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GLOBAL SUPPLIER
OF SECURE RADIO
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GENERAL INFORMATION

Harris RF Communications is the leading global supplier of secure radio communications and embedded high-grade encryption solutions for military, government and commercial organizations.

The company's Falcon® family of software-defined tactical radio systems encompasses manpack, handheld and vehicular applications. Falcon® III is the next generation of radios supporting the U.S. military's Joint Tactical Radio System (JTRS) requirements as well as network-centric operations worldwide. Harris RF Communications is also a leading supplier of *assured communications*® systems and equipment for public safety, utility and transportation markets, with products ranging from the most advanced IP voice and data networks to portable and mobile single- and multiband radios.

Harris Corporation is an international communications and information technology company serving government and commercial markets in more than 125 countries. Headquartered in Melbourne, Florida, the company has approximately $5 billion of annual revenue and 14,000 employees — including nearly 6,000 engineers and scientists. Harris is dedicated to developing best-in-class *assured communications*® products, systems, and services. Additional information about Harris Corporation is available at www.harris.com.

HARRIS®

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PRODUCTS AND SERVICES OVERVIEW

STANDARDS EXCELLENCE

Harris RF Communications has established a worldwide reputation as a supplier of state-of-the-art communications systems. We recognize that continued success in the communications business requires top-quality customer support services.

MANUFACTURING

Harris RF Communications is dedicated to providing quality products and services to our customers through innovative manufacturing technology and techniques. We have incorporated lean manufacturing to enhance our state-of-the-art production facility. Lean manufacturing minimizes production costs by reducing the stored inventory of materials and components, virtually eliminating storage control problems.

In addition, we have adopted the industry leading IPC/JSTD001 certified workmanship standards, resulting in improved reliability and an increased level of customer satisfaction.

QUALITY

Quality is an integral part of Harris RF Communications products and services. The company has implemented and maintains a Quality Management System to ensure consistent results, enhance customer satisfaction, and improve business performance. Our overall quality system has been certified to the ISO 9001:2008 and the NATO AQAP 2110 Quality Management Standards. In addition, our engineering processes have been appraised successfully to Maturity Level 3 as defined by the SEI CMMI model and certified to the NATO AQAP 2210 Standard for Software Quality Assurance.

The Harris RF Communications ISO 9001:2008 Certificate of Registration was issued by BSI Management Systems, Certificate Number FM29196. The initial ISO registration was achieved in September 1994, with reassessments every three years thereafter. Our current Certificate was issued in May 2012. The NATO AQAP 2110 and 2210 certificate was issued in March 2009, Certificate Number TI/24-010/2009; the first SEI CMMI Level 3 appraisal was completed in December 2006.

The Quality Organization serves the division in the areas of quality assurance, quality control, purchased material quality, design quality, process auditing, and continual improvement. We work in a cross-functional partnership to assure customer satisfaction through quality and business performance excellence.

Harris RF Communications' Quality Policy is Our Vision: "To be the preferred global provider of trusted communication solutions for those defend, protect, and serve."

ENGINEERING DESIGN

Harris RF Communications Division has built its reputation on excellence of engineering design. Our engineering staff is available to assist in establishing detailed requirements, including pre-sale site surveys for any and all types of communications equipment.

CUSTOMER SUPPORT SERVICES

PRODUCT SERVICES AND TECHNICAL SUPPORT

Harris RF Communications is dedicated to providing technical support to our customers, and provides a toll-free 24/7 hotline to assist customers that may need operational or troubleshooting assistance.

The Product Service Department can be reached at the toll-free number listed below. Additionally, the Product Service Department offers a variety of other services, like Return Material Authorizations (RMAs) and call forwarding to the proper personnel or department when additional help or more in-depth technical understanding is required. The core hours for the Product Service Department are 8:00 AM to 5:00 PM EST, Monday through Friday.

You can reach Product Service and Technical Support in any of the following ways:

- Telephone: (+1 585) 242-3561
- Toll Free: (+1 866) 264-8040
- Fax: (+1 585) 242-4483
- Email: rfcsrvc@harris.com
- Web: www.rf.harris.com/support
- RMA Support: https://premier.harris.com/rfcomm/new_user_rma_only.aspx

TERMS AND CONDITIONS OF REPAIR

1. Definitions: As used in these Terms and Conditions, the following terms shall have the following meanings: (a) "Supplies" or "Equipment" shall mean Seller's products or services; (b) The term this "Subcontract," this "Contract" or this "Purchase Order" or this "Agreement" are interchangeable and wherever appearing herein, shall be deemed to mean the contractual instrument, which shall be binding between Purchaser and Seller; (c) "RMA" (Return Material Authorization) shall be a number assigned to a specified list of equipment being sent to Seller for repair/upgrade.

2. Price: Prices estimated and quoted to Purchaser are Time and Material. Seller reserves the right to change prices or terms after the validity expiration date of the Estimate or Quote. An expedited turnaround time per each piece of equipment received for repair is available for an additional cost of one and a half times the current labor rate per hour over the total repair charge. A requested turnaround time less than the current standard turnaround time shall be considered an expedited request. This expedited time does not include transportation time and time awaiting response from Purchaser (Estimate and/or Quote approval). Expedited repairs must be agreed upon prior to issuance of the RMA number and agreed to along with all other terms of the Seller. Obsolescence may affect turn around time. Purchaser agrees to an evaluation fee of one and a half times the current labor rate per hour per piece of out-of-warranty equipment sent to Harris for repair. Once evaluation is complete, a repair estimate will be provided. This estimate will not include any applicable freight and tax charges. If Purchaser does not, after receiving the estimate, elect to have the equipment repaired, the evaluation fee per piece of equipment evaluated plus any applicable freight and tax will be charged. Once provided with an estimate for

GENERAL INFORMATION

repair, activity will be put on hold until a signed copy of the Repair Estimate is received from the Purchaser giving permission to proceed with repairs. This hold time will not be included in computing the Seller's required turnaround time. If Purchaser does not provide Seller with a repair decision regarding the Estimate within 21 days of the submittal date, Seller reserves the right to send equipment back to Purchaser not repaired. Prices are subject to change without notice after 30 days of the original Estimate or Quote date.

3. Terms of Payment: The Purchaser shall pay the Seller, upon the submission by Seller of proper invoices or vouchers for repairs made in accordance with the terms of this purchase order. Partial shipments and early deliveries are acceptable and will result in partial invoices. Payments received by Seller beyond thirty (30) days from date of submission of the invoice shall be subject to the assessment of interest at the rate of 1.5% per month.

4. Taxes and Duties: All prices are exclusive of federal, state, and local excise, sales and use and similar taxes arising from or assessed in connection with the Purchase Order. Should Purchaser be exempt from paying certain taxes described above then Purchaser shall be responsible for providing Seller with a properly executed tax exemption certificate acceptable to the interested taxing authorities prior to shipment of supplies or services contemplated under the Purchase Order.

5. Incoming Shipments: Purchaser must prepay all transportation, insurance, duty and customs charges. Seller will pay for return to Purchaser of the warranted repaired/replaced equipment or part, C.I.F. destination; Purchaser must pay any duty, taxes or customs charges. The provided shipping label with barcode must be placed on the outside of all containers when shipping to Seller. Failure to provide shipping label with barcode may result in an extended turnaround time. Improper importing/packaging will result in Seller not being held liable to agreed to turnaround times. All equipment sent to Seller by Purchaser will be subject to these terms and conditions, whether or not an RMA number was properly obtained.

6. Delivery: FOB Origin, Harris Corporation, RF Communications Division (RFCD) Rochester, New York, USA. Risk of loss and damage shall transfer to Purchaser at shipping point upon transfer to a common carrier. Seller is not responsible for damages to equipment due to improper packaging or for damage caused by the shipping/transport company. The Purchaser shall bear the cost of return of equipment to be repaired to Seller. Upon repair completion, equipment will be returned to the shipping address specified on the RMA request (unless otherwise stated) along with a copy of the Final Repair Report. After Purchaser receipt of repaired equipment, any shipping related damages must be reported to the shipping/transport company.

7. Force Majeure: Seller shall be excused from performance and not be liable for delay in performance or non-performance attributable in whole or in part to any cause beyond its reasonable control and without its fault or negligence, including but not limited to: actions or inactions of government, whether in its sovereign or contractual capacity; judicial action; war, civil disturbance, terrorism, insurrection, sabotage, or act of public enemy; labor difficulty or dispute; fire, flood, storm or other act of God; transportation difficulties; by Purchaser's fault or negligence; failure or delay in delivery by Seller's suppliers or subcontractors; strike; shortage of energy, materials or labor sufficient to fill its order (in which case Seller may apply or prorate shipments of its products to or among its customers as in its judgment is reasonable in the circumstances), or inability to obtain export licenses or other event or circumstance beyond the control of Seller.

8. Title and Remedies: Title shall pass to Purchaser upon acceptance. If Purchaser defaults in paying or performing any of its obligations hereunder or Purchaser's financial stability changes, Seller may treat all amounts owing hereunder to be immediately due and payable, may deduct same from any other sums due or to become due to Purchaser, may withhold any shipments due Purchaser, may require advance payments, or seek other remedies as allowed by law.

9. Factory Inspection and Acceptance: Acceptance shall be deemed to occur upon satisfactory conclusion of standard factory acceptance tests at Seller's factory and upon transfer to a common carrier. Harris standard repair process does not include providing the Purchaser with a Certificate of Compliance (C of C) unless contractually obligated.

10. U.S. Export License and Transfer Approvals: It is expressly understood and agreed that this Agreement, and all obligations arising hereunder, are subject to US export control laws and regulation. Furthermore, to the extent any technical data is exchanged between the parties, the receiving party represents and warrants that no technical data furnished to it by the disclosing party shall be disclosed to any foreign nation, firm, or country, including foreign nationals employed by or associated with the receiving party, nor shall any technical data be exported from the United States without first complying with all requirements of the International Traffic in Arms Regulations (ITAR) or the Export Administration Regulations (EAR), including the requirement for obtaining any export license if applicable. The receiving party shall first obtain the written consent of the disclosing party prior to submitting any request for authority to export any such technical data. The receiving party shall indemnify and hold the disclosing party harmless for all claims, demands, damages, costs, fines, penalties, attorney's fees, and all other expenses arising from failure of the receiving party to comply with this clause or the ITAR and EAR.

11. Information Exchange: Information provided or exchanged between the parties shall remain the property of the disclosing party. Each party shall comply with the terms of any non-disclosure agreement executed between the parties.

12. Public Release Information: No public release of information, news release, announcement, advertisement, denial or confirmation of the Purchase Order or the subject matter hereof or thereof by Purchaser shall be made without the prior written approval of the Seller.

13. Limitation of Liability: PURCHASER IS EXPRESSLY NOTIFIED THAT UNDER NO CIRCUMSTANCES SHALL SELLER BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOSS OF REVENUE, LOSS OF PROFITS, OR LOSS OF BENEFICIAL USE, EVEN IF SELLER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THIS LIMITATION SHALL APPLY TO ANY CLAIM OR CAUSE OF ACTION WHETHER IN CONTRACT OR TORT (INCLUDING NEGLIGENCE, STRICT LIABILITY OR BREACH OF WARRANTY). IN NO EVENT WILL SELLER'S LIABILITY TO PURCHASER OR ANY PARTY CLAIMING THROUGH PURCHASER, EXCEED THE ACTUAL SALES PRICE PAID BY PURCHASER FOR ANY SUPPLIES PROVIDED.

14. Warranty: Except those products specifically excluded. The Seller's standard limited repair warranty is extended to the original Purchaser or the U.S. Government, in the case of a prime subcontract, and applies to all Harris Corporation, RF Communications Division out of warranty equipment repaired By Harris and employed for the service normally intended. If Seller's repaired equipment fails in normal use because of a defect in workmanship or materials within sixty (60) days from the date of shipment, Seller will repair or replace (at Seller's option) the equipment or part with new, reconditioned, or remanufactured equipment or parts without charge to Purchaser, at Seller's Authorized Repair Center or factory. Other manufacturer's equipment, if any, shall carry only such manufacturer's standard warranty.

The Purchaser must notify Seller promptly of a defect within sixty (60) days from date of shipment. Providing Seller concurs that the failure is a valid warranty claim based on the previous problem, and is unable to correct the problem without having the equipment shipped to Seller, then:

- Purchasers with equipment purchased for use outside the United States will be supplied with information for the return of the defective equipment or part to Seller's factory in Rochester, NY, U.S.A., for repair or replacement. Purchaser must prepay all transportation, insurance, duty and customs charges. Seller will pay for return to Purchaser of the repaired/replaced equipment or part, C.I.F. destination; Purchaser must pay any duty, taxes or customs charges.
- Purchaser must obtain a Return Material Authorization Number, properly pack, insure, prepay the shipping charges and ship the defective equipment or part to Seller's factory or to the Authorized Warranty Repair Center indicated by Seller.
  - RF Comm Division Premier Website: https://premier.harris.com/rfcomm
  - RF Comm Division Product Service Phone: (585) 242-3561 or (866) 264-8040
  - RF Comm Division Product Service Fax: 585-242-4483
  - RF Comm Division Product Service Email: rfcsrvc@harris.com
  - Product Service
    1680 University Avenue
    Rochester, NY 14610, U.S.A.
- Seller will repair or replace the defective equipment or part and pay for its return to Purchaser, provided the repair or replacement is due to a cause covered by this warranty. If Seller receives equipment with an incomplete problem/symptom description, the repeat repair warranty shall not apply. Seller shall not be responsible for:
  - Defects or failures caused by Purchaser or user abuse or misuse.
  - Defects or failures caused by unauthorized attempts to repair or alter the equipment in any way.
  - Consequential damages incurred by a Purchaser or user from any cause whatsoever, including, but not limited to transportation, non-Seller repair or service costs, downtime costs, costs for substituting equipment or loss of anticipated profits or revenue.
  - The performance of the equipment when used in combination with equipment not purchased from Seller.
  - SELLER MAKES NO WARRANTY OF OPERATIONAL EFFICIENCY OR COMMUNICATIONS RANGE WHICH EXTENDS BEYOND THE DESCRIPTION OF THE EQUIPMENT ON THE FACE OF THE PURCHASE ORDER.
  - Seller assumes no responsibility for design characteristics of special equipment manufactured to specifications supplied by or on behalf of Purchaser.

THIS IS SELLER'S SOLE AND EXCLUSIVE WARRANTY FOR DEFECTIVE OR NON-CONFORMING SUPPLIES, AND IS IN LIEU OF ALL OTHER WARRANTIES (EXCEPT TITLE), EXPRESS, IMPLIED OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, INFRINGEMENT, OR ANY WARRANTY ARISING OUT OF COURSE OF DEALING, OR CUSTOM OR USAGE OF TRADE. THE ABOVE LIMITED WARRANTY CONSTITUES SELLER'S SOLE AND EXCLUSIVE LIABILITY HEREUNDER AND BUYER'S SOLE AND EXCLUSIVE REMEDY FOR DEFECTIVE OR NON-CONFORMING SUPPLIES.

15. Disputes: The parties agree that the exclusive venue for any action related to the dispute or interpretation of the terms herein or this contractual instrument shall be in the courts with appropriate jurisdiction located in the State of New York, and each party irrevocably submits to the jurisdiction of each such court in any such action and waives any objection it may now or hereafter have to venue or personal jurisdiction in each such court. The prevailing party in any action related to the dispute or aforementioned interpretation shall be entitled to recover its reasonable attorneys fees incurred in pursuing the action, including those fees incurred throughout all bankruptcy and appellate proceedings. THE PARTIES FURTHER AGREE, TO THE EXTENT PERMITTED BY LAW, TO WAIVE ALL RIGHTS TO A TRIAL BY JURY OF ANY ACTION RELATING TO ANY DISPUTE OR INTERPRETATION OF THIS AGREEMENT. THE PARTIES SPECIFICALLY ACKNOWLEDGE THAT THIS WAIVER IS MADE KNOWINGLY AND VOLUNTARILY AFTER AN ADEQUATE OPPORTUNITY TO NEGOTIATE ITS TERMS.

16. Patent, Copyright, and Trademark Indemnity: Purchaser agrees to notify Seller promptly in writing of any notice, suit or other action against Seller based upon a claim that the supplies delivered by Seller under this Purchase Order infringe a U.S. patent, copyright, or trade secret of a third party. Seller will defend at its expense any such action, except as excluded below, and shall have full control of such defense, including all appeals and negotiations, and will pay all settlement costs or damages awarded against Purchaser, but Seller shall not be liable to Purchaser for any indirect, consequential or incidental damages, including but not limited to, loss of profits. In the event of such notice, suit or action, Seller may at its option and at its expense procure for Purchaser the right to continue using the equipment or modify the equipment to render such non-infringing, or accept return of the equipment and replace such with substantially equivalent non-infringing equipment, or accept return of the equipment and refund or credit to Purchaser the amount of the original purchase price, less a reasonable charge for depreciation and damage. The preceding agreements by Seller in this section shall not apply; (1) to any equipment or portion thereof manufactured to specifications furnished by or on behalf of Purchaser; (2) to any infringement arising out of the use of the equipment in combination with other equipment not furnished by Seller; (3) to use in a manner not normally intended; (4) to any patent, copyright, or trade secret in which Purchaser, or subsidiary or affiliate thereof, has a direct or indirect interest; (5) if Purchaser did not provide Seller with prompt notice, authority, information and assistance necessary to defend the action; (6) if any supply to be furnished under this Purchase Order is to be delivered to the United States Government, unless Purchaser's contract with the Government for the product

obligates Purchaser to provide indemnification to the Government for intellectual property rights infringement, but in that event, only to the same extent as Purchaser's obligation. The foregoing states the entire liability of Seller for patent, copyright, trademark and trade secret infringements by the equipment delivered by Seller under this Purchase Order.

17. Termination for Default: (a)(1) The Purchaser may, subject to paragraphs (b) and (c) of this clause, by written notice of default to the Seller, terminate this Purchase Order in whole or in part if the Seller fails to – (i) Deliver the supplies or to perform the services within the time specified in this Purchase Order or any extension; (ii) Make progress, so as to endanger performance of this Purchase Order (but see subparagraph (a)(2) of this clause); or (iii) Perform any of the other provisions of this Purchase Order (but see subparagraph (a)(2) of this clause). (2) The Purchaser's right to terminate this Purchase Order under subdivisions (a)(1)(ii) and (1)(iii) of this clause, may be exercised if the Seller does not cure such failure within 10 days (or more if authorized in writing by the Purchaser) after receipt of the notice from the Purchaser specifying the failure. (b) Except for defaults of Seller's subcontractors at any tier, the Seller shall not be liable for any excess costs if the failure to perform the Purchase Order arises from causes beyond the control and without the fault or negligence of the Seller. Examples of such causes include (1) acts of God or of the public enemy, (2) acts of the Government in either its sovereign or contractual capacity, (3) fires, (4) floods, (5) epidemics, (6) quarantine restrictions, (7) strikes, (8) freight embargoes, and (9) unusually severe weather. In each instance the failure to perform must be beyond the control and without the fault or negligence of the Seller. (c) If the failure to perform is caused by the default of the Seller's subcontractor at any tier, and if the cause of the default is beyond the control of both the Seller and subcontractor, and without the fault or negligence of either, the Seller shall not be liable for any excess costs for failure to perform, unless the subcontracted supplies or services were obtainable from other sources in sufficient time for the Seller to meet the required delivery schedule. (d) If this Purchase Order is terminated for default, the Purchaser may require the Seller to transfer title and deliver to the Purchaser, as directed, any completed supplies, (10) Upon direction of the Purchaser, the Seller shall also protect and preserve property in its possession in which the Purchaser has an interest. (e) The Purchaser shall pay Purchase Order price for completed supplies delivered and accepted. Failure to agree will be a dispute under the Disputes clause. (f) If, after termination, it is determined that the Seller was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Purchaser.

18. Termination by Seller: Seller may terminate this Purchase Order if Purchaser defaults in a material respect in the payment of money to Seller under this Purchase Order and fails to cure such default within fourteen (14) days after receiving written notice of its decision immediately to terminate this Purchase Order. If Seller terminates this Purchase Order based on Purchaser's breach then the Seller shall be entitled to damages, including lost profits the Seller would have realized, had the Seller been permitted to perform in accordance with the Purchase Order. Seller retains the right to reject equipment for repair in the event Harris has discontinued production of such equipment for a period of ten (10) years, or until the end of a specified warranty period. Seller does not have to accept equipment that is out of production and/or obsolete. If received and deemed obsolete and not repairable, Purchaser is responsible for standard evaluation fee.

19. Assignment: Neither party shall assign the Purchase Order to any other party without the prior written consent of the other party. Any attempted or purported assignment of the Purchase Order without the other parties' prior written consent shall be null and void and not binding.

20. Orders Issued Under Government Prime or Subcontracts: Nothing in Harris Standard Terms and Conditions shall be construed to authorize the waiver of any provision of law as prescribed in FAR Part 12, or terms as set forth in FAR 52.244-6, Subcontracts for Commercial Items, if applicable.

21. Survivability: The following provisions shall survive the completion or termination of this Purchase Order: U.S. Export License and Transfer Approvals (10), Information Exchange (11), Public Release Information (12), and Limitation of Liability (13).

22. Waiver: Any waiver by either party of a breach or default shall not constitute a general waiver of any other breach or default otherwise occurring.

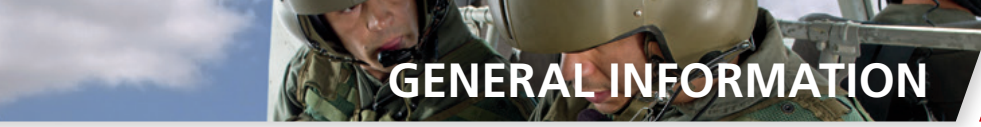
23. Enforceability: The parties agree that if any portion of this Purchase Order shall become illegal and/or unenforceable, the remaining portion shall continue to be binding and enforceable provided that the validity of the remaining portion would not defeat the overall business intent of the parties or give one party any substantial financial benefit to the detriment of the other party.

FIELD ENGINEERING SERVICES

The Harris RF Communications Division's Field Engineering Department provides a variety of worldwide services that includes site surveys, system installation, diagnosis and repair as well as maintenance and basic operator training on all Harris RF Communications products. Our current customers include numerous federal agencies, state and foreign governments, and both U.S. and foreign military organizations.

The department specializes in providing a high level of customer service that is focused on meeting the customer's needs. The Field Engineering team has many years of combined experience in a variety of backgrounds, including the federal, civil, and military arenas, and is able to adapt and excel in the most challenging environments encountered throughout the world. Harris field engineers have a worldwide reputation for quick deployment and expert customer service with extensive product and technical knowledge.

The Harris RF Communications Field Engineering Department maintains a staff of highly qualified field engineers to provide installation, troubleshooting, maintenance, demonstration, familiarization, and training for all our products. The Field Engineering Department can also provide on-site assistance for extended periods at both domestic and worldwide locations.



APPLICATIONS ENGINEERING SERVICES

Harris RF Communications maintains a staff of applications engineers to assist customers on-site or via telephone or email. Individuals on our staff routinely create custom solutions to unique customer applications, utilizing Harris products, OEM and customer-furnished equipment. Many of our applications engineers are subject matter technical experts and former users of our equipment in the field, allowing them to provide real-world perspective and experience with Harris equipment.

REPAIR MAINTENANCE FACILITIES

Harris RF Communications operates office and depot repair facilities in many cities worldwide. Depot-level equipment maintenance and bonded-bin spares facilities are staffed with skilled technicians qualified to install, maintain, upgrade and repair current and legacy Harris equipment.

TECHNICAL SERVICES

Harris RF Communications' Technical Services Department provides logistics planning services, technical documentation, technical training and a comprehensive range of maintenance services to help ensure our customers have continued success with our products.

TECHNICAL PUBLICATIONS

Harris RF Communications provides a wide range of manuals, booklets, and guides that cover all levels of operations and maintenance on all products. Although most publications are off-the-shelf, we also specialize in providing custom technical publications that satisfy specific customer needs.

Operation manuals, reference guides, and cards provide operating instructions ranging from basic to advanced levels. Operation manuals also cover accessory/box level Line Replaceable Unit (LRU) maintenance at Levels I and II.

System Installation/Maintenance manuals cover Maintenance Levels I and II, including installation instructions, test and troubleshooting, and removal/replacement. Maintenance manuals cover module or Shop Replaceable Unit (SRU) level maintenance at Level III, which includes theory of operation, removal/replacement, test, and fault. A Level IV data package, available upon request, includes parts list, schematics and component location diagrams to aid in component-level repair when this approach is cost-effective.

Harris RF Communications also provides help systems and user guides for software products. These user assistance products include installation, operation, and programming.

WEBSITE SUPPORT

Harris RF Communications is committed to providing customers with the highest level of service, training and support. Through our website, customers may request training, read and download publications, request field and product services, download the latest and greatest radio firmware and learn more about our multimedia and logistics products. Visit www.rf.harris.com/support to view information on Product Service, Field Service, Training, Publications, Logistics, and Multimedia. Pages available include:

Product Service Page: Offers a list of our products currently supported. Customers may also take advantage of returning their product online for repair.

Field Service Page: Provides a form for customers to submit questions or request service on their equipment, including maintenance, installation and operator familiarization.

Training Page: Provides RF Communications training information, including types of training, available courses and an overview of the Harris Maintenance Philosophy. Customers may also request a training course online.

Publications Page: Provides information on types of manuals we provide. Customers may request a manual or search some of the links to online manuals.

Logistics Page: Provides an overview on our support philosophy and lists of spares kits currently offered.

Multimedia Page: Offers an overview of the Multimedia Group, a current product list and various multimedia samples. The Harris Multimedia Group also develops websites around specific customer requirements. Contact the Multimedia Department at RFC_Multimedia@harris.com for more information.

TECHNICAL TRAINING

Harris RF Communications provides hands-on, practical training in installation, operation and maintenance of all RF Communications systems and products.

Our instructors have many years of on-the-job experience in their areas of expertise and are recognized subject-matter experts. All must complete stringent certification requirements before qualifying as classroom instructors. They bring a variety of job experiences, real-world applications, and insight to enhance the learning process and ensure instruction is targeted to meet customers' needs. Whatever your training requirement may be, our instructors are poised to deliver the highest quality training available at Harris and at customer locations around the world.

Our training courses are designed to give our customers the knowledge required to operate and maintain their communications systems at peak performance. Courses are categorized as either system- or product-level training.

- System-level training courses are conducted at either the factory in Rochester, New York or at the customer's location.
- Product-level training courses are conducted at our Technical Training Center in Rochester, New York; Harris facilities at various locations around the world; or at the customer's location.

The following types of courses are available to satisfy our customers' training requirements:

- Familiarization Training
- Operation Training (Level I/II)
- Maintenance Training (Level III)
- Maintenance Training (Level IV)
- Refresher/Sustainment Training

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- Instructor Key Personnel Training (IKPT)
- Blended Learning (CBT, combined with standup instruction)
- Computer-Based Training (Available on Premier Websites)

For further information on these courses, assistance, or to request a brochure describing our training capabilities, contact our Technical Training staff through our website at www.rf.harris.com/support/training

MAINTENANCE SUPPORT

Harris RF Communications offers a full range of support products, including technical manuals, classroom training, computer-based interactive training, spares, maintenance repair kits, tools and test equipment, and website support. All RF Communications support products are based upon the concept of four levels of maintenance, described in the following paragraphs.

LEVEL I MAINTENANCE

Level I Maintenance is performed by the equipment operator. It is limited to fault detection using Built-In Test Equipment (BITE) and performing equipment inspections. No tools, spares, or special maintenance items are required at Level I Maintenance.

Technical manuals for Level I Maintenance include operator cards, operator manuals and system manuals. Training at this level covers basic operations using the Level I technical manuals.

LEVEL II MAINTENANCE

Level II Maintenance is performed by the equipment operator. Level I and Level II Maintenance are often performed by the same person. Level II corrective maintenance involves fault detection, isolation, and removal and replacement (R/R) of defective Line Replaceable Units (LRUs). Level II preventive maintenance consists of tasks performed on whole units that will aid in finding or preventing failures. No tasks require the equipment operator to disassemble a unit. Preventive maintenance consists of using BITE to perform operational readiness tests, inspections and other tasks such as filter cleaning.

Level II Maintenance requires the use of common tools and test equipment for installation and unit level maintenance. No special tools or maintenance items are required at Level II. Spares can include whole units, accessory items such as microphone assemblies, and consumable items, such as fuses and lamps, combined in a Running Spares Kit (RSK).

Technical manuals for Level II Maintenance include operator manuals and system manuals with installation, operation and maintenance information on the system to the unit accessories level. Level II training involves advanced operating instructions, programming, and hands-on exercises using the Level II technical manuals.

LEVEL III MAINTENANCE

Level III Maintenance is performed by the maintainer. Level III corrective maintenance involves extensive use of BITE to achieve fault verification and isolation, and removal and replacement of defective internal modules and Chassis-Mounted Components (CMCs), referred to as Shop Replaceable Units (SRUs). Preventive maintenance at this level includes such tasks as using test equipment to perform sensitivity and power output adjustments. Level III Maintenance may include test procedures to verify overall functioning of units.

Tools and test equipment are required at this level sufficient to allow disassembly, fault isolation, and troubleshooting to the module level. Level III Maintenance can require breakout boxes, extender cards, and some special tools. Spares can include circuit cards and CMCs.

Technical manuals for Level III Maintenance include information on unit operations and maintenance to the circuit card level. Training involves Level III Maintenance, alignment instructions, and hands-on exercises using the Level III technical manuals.

LEVEL IV MAINTENANCE

Level IV Maintenance provides depot repair and return to service of faulty equipment. Items serviced at this level are typically individual SRUs and their subassemblies that are replaced during Level III Maintenance. The extent to which component-level fault isolation can be achieved is a function of several factors, including circuit complexity, density of components, manufacturing techniques, impact of failure and probability of failure.

Because of these factors, Level IV Maintenance is usually not cost-effective and is not normally supplied. A quotation for Level IV Maintenance materials and information can be made available by request.

Level IV Maintenance often requires the use of external test fixtures and Automated Test Equipment (ATE), with supporting documentation to permit maintainers to isolate individual faulted components. Upon request, a supplemental repair kit is available. Contents of this kit will be dependent on the customer's current need.

Technical documentation for Level IV Maintenance consists of a supplemental data package. This package will include detailed schematic diagrams, component location diagrams and parts lists. Training quotes for Level IV Maintenance are provided upon customer request.

MAINTENANCE CONCEPT SUPPORT LEVELS

CORRECTIVE AND PREVENTIVE MAINTENANCE	TOOLS AND TEST EQUIPMENT	TECHNICAL MANUALS	TRAINING	SPARES
LEVEL I				
Limited to fault detection using BITE and performing equipment inspections.	No tools/test equipment normally required at this level.	Operation card, operator manual, system manual.	Basic operations. Hands-on exercises using the Level I manuals.	No spares at this level.
LEVEL II				
Corrective fault detection, isolation and removal and replacement (R/R) of defective line. Line Replaceable Units (LRU). No disassembly of units. Preventive pre-operational checks using BITE, inspections and other tasks, such as filter cleaning.	Common tools and test equipment required for installation and unit-level maintenance.	Operator's manual, systems manual, installation, operations and maintenance of the system to unit accessories level.	Advanced operations maintenance training. Hands-on exercises using the Level II manual.	If desired, whole unit is provided as a spare. Spares to LRU items and consumables. Running Spares Kit (RSK). Consumable items such as fuses, lamps, and filters.
LEVEL III				
Corrective fault verification of defective LRU. Fault isolation and R/R to defective circuit card or Chassis-Mounted Components (CMC). Extensive use of BITE and troubleshooting procedures as detailed in the manual. Preventive alignments and adjustments requiring common test equipment and simple special maintenance aids such as breakout boxes or interface cables. Alignments are minimized.	Common tools and test equipment required for maintenance to module and CMC level. Maintenance Repair Kits (MRKs). Special items for Level III maintenance. Simple items such as breakout boxes, extender cards, and special tools.	Level III manual: Unit operations and maintenance to circuit card level.	Level III maintenance including alignments. Hands-on exercises using the Level III manual. Prefaulted modules as training aids.	Circuit cards and chassis-mounted components. Site Spares Kit (SSK). Recommended Spare Parts List (RSPL). Level III spares such as assemblies, modules, CMC.
LEVEL IV				
Corrective fault verification of defective Shop Replaceable Units (SRUs). Repair of defective SRU to piece-part level. No preventive maintenance is generally performed at this level.	Common tools and test equipment for maintenance to piece-part level and unit overhaul. Advanced Test Jigs and Fixtures (TJF) with documentation. Advanced Automatic Test Equipment (ATE) with documentation. Special tools. Total maintenance capabilities.	Level IV documentation: Complete maintenance to piece-part level, detailed schematics, parts lists, etc.	Level IV Maintenance Training. Hands-on exercises using Level IV documentation.	Piece-part spares.

PUBLICATIONS AND TRAINING

MULTIMEDIA PRODUCTS

The Harris Corporation Multimedia Department provides a comprehensive range of customer and training support products, including Computer-Based Training (CBT), e-learning products, premier customer websites, and video services. These products are developed to support both the customer and customer products, whether it is quick access to training on your product or sustainment training and product support. Contact the Multimedia Department at RFC_Multimedia@harris.com for alternate language versions.

ELECTRONIC PUBLICATIONS (E-PUBS)

Harris RF Communications provides selected electronic manuals in the form of Electronic Publications (e-Pubs). The e-Pub is a Harris technical manual, prepared in digital form by means of an authoring system for electronic window display. e-Pubs provide a working table of contents with links to chapters, paragraphs, figures and tables. e-Pubs can be produced for any Harris RF Communications product using the same data that has been developed for a paper manual. e-Pubs are developed using open-systems applications programs that run on any computer platform using Windows XP or later software. This allows customers the choice of replacing paper manuals with new technology. Contact the Multimedia Department at RFC_Multimedia@harris.com for alternate language versions.

COMPUTER-BASED TRAINING(CBT)

As an alternative to paper manuals and training, Harris RF Communications offers selected computer-based technical trainings that work in conjunction with e-Pubs to provide a robust training experience. CBTs are interactive and can be incorporated with video, images, graphics, text and audio and include a fully-functional virtual radio. Harris Computer Based Trainings are developed to provide students with knowledge, skills and references to install, operate and perform maintenance to the required level, all without requiring any contact with the equipment. Training is achieved through the use of text, graphics, linked e-Pubs, examples, videos, commentary by actual Harris instructors, hands-on lessons on a simulated radio, and randomized quizzes. Progress is monitored and reported to the user as they progress through the lessons and feedback is provided with links to relevant areas if they get stuck or require additional background on a concept.

Harris RF Communications offers two different styles of CBT products: Level I/II for radio equipment, and video tutorials.

The Level I/II CBT for our radio products provides both operations and programming procedures. Level I/II CBT includes a virtual interactive radio with functioning ancillary devices to allow users to thoroughly explore the actual product functionality in a standalone environment. CBTs are presented in a manner to begin each lesson, based on Harris stand-up training course syllabi, with an overview of the topic to be covered, followed by a guided Hands-On lesson to allow the user to complete a specified objective by pressing the buttons as if it were a real radio. Each lesson concludes with a randomized quiz, selecting questions from a bank of questions on that topic created by Harris subject-matter-experts. Examples of lesson topics include: Basic Operations, Cryptography, Networking, and each of the Waveforms specific to the product being trained.

COMPUTER BASED TRAINING (CBT)

PRODUCT NUMBER	PRODUCT NAME
10515-0319-7200	AN/PRC-117G Multiband Manpack Radio
10515-0409-7200	AN/PRC-152A Multiband Handheld Radio
10515-0283-7200	AN/PRC-152 Multiband Handheld Radio
10515-0334-7200	RF-7800M-MP Multiband Handheld Radio
10515-0363-7200	RF-7800V-HH Handheld Radio
10515-0477-7200	Tactical Key Loader (TKL) (KYK-11)
10515-0466-7200	RF-330E-TR Wideband Team Radio

Video Tutorial products are designed to help users during the equipment installation process. Graphical parts lists are included to help the installer easily identify parts. Video of every step in an installation is recorded and presented in an easy-to-follow format with step-by-step instructions.

VIDEO TUTORIALS

PRODUCT NUMBER	PRODUCT NAME
10515-0283-7100	AN/PRC-152(C) Multiband Handheld Radio
10515-0103-7100	AN/PRC-150(C) HF Manpack Radio

e-LEARNING

Everyone learns new information at a different pace. e-Learning enables a student to train online wherever and whenever convenient. Time and location constraints disappear, and the modular content allows a student to learn in "chunks." e-Learning will quickly and easily help a student master basic concepts inherent in Harris radios.

e-Learning has also become an integral part of our training courses. As with the CBTs, Trainers can use this as a prerequisite before a factory class or refresher training after class. It can be used where field and factory classes are not practical.

e-learning courses outlined below are available on CD-ROM. More information can be found at: https://premier.harris.com/rfcomm to choose courses.

PRODUCT NUMBER	PRODUCT NAME
10515-0229-7100	e-Learning Suite—International HF Technology, Part 1 HF Technology, Part 2 HF Technology, Part 3 ALE 3G ALE Internet Protocol (IP) Networking GPS Modems and Waveforms Wireless IP and Telephony

PRODUCT NUMBER	PRODUCT NAME
10515-0229-7101	e-Learning Suite—U.S. Domestic HF Technology, Part 1 HF Technology, Part 2 HF Technology, Part 3 ALE 3G ALE Internet Protocol (IP) Networking DAMA Dedicated SATCOM Securing Communications GPS Modems and Waveforms Wireless IP and Telephony

SPARES, TOOLS, AND TEST EQUIPMENT

Advanced logistic and spare parts support is critical to maintaining efficient system maintenance. Harris RF Communications offers customers a series of spare parts kits based upon statistical analysis and field service reports. These kits are available at the time of equipment purchase.

Harris can also supply the specialized tools and test fixtures to suit individual customer maintenance and repair programs. Purchase of spares, tools and specialized test equipment is strongly recommended at the same time as the equipment.

SPARE PARTS SUPPORT

Spare parts, unless extended warranty is purchased, have a standard warranty of one year.

SPARE PARTS KITS

The Spare Parts Kits required to support the equipment in this catalog are categorized into three complementary kits: Running Spares Kits (RSK), Site Spares Kits (SSK), and Maintenance Repair Kits (MRK). Each kit is unique and does not include spares supplied as a part of another kit. Selecting which kit(s) to purchase depends on the customer's repair philosophy.

When ordering individual spare parts, include the following information:

- Harris part number
- Quantity
- Equipment model number needing spares
- A short description of the part, including information such as frequency and length, as applicable.

Note that the composition of spare parts kits reflects current production models of the equipment. When ordering for previously purchased equipment, provide the model and serial number (or approximate date of purchase) for a quotation.

For more information, contact our Sales Department.
Domestic Sales Department: (585) 241-8400
or (585) 244-5830 ext. 8400

International Sales Department: (+1 585) 241-8383
or (+1 585) 244-5830 ext. 8383

ORDERING INFORMATION

To place or to expedite an order for the United States, contact our Domestic Sales Department at (585) 241-8400 or (585) 244-5830, ext. 8400. On orders for export, contact our International Sales Department at (+1 585) 241-8383 or (+1 585) 244-5830, ext. 8383.

SPECIFICATIONS

When ordering communications equipment, it is important to provide all of the required information at the time of the initial order. Please supply the appropriate information from the specified lists that follow.

TRANSCEIVERS

- Specify the model series by number.
- Specify any required options and accessories by model number.
- Specify the power source.
- Specify the type of mounting.

ANTENNA COUPLERS

- Specify the type, length and frequency range of antenna(s) to be used.
- Order the required length of RF coaxial and control cables. Note the maximum cable lengths permitted between the transmitter/transceiver and the coupler.
- Specify power source.

DC OPERATION

DC operating voltages for equipment in this catalog are generally stated as either 12 VDC or 24 VDC. This terminology is in accordance with general usage when referring to vehicular battery voltages. In actual vehicle operation with the generator charging the vehicle battery, the nominal voltage is higher. The equipment is rated for operation on the nominal voltage under charging conditions. The table below summarizes the requirements:

COMMON USAGE SUPPLY VOLTAGE	ACTUAL NOMINAL VOLTAGE FOR SPECIFIED PERFORMANCE
12 VDC	13.6 VDC
24 VDC	26.4 VDC

ACCESSORIES

When ordering accessories:

- Specify the type and model number of equipment that will be used with the accessory.
- Specify the equipment serial number, if possible.
- If a Harris RF Communications accessory is to be used with equipment of another manufacturer, give the equipment name and model number.

TERMS AND CONDITIONS

Terms of sale for domestic sales may be reviewed on Harris' web site at: www.rf.harris.com/warranty-support.asp

EXTENDED WARRANTIES AND SERVICE CONTRACTS

Harris RF Communications offers extended warranties and service contracts. An extended warranty lengthens the original warranty provided with Harris RF Communications equipment and systems. Customers who want factory-trained personnel to assist in the installation, operation, maintenance, and service of their communications equipment can order a service contract. For more information, contact our Product Service Department. Typical charges for extended warranties are 3% of the sales price for the second year and an additional 6% for the third year (9% total). Extended warranties do not cover batteries and other life-limited items unless specifically included in the agreement in writing.

QUOTATIONS AND OFFERS

This catalog does not constitute an offer to sell unless confirmed in writing by the company. All quotations, sales, and agreements are subject to change as a result of strikes, accidents, transportation failures, and other causes beyond our control. Written quotations are valid for 60 days unless otherwise stated.

INTERNATIONAL SALES PAYMENTS

Specifically for customers outside of the U.S., payments must be by cash in advance or Confirmed Irrevocable Letter of Credit through an acceptable top tier international bank. Other types of payment terms may be arranged by contacting RF Communications in advance of ordering. Credit or delayed payment schedule may be arranged at Harris' discretion under certain conditions for both U.S. and export customers. For additional information, please contact our Trade Finance Department at tradefin@harris.com.

INTERNATIONAL SHIPMENTS

Certificates of origin required by specific contract provisions should state "of North American origin." The port of embarkation shall be any port of the seller's designation.

Any other questions related to solicitations or orders please contact the appropriate sales department:

Domestic Sales Department; (585) 241-8400
or (585) 244-5830 ext.8400

International Sales Department; (+1 585) 241-8383
or (+1 585) 244-5830 ext.8383

THE NEXT GENERATION OF ADVANCED TACTICAL COMMUNICATIONS

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The Falcon III series of radios provides a new generation of advanced tactical communications capabilities. The product line builds on the foundation of Falcon II and introduces new technologies, including wideband communications, advanced SATCOM capabilities, and the Software Communications Architecture (SCA).

This new technology is the driving force for delivering more information, faster, to all levels of tactical communications networks.

The Falcon III line offers products ranging from 30 MHz to more than 2 GHz. All family members are designed to MIL-STD-810, resulting in rugged equipment able to survive the demands of the battlefield.

HARRIS®

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TYPE-1 MULTI-CHANNEL MANPACK

RF-340M-MP MULTI-CHANNEL MANPACK RADIO

RF-340M-MP

The Falcon III Multi-Channel Manpack (MCMP) is a modular two-channel radio that covers the full 30-2500 MHz frequency range on each channel while offering a form factor that is 30% smaller than similar products. Each channel is capable of running a wide variety of Software Communications Architecture (SCA) narrowband, wideband, and SATCOM waveforms – including the same waveform on both channels. Each channel can be used to transmit and receive simultaneously, using different frequency bands and/or waveforms. Embedded routing and cross-banding provide the ability to connect disparate nets and sub-nets together for both voice and data.

A defining feature of the MCMP is its fully-integrated Mobile User Objective System (MUOS) hardware capability, making the radio MUOS-ready without change-outs or hardware additions when the waveform is developed and software upgrade released. Additionally, a third slot accommodates an optional module to add a variety of potential capabilities in the future such as an Intelligence Surveillance and Reconnaissance (ISR) receiver, Signals Intelligence (SIGINT), and additional Mobile Ad-hoc Networking (MANET) capabilities.

Situational awareness is enhanced through an embedded SAASM GPS receiver that displays local position and provides automatic position reporting on both channels. The Multi-Channel Manpack running the Software Communications Architecture is compatible with JTRS Enterprise Network Manager (JENM) software to provide full capability for network planning and monitoring, and is able to store multiple mission fill files for maximum mission flexibility. Use of a single, standard lithium ion battery further reduces the weight of the MCMP radio in dismount configuration, while compatibility with the AN/VRC-114, RF-7800M-V (AN/PRC-117G) and other Harris amplifier solutions offers up to 50 watts of output power for vehicular and base station systems.

FEATURES

- Covers 30 to 2500 MHz frequency range
- 2 Channels in a single radio, each with up to 99 presets
- Optional 3rd slot for advanced mission capabilities
- Embedded routing and cross-banding
- 30% smaller than other 2-channel manpacks
- SCA v2.2.2 operating environment
- Output Power: Narrowband (30-512 MHz) 10 watts, Wideband (225-2000 MHz) 20 watts peak, SATCOM (243-318 MHz) 20 watts
- MUOS-ready hardware
- Sierra II Programmable Cryptographic Module
- HAIPE v1.3.5, DS-101 and DS-102 keyfill modes
- Internal GRAM-SAASM GPS
- Soldier Radio Waveform (SRW)
- VHF/UHF LOS (VULOS) AM/FM
- SINCGARS ECCM
- HaveQuick I/II ECCM
- Dedicated UHF SATCOM: MIL-STD-188-181B
- DAMA UHF SATCOM: MIL-STD-188-182, MIL-STD-188-183, (Rev – or Rev A), NATO Frequency Tables
- Integrated Waveform (IW) Phase 1 MIL-STD-188-181C, MIL-STD-188-183B
- ANW2, WNW, HPW, and SATURN capable

INCLUDED WAVEFORMS AND CAPABILITES

SOLDIER RADIO WAVEFORM (SRW)

The Soldier Radio Waveform (SRW) was developed to serve as the standard for wideband tactical communications for the U.S. Department of Defense. SRW delivers voice, data, and high-bandwidth networking capabilities to forces at the tactical edge. The RF-340M-MP Multi-Channel Manpack offers SRW version 1.01.1c as well as integration with the Joint Enterprise Network Manager (JENM) for SRW mission planning and network monitoring.

VHF/UHF/LINE-OF-SIGHT (VULOS), LINE-OF-SIGHT (LOS), SATCOM AND BEACON

VULOS plain and cipher text fixed frequency-operating modes include VHF/UHF FM and AM in the 30 to 512 MHz range. VULOS waveform-supported encryption capabilities include ANDVT/KYV- 5, KY-57 VINSON, and KG-84C Type-1 modes as well as a Type-3 AES option. Several voice and data modes are also available, including FM/ AM analog voice, FSK voice/data, and ASK voice/data.

SINCGARS

The radio's SINCGARS capability meets MIL-STD-188-241-1, (ICOM Mode 2/3), Mode 1, and SIP/ESIP specifications. It performs TX/RX HOPSET, ERF, Cold Start, and OTAR, storing up to 25 TSKs and 25 TEKs. The radio also has Master or member selection, Late Net Entry (LNE), F-NET changing, and CUE functions. GTOD can be entered manually, via LNE, or via the embedded GPS receiver.

HAVEQUICK (HQ) I/II

The MCMP supports training and actual WOD, MWOD, HQ initialization, and I/II Active Net data. The radio can receive HQ TOD from an internal GPS, or RX/TX TOD Mickey using the front panel menus.

INTEGRATED WAVEFORM (IW)

The RF-340M-MP MCMP is JITC certified for IW Phase 1, meeting MIL-STD-188-181C requirements for pre-assigned services. IW mode is designed to reduce user setup and operational complexity as compared

to DAMA. IW employs a more flexible Time Division Multiple Access (TDMA) architecture, with significantly improved satellite access, MELP voice quality and increased data throughput CPM modems. IW mode also supports Multiple Access MIL-STD-188-183B Asynchronous Data Transfer (ADT) services for use in conjunction with MIL-STD-188-184A protocols and PDA-184A applications. When used in Single Service Access mode, IW can support MIL-STD 188-181B protocols.

SITUATIONAL AWARENESS (SA)

This function can send and receive SA data in LOS narrowband modes and wideband modes. The SA receive radio can be programmed to receive CoT, J-VMF, SINCGARS, or Harris SA formats. This information is only sent securely to prevent intercept. In LOS narrowband modes, receiving radios detect the SA information at the front of voice transmissions and export it to a PC or Android devices running PLI-SA software. In wideband modes the SA is integrated with the data.

CONFIGURATION AND PROGRAMMING

The RF-340M-MP can be programmed from the front panel for legacy narrowband operations. The Falcon III Communications Planning Application (CPA) can be used to program all narrowband and wideband modes (incorporating JENM files for JTRS waveforms). The MCMP also can be configured and programmed directly by the Joint Enterprise Network Manager (JENM) for new JTRS waveforms.

ACCESSORIES

ANTENNAS

PRODUCT NUMBER	PRODUCT NAME
RF-3166L-AT001	L-Band 1250-1850 MHz Dismount Antenna
RF-3166U-AT001	UHF/Wideband 225-450 MHz Dismount Antenna
RF-3150-AT122	VHF 30-108 MHz Dismount Antenna
RF-3143-AT320	Tri-Band Dismount Antenna
RF-3165-AT122	225-2000 MHz Wideband Dismount Antenna
RF-3081-ATXXX	UHF SATCOM ATP Yagi Fixed-site Antenna (MUOS capable)
RF-3073-AT242	L1/L2 Push-On GPS Antenna
RF-3070-AT242	L1/L2 Soldier-Worn GPS Antenna, 6 ft. (~1.8 m)

AUDIO PRODUCTS

PRODUCT NUMBER	PRODUCT NAME
10075-1399	H-250 Handset
A30-1059-002	Modified H250, Dual Audio Interface
10535-0707-AXXX	Speaker Audio Interface Cable
RF-5980-SA101	Dual Net Tactical Amplifed Speaker (Green)
10535-2713-AXXX	Right Angle Speaker Power Cable (RF-5901-PS005)
10535-0706-AXXX	Speaker Power Cable (RF-7800M-V Power Amplifier)

BATTERIES

PRODUCT NUMBER	PRODUCT NAME
BB-2590/U	Rechargeable Li Ion Battery
BB-5590/U	Non-rechargeable Li Ion battery
RF-5058-CH002	Two-Bay Charger/Conditioner
RF-5058-CH006	Six-Bay Charger/Conditioner
12043-4800-01	Single Battery Box
12177-XXXX-01	Battery Adapter System • 12177-2000-01 • 12177-3000-01
12177-2000-01	Dual Battery Adapter
12177-3000-01	Tethered Battery Box

CABLES

PRODUCT NUMBER	PRODUCT NAME
12083-0707-A003	USB to Ethernet Cable
12043-2750-A006	USB Programming Cable
10511-0704-012	KDU 6 ft. (~1.8 m) Extension Cable
12041-5663-01	USB Adapter Assembly Front Radio Exit
12041-5663-02	USB Adapter Assembly Rear Radio Exit

REMOTE CONTROL

PRODUCT NUMBER	PRODUCT NAME
10553-1300-02	Falcon III KDU
10553-0100-02	Falcon III KDU kit and Velcro Strap, 6 ft. (~1.8 m) Extension Cable

SOFT GOODS (CARRYING ACCESSORIES)

PRODUCT NUMBER	PRODUCT NAME
RF-5934-XXX	3-day MCMP Assault Bag

SOFTWARE

PRODUCT NUMBER	PRODUCT NAME
RF-6705-SW001	Tactical Chat IP
RF-6650M	Communications Planning Application (CPA)

MCMP SHOCK MOUNTS

PRODUCT NUMBER	PRODUCT NAME
12172-4200-01	Single Mount (radio not included)
12172-4600-01	Dual Mount (radio not included)

REMOTE 50W VHF/UHF POWER AMPLIFIER

12172-0300-01

Designed for long-range applications and increased communications reliability, the Remote 50W Power Amplifier (PA) supplies up to 50 watts of output power to an RF-340M-MP channel operating in the 30 to 450 MHz frequency band. The Remote PA is compatible with all narrowband, wideband, and SATCOM waveforms available with the RF-340M-MP, including a future upgrade to MUOS without hardware modifications.

The 12172-0300-01 amplifier interfaces directly to the MCMP mount to provide amplification for a single channel, or it can be tethered to an RF-7800M/UL-V system for 2-channel amplification with the RF-340M-MP. The remote 50W VHF/UHF Power Amplifier features separate banded antenna ports with automatic port switching, providing flexibility to meet multi-mission application requirements. Other features include VHF (30 to 90 MHz) and UHF (200 to 400 MHz) collocation filters, internal LNA, and integrated shock mount.

FEATURES

- Power output:
  - VHF Low (30-90 MHz) 50 watts
  - VHF High/UHF (90-450 MHz) 50 watts
  - UHF SATCOM (223-320 MHz) 50 watts
  - Wideband (225-450 MHz) 50 watts
  - Wideband (450-2000 MHz) 20 watts
  - VHF (30-90 MHz) and UHF (200-400 MHz) collocation filtering
- Supports narrowband, wideband, and SATCOM waveforms
- MUOS-capable hardware

POWER ADAPTERS AND CABLES

PRODUCT NUMBER	PRODUCT NAME
10513-0810-AXXX	Cable, RF to Remote Power Amplifier
12172-4515-A1	Cable, MCMP RT to PA J3 Interface Cable
10570-0716-AXXX	Cable, DC Power to Remote PA
RF-5910-PS005	AC Manpack Battery Eliminator

VEHICULAR ANTENNAS

PRODUCT NUMBER	PRODUCT NAME
RF-387-ATXXX	VHF Whip Antenna (30-108 MHz)
RF-3184-ATXXX	UHF Dipole Antenna (225-450 MHz)
RF-3183-ATXXX	VHF/UHF Whip Antenna (30-512 MHz)
RF-3186-ATXXX	UHF/L-Band Dipole Antenna (500-2500 MHz)
RF-3187-ATXXX	Tri-Band Antenna (30-2000 MHz)
RF-3141-ATXXX	L-Band Dipole Antenna (1240-1850 MHz)
12006-9001-01	SOTM X-Wing Antenna
RF-3071-AT234	L1/L2 Vehicular GPS Antenna

NETWORKING RADIOS

RF-330E-TR WIDEBAND NETWORKING TEAM RADIO

RF-330E-TR001

The RF-330E-TR Wideband Team Radio is a small, tactical team radio, NSA certified for Type-1, Secret and Below encryption in a non-CCI package. Designed to exceed Rifleman Radio and Nett Warrior operational requirements for range, battery life and mission weight, the RF-330E-TR provides simultaneous voice, high-speed data and up-to-date position location information, enhancing situational awareness and ensuring the individual war fighter is always connected and never alone.

The RF-330E-TR hosts the SRW networking waveform and features a Software Communications Architecture (SCA v2.2.2) operating environment, enabling software upgradeability as well as hosting additional software defined waveforms.The compact size and advanced capabilities of the RF-330E-TR provide a means to allow seamless voice and data capabilities for every team member, enabling today's war fighter to take on tomorrow's missions.

FEATURES

- 225 MHz-2 GHz Tri-band antenna optimized for 225-450 MHz, 1250-1390 MHz and 1755-1850 MHz
- SCA v2.2.2 Soldier Radio Waveform (SRW)
- Software programmable security architecture
- Selectable up to 3.2 watts
- SRW, Software upgradeable to support additional/future waveforms
- 1.2 MHz bandwidth
- 2 lbs. (~0.9 kg) with battery and antennas
- Storage for up to 99 programmable presets
- Nominal 10.8 VDC (Falcon III HH radio family interface)
- Interfaces with currently fielded inventories of Falcon III HH batteries and chargers (Falcon III HH radio family)
- Unparalleled battery life capable of supporting missions well in excess of 24 hours with only a single spare battery
- Internal GPS standard, external SAASM interface (DAGR/PLGR)
- OLED Display (HMI) provides immediate visual confirmation of R/T status: Battery gauge/Net connection status/Preset number/label Indication of loaded key material
- User friendly utility access (HMI) to menu driven radio utilities without requiring an external device

The RF-330E-TR includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12153-7100-01	Radio Assembly, Harris Rifleman Radio RF-330E-TR001	1
10515-0446-4000	Operator Card, RF-330E-TR	1
10515-0446-4200	Operator Manual, RF-330E-TR	1
10515-0446-4500	Operator Student Guide, RF-330E-TR	1
10518-2972-01	CD Assembly, CPA for RF-330E-TR	1
10518-7972-01	CD Labeled, CPA for RF-330E-TR	1
10518-8972-01	Software, CPA for RF-330E-TR	1
12153-1040-01	Kit, RF-330E-TR Programming	1

ACCESSORIES

See the Common Accessories and Antennas chapters for more information.

ANTENNAS

PRODUCT NUMBER	PRODUCT NAME
12121-2730-01	Handheld Tri-band Antenna
12121-2750-01	RF-330E-TR GPS Antenna

AUDIO PRODUCTS

PRODUCT NUMBER	PRODUCT NAME
12041-3150-01	Lapel Speaker Microphone
RF-3055-TG001	Talk Group Selector
RF-3020-HS001	Headset with Microphone
RF-3020-HS002	Headset with Sniper Switch

CABLES

PRODUCT NUMBER	PRODUCT NAME
12153-0840	Cable Assembly, 14-pin to USB Type A device
12153-0841	Cable Assembly, 14-pin to USB Micro B device
12153-0842	Cable Assembly, 14-pin to USB Micro B host
12153-0843	Cable Assembly, 14-pin to USB Micro B with ANC power
12153-0844	Cable Assembly, 14-pin to Tablet
12153-0845	Cable Assembly, 14-pin to PLGR/DA GR
12153-0846	Cable Assembly, 14-pin to Ethernet
12153-0849-A1	Cable Assembly, 14-pin to 7-pin Fischer, USB (Tablet)
12153-0850	Cable Assembly, 14-pin to KDU
12153-0852	Cable Assembly, 14-pin to USB A, PLGR/DA GR
12153-0854	Cable Assembly, 14-pin to USB B, PLGR/DA GR
12153-0860	Cable Assembly, 14-pin to USB A, KDU
12153-0862	Cable Assembly, 14-pin to USB B, KDU
12153-0864	Cable Assembly, 14-pin to USB A, KDU, RS232

BATTERIES AND CHARGERS

PRODUCT NUMBER	PRODUCT NAME
12041-2200-02	Rechargeable, High-Capacity Li Ion Battery
RF-5911-PS001	AA Battery Adapter
RF-5853-CH101	Single-Bay Li Ion Battery Charger
RF-5853-CH102	Two-Bay Li Ion Battery Charger
RF-5853-CH106	Six-Bay Li Ion Battery Charger

POWER ADAPTERS

PRODUCT NUMBER	PRODUCT NAME
RF-5912-PS001	DC Battery Adapter/Charger

SOFT GOODS (CARRYING ACCESSORIES)

PRODUCT NUMBER	PRODUCT NAME
RF-5952-CA006	Multicam Holster, RF-330E
12500-3010-07	Talk Group Selector Holster

SOFTWARE

PRODUCT NUMBER	PRODUCT NAME
10518-2972-01	CD Assembly, CPA for RF-330E-TR
10518-7972-01	CD Labeled, CPA for RF-330E-TR
10518-8972-01	Software, CPA for RF-330E-TR
12153-1040-01	Kit, RF-330E-TR Programming

TECHNICAL MANUALS

PRODUCT NUMBER	PRODUCT NAME
10515-0446-4000	Operator Card, RF-330E-TR
10515-0446-4200	Operator Manual, RF-330E-TR
10515-0446-4500	Operator Student Guide, RF-330E-TR
10515-0446-4000	Operator Card, RF-330E-TR

TYPE-1 MULTIBAND MANPACK

AN/PRC-117G MULTIBAND NETWORKING MANPACK

AN/PRC-117G(V)1(C)

The AN/PRC-117G(V)1(C) is a Type-1 wideband tactical radio for on-the-move networking that is 30% smaller and 35% lighter than the previous generation of manpack radios. The AN/PRC-117G single-channel radio provides secure Internet Protocol (IP) data to the tactical Internet at on-air rates up to 10 Megabits per second (Mbps) and is powered by a single standard battery.

With a range of multiband and multimission capabilities, the AN/PRC-117G covers 30 MHz to 2 GHz and transmits up to 10 watts VHF/UHF line-of-sight, with 20 watts output over tactical satellite (TACSAT) and Wideband modes. It incorporates the Harris Adaptive Networking Wideband Waveform (ANW2), with a dedicated Combat Net Radio (CNR) voice channel to ensure voice communication is never lost if the IP network goes down. The AN/PRC-117G also incorporates Soldier Radio Waveform (SRW), SINCGARS, Havequick I/II, VHF/UHF AM and FM, and a variety of TACSAT capabilities, including the High Performance Waveform (HPW), MIL-STD-188-181B Dedicated SATCOM, DAMA (MIL-STD-188-182A and MIL-STD-188-183A) and Phase 1 Integrated Waveform (IW). Optional capabilities include SATURN hopping ECCM, ROVER waveform for receiving L-Band video transmissions and the APCO P25 waveform for civilian first responder interoperability, increasing the operational scope of the AN/PRC-117G. MUOS TACSAT will also be available as an optional software only upgrade. Other Software Communications Architecture (SCA)-based waveforms can also be ported into the radio.

The AN/PRC-117G utilizes the Harris Sierra™ II software-programmable encryption module, a reprogrammable cryptographic device that protects information up to the TOP SECRET level. The radio also supports numerous legacy encryption modes and can store multiple mission fill files to extend the time between reconfigurations. An INE (inline network encryption) function extends the secure IP network using other IP-capable devices, such as the RF-7800B BGAN transceivers and RF-7800W HCLOS Radio. The AN/PRC-117G's embedded GRAM SAASM GPS receiver displays local position and provides automatic position reporting for situational awareness. The radio also features three separate antenna connections for efficient and flexible use of antennas.

FEATURES

- 30 MHz-2 GHz frequency range
- SCA v2.2.2 operating environment
- Narrowband (30-512 MHz) 10 watts output power, wideband (225-2000 MHz) 5 watts peak output power, SATCOM (243-318 MHz) 20 watts output power
- MUOS-ready hardware
- HAIPE v1.3.5, DS-101 and DS-102 keyfill modes
- Internal GRAM-SAASM GPS
- Adaptive Networking Wideband Waveform (ANW2)
- Soldier Radio Waveform (SRW)
- SINCGARS ECCM, Havequick I/II ECCM
- Dedicated UHF SATCOM: MIL-STD-188-181B
- DAMA UHF SATCOM: MIL-STD-188-182, MIL-STD-188-183, (Rev – or Rev A), NATO Frequency Tables
- Integrated Waveform (IW) Phase 1 MIL-STD-188-181C, MIL-STD-188-183B
- High Performance Waveform (HPW) and HPW-IP
- Sierra II Programmable Cryptographic Module
- VULOS Type 3 AES Key Support
- ROVER Waveform (Optional)
- APCO P25 Waveform (Optional)
- SATURN waveform (Optional)
- MUOS waveform (Software only upgrade) (Optional)

INCLUDED WAVEFORMS AND CAPABILITES

ADAPTIVE NETWORKING WIDEBAND WAVEFORM (ANW2)

The Adaptive Networking Wideband Waveform (ANW2) is an ad-hoc (self-forming and self-healing), IP-based, UHF line-of-sight (LOS), wideband wireless network waveform for fixed and mobile communications. ANW2 seamlessly allows data connectivity around corners for the most accurate common operational picture of the immediate battle space in urban combat scenarios. In non-urban settings ANW2 ensures immediate, robust voice communications at all times and can be used to achieve a high data rate pipe for point-to-point applications such as streaming video. The latest ANW2C provides 30-node capability, up to nine voice HOP relays, and supports up to 225 Guest nodes. The waveform also has higher speed GMSK modems, VoIP support, and Dynamic Channel Allocation (DCA).

SOLDIER RADIO WAVEFORM (SRW)

The Soldier Radio Waveform (SRW) was developed to serve as the standard for wideband tactical communications for the U.S. Department of Defense. SRW delivers voice, data, and high-bandwidth networking capabilities to forces at the tactical edge. Harris ported SRW 1.01.1c and SRW Network Manager (SRWNM/JENM) support into the AN/PRC-117G.

Note: For U.S. DoD customers that wish to upgrade currently fielded radios, SRW is available as a software-only update for 0N707070-9 or -10 hardware through the Harris Premier website. For earlier hardware versions, including 0N707070-1 and 0N707070-7, SRW is available as a program-specific upgrade. Contact Harris Product Management for more details.

VHF/UHF/LINE-OF-SIGHT (VULOS), LINE-OF-SIGHT (LOS), SATCOM AND BEACON

The AN/PRC-117G can be programmed manually or via the Communications Planning Application (CPA). The radio can be configured to support multiple COMSEC types and modulations per waveform. VULOS plain and cipher text fixed frequency operating capabilities include VHF/UHF FM and AM in the 30 to 512 MHz range. VULOS waveform-supported encryption capabilities include ANDVT/KYV-5, KY-57 VINSON, and KG-84C Type-1 modes as well as a Type-3 AES option. Several voice and data modes are also supported, including FM/AM analog voice, FSK voice/data, and ASK voice/data.

SINCGARS

The radio's SINCGARS capability meets MIL-STD-188-241-1, (ICOM Mode 2/3), Mode 1, and SIP/ESIP specifications. It performs TX/RX HOPSET, ERF, Cold Start, and OTAR, storing up to 25 TSKs and 25 TEKs. The radio also has Master or member selection, Late Net Entry (LNE), F-NET changing, and CUE functions. GTOD can be entered manually, via LNE, or via the embedded GPS receiver. All modes, including F1-F1 retransmit and SC or FH retransmit, require two AN/PRC-117G radios and a retransmit cable.

HAVEQUICK (HQ) I/II

The AN/PRC-117G can be programmed manually or via the Communications Planning Application (CPA), including WOD, MWOD, FMT, HQ initialization, and I/II Active Net data. The radio can receive HQ TOD from an internal GPS, or RX/TX TOD Mickey using the Keypad/Display Unit (KDU) menus.

SITUATIONAL AWARENESS (SA)

This function can send and receive SA data within each transmission in most voice modes and certain data modes. The SA receive radio can be programmed to receive CoT, J-VMF, SINCGARS, or Harris SA formats. This information is only sent securely to prevent intercept. Receiving radios detect the SA information at the front of voice transmissions and export it to a PC or other external device. The exported data is fully compatible with C2PC systems and can be displayed using this application.

INTEGRATED WAVEFORM (IW)

The AN/PRC-117G is JITC certified for IW Phase 1, meeting MIL-STD-188-181C and MIL-STD-188-183B requirements for pre-assigned services. IW mode is designed to reduce user setup and operational complexity as compared to DAMA. IW employs a more flexible Time Division Multiple Access (TDMA) architecture with significantly improved satellite access, MELP voice quality and increased data throughput CPM modems. IW mode also supports Multiple Access MIL-STD-188-183B Asynchronous Data Transfer (ADT) services for use in conjunction with MIL-STD-188-184A protocols. When used in Single Service Access mode, IW can support HPW and MIL-STD 188-181B protocols.

HIGH-PERFORMANCE WAVEFORM (HPW)

HPW securely transfers large files on wideband and narrowband dedicated SATCOM channels and line-of-sight (LOS) nets at speeds three to five times faster than many fielded data systems. The waveform's advanced techniques include over-the-air data rates of up to 64 Kbps LOS and 56 Kbps on UFO SAT channels, error-free delivery using ARQ protocols with black side encryption, and automatic waveform adaptation based on varying channel conditions. The radio's PPP interface connects to the supplied PC port drivers; no external PC card is required. HPW utilizes the radio's PPP interface, which requires either the 12043-2710-A006 PPP Cable or the 12043-2750-A006 USB PPP Cable.

HPW-INTERNET PROTOCOL (HPW-IP)

HPW-IP mode enables point-to-point data transmissions via IP-based applications such as the RF-6705 Tactical Chat IP. HPW-IP provides a common IP interface to extend networking applications over the LOS nets and dedicated SATCOM links. HPW-IP utilizes the radio's PPP interface, which requires either the 12043-2710-A006 PPP Cable or the 12043-2750-A006 USB PPP Cable.

OPTIONAL WAVEFORMS

MOBILE USER OBJECTIVE SYSTEM (MUOS) WAVEFORM

12043-8940-0012

MUOS is a next-generation military satellite communications system designed to provide users with enhanced SATCOM capabilities through tactical radios. MUOS provides secure, mobile-networked voice and data services worldwide and provides the warfighter on the ground with a direct link to other users and the command level virtually anywhere in the world. The MUOS system delivers greater user capacity over the legacy SATCOM system at user data rates of up to 64 kbps with the AN/PRC-117G. Further, MUOS offers the ability to communicate on the move—both in dismount and vehicular applications—to avoid the need for the warfighter to "stop and point" to establish the SATCOM link as is required with legacy systems. Type-1 security is provided with High Assurance IP Encryptor (HAIPE), enabling Internet Protocol-based applications for networking on the move. The MUOS waveform is available as a software-only upgrade to fielded AN/PRC-117G radio systems, and is available as an optional upgrade on new units delivered.

Note: For U.S. DoD customers that wish to upgrade currently fielded radios, MUOS is available as a software-only update for 0N707070-9 or -10 hardware. For earlier hardware versions, including 0N707070-1 and 0N707070-7, MUOS is available as a program-specific upgrade. Contact Harris Product Management for more details.

SATURN WAVEFORM

12043-8940-0011

The SATURN waveform operates in the UHF band and offers superior ECCM technology with faster hopping and improved TRANSEC over legacy ECCM waveforms. The AN/PRC-117G can be programmed manually or via the Communications Planning Application (CPA), including all required MWOD, Training Mode, and Active Net HOP data. The radio can receive a SATURN TOD from an internal GPS or via RX Over-the-Air.

FALCON III® MULTIBAND RADIOS

REMOTELY OPERATED VIDEO ENHANCED RECEIVER (ROVER)

12043-8940-0002

The AN/PRC-117G can be configured as part of a system that allows ground forces, such as Forward Air Controllers, to receive video feeds from an aircraft or unmanned aerial vehicle (UAV) transmitting in the L-Band frequency range. Images acquired by the aircraft's sensors are transmitted to the AN/PRC-117G and displayed on a device such as a ruggedized laptop or video display.

APCO P25 WAVEFORM

12043-8940-0005

The APCO P25 Waveform was developed as a standard for allowing effective and reliable mobile communications between local and federal agencies and across manufacturers. The waveform enables civilian interoperability between the AN/PRC-117G and a wide variety of local and federal agencies' land mobile radios.

This software-only waveform option offers the APCO P25 waveform for the AN/PRC-117G, enabling civilian interoperability across manufacturers and between a variety of local and federal agencies. The waveform includes analog and digital conventional (IMBE) modes of operation in both the VHF and UHF P25 bands. P25 can be operated in either PT or with Type-III DES-OFB or AES encryption (included). The KVL3000/MP Adapter Kit (12053-6400-04) is required to load P25 keys into the AN/PRC-117G.

L-BAND ROVER ANTENNA KIT

RF-3166-AT122

The RF-3166-AT122 antenna kit includes the 12006-5500-01 Antenna, N-to-N cable, and a carry bag. The antenna receives L-Band signals in the 1.71 to 1.85 GHz range and is optimized for operation with the 12043-8940-0002 L-Band ROVER Option. The antenna has two female type-N ports, a directional linearly polarized antenna and an omni-directional linearly polarized antenna. The radio connects to the antenna through the wideband port via a coax cable with type-N terminations on both ends. ROVER receive operations also require the ROVER Waveform Option (12043-8940-0002) installed in the radio.

The AN/PRC-117G(V)1(C) includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
AN/PRC-117G(V)1(C)	Multiband Receiver/Transmitter	1
12043-2750-A006	USB Programming Cable, 6 ft. (~1.8 m)	1
RF-6650M	Communications Planning Application CD	1
10075-1399	H-250/U Lightweight Handset (Modified)	1
10515-0383-4100	ANW2 Simplified Setup Guide	1
10515-0319-4100	AN/PRC-117G Pocket Guide	1
10515-0319-6000	AN/PRC-117G e-Pub CD	1
10515-0319-4000	AN/PRC-117G SINCGARS System Pocket Guide	1
10515-0319-4020	AN/PRC-117G Integrated Waveform (IW) Supplement	1
10515-0319-4030	AN/PRC-117G DAMA Waveform Operation Supplement	1
10515-0319-4100	AN/PRC-117G Multiband Manpack Radio Reference Guide	1
10515-0319-4200	AN/PRC-117G Multiband Manpack Radio Operation Manual	1
10515-0333-4200	Falcon III Multiband Vehicular Radio Systems RF-300M-V150/V250/V255, RF-7800M-V150 System Installation/ Maintenance Manual	1
10515-6581	Falcon III IW Operator Card	1
10515-6525	AN/PRC-117G HUB Replacement Guide	1

OPTIONS

DISMOUNT ANTENNA KIT

RF-300M-DK001

This antenna kit for the AN/PRC-117G includes:

PRODUCT NUMBER	PRODUCT NAME
RF-3152-AT152	30-512 MHz UHF/VHF Manpack Antenna
RF-3164-AT122	225-450 MHz UHF Manpack Antenna
RF-3150-AT152	30-108 MHz VHF Manpack Antenna
RF-3070-AT242	L1/L2 Active GPS Antenna
12043-4800-01	Battery Box
10372-0349-01	Antenna Bag (Green)
10515-6392	Antenna Reference Card
12043-6077-01	J3/J6 Port Covers (2)

RF-300M-DK005

This antenna kit for the AN/PRC-117G includes:

PRODUCT NUMBER	PRODUCT NAME
RF-3152-AT152	30-512 MHz UHF/VHF Manpack Antenna
RF-3165-AT122	225-2000 MHz UHF Manpack Antenna
RF-3150-AT152	30-108 MHz VHF Manpack Antenna
RF-3073-AT242	L1/L2 Active Push-on GPS Antenna
12043-4800-01	Battery Box
10372-0349-01	Antenna Bag (Green)
10515-6392	Antenna Reference Card
12043-6077-01	J3/J6 Port Covers (2)

RF-300M-DK041

MUOS Dismount-at-the-Pause Antenna Kit – Fielded AN/PRC-117G Upgrade:

PRODUCT NUMBER	PRODUCT NAME
12043-8995-0012	MUOS Waveform Option, Software Upgrade for Fielded System
RF-3081-AT001	Antenna, Portable SATCOM
12006-7200-01	Diplexer, Dismount, MUOS, Green

RF-300M-DK051

MUOS Dismount-at-the-Pause Antenna Kit—New for AN/PRC-117G:

PRODUCT NUMBER	PRODUCT NAME
12043-8940-0012	MUOS Waveform Option, Factory
RF-3081-AT001	Antenna, Portable SATCOM
12006-7200-01	Diplexer, Dismount, MUOS, Green

RF-300M-DK042

MUOS Dismount On-The-Move Kit—Fielded AN/PRC-117G Upgrade:

PRODUCT NUMBER	PRODUCT NAME
12043-8995-0012	MUOS Waveform Option, Software Upgrade for Fielded System
RF-3167-AT001	Antenna, AN/PRC-117G Manpack, MUOS

RF-300M-DK052

MUOS Dismount On-The-Move Kit—New for AN/PRC-117G:

PRODUCT NUMBER	PRODUCT NAME
12043-8940-0012	MUOS Waveform Option, Software Upgrade
RF-3167-AT001	Antenna, AN/PRC-117G Manpack, MUOS

AN/PRC-117G ACCESSORIES

See the Vehicular Amplifiers section of this chapter and the Common Accessories and Antennas chapters for more information.

SOLDIER L1/L2 PUSH-ON GPS ANTENNA

RF-3073-AT242

The RF-3073-AT242 is an active L1/L2 GPS antenna for use with the RF-7800M-MP manpack radio. The 1.25 W x 1.25 D x 1.25 H inches (~3.2 x 3.2 x 3.2 centimeters), 2.0-ounce (~57-gram) antenna is designed for permanent mounting directly to the GPS connector on the RF-7800M-MP. The antenna contains an internal switch that bypasses the RF-3073-AT242 when activated by attaching an external L1 GPS antenna to the top SLB connector. The active antenna incorporates bandpass filtering, a limiter, and a Low Noise Amplifier (LNA) with gain of 25 dB on L1 and 29 dB on L2. Color: Black.

ANTENNAS (DISMOUNT)

PRODUCT NUMBER	PRODUCT NAME
RF-3150-AT152	30-108 MHz VHF Blade Antenna
RF-3152-AT152	30-512 MHz VHF/UHF Monopole Blade Antenna with Gooseneck Base
RF-3164-AT122	225-450 MHz UHF Dipole Blade Antenna with Gooseneck Base
RF-3165-AT122	225-2000 MHz Wideband Antenna with Gooseneck Base
RF-3080-AT001	240-400 MHz UHF SATCOM Antenna Set
RF-3070-AT242	L1/L2 Soldier Worn GPS Antenna, with 6-ft. (~1.8-m) cable

AUDIO PRODUCTS

PRODUCT NUMBER	PRODUCT NAME
RF-3020-HSXXX	Lightweight Headset
RF-5980-SAXXX	Tactical Amplifier/Speaker

BATTERIES AND CHARGERS

PRODUCT NUMBER	PRODUCT NAME
BA-5590/U	Non-Rechargeable, Disposable Lithium Battery
BA-5390/U	Non-Rechargeable Lithium Manganese Dioxide Battery
BB-390B/U	Rechargeable Nickel Metal-Hydride Battery
BB-2590/U	Rechargeable Li Ion Battery
RF-5058-CH002 RF-5058-CH006	Two-Bay Charger/Conditioner Six-Bay Charger/Conditioner

CABLES

PRODUCT NUMBER	PRODUCT NAME
12043-2710-AXXX	PPP Data Cable
12043-2730-AXXX	Data and Remote Control Cable
12043-2740-AXXX	Digital Retransmission Cable
12043-2760-AXXX	Ethernet Cable (male RJ45)
12043-2765-A006	Ethernet Cable (female RJ45)
12006-4241-AXXX	GPS Cable
12043-2750-AXXX	USB Programming Cable
12043-0839-A010	Inline Network Encryption
12043-0838-A006	Inline Network Encryption (J6 to J6)
12043-6400-04	P25 KVL3000+ Adapter Cable, 4 ft. (~1.2 m)

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
RF-7800M-AD250	AN/VRC-103 VHF/UHF Mounting Tray
RF-7871-VM001	Shock Tray, for use with RF-5910-PS005 Battery Eliminator
RF-7871-VM002	Shock Tray, for use with alternate vehicular power

POWER ADAPTER

PRODUCT NUMBER	PRODUCT NAME
RF-5910-PS005	Power Supply (AC-to-DC, DC-to-DC) with battery back-up and auxiliary DC output

REMOTE CONTROL

PRODUCT NUMBER	PRODUCT NAME
RF-7800R-RC003	Falcon III Remote Control System
10553-0100-XX	Falcon III Remote KDU

SOFT GOODS (CARRYING ACCESSORIES)

PRODUCT NUMBER	PRODUCT NAME
RF-5935-CAXXX	Backpack Carrying Bag
10372-0349-XX	Antenna Bag

SOFTWARE

PRODUCT NUMBER	PRODUCT NAME
RF-6760W-04EN	Wireless Message Terminal Software, Synchronous DTE data
RF-6705-SW001	Tactical Chat IP
RF-6650M	Communications Planning Application (CPA)

TECHNICAL MANUALS

PRODUCT NUMBER	PRODUCT NAME
10515-0319-6000	AN/PRC-117G e-Pub CD
10515-0319-4200	AN/PRC-117G Operator's Manual
10515-0319-4300	AN/PRC-117G Intermediate Maintenance Manual
10515-0319-4100	AN/PRC-117G Quick Reference Guide
10515-0383-4100	ANW2 Simplified Guide
10515-0319-4020	Integrated Waveform (IW) Operation Supplement
10515-0319-4030	DAMA Operation Supplement
10515-0319-4000	SINCGARS Pocket Guide
10515-6392	Antenna Reference Card
10515-0319-4050	SRW Operation Supplement
10515-0319-7200	Computer Based Training (CBT)

VEHICULAR SYSTEMS

SINGLE CHANNEL CONFIGURATION

RF-300M-V150

The RF-300M-V150 includes an AN/PRC-117G(V)1(C) radio, a power amplifier (PA), and a vehicular interface mount (VIM). The radio mounts securely within the PA, supporting both narrowband and wideband waveforms.

The PA features separate VHF, UHF, SATCOM and wideband antenna ports with automatic port switching, providing a radio system with true multimission capability. The user selects the desired radio preset to switch between ground, ground-to-air, SATCOM, and wideband networking communications. The PA includes VHF (30 to 90 MHz) and UHF (200 to 400 MHz) collocation filters, an internal LNA, wideband PA control interface, and auxiliary power output.

The VIM provides a DC input power connector, a DC output connector, VIC-1/VIC-3 interface, and DC speaker power connector. It includes a shock mount and a mechanism to lock the manpack radio for physical security.

FEATURES

- Power output:
  - VHF Low (30-90 MHz) 50 watts
  - VHF High/UHF (90-450 MHz) 50 watts
  - SATCOM (225-320 MHz) 50 watts
  - Wideband: 50 watts from 225-450 MHz; 20 watts from 450-2000 MHz
  - VHF (30-90 MHz) and UHF (200-400 MHz) collocation filtering
- Supports narrowband and wideband waveforms
- VIC-1 and VIC-3 interface
- External DC power output to accessories
- MUOS-ready hardware

The RF-300M-V150 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
AN/PRC-117G(V)1(C)	Multiband Receiver/Transmitter	1
12043-2750-A006	USB Programming Cable, 6 ft. (~1.8 m)	1
RF-6650M	Communications Planning Application CD	1
10075-1399	H-250/U Lightweight Handset (Modified)	1
10515-0319-4000	SINCGARS Pocket Guide	1
10515-0383-4100	ANW2 Simplified Guide	1
10515-0319-4100	AN/PRC-117G Pocket Guide	1
10515-0319-6000	AN/PRC-117G e-Pub CD	1
RF-7800M-PA150	50 Watt Power Amplifier Assembly	1
11080-3980-01	50 Watt DC Switch Assembly	1
12064-5005-01	Single VAA Ancillary and Cable Kit	1
12050-3000-03	Shock Mount Assembly	1
12064-0150-01	Locking Bar and Lanyard	1
10570-0720-01	DC Power Cable and Fuse Kit, 21 ft. (~6.4 m)	1

SINGLE CHANNEL WIDEBAND CONFIGURATION

RF-300UL-V150

The RF-300UL-V150 includes an AN/PRC-117G(V)1(C) radio, a wideband power amplifier (PA), and a vehicular interface mount (VIM). The radio mounts securely within the PA, supporting both narrowband and wideband waveforms up to 5 MHz bandwidth.

The VAA features separate VHF, UHF, SATCOM, and wideband antenna ports with automatic port switching, providing the radio system with true multimission capability. The operator only needs to select the required preset on the radio to switch between ground, ground-to-air, and wideband networking communications. Other features provided by the RF-300UL-V150 include UHF (225 to 520 MHz) and L-Band (1.2 to 2 GHz) collocation filters, an internal LNA, wideband PA control interface, and auxiliary power output.

The VIM provides a DC input power connector, a DC output connector, VIC-1/VIC-3 interface, and DC speaker power connector. It includes a shock mount and a mechanism to lock the manpack radio for physical security.

FEATURES

- Power output:
  - VHF Low/High Broadband (Amplifier bypass) 10 watts from 30-225 MHz
  - UHF (225-1000 MHz) 50 watts
  - SATCOM (225-320 MHz) 50 watts
  - L-Band (1000-2000 MHz) 50 watts
  - UHF (225-520 MHz) and L-Band (1.2-2 GHz) collocation filtering
- Supports narrowband and wideband waveforms, up to 5 MHz bandwidth
- VIC-1 and VIC-3 interface
- MUOS-ready hardware
- External DC power output to accessories

The RF-300M-V150 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
AN/PRC-117G(V)1(C)	Multiband Receiver/Transmitter	1
12043-2750-A006	USB Programming Cable, 6 ft. (~1.8 m)	1
RF-6650M	Communications Planning Application CD	1
10075-1399	H-250/U Lightweight Handset (Modified)	1
10515-0319-4000	SINCGARS Pocket Guide	1
10515-0383-4100	ANW2 Simplified Guide	1
10515-0319-4100	AN/PRC-117G Pocket Guide	1
10515-0319-6000	AN/PRC-117G e-Pub CD	1
12137-0900-01	50 Watt U/L Band Power Amplifier Assembly	1
12064-5005-01	50 Watt System Ancillary and Cable Kit	1
11080-3980-01	50 Watt DC Switch Assembly	1
12050-3000-03	Shock Mount Assembly	1
12064-0150-01	Locking Bar and Lanyard	1
10570-0720-01	DC Power Cable and Fuse Kit, 21 ft. (~6.4 m)	1

FALCON III® MULTIBAND RADIOS

DUAL CHANNEL MULTIBAND CONFIGURATION

RF-300M-V250

The RF-300M-V250 includes two AN/PRC-117G(V)1(C) radios, two power amplifiers (PAs), a shock mount interface assembly (SIM), a standard MT-6352 dual mount, and locking hardware, supporting both narrowband and wideband waveforms, up to 5 MHz bandwidth.

Each PA features separate VHF, UHF, SATCOM and wideband antenna ports with automatic port switching, providing a radio system with true multimission capability. The user selects the desired radio preset to switch between ground, ground-to air, SATCOM, and wideband networking communications. Each PA includes VHF (30 to 90 MHz) and UHF (200 to 400 MHz) collocation filters, an internal LNA, wideband PA control interface, and auxiliary power output.

FEATURES

- Dual channel up to 50 watts output power
- Power output:
  - VHF Low (30-90 MHz) 50 watts
  - VHF High/UHF (90-450 MHz) 50 watts
  - SATCOM (225-320 MHz) 50 watts
  - Wideband: 50 watts from 225-450 MHz, 20 watts from 450-2000 MHz
  - VHF (30-90 MHz) and UHF (200-400 MHz) collocation filtering
- Supports narrowband and wideband waveforms
- VIC-1 and VIC-3 interface
- Supplied with MT-6352 mount

The RF-300M-V250 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
AN/PRC-117G(V)1(C)	Multiband Receiver/Transmitter	2
12043-2750-A006	USB Programming Cable, 6 ft. (~1.8 m)	2
RF-6650M	Communications Planning Application CD	2
10075-1399	H-250/U Lightweight Handset (Modified)	2
10515-0319-4000	SINCGARS Pocket Guide	2
10515-0383-4100	ANW2 Simplified Guide	2
10515-0319-4100	AN/PRC-117G Pocket Guide	2
10515-0319-6000	AN/PRC-117G e-Pub CD	2
RF-7800M-PA150	50 Watt Power Amplifier Assembly	2
11080-3980-01	50 Watt DC Switch Assembly	1
12064-5005-02	Dual Manpack VAA Ancillary and Cable Kit	1
12053-6800-01	Shock Mount Interface Assembly	1
MT-6352/VRC	Dual System Shock Mount	1
12064-5005-02	Dual VAA System Cable Kit	1
12064-0150-01	Locking Bar and Lanyard	2
12064-1011-01	Dual Systems Control Plate Kit	1
10570-0720-01	DC Power Cable and Fuse Kit, 21 ft. (~6.4 m)	1

DUAL CHANNEL L-BAND CONFIGURATION

RF-300UL-V250

The RF-300UL-V250 includes two AN/PRC-117G(V)1(C) radios, two wideband power amplifiers (PAs), a shock mount interface assembly (SIM), a standard MT-6352 dual mount, and locking hardware. The radios mount securely within the PAs, supporting both narrowband and wideband waveforms up to 5 MHz bandwidth.

Each PA features separate VHF, UHF, SATCOM, and wideband antenna ports with automatic port switching, providing a radio system with true multimission capability. The user selects the desired radio preset to switch between ground, ground-to air, SATCOM, and wideband networking communications. Each PA includes UHF (225 to 520 MHz) and L-Band (1.2 to 2 GHz) collocation filters, an internal LNA, wideband PA control interface, and auxiliary power output.

FEATURES

- Dual channels with up to 50 watts output power
- Power output:
  - VHF Low/High Broadband (Amplifier bypass): 10 watts from 30-225 MHz
  - UHF (225-1000 MHz) 50 watts
  - SATCOM (225-320 MHz) 50 watts
  - L-Band (1000-2000 MHz) 50 watts
  - UHF (225-520 MHz) and L-Band (1.2-2 GHz) collocation filtering
- Supports narrowband and wideband waveforms, up to 5 MHz bandwidth
- VIC-1 and VIC-3 interface
- MUOS-ready hardware
- Supplied with MT-6352 mount

The RF-300UL-V250 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
AN/PRC-117G(V)1(C)	Multiband Receiver/Transmitter	2
12043-2750-A006	USB Programming Cable, 6 ft. (~1.8 m)	2
RF-6650M	Communications Planning Application CD	2
10075-1399	H-250/U Lightweight Handset (Modified)	2
10515-0319-4000	SINCGARS Pocket Guide	2
10515-0383-4100	ANW2 Simplified Guide	2
10515-0319-4100	AN/PRC-117G Pocket Guide	2
10515-0319-6000	AN/PRC-117G e-Pub CD	2
12137-0900-01	50 Watt U/L Band Power Amplifier Assembly	2
12064-5005-02	Dual System Ancillary and Cable Kit	1
11080-3980-01	50 Watt DC Switch Assembly	1
12053-6800-01	Shock Mount Interface Assembly	1
MT-6352/VRC	Dual System Shock Mount	1
12064-0150-01	Locking Bar and Lanyard	2
12064-1011-01	Dual Systems Control Plate Kit	1
10570-0720-01	DC Power Cable and Fuse Kit, 21 ft. (~6.4 m)	1

FALCON III® MULTIBAND RADIOS

DUAL CHANNEL L-BAND AND MULTIBAND CONFIGURATION

RF-300UL-V350

The RF-300UL-V350 includes two AN/PRC-117G(V)1(C) radios, a UL-band Power Amplifier (PA), a multiband PA, a shock mount interface assembly (SIM), a standard MT-6352 dual mount, locking hardware, and DC power kit. The dual system is designed to provide 50 watts of output power across the entire 30 MHz to 2 GHz spectrum, including narrowband waveforms, SINCGARS, and wideband ANW2 and SRW waveform frequencies.

Each PA features separate VHF, UHF, SATCOM and wideband antenna ports with automatic port switching, providing a radio system with true multi-mission capability. The user selects the desired radio preset to switch between ground, ground-to air, SATCOM, and wideband networking communications. Each PA includes VHF and UHF collocation filters, an internal LNA, wideband PA control interface, and auxiliary power output.

FEATURES

- Dual channel 50 watts output power across the entire 30 MHz-2 GHz band
- VIC-1 and VIC-3 interface
- Supplied with MT-6352 mount

UL-BAND POWER AMPLIFIER (UL-PA) POWER OUTPUT

RADIO BAND	FREQUENCY	POWER
VHF Low	30-225 MHz	10 W
VHF/UHF High	225-520 MHz	50 W
SATCOM	225-320 MHz	50 W
Wideband	225 MHz-2 GHz	50 W

MULTIBAND POWER AMPLIFIER (PA) POWER OUTPUT

RADIO BAND	FREQUENCY	POWER
VHF Low	30-90 MHz	50 W
VHF/UHF High	90-450 MHz	50 W
SATCOM	225-320 MHz	50 W
Wideband	450-512 MHz 450 MHz-2 GHz	20 W 20 W

The RF-300UL-V350 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
AN/PRC-117G(V)1(C)	Multiband Receiver/Transmitter	2
12043-2750-A006	USB Programming Cable, 6 ft. (~1.8 m)	2
RF-6650M	Communications Planning Application CD	2
10075-1399	H-250/U Lightweight Handset (Modified)	2
10515-0319-4000	SINCGARS Pocket Guide	2
10515-0383-4100	ANW2 Simplified Guide	2
10515-0319-4100	AN/PRC-117G Pocket Guide	2
10515-0319-6000	AN/PRC-117G e-Pub CD	2
RF-7800M-PA150	50-Watt Power Multiband Amplifier	1
12137-0900-01	50-Watt Power L-Band (MUOS) Amp	1
11080-3980-01	50-Watt DC Switch Assembly	1
12064-5005-02	Dual Manpack VAA Ancillary and Cable Kit	1
12053-6800-01	Shock Mount Interface Assembly	1
MT-6352/VRC	Dual System Shock Mount	1
12064-5005-02	Dual VAA System Cable Kit	1
12064-0150-01	Locking Bar and Lanyard	2
12064-1011-01	Dual System Control Plate Kit	1
10570-0720-01	DC Power Cable and Fuse Kit, 21 ft. (~6.4 m)	1

OPTIONS

VEHICULAR ANTENNA KIT (GREEN)

RF-300M-VK001

This antenna kit for the RF-300M series of vehicular amplifier adapters includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
10369-7212-025	Cable Assembly, BNC-to-BNC, 25 ft. (~7.6 m)	2
12006-9001-01	X-Wing SATCOM Antenna	1
RF-292-01	Vehicular Antenna Mounting Kit (Green)	1
RF-3071-AT230	Vehicular GPS Antenna Kit (Green)	1
RF-3183-AT013	30-512 MHz Antenna (Green)	1

VEHICULAR ANTENNA KIT (TAN)

RF-300M-VK004

This antenna kit for the RF-300M series of vehicular amplifier adapters includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
10369-7212-025	Cable Assembly, BNC-to-BNC, 25 ft. (~7.6 m)	2
12006-9001-01	X-Wing SATCOM Antenna	1
RF-292-02	Vehicular Antenna Mounting Kit (Tan)	1
RF-3071-AT234	Vehicular GPS Antenna Kit (Tan)	1
RF-3183-AT012	30-512 MHz Antenna (Tan)	1

RF-300M-VK041

MUOS Vehicular On-the-Move Antenna Kit – Fielded AN/PRC-117G Upgrade:

PRODUCT NUMBER	PRODUCT NAME
12043-8995-0012	MUOS Waveform Option, Software Upgrade for Fielded System
12006-9001-01	Antenna, Bolt Mount, X-WING, SOTM
12006-7100-01	Diplexer, Vehicular, MUOS, Green

RF-300M-VK051

MUOS Vehicular On-the-Move Antenna Kit – New for the AN/PRC-117G:

PRODUCT NUMBER	PRODUCT NAME
12043-8940-0012	MUOS Waveform Option, Factory
12006-9001-01	Antenna, Bolt Mount, X-Wing, SOTM
12006-7100-01	Diplexer, Vehicular, MUOS, Green

ACCESSORIES

See the Common Accessories and Antennas chapters for more information.

SOLDIER L1/L2 PUSH-ON GPS ANTENNA

RF-3073-AT242

The RF-3073-AT242 is an active L1/L2 GPS antenna for use with the RF-7800M-MP manpack radio. The 1.25 W x 1.25 D x 1.25 H inches (~3.2 x 3.2 x 3.2 centimeters), 2.0-ounce (~57-gram) antenna is designed for permanent mounting directly to the GPS connector on the RF-7800M-MP. The antenna contains an internal switch that bypasses the RF-3073-AT242 when activated by attaching an external L1 GPS antenna to the top SLB connector. The active antenna incorporates bandpass filtering, a limiter, and a Low Noise Amplifier (LNA) with gain of 25 dB on L1 and 29 dB on L2. Color: Black.

ANTENNAS

PRODUCT NUMBER	PRODUCT NAME
RF-3071-ATXXX	L1/L2 Vehicular GPS Antenna
RF-3184-ATXXX	225-450 MHz UHF Vehicular Antenna
RF-3183-ATXXX	30-512 MHz Multiband Vehicular Antenna
12006-9001-01	SATCOM X-Wing Vehicular Antenna, Bolt-on
12006-9002-01	SATCOM X-Wing Vehicular Antenna, Magnetic Mount (Tan)
12006-9003-01	SATCOM X-Wing Vehicular Antenna, Magnetic Mount (Black)
12006-9004-01	SATCOM X-Wing Vehicular Antenna, Magnetic Mount (Green)
RF-3141-ATXXX	1250-1850 MHz High Gain Vehicular Antenna
RF-3142-ATXXX	350-450 MHz High Ruggedized Vehicular Antenna
RF-3143-ATXXX	30-512 MHz Multiband Vehicular Dipole Antenna
RF-3186-ATXXX	500-2500 MHz Multiband Vehicular Antenna
RF-3187-ATXXX	30-2000 MHz Multiband Vehicular Antenna

MULTIBAND MANPACK

RF-7800M-MP MULTIBAND NETWORKING RADIO (MBNR)

RF-7800M-MP

The RF-7800M-MP Multiband Networking Radio provides secure voice and high-speed networked data services on the move. This compact, single channel radio covers 30 MHz to 2 GHz and provides 20 watts of transmit power. Capable of fixed-site, vehicular, or manportable battery-powered operation, it uses a single standard battery for reduced weight as a dismounted radio. The radio hardware supports narrowband (25 kHz or less) waveforms from 30 to 512 MHz and wideband (greater than 25 kHz) waveforms from 225 MHz to 2 GHz.

The radio includes an embedded 12-channel GPS receiver to display local position and provide automatic position reporting for situational awareness on the battlefield. Built-in AES and Citadel encryption modes provide high-grade security for all transmissions using 128-bit or 256-bit keys. The RF-7800M-MP can store multiple mission fill files to extend the time between reconfigurations.

Using the Harris Adaptive Networking Wideband Waveform (ANW2), the RF-7800M-MP provides high-speed, networked data at unprecedented rates. ANW2 intelligent protocols provide an ad-hoc, self-healing networking capability, allowing the radio to automatically discover and join authorized networks. ANW2 includes a dedicated Combat Net Radio (CNR) voice channel to ensure voice communication is never lost, even if the IP network goes down. The RF-7800M-MP includes an INE (Inline Network Encryption) function for extension of the secure high speed IP network using other IP-capable devices, such as the RF-7800B BGAN transceivers and RF-7800W HCLOS Radio.

The radio also provides narrowband VHF and UHF fixed frequency line-of-sight (LOS) operation in both Plain Text and Cipher Text modes for interoperability with a wide variety of LOS radios, including Harris Falcon II and Falcon III Combat Network Radios (CNR). The Quicklook ECCM Waveform protects narrowband voice and data from hostile interference. Optional TALON and Havequick are also available. The RF-7800M-MP incorporates the Software Communications Architecture (SCA) operating environment, enabling the development and field upgrade of waveforms and encryption.

FEATURES

- 30 MHz-2 GHz frequency range
- 1.2 MHz and 5 MHz wideband channel bandwidths
- SCA v2.2.2 operating environment
- Adaptive Networking Wideband Waveform (ANW2)
- Quicklook IA/II ECCM Modes
- Output power: VHF/UHF (30-512 MHz) 10 watts; Wideband (225-2000 MHz) 5 watts
- Acropolis II Programmable Cryptographic Module
- Citadel and AES Encryption
- Optional TALON and Havequick I/II ECCM
- Optional Satellite TDMA Capability (STC), 25 kHz dedicated channels

INCLUDED WAVEFORMS AND CAPABILITES

ADAPTIVE NETWORKING WIDEBAND WAVEFORM (ANW2)

The Adaptive Networking Wideband Waveform (ANW2) is an ad-hoc (self-forming and self-healing), IP-based, UHF line-of-sight (LOS), wideband wireless network waveform for fixed and mobile communications. ANW2 seamlessly allows data connectivity around corners for the most accurate common operational picture of the immediate battle space in urban combat scenarios. In non-urban settings, ANW2 ensures immediate, robust voice communications at all times and can be used to achieve a high data rate wide pipe for point-to-point applications such as streaming video. The latest ANW2C provides 30-node capability, up to nine voice HOP relays, and supports up to 225 Guest nodes. The waveform also features higher speed GMSK modems, VoIP support and Dynamic Channel Allocation (DCA).

VHF/UHF/LINE-OF-SIGHT (VULOS), LINE-OF-SIGHT (LOS)

The RF-7800M-MP can be programmed manually or via the Communications Planning Application (CPA) with up to 100 nets, including AM/FM LOS, or Beacon data. The radio can be configured to support Type-3 AES or CITADEL encryption types. VULOS plain and cipher text fixed frequency operating capabilities include VHF/UHF FM and AM in the 30 to 512 MHz range. LOS data modes are also supported, including FM/AM analog voice, FSK voice/data, and ASK voice/data.

QUICKLOOK WAVEFORM

The Quicklook waveform is an easy-to-use Electronic Counter Counter Measure (ECCM) feature that employs frequency hopping to protect voice and data transmissions from outside interference. Quicklook utilizes configurable frequency sets for hopping and exclusion, and is secured with AES or Citadel encryption modes. The RF-7800M-MP supports both Quicklook IA and Quicklook II modes with automatic version detection upon receipt.

SITUATIONAL AWARENESS (SA)

This function can send and receive SA data within each transmission in most voice modes and certain data modes. The radio can be programmed with Harris or Cursor On Target (CoT), and International RMC SA formats. The SA information is only sent securely to prevent intercept. Receiving radios detect the SA information at the front of voice transmissions and export it to a PC or other external device. The exported data is fully compatible with C2PC systems and can be displayed using this application.

OPTIONAL WAVEFORMS

HAVEQUICK (HQ) I/II

12093-8940-0003

The RF-7800M-MP can be programmed manually or via the Communications Planning Application (CPA) with up to 100 HQ I/II nets, including WOD, MWOD, FMT, and HQ I/II Active Net data. The radio can receive HQ TOD from the internal GPS, or RX/TX TOD Mickey using the Keypad/Display Unit (KDU) menus.

TALON™ ECCM

12093-8940-0004

TALON is an optional, frequency hopping Electronic Counter-Counter Measures (ECCM) waveform used to prevent signal detection or jamming of the transmission path. The TALON ECCM feature is fully compatible with other radio types using the TALON waveform, when programmed with matching parameters.

SATELLITE TDMA CAPABILITY (STC) WAVEFORM

12093-8940-0005

The STC feature makes the most of available dedicated satellite channels via a Time Division Multiple Access (TDMA) based satellite waveform by allowing one single 25 kHz channel be configured to support up to eleven voice circuits or a combination of voice and data circuits within the constraints of the satellite transceiver capability, channel, and other environmental conditions.

L-BAND ROVER WAVEFORM OPTION

12093-8940-0002

This radio firmware option enables the RF-7800M-MP to receive L-Band (1.71 to 1.85 GHz) analog ROVER transmissions from UAV or similar equipment. A ROVER-enabled RF-7800M-MP provides video resolution up to 720 x 480 pixels at 15 fps in color and black-and-white. The "seek" capability determines video frequency and is VLC Media Player compatible. An L-Band antenna, such as the RF-3166-AT122, and the 12043-2760-A006 or similar network cable (ordered separately) is also required.

L-BAND ROVER ANTENNA KIT

RF-3166-AT122

The RF-3166-AT122 antenna kit includes the 12006-5500-01 Antenna, N-to-N cable, and a carry bag. The antenna receives L-Band signals in the 1.71 to 1.85 GHz range and is optimized for operation with the 12093-8940-0002 L-Band ROVER Software Option. The antenna has two female type-N ports, for a directional linearly polarized antenna and an omni-directional linearly polarized antenna. The radio connects to the antenna through the wideband port via a coax cable with type-N terminations on both ends. ROVER receive operations require the ROVER Waveform Option (12043-8940-0002) installed in the radio.

The RF-7800M-MP includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7800M-MP	Multiband Receiver/Transmitter	1
12043-2750-A006	USB Programming Cable, 6 ft. (~1.8 m)	1
RF-7800MM-SW001	Communications Planning Application CD	1
10075-1399	H-250/U Lightweight Handset (Modified)	1
10515-0404-4100	ANW2 Simplified Setup Guide	1
10515-0334-4100	RF-7800M-MP Pocket Guide	1
10515-0334-6000	RF-7800M-MP e-Pub CD	1
10515-0334-4000	RF-7800M-MP ANW2 Pocket Guide	1
10515-0334-4100	RF-7800M-MP Multiband Manpack Radio Operation Manual	1
10515-0334-4200	RF-7800M-MP Multiband Manpack Radio Operation Manual	1
10515-0333-4200	Falcon III Multiband Vehicular Radio Systems RF-300M-V150/V250/V255, RF-7800M-V150 System Installation/ Maintenance Manual	1

DISMOUNT ANTENNA KIT (GREEN)

RF-7800M-DK001

This antenna kit for the RF-7800M-MP includes:

PRODUCT NUMBER	PRODUCT NAME
RF-3152-AT152	30-512 MHz UHF/VHF Manpack Antenna
RF-3164-AT122	225-450 MHz UHF Manpack Antenna
RF-3150-AT152	30-108 MHz VHF Manpack Antenna
12006-0017-02	L1 GPS Antenna (Green)
12043-4800-01	Battery Box
10372-0349-01	Antenna Bag (Green)
10515-6446	Antenna Reference Card
12043-6077-01	J3/J6 Port Covers (2)

RF-7800M-VK001

This antenna kit for the RF-7800M-V series of vehicular amplifier adapters includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
10369-7212-025	Cable Assembly, BNC-to-BNC (25 ft., ~7.6 m)	2
12006-0017-02	L1 GPS Antenna (Green)	1
RF-292-01	Vehicular Antenna Mounting Kit (Green)	1
RF-3183-AT013	30-512 MHz Antenna (Green)	1
10515-6446	Antenna Reference Card	1

VEHICULAR ANTENNA KIT (TAN)

RF-7800M-VK004

This antenna kit for the RF-7800M-V series of vehicular amplifier adapters includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
10369-7212-025	Cable Assembly, BNC-to-BNC (25 ft., ~7.6 m)	2
12006-0017-06	L1 GPS Antenna (Tan)	1
RF-292-02	Vehicular Antenna Mounting Kit (Tan)	1
RF-3183-AT012	30-512 MHz Antenna (Tan)	1
10515-6446	Antenna Reference Card	1

RF-7800M-MP (MBNR) ACCESSORIES

See the Vehicular Amplifiers section of this chapter and the Common Accessories and Antennas chapters for more information.

SOLDIER L1/L2 PUSH-ON GPS ANTENNA

RF-3073-AT242

The RF-3073-AT242 is an active L1/L2 GPS antenna for use with the RF-7800M-MP manpack radio. The 1.25 W x 1.25 D x 1.25 H inches (~3.2 x 3.2 x 3.2 centimeters), 2.0-ounce (~57-gram) antenna is designed for permanent mounting directly to the GPS connector on the RF-7800M-MP. The antenna contains an internal switch that bypasses the RF-3073-AT242 when activated by attaching an external L1 GPS antenna to the top SLB connector. The active antenna incorporates bandpass filtering, a limiter, and a Low Noise Amplifier (LNA) with gain of 25 dB on L1 and 29 dB on L2. Color: Black.

ANTENNAS (DISMOUNT)

PRODUCT NUMBER	PRODUCT NAME
RF-3080-AT001	SATCOM ATP Antenna (STC)
RF-3150-AT152	30-108 MHz VHF Manpack Antenna
RF-3152-AT152	30-512 MHz VHF/UHF Monopole Blade Antenna with Gooseneck Base
RF-3164-AT122	225-450 MHz UHF Manpack Antenna
RF-3165-AT122	225-2000 MHz Wideband Antenna
10511-0400-XX	GPS Antenna Kit, L1 Band

AUDIO PRODUCTS

PRODUCT NUMBER	PRODUCT NAME
10075-1399	H-250/U Lightweight Handset (Modified)
RF-5980-SAXXX	Tactical Amplifier/Speaker

FALCON III® MULTIBAND RADIOS

BATTERIES AND CHARGERS

PRODUCT NUMBER	PRODUCT NAME
BA-5590/U	Non-Rechargeable, Disposable Lithium Battery
BA-5390/U	Non-Rechargeable Lithium Manganese Dioxide Battery
BB-390B/U	Rechargeable Nickel Metal-Hydride Battery
BB-2590/U	Rechargeable Li Ion Battery
RF-5058-CH002 RF-5058-CH006	Two-Bay Charger/Conditioner Six-Bay Charger/Conditioner

CABLES

PRODUCT NUMBER	PRODUCT NAME
12043-2710-AXXX	PPP Data Cable
12043-2730-AXXX	Data and Remote Control Cable
12043-2760-AXXX	Ethernet Cable (male RJ-45)
12043-2765-A006	Ethernet Cable (female RJ45)
12006-4241-AXXX	GPS Cable
12043-2750-AXXX	USB Programming Cable
12043-0839-A010	Inline Network Encryption
12043-0838-A006	Inline Network Encryption (J6 to J6)

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
RF-7871-VM001	Shock Tray, for use with RF-5910-PS005 Battery Eliminator
RF-7871-VM002	Shock Tray, for use with alternate vehicular power

POWER OPTIONS

PRODUCT NUMBER	PRODUCT NAME
MANPACK	
RF-5910-PS005	Power Supply (AC-to-DC, DC-to-DC) with battery back-up and auxiliary DC output
VAA, BASE STATION, VEHICULAR	
RF-5051-PS001	AC Power Supply (dual 28 VDC output)
RF-5055PS	AC Power Supply (single 28 VDC output)
RF-5056PS	12-28 Volt DC/DC Converter
10570-0720-01	DC Power Cable and Fuse Kit, 21 ft. (~6.4 m)

REMOTE CONTROL

PRODUCT NUMBER	PRODUCT NAME
RF-7800R-RC003	Falcon III Remote Control System
10553-0100-XX	Falcon III Remote KDU

SOFT GOODS (CARRYING ACCESSORIES)

PRODUCT NUMBER	PRODUCT NAME
RF-5935-CA001	Falcon III Backpack
10372-0349-XX	Falcon III Antenna Bag

SOFTWARE

PRODUCT NUMBER	PRODUCT NAME
RF-7800MM-SW001	Communications Planning Application CD
RF-6760W	Wireless Message Terminal Software
12093-1030-01	Type-3 Initialization Kit (TIK)
RF-6705-SW001	Tactical Chat IP

VEHICULAR AMPLIFIER ADAPTERS

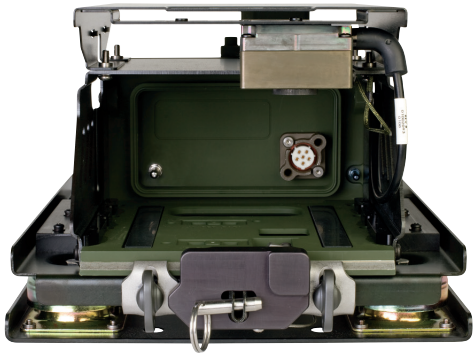
PRODUCT NUMBER	PRODUCT NAME
RF-7800M-V120	Single 20 Watt Vehicular Amplifier Adapter
RF-7800M-V150	Single 50 Watt Vehicular Amplifier Adapter
RF-7800M-V250	Dual 50 Watt Vehicular Amplifier Adapter

TECHNICAL MANUALS

PRODUCT NUMBER	PRODUCT NAME
10515-0334-6000	RF-7800M-MP e-Pub CD
10515-0334-4000	RF-7800M-MP ANW2 Pocket Guide
10515-0334-4100	RF-7800M-MP Multiband Manpack Radio Reference Guide
10515-0334-4200	RF-7800M-MP Multiband Manpack Radio Operation Manual
10515-0333-4200	Falcon III Multiband Vehicular Radio Systems RF-300M-V150/V250/V255, RF-7800M-V150 System Installation/ Maintenance Manual
10515-6392	Antenna Reference Card
10515-0334-4030	TALON Supplement
10515-0334-4020	Havequick Supplement
10515-0334-7200	Computer Based Training (CBT)

VEHICULAR AMPLIFIER ADAPTERS

SINGLE MULTIBAND VEHICULAR ADAPTER



RF-7800M-V120

The RF-7800M-V120 is a vehicular power supply/power conditioner for use with a single AN/PRC-117G(V)1(C) or RF-7800M-MP manpack radio (ordered separately). The RF-7800M-V120 provides a Vehicular Interface Mount (VIM) that is identical to the VIM used in the RF-300M-V150. Additional features provided by the RF-7800M-V120 include vehicle power conditioning, VIC-1 and VIC-3 interface, and external power output to power accessories such as a loudspeaker or battery charger. The VAA also provides a mechanism to lock the manpack radio for physical security.

FEATURES

- Utilizes manpack radio power
- Supports narrowband and wideband waveforms, up to 5 MHz bandwidth
- VIC-1 and VIC-3 interface
- External DC power output to accessories

The RF-7800M-V120 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7800M-PA120	20 Watt Vehicular Adapter Assembly	1
12064-5000-03	20 Watt System Ancillary and Cable Kit	1
2050-3000-03	Shock Mount Assembly	1
12064-0150-01	Locking Bar and Lanyard	1
10570-0720-01	DC Power Cable and Fuse Kit, 21 ft. (~6.4 m)	1

SINGLE 50 WATT VHF/UHF VEHICULAR AMPLIFIER ADAPTER

RF-7800M-V150

The RF-7800M-V150 is a 50 watt vehicular amplifier adapter (VAA) for use with a single AN/PRC-117G(V)1(C) or RF-7800M-MP manpack radio (ordered separately). Designed for long-range applications and increased communications reliability, the RF-7800M-V150 supplies up to 50 watts output power, supporting both narrowband and wideband waveforms up to 5 MHz bandwidth.

The VAA features separate banded antenna ports with automatic port switching, providing the radio system with true multimission capability. The user only needs to select the required preset on the radio to switch between ground, ground-to-air, and wideband networking communications. Other features provided by the RF-7800M-V150 include VHF (30-90 MHz) and UHF (200-400 MHz) collocation filters, internal LNA, VIC-1 and VIC-3 interface, wideband power amplifier control interface, and external power output to power accessories such as a loudspeaker or battery charger. The VAA provides a mechanism to lock the manpack radio for physical security.

FEATURES

- Power output:
  - VHF Low (30-90 MHz) 50 watts; VHF High/UHF (90-450 MHz) 50 watts
  - SATCOM (if used with AN/PRC-117G) 50 watts from 25-320 MHz
  - Wideband 50 watts from 225-450 MHz; 20 watts from 450-2000 MHz
  - VHF (30-90 MHz) and UHF (200-400 MHz) collocation filtering
- Supports narrowband and wideband waveforms, up to 5 MHz bandwidth
- VIC-1 and VIC-3 interface
- MUOS-ready hardware
- External DC power output to accessories

The RF-7800M-V150 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7800M-PA150	50 Watt Power Amplifier Assembly	1
12064-5005-01	50 Watt System Ancillary and Cable Kit	1
11080-3980-01	50 Watt DC Switch Assembly	1
12050-3000-03	Shock Mount Assembly	1
12064-0150-01	Locking Bar and Lanyard	1
10570-0720-01	DC Power Cable and Fuse Kit, 21 ft. (~6.4 m)	1

SINGLE 50 WATT UHF/L-BAND VEHICULAR AMPLIFIER ADAPTER

RF-7800UL-V150

The RF-7800UL-V150 is a 50 watt vehicular amplifier adapter (VAA) for use with a single AN/PRC-117G(V)1(C) manpack radio (ordered separately). Designed for long-range wideband applications and increased communications reliability, the RF-7800UL-V150 system provides up to 50 watts output power, supporting both narrowband and wideband waveforms up to 5 MHz bandwidth.

The VAA features separate banded antenna ports with automatic port switching, providing the radio system with true multimission capability. The user only needs to select the required preset on the radio to switch between ground, ground-to-air, and wideband networking communications. Other features provided by the RF-7800UL-V150 include UHF (225-520 MHz) and L-Band (1.2-2 GHz) collocation filters, internal LNA, VIC-1 and VIC-3 interface, wideband power amplifier control interface, and external power output to power accessories such as a loudspeaker or battery charger. The VAA provides a mechanism to lock the manpack radio for physical security.

FEATURES

- Power output:
  - VHF Low/High Broadband (Amplifier bypass) 10 watts from 30-225 MHz
  - UHF (225-1000 MHz) 50 watts
  - SATCOM (used with AN/PRC-117G) 50 watts from 225-320 MHz
  - L-Band (1000-2000 MHz) 50 watts
  - UHF (225-520 MHz) and L-Band (1.2-2 GHz) collocation filtering
- Supports narrowband and wideband waveforms, up to 5 MHz bandwidth
- VIC-1 and VIC-3 interface
- MUOS-ready hardware
- External DC power output to accessories

The RF-7800UL-V150 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12137-0900-01	50 Watt U/L-Band Power Amplifier Assembly	1
12064-5005-01	50 Watt System Ancillary and Cable Kit	1
11080-3980-01	50 Watt DC Switch Assembly	1
12050-3000-03	Shock Mount Assembly	1
12064-0150-01	Locking Bar and Lanyard	1
10570-0720-01	DC Power Cable and Fuse Kit, 21 ft. (~6.4 m)	1

DUAL 50 WATT VHF/UHF VEHICULAR AMPLIFIER ADAPTER

RF-7800M-V250

The RF-7800M-V250 is a dual-configuration, 50 watt vehicular amplifier adapter (VAA) for use with two AN/PRC-117G(V)1(C) or RF-7800M-MP manpack radios (ordered separately). It comes equipped with two power amplifiers (PAs), a SINCGARS Interface Module (SIM), a standard MT-6352 SINCGARS dual mount, and locking hardware. The power amplifiers are identical to the PA provided in the RF-7800M-V150.

FEATURES

- Dual channels, each with up to 50 watts output power
- Power output:
  - VHF Low (30-90 MHz) 50 watts
  - VHF High/UHF (90-450 MHz) 50 watts
  - SATCOM (if used with AN/PRC-117G) 50 watts from 225-320 MHz
  - Wideband 50 watts from 225-450 MHz; 20 watts from 450-2000 MHz
  - VHF (30-90 MHz) and UHF (200-400 MHz) collocation filtering
- Supports narrowband and wideband waveforms, up to 5 MHz bandwidth
- VIC-1 and VIC-3 interface
- MUOS-ready hardware

The RF-7800M-V250 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7800M-PA150	50 Watt Power Amplifier Assembly	2
11080-3980-01	50 Watt DC Switch Assembly	1
12064-5005-02	Dual System Ancillary and Cable Kit	1
12053-6800-01	Shock Mount Interface Assembly	1
MT-6352/VRC	Dual System Shock Mount	1
12064-0150-01	Locking Bar and Lanyard	2

DUAL 50 WATT UHF/L-BAND VEHICULAR AMPLIFIER ADAPTER

RF-7800UL-V250

The RF-7800UL-V250 is a dual-configuration, 50 watt vehicular amplifier adapter (VAA) for use with two AN/PRC-117G(V)1(C) manpack radio (ordered separately). It comes equipped with two wideband power amplifiers (PAs), a SINCGARS Interface Module (SIM), a standard MT-6352 dual mount, and locking hardware. The power amplifiers are identical to the PA provided in the RF-7800UL-V150.

FEATURES

- Dual channel 50 watts output power
- Power output:
  - VHF Low/High Broadband (Amplifier bypass) 10 watts from 30-225 MHz
  - UHF (225-1000 MHz) 50 watts
  - SATCOM (if used with AN/PRC-117G radio) 50 watts from 225-320 MHz
  - L-Band (1000-2000 MHz) 50 watts
  - UHF (225-520 MHz) and L-Band (1.2-2 GHz) collocation filtering
- Supports narrowband and wideband waveforms, up to 5 MHz bandwidth
- VIC-1 and VIC-3 interface
- MUOS-ready hardware
- External DC power output to accessories

The RF-7800UL-V250 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12137-0900-01	50 Watt U/L-Band Power Amplifier Assembly	2
12064-5005-02	Dual System Ancillary and Cable Kit	1
11080-3980-01	50 Watt DC Switch Assembly	1
12053-6800-01	Shock Mount Interface Assembly	1
MT-6352/VRC	Dual System Shock Mount	1
12064-0150-01	Locking Bar and Lanyard	2

DUAL CHANNEL L-BAND AND MULTIBAND CONFIGURATION

RF-7800UL-V350

The RF-7800UL-V350 includes a UL-Band Power Amplifier (PA), a Multiband PA, a shock mount interface assembly (SIM), a standard MT-6352 dual mount, locking hardware, and DC power kit. The system is designed to provide 50 watts of output power across the entire 30 MHz to 2 GHz spectrum, including narrowband (LOS and HOPPING) and the ANW2 Wideband waveform.

Each PA features separate VHF, UHF and wideband antenna ports with automatic port switching, providing a radio system with true multi-mission capability. The user selects the desired radio preset to switch between ground, ground-to air, and wideband networking communications. Each PA includes VHF and UHF collocation filters, wideband PA control interface, and auxiliary power output.

FEATURES

- Dual channel 50 watts output power across the entire 30 MHz-2 GHz band
- Collocation filtering
- VIC-1 and VIC-3 interface
- Supplied with MT-6352 mount
- UL-Band PA Power Output:
  - VHF Low/High Broadband (Amplifier bypass) 10 watts from 30-225 MHz
  - UHF (225-1000 MHz) 50 watts
  - SATCOM (used with AN/PRC-117G radio) 50 watts from 225-320 MHz
- L-Band PA Power Output:
  - L-Band (1000-2000 MHz) 50 watts
- Multiband PA Power Output
  - VHF Low (30-90 MHz) 50 watts
  - VHF High/UHF (90-450 MHz) 50 watts
  - SATCOM (225-320 MHz) 50 watts
  - Wideband 50 watts from (225-450 MHz); 20 watts from 450-2000 MHz

The RF-7800UL-V350 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12043-2750-A006	USB Programming Cable, 6 ft. (~1.8 m)	2
RF-7800M-PA150	50 Watt Power Multiband Amplifier	1
12137-0900-01	50 Watt Power L-Band (MUOS) Amp	1
11080-3980-01	50 Watt DC Switch Assembly	1
12064-5005-02	Dual Manpack VAA Ancillary and Cable Kit	1

PRODUCT NUMBER	PRODUCT NAME	QTY
12053-6800-01	Shock Mount Interface Assembly	1
MT-6352/VRC	Dual System Shock Mount	1
12064-0150-01	Locking Bar and Lanyard	2
12064-1011-01	Dual System Control Plate Kit	1
10570-0720-01	DC Power Cable and Fuse Kit, 21 ft. (~6.4 m)	1

ACCESSORIES

See the Common Accessories and Antennas chapters for more information.

SOLDIER L1/L2 PUSH-ON GPS ANTENNA

RF-3073-AT242

The RF-3073-AT242 is an active L1/L2 GPS antenna for use with the RF-7800M-MP manpack radio. The 1.25 W x 1.25 D x 1.25 H inches (~3.2 x 3.2 x 3.2 centimeters), 2.0-ounce (~57-gram) antenna is designed for permanent mounting directly to the GPS connector on the RF-7800M-MP. The antenna contains an internal switch that bypasses the RF-3073-AT242 when activated by attaching an external L1 GPS antenna to the top SLB connector. The active antenna incorporates bandpass filtering, a limiter, and a Low Noise Amplifier (LNA) with gain of 25 dB on L1 and 29 dB on L2. Color: Black.

ANTENNAS

PRODUCT NUMBER	PRODUCT NAME
12006-9004-01	SATCOM X-Wing Vehicular Antenna, Magnetic Mount (Green)
RF-3141-ATXXX	1250-1850 MHz High Gain Vehicular Antenna
RF-3142-ATXXX	350-450 MHz Ruggedized Vehicular Antenna
RF-3143-ATXXX	30-512 MHz Multiband Vehicular Dipole Antenna
RF-3183-ATXXX	30-512 MHz Multiband Vehicular Antenna
RF-3184-ATXXX	225-450 MHz UHF Vehicular Antenna
RF-3186-ATXXX	500 MHz-2.5 GHz Multiband Vehicular Antenna
RF-3187-ATXXX	30 MHz-2 GHz Multiband, Vehicular Antenna

CABLES

PRODUCT NUMBER	PRODUCT NAME
12043-2710-AXXX	PPP Data Cable
12043-2730-AXXX	Data and Remote Control Cable
12043-2740-AXXX	Digital Retransmission Cable
12043-2760-AXXX	Ethernet Cable
12043-2750-AXXX	USB Programming Cable
10369-7210-XXX	Coaxial Cable (RG-213), N-to-N
10369-7211-XXX	Coaxial Cable (RG-213), N-to-BNC
10369-7212-XXX	Coaxial Cable (RG-213), BNC-to-BNC
10513-0811-AXXX	Coaxial Cable (CMR-400DB), N-to-BNC
12011-0120-AXXX	Coaxial Cable (RG-223), BNC-to-TNC
12043-0839-A010	Inline Network Encryption
12043-0838-A006	Inline Network Encryption (J6 to J6)

POWER OPTIONS

PRODUCT NUMBER	PRODUCT NAME
MANPACK	
RF-5910-PS005	Power Supply (AC-to-DC, DC-to-DC) with battery back-up and auxiliary DC output
RF-5051-PS001	AC Power Supply (dual 28 VDC output)
RF-5055PS	AC Power Supply (single 28 VDC output)
RF-5056PS	12-28 Volt DC/DC Converter

TYPE-1 WIDEBAND NETWORKING HANDHELD

WIDEBAND NETWORKING RADIO

AN/PRC-152A(C)

The AN/PRC-152A(C) provides voice, high-speed networked data, and full-motion video services on the move. Covering the 30 to 512 MHz frequency range, this multiband radio also comes with a high band enhancement that increases its frequency coverage to 30 to 520 MHz and 762 to 870 MHz for select waveforms. The AN/PRC-152A(C) provides interoperability with traditional narrowband waveforms such as SINCGARS, Havequick II, and VHF/UHF AM and FM in the 30 to 512 MHz range. Additionally, the radio supports wideband networking waveforms from 225 to 450 MHz.

The AN/PRC-152A(C) features the Software Communications Architecture (SCA) operating environment, which provides the optimal transition to software-defined radio technology. SCA architecture enables the upgrade to future waveforms, supporting the evolution of communications from legacy narrowband to network-centric wideband operations. Secured with the Harris Sierra™ II encryption module, the AN/PRC-152A(C) provides voice and data security up to the TOP SECRET level.

The AN/PRC-152A(C) provides high-speed networked data using the Harris Adaptive Networking Wideband Waveform (ANW2). ANW2 uses innovative intelligent protocols that do not require the presence of a designated network control station—each radio automatically discovers and joins an authorized network. Ad-hoc networking allows automatic and transparent relay through an available station. It also heals the network if a station leaves, ensuring network reliability. ANW2 supplies situational awareness and data on demand, seamlessly linking dismounted soldiers with upper-echelon networks. The radio quickly and efficiently transmits mission-critical voice, data and video in the most challenging urban communications environments.

The AN/PRC-152A(C) is the wideband radio that can deliver IP-based mobile ad-hoc networking to warfighters at the tactical edge. The radio's 1.2 MHz bandwidth interoperates with the AN/PRC-117G.

FEATURES

- 30-520 MHz (narrowband), 225-450 MHz (wideband) and 762-870 MHz (narrowband)
- SCA v2.2.2 operating environment
- Sierra II-based Type-1 encryption
- Narrowband (NB) 12.5, 25 KHz, Wideband (WB) 1.2 MHz
- 250 mw to 5 watts; 10 watts SATCOM mode
- CNR Voice Mode
- AM/FM line-of-sight
- SINCGARS SC/FH
- HAVEQUICK I/II
- SRW
- ANW2
- Selectable (Tone, noise, CDCSS, CTCSS) squelch tones
- Internal GPS (option)

INCLUDED WAVEFORMS AND CAPABILITES

ADAPTIVE NETWORKING WIDEBAND WAVEFORM (ANW2)

12104-8940-0032

The Adaptive Networking Wideband Waveform (ANW2) is an ad-hoc (self-forming and self-healing), IP-based, UHF line-of-sight (LOS), wideband wireless network waveform for fixed and mobile communications. ANW2 seamlessly allows data connectivity around corners for the most accurate common operational picture of the immediate battle space in urban combat scenarios. In non-urban settings, ANW2 ensures immediate, robust voice communications at all times and can be used to achieve a high data rate wide pipe for point-to-point applications such as streaming video.

12104-8940-0041

The latest ANW2C provides 30-node capability, up to nine voice HOP relays, and supports up to 225 Guest nodes. The waveform also has higher speed GMSK modems, VoIP support, and Dynamic Channel Allocation (DCA).

SINCGARS

12104-8940-0034

The AN/PRC-152A(C) has SINCGARS capability, meeting MIL-STD-188-241-1 (ICOM Mode 2/3), Mode 1, and SIP/ ESIP specifications for voice/data transmission. The radio is interoperable in voice and SDM and EDM data modes. It performs TX/RX HOPSET, ERF, Cold Start, and OTAR, storing up to 25 TSKs and 25 TEKs for programming up to 100 SINCGARS nets. Additionally, the radio has master or member selection, Late Net Entry (LNE), F-NET changing, and CUE functions. GTOD can be entered manually, via LNE, or via external PLGR or NMEA-183 device. SC or FH retransmit is accomplished utilizing two AN/PRC-152A(C) radios and a retransmit cable.

HAVEQUICK (HQ) I/II

12104-8940-0012

The AN/PRC-152A(C) can be programmed manually or via CPA with up to 100 HQ I/II nets, including WOD, MWOD, FMT, and HQ I/II Active Net data. The radio can receive HQ Time-of-Day from an external PLGR or DAGR device, or RX/TX TOD "Mickey" using the Keypad/Display Unit (KDU) menus. While in HQ mode, the radio can be programmed to monitor a GUARD channel. The radio supports Initial channel and Hop channel switching.

OPTIONAL WAVEFORMS

SOLDIER RADIO WAVEFORM (SRW)

12104-8940-0033

The Soldier Radio Waveform (SRW) was developed to serve as the standard for wideband tactical communications for the U.S. Department of Defense. SRW delivers voice, data, and high-bandwidth networking capabilities to forces at the tactical edge.

APCO P25 WAVEFORM

12104-8940-0001

This software-only waveform option provides the APCO P25 waveform, enabling civilian interoperability across manufacturers and between a variety of local and federal agencies. The waveform includes analog and digital conventional (IMBE) modes of operation in both the VHF and UHF P25 bands. P25 can be operated in either plain text or secure using Type III DES-OFB or AES encryption (included).

P25 OTAR (OVER THE AIR RE-KEY)

12104-8940-0022

This software-only option provides APCO-P25 over-the-air key material transfer from a central Key Management Facility (KMF). APCO-P25 waveform required.

HIGH-PERFORMANCE WAVEFORM (HPW)

12104-8940-0005

This software-only waveform option provides the High Performance Waveform (HPW) to enable secure, error-free data transfer over SATCOM nets. By adapting to channel conditions, data can be delivered over-the-air at high-speed rates up to 56 Kbps.

HPW IP

12104-8940-0023

This software-only waveform option adds an embedded Internet Protocol (IP) capability to the radio. HPW IP is an optional communications mode that provides an IP interface to allow the radio to support point-to-point IP packet transmission between computers running IP data-based applications. HPW IP is a mutually exclusive mode to the traditional HPW SATCOM mode—only one mode is used at a time. (Requires HPW option).

DAMA

12104-8940-0011

The DAMA option offers JITC-certified UHF DAMA-SATCOM, including MIL-STD-188-182A (5KHz) and MIL-STD-188-183A (25KHz). The JTRS-approved AN/PRC-152 is the first SCA-compliant handheld radio to provide JITC certified DAMA.

IW

12104-8940-0019

The Integrated Waveform (IW) option adds IW capability to the AN/PRC-152A with a software upgrade. IW is the replacement for DAMA, allowing more efficient use of 25 kHz satellite channels and incorporates clear, high quality MELP voice. With the AN/PRC-152A, the IW waveform option provides customers a secure, interoperable voice and data solution on IW channels.

ANW2 AND ANW2C BUNDLE UPGRADE

12104-8995-0043

ANW2 AND ANW2C SRW UPGRADE

12104-8995-0030

AN/PRC-152A SYSTEM CONFIGURATION MATRIX

SYSTEM CONFIGURATIONS	2-M (~7-FT.) SUBMERSION	20-M (~70-FT.) SUBMERSION	INTERNAL GPS RECEIVER	WIDEBAND WAVEFOREM (225-450 MHZ)	HIGH BAND (30-520 MHZ & 762-870 MHZ)
AN/PRC-152A(V)3(C)	•			•	•
AN/PRC-152A(V)4(C)	•		•	•	•
AN/PRC-152A(V)5(C)		•		•	•
AN/PRC-152A(V)6(C)		•	•	•	•
12041-1900-07	•				•
12041-1900-08	•		•		•
12041-1900-13		•			•
12041-1900-14		•	•		•

The AN/PRC-152A(C) includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12041-2200-02	Rechargeable Li Ion Battery	1
10515-0409-4010	Operator Card	1
12102-2700-01	30-870 MHz Blade Antenna	1
10515-0409-6000	e-Pub	1
12031-2700-01	UHF Handheld Whip Antenna	1

AN/PRC-152A(C) ACCESSORIES

See the Common Accessories and Antennas chapters for more information.

ANTENNAS

PRODUCT NUMBER	PRODUCT NAME
12049-0500-01	Antenna Adapter Switch
12011-2700-01	1-Meter (~3 ft.) VHF Blade Antenna
12031-2700-01	UHF Whip Antenna
12041-6550-01	Handheld GPS Antenna
12011-2710-01	Multiband Antenna (Maritime)
12011-2720-01	VHF Blade Antenna (Maritime)
10511-0400-01	Remote GPS Flat Package Antenna

PRODUCT NUMBER	PRODUCT NAME
RF-3161-AT001	VHF Dipole Antenna
RF-3162DB-AT001	Multiband Dipole Antenna
RF-3080-AT001	High-Gain UHF SATCOM Antenna
12011-2730-01	VHF/UHF 45-inch (~1.1 m) Blade Antenna
12102-2700-01	30-870 MHz Blade Antenna

AUDIO PRODUCTS

PRODUCT NUMBER	PRODUCT NAME
RF-3020-HS001	1-Meter (~3 ft.) Submersible Headset
RF-3020-HS002	1-Meter (~3 ft.) Submersible Headset with Sniper Switch
RF-3020-HS003	Headset
RF-3020-HS004	Headset with Sniper Switch
RF-3021-HS001	Padded Earpiece Headset
RF-3021-HS002	Padded Earpiece Headset with Sniper Switch
RF-5961-HS003	Security Force Communication Set
RF-5961-HS005	Over-the-Ear Headset
12041-3100-01	Lapel Speaker-Microphone with Audio Jack
RF-5963-HS001	20-Meter (~66 ft.) Maritime Headset

BATTERIES AND CHARGERS

PRODUCT NUMBER	PRODUCT NAME
12041-2200-02	Rechargeable, High-Capacity Li Ion Battery
RF-5853-CH101 RF-5853-CH102 RF-5853-CH106	Single-Bay Li Ion Battery Charger Two-Bay Li Ion Battery Charger Six-Bay Li Ion Battery Charger
RF-5911-PS001	AA Battery Adapter
RF-5912-PS001	DC Battery Adapter/Charger

CABLES

PRODUCT NUMBER	PRODUCT NAME
12053-6400-03	P25 KVL3000+ Adapter Cable, 4 ft. (~1.2 m)
12041-7110-A1	Serial Data/Remote Cable
12041-7227-01	USB Mission Programming Kit 12041-5660-03 Adapter Assembly, USB Mini AB W95-0011-403 Cable Assembly, USB Type A to USB Plug-B
12041-7227-02	Kit, AN/PRC-152A USB/KDU, Bottom Exit 12041-5663-01 Adapter Assembly, AN/PRC-152A USB/KDU, Bottom Exit 12043-2850-A006 Cable Assembly, Data/Programming (USB), Type A
12041-7227-04	Kit, AN/PRC-152A USB/KDU, Top Exit 12041-5663-02 Adapter Assembly, AN/PRC-152A USB/KDU, Top Exit 12043-2850-A006 Cable Assembly, Data/Programming (USB), Type A
12041-7130-A1	Retransmission Cable
12041-7170-A006	GPS Interface Cable
12041-7180-A006	PPP Data Cable
12041-7290-A006	Sync/Async Cable
12083-0707-A003	USB to Ethernet Cable

SOFT GOODS (CARRYING ACCESSORIES)

PRODUCT NUMBER	PRODUCT NAME
RF-5932-CAXXX	Handheld Radio Holster
RF-5933-CAXXX	Handheld Radio Flip-Down Holster
12041-1595-01	Handset Radio Accessory Bag

TECHNICAL MANUALS

PRODUCT NUMBER	PRODUCT NAME
10515-0409-4010	Operator Card
10515-0409-4200	Operation Manual
10515-0409-4100	Field Reference Guide
10515-0411-4200	Mission Planning and Programming Guide
10515-0409-4300	Level III Maintenance Manual

WIDEBAND TRIMLINE VEHICULAR AMPLIFIER (TVA)

RF-300W-TV

The Falcon III® RF-300W-TV Wideband Trimline Vehicular Amplifier (TVA) is a low-profile, single-channel power amplifier designed for use with the Falcon III Software Communications Architecture (SCA)-based handheld radios, including the AN/PRC-152A and RF-7800M-HH handhelds.

The TVA provides narrowband and wideband RF amplification, supporting revolutionary wideband networking waveforms such as the Harris Adaptive Networking Wideband Waveform (ANW2), which uses innovative intelligent protocols that do not require a designated network control station. ANW2's ad-hoc networking capability allows automatic and transparent relay while also healing the network if a station leaves, ensuring network reliability.

With advanced co-site filtering, the TVA supports multi-channel vehicle configurations while using frequency-hopping waveforms. The amplifier communicates directly with the handheld radio to provide an automatically synchronized system—even when switching between various waveforms. The TVA also features separate VHF, UHF, and SATCOM ports with automatic port switching that allows users to switch between ground, ground-to-air, or SATCOM communications by simply selecting the required net on the radio.

An integrated Handheld Remote Charging Unit (HHRCU) permits simultaneous operation and charging of the handheld battery and remote control. The unit's "jerk-and-run" capability allows the handheld radio to be removed for dismount operations while remaining powered on. Additional TVA features include VIC-1 and VIC-3 intercom system interfaces and stacking capability to create a dual-channel configuration.

The TVA's smaller footprint is ideal for replacing larger amplifiers and installations in vehicles with limited space available. It fits into an MT-6352 SINCGARS tray or can be hard-mounted in a vehicle.

FEATURES

- Compatible with the AN/PRC-152A and RF-7800M-HH handhelds
- VIC-1 and VIC-3 intercom system interfaces
- Supports both wideband networking and traditional narrowband and SATCOM waveforms
- Supports Harris Adaptive Networking Wideband Waveform (ANW2)
- Separate VHF, UHF, and SATCOM ports with automatic port switching
- Built in co-site filtering for multi-channel vehicle configurations
- Jerk-and-run capability for dismount operations
- Full remote control for seamless transition between frequency and waveform
- Small footprint saves vehicle space for other equipment

The RF-300M-TV includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12156-0100-01	Trimline Vehicle Adapter (TVA) Unit	1
12105-0110-01	TVA Ancillaries Kit	1
12105-0111-01	TVA Ancillaries Kit for MT-6352 Mount	1
12156-1430-A1	Vehicular Amplifier Adapter/Interface Cable Assembly	1
12156-6000-01	Handheld Remote Control Unit (HHRCU)	1
10515-0368-4200	System Installation/Maintenance Manual	1
12053-1410-B015	BNC-to-BNC RF Coax Cable, 15 ft. (~4.6 m)	1

Note: Radio is included only with selected system configurations.

RF-300W-TVXXX SYSTEM CONFIGURATION MATRIX

PRODUCT NUMBER	RADIO INCLUDED
RF-300W-TV001	Amplifier only
RF-300W-TV010	AN/PRC-152A
RF-300W-TV070	RF-7800M-HH

ACCESSORIES

See the Common Accessories and Antennas chapters for more information.

ANTENNAS

PRODUCT NUMBER	PRODUCT NAME
RF-3183-ATXXX	Multiband Vehicular Whip Antenna
12049-0500-01	Antenna Adapter Switch

AUDIO PRODUCTS

PRODUCT NUMBER	PRODUCT NAME
RF-5980-SA001	Tactical Amplifier/Speaker
RF-5982-SA001	Amplified Speaker
10075-1399	H-250/U Lightweight Handset (Modified)

CABLES

PRODUCT NUMBER	PRODUCT NAME
10570-0716-AXXX	DC Input Cable, RF-5051/PS001/RF-5055PS
12041-7130-A1	Retransmission Cable
10570-0717-AXXX	DC Input Cable, RF-5056PS/RF-5061-PS001
10369-7212-015	RF Interconnection Cable (BNC-to-BNC), 15 ft. (~4.6 m)

POWER SUPPLIES

PRODUCT NUMBER	PRODUCT NAME
RF-5051-PS001	Power Supply
RF-5055PS	AC/DC Power Supply
RF-5056PS	12/24 Volts DC/DC Converter
RF-5061-PS001	DC/DC Converter

REMOTE CONTROL

PRODUCT NUMBER	PRODUCT NAME
10553-0200-XX	Falcon III Keypad/Display Unit (KDU) Remote Kit, with 6 ft. (~1.8 m) Cable and Wrist Strap

TECHNICAL MANUAL

PRODUCT NUMBER	PRODUCT NAME
10515-0450-4200	System Installation/Maintenance Manual

WIDEBAND NETWORKING HANDHELD

WIDEBAND NETWORKING HANDHELD

RF-7800M-HH001 CARC Green
RF-7800M-HH002 CARC Black
RF-7800M-HH003 CARC Tan

The RF-7800M-HH Wideband Networking Radio provides voice, high-speed networked data, and full-motion video services on the move. Covering the 30 to 520 MHz and 762 to 870 MHz frequency ranges, the RF-7800M-HH radio provides interoperability with traditional narrowband waveforms such as VHF/UHF AM and FM and frequency hopping ECCM modes.

The RF-7800M-HH Wideband Networking Radio provides high-speed networked data using the Harris Adaptive Networking Wideband Waveform (ANW2). ANW2 uses innovative intelligent protocols that do not require the presence of a designated network control station—each radio automatically discovers and joins an authorized network while self-healing if a station leaves, ensuring network reliability.

ANW2 also supplies situational awareness and data on demand, seamlessly linking dismounted soldiers with upper-echelon networks. The radio quickly and efficiently transmits mission-critical voice, data and video in the most challenging urban communications environments while providing full interoperability with the RF-7800M-MP as part of the complete battlefield solution.

The radio features the Software Communications Architecture (SCA) operating environment, which provides the optimal transition to software-defined radio technology. SCA architecture enables the upgrade to future waveforms, supporting the evolution of communications from legacy narrowband to network centric wideband operations. The radio provides AES 256 and Citadel II encryption for mission needs and secure interoperability with Harris Falcon radios.

FEATURES

- 30-512 MHz (narrowband), 225-450 MHz (wideband)
- SCA v2.2.2 operating environment
- Programmable Acropolis Encryptions (AES and Citadel algorithms)
- Channel bandwidth: Narrowband (NB) 12.5, 25 KHz; Wideband (WB) 1.2 MHz
- Up to 5 watts output power
- ECCM: Quicklook 1A/2
- Selectable (Tone, noise, CDCSS, CTCSS) squelch tones
- Internal GPS
- Night Vision Goggle compatible display
- Interoperable with the RF-7800M-MP

INCLUDED WAVEFORMS AND CAPABILITES

ADAPTIVE NETWORKING WIDEBAND WAVEFORM (ANW2)

12138-8940-0003

The Adaptive Networking Wideband Waveform (ANW2) is an ad-hoc (self-forming and self-healing), IP-based, UHF line-of-sight (LOS), wideband wireless network waveform for fixed and mobile communications. ANW2 seamlessly allows data connectivity around corners for the most accurate common operational picture of the immediate battle space in urban combat scenarios. In non-urban settings, ANW2 ensures immediate, robust voice communications at all times and can be used to achieve a high data rate wide pipe for point-to-point applications such as streaming video.

12138-8940-0041

The latest ANW2C provides 30-node capability, up to nine voice HOP relays, and supports up to 225 Guest nodes. The waveform also has higher speed GMSK modems, VoIP support, and Dynamic Channel Allocation (DCA).

QUICKLOOK WAVEFORM

12138-8940-0004

The Quicklook waveform is an easy-to-use Electronic Counter Counter Measure (ECCM) feature that employs frequency hopping to protect voice and data transmissions from outside interference. Quicklook utilizes configurable frequency sets for hopping and exclusion, and is secured with AES or Citadel encryption modes. The RF-7800M-HH supports both Quicklook IA and Quicklook II modes with automatic version detection upon receipt.

SATELLITE TDMA CAPABILITY (STC) WAVEFORM

12138-8940-0044

The STC feature makes the most of available dedicated satellite channels via a Time Division Multiple Access (TDMA) based satellite waveform by allowing one single 25 kHz channel be configured to support up to eleven voice circuits or a combination of voice and data circuits within the constraints of the satellite transceiver capability, channel, and other environmental conditions.

The RF-7800M-HH Wideband Networking Radio includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12041-2200-02	Rechargeable Lithium Ion Battery	1
12031-2700-01	UHF Handheld Whip 225-450 MHz	1
12011-2710-01	VHF/UHF Blade Antenna, 30-512 MHz (45 in., ~1.1 m)	1
10515-0424-4010	Operator Card	1
10515-0424-4200	Operator Manual	1
RF-7800MH-SW001	Communications Programming Application	1

CABLES

PRODUCT NUMBER	PRODUCT NAME
12041-7227-01	USB Mission Programming Kit 12041-5660-03 Adapter Assembly, USB Mini AB W95-0011-403 Cable Assembly, USB Type A to USB Plug-B
12041-7227-02	Kit, PRC-152A USB/KDU, Bottom Exit 12041-5662-01 Adapter Assembly, AN/PRC-152A USB/KDU, Bottom Exit 12043-2850-A006 Cable Assembly, Data/Programming (USB), Type A
12041-7227-04	Kit, PRC-152A USB/KDU, Top Exit 12041-5662-02 Adapter Assembly, AN/PRC-152A USB/KDU, Top Exit 12043-2850-A006 Cable Assembly, Data/Programming (USB), Type A
12041-7110-A1	Serial Data/Remote Cable
12041-7130-A1	Retransmission Cable
12041-7180-A006	PPP Cable
12041-7290-A006	Sync/Async Data Cable
12041-5490-A006	Cable Assembly, RF-7800M-HH to FIII KDU
12106-1460-A006	Cable Assembly, RF-7800M-HH to RF-7800I-CU
12085-2225-01	Cable Kit, RF-7400E (TVP) to RF-7800M-HH 12041-5662-02 Adapter Assembly, AN/PRC-152A USB/KDU, Top Exit 12085-2216-A006 Cable Assembly, TVP USB to RF-7800M/AN/PRC-117G

ACCESSORIES

See the Common Accessories and Antennas chapters for more information.

ANTENNAS

PRODUCT NUMBER	PRODUCT NAME
12031-2700-01	UHF Handheld Whip, 225-450 MHz
12011-2710-01	VHF/UHF Blade Antenna, 30-512 MHz (45 in., ~1.1 m)
RF-3161-AT001	VHF Dipole Antenna 30-108 MHz
RF-3162DB-AT001	Multiband Dipole Antenna 30-512 MHz

AUDIO PRODUCTS

PRODUCT NUMBER	PRODUCT NAME
RF-3020-HS001	1-Meter (~3-ft.) Submersible Headset
RF-3020-HS002	1-Meter (~3-ft.) Submersible Headset with Sniper Switch
RF-3021-HS001	Padded Earpiece Headset
RF-3021-HS002	Padded Earpiece Headset with Sniper Switch
RF-5961-HS003	Security Force Communication Set
12041-3100-01	Lapel Speaker-Microphone with Audio Jack
RF-5963-HS001	20-Meter (~66-ft.) Maritime Headset

BATTERIES AND CHARGERS

PRODUCT NUMBER	PRODUCT NAME
12041-2200-02	Rechargeable, High-Capacity Lithium-Ion Battery
RF-5853-CH101 RF-5853-CH102 RF-5853-CH106	Single-Bay Li Ion Battery Charger Two-Bay Li Ion Battery Charger Six-Bay Li Ion Battery Charger
RF-5911-PS001	AA Battery Adapter
RF-5912-PS001	DC Battery Adapter/Charger
RF-5852-CH011	Vehicular Power Supply/Charger

DISMOUNT KIT

RF-7800M-DSXXX

Specify color by replacing 'XXX':

001 CARC Green
002 CARC Black
003 CARC Tan

PRODUCT NUMBER	PRODUCT NAME	QTY
12138-1000-0X	RF-7800M-HH Radio	1
12041-2200-02	Rechargeable Lithium Ion Battery	2
12031-2700-01	UHF Handheld Wrap, 225-450 MHz	1
12011-2710-01	VHF/UHF Blade Antenna, 30-512 MHz (45 in., ~1.1 m)	1
12041-1595-01	Handheld Accessory Bag	1
RF-3162DB-AT001	Multiband Dipole Antenna	1
RF-5932-CA00X	Handheld Radio Holster	1
10515-0424-4010	Operator Card	1
10515-0424-4200	Operational Manual	1

TECHNICAL MANUALS

PRODUCT NUMBER	PRODUCT NAME
10515-0424-4000	ANW2 Set-up Guide
10515-0424-4010	Operator Card
10515-0424-4100	Field Reference Guide
10515-0424-4200	Operational Manual
10515-0424-4500	Operational Student Guide
10515-0425-4100	Application Programming Guide

MULTIBAND VEHICULAR

SINGLE MULTIBAND VEHICULAR SYSTEM

RF-300M-HV

Based on the same components as the AN/VRC-110, the RF-300M-HV single systems (shown with the AN/PRC-152 radio) combine the interoperability and upgradeability of the AN/PRC-152(C) with a high-power vehicular amplifier for range extension and increased communications reliability. The RF-300M-HV provides 50 watts from 30 to 90 MHz and 20 watts from 90 to 512 MHz, with up to 50 watts in the SATCOM bands.

Multiple mounting options are available. Systems with the Shock Mount Interface Assembly (SIM) are designed to fit into the standard dual-width SINCGARS MT-6352 mount for drop-in replacement of legacy systems. Systems with the Vehicle Interface Mount (VIM) allow independent installation and include a ruggedized shock tray and the necessary audio and power interfaces. Color: Green.

FEATURES

- Fully integrated and compatible with AN/PRC-152(C), RF-7800M-HH, RF-310M-HH and AN/PRC-152A(C) radios (narrowband only)
- Integrates into the MT-6352 SINCGARS mount (MT-6352 not included)
- Hot "jerk-and-run" design
- High-power, 50 watt output from 30-90 MHz
- 20 watt output from 90-512 MHz; 50 watt output in SATCOM bands
- Dual antenna ports (VHF/UHF) with automatic switching
- Integrated collocation filtering and battery charger
- VIC-1, VIC-3, and LS-671 audio interfaces
- Rugged construction qualified to MIL-STD-810F
- Operates from 26 VDC nominal

Included with the RF-300M-HV:

PRODUCT NUMBER	PRODUCT NAME	QTY
12053-0100-09	Vehicular Amplifier Adapter (VAA)	1
12053-6800-01 OR 12050-3000-02	Shock Mount Interface Assembly (SIM) Vehicle Interface Mount (VIM)	1
12053-0110-01	VAA Ancillary Kit	1

Note: AN/PRC-152 radio is included only with selected system configurations; see RF-300M-HV Single System Configuration Matrix.

RF-300M-HVXXX SINGLE SYSTEM CONFIGURATION MATRIX

SYSTEM CONFIGURATIONS	INCLUDES AN/PRC-152(C)	SIM MOUNT	VIM MOUNT
RF-300M-HV019		•	
RF-300M-HV021			•
RF-300M-HV109	•	•	
RF-300M-HV110	•		•

OPTIONS

Shock Mount Interface Assembly (SIM): Interface module that allows single RF-300M-HV systems to integrate with a customer-provided, standard dual-width SINCGARS MT-6352 shock mount. The SIM contains all necessary power and audio interfaces to integrate the capabilities of RF-300M-HV systems into existing legacy MT-6352 mounts.

Vehicle Interface Mount (VIM): Combination shock mount and interface assembly specifically designed for use with single RF-300M-HV systems. Mount, power and audio interfaces are contained within a single compact package, allowing flexible installation of single systems for a wide variety of uses.

ACCESSORIES

See the Common Accessories and Antennas chapters for more information.

ANTENNAS

PRODUCT NUMBER	PRODUCT NAME
12049-0500-01	Antenna Adapter Switch
RF-3183-ATXXX	Multiband Vehicular Whip Antenna

AUDIO PRODUCTS

PRODUCT NUMBER	PRODUCT NAME
RF-5980-SAXXX	Tactical Amplifier/Speaker
RF-5982-SA001	Amplified Speaker
10075-1399	H-250/U Lightweight Handset (Modified)

CABLES

PRODUCT NUMBER	PRODUCT NAME
12053-1420-A2	RF Interconnection Cable (BNC-to-BNC), 7.5 in. (~19 cm)
12041-7130-A1	Retransmission Cable
10570-0716-AXXX	DC Input Cable, RF-5051-PS001/RF-5055PS
10570-0717-AXXX	DC Input Cable, RF-5056PS/RF-5061-PS001

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
12053-6800-01	Shock Mount Interface Assembly
12050-3000-02	Vehicle Interface Mount

POWER SUPPLIES

PRODUCT NUMBER	PRODUCT NAME
RF-5051-PSXXX	Power Supply
RF-5055PS	AC/DC Power Supply
RF-5056PS	12/24 Volts DC/DC Converter
RF-5061-PS001	DC/DC Converter

REMOTE CONTROL

PRODUCT NUMBER	PRODUCT NAME
12053-6600-01	Keypad/Display Unit (KDU) Remote Kit, with 6 ft. (~1.8 m) Cable
10553-0200-XX	Falcon III Keypad/Display Unit (KDU) Remote Kit, with 6 ft. (~1.8 m) Cable and Wrist Strap

TECHNICAL MANUALS

PRODUCT NUMBER	PRODUCT NAME
10515-0359-4100	Operator Card
10515-0359-4200	System Installation/Maintenance Manual

MULTIBAND TRIMLINE VEHICULAR ADAPTER

RF-300M-TV

The Falcon III RF-300M-TV (shown with the AN/PRC-152 radio) is a multiband, low-profile, 50 watt Trimline Vehicular Amplifier (TVA) designed for use with Falcon III Type-1 handheld radios. Based on the advanced system architecture of the AN/VRC-110 Vehicular Amplifier Adapter, the TVA's space-saving, low-profile design allows installation in vehicles lacking the space needed for typical power amplifiers, and can create room in vehicles that have large amplifiers installed.

The single-channel TVA provides 50 watts from 30 to 90 MHz, 20 watts from 90 to 512 MHz, and 50 watts in SATCOM bands. Featuring separate VHF, UHF, and SATCOM ports combined with automatic port switching, the TVA allows true multimission capability. The user can switch between ground, ground-to-air, and SATCOM simply by selecting the desired radio preset.

Multiple mounting options are available. The TVA can be hard mounted or placed in an MT-6352 SINCGARS shock mount (ordered separately). The handheld radio is placed in the Handheld Remote Control Unit (HHRCU) and can be mounted up to 15 feet (~4.5 meters) from the amplifier.

FEATURES

- Compatible with AN/PRC-152(C), RF-310M-HH and AN/PRC-152A(C) radios (narrowband only)
- Integrates into the MT-6352 SINCGARS mount (ordered separately)
- Hot "jerk-and-run" design
- High-power, 50 watt output from 30-90 MHz, 20 watt output from 90-512 MHz
- 50 watt output in SATCOM bands
- Three separate antenna ports for VHF, UHF, and SATCOM
- HHRCU radio mounting up to 15 ft. (~4.5 m) from amplifier unit
- Integrated collocation filtering and battery charger
- VIC-1, VIC-3, and LS-671 audio interfaces
- Rugged construction qualified to MIL-STD-810G
- Operates from 26 VDC nominal

The RF-300M-TV includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12105-0100-01	Trimline Vehicle Adapter (TVA) Unit	1
12105-0110-01	TVA Ancillaries Kit	1
12105-0111-01	TVA Ancillaries Kit for MT-6352 Mount	1
12105-1430-A1	Vehicular Amplifier Adapter/Interface Cable Assembly	1
12105-6000-01	Handheld Remote Control Unit (HHRCU)	1
10515-0368-4200	System Installation/Maintenance Manual	1
12053-1410-B015	BNC-to-BNC RF Coax Cable, 15 ft. (~4.6 m)	1

Note: AN/PRC-152 radio is included only with selected system configurations.

RF-300M-TVXXX SYSTEM CONFIGURATION MATRIX

PRODUCT NUMBER	AN/PRC-152 INCLUDED
RF-300M-TV001	No
RF-300M-TV101	Yes

ACCESSORIES

See the Common Accessories and Antennas chapters for more information.

ANTENNAS

PRODUCT NUMBER	PRODUCT NAME
RF-3183-ATXXX	Multiband Vehicular Whip Antenna
12049-0500-01	Antenna Adapter Switch
12006-9001-01	X-Wing Mobile SATCOM Antenna, Bolt-On (Black)
12006-9002-01	X-Wing Mobile SATCOM Antenna, Magnetic-Mount (Tan)
12006-9003-01	(Black)
12006-9004-01	(Green)

AUDIO PRODUCTS

PRODUCT NUMBER	PRODUCT NAME
RF-5980-SA001	Tactical Amplifier/Speaker
RF-5982-SA001	Amplified Speaker
10075-1399	H-250/U Lightweight Handset (Modified)

CABLES

PRODUCT NUMBER	PRODUCT NAME
10570-0716-AXXX	DC Input Cable, RF-5051/PS001/RF-5055PS
12041-7130-A1	Retransmission Cable
10570-0717-AXXX	DC Input Cable, RF-5056PS/RF-5061-PS001
10369-7212-015	RF Interconnection Cable (BNC-to-BNC), 15 ft. (~4.6 m)

POWER SUPPLIES

PRODUCT NUMBER	PRODUCT NAME
RF-5051-PS001	Power Supply
RF-5055PS	AC/DC Power Supply
RF-5056PS	12/24 Volts DC/DC Converter
RF-5061-PS001	DC/DC Converter

REMOTE CONTROL

PRODUCT NUMBER	PRODUCT NAME
10553-0200-XX	Falcon III Keypad/Display Unit (KDU) Remote Kit, with 6 ft. (~1.8 m) Cable and Wrist Strap

TECHNICAL MANUAL

PRODUCT NUMBER	PRODUCT NAME
10515-0368-4200	System Installation/Maintenance Manual

BROADBAND GLOBAL AREA NETWORKING

LAND PORTABLE TACTICAL INMARSAT BGAN TERMINAL

RF-7800B-DU024

The Harris RF-7800B-DU024 is an Inmarsat Class 2 Land Portable BGAN terminal that allows simultaneous voice and wideband data connectivity for beyond-line-of-sight (BLOS) network capability. Inmarsat's BGAN service offers global SATCOM connectivity and provides wideband data throughput (up to 432 kbps). Lightweight and small, it is meant for SATCOM-on-the-Quick-Halt (SOQH) at the dismount level or fixed-site applications. The RF-7800B-DU024 is designed and tested to meet MIL-STD-810 requirements.

As a standalone device integrated into existing infrastructures, the RF-7800B-DU024 provides a rugged, mobile SATCOM solution for wideband, BLOS communications suiting numerous applications. The RF-7800B-DU024 features a web-based interface for configuration and control of the terminal for standalone operation. When used with the AN/PRC-117G or RF-7800M-MP manpack radios, the RF-7800B-DU024 operates simultaneously with the ANW2 waveform, supporting BLOS range extension of ANW2 networked data. When the radio changes to a BGAN-enabled net, the RF-7800B-DU024 automatically connects to the Inmarsat network, enabling an encrypted IP data transfer capability that is automatically routed through either the ANW2 LOS or BGAN satellite network.

FEATURES

- Global coverage
- Full IP capability
- Inmarsat certified Land Mobile User Equipment Class 2
- BGAN background user data rates up to 432 kbps
- BGAN streaming QoS user data rates of 32, 64, 128 kbps
- Simultaneous use of Ethernet, USB, and ISDN interfaces
- MIL-STD-810 and MIL-STD-461 tested

The RF-7800B-DU024 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12091-0020-10	Class 2 Land Portable BGAN Terminal	1
12043-0894-A1	AC/DC Power Supply	1
12043-0833-A010	Standalone Ethernet Cable, 10 ft. (~3 m)	1
10515-0365-4200	RF-7800B BGAN Terminal Operation Manual	1
10515-0365-6000	RF-7800B BGAN Terminal Operation Manual CD	1

OPTIONS

FALCON III MULTIBAND MANPACK LAND PORTABLE ANCILLARY KIT

12091-0060-01

This kit supplies the Black side Ethernet cable and battery box assembly that provides power using standard manpack radio batteries.

PRODUCT NUMBER	PRODUCT NAME
12043-0830-A006	FIII Manpack Black Ethernet Cable, 6 ft. (~1.8 m)
12091-4010-01	Battery Box and Cover Kit
12043-0850-A006	Battery Box Cable, 6 ft. (~1.8 m)

LAND MOBILE TACTICAL INMARSAT BGAN TERMINAL

RF-7800B-VU104

The Harris RF-7800B-VU104 is an Inmarsat Class 10 Land Mobile BGAN terminal that provides simultaneous voice and wideband data connectivity for beyond-line-of-sight (BLOS) SATCOM-on-the-Move (SOTM) network capability. Designed for vehicular applications, Inmarsat's BGAN service offers global SATCOM connectivity and provides wideband data throughput (up to 492 kbps), allowing continuous satellite tracking and connectivity as it moves. The SOTM antenna is permanently mounted on a vehicle, supplying uninterrupted network connectivity while traveling at speeds of up to 70 MPH (110 km/h) and vehicular velocity of motion up to 100 degrees per second in both azimuth and elevation, with simultaneous random pitch and roll. The RF-7800B-VU104 is designed and tested to meet MIL-STD-810 requirements.

As a standalone device integrated into existing infrastructures, the RF-7800B-VU104 provides a rugged, mobile SATCOM solution for wideband, BLOS communications suiting numerous applications. The RF-7800B-VU104 provides a web-based interface for independent configuration and control of the terminal. When used with the AN/PRC-117G or RF-7800M-MP manpack radios, the RF-7800B-VU104 operates simultaneously with the ANW2 waveform to provide BLOS range extension of ANW2 networked data. When the radio changes to a BGAN-enabled net, the RF-7800B-VU104 automatically connects to the Inmarsat network, allowing encrypted IP data transfer routed through either the ANW2 LOS or BGAN satellite network.

FEATURES

- Global coverage
- Full IP capability
- Inmarsat certified Land Mobile User Equipment Class 10
- BGAN background user data rates up to 492 kbps
- BGAN streaming QoS user data rates of 32, 64, 128, 256 kbps
- Simultaneous use of Ethernet, USB and ISDN interfaces
- MIL-STD-810F and MIL-STD-461E tested
- Internal MIL-STD-1275 power supply

The RF-7800B-VU104 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12091-0040-10	Class 10 Land Mobile BGAN Terminal	1
12043-0843-A015	Automobile 12 VDC Power Cable, 15 ft. (~4.6 m)	1
12043-0833-A015	Standalone Ethernet Cable, 15 ft. (~4.6 m)	1
12091-4170-01	POTS Magnet Mount Assembly	4
10515-0365-4200	RF-7800B BGAN Terminal Operation Manual	1
10515-0365-6000	RF-7800B BGAN Terminal Operation Manual CD	1

OPTIONS

FALCON III MULTIBAND MANPACK LAND MOBILE ANCILLARY KIT

12091-0070-01

This kit provides a BGAN Ethernet to Falcon III Manpack Black side Ethernet cable for connection to the AN/PRC-117G or RF-7800M-MP multiband manpack radios.

PRODUCT NUMBER	PRODUCT NAME
12043-0830-A015	FIII Manpack Black Ethernet Cable, 15 ft. (~4.6 m)
12043-0890-A015	BGAN DC Power to 4 Leads/RF-7800B-VU Remote On/Off Cable, 15 ft. (~4.6 m)
F03-0008-906	Inline Fuse Kit
F15-0012-003	Fuse, Automotive Blade, 5A/32 volts

ACCESSORIES

See the Common Accessories and Antennas chapters for more information.

AUDIO PRODUCTS

PRODUCT NUMBER	PRODUCT NAME
12091-4140-01	ISDN Handset
12091-4160-01	ISDN to POTS Converter
RF-6015-HS001	Combat Telephone
RF-6015-HS002	Field telephone

BATTERIES

PRODUCT NUMBER	PRODUCT NAME
BA-5590/U	Non-Rechargeable, Disposable Lithium Battery
BA-5390/U	Non-Rechargeable Lithium Manganese Dioxide Battery
BB-390B/U	Rechargeable Nickel Metal-Hydride Battery
BB-2590/U	Rechargeable Li Ion Battery
RF-5058-CH002 RF-5058-CH006	Two-Bay Charger/Conditioner Six-Bay Charger/Conditioner

FALCON III® MULTIBAND RADIOS

CABLES (DATA)

PRODUCT NUMBER	PRODUCT NAME
12043-0830-A006 12043-0830-A015	FIII Manpack Black Ethernet Cable, 6 ft. (~1.8 m) 15 ft. (~4.6 m)
12043-0831-A006 12043-0831-A015	FIII Manpack Black Ethernet and ISDN Cable, 6 ft. (~1.8 m) 15 ft. (~4.6 m)
12043-0832-A010	Standalone Ethernet, ISDN, USB Cable, 10 ft. (~3 m)
12043-0833-A010 12043-0833-A015 12043-0833-A100	Standalone Ethernet Cable, 10 ft. (~3 m) 15 ft. (~4.6 m) 100 ft. (~30.5 m)
12043-0834-A010 12043-0834-A015	Standalone Ethernet and ISDN Cable, 10 ft. (~3 m) 15 ft. (~4.6 m)
12043-0835-A010 12043-0835-A015	Standalone ISDN Cable, 10 ft. (~3 m) 15 ft. (~4.6 m)
12043-0836-A010 12043-0836-A015	Standalone USB and ISDN Cable, 10 ft. (~3 m) 15 ft. (~4.6 m)
12043-0837-A015 12043-0837-A025 12043-0837-A050	Data Extension Cable, Ethernet and ISDN, 15 ft. (~4.6 m) 25 ft. (~7.6 m) 50 ft. (~15 m)

FILTERS

PRODUCT NUMBER	PRODUCT NAME
12091-4200-01	HF/VHF/UHF Co-Site Low Pass Filter Kit for L-Band

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
12091-4150-01	BGAN Land Portable Fixed Mounting Kit

POWER CABLES

PRODUCT NUMBER	PRODUCT NAME
12043-0890-A010 12043-0890-A015	BGAN DC Power to 4 Leads/RF-7800B-VU Remote On/Off Cable, 10 ft. (~3 m) 15 ft. (~4.6 m)
12043-0891-A006 12043-0891-A015	BGAN DC Power to RF-505X Power Supply Cable, 6 ft. (~1.8 m) 15 ft. (~4.6 m)
12043-0892-A006 12043-0892-A015	BGAN DC Power to RF-505X Power Supply/RF-7800B-VU Remote On/Off Cable, 6 ft. (~1.8 m) 15 ft. (~4.6 m)
12043-0843-A015	Automobile 12 VDC Power Cable, 15 ft. (~4.6 m)
12043-0894-A1	AC/DC Power Supply
12043-0895-A015 12043-0895-A025 12043-0895-A050	Power Extension Cable, 15 ft. (~4.6 m) 25 ft. (~7.6 m) 50 ft. (~15 m)
12043-0896-A010 12043-0896-A015	BGAN DC Power to Two Leads, 10 ft. (~3 m) 15 ft. (~4.6 m)

SOFTWARE

PRODUCT NUMBER	PRODUCT NAME
RF-6650M	Communications Planning Application (CPA) Platform for AN/PRC-117G Support Package
RF-7800MM-SW001	Communications Planning Application (CPA) for the RF-7800M-MP

TECHNICAL MANUAL

PRODUCT NUMBER	PRODUCT NAME
10515-0365-4200	RF-7800B BGAN Terminals Operation Manual

INTEROPERABLE FAMILY OF RADIOS

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INTERNATIONAL VHF, MULTIBAND, & SOLDIER RADIOS

Harris RF Communications is the leading supplier of secure radio communication solutions for military and government organizations around the world.

The Falcon® Family of International Software-Defined Radio (SDR) communication systems provides enhanced capabilities and improved interoperability for individual soldiers, command posts, vehicles, and airborne platforms. Built upon shared core technologies, Harris provides military organizations with building blocks to form complete communication solutions with a family-wide common user experience.

The Falcon systems have been designed for the modern soldier, focused on providing access to actionable battlefield information across the military organization where information and communication superiority provide clear advantages on the battlefield. In addition, improvements in radio technology, both in advanced hardware and in the latest software-defined radio architecture, allow soldiers to communicate further, faster, and more reliably than ever before. Harris continues to deliver advanced market-leading capabilities that increase military effectiveness in easy-to-use communication devices.

HARRIS®

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FALCON® WebUI

RF-7850AP-SW101

The Falcon WebUI is a software-defined framework that allows Harris to deliver tools and applications directly embedded inside the latest generation of Falcon Tactical Radio Systems. By embedding applications inside the radio, military organizations are no longer bound to specialized computers, laptops and edge devices. The WebUI framework is built upon standard web-based technology, namely HTML and JavaScript. Any modern web browser (Microsoft Internet Explorer, Google Chrome, Mozilla Firefox, etc) across operating systems can access the WebUI without any special software installations, making it extremely accessible and sustainable.

The Falcon WebUI comes with a variety of software tools and applications, including:

- Launcher, a graphical 'home' screen with access to installed applications
- TacChat, a radio text messaging application
- Ground Force Tracker, a basic visual situational awareness application
- Soft KDU, a control panel application for tactical radios
- BIT, a Built-In Test and radio diagnostics tool
- Configurator, a radio configuration application

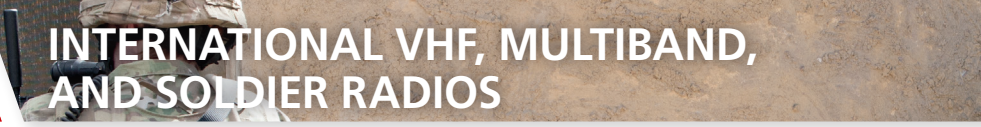
The WebUI is available as a premium add-on option for select Falcon Tactical Radio Systems. Please note that the list of tools and applications can change over time, so consult your sales representative for the latest availability of supported tools, applications and radio systems.

FALCON WebUI DEVELOPER API

Complementary to the WebUI, Harris offers a software API (Application Programming Interface) to enable rapid development of custom embedded applications.

The Falcon WebUI Developer API is a set of software specifications, example code and code libraries that enable HTML software programmers to quickly develop new applications to be installed into the WebUI framework inside select Falcon Tactical Radio Systems. Prior knowledge of basic radio operation, basic IP networking, basic HTML programming, and basic JavaScript programming is required.

The WebUI Developer API is available as a commercially licensed software development kit. Please note that the API offering can change over time, so contact your sales representative for the latest availability and licensing information.



FALCON SPR™ SECURE PERSONAL RADIO

OVERVIEW

RF-7850S SPR

The RF-7850S SPR is the most advanced secure personal radio system available on the market. The RF-7850S SPR provides all of the communication capabilities required for the modern soldier operating at the team, squad, or platoon levels. Paired with advanced Harris waveform capabilities, the RF-7850S SPR provides team-based voice, fully networked platoon-wide communication and reliable position reports, ensuring each and every soldier is always connected, accounted for and never alone.

STANDARD FEATURES

- Soldier TNW advanced ad hoc networking soldier waveform
- Advanced soldier audio including multiple concurrent talkgroups, full-duplex operation, stereo audio, VOX and customizable audible voice prompts
- Secure communications with 256-bit AES encryption designed for FIPS 140-2
- Simultaneous voice, data and GPS for a complete soldier system
- Dual PTT
- RNDIS, USB and IP Interfaces
- MELP 2400 audio
- Remote KDU compatibility
- Built-in GPS

RF-7850AP-SW101 SOFTWARE ADVANCED OPTIONS (SEE PAGE 51)

- Embedded applications and development API for easy integration and future capability enhancements
- WebUI
- Tactical Chat IP App
- Ground Force Tracker App

RF-7800S-TR SPR TEAM RADIO

The RF-7800S-TR SPR Team Radio provides secure, digitized voice and data communications to every member of a team without distracting his or her attention from the task at hand. The radio's small, lightweight design fits easily in a pocket, and is powered by a rechargeable lithium-ion battery.

STANDARD FEATURES

- Talk-Group Wideband Waveform (TGW2) advanced team communication waveform
- Advanced Soldier Audio including multiple concurrent talkgroups, full-duplex operation, stereo audio, VOX and customizable audible voice prompts
- Secure Communications with 256-bit Citadel® and FIPS 197 validated AES encryption
- Simultaneous Voice, Data and GPS for a complete soldier system
- Built-in GPS
- Dual PTT
- RNDIS, USB and IP Interfaces

RF-7800S-V SPR VEHICLE RADIO

The RF-7800S-V SPR Vehicle Radio provides secure digitized voice and data communication in a small, integrated package suitable for mounting in a variety of applications. The RF-7800S SPR Vehicle Radio Kit provides the same industry leading communication services offered by the RF-7800S SPR Secure Personal Radio, adding physical and electrical interfaces that directly connect with the vehicle platform.

STANDARD FEATURES

- Talk-Group Wideband Waveform (TGW2) advanced team communication waveform
- Advanced soldier audio including multiple concurrent talkgroups, full-duplex operation, stereo audio, VOX and customizable audible voice prompts
- Secure communications with 256-bit Citadel® and FIPS 197 validated AES encryption
- Simultaneous voice, data and GPS for a complete soldier system
- Built-in GPS connection for roof-mounted GPS antennas
- Dual PTT
- RNDIS, USB and IP Interfaces
- Military grade DC power input (12V/24V)
- Designed for direct installation on vehicle chassis without the need for a shock-mount

SPECIFICATIONS FOR FALCON SPR PRODUCTS

GENERAL	RF-7850S SPR™	RF-7800S-TR	RF-7800S-V SPR
Frequency Range	225 MHz-2.0 GHz with flexible talk groups	350-450 MHz	350-450 MHz
Bandwidth	Wideband: 1.2 MHz, 5.0 MHz Narrowband: 25 kHz	25 kHz, 500 kHz, or 1.2 MHz	25 kHz, 500 kHz, or 1.2 MHz
PHYSICAL			
Dimensions	~3.1 W x 8.3 H x 2 D in. with battery (~8.0 W x 21.0 H x 5.0 D cm)	3.1 W x 4.3 H x 1.0 D in. without battery (~7.0 W x 10.8 H x 2.5 D cm)	4.25 W x 5.6 H x 2 D in. (~10.8 W x 14.3 H x 5.0 D cm)
Volume	475 cc	166 cc	N/A
Weight	~1.71 lbs (775 g with battery)	10.6 oz. (~300 g)	N/A
Color	RF-7850S-TR001: Green/Black RF-7850S-TR011: Black	RF-7800S-TR101 & RF-7800S-TR201: Green/Black RF-7800S-TR111 & RF-7800S-TR211: Black	RF-7800S-V001: Green/Black RF-7800S-V011: Black
TRANSMIT			
Power Output	1 Watt, 2 Watts, 3.2 Watts	2 Watts, adjustable to 1 Watt, 0.25 Watt	2 Watts, adjustable to 1 Watt, 0.25 Watt
RECEIVE			
Sensitivity Audio Output	N/A	0-70 dBA with standard headset	N/A
ENVIRONMENTAL (MIL-STD-810)			
Operating Temperature	-30° C to +60° C (-22°F to +140°F)	-30° C to +60° C (-22°F to +140°F)	-30° C to +60° C (-22°F to +140°F)
Shock/Vibration	Ground portable	Ground portable	Wheeled vehicle
Immersion	2 meters (~6.6 feet)	2 meters (~6.6 feet)	2 meters (~6.6 feet)
INTERFACES			
Data	USB 2.0, IP over USB, RS232	USB 2.0, IP over USB, RS23	USB 2.0, IP over USB, RS23
GPS	Removable Antenna	Fixed Antenna	External Antenna
STANDARD KITS			
	Black Lowband Antenna (225-870 MHz)	**Short Antenna** (350-450 MHz)	**Magnetic-Mount GPS Antenna**
	RF-7850S-TR001 Green Rechargeable Battery **RF-7850S-TR011** Black Rechargeable Battery	**RF-7800S-TR101** Green Li Ion Rechargeable Battery **RF-7800S-TR201** Black Li Ion Rechargeable Battery **RF-7800S-TR111 & RF-7800S-TR211** AA Battery Adapter (6 batteries required; not included)	**Ancillary Kit** including unterminated DC power cable and lock washers
	Operator's Card	**Operator Card**	**Operator Card**
			Vehicle installation instruction sheet
OPTIONAL	RF-7850S SPR™	RF-7800S-TR	RF-7800S-V SPR
	Headset (various models to choose from)	**Spare Batteries** (additional)	**Headsets**
	Spare Batteries (additional)	**Headsets** (various models to choose from)	**Configuration Kit**
	Battery Chargers (various models to choose from)	**Wireless PPT**	**Vehicle Antenna**
	Configuration Kit (includes software and cable)	**Configuration Kit**	
		Battery Chargers	

COLOR OPTIONS

GREEN BLACK

SPR ACCESSORIES

ANTENNAS FOR RF-7850S SPR

SPARE LOW-BAND ANTENNA
12121-2700-01

The antenna is for use with the RF-7850S SPR (included in the standard configuration) and provides reliable performance across the frequency range of 225 to 870 MHz in all operating modes and power output settings. This antenna can also be ordered separately as a spare item.

OPTIONAL HIGH-BAND ANTENNA
12121-2710-10

The antenna is optional in the RF-7850S SPR configurations and provides reliable performance across the frequency range of 870 MHz to 2.0 GHz in all operating modes and power output settings. This is an add-on option for operation in frequencies above 870 MHz.

OPTIONAL TRI-BAND ANTENNA
12121-2730-01

The antenna is optional in the RF-7850S SPR configurations and provides reliable performance across the frequency ranges of 225 to 450 MHz, 1250 to 1390 MHz, 1755 to 1850 MHz. This is an add-on option that is able to alternate between Lowband and Highband frequencies.

ANTENNAS FOR RF-7800S-TR

SPARE SHORT FLEXIBLE WHIP ANTENNA

12055-2700-01

This short, flexible UHF whip antenna is designed for use with the RF-7800S-TR SPR Team Radio.

The antenna is included in standard RF-7800S-TR SPR configurations and provides reliable performance across the frequency range of 350 to 4500 MHz in all operating modes and power output settings. This antenna can also be ordered separately as a spare item.

EXTENDED-RANGE DISMOUNT SOLDIER ANTENNA

RF-3162SP-AT001

This body-worn dipole UHF antenna is designed for use with the RF-7800S-TR SPR Team Radio.

Integrating the RF-3162SP-AT001 with the SPR increases the overall system performance and range as compared to the standard short flexible whip antenna. The antenna provides reliable performance across the frequency range of 350 to 450 MHz in all operating modes and power output settings in a small package (approximately 32 inches/ ~82 centimeters long).

The antenna can be attached to standard MOLLE webbing systems with the included clips and its flexible gooseneck design allows the antenna to bend and conform to the body's shape. It can also be worn in a folded position for limited urban communication or elevated into a tree for extended range using the accompanying elevation kit. The antenna kit includes the dipole antenna with three-foot (~0.9 meter) coaxial cable, two MOLLE attachment clips, operator card and an elevation kit (extended coax cable, rope and throwing weight). Color: Black.

ANTENNAS FOR RF-7800S-V

VEHICULAR ANTENNA
RF-3184-AT320 Green
RF-3184-AT324 Tan

The UHF Vehicular Dipole antenna provides reliable performance across the frequency range of 350 to 450 MHz for the RF-7800S-V SPR Vehicular Radio.

HEADSETS

COMPATIBILITY CHART

PRODUCT NUMBER	PRODUCT NAME	INLINE PTT BUTTONS	SINGLE/ DUAL EAR	HEARING PROTECTION	OPTIONS	RF-7850S RADIO	RF-7800S TEAM RADIO	RF-7800S VEHICLE RADIO
STANDARD HEADSETS								
RF-3031-HS001	Breeze Ultra-Lightweight Headset	N/A	Single Left Pad	N/A	N/A	N/A	•	N/A
RF-3038-HS001	Ranger Lightweight Headset	Torpedo Single Inline PTT	Single Left Pad	N/A	Secondary wired PTT	•	•	N/A
RF-3030-HS001	Basic Tactical Headset	N/A	Single Left Cup	N/A	N/A	•	•	N/A
11149-0910-03	Cobra Tactical Headset	Cobra Dual Inline PTT (interchangeable)	Single Left Cup	N/A	N/A	•	•	N/A
RF-3039-HS001	ClearTrak Heavy Duty Headset (Behind-the-Head)	Single Built-In PTT	Dual Cups	Passive (NRR 24 dB)	N/A	•	•	•
RF-3039-HS002	ClearTrak Heavy Duty Headset (Over-the-Head)	Single Built-In PTT	Dual Cups	Passive (NRR 24 dB)	N/A	•	•	•
RF-3014-HS122	ComTac Heavy Duty Headset with Talk-through	N/A	N/A	N/A	N/A	•	•	•
RF-5967-HS004	X5 Headset with Hearing Protection Earpieces and Talk-through	V60 Dual Inline PTT (interchangeable)	Dual In-the-Ear with Talk-through (powered by SPR)	Passive (SNR 32 dB, NRR 29 dB)	Accepts secondary radio	•	•	N/A
SPECIAL USE HEADSETS/AUDIO PRODUCTS								
RF-3033-HS001	Professional Throat Mic System	Round (80 mm) Single Inline PTT	Single In-the-Ear (Left/Right Adjustable)	N/A	N/A		•	
RF-3033-HS002	Standard Throat Mic System	Torpedo Single Inline PTT and Secondary Flat PTT	Single In-the-Ear (Left/Right Adjustable)	N/A	Alternative secondary wired PTT		•	
RF-3034-HS001	Helmet Compatible Headset	Single Flat PTT	Dual Pads	N/A	N/A		•	•
RF-3035-HS001	Hurricane Tactical Headset	Torpedo Single Inline PTT	Dual In-the-Ear	Passive (29 dB)	Alternative secondary wired PTT		•	
RF-3037-HS001	Skull Mic System	Round (80 mm) Single Inline PTT	Single Cup (Left/Right Adjustable)	N/A	N/A		•	
RF-3050-SM003	Speaker-Mic (Fist-Mic) with Volume Control	Dual Built-In PTT	N/A	N/A	Secondary headset (SPR standard audio connector) such as the M3 Tactical Earpiece	•	•	•

BREEZE ULTRA-LIGHTWEIGHT HEADSET

RF-3031-HS001

This headset is a behind-the-head, single left earphone, designed for extended wear in active environments. Its ultra lightweight frame offers superior comfort and fit. Included is a flexible boom microphone and replaceable wind screen. The headset can be worn under a helmet or cap. Recommended for use with the RF-7800S-TR SPR Team Radio.

RANGER LIGHTWEIGHT HEADSET

RF-3038-HS001

This splash-proof, behind-the-head style headset comes with a single left speaker with easy adjustment. The headset is flexible with a noise canceling left boom microphone. It is wind and dust proof for harsh environments. It includes a Torpedo Single Inline PTT, plus the ability to accept a second wired PTT. Recommended for use with the RF-7800S-TR SPR Team Radio and RF-7850S SPR radio.

OPTIONS

SECONDARY WIRED PTTS

PRODUCT NUMBER	PRODUCT NAME
RF-3052-PT001	Sniper, Flat PTT
RF-3052-PT002	Ring PTT
RF-3052-PT003	Barrel PTT
RF-3052-PT004	Standard Flat PTT
RF-3052-PT005	Round 80 mm PTT

BASIC TACTICAL HEADSET

RF-3030-HS001

This headset is made to fit under a helmet or cap and designed with a single, left-side soft rubber ear cup. It offers a flexible fit and comfort and the large ear cup ensures clarity. It provides a Velcro head strap and elastic headband for a secure and adjustable fit. The flexible boom mic offers easy adjustments. Recommended for use with the RF-7800S-TR SPR Team Radio and RF-7850S SPR radio.

COBRA TACTICAL HEADSET

11149-0910-03

The modular Cobra headset system provides the user with personal choice and the flexibility to reconfigure the equipment to suit a specific type of mission. No tools are required and configuration changes can be made in a matter of seconds. The system components are fully ruggedized to withstand the extreme environments encountered in military operations. They provide high quality acoustic performance, light weight, and long-term comfort. The design also ensures full compatibility with helmets, weapons and other personal equipment. The headset is adjustable for wear on the left or right ear when fitted with the simple mesh strap. The included Cobra Dual Inline Interchangeable PTT mixes both audio channels into one ear and allows the user to independently key channel 1 or channel 2 as required. It is mounted in a cloth pouch with MOLLE compatible fastenings. Recommended for use with the RF-7800S-TR SPR Team Radio and RF-7850S.

CLEARTRAK HEAVY DUTY HEADSETS

RF-3039-HS001 Behind-the-Head
RF-3039-HS002 Over-the-Head

This heavy-duty hearing protection headset comes equipped with noise canceling microphone. It has dual cloth-covered ear seals for comfort and a push-to-talk switch located on the ear cup. It comes in either behind-the-head or over-the-head styles. The headset also features passive (24 DB) hearing protection. It is compatible for use with all RF-7800S SPR radios and RF-7850S SPR radio.

HEARING PROTECTED EARPIECES WITH BONE-CONDUCTION MIC, TALK-THORUGH AND INLINE PTT HEADSET

RF-5967-HS004, X5 Earpiece, V60 PTT

The V60/X5 Earpiece Headset is a dual in-the-ear style headset that utilizes a bone conduction microphone. It has no external microphone and captures vibrations in the user's jawbone, converting them to crisp and clear sound. No external ambient noise around the user is picked up. As a result, the headset can be used in extreme situations without the audio interference commonly found when communicating in these environments.

Utilizing a form factor that has been researched and designed over the last decade, the earpieces adapt perfectly to the contours of the ear to offer maximum comfort as well as a secure fit. The earpieces can be easily adjusted in length to allow compatibility with helmets, eyewear, gas masks or circumaural headsets. The X5 headset also offers hearing protection (passive SNR 32 db and NRR 29 db) with natural hear-thru and the ability to control two communication devices simultaneously. Intelligence inside the V60 control unit comes from microprocessors and state-of-the-art high speed digital signal processors, allowing the user to control both hear-thru volume (with super enhanced hearing) and communication volume.

The V60 PTT operates in both half duplex radio mode and full duplex mode and can accept a secondary radio or intercom system connection. All connectors and switches are submersible to 2 meters and manufactured to the grade to meet or exceed military specifications. The talk-through feature on the V60 PTT requires power from the radio. Recommended for use with the RF-7800S-TR SPR Team Radio and RF-7850S SPR radio.

OPTIONS

FOAM EAR CANAL TIPS

PRODUCT NUMBER	PRODUCT NAME
A06-0021-418	Short Slim, Black, 100-pair Box
A06-0021-419	Short Standard, Black, 100-pair Box
A06-0021-420	Short Large, Black, 100-pair Box
A06-0021-421	Original Slim, Black, 100-pair Box
A06-0021-422	Original Standard, Black, 100-pair Box
A06-0021-423	Original Large, Black, 100-pair Box
A06-0021-424	Demo Kit, Black, 15 pair in 6 Sizes

THROAT MIC SYSTEMS

RF-3033-HS001 Professional Throat Mic System
RF-3033-HS002 Standard Throat Mic System

This highly sensitive communication system can pick up even a whisper. It has a single, adjustable left/right in-the-ear earpiece and adjustable elastic strap with a comfortable fit around the neck. The headset accommodates most helmet configurations and offers push-to-talk options for use with protective clothing and special applications. The Professional Throat Mic System features a round (80 mm) single inline PTT. The Standard Throat Mic System features a Torpedo single inline PTT and secondary flat PTT, with the option to utilize an alternative, wired secondary PTT. Recommended for use with the RF-7800S-TR SPR Team Radio.

OPTIONS

SECONDARY WIRED PTTS

PRODUCT NUMBER	PRODUCT NAME
RF-3052-PT001	Sniper, Flat PTT
RF-3052-PT002	Ring PTT
RF-3052-PT003	Barrel PTT
RF-3052-PT004	Standard Flat PTT
RF-3052-PT005	Round 80 mm PTT

HELMET COMPATIBLE HEADSET

RF-3034-HS001

The Helmet Compatible Headset is ideal for installation in non-military helmets. This high performance, in-helmet solution offers two in-helmet speakers, a microphone and adjustable single flat push-to-talk switch. Its modular design allows for quick disconnects and cord coil at key points between components. The components are adjustable and can be worn or attached at several locations. The headset is compatible with all RF-7800S SPR radios.

HURRICANE TACTICAL HEADSET

RF-3035-HS001

The Hurricane Tactical Headset is designed to provide hearing protection in a high noise environment without all of the weight and bulk of heavy-duty headsets. The dual ear loops ship standard with ear tips that provide passive noise reduction of 29 dB to deliver advanced protection against dangerous decibel levels. The user can easily convert the headset for use in a low noise environment by simply switching out the ear tips. The close fitting headset can be worn comfortably under a helmet or cap. It includes a Tornado single inline PTT and the option to utilize an alternative secondary wired PTT. Recommended for use with the RF-7800S-TR SPR Team Radio.

OPTIONS

SECONDARY WIRED PTTS

PRODUCT NUMBER	PRODUCT NAME
RF-3052-PT001	Sniper, Flat PTT
RF-3052-PT002	Ring PTT
RF-3052-PT003	Barrel PTT
RF-3052-PT004	Standard Flat PTT
RF-3052-PT005	Round 80 mm PTT

SKULL MIC SYSTEM

RF-3037-HS001

The Skull Mic System has been designed to fit into most helmet configurations. A comfortable molded rubber microphone and adjustable left- or right-side ear cup pick up vibrations through the top of the skull. The headset includes a single round (80 mm) inline PTT. Recommended for use with the RF-7800S-TR SPR Team Radio.

SPEAKER-MIC (FIST-MIC)

RF-3050-SM003

The RF-3050-SM003 Speaker-Mic has been designed specifically to complement the SPR and its unique capabilities. The Speaker-Mic has built-in dual-PTT controls and SPR volume controls. An additional connector on the top of the Speaker-Mic allows users to attach a secondary headset with the SPR's standard audio connector to provide seamless transitions between Speaker-Mic operation and headset operation. The Speaker-Mic is compatible with all RF-7800S SPR and RF-7850S SPR radios.

WIRELESS DUAL PTT WITH VOLUME CONTROL

12055-0450-01

The RF-7800S SPR Wireless Push to Talk (WPTT) device utilizes IEEE 802.15.4 wireless technology ("ZigBee") to offer short range wireless communications with low power consumption. It has dual PTT and volume controls. The Wireless PTT is submersible to two meters (~6.6 feet). The device offers 128-bit AES encryption and is environmentally

tested to MIL-STD-810F. The wireless PTT requires a single CR123A (12055-0456-01) battery (ordered separately), which provides approximately 180 days of operation under typical conditions. The wireless PTT is compatible with the RF-7800S-SPR Team Radio.

SNIPER, FLAT PTT

RF-3052-PT001

This PTT is intended for use with the RF-7800S-TR SPR Team Radio and RF-7850S SPR radio. It is designed as an add-on to headsets with the Torpedo PTT. This low-profile PTT comes with a Velcro strap for easy attachment to a weapon.

RING PTT

RF-3052-PT002

This PTT is intended for use with the RF-7800S-TR SPR Team Radio and RF-7850S SPR radio. It is designed as an add-on to headsets with the Torpedo PTT. The Velcro strap allows easy attachment around a finger.

BARREL PTT

RF-3052-PT003

This PTT is intended for use with the RF-7800S-TR SPR Team Radio and RF-7850S SPR radio. It is designed as an add-on to headsets with the Torpedo PTT.

STANDARD FLAT PTT

RF-3052-PT004

This PTT is intended for use with the RF-7800S-TR SPR Team Radio and RF-7850S SPR radio. It is designed as an add-on to headsets with the Torpedo PTT.

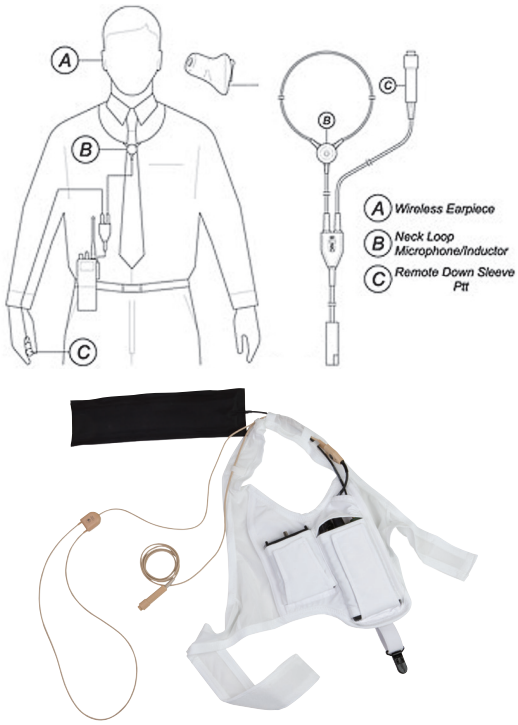
ROUND 80 MM PTT

RF-3052-PT005

This PTT is intended for use with the RF-7800S-TR SPR Team Radio and RF-7850S SPR radio. It is designed as an add-on to headsets with the Torpedo PTT.

COVERT AND SECURITY KITS

COVERT KIT



RF-3065-CK002

The RF-3065-CK002 Covert Kit is used with the RF-7800S-TR SPR Team Radio to provide secure communications in covert or plain-clothes operational environments. The kit includes a concealable, wearable harness, which provides a pouch for the RF-7800S SPR Team Radio and an additional spare battery. The harness is available in multiple sizes, which should be specified when ordering (XS, S, M, L, XL, XXL). Additionally, the kit provides a wireless earpiece, which works with the neck loop to create the audio link to the radio and a covert flat antenna. The entire system can be worn under a military uniform or under civilian clothing for maximum covert operation.

The RF-3065-CK002 includes:

- Covert Neck Loop with Fist Held Barrel PTT
- Covert Wireless Earpiece
- Covert, Under-Jacket Radio Shoulder Harness, White (specify size)
- Covert Dipole Antenna with Pouch

SURVEILLANCE AND SECURITY KITS

The Surveillance and Security Kits are used with the RF-7800S SPR to provide secure communications in surveillance missions or security operations. The kits provide either a single-wire interface or a three-wire interface to the RF-7800S SPR that includes a low-profile single earpiece, a concealable microphone and a low-profile PTT control. The single-wire kit includes a low-profile earpiece with built-in bone conduction microphone. The three-wire kits can be upgraded with an optional wireless (induction) earpiece. The Surveillance and Security Kits can be worn under civilian clothing or clipped to a military uniform, but do not include a pouch for the SPR. Pouches or carrying accessories should be ordered separately.

1-WIRE TACTICAL SECURITY KIT
RF-3053-HSXXX

This kit is intended for use with the RF-7800S-TR SPR Team Radio. It includes an M3 low profile tactical earpiece with bone-conduction mic and M15 single inline PTT. Color: Black earpiece and black PTT.

3-WIRE SURVEILLANCE KIT

RF-3041-SK001 Beige Earpiece Clip
RF-3041-SK002 Black Earpiece Clip

This kit is intended for use with the RF-7800S-TR SPR Team Radio. It includes a mini-lapel pin mic and fist held barrel PTT.

3-WIRE SECURITY KITS
RF-3041-SK003

This kit is intended for use with the RF-7800S-TR SPR Team Radio. It includes a clothing clip mic and clothing clip flat PTT. Color: Black earpiece clip.

RF-3041-SK004

This kit is intended for use with the RF-7800S-TR SPR Team Radio. It includes a mini-lapel pin mic and fist-held flat PTT. Color: Black earpiece clip.

OPTIONS

WIRELESS EARPIECES AND CONNECTORS FOR RF-3041-SK 3-WIRE SURVEILLANCE AND SECURITY KITS

The following products are easily added to RF-3041-SK 3-Wire Surveillance and Security Kits to provide a wireless earpiece capability. Order one earpiece and one mating inductor for each user.

COVERT WIRELESS EARPIECES

RF-3044-WR001 Beige Earpiece
RF-3044-WR002 Brown Earpiece

These right ear-worn earpieces are compatible with both the RF-3045-PI001 Covert Mating Flat Inductor and the RF-3047-NL001 Covert Mating Neck Loop Inductor.

COVERT MATING FLAT INDUCTOR FOR WIRELESS EARPIECE

RF-3045-PI001

This flat inductor provides the wireless link for the RF-3044-WR Covert Wireless Earpiece. Color: Beige.

COVERT MATING NECK LOOP INDUCTOR FOR WIRELESS EARPIECE

RF-3047-NL001

This neck loop inductor provides the wireless link for the RF-3044-WR Covert Wireless Earpiece. Color: Beige.

POWER

RF-7800S BATTERY

HIGH-CAPACITY LITHIUM-ION RECHARGEABLE BATTERY

12055-2105-01

This spare battery is intended for use with the RF-7800S-TR SPR Team Radio and the RF-7400E-VP Tactical Video Processor (TVP).

WIRELESS PTT REPLACEMENT BATTERY
12055-0456-01

This 3-volt CR123A battery is intended for use in the 1205-0450-01 Wireless PTT.

AA BATTERY HOLDER

12055-2102-01

This spare battery adapter accommodates six AA batteries (not included). It is also compatible with the Harris B41-0007-000 AA Zinc-Manganese Dioxide Battery and B41-0010-200 AA Lithium Battery (single use). The AA Battery Holder is intended for use with the RF-7800S-TR SPR Team Radio and the RF-7400E-VP Tactical Video Processor (TVP).

RF-7800S-PS SPR POWER ADAPTER

12055-2200-01

The SPR Power Adapter is a modular system upgrade for the RF-7800S-TR SPR Team Radio that allows an easy connection to higher capacity batteries, fuel cells or soldier-worn power systems. The Power Adapter clips directly to the bottom of the Team Radio in place of a standard battery and provides a cable connection to an alternative power supply, such as Harris handheld or manpack radio batteries (batteries and cables ordered separately). The RF-7800S SPR Power Adapter can accept DC sources from 8.6 to 17 VDC and is tested to MIL-STD-810G military environmental standards.

FEATURES

- Input: 8.6-17.0 VDC
- Under voltage/over voltage protection
- Reverse polarity protection
- Over current protection
- Electrical performance tested to MIL-STD-461E
- Environmental performance tested to MIL-STD-810G
- Weight: less than 250 g (~8.8 oz)

OPTIONS

The SPR Power Adapter requires one of the following battery cables:

HANDHELD BATTERY CABLE WITH STRAP

12055-2252-A004

This cable is intended for use with handheld batteries when using the RF-7800S SPR Power Adapter. It is compatible with the Harris 12041-2100-XX and 12041-2200-XX Handheld Batteries (ordered separately).

MANPACK BATTERY CABLE WITH STRAP
12055-2253-A004

This cable is intended for use with manpack batteries when using the RF-7800S SPR Power Adapter. It is compatible with the following Harris manpack batteries (ordered separately):

PRODUCT NUMBER	PRODUCT NAME
BA-5390/U	Non-Rechargeable, Disposable Lithium-Manganese Dioxide Battery
BA-5590/U	Non-Rechargeable, Disposable Lithium
BB-390B/U	Rechargeable Nickel Metal-Hydride Battery
BB-590B/U	Lithium Ion Battery
BB-2590/U	Rechargeable Li Ion Battery

RF-5854 BATTERIES AND CHARGERS (AC)

All battery chargers listed are intended for use with the 12055-2105-01 High Capacity Lithium-Ion (Li Ion) Rechargeable Battery.

SINGLE-BAY BATTERY CHARGER (AC)

RF-5854-CH001

This charger is intended for use in a tactical office environment. It can charge a single battery at a time.

MULTIPLE BAY CHARGERS
RF-5853-CH00X

Specify product by replacing 'X' with product number fron the choices below:

1 = 1 x Bay 2 = 2 x Bays 6 = 6 x Bays

6-BAY BATTERY CHARGER (AC)

RF-5854-CH006

This charger is intended for use in a tactical office environment. It can charge up to six batteries at a time.

VEHICLE 8-BAY BATTERY CHARGER (DC)

RF-5955-CH008

This rugged charger can be installed directly into a vehicle or in other tactical environments. It can charge up to eight batteries at a time.

TWO-SOLAR BATTERY CHARGER

RF-5905-CH00X

Specify battery charger color by replacing 'X' above:

01	Traditional Camouflage
02	Desert Camouflage
03	Digital Camouflage

RF-7850S BATTERIES AND CHARGERS

HIGH-CAPACITY LI-ION RECHARGEABLE BATTERY

12041-2200-XX

AA BATTERY ADAPTER

RF-5911-PS001

1-BAY BATTERY CHARGER

RF-5853-CH101

2-BAY BATTERY CHARGER

RF-5853-CH102

6-BAY BATTERY CHARGER

RF-5853-CH106

SOLAR BATTERY CHARGER

RF-5903-CH00X

Specify solar charger color by replacing 'X' above:

01	Traditional Camouflage
02	Desert Camouflage
03	Digital Camouflage

SOFT GOODS (CARRYING ACCESSORIES)

MOLLE COMPATIBLE HOLSTERS FOR SPR TEAM RADIO WITH STANDARD BATTERIES

12055-6060-XX

This MOLLE-compatible holster is designed to carry the RF-7800S-TR SPR Team Radio with standard batteries.

Specify holster color by replacing 'XX' above:

01 Olive Drab Green
02 Coyote Tan
03 Traditional Digital Camouflage
04 Desert Digital Camouflage
05 Black

MOLLE COMPATIBLE HOLSTERS FOR SPR TEAM RADIOS AND TACTICAL VIDEO PROCESSOR (TVP)

12128-6060-XX

This MOLLE-compatible holster is designed to carry the RF-7800S-TR Team Radio with a power adapter, or the RF-7400E-VP.

Specify holster color by replacing 'XX' above:

01 Olive Drab Green
02 Coyote Tan
03 Traditional Digital Camouflage
04 Desert Digital Camouflage
05 Black
06 Multicam

12121-1580-XX

This MOLLE-compatible holster is designed to carry the RF-7850S-SPR radio with standard batteries, or the RF-7400E-VP.

Specify holster color by replacing 'XX' above:

01 Olive Drab Green
02 Coyote Tan
03 Traditional Digital Camouflage
04 Desert Digital Camouflage
05 Black
06 Multicam

FALCONFIGHTER® SOFT CARRYING CASE

12128-6050-XX

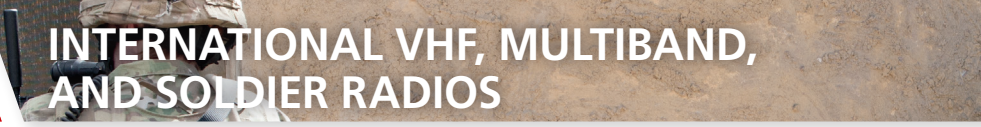
This carrying case is compatible with all SPR radios and can hold a single soldier's SPR communication kit with cables and ancillaries.

Specify holster color by replacing 'XX' above:

01 Olive Drab Green
02 Coyote Tan
03 Traditional Digital Camouflage
04 Desert Digital Camouflage
05 Black
06 Multicam

COLOR OPTIONS

OLIVE DRAB GREEN | COYOTE TAN | TRADITIONAL DIGITAL CAMO | DESERT DIGITAL CAMO | BLACK | MULTICAM



CABLES

COMPATIBILITY CHART

PRODUCT NUMBER	PRODUCT NAME	RF-7850S-SPR	RF-7800S-TR TEAM RADIO (TR)	RF-7800S-V VEHICLE RADIO
VIDEO/DISPLAY/CONFIGURATION				
12085-2211-A004	Video Cable – RF-7800S SPR to TVP		•	•
12164-2211-A004	Video Cable – RF-7850S SPR to TVP	•		
ETHERNET				
12164-0714-A004	Ethernet Cable	•		
12055-0714-A003	Cable Adapter, USB to Ethernet (RJ-45), 3 feet		•	•
PROGRAMING/DATA				
12164-0710-A006	Standard USB Data/Programming Cable	•		
12164-0711-A006	Mini USB Data/Programming Cable	•		
12055-0710-AXXX	Fill/Data Cable, USB (primary data cable)		•	•
12055-0711-AXXX	Fill/Data Cable, Mini-USB		•	•
12055-0712-AXXX	Data Cable, USB Host Mode		•	•
COAXIAL				
12055-0790-A015	Coaxial Cable, Double-Shielded RG-223, Type SMA to N, 15 ft. (~4.6 m)			•
12055-0791-A36	Coaxial Cable, Double-Shielded RG-223,Type SMA to BNC, 36 in. (~91 cm)			•
12055-0792-A015	Coaxial Cable, Double-Shielded RG-223, Type TNC to N, 15 ft. (~4.6 m)			•
CABLES (MISC)				
12164-0718-A006	Tablet Data Cable – RF-7850S-TR	•		
12055-0718-A006	Tablet-SPR/RNIDS – RF-7800S-TR		•	

USB TO ETHERNET (RJ-45)

12055-0714-A003

Cable for the RF-7800S-TR Team Radio and the RF-7800S-V Vehicle Radio. It connects to the SPR-DAT port and has a standard Ethernet jack (RJ-45).

FILL/DATA CABLE, USB (PRIMARY DATA CABLE)

12055-0710-AXXX

Cable for the RF-7800S Secure Personal Radio (SPR) family and RF-7400E-VP Tactical Video Processor (TVP). It connects to the SPR-DAT port and to a standard USB port (Type A).

Specify cable length by replacing 'AXXX' above:

A003	3 ft. (~0.9 m)	A004	4 ft. (~1.2 m)
A006	6 ft. (~1.8 m)		

FILL/DATA CABLE, MINI-USB

12055-0711-AXXX

Cable for the RF-7800S Secure Personal Radio (SPR) family and RF-7400E-VP Tactical Video Processor (TVP). It connects to the SPR-DAT port and to a standard Mini-USB port (Type Mini B-5).

Specify cable length by replacing 'AXXX' above:

A003	3 ft. (~0.9 m)	A004	4 ft. (~1.2 m)
A006	6 ft. (~1.8 m)		

DATA CABLE, USB HOST MODE

12055-0712-AXXX

Cable for the RF-7800S-TR SPR Team Radio and RF-7800S-V SPR Vehicle Radio. It connects to the SPR-DAT port and to a standard USB port (Type A).

Specify cable length by replacing 'AXXX' above:

A003	3 ft. (~0.9 m)	A004	4 ft. (~1.2 m)
A006	6 ft. (~1.8 m)		

SOFTWARE AND UTILITIES

SPR PROGRAMMING KITS AND UTILITY SOFTWARE

RF-7800S-PK001

The SPR™ Programming Kit provide software applications to enable planning and filling of the RF-7800S SPR Team Radio and RF-7800S SPR Vehicle Radio. The kit include cables to assist in connecting and configuring the radios and a CD-ROM containing the Communication Planning Application (CPA) and the RF-7800S SPR Utility Software Application (SUS).

The CPA provides access to all necessary configuration parameters for the RF-7800S SPR, including station type definition, net planning, and key management. Multiple nets can be configured and stored in a plan file on a PC or removable media for easy distribution to the radio via USB. The SUS can be installed on either a PC or PDA. The application supplies a user-friendly radio interface, real-time editing, and real-time distribution of the radio plan file, including the ability to perform radio firmware upgrades. The SUS can also perform built-in radio test and ongoing reporting of radio status.

The SUS includes the Harris Ground Force Tracking GPS Application, which enables a squad or platoon leader to track team locations and display this information as a digital map overlay. The software enables the team leader to monitor the position of his team in real-time in a tactical environment.

The RF-7800S-PK001 kit includes a software CD-ROM and 12055-0710-A006 Fill/Data Cable. This cable can be used to program RF-7800S SPR Team Radios and RF-7800S SPR Vehicle Radios.

RF-7850S-PK001

The RF-7850S-PK001 kit includes a software CD-ROM and 12164-0710-A006 Type A Programming Cable and external black KDU 12113-0100-22.

VOICE PROMPT LANGUAGE

The RF-7800S-TR/V and the RF-7850S SPR Radios can be ordered with a factory-loaded voice prompt option in various languages. U.S. English (male) voice prompts are the default configuration pre-loaded in each Vehicle Radio unless another language is specified. Contact your Harris Sales Representative for a list of available languages.

OPTIONAL

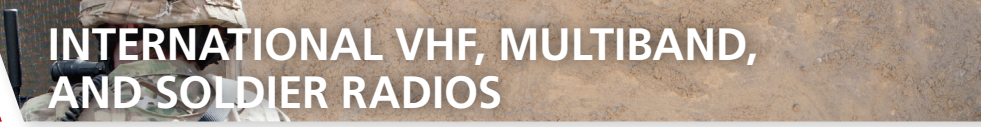
PRODUCT NUMBER	PRODUCT NAME
SOFTWARE	
RF-7850AP-SW101	Embedded Apps SW Package includes: WebUI Embedded TacChat Embedded GFT Embedded BITE
RF-7850AP-SW20X	Factory Loaded Voice Prompts (English default)

KEYPAD DISPLAY KIT (KDU)

12113-1000-XX

Specify product color by replacing the 'XX' the chart below:

21	Green
22	Black
23	Tan



RF-7800V PRODUCTS

OVERVIEW

RF-7800V-HH VHF HANDHELD

The Harris RF-7800V VHF Combat Net Radio (CNR) is designed to provide exceptional performance in combat environments. Its small, lightweight design and range-extending advanced modem technologies allow maximum user mobility while providing the advanced features for mission critical communications.

STANDARD FEATURES

- Up to 64 kbps IP data
- Quicklook 1A, 2 & 3
- Free Channel Search
- Long range MELP
- FM analog voice
- FSK MELP & CVSD voice
- FSK data
- Simultaneous voice and data
- Dual PTT
- Directed calling
- Embedded GPS and situational awareness reporting
- Embedded applications: Tactical Chat IP, File Browser, Navigation and Built in Test (BIT)
- Direct USB/Ethernet connectivity
- Citadel II & AES encryption modes
- Falcon II interoperability
- Software Defined Radio (SDR)

RF-7800V-SW002 ADVANCED OPTIONS

- 75 kHz bandwidth
- Up to 192 kbps IP data
- TDMA Networking Waveform (TNW)
- Quicklook Wide, 64 kbps IP data
- Voice over IP (VoIP) and Session Initiation Protocol (SIP)
- Telephony and RF-6010 support
- SNMP Read/Write Capabilities

RF-7850AP-SW101 SOFTWARE ADVANCED OPTIONS (SEE PAGE 51)

- Embedded applications and development API for easy integration and future capability enhancements
- WebUI
- Tactical Chat IP App
- Ground Force Tracker App

RF-7800V-V51X VHF VEHICULAR RADIO

The RF-7800V-V51X VHF Vehicular Radio takes the features and performance of the RF-7800V VHF CNR radio and 50 Watt Vehicular Adapter Unit (VAU) and combines the two into one small-form-factor, high-powered radio for use in vehicle or base station radio systems.

STANDARD FEATURES

- Built-in interface connections: Remote KDU, power, GPS, intercom, and external fan and speaker
- HUB battery to maintain ToD synchronization
- RF-7800I Vehicular Intercom System interoperability

RF-7800V-V50X VHF HANDHELD RADIO POWER AMPLIFIER

The RF-7800V-V50X is a high-performance VHF power amplifier (PA) for use in vehicle or base station radio systems. It complements the RF-7800V VHF transceiver by supplying additional RF power for increased range and link reliability.

STANDARD FEATURES

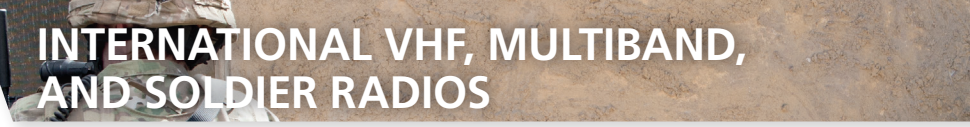
- Co-location filtering compatible with hopping systems
- Up to 50 watts output power
- External speaker power point
- Hot "jerk-and-run" (handheld remains powered on when removed from vehicle system)
- Integrated handheld battery charger
- RF-7800I Vehicular Intercom System interoperability
- VIC-1 and VIC-3 interface, and heat sinking for an extended-use duty cycle

SPECIFICATIONS FOR RF-7800V PRODUCTS

GENERAL	RF-7800V-HH	RF-7800V-V51X	RF-7800V-V50X
Frequency Range	30-108 MHz	30-108 MHz	N/A
Bandwidth	25 & 75 kHz	25 & 75 kHz	N/A
Net Presets	25 total/13 Selectable from switch	25	N/A
RF Input/Output Impedance	50 Ohms	50 Ohms, unbalanced	50 Ohms, unbalanced
Input Power	N/A	20-32 VDC	20-32 VDC
Collocation	N/A	15% frequency and 1.5 m antenna separation	9% frequency and 1.5 m antenna separation
PHYSICAL			
Dimensions	2.94 W x 9.71 H x 2.43 D in. (~7.4 W x 24.6 H x 6.1 D cm)	7.5 W x 7.9 H x 13.5 D in. (~19.0 W x 20.0 H x 34.3 D cm)	2.94 W x 9.71 H x 2.43 D in. (~19.3 W x 27.2 H x 35.6 D cm)
Weight	2.4 lbs (~1.1 kg) with battery	28 lbs (~12.7 kg)	26 lbs (~11.8 kg) without shock tray
Color (CARC finish)	Green (RF-7800V-HH001) Black (RF-7800V-HH002) Tan (RF-7800V-HH003)	Green (RF-7800V-V511) Black (RF-7800V-V512) Tan (RF-7800V-V513)	Green (RF-7800V-V501) Black (RF-7800V-V502) Tan (RF-7800V-V503)
TRANSMIT			
Power Output	0.25, 1, 2, 5 and up to 10 Watts	5 Watts, 20 Watts, 50 Watts (user selectable)	5 Watts, 20 Watts, 50 Watts (user selectable)
Frequency Stability	± 1 ppm	± 1 ppm	N/A
Harmonic Suppression	-50 dBc	> 60 dBc typical	> 60 dBc typical
Spurious Suppression	-50 dBc	> 50 dBc typical	> 50 dBc typical
RECEIVE			
FM Sensitivity	-116 dBM @12 dB SINAD	-112 dBM @12 dB SINAD	-112 dBM @12 dB SINAD
Adjacent Channel Rejection	50 dB	>60 dB	N/A
Squelch	Selectable: off/noise/tone/digital	Selectable: off/noise/tone/digital	N/A
IF Rejection	75 dB	>60 dB	>60 dB
ENVIRONMENTAL			
Operating Temperature	-30° C to +60° C (-22°F to +140°F) -25° C to +60° C (-13°F to +140°F) with battery	-30° C to +60° C (-22°F to +140°F)	-30° C to +60° C (-22°F to +140°F)
Shock	Drop MIL-STD-810F	Ground/Mobile per MIL-STD-810G	Ground/Mobile per MIL-STD-810F
Immersion	5 meters (~16.4 feet)	N/A	N/A
Humidity	95% per MIL-STD-810F	95% per MIL-STD-810G	95% per MIL-STD-810F
Vibration	Loose cargo per MIL-STD-810F	Ground/Mobile per MIL-STD-810G	Ground/Mobile per MIL-STD-810F
STANDARD KITS			
	Handheld Assembly 12067-1000-XX	**Vehicular Radio Assembly** 12112-1000-XX	**Vehicular Adaptor Unit Assembly** 12107-0100-XX
	13 in. Whip Antenna 12011-2600-01	**Ancillary Kit** 12112-0105-01	**Ancillary Kit** 12107-0105-01
	High-Capacity Li-Ion Battery 12041-2200-0X	**Operation Manual** 10515-0397-4100	**Shock Mount/Interface** 12050-3000-04
	Operator Card 10515-0363-4100	**System Install & Maintenance Manual** 10515-0397-4200	**System Install & Maintenance Manual** 10515-0376-4200
	Operation Manual (Soft Copy) 10515-0363-4200		
	Communications Programming Application RF-7800VH-SW001		

COLOR OPTIONS

GREEN TAN BLACK



RF-7850M PRODUCTS
OVERVIEW

RF-7850M-HH MULTIBAND HANDHELD

The Harris RF-7850M Multiband Combat Net Radio (CNR) is designed to provide exceptional performance in combat environments. Its small, lightweight design and range-extending advanced modem technologies allow maximum user mobility while providing the advanced features for mission critical communications.

STANDARD FEATURES

- Up to 64 kbps IP data
- Quicklook 1A, 2 & 3
- Free Channel Search
- Long range MELP
- AM/FM Analog Voice
- FSK/ASK MELP & CVSD Voice
- ASK data
- Simultaneous voice and data
- Dual PTT
- Directed calling Embedded GPS and situational awareness reporting
- Embedded applications: Tactical Chat IP, File Browser, Navigation and Built in Test (BIT)
- Direct USB/Ethernet connectivity
- Citadel II & AES encryption modes
- Falcon II interoperability
- Software Defined Radio (SDR)

RF-7850M-SW002 ADVANCED OPTIONS

- ANW2 (1,2 and 5 Watts)
- MACA 2 192kbps on 75kHz channel
- SVD on 75kHz channel
- TNW (BMS)
- Single Radio Repeater in TNW
- KML Server and NFFI GPS support
- QL WIDE
- SIP and RF-6010 Base Station
- PTT through WIP retrans and Advanced IP Repeater
- ROIP
- SNMP Write Capabilities

RF-7850AP-SW101 SOFTWARE ADVANCED OPTIONS (SEE PAGE 51)

- Embedded applications and development API for easy integration and future capability enhancements
- WebUI
- Tactical Chat IP App
- Ground Force Tracker App

RF-7850M-V51X MULTIBAND VEHICULAR RADIO

The RF-7850M-V51X Multiband Vehicular Radio takes the features and performance of the RF-7850M Multiband CNR radio and 50 Watt Vehicular Adapter Unit (VAU) and combines the two into one small-form-factor, high-powered radio for use in vehicle or base station radio systems.

STANDARD FEATURES

- Built-in interface connections: Remote KDU, power, GPS, intercom, and external fan and speaker
- HUB battery to maintain ToD synchronization
- RF-7800I Vehicular Intercom System interoperability

RF-7850M-V50X MULTIBAND HANDHELD RADIO POWER AMPLIFIER

The RF-7850M-V50X is a high-performance multiband power amplifier (PA) for use in vehicle or base station radio systems. It complements the RF-7850M multiband transceiver by supplying additional RF power for increased range and link reliability.

STANDARD FEATURES

- Co-location filtering compatible with hopping systems
- External speaker power point
- Hot "jerk-and-run" (handheld remains powered on when removed from vehicle system)
- Integrated handheld battery charger
- RF-7800I Vehicular Intercom System interoperability
- VIC-1 and VIC-3 interface, and heat sinking for an extended-use duty cycle

SPECIFICATIONS FOR RF-7850M PRODUCTS

GENERAL	RF-7850M-HH	RF-7850M-V51X	RF-7850M-V50X
Frequency Range	30-512 MHz	30-512 MHz	N/A
Bandwidth	8.33, 12.5, 25 & 75 kHz, 1.2 MHz	8.33, 12.5, 25 & 75 kHz, 1.2 MHz	N/A
Net Presets	25 total/13 Selectable from switch	25	N/A
RF Input/Output Impedance	50 Ohms	50 Ohms, unbalanced	50 Ohms, unbalanced
Input Power	N/A	20-32 VDC	20-32 VDC
Collocation	N/A	15% frequency and 1.5 m antenna separation	9% frequency and 1.5 m antenna separation
PHYSICAL			
Dimensions	2.94 W x 9.71 H x 2.43 D in. (~7.4 W x 24.6 H x 6.1 D cm)	7.5 W x 7.9 H x 13.5 D in. (~19.0 W x 20.0 H x 34.3 D cm)	2.94 W x 9.71 H x 2.43 D in. (~19.3 W x 27.2 H x 35.6 D cm)
Weight	2.4 lbs (~1.1 kg) with battery	28 lbs (~12.7 kg)	26 lbs (~11.8 kg) w/o shock tray
Color (CARC finish)	Green (RF-7850M-HH001) Black (RF-7850M-HH002) Tan (RF-7850M-HH003)	Green (RF-7850M-V511) Black (RF-7850M-V512) Tan (RF-7850M-V513)	Green (RF-7850M-V501) Black (RF-7850M-V502) Tan (RF-7850M-V503)
TRANSMIT			
Power Output	0.25, 1, 2, 5 and up to 10 Watts	30-108 MHz: 5 Watts, 20 Watts, 50 Watts 108-512 MHz: 5 Watts, 10 Watts, 20 Watts	30-108 MHz: 5 Watts, 20 Watts, 50 Watts 108-512 MHz: 5 Watts, 10 Watts, 20 Watts
Frequency Stability	± 1 ppm	± 1 ppm	N/A
Harmonic Suppression	-50 dBc	> 60 dBc typical	> 60 dBc typical
Spurious Suppression	-50 dBc	> 50 dBc typical	> 50 dBc typical
RECEIVE			
FM Sensitivity	-116 dBM @12 dB SINAD	-112 dBM @12 dB SINAD	-112 dBM @12 dB SINAD
Adjacent Channel Rejection	50 dB	>60 dB	N/A
Squelch	Selectable: Off/noise/tone/digital	Selectable: Off/noise/tone/digital	N/A
IF Rejection	75 dB	>60 dB	>60 dB
ENVIRONMENTAL			
Operating Temperature with battery	-30° C to +60° C (-22°F to +140°F) -25° C to +60° C (-13°F to +140°F)	-30° C to +60° C (-22°F to +140°F)	-30° C to +60° C (-22°F to +140°F)
Shock	Drop per MIL-STD-810G	Ground/Mobile per MIL-STD-810G	Ground/Mobile per MIL-STD-810G
Immersion	5 meters (~16.4 feet)	N/A	N/A
Humidity	95% per MIL-STD-810G	95% per MIL-STD-810G	95% per MIL-STD-810G
Vibration	Loose cargo per MIL-STD-810G	Ground/Mobile per MIL-STD-810G	Ground/Mobile per MIL-STD-810G
STANDARD KITS			
	13 in. Whip Antenna 12011-2710-03	**Vehicular Radio Assembly** 12185-1000-0X	**Vehicular Adapter Unit Assembly** 12184-0100-XX
	Blade Antenna 12011-2730-01	**Operation Manual** 10515-0466-4100	**Shock Mount/Interface** 12050-3000-14
	High-Capacity Li-Ion 12041-2200-0X	**Ancillary Kit** 12107-0105-01	**Ancillary Kit** 12107-0105-01
	Operator Card 10515-0461-4100	**System Install & Maintenance Manual** 10515-0466-4200	**System Install & Maintenance Manual** 10515-0376-4200
	Operation Manual (Soft Copy) 10515-0461-4200		
	Communications Programming Application RF-7850MH-SW001		

COLOR OPTIONS

GREEN TAN BLACK

Suggested handsets, headsets, and speaker mic: RF-3023-HS001 headset. RF-3023-HS003 - headset, RF-3023-HS005 - handset, and RF-3023-SM001 speaker mic

ACCESSORIES

VHF/MULTIBAND PRODUCTS

See the Common Accessories and Antennas chapters for more information.

ANTENNAS

PRODUCT NUMBER	PRODUCT NAME
12011-2700-01	VHF Handheld Blade Antenna
RF-3161-AT001	VHF Dismount Soldier Antenna
10511-0400-XX	GPS Antenna Kit (L1 Band)
RF-3162DB-AT001	Multiband Dismount Soldier Antenna
RF-3183-ATXXX	Multiband Vehicular Whip Antenna
RF-387-ATXXX	VHF Low-Band Center-fed Vehicular Whip Antenna, 10 ft. (~3.0 m)
RF-398-0X	VHF Low-Band Vertically Polarized End-fed Antenna, 6.25 ft. (~1.9 m)

AUDIO PRODUCTS

PRODUCT NUMBER	PRODUCT NAME
RF-3023-HS001	Dual PTT Headset (Large PTTs and Earcup)
RF-3023-HS003	Dual PTT Headset (Small PTTs and Earcup)
RF-3023-HS005	Dual PTT Capable Handset
RF-3023-SM001	Dual PTT Lapel Speaker-Microphone
RF-5980-SA101	Dual Net Speaker

BATTERIES AND CHARGERS

PRODUCT NUMBER	PRODUCT NAME
12041-2200-XX	High-Capacity Li Ion Battery, Rechargeable (5.8 A-HR)
RF-5911-PS001	Non-Rechargeable AA Battery Holder
RF-5903-CHXXX	Battery Solar Charger, Handheld
RF-5853-CH101 RF-5853-CH102 RF-5853-CH106	Handheld Battery One-Bay Battery Charger Two-Bay Battery Charger Six-Bay Battery Charger

CABLES AND ADAPTERS

PRODUCT NUMBER	PRODUCT NAME
12067-5220-01	Ethernet RJ-45 Cable Assembly, Configuration/Fill/Programming/IP Data/Remote Control, 6 ft. (~1.8 m)
12067-5600-01	USB Type A Adapter, Configuration/Fill/Programming/USB Mass Storage
12067-5700-01	USB MINI AB Adapter, Configuration/Fill/Programming/USB Mass Storage
12067-5250-01	Retransmission Cable, Voice and Data, 50 ft. (~15 m)
12067-5800-A0XX	Cable; RF-3590-RT Tablet
12085-2202-A004	RF-7850M to RF-7400E TVP
12106-1412-A006	Cable; RF-7800I-CU
10369-7212-XXX	RG-213 Coax BNC to BNC
10513-0812-AXXX	LMR-400 Coax BNC to BNC
10535-0713-AXXX	RF-5980-SA101 Speaker Power
10535-0707-AXXX	RF-5980-SA101 Speaker Audio Cable
RF-5940-MT003	KDU Mount Adapter

REMOTE KEYPAD DISPLAY UNITS

PRODUCT NUMBER	PRODUCT NAME
12113-1000-01 12113-1000-02 12113-1000-03	Handheld Remote Keypad/Display Unit (KDU) with USB, 6 ft. (~1.8 m), (Green) (Black) (Tan)
12113-1000-11 12113-1000-12 12113-1000-13	RF-7800V-V50X & V51X Remote KDU, 20 ft. (~6.1 m), (Green) (Black) (Tan)

POWER SUPPLIES

PRODUCT NUMBER	PRODUCT NAME
RF-5852-CH011	Vehicular Handheld Charger/Power Supply
RF-5912-PS001	Power Adapter, Handheld
RF-5051-PS001	Power Supply, AC/DC
RF-5056PS	12/24 Volt DC/DC Converter
RF-5061-PS001	DC/DC Converter (12 VDC input only)

SOFT GOODS (CARRYING ACCESSORIES)

PRODUCT NUMBER	PRODUCT NAME
RF-5936-CAXXX	Handheld Radio Holster
RF-5937-CAXXX	Handheld Radio Flip-Down Holster
12041-1595-01	Handset Radio Accessory Bag

SOFTWARE

PRODUCT NUMBER	PRODUCT NAME
RF-6705-SW001	Tactical Chat IP, IP-based messaging and file transfer

SPARES KITS

PRODUCT NUMBER	PRODUCT NAME
RF-7850M-SK001	RF-7850M-HH001 Spares Kit (Green)
RF-7850M-SK002	RF-7850M-HH002 Spares Kit (Black)
RF-7850M-SK003	RF-7850M-HH003 Spares Kit (Tan)
RF-7850M-SK50X	RF-7850M-V50X Spares Kit
RF-7800V-SK001	RF-7800V-HH001 Spares Kit (Green)
RF-7800V-SK002	RF-7800V-HH002 Spares Kit (Black)
RF-7800V-SK003	RF-7800V-HH003 Spares Kit (Tan)
RF-7800V-SK50X	RF-7800V-V50X Spares Kit

MAINTENANCE MANUALS

PRODUCT NUMBER	PRODUCT NAME
10515-0363-4300	VHF Maintenance Manual
10515-0376-4300	RF-7800V-V50X Maintenance Manual
10515-0397-4200	RF-7800V-V51X Maintenance Manual
10515-0461-4300	RF-7850M Maintenance Manual

SYSTEM KITS

VHF DISMOUNTED COMMUNICATION SYSTEM

RF-7800V-DS001 Green
RF-7800V-DS002 Black
RF-7800V-DS003 Tan

The RF-7800V-DSXXX is a complete communications solution for the dismounted soldier that includes a Harris RF-7800V VHF CNR, RF-3161-AT001 VHF Soldier Antenna, interconnecting coaxial cable, radio holster, and one additional battery.

RF-7800V-DSXXX CONFIGURATIONS

All configurations are submersible to 5 meters (~16 feet) and include internal GPS.

PRODUCT NUMBER	RADIO	COLOR
RF-7800V-DS001	RF-7800V-HH001	CARC Green
RF-7800V-DS002	RF-7800V-HH002	CARC Black
RF-7800V-DS003	RF-7800V-HH003	CARC Tan

The RF-7800V-DSXXX includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7800V-HHXXX	VHF Handheld Radio	1
RF-3161-AT001	VHF Dismount Soldier Antenna, including Interconnecting Cables and Antenna Elevation Kit	1
12011-2700-01	VHF Handheld Blade Antenna	1
12011-2600-01	VHF Handheld Whip Antenna	1
12041-2200-XX	Rechargeable High-Capacity Li Ion Battery	1
12041-1595-01	Handset Radio Accessory Bag	1
RF-5936-CAXXX	Radio Holster	1

MULTIBAND DISMOUNTED COMMUNICATION SYSTEM

RF-7850M-DS001 Green
RF-7850M-DS002 Black
RF-7850M-DS003 Tan

The RF-7850M-DSXXX is a complete communications solution for the dismounted soldier that includes a Harris RF-7850M Multiband CNR, RF-3162DB-AT001 Multiband Soldier Antenna, interconnecting coaxial cable, radio holster, and one additional battery.

RF-7850M-DSXXX CONFIGURATIONS

All configurations are submersible to 5 meters (~16 feet) and include internal GPS.

PRODUCT NUMBER	RADIO	COLOR
RF-7850M-DS001	RF-7850M-HH001	CARC Green
RF-7850M-DS002	RF-7850M-HH002	CARC Black
RF-7850M-DS003	RF-7850M-HH003	CARC Tan

The RF-7850M-DSXXX includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7850M-HHXXX	Multiband Handheld Radio	1
RF-3162DB-AT001	Multiband Dismount Soldier Antenna, including Interconnecting Cables and Antenna Elevation Kit	1
12011-2730-01	Multiband Handheld Blade Antenna	1
12011-2710-03	Multiband Handheld Whip Antenna	1
12041-2200-XX	Rechargeable High-Capacity Li Ion Battery	1
12041-1595-01	Handset Radio Accessory Bag	1
RF-5936-CAXXX	Radio Holster	1

INTERNATIONAL VHF, MULTIBAND, AND SOLDIER RADIOS

VHF VEHICULAR COMMUNICATION SYSTEM

RF-7800V-VS511 CARC Green
RF-7800V-VS512 CARC Black
RF-7800V-VS513 CARC Tan

The RF-7800V-VS VHF Vehicular Communication System uses the RF-7800V-V51X VHF Vehicular Radio to create a 50 watt VHF communication system covering the 30 to 108 MHz frequency band. The RF-7800V-VS includes everything required for a space-constrained vehicle installation.

RF-7800V-VS51X CONFIGURATIONS

PRODUCT NUMBER	RADIO	COLOR
RF-7800V-VS511	RF-7800V-V511	CARC Green
RF-7800V-VS512	RF-7800V-V512	CARC Black
RF-7800V-VS513	RF-7800V-V513	CARC Tan

The RF-7800V-VS51X includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7800V-V51X	VHF Vehicular Radio	1
RF-387-AT00X	VHF Low-Band Center-fed Vehicular Whip Antenna, 10 ft. (~3.0 m)	1
10369-7212-025	Coax Cable, 25 ft. (~7.6 m)	1
RF-292-0X	Universal Antenna Mount	1
RF-3023-HS005	Dual PTT Capable Handset	1
10511-0730-A025	GPS Extension Cable, 25 ft. (~7.6 m)	1
RF-5980-SA10X	Tactical Speaker	1
10535-0713-A009	Speaker Power Cable for RF-5980-SAXXX, 9 ft. (~2.7 m)	1
10535-0707-A009	Audio Interface Cable for Tactical Speaker, 9 ft. (~2.7 m)	1

MULTIBAND VEHICULAR COMMUNICATION SYSTEM

RF-7850M-VS511 CARC Green
RF-7850M-VS512 CARC Black
RF-7850M-VS513 CARC Tan

The RF-7850M-VS Multiband Vehicular Communication System uses the RF-7850M-V51X Multiband Vehicular Radio to create a 50 watt Multiband communication system covering the 30 to 512 MHz frequency band. The RF-7850M-VS includes everything required for a space-constrained vehicle installation.

RF-7850M-VS51X CONFIGURATIONS

PRODUCT NUMBER	RADIO	COLOR
RF-7850M-VS511	RF-7850M-V511	CARC Green
RF-7850M-VS512	RF-7850M-V512	CARC Black
RF-7850M-VS513	RF-7850M-V513	CARC Tan

The RF-7850M-VS51X includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7850M-V51X	Multiband Vehicular Radio	1
RF-3183-AT10X	Multiband Low-Band Center-fed Vehicular Whip Antenna, 10 ft. (~3.0 m)	1
10511-0730-A025	GPS Extension Cable, 25 ft. (~7.6 m)	1
10369-7212-025	Coax Cable, 25 ft. (~7.6 m)	2
RF-292-0X	Universal Antenna Mount	1
RF-3023-HS005	Dual PTT Capable Handset	1
RF-5980-SA10X	Tactical Speaker	1
10535-0713-A009	Speaker Power Cable for RF-5980-SA10X, 9 ft. (~2.7 m)	1
10535-0707-A009	Audio Interface Cable for Tactical Speaker, 9 ft. (~2.7 m)	1

VHF VEHICULAR COMMUNICATION SYSTEM

RF-7800V-VS501 CARC Green
RF-7800V-VS502 CARC Black
RF-7800V-VS503 CARC Tan

The RF-7800V-VS VHF Vehicular Communication System uses the RF-7800V VHF CNR in conjunction with the RF-7800V-V50X VHF Power Amplifier to create a 50 watt VHF communication system covering the 30 to 108 MHz frequency band. The RF-7800V-VS includes everything required for a vehicle installation while maintaining the dismounted capability of the radio.

RF-7800V-VS50X CONFIGURATIONS

PRODUCT NUMBER	RADIO	POWER AMPLIFIER	COLOR
RF-7800V-VS501	RF-7800V-HH001	RF-7800V-V501	CARC Green
RF-7800V-VS502	RF-7800V-HH002	RF-7800V-V502	CARC Black
RF-7800V-VS503	RF-7800V-HH003	RF-7800V-V503	CARC Tan

The RF-7800V-VS50X includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7800V-HHXXX	VHF Handheld Radio	1
RF-7800V-V50X	VHF Handheld Radio Power Amplifier	1
12011-2700-01	VHF Handheld Blade Antenna	1
RF-387-AT00X	VHF Low-Band Center-fed Vehicular Whip Antenna, 10 ft. (~3.0 m)	1
10369-7212-025	Coax Cable, 25 ft. (~7.6 m)	1
RF-292-0X	Universal Antenna Mount	1
RF-5936-CAXXX	Radio Holster	1
12041-1595-01	Handset Radio Accessory Bag	1
RF-3023-HS005	Dual PTT Capable Handset	1
10511-0730-A025	GPS Extension Cable, 25 ft. (~7.6 m)	1

MULTIBAND VEHICULAR COMMUNICATION SYSTEM

RF-7850M-VS501 CARC Green
RF-7850M-VS502 CARC Black
RF-7850M-VS503 CARC Tan

The RF-7850M-VS Multiband Vehicular Communication System uses the RF-7850M VHF CNR in conjunction with the RF-7850M-V50X Multiband Power Amplifier to create a 50 watt Multiband communication system covering the 30 to 512 MHz frequency band. The RF-7850M-VS includes everything required for a vehicle installation while maintaining the dismounted capability of the radio.

RF-7850M-VS50X CONFIGURATIONS

PRODUCT NUMBER	RADIO	POWER AMPLIFIER	COLOR
RF-7850M-VS501	RF-7850M-HH001	RF-7850M-V501	CARC Green
RF-7850M-VS502	RF-7850M-HH002	RF-7850M-V502	CARC Black
RF-7850M-VS503	RF-7850M-HH003	RF-7850M-V503	CARC Tan

The RF-7850M-VS50X includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7850M-HHXXX	Multiband Handheld Radio	1
RF-7850M-V50X	Multiband Handheld Radio Power Amplifier	1
RF-3183-AT10X	30-512 MHz Dual BNC with Internal GPS	1
10369-7212-025	Coax Cable, 25 ft. (~7.6 m)	2
RF-292-0X	Universal Antenna Mount	1
RF-5936-CAXXX	Radio Holster	1
12041-1595-01	Handset Radio Accessory Bag	1
RF-3023-HS005	Dual PTT Capable Handset	1
12041-2200-XX	Rechargeable High-Capacity Li Ion Battery	1
10511-0730-A025	GPS Extension Cable, 25 ft. (~7.6 m)	1

INTERNATIONAL VHF, MULTIBAND, AND SOLDIER RADIOS

VHF HANDHELD BASE STATION COMMUNICATION SYSTEM

RF-7800V-B501 CARC Green
RF-7800V-B502 CARC Black
RF-7800V-B503 CARC Tan

The RF-7800V-B50X VHF Base Station Communication System uses the RF-7800V VHF CNR in conjunction with the RF-7800V-V50X VHF Power Amplifier to create a 50 watt VHF communication system covering the 30 to 108 MHz frequency band. The RF-7800V-B50X includes everything required for a base station installation (except antennas) while maintaining the dismounted capability of the radio. Antennas required for more complex applications must be ordered separately.

RF-7800V-B50X CONFIGURATIONS

PRODUCT NUMBER	RADIO	POWER AMPLIFIER
RF-7800V-B501	RF-7800V-HH001	RF-7800V-V501
RF-7800V-B502	RF-7800V-HH002	RF-7800V-V502
RF-7800V-B503	RF-7800V-HH003	RF-7800V-V503

The RF-7800V-B50X includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7800V-HH00X	VHF Handheld Radio	1
RF-7800V-V50X	VHF Handheld Radio Power Amplifier	1
12050-3200-XX	Base Station Rack	1
12041-1595-01	Handset Radio Accessory Bag	1
RF-3023-HS005	Dual PTT-Capable Handset	1
RF-5051-PS00X	Power Supply	1
RF-5980-SA10X	Tactical Amplified Speaker	1
10535-0707-A009	Audio Interface Cable for Tactical Amplified Speaker, 9 ft. (~2.7 m)	1
10535-0713-A009	RF-5980-SA10X Speaker Power Cable, 9 ft. (~2.7 m)	1
10570-0716-A006	Power Cable	1
E75-0017-180	GPS Extension Cable	1
12086-0017-01	Antenna, GPS Straight SMB	1

MULTIBAND HANDHELD BASE STATION COMMUNICATION SYSTEM

RF-7850M-B501 CARC Green
RF-7850M-B502 CARC Black
RF-7850M-B503 CARC Tan

The RF-7850M-B50X Multiband Base Station Communication System uses the RF-7850V VHF CNR in conjunction with the RF-7850M-V50X Multiband Power Amplifier to create a 50 watt Multiband communication system covering the 30 to 512 MHz frequency band. The RF-7850M-B50X includes everything required for a base station installation (except antennas) while maintaining the dismounted capability of the radio. Antennas required for more complex applications must be ordered separately.

RF-7850M-B50X CONFIGURATIONS

PRODUCT NUMBER	RADIO	POWER AMPLIFIER
RF-7850M-B501	RF-7850M-HH001	RF-7850V-V501
RF-7850M-B502	RF-7850M-HH002	RF-7850V-V502
RF-7850M-B503	RF-7850M-HH003	RF-7850V-V503

The RF-7850M-B50X includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7850M-HH00X	Multiband Handheld Radio	1
RF-7850M-V50X	Multiband Handheld Radio Power Amplifier	1
12050-3200-XX	Base Station Rack	1
12041-1595-01	Handset Radio Accessory Bag	1
RF-3023-HS005	Dual PTT-Capable Handset	1
RF-5051-PS00X	Power Supply	1
RF-5980-SA10X	Tactical Amplified Speaker	1
10535-0707-A009	Audio Interface Cable for Tactical Amplified Speaker, 9 ft. (~2.7 m)	1
10535-0713-A009	RF-5980-SA10X Speaker Power Cable, 9 ft. (~2.7 m)	1
10570-0716-A006	Power Cable	1
E75-0017-180	GPS Extension Cable	1
12086-0017-01	Antenna, GPS Straight SMB	1

VHF BASE STATION COMMUNICATION SYSTEM

RF-7800V-B51X CARC Green
RF-7800V-B512 CARC Black
RF-7800V-B513 CARC Tan

The RF-7800V-B51X VHF Base Station Communication System uses the RF-7800V-V51X VHF Vehicular Radio to create a 50 watt VHF communication system covering the 30 to 108 MHz frequency band. The RF-7800V-B51X includes everything required for a space-constrained base station installation. Antennas required for more complex applications must be ordered separately.

The RF-7800V-B51X includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7800V-V51X	VHF Vehicular Radio	1
12050-3250-XX	Base Station Rack	1
E75-0017-180	GPS Extension Cable, 15 ft. (~4.6 m)	1
10511-0400-01	GPS Antenna Kit (L1 Band), 6 ft. (~1.8 m)	1
RF-3023-HS005	Dual PTT-Capable Handset	1
RF-5051-PS00X	Power Supply	1
10570-0716-A006	DC Power Cable, 6 ft. (~1.8 m)	1
RF-5980-SA101	Tactical Amplified Speaker	1
10535-0707-A009	Audio Interface Cable for Tactical Amplified Speaker, 9 ft. (~2.7 m)	1
10535-0713-A009	RF-5980-SA101 Speaker Power Cable, 9 ft. (~2.7 m)	1

MULTIBAND BASE STATION COMMUNICATION SYSTEM

RF-7850M-B51X CARC Green
RF-7850M-B512 CARC Black
RF-7850M-B513 CARC Tan

The RF-7850M-B51X VHF Base Station Communication System uses the RF-7850M-V51X Multiband Vehicular Radio to create a 50 watt Multiband communication system covering the 30 to 512 MHz frequency band. The RF-7850M-B51X includes everything required for a space-constrained base station installation. Antennas required for more complex applications must be ordered separately.

The RF-7850M-B51X includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7850M-V51X	Multiband Vehicular Radio	1
12050-3250-XX	Base Station Rack	1
E75-0017-180	GPS Extension Cable, 15 ft. (~4.6 m)	1
10511-0400-01	GPS Antenna Kit (L1 Band), 6 ft. (~1.8 m)	1
RF-3023-HS005	Dual PTT-Capable Handset	1
RF-5051-PS00X	Power Supply	1
10570-0716-A006	DC Power Cable, 6 ft. (~1.8 m)	1
RF-5980-SA101	Tactical Amplified Speaker	1
10535-0707-A009	Audio Interface Cable for Tactical Amplified Speaker, 9 ft. (~2.7 m)	1
10535-0713-A009	RF-5980-SA101 Speaker Power Cable, 9 ft. (~2.7 m)	1

See antenna section #9 for base station antennas.

Note: Quantities listed are totals and include items normally delivered as part of the radio and power amplifier.

RF-7850A AIRBORNE RADIO PRODUCTS

OVERVIEW

RF-7850A-MR002

The RF-7850A-MR002 Multi-Channel Airborne Networking Radio extends the coverage of the Harris Falcon suite of radios into a multi-channel, avionics certified platform. The dual-channel airborne tactical radio is based on combat proven Harris Falcon III RF-7850M technology, combining narrowband and wideband interoperability in the same SWaP as single channel airborne solutions. The RF-7850A-MR fulfills evolving mission needs delivering expanded area command and control, ISR and net-centric close combat support. The RF-7850A-MR002 is airborne certified for fixed wing and rotary-wing aircraft and integrates easily into a wide variety of platforms.

STANDARD FEATURES

- High-speed data
- Advanced ECCM and Free Channel Search
- TDMA Networking Waveform (TNW)
- Industry Standard Protocols (USB, SIP, VOIP, SNMP, etc.)
- Falcon II® and Falcon III® Interoperability
- Software Defined Radio
- ANW2
- Retransmission
- RF-7850AP-SW101 included

RF-7850A-UA001

The RF-7850A-UA001 Unmanned Aircraft Radio is the most capable airborne-qualified solution based on the RF-7850M-HH radio, leveraging full interoperability with legacy narrowband waveforms and extending Harris leading wideband networking radio capabilities into the air. The lightweight RF-7850A-UA radio delivers unprecedented high-speed data and video for improved situational awareness and decision making. Deployment of the RF-7850A-UA in unmanned aerial vehicles (UAVs) provides range extension, retransmission capabilities and an advantaged node for expanded wideband communications coverage. The RF-7850A-UA integrates easily into a wide variety of platforms support multiple missions supporting ground troops with extended coverage.

STANDARD FEATURES

- High-speed data
- Advanced ECCM and Free Channel Search
- TDMA Networking Waveform (TNW)
- Industry Standard Protocols (USB, SIP, VOIP, SNMP, etc.)
- Falcon II® and Falcon III® Interoperability
- Software Defined Radio
- ANW2
- RF-7850AP-SW101 included

RF-7850A-TM001

The RF-7850A-TM001 Airborne Transit Case System provides the ideal solution for a roll-on/roll-off capability, ensuring ultimate flexibility and ease of deployment. The Transit case provides the same level of functionality of a fully integrated RF-7850A-MR002 radio solution, but minimizes the integration requirements for timely deployment of wideband networking capabilities in any airborne platform.

The RF-7850A-TM001 comes with an independent power source, eliminating the need for utilizing aircraft power. All audio and data interfaces are available via a patch panel of industry standard connections. An intercom system is included for local conferencing, 2-channel radio receive and transmit, and integration into the onboard ICS.

STANDARD FEATURES

- High-speed data
- Advanced ECCM and Free Channel Search
- TDMA Networking Waveform (TNW)
- Industry Standard Protocols (USB, SIP, VOIP, SNMP, etc.)
- Falcon II® and Falcon III® Interoperability
- Software Defined Radio
- ANW2
- Retransmission

SPECIFICATIONS FOR RF-7850A PRODUCTS

GENERAL	RF-7850A-MR	RF-7850A-UA	RF-7850A-TM001
Frequency Range	30-512 MHz	30-512 MHz	30-512 MHz
Net Presets	25	25	25
Channels	2	1	2
Bandwidth	8.33 KHz, 12.5 KHz, 25 KHz, 75 KHz, and 1.2 MHz	8.33 KHz, 12.5 KHz, 25 KHz, 75 KHz, and 1.2 MHz	8.33 KHz, 12.5 KHz, 25 KHz, 75 KHz, and 1.2 MHz
Transmission Modes	AM/FM Analog Voice FSK/ASK MELP Voice FSK/ASK CVSD Voice ASK Data Wideband FSK/TCM Data ECCM	AM/FM Analog Voice FSK/ASK MELP Voice FSK/ASK CVSD Voice ASK Data Wideband FSK/TCM Data ECCM	AM/FM Analog Voice FSK/ASK MELP Voice FSK/ASK CVSD Voice ASK Data Wideband FSK/TCM Data ECCM
Platform	Software-defined radio	Software-defined radio	Software-defined radio
Power	28 VDC per MIL-STD-704F	Independent power provided by 12 VDC	Independent power provided by 28 VDC
PHYSICAL			
Dimensions	9.0 L x 6.0 W x 6.2 H in. (~22.9 L x 15.2 W x 15.7 H cm.)	3.0 W x 5.3 H x 1.6 D in. (~7.6 W x 13.5 H x 4.1 D cm.)	22.0 W x 16.0 H x 22.0 D in. (~55.9 W x 40.6 H x 55.9 D cm.)
Weight	~12.0 lbs (~5.44 kg)	1.1 lbs 18 oz. (~0.5 kg)	~40 lbs. (~18.1 kg)
Color	Black	Olive Drab Green	Black
ENVIRONMENTAL			
Operating Temperature	-31° to +60°C (operational) -40° to +90°C (storage)	-31°C to +60°C (operational) -40°C to +90°C (storage)	-31°C to +60°C (operational) -40°C to +90°C (storage)
EMI	MIL-STD-461F (tailored)	MIL-STD-461F (tailored)	MIL-STD-461F (tailored)
STANDARD KITS			
	Receiver/Transmitter	**Receiver/Transmitter**	**Transit Case**
	KDU Cable Kit 12113-1000-32	**CD including CPA, Operator manual**	**Radio** RF-7850A-MR
	CD including CPA, Operator manual		**CD including CPA, Operator manual**
OPTIONAL ACCESSORIES			
Integration Kit	12178-7500-01 • Interface Control Document (ICD) • Connectors and Back shells	12178-7500-02 • Interface Control Document (ICD) • Connectors and Back shells	
Bench Top Programming Cable Kit	12178-7000-01 • 12178-7015-A1 Data Channel 1 • 12178-7016-A1 Data Channel 2 • 12178-7020-A006 Audio Channel 1 • 12178-7021-A006 Audio Channel 2 • 12178-7025-A1 KDU Interface • 12178-7030-A1 28VDC Power • 12178-7010-A1 Coax Cables	12178-7000-02 • 12178-7050-A1 Networking • 12178-7055-A006 Power • 12178-7060-A006 Audio • 12178-7065-A006 RF	
Coax Cables	12011-0120-A015 BNC-TNC RG-400 12011-0120-A025 BNC-TNC RG-400		
Hand/Headsets			RF-3023-HS001 Dual PTT Headset RF-3023-HS003 Dual PTT Headset RF-3023-HS005 Dual PTT Headset RF-3023-SM001 Speaker Microphone
KDU	12113-1000-31, 6 ft. (~1.8 m) USB Fischer Connector (green) 12113-1000-32, 6 ft. (~1.8 m) USB Fischer Connector (black) 12113-1000-33, 6 ft. (~1.8 m) USB Fischer Connector (tan) 12113-1000-34, 20 ft. (~6 m) Fischer Connector 12113-1000-35, 20 ft. (~6 m) Fischer Connector 12113-1000-36, 20 ft. (~6 m) Fischer Connector		

Airborne antenna options vary depending on aircraft type and intended modes of operation for the radio. Contact your Harris Sales Representative for recommended antenna options.

RF-5800M MULTIBAND PRODUCTS

OVERVIEW

RF-5800M-HH MULTIBAND HANDHELD

The RF-5800M-HH is an advanced multiband, multimission handheld radio that provides reliable tactical communications through enhanced secure voice and data capabilities. The RF-5800M-HH is interoperable in secure and non-secure modes with the Falcon II and Falcon III radio products.

STANDARD FEATURES

- Citadel® II encryption
- Quicklook IA ECCM
- Wireless IP
- Embedded 16 Kbps modem
- Wireless secure radio-to-radio simple net cloning
- AM-swept frequency distress Beacon
- Automatic position reporting using an internal or external GPS receiver
- Automatic whisper operation
- Directed calling/telephony
- Short Messaging Service (SMS)
- CTCSS tone support
- RF-7800I Vehicular Intercom System interoperability (data and voice)
- TELNET programming via PPP
- Directed rebroadcast
- Advanced repeater outstation

RF-5800M-V52X MULTIBAND HANDHELD RADIO POWER AMPLIFIER

The RF-5800M-V52X is a high-performance, multiband power amplifier (PA) for use in vehicle or base station radio systems. The power amplifier complements the RF-5800M-HH Multiband Handheld transceiver (ordered separately) by supplying additional RF power for increased range and link reliability.

STANDARD FEATURES

- MIL-STD-1275 DC input
- Collocation filters
- RF-7800I Vehicular Intercom System connection point
- VIC-1/-3 connection point
- External speaker power port
- DC power in/power out connections
- Dual antenna ports with automatic port switching
- Operation from 26 VDC nominal

SPECIFICATIONS FOR RF-5800M PRODUCTS

GENERAL	RF-5800M-HH	RF-5800M-V520
Frequency Range	30-512 MHz (continuous)	30-512 MHz
Net Presets	25	N/A
RF Input/Output Impedance	50 Ohms, unbalanced	20-32 VDC; 50 Ohms VHF/UHF, unbalanced
Collocation	N/A	15% frequency and 1.5 m antenna separation
PHYSICAL		
Dimensions	2.87 W x 9.09 H x 2.43 D in. (~7.3 W x 23.1 H x 6.1 D cm)	10.5 W x 12.5 H x 16.5 D in. (~26.6 W x 31.7 H x 42.0 D cm)
Weight	<2.2 lbs (<1 kg) with battery	26 lbs (~11.8 kg) without shock tray 40 lbs (~18.1 kg.) with shock tray
Color (CARC finish)	RF-5800M-HH004 Green RF-5800M-HH104 Green RF-5800M-HH114 Black RF-5800M-HH124 Tan	RF-5800M-V520 Green RF-5800M-V522 Tan
TRANSMIT		
Power Output	250 mW, 2 Watts, 5 Watts (user selectable)	20 Watts: 90-512 MHz 50 Watts: 30-90 MHz
Harmonic Suppression	> 47 dBc typical	> 47 dBc typical
Spurious Suppression	> 50 dBc typical	> 50 dBc typical
RECEIVE		
FM Sensitivity	-116 dBM @12 dB SINAD	-112 dBM @12 dB SINAD
IF Rejection	> 65 dB	> 60 dB
ENVIRONMENTAL		
Operating Temperature	-30° C to +60° C (-22°F to +140°F) -20° C to +60° C (-4°F to +140°F) (with battery)	-30° C to +60° C (-22°F to +140°F)
Shock	N/A	Ground/Mobile per MIL-STD-810
Immersion	2 m (~7 ft.)	N/A
Humidity	90% per MIL-STD-810	90% per MIL-STD-810
Vibration	N/A	Ground/Mobile per MIL-STD-810
STANDARD KITS		
	Multiband Handheld Transceiver 12046-1000-XX	**System Install and Maintenance Manual** 10515-0328-4200
	Rechargeable Li Ion Battery 12041-2100-02	**Vehicular Adapter Unit Assembly (CARC Green)** 12065-0100-04
	Multiband Handheld Antenna 12011-2710-01	**Ancillary Kit** 12065-0105-02
	VHF Handheld Blade Antenna 12011-2700-01	**Shock Tray/Power Distribution** 12050-3000-02
	Operator Card 10515-0234-4100	
	CD-ROM documentation 10518-2901-04 • 10515-0234-4200 Operation Manual • 10515-0234-4100 Operator Card • RF-5800MH-SW001 Programming Application	

ACCESSORIES

RF-5800M MULTIBAND PRODUCTS

See the Common Accessories and Antennas chapters for more information.

ANTENNAS

PRODUCT NUMBER	PRODUCT NAME
RF-3162-AT001	Multiband Dismount Soldier Antenna
10511-0400-XX	GPS Antenna Kit (L1 Band)
RF-3183-ATXXX	VHF/UHF GPS Multiband Vehicular Whip Antenna
RF-390-ATXXX	VHF/UHF Multiband Vehicular Whip Antenna
RF-387-ATXXX	VHF Low-Band Vehicular Whip Antenna
RF-398-XX	VHF Low-Band Vertical Whip Antenna
RF-3071-ATXXX	Vehicular L1/L2 GPS Antenna Kit
12041-6550-01	GPS Antenna Assembly

AUDIO PRODUCTS

PRODUCT NUMBER	PRODUCT NAME
RF-3020-HSXXX	Lightweight Submersible Headset
RF-3021-HSXXX	Lightweight Padded Earpiece Headset
RF-5961-HS003	Security Force Communication Set
RF-5980-SA001	Tactical Speaker
10075-1399	H-250/U-Lightweight Handset (Modified)
12041-3100-01	Lapel Speaker Microphone

BATTERIES AND CHARGERS

PRODUCT NUMBER	PRODUCT NAME
12041-2100-XX	Rechargeable High-Capacity Li Ion Battery
RF-5852-CH011	Vehicular Handheld Charger/Power Supply
RF-5911-PS001	Non-rechargeable AA Battery Holder
RF-5903-CHXXX	Solar Battery Charger, Handheld
RF-5853-CH10X	Battery Charger—Handheld Battery

CABLES

PRODUCT NUMBER	PRODUCT NAME
12011-0200-01	Configuration/Fill/Programming Cable, 9-pin D, 6 ft. (~1.8 m)
12011-0210-AXXX	Sync Data Cable, 25-pin
12011-0775-AXXX	Tactical Internet Cable, ANP PTP 9-pin Cable
12011-0200-01	Configuration/Fill Cable 9-pin D, 6 ft. (~1.8 m)
12011-0210-AXXX	Sync Data Cable 25-pin
12011-0775-AXXX	Tactical Internet Cable, ANP PTP Cable
12011-0230-AXXX	Retransmission Cable
10369-7212-XXX	Coaxial Cable Assembly RG-213
10513-0812-AXXX	BNC Male to BNC Male LMR-400
10570-0716-AXXX	Amplifier to Power Supply Cable
10535-0707-AXXX	Speaker Cable, Audio
10535-0713-AXXX	RF-5980-SA001 Speaker Power Cable
12011-0230-AXXX	Retransmission Cable

POWER ADAPTERS

PRODUCT NUMBER	PRODUCT NAME
RF-5800M-V52X	Vehicular Systems Multiband Handheld Radio Power Amplifier
RF-5912-PS001	Power Adapter—Handheld
RF-5852-CH011	Vehicular Handheld Charger/Power Supply

POWER SUPPLIES

PRODUCT NUMBER	PRODUCT NAME
RF-5051-PS001	AC/DC Power Supply
RF-5055PS	AC/DC Power Supply
RF-5056PS	12/24 Volt DC/DC Converter
RF-5061-PS001	DC/DC 12V input to 26V Output

SOFT GOODS (CARRYING ACCESSORIES)

PRODUCT NUMBER	PRODUCT NAME
RF-5932-CAXXX	Handheld Radio Holster
RF-5933-CAXXX	Handheld Radio Flip-Down Holster
12041-1595-01	Handset Radio Accessory Bag

SOFTWARE

PRODUCT NUMBER	PRODUCT NAME
RF5800MH-SW001	RF-5800M-HH Computer Programming Application
RF-6705-SW001	IP-Based Tactical Messaging
RF-6760W	Wireless Message Terminal Software
RF-3700H	HUITS Imaging

SPARES KITS

PRODUCT NUMBER	PRODUCT NAME
RF-5800M-SK004	RF-5800M-HH004 Spares Kit
RF-5800M-SK104	RF-5800M-HH104 Spares Kit
RF-5800M-SK114	RF-5800M-HH114 Spares Kit
RF-5800M-SK204	RF-5800M-HH124 Spares Kit
RF-5800M-UKXXX	GPS Upgrade Kit
RF-5800M-SK520	RF-5800M-V520 (12065-0100-02) Spares Kit
RF-5800M-SK522	RF-5800M-V522 (12065-0100-03) Spares Kit
RF-5800M-SK523	RF-5800M-V52X (12065-0100-05 and 12065-0100-06) Spares Kit
11146-2027-01	Fan Kit

TECHNICAL MANUALS

PRODUCT NUMBER	PRODUCT NAME
10515-0328-4200	System Installation/Maintenance Manual
10515-0342-4300	RF-5800M-V520/RF-5800V-V500 Intermediate Maintenance Manual

SYSTEM KITS

RF-5800M MULTIBAND PRODUCTS

MULTIBAND DISMOUNTED COMMUNICATION SYSTEM

RF-5800M-DS001 (without GPS)
RF-5800M-DS101 (with GPS)

The RF-5800M-DSXXX is a complete communication solution for the dismounted soldier that addresses the problems encountered by communicators on the modern battlefield while improving the range of voice and data communications. The key elements of the Dismounted Communication System are a Harris multiband handheld radio, a multiband soldier antenna, interconnecting coaxial cable, and radio holster.

When used in conjunction with the Harris handheld radios, the RF-3162-AT Multiband Soldier Antenna reduces the soldier's load by over 5 pounds (~2.5 kilograms)—as compared to the competitive 10 watt VHF manpack—while providing communication ranges similar to the higher-power, heavier manpack radios. The Soldier Antenna's ergonomic design permits the user to move freely and comfortably in all environments. Its gooseneck sections, typically secured to the vest with "Alice" clips, flex and contour to the soldier's body shape, while the upper blade allows the soldier to fold over sections of the antenna so that it remains below helmet height.

Designed to MIL-STD-810F to survive the harshest environments, the Soldier Antenna is capable of operating from 30 to 512 MHz with a maximum power capacity of 10 watts. Color: Green.

RF-5800M-DS CONFIGURATIONS

PRODUCT NUMBER	HANDHELD RADIO	IMMERSION	INTERNAL GPS
RF-5800M-DS001	RF-5800M-HH004	2 m (~7 ft.)	No
RF-5800M-DS101	RF-5800M-HH104	2 m (~7 ft.)	Yes

The RF-5800M-DS001 (without GPS) includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12046-1000-16	Multiband Handheld Transceiver	1
RF-3162-AT001	Multiband Dismount Soldier Antenna	1
12011-2700-01	VHF Handheld Blade Antenna	1
12041-2100-02	Rechargeable High-Capacity Li Ion Battery (Green)	2
12011-2710-01	Multiband Handheld Antenna	1
12041-1595-01	Handset Radio Accessory Bag	1
RF-5932-CA003	Radio Holster (Green)	1

The RF-5800M-DS101 (with GPS) includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12046-1000-17	Multiband Handheld Transceiver	1
RF-5800M-HH104	Multiband Handheld Radio	1
RF-3162-AT001	Multiband Dismount Soldier Antenna	1
12011-2700-01	VHF Handheld Blade Antenna	1
12041-2100-02	Rechargeable High-Capacity Li Ion Battery (Green)	1
12011-2710-01	Multiband Handheld Antenna	1
12041-1595-01	Handset Radio Accessory Bag	1
RF-5932-CA003	Radio Holster (Green)	1

Note: Quantities listed are totals and include some items normally delivered as part of the radio and antenna.

INTERNATIONAL VHF, MULTIBAND, AND SOLDIER RADIOS

MULTIBAND VEHICULAR COMMUNICATION SYSTEM

RF-5800M-VS520 (without GPS)
RF-5800M-VS521 (with GPS)

The RF-5800M-VS52X Multiband Vehicular Communication System uses the RF-5800M-HH Multiband Handheld Radio in conjunction with the RF-5800M-V520 Multiband Power Amplifier to create a 50 watt VHF and 20 watt UHF communication system covering the 30 to 512 MHz frequency band. The RF-5800M-VS52X includes everything required for a basic vehicle installation while maintaining the dismount capability of the radio.

RF-5800M-VS52X CONFIGURATIONS

PRODUCT NUMBER	HANDHELD RADIO	GPS
RF-5800M-VS520	RF-5800M-HH004	No
RF-5800M-VS521	RF-5800M-HH104	Yes

The RF-5800M-VS520 (without GPS) includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12046-1000-16	Multiband Handheld Transceiver	1
RF-5800M-V520	Multiband Handheld Radio Power Amplifier	1
12011-2710-01	Multiband Handheld Antenna	1
12011-2700-01	VHF Handheld Blade Antenna	1
12041-2100-02	Rechargeable High-Capacity Li Ion Battery (Green)	1
10570-0720-01	DC Power Cable Assembly	1
RF-390-AT001	Multiband Vehicular Whip Antenna	1
10369-7212-025	Coax Cable, 25 ft. (~7.6 m)	2
RF-292-01	Universal Antenna Mount	1
10075-1399	H-250/U Lightweight Handset (Modified)	1
12041-1595-01	Handset Radio Accessory Bag	1
RF-5932-CA003	Handheld Radio Holster (Green)	1

The RF-5800M-VS521 (with GPS) includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12046-1000-17	Multiband Handheld Transceiver	1
12011-2710-01	Multiband Handheld Antenna	1
12011-2700-01	VHF Handheld Blade Antenna	1
12006-0017-01	Antenna, GPS Straight SMB Connector	1
12041-2100-02	Rechargeable High-Capacity Li Ion Battery (Green)	2
RF-5800M-V520	Multiband Handheld Radio Power Amplifier	1
10570-0720-01	DC Power Cable Assembly	1
RF-390-AT001	Multiband Vehicular Whip Antenna	1
10369-7212-025	Coax Cable, 25 ft. (~7.6 m)	2
RF-292-01	Universal Antenna Mount	1
10075-1399	H-250/U Lightweight Handset (Modified)	1
12041-1595-01	Handset Radio Accessory Bag	1
RF-5932-CA003	Handheld Radio Holster (Green)	1
E75-0017-180	Cable Extension SMB Male to SMB Female RG-316DS	1

MULTIBAND BASE STATION COMMUNICATION SYSTEM

RF-5800M-B520 (without GPS)
RF-5800M-B521 (with GPS)

The RF-5800M-B520/B521 VAA Base Station uses the RF-5800M-HH Multiband Handheld Radio in conjunction with the RF-5800M-V520 VHF/UHF Power Amplifier to create a 50-watt VHF and 20-watt UHF communication system covering the 30 to 512 MHz frequency band. The RF-5800M-B520/B521 includes everything required for a base station installation while maintaining the dismounted capability of the radio. Antennas required for more complex applications must be ordered separately.

RF-5800M-B52X CONFIGURATIONS

PRODUCT NUMBER	HANDHELD RADIO	GPS
RF-5800M-B520	RF-5800M-HH004	No
RF-5800M-B521	RF-5800M-HH104	Yes

The RF-5800M-B520 (without GPS) includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12046-1000-16	Multiband Handheld Transceiver	1
RF-5800M-V520	Multiband Handheld Radio Power Amplifier	1
12011-2700-01	VHF Handheld Blade Antenna	1
12011-2710-01	Multiband Handheld Antenna	1
12041-2100-02	Rechargeable High-Capacity Li Ion Battery (Green)	1
10535-0707-A009	Speaker Audio Cable, 9 ft. (~2.7 m)	1
10535-0713-A009	Speaker Power Cable, 9 ft. (~2.7 m)	1
RF-5980-SA001	Tactical Speaker	
10570-0716-A006	RF-5055 Cable to VAU, 6 ft. (~1.8 m)	1
RF-5051-PS001	RF-5051 Power Supply	1
12041-1595-01	Handset Radio Accessory Bag	1
10075-1399	H-250/U Lightweight Handset (Modified)	1

The RF-5800M-B521 (with GPS) includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12046-1000-17	Multiband Handheld Transceiver	1
12011-2700-01	VHF Handheld Blade Antenna	1
12011-2710-01	Multiband Handheld Antenna	1
12006-0017-01	Antenna GPS Straight SMB Connector, Magnetic Mount	1
12041-2100-02	Rechargeable High-Capacity Li Ion Battery	1
RF-5800M-V520	Multiband Handheld Radio Power Amplifier	1
10535-0707-A009	Speaker Audio Cable, 9 ft. (~2.7 m)	1
10535-0713-A009	Speaker Power Cable, 9 ft. (~2.7 m)	1
RF-5980-SA001	Tactical Speaker	1
10570-0716-A006	RF-5055 Cable to VAU, 6 ft. (~1.8 m)	1
RF-5051-PS001	RF-5051 Power Supply	1
10075-1399	H-250/U Lightweight Handset (Modified)	1
12041-1595-01	Handset Radio Accessory Bag	1

Note: Quantities listed are totals and include some items normally delivered as part of the radio and power amplifier.

See Antenna section #9 for base station antennas.

Note: Quantities listed are totals and include items normally delivered as part of the radio and power amplifier.

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TOP OF FALCON® TACTICAL NETWORKING ARCHITECTURE

RF-7800W Radio

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FALCON III® HIGH-CAPACITY LINE-OF-SIGHT (HCLOS) RADIOS

The RF-7800W-OU500 Multi-Mission High-Capacity Line-of-Sight (HCLOS) Radio, part of the Falcon III® series of radio products, provides a new generation of tactical communications capability.

The HCLOS Radio is positioned at the top of the Falcon Tactical Networking Architecture, providing backhaul capability to Harris's all-Internet Protocol (IP)-based products. It can be configured as a point-to-point (PTP), high-capacity radio servicing short- and long-distance links, or in point-to-multipoint (PMP) deployments to extend a wireless or local area network (WAN or LAN) to fixed or at-the-halt deployed sectors. The radio's robust and highly secure waveform allows for deployments beyond traditional HCLOS links, serving high capacity bandwidth in ship-to-ship, ship-to-shore, and ground-to-air network extensions. The RF-7800W HCLOS radio products are designed to meet a variety of broadband deployment needs in small, compact, and easy-to-use packages.

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RF-7800W RADIO

MULTI-MISSION HIGH-CAPACITY LINE-OF-SIGHT (HCLOS) RADIO

RF-7800W-OU500

The RF-7800W-OU500 Multi-Mission High-Capacity Line-of-Sight (HCLOS) Radio leverages proven OFDM technology to deliver high-speed Ethernet throughput over wireless links. Under clear line-of-sight conditions, the HCLOS Radio can provide robust, long-range connectivity at distances beyond 100 miles (~160 kilometers). Operating over the 4.4 to 5.875 GHz frequency band, transmissions can be secured via the embedded encryption capability or via external Ethernet in-line network encryption (INE) devices. The HCLOS Radio is ideal for use in wireless networking solutions required by public safety, first responders, training and simulation networks, and long or short-haul battlefield communications connectivity. The radio design is FIPS 140-2 Level 2 certified and utilizes FIPS 197 approved AES 256 encryption.

The all-Internet Protocol (IP) design of the radio delivers a seamless extension of Ethernet LANs and WANs at proven data rates greater than 180 Mbps. The radio provides unmatched spectral flexibility with support for up to four different channel sizes (5, 10, 20, and 40 MHz) in PTP and PMP modes, and center frequency specification in 0.5 MHz increments. Extremely low latency in PTP and PMP ensures the successful delivery of bandwidth-intensive applications such as VoIP, real-time video, teleconferencing, and C4I.

Designed for the harshest outdoor conditions, the radio receives DC power over Ethernet from the indoor unit via standard Ethernet cable. It is lightweight and easy to configure and deploy. Using a standard Web browser, the user has access to all required configuration items and statistics necessary to configure and monitor radio operation. Third-party network management applications can also be utilized via the standard SNMP interface. A variety of directional and sector or omni-directional antennas are available (ordered separately). Finish/Color: Powder Coat Green 34094.

FEATURES

- 4.4-5.875 GHz frequency range
- LOS, near-LOS and non-LOS (OFDM)
- Range: 160+ km clear LOS PTP; 50+ km clear LOS PMP
- Channel sizes: 5, 10, 20, 40 MHz (PTP); 5 MHz channel spacing
- TX power up to 22 dBm adjustable (automatic/manual)
- FIPS 140-2 Level 2 certified
- Embedded data encryption of FIPS 197-certified 256-bit AES
- Embedded wireless encryption of Traffic Flow Security (TFS)
- Interference control: automatic transmit power control and adaptive modulation
- Enhanced Interference Mitigation (EIM) allows the radio to detect interference and escape to a different channel
- Maximum Ethernet rates: 180+ Mbps PTP and PMP
- IPv4, transparent bridge, PTP, DHCP pass-through
- System configuration and software upgradeable via HTTP/HTTPS Internet browser interface and Telnet/SSH interface
- Network management and system configuration via SNMPv2/SNMPv3
- Field software upgradeable
- Embedded GPS module

The RF-7800W-OU500 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12069-3800-01	AC Power over Ethernet (PoE) Block, with cables	1
12069-3810-01	Radio/Antenna Mounting Bracket	1
12069-3940-A20	RF Coax Cable, 20 in. (~51 cm)	2
10515-0426-6000	CD-ROM user documentation and tools	1

OPTIONS

4.4-5.0 GHZ RADIO VERSION

RF-7800W-OU470

This version of the HCLOS Radio includes all the features of the RF-7800W-OU500, but at a reduced operating frequency range of 4.4 to 5.0 GHz.

ACCESSORIES

See the Antennas and Common Accessories chapters for more information.

ANTENNA

PRODUCT NUMBER	PRODUCT NAME
12069-3160-01	GPS Antenna

CABLES

Order rugged Power over Ethernet (PoE) cables separately.

PRODUCT NUMBER	PRODUCT NAME
	Cable Assembly, straight with backshells:
12069-0030-A006	6 ft. (~1.8 m)
12069-0030-A015	15 ft. (~4.6 m)
12069-0030-A100	100 ft. (~30.5 m)
12069-0030-A240	240 ft. (~72 m)
12069-0030-A300	300 ft. (~91.4 m)
	Cable Assembly, straight with backshell:
12069-0031-A003	3 ft. (~9 m)
12069-0031-A006	6 ft. (1.8 m)
12069-0031-A015	15 ft. (~4.6 m)
12069-0031-A100	100 ft. (~30.5 m)
12069-0031-A240	240 ft. (~72 m)
12069-0031-A300	300 ft. (~91.4 m)

NETWORK INTERFACE UNIT (NIU)

RF-7800W-IU200

The RF-7800W-IU200 Network Interface Unit (NIU) facilitates setup for deployments of the RF-7800W HCLOS Radio. The NIU is vehicular rugged and can be used in mobile or at-the-halt communications, reducing the power and networking equipment needed for each installation.

One NIU can power up to four radios and operates as a network switch. Link condition for two connected radios is displayed via LED displays on the front panel. The NIU defaults to AC power input and automatically switches to DC—without power interruption—when AC power is lost. Engineering order wire can be used for push-to-talk voice communications between NIUs via a H-250 handset.

Configuration and management of the NIU is Web-based and password protected. A single fiber optic interface is also available to allow remote access to the unit from a distance of up to two kilometers (~1.2 miles). Finish/Color: Powder Coat Green.

FEATURES

- 5-port network switch
- Ruggedized RJ-45 PoE copper Ethernet ports (4)
- Single mode fiber optic port
- Signal strength LEDs
- AC input, DC input/DC output
- 85-265 VAC; 47-440 Hz
- 10.5-34.5 VDC
- Ancillary 52 VDC output; can be used to power the RF-7800W-PA440 Power Amplifier (used with legacy RF-7800W-OU440 model HCLOS radio)

The RF-7800W-IU200 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
10181-9809-009	Cable Assembly, AC Power	1
J85-0022-001	European AC Power Adapter	1
J85-0023-001	UK AC Power Adapter	1
Z52-0031-001	Australia AC Power Adapter	1
12069-1032-A015	Cable Assembly, DC Cable, Unterminated (15 ft., ~4.6 m)	1
10075-1399	Handset, Modified H-250	1

OPTIONS

FIBER OPTIC CABLES

Additional lengths available by request.

PRODUCT NUMBER	PRODUCT NAME
12069-3920-A100	Cable Assembly, single mode, 1310 NM, tactical fiber, 100 ft. (~30.5 m)
12069-3920-A500	500 ft. (~0.15 km)
12069-3920-A1	0.5 kilometers (~0.3 miles)
12069-3920-A2	1.0 kilometers (~0.6 miles)
12069-3920-A3	1.5 kilometers (~0.9 miles)
12069-3920-A4	2.0 kilometers (~1.2 miles)
12069-3925-01	Tactical fiber with reel, 500 ft. (~152 m)

CLOSED LOOP ANTENNA ALIGNMENT SYSTEM (CLAAS)

RF-7800W-AA001

The RF-7800W-AA001 is a Closed Loop Antenna Alignment System (CLAAS) that automatically aligns the antennas to achieve the best signal available. The CLAAS is designed to automate the link alignment process, ensure marginal links are achieved, and maximize link performance while increasing Ethernet throughput. The CLAAS consists of a Power Control Unit (PCU), brackets, and a motor.

The RF-7800W-AA001 PCU can be sourced from wide range AC (85 to 265 VAC, 47 to 63 Hz) and DC (10.5 to 34.5 VDC), powering and communicating with the motor and providing PoE to the RF-7800W HCLOS Radio mounted on the CLAAS. The PCU also provides the user interface needed to control the CLAAS, which utilizes the same software platform for identical operation. A CLAAS can function as a single node to allow quicker alignment, or as a paired node where each system accounts for the distant end during the alignment process. The CLAAS communicates directly with the radio connected to the PCU via an IP connection, polling the radio for RSSI and link data information to ensure a quick and accurate response.

The CLAAS includes brackets to mount all the cataloged antennas, as seen in the images.

Recommended masts for CLAAS deployment:

PRODUCT NUMBER	PRODUCT NAME
12069-7005-02	15-Meter Telescoping Mast (Black)
RF-5945-TM180	18-Meter Telescoping Mast (Green)
12069-7006-02	21-Meter Telescoping Mast (Green)

FEATURES

- Management via http Web interface and IP connectivity
- Antenna selection from pre-defined list
- Radio polled for RSSI and other data to link radios via IP connection
- Multiple scanning methods; manual or automatic scanning for peer radio
- Single or paired modes
- Use in point-to-point (PTP) or point-to-multipoint (PMP) modes
- Universal mount for various mast deployments
- Lightweight and easy to deploy

The RF-7800W-AA001 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
10181-9809-009	Cable Assembly, AC Power (US) (9 ft., ~2.7 m)	1
10181-9814-009	Cable Assembly, AC Power (European) (9 ft., ~2.7 m)	1
10181-9831-009	Cable Assembly, (UK) AC Power (9 ft., ~2.7 m)	1
12069-1032-A015	DC Cable Assembly, Unterminated (15 ft., ~4.6 m)	1
J68-0013-004	Connector RJ45 Plug, with Metal Gland (Black)	1
J68-0013-906	Connector Cap For Plug (Black)	1
10515-0364-6000	CD-ROM user documentation	1
2069-0068-A100	Power Control Cable (100 ft., ~30.5 m)	1

ANTENNA TRACKING SYSTEM (ATS)

RF-7800W-TK001

The RF-7800W-TK001 is an Antenna Tracking System (ATS) based on the RF-7800W-AA001 CLAAS. The ATS utilizes GPS position reporting through Harris-provided local and remote GPS transponders, as well as continuous polling of radio RF signal level to track and maintain a high performing radio link. The ATS is designed to allow the use of high-gain directional antennas in mobile applications, a configuration previously impossible without omni-directional antennas. The ATS consists of a Power Control Unit (PCU), brackets, a servo and GPS Heading Unit (GHU).

The PCU can be powered from wide range AC (85 to 265 VAC, 47 to 63 Hz) and DC (10.5 to 34.5 VDC) sources—and also powers and communicates with the motor—to provide PoE to the RF-7800W HCLOS Radio mounted on the ATS. The PCU also includes an embedded Graphical User Interface (GUI) to easily manage, configure, and control the ATS system.

The ATS can be deployed for ship-to-shore, ship-to-ship and ground-to-air applications. It communicates directly with the radio connected to the PCU via an IP connection. Color: Powder Coat Green.

FEATURES

- Management via http Web interface and IP connectivity
- Antenna selection from pre-defined list
- Maintains optimal link using radio RSSI and GPS assisted acquisition and lost link fail over
- Use in point-to-point (PTP) or point-to-multipoint (PMP) modes
- Universal mount for various mast deployments
- Lightweight and easy to deploy

The RF-7800W-TK001 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
10181-9809-009	Cable Assembly, AC Power (US) (9 ft., ~2.7 m)	1
10181-9814-009	Cable Assembly, AC Power (European) (9 ft., ~2.7 m)	1
10181-9831-009	Cable Assembly, (UK) AC Power (9 ft., ~2.7 m)	1
12069-1032-A015	DC Cable Assembly, Unterminated (15 ft., ~4.6 m)	1
J68-0013-004	Connector RJ45 Plug, with Metal Gland (Black)	1
J68-0013-906	Connector Cap For Plug (Black)	1
10515-0364-6000	CD-ROM user documentation	1

ACCESSORIES

See the Antennas and Common Accessories chapters for more information.

ANTENNAS

PRODUCT NUMBER	PRODUCT NAME
12069-0510-01	Aircraft Blade Antenna, 450-470 MHz
12069-0511-01	Dipole Antenna, 400-512 MHz, NATO
12069-0511-02	Dipole Antenna, 400-512 MHz, NATO with GPS
12069-0511-03	Dipole Antenna, 400-512 MHz, Jam-Nut
12069-0520-01	Aircraft GPS Antenna, Active L1
12069-0117-01	Rugged Blade Antenna, 4.5-5.0 GHz

ADDITIONAL ACCESSORIES

PRODUCT NUMBER	PRODUCT NAME
12069-0500-01	RF-7800W GPS Transponder, 450-470 MHz
12069-0202-01	Rack Mount Power Control Unit

LIGHTNING PROTECTOR

12069-0040-01

The Lightning Protector (LP) provides a tool-less connection to RF-7800W HCLOS Radio installations that will not restrict the Power over Ethernet (PoE) necessary to power the radio. The LP is best used with Harris preassembled cables (ordered separately). Choosing the correct cable length will ensure the LP is installed correctly.

For mast installations, it is recommended that one LP be installed closest to the point of entry of the networking equipment. If towers are installed, two LPs should be installed: one closest to the point of entry of the networking equipment and one on the tower closest to the radio. The total cable length from radio to PoE source should be 91 meters (~298.6 feet), allowing 9 more meters (~30 feet) for a network connection from the PoE source to a networking device (PC, router, etc.).

The maximum distance for RJ-45 cable, using 100BaseT Ethernet speeds, can be up to 100 meters (~328 feet) without any packet degradation. This is an IEEE 802.3 standard, not a limitation imposed by the RF-7800W HCLOS Radio. Finish/Color: Powder Coat Green.

FEATURES

- Tool-less installation
- Environmentally sealed

The 12069-0040-01 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
10515-6441	Operator Card	1
12069-0042-A1	Grounding Strap	1
Z31-0008-105	Hose Clamp	1

12069-0045-01

Provides lightning protection for the RF-7800W-AA00X (CLAAS) and RF-7800W-TK00X (Tracking) Systems control cable. This LP comes with a wall mount bracket, a ground strap assembly, and the means to mount it onto a pole 2 to 4.5 inches (~5 to 11.4 centimeters). 12069-0043-A1 Control Cable jumper required. Quantity one per system.

12069-0043-A1

Power and control cable jumper assembly. A 42-inch (~1.1-meter) power and control cable for use with Lightning Protector 12069-0045-01. Quantity one per system.

BATTERY BAG

12069-1500-01

The HCLOS Battery Bag can be used as a DC source to the RF-7800W-IU200 Network Interface Unit (NIU) when powering the RF-7800W-OU500/OU470 HCLOS Radios from typical manpack radio batteries. The HCLOS Radio's low power consumption allows it to be powered via an AC source using the 12069-0024-01 Power over Ethernet (PoE) Block, an AC or DC source using the NIU, or via the Power Control Unit (PCU) on the RF-7800W-AA001 Closed Loop Antenna Alignment System (CLAAS). This battery bag can also be used on short-term deployments to power the CLAAS.

FEATURES

- Supports up to 6 rechargeable and non-rechargeable manpack batteries (batteries not included)
- Environmentally sealed

RF-7800W ANTENNAS

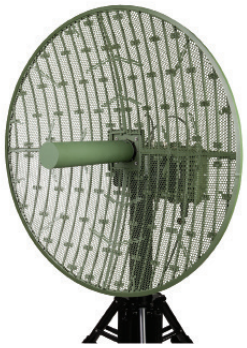
DUAL POLARIZED ONE-FOOT PANEL ANTENNA

RF-7800W-AT201

TWO-FOOT PANEL ANTENNA

RF-7800W-AT202

DUAL POLARIZED THREE-FOOT GRID PARABOLIC ANTENNA



RF-7800W-AT203

SECTOR ANTENNA

RF-7800W-AT207

RUGGED OMNI ANTENNA

RF-7800W-AT206

RF-7800W ANTENNA SPECIFICATIONS

	RF-7800W-AT201 1-FOOT	RF-7800W-AT202 2-FOOT	RF-7800W-AT203 3-FOOT	RF-7800W-AT206 OMNI	RF-7800W-AT207 90° SECTOR
ELECTRICAL					
Frequency	4.4-5.875 GHz				
Gain	21.0 dBi	26.0 dBi	30.0 dBi	8.0 dBi	13.5 dBi
VSWR (max)	2.2:1	2.1:1	2.1:1	2.2:1	2.0:1
Beamwidth (VxH)	10° x 10°	6° x 6°	4.4° x 4.4°	360° x 8°	90° x 8°
Polarization	Dual Linear Vertical and Horizontal				
Cross Polarization	20 dB				
Front to Back Ratio	27 dB	30 dB	30 dB	N/A	25 dB
Port to Port Isolation	30 dB	30 dB	28 dB	30 dB	30 dB
Input Impedance	50 Ω per port				
Input Power (max)	10 watts CW (40 dBm) per port				
MECHANICAL					
Dimensions (LxWxD)	13.1 x 13.1 x 2.6 in. (~33.3 x 33.3 x 6.5 cm)	24.0 x 24.0 x 2.9 in. (~61 x 61 x 7.3 cm)	37.0 x 15.5 in. (~80 x 39.4 cm)	31.5 x 1.8 in. (~91.4 x 4.5 cm)	20.0 x 10.0 x 2.5 in. (~50.8 x 25.4 x 6.4 cm)
Weight	4.4 lbs. (~2.0 kg)	12.6 lbs. (~5.7 kg)	12.5 lbs. (~5.7 kg)	3.3 lbs. (~1.5 kg)	3.0 lbs. (~1.4 kg)
Connectors	2 x Type-N				
ENVIRONMENTAL					
Altitude	MIL-STD-810G Method 500.5, Procedure II: 15,000 ft. (~4.6 km)				
Temperature	MIL-STD-810G Method 501.5/502.5, Procedure II: -40°C to +60°C				
Humidity	MIL-STD-810G Method 507.5, Procedure II: 95% at +50°C				
Salt Fog	MIL-STD-810G Method 509.5				
Sand & Dust	MIL-STD-810G Method 510.5 Procedure I/II				
Immersion	IEC 60529: IPX6				
Vibration	MIL-STD-810G Method 514.6, Procedure II Category 5				
Shock	MIL-STD-810G Method 516.6, Procedure IV				
Survival Wind Speed	125 MPH (~201 kph)				

MASTS/MOUNTING HARDWARE

MASTS

PUSH-UP MAST WITH WINCH

RF-5941-PM155

The RF-5941-PM155 is a lightweight, transportable push-up mast designed for quick at-the-halt deployments of the RF-7800W HCLOS Radio. Fully deployed, the mast will reach 49.2 feet (~15 meters) in height. This mast can also be deployed with the Harris RF-7800W-AT201, RF-7800W-AT012, RF-7800W-AT203, RF-7800W-AT005, RF-7800W-AT016 and RF-7800W-AT017 antennas.

The mast's winching system features a self-braking winch that offers two modes: free spin and engaged. While in engaged mode, the devices can be raised or lowered by simply reversing the direction of the handle. When the handle is released under load, a set of disc brakes automatically engages as a safety precaution. The winch also features a sealed housing for protection from the elements.

The RF-5941-PM155 includes:

- Tripod
- Winch system
- Guy lines
- Ground kit
- Ground stakes
- Storage bag

LIFT MAST WITH WINCH

RF-5941-LM155

The RF-5941-LM155 is a lightweight, transportable, sectional mast that is capable of supporting the weight of the RF-7800W CLAAS system at 15 meters. The mast is easily deployed by mounting the radio/antenna payload to the first mast section, then using the pulley/winch system to lift up your mast one section at a time. With its 3.5-inch (~8.9-centimeter) outer diameter mast sections, RF-5941-LM155 mast is an excellent high wind solution and has a secondary guy kit (12069-7021-01) available as an option.

The RF-5941-PM155 includes:

- Tripod and winch system
- Mast sections
- Carry bags (2)
- Guy and tripod stakes
- Guy lines

TELESCOPIC MASTS

RF-5945

The RF-5945-TM series of masts are reliable screw or strap-driven guyed field masts. The Telescopic Masts can elevate any RF-7800W payload for ground-mounted, vehicle, and shelter deployments. The masts include a kit with the hardware needed to mount the brackets included with the RF-7800W-AA001 Closed Loop Antenna Alignment System (CLAAS) or RF-7800W-TK001 Antenna Tracking System (ATS). A manual positioning kit is also included to assist in deployments not incorporating the CLAAS. These telescopic masts are ideal for short- or long-term deployments that require sturdier support for non-ideal link conditions.

CABLES

The Ethernet cables listed below are double-shielded CAT-5e outdoor cables with a ruggedized, quick-locking RJ-45-based Ethernet connector for the RF-7800W HCLOS Radio. While other, lower-cost Ethernet cables can be used, their quality and impact on system performance cannot be predicted.

PRODUCT NUMBER	PRODUCT NAME
12069-0024-01	AC Power-over-Ethernet (PoE) Block (includes cables for various international standards)
12069-0030-A060	CAT-5e Cable Assembly, straight with backshells and caps at both ends, 60 ft. (~18 m)
12069-0030-A110	CAT-5e Cable Assembly, straight with backshells and caps at both ends, 110 ft. (~33 m)
12069-0031-A165	CAT-5e Cable Assembly, straight with backshell and cap at one end, 165 ft. (~50 m)

TECHNICAL MANUAL

PRODUCT NUMBER	PRODUCT NAME
10515-0364-6000	CD-ROM for RF-7800W-AA001 CLAAS (includes all manuals)

ADDITIONAL TELESCOPIC MAST MODELS

PRODUCT NUMBER	PRODUCT NAME	WEIGHT (MAST ONLY)	PAYLOAD (MAX)	NESTED HEIGHT
RF-5945-TM180	18-Meter Telescopic Mast (includes kit for deploying the RF-7800W-AA001 CLAAS)	91 lbs. (~41.5 kg)	66 lbs. (~30 kg)	12.2 ft. (~3.7 m)
12069-7005-02	15-Meter Carbon Fiber Telescopic Mast, with CLAAS mounting kit	135 lbs. (~61 kg)	75 lbs. (~34 kg)	8 ft. (~2.4 m)
12069-7006-02	21-Meter Aluminum Telescopic Mast, with CLAAS mounting kit	197 lbs. (~90 kg)	180 lbs. (~80 kg)	14.6 ft. (~4.4 m)

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COMPREHENSIVE SOLUTION FOR ANY VEHICLE, ANY MISSION

Falcon III Advanced Intercom System

Central Unit 100
Crew Stations 101
Central Unit and Crew Station Cables 102
Additional System Components 103
RF-7800I Mounting Options 105
Intercom System Audio Options 106

FALCON III® ADVANCED INTERCOM SYSTEM

The Harris Falcon® III Advanced Intercom System provides enhanced communications and networking capabilities for mobile platforms.

The RF-7800I Advanced Intercom System is the customizable, reliable choice for intercom communications in any mission. A comprehensive solution for voice and data communication, tactical network connectivity, and battle management system interoperability, the RF-7800I provides voice and data connectivity among vehicle crew members while creating a network backbone to integrate vehicle communication systems. With a modular, configurable platform, the RF-7800I is easy to install, lightweight, and power efficient. The rugged RF-7800I interoperates with Harris Falcon tactical radios as well as other military, government and commercial devices. With the Harris Advanced Intercom System, crew members can communicate with dismounted personnel, other vehicles and command centers through HF, VHF, UHF and BGAN satellite communications technology.

HARRIS®

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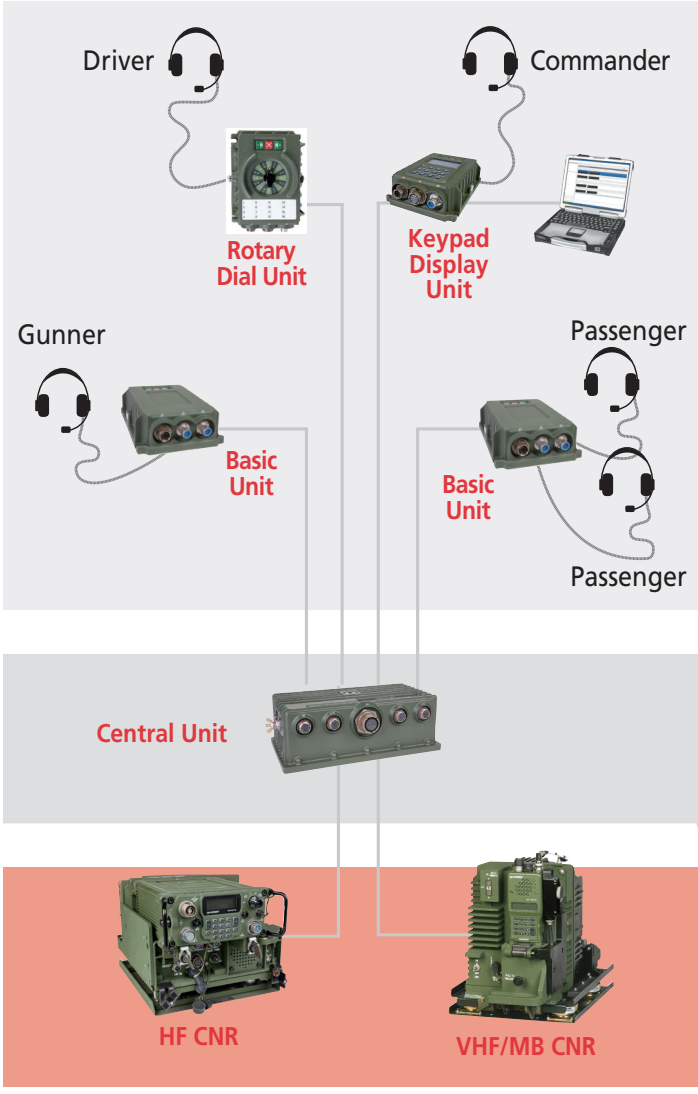
FALCON III ADVANCED INTERCOM SYSTEM

The RF-7800I Advanced Intercom System allows users to build a custom, flexible intercom system for any application:

1. Each system design begins with choosing the appropriate Central Unit configuration. See the Central Unit section.
2. Select Crew Stations to extend the necessary user interfaces and capabilities for individual users within the system. See the Crew Station section.
3. See the Intercom System Audio Options section to select compatible headsets.
4. See the Central Unit and Crew Station Cables section for interconnecting cables with the Central Unit. Select a distribution cable to connect the Central Unit to the appropriate number of crew stations. Then select the Crew Station cables in the appropriate sizes to connect the distribution cable to the individual Crew Stations.
5. Select appropriate radio interface cables from the Radio Interface Cables section which will connect the radios to the Central Unit.

The RF-7800I also accommodates a variety of mounting options, as detailed in the RF-7800I Mounting Options section. Users can enhance the system with add-on and accessory items found in the Additional System Components section.



CREW STATIONS

- Select the ideal combination of Crew Stations for the application to provide the preferred user interface and capability set to each user
- Select additional system components as desired to enhance vehicle system capabilities

HEADSETS AND HEADSET CABLING

- Choose from a range of supported headset options, including ANR options

CABLING AND MOUNTING

- Select required cabling to interface Crew Stations and accessories to Central Unit
- Select preferred mounting options for Crew Stations

CENTRAL UNIT

- Heart of the system
- Software defined and programmable

COMBAT NET RADIO SELECTION

- Select proper radio interface cabling for radios to be integrated to the RF-7800I system

CENTRAL UNIT

The Intercom System's main component, the Central Unit, performs voice channel switching and digital data packet routing between crew stations and combat net radios. The Central Unit supports up to eight Crew Stations and ten combat net radios. It also has two general-purpose serial ports, a Speaker Unit port, two serial/USB host ports, and two Ethernet ports for full network integration.

The Central Unit provides clear voice communications using digital signal processing technology that eliminates vehicle background noise to enable maximum voice intelligibility for all crew members. It also monitors vehicle system status and Crew Station controls and indicators. The Central Unit ships with the RF-7800I programming application that has a simple, straightforward, user interface that allows for upgrades to the software configurable intercom components. This user interface enables easy incorporation of feature enhancements and reconfiguration of the system to support new mission requirements.

Communication between the Central Unit and the Crew Stations is established over a single, easy-to-install four-wire interface. This interface provides power to the Crew Stations and headsets, programming and real-time configuration capabilities, and duplex streams of both 64 kbps digitized PCM voice channels and digital synchronous communication with data and control signals of the serial asynchronous ports.

The Central Unit can be configured to provide notifications to users in their native language. Central Unit Bridging (CUB) provides flexibility for larger networks, allowing more crew stations and radios to be interfaced to the Intercom System.

RF-7800I-CU1XX CENTRAL UNIT CONFIGURATIONS

PRODUCT NUMBER	PRODUCT NAME	CONFIGURATION
RF-7800I-CU100	Central Unit (Green)	Voice and Data Configuration Supports 8 Crew Stations, 10 radio transceivers, 1 Speaker Unit, 2 Ethernet connections, 2 general-purpose serial ports, 2 serial/USB host ports
RF-7800I-CU102	Central Unit (Tan)	Same as above

RF-7800I-CU2XX CENTRAL UNIT LIGHT

A "light" version for voice-only applications is also available that supports up to four Crew Stations and up to two radio transceivers.

PRODUCT NUMBER	PRODUCT NAME	CONFIGURATION
RF-7800I-CU200	Central Unit Light (Green)	Voice-Only Configuration Supports 4 Crew Stations and 2 radio transceivers
RF-7800I-CU202	Central Unit Light (Tan)	Same as above

The RF-7800I Central Unit includes:

PRODUCT NUMBER	PRODUCT NAME
12109-2900-01	RF-7800I Software and Manual CD
12109-8100-0X	RF-7800I Digital Intercom System Control Center (DCC) Software (Windows OS)
12109-8120-0X	RF-7800I Soft Keypad Application (SKA) Software (Windows OS)
12109-8130-0X	RF-7800I SKA Software (Android)

RF-7800I TECHNICAL MANUALS

PRODUCT NUMBER	PRODUCT NAME
10515-0382-4200	RF-7800I Reference Guide
10515-0407-4000	RF-7800I Default Configuration Operators Card
10515-0407-4200	RF-7800I Software Manual for DCC
10515-0407-4100	RF-7800I SKA Manual (Windows and Android)

CREW STATIONS

The RF-7800I offers three types of Crew Stations, each with distinct user interface capabilities and features. The Central Unit interfaces to any combination of Crew Stations to provide custom solutions for any vehicle or command center application. Crew Stations allow operators to monitor selected channels, conference with selected intercom users, monitor and transmit via radio transceivers, and access external connections such as telephone lines. Each Crew Station comes in two variants: dual headset or single headset and a data port to support a PC or other data device.

KEYPAD DISPLAY UNIT

RF-7800I-KDXXX

The fully featured Keypad Display Unit provides real-time command and control of the intercom and radios for maximum mission flexibility. This Crew Station offers a high resolution OLED screen for displaying options, messages, and commands. The keypad drives the icons on the display, allowing the user access to the intercom and radio channels with a simple, single key press. When selecting different options, users receive audible feedback in their native language as configured through the Central Unit programming software.

Harris Falcon® radio users can employ the Keypad Display Unit to remotely control radio parameters. Users can navigate through presets, issue calls to radio network users, display GPS information, and control power configuration.

RF-7800I-KDXXX CONFIGURATIONS

PRODUCT NUMBER	CONFIGURATION
RF-7800I-KD200	2 Headset Ports (Green)
RF-7800I-KD202	2 Headset Ports (Tan)
RF-7800I-KD400	1 Headset Port, 1 RS-232 Port (Green)
RF-7800I-KD402	1 Headset Port, 1 RS-232 Port (Tan)

ROTARY DIAL UNIT

RF-7800I-RDXXX

The Rotary Dial Unit provides users with real-time selection of 16 pre-programmed operation modes through a single turn of a knob. Users can easily determine the Crew Stations or radio assets in use based on the status indicators provided at each dial position.

RF-7800I-RDXXX CONFIGURATIONS

PRODUCT NUMBER	CONFIGURATION
RF-7800I-RD200	2 Headset Ports (Green)
RF-7800I-RD202	2 Headset Ports (Tan)
RF-7800I-RD400	1 Headset Port, 1 RS-232 Port (Green)
RF-7800I-RD402	1 Headset Port, 1 RS-232 Port (Tan)

BASIC UNIT

RF-7800I-BUXXX

The Basic Unit provides users with preprogrammed operation through a hands-free plug-and-play interface. It is an ideal solution for crew members requiring voice and data communications for executing time-sensitive, critical operations without requiring the flexibility to modify system configuration.

RF-7800I-BUXXX CONFIGURATIONS

PRODUCT NUMBER	CONFIGURATION
RF-7800I-BU200	2 Headset Ports (Green)
RF-7800I-BU202	2 Headset Ports (Tan)
RF-7800I-BU400	1 Headset Port, 1 RS-232 Port (Green)
RF-7800I-BU402	1 Headset Port, 1 RS-232 Port (Tan)

CENTRAL UNIT AND CREW STATION CABLES

PROGRAMMING AND DATA CABLES

Choose from the chart below for RF-7800I Central Unit programming and data capability. (Cable lengths of 6 ft. (~1.8 m) shown below)

PRODUCT NUMBER	PRODUCT NAME
12106-2353-A006	Central Unit (CU) J2 to 2 Ethernet RJ-45 and RS-232, Data and Programming Cable, CU to CU bridging over Ethernet, right-angle
12106-2354-A006	Central Unit J2 to Single Ethernet RJ-45, CU to CU bridging over Ethernet, right-angle
12106-2355-A006	Central Unit J6/J7 to USB, right-angle
12106-2366-A006	Central Unit Com Port to dB15 for DAGR, PLGR, Polaris GPS devices, right-angle
12106-1356-A006	CU Com Port to dB9 (for GPS)

DISTRIBUTION CABLES

The RF-7800I Central Unit supports all Crew Stations through the main J3 connector on the face of the unit. A two-cable combination is used to connect Crew Stations to the Central Unit: a 2 ft. (~0.67-meter) "octopus" cable (selected from the table below) is attached to the 12106-1013-A0XX Crew Station cable, which is then connected to the Crew Station. This cabling configuration provides no single point of failure and allows easy cable replacement if maintenance is required. Choose a distribution cable from the chart below:

PRODUCT NUMBER	CONFIGURATION
12106-1324-A002	Central Unit to Crew Station Distribution Cable (Up to 4 Crew Stations)
12106-1328-A002	Central Unit to Crew Station Distribution Cable (Up to 8 Crew Stations)
12106-1348-A002	Central Unit Distribution Cable (Up to 4 Crew Stations, Speaker, Up to 2 Radios) (for Central Unit Light Only)

CREW STATION CABLES

Each Crew Station is connected to the "octopus" cable with one of the following cabling options:

PRODUCT NUMBER	PRODUCT NAME
12106-1013-A006	Cable Assembly for Basic Unit, Keypad/ Display, Rotary Dial, Telephone & Alarm Unit to Remote Distribution Box, 6 ft. (~1.8 m)
12106-1013-A010	10 ft. (~3 m)
12106-1013-A015	15 ft. (~4.6 m)
12106-1013-A020	20 ft. (~6.1 m)

Cable lengths can be customized upon request. Contact your Harris Sales Representative for details.

CREW STATION DATA CABLE

PRODUCT NUMBER	PRODUCT NAME
12106-1351-A006	Crew Station to RS-232 Connection

HARRIS RADIO INTERFACE CABLES

Cable lengths of 6 ft. (~1.8 m) shown below.

PRODUCT NUMBER	PRODUCT NAME
12106-1405-A006	Central Unit to AN/PRC-117F
12106-1412-A006	Central Unit to RF-7800V-HH with Ethernet
12106-1413-A006	Central Unit to AN/PRC-117G/RF-7800M-MP with Ethernet
12106-1420-A006	Central Unit to VRC-114 6-pin Audio
12106-1421-A006	Central Unit to AN/PRC-152/VRC-110, 45°
12106-1426-A006	Central Unit to VRC-92 18-pin Intercom
12106-1460-A006	Central Unit to AN/PRC-152A/RF-7800M-HH with Ethernet
12106-1502-A006	Central Unit to AN/PRC-150/ RF-5800H-MP/ RF-7800H-MP (20 watts configuration)
12106-1503-A006	Central Unit to AN/PRC-150/ RF-5800H-MP/VRC-104/RF-7800H-MP (150 watts configuration)
12106-1503-A1	Central Unit to AN/PRC-150/ RF-5800H-MP/VRC-104/RF-7800H-MP (125 and 400 watts, Prepost configurations)
12106-1505-A006	Central Unit to RF-5800V-MP/RF-5800M-MP
12106-1507-A006	Central Unit to RF-5800V-HH/ RF-5800M-HH
12106-1509-A006	Central Unit to RF-7800S Audio Only
12106-2510-A006	Central Unit USB to RF-7800S Audio and Data, right-angle

Custom lengths up to 20 feet (~6.1 meters) can be supported upon request. Contact your Harris Sales Representative for details.

OTHER VENDOR RADIO INTERFACE CABLES

PRODUCT NUMBER	CONFIGURATION
12106-1592-A006	PR4G V3 and Thales 3700

Other vendor radio interface cables are also available. Contact your Harris Sales Representative for details.

POWER CABLES, CENTRAL UNIT DC

The Central Unit runs on DC power and requires one of these cables:

PRODUCT NUMBER	CONFIGURATION
12106-1003-A020	Central Unit to DC power
12106-1009-A006	Central Unit to RF-5051PS Power Supply

POWER FILTER AND DISCONNECT ASSEMBLY

12106-5200-02 Green

12106-5200-04 Tan

The Power Filter and Disconnect Assembly may be used in place of the DC Power Cables in the RF-7800I system. This kit provides an inline power switch, with over current protection, allowing the user to control the power supplied to the RF-7800I system. This box may or may not be used depending on the vehicle power supply and distribution solution required. It supports 5 amps right angle power to the Vehicular Intercom System. The Power Filter and Disconnect Assembly includes the 12106-1003-A020 Central Unit DC Power Cable.

ADDITIONAL SYSTEM COMPONENTS

The RF-7800I is highly configurable and supports additional accessory items to ensure that each system is designed to meet mission specifications. Choose the exact features that the mission requires by adding any of the following units.

SPEAKER UNIT

RF-7800I-SA10X

The Speaker Unit features an 8-watt amplifier and a 6-step volume control knob. The Speaker Unit's high power is ideal for command broadcasts or radio monitoring. The system can be preconfigured to simultaneously monitor any or all of the audio sources connected to the intercom via the Speaker Unit.

RF-7800I-SA10X CONFIGURATIONS

PRODUCT NUMBER	PRODUCT NAME
RF-7800I-SA100	Speaker Unit, 8 watts (Green)
RF-7800I-SA102	Speaker Unit, 8 watts (Tan)

SPEAKER UNIT CABLE

The Speaker Unit connects to the Central Unit using the following cable:

PRODUCT NUMBER	PRODUCT NAME
12106-2364-A010	Central Unit to Speaker, right-angle (10 ft., ~3 m)

Cable lengths can be customized upon request. Contact your Harris Sales Representative for details.

FALCON III® ADVANCED INTERCOM SYSTEM

TELEPHONE & ALARM UNIT

RF-7800I-TA10X

The Telephone & Alarm Unit provides seamless integration with an analog PBX or a field telephone to enable direct dialing from the Crew Stations. One unit can connect a Private Branch Exchange (PBX) and field phone at the same time to support incoming and outgoing calls. The Telephone & Alarm Unit includes an alarm/sensor interface for monitoring warning signals originated by vehicle subsystems such as engine, NBC and IR warnings. Events trigger a warning voice broadcast relevant to the alarm source while flashing the Crew Station's red button. The Central Unit may be configured to provide notifications to users in their native language.

The Telephone & Alarm Unit is configurable to detect the following signals:

- Alarm: GND/not connected; 24 V/not connected; GND/24 V
- Telephone: 300 Hz to 3 KHz electrical signals at voltages from 3 to 10 Vpp

RF-7800I-TA10X CONFIGURATIONS

PRODUCT NUMBER	PRODUCT NAME
RF-7800I-TA100	Telephone and Alarm Unit (Green)
RF-7800I-TA102	Telephone and Alarm Unit (Tan)

TELEPHONE & ALARM UNIT CABLES

The Telephone & Alarm Unit connects to the Central Unit using the same cable options as the Crew Stations. Choose one cable from the chart below.

PRODUCT NUMBER	PRODUCT NAME
12106-1374-A010	Alarm, Open Ended (10 ft., ~3 m)
12106-1072-A006	Field Phone and PABX (6 ft., ~1.8 m)

Cable lengths can be customized upon request. Contact your Harris Sales Representative for details.

COMBAT TELEPHONE

RF-6015-HS001

This rugged combat telephone provides traditional handset-style operation for the field user. This phone is well suited for tactical operational environments.

FIELD TELEPHONE

RF-6015-HS002

This compact handheld field telephone offers a rugged, lightweight option to mobile RF-6010 users, and can be used with the RF-7800I Intercom system. Contact Product Management for availability or information on additional commercial telephone models.

TECHNICAL MANUAL

PRODUCT NUMBER	PRODUCT NAME
10515-0262-4200	User's Manual

REMOTE FIELD WIRE KIT

12109-6050-01

All RF-7800I Crew Stations support a remote system operation capability at up to 1.2 kilometers (~0.75 miles) using a standard military field wire (WD-1A/TT field wire purchased separately) interface. To support quick deployment of a Crew Station for remote operation, the RF-7800I Field Wire Remote Kit provides all components necessary to operate a Crew Station remotely outside the vehicle.

QUICK DISMOUNT REMOTE KIT

12109-6060-01

The Quick Dismount Remote Kit provides a quick deployable kit with all components necessary to operate a Crew Station remotely, for up to 1.2 kilometers (~ 0.75 miles) from the vehicle (WD-1A/TT field wire purchased separately). The lightweight grab-and-go case provides storage for all components in the kit including room for a Crew Station (purchased separately).

Kit includes:

PRODUCT NUMBER	PRODUCT NAME
12109-0280-01	Passive Speaker
12109-6050-01	Remote Field Wire Kit
12109-0250-01	Intercom Handset
12106-1050-A32	Cable Assembly, Crew Station to Handset (Bose and Racal Raptor Light ANR Headsets compatiable)

RF-7800I MOUNTING OPTIONS

CENTRAL UNIT SHOCK MOUNT

12109-6410-01

The headless design of the Central Unit allows it to be mounted remotely using the 12109-6410-01 Shock Mount Assembly for optimal use of limited cabin space.

CREW STATION QUICK RELEASE SHOCK MOUNT

12109-6610-01

The Quick Release Shock Mount allows a Crew Station to be rapidly removed for remote support.

CREW STATION GIMBLE MOUNT

RF-5940-MT004

Crew Stations support multiple mounting configurations. They can be hard mounted for rigidity or used with the Universal Gimble Mount to provide flexibility and ease of access via multiple mounting angles. The RF-5940-MT004 may be used to mount any Crew Station, Speaker Unit, or Telephone and Alarm Unit.

DUAL CREW STATION GIMBLE MOUNT

RF-5940-MT005

The Dual Crew Station Gimble Mount may be used to mount a combination of any two Crew Stations, Speaker Unit, or Telephone and Alarm Unit.

INTERCOM SYSTEM AUDIO OPTIONS

HANDSETS

12109-0250-01

For applications when wearing a headset is not preferred, such as operational center use, the RF-7800I offers a handset option, the 12109-0250-01 Intercom Handset.

HEADSETS

The RF-7800I Crew Stations support most types of tactical headsets. Use an under-the-helmet, light ANR (Active Noise Reduction) headset for use in most wheeled vehicular applications to minimize vehicle background noise. For tracked vehicle applications where noise levels are extremely high, use a heavy ANR solution. Headsets are also offered in an integrated helmet solution.

PRODUCT NUMBER	PRODUCT NAME	PHOTO
A06-0013-001 (Size Medium) A06-0013-002 (Size Large)	Bose PICVC Integrated Helmet, Heavy ANR	
A30-0521-001	Racal Integrated Helmet, Heavy ANR	
A30-0521-002	Racal Under Helmet, Heavy ANR	
A06-0015-001	Racal Under Helmet, Light ANR	

Additional headsets can be supported upon request. Contact your Harris Sales Representative to discuss headset compatibility.

ADVANCED HEADSETS

For applications requiring wireless connectivity while dismounted from the vehicle, Harris offers advanced dual-down-lead headsets that support both wired intercom connectivity and wireless connectivity over a radio network.

PRODUCT NUMBER	PRODUCT NAME
A30-1446-010	Bose T5 Dual Comm Under-the-Helmet Adjustable ANR Headset

HEADSET CABLING

Cable varies depending on the headset selected for use with the Crew Stations. See below for cable choices.

PRODUCT NUMBER	PRODUCT NAME
12106-1050-A32	Crew Station to All Bose or Racal Light ANR Headsets
12106-1065-A015	Headset Extensions
12106-1350-A32	Crew Station to Racal Heavy ANR Headsets
12106-1450-A32	Crew Station to 6-pin Audio
12106-1055-A32	Crew Station to Headset, Binaural

PASSIVE SPEAKER

12109-0280-01

The Passive Speaker is designed to operate plugged into a headset port on any Crew Station unit, using a standard RF-7800I headset interface cables (included with the Passive Speaker). The Passive Speaker is optimal for use when remotely operating Crew Stations where power may not be available and for monitoring audio traffic when wearing a headset is not desired.

DELIVERING
MORE
INFORMATION
FASTER

FALCON II® & III® HF RADIOS

The Falcon III HF product line introduces a new generation of advanced tactical communications capabilities that will transform the modern battlefield.

Built on the solid engineering foundation of Falcon II, the Falcon III HF product line introduces new technologies, including wideband communications. This leading-edge technology delivers more information, faster, to all echelons of the digital network—without sacrificing security and robustness.

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FALCON III HF MANPACKS

OVERVIEW

RF-7800H-MP001/RF-7800H-MP002

The Falcon III® RF-7800H-MP is the next-generation software-defined tactical radio that provides crucial capabilities such as wideband data performance and interoperability with fielded Falcon II HF radios, enabling formation superiority on today's battlefield.

STANDARD FEATURES

- Smallest, lightest, fastest wideband HF manpack radio
- Wideband data up to 120 kbps
- Fully interoperable with Falcon II® HF radio and accessories
- Wideband HF Data MIL-STD-188-110C Appendix D
- Automatic Link Establishment (ALE) STANAG 4538 FLSU, MIL-STD-188-141B Appendix A, Appendix B (Linking Protection, AL-1)
- Frequency Hopping Serial Tone ECCM Falcon II Interoperable
- Encrypted Data
  HF: US MIL-STD-188-110C App. D, App. C, and Main Body Serial-tone Waveforms, STANAG 4285, STANAG 4415, STANAG 4539; VHF: WBFSK (16 kbps)
- Vocoder HF: LPC-10-52E (600/2400), MELP (600/1200/2400), VHF: CVSD
- RF-6760W-HF Wireless Messaging Terminal Software for Windows OS (Included with RF-7800H-MP002)

SPECIFICATIONS FOR FALCON III HF MANPACKS

GENERAL	RF-7800H-MP-M001/M002
Frequency Range	1.5-59.999 MHz
Net Presets	75, Fully programmable
Frequency Stability	$\pm 1 \times 10^{-6}$
Emission Codes	J3E (single sideband, upper or lower, suppressed carrier telephony) H3E (compatible AM single sideband plus full carrier) A1A, J2A (compatible CW), selectable; F3E (FM)
RF Input/Output Impedence	50 Ohms nominal, unbalanced
Power Output	26 VDC (21.5-32 VDC)
Data Interfaces	USB, Synchronous or asychronous (RS-232C)
PHYSICAL	
Dimensions	7.9 W x 3.3 H x 9.2 D in. (~20.0 W x 8.3 H x 23.4 D cm)
Weight	8.7 lbs (~3.9 kg no battery)
Color (CARC finish)	CARC Green Tan
TRANSMIT	
Power Output	HF: 1, 2, 20 Watts PEP, -1/+1 dB VHF: 1, 5, 10 Watts FM
Audio Input	1.5 mV at 150 Ohm or 0 dBm at 600 Ohm for full rated output
Carrier Suppression	Greater than 60 dB below PEP output (J3E mode)
Undesired Sideband Suppression	Greater than 60 dB below PEP output
RECEIVE	
Sensitivity	SSB: -113 dBM (0.5 µV) for 10 dB SINAD
Audio Output	12 mV at 1000 Ohm to external handset
Squelch	Front panel adjustable, active squelch selectable
IF Rejection	Greater than 80 dB

RECEIVE	
Image Rejection **AGC**	Greater than 80 dB (1st IF image) Mode dependent, automatically selected
Intermodulation Distortion	-80 dB or better for two -30 dBm signals separated 30 kHz or more
Overload Protection	Receiver protected to 32 VRMS
ENVIRONMENTAL	
Test Method	Per MIL-STD-810G
STANDARD KITS	
10515-0413-6000	RF-7800H e-Pub CD documentation •10515-0413-4200 Operator's Manual •10515-0413-4000 Operator's Card •10515-0413-4100 Field Reference Guide •10515-6648 Instruction Sheet, Dismount Dipole Adapter
10515-0143-4000	Operator's Card
10515-0413-4100	Field Reference Guide
12006-0017-02	GPS Antenna
10372-0240-02	OE-505 Manpack Antenna Kit
10372-1260-01	Antenna Assembly Adapter
10372-1270-01	Dismount Dipole Adapter
10075-1399	H-250/U Lightweight Handset (Modified)
12043-4800-01	Battery Box
10303-1008-01	Ground Stake Kit
12043-2850-A006	Cable Assembly, Data/Programming (USB)
10535-0775-A006	Cable Assembly, Async/Data, 6 ft. (~1.8 m)
RF-7800H-SW001	Communications Planning Application
RF-6551H	Tactical Chat Communications Software
RF-6760W-HF	Wireless Message Terminal (WMT), HF only Version, included with MP002 only

FALCON II HF MANPACK

OVERVIEW

AN/PRC-150(C)

The AN/PRC-150(C) is an advanced, nomenclatured HF/VHF manpack radio that provides reliable tactical communications through U.S. government Type-1 encryption for enhanced secure voice and data performance. It features reduced size and weight and extended battery life. The removable Keypad/Display Unit (KDU) enables operation on the move with the transceiver stowed in the user's backpack.

STANDARD FEATURES

HF:

- Encrypted Data: MIL-STD-188-110B App. C (9600 bps and 12,800 bps uncoded), App. B 39 tone (to 2400 bps), Serial Tone (to 9600 bps), STANAG 4285 (2400 bps), STANAG 4415 (75 bps), STANAG 4539 (9600 bps), FSK (600 bps)
- Automatic Link Establishment (ALE): STANAG 4538 FLSU, MIL-STD-188-141B Appendix A with Appendix B AL-1 LP, including Scope Command telephony call type
- Frequency Hopping: Serial Tone ECCM
- Vocoder: LPC-10-52E (600/2400) MELP (600/2400)
- Data Link Layer Protocol: (ARQ) STANAG 4538 (3G), pFED-STD-1052

VHF:

- Vocoder: LPC-10-52E (600/2400) MELP (600/2400)
- Encrypted Data: Wideband FSK (16 kbps)

SPECIFICATIONS FOR FALCON II HF MANPACK

GENERAL	AN/PRC-150(C)
Frequency Range	1.6-59.999 MHz
Net Presets	75, Fully programmable
Frequency Stability	$\pm 1 \times 10^{-6}$
Emission Codes	J3E (single sideband, upper or lower, suppressed carrier telephony) H3E (compatible AM single sideband plus full carrier) A1A, J2A (compatible CW), selectable; F3E (FM)
RF Input/Output Impedence	50 Ohms nominal, unbalanced
Power Output	26 VDC (21.5-32 VDC)
Data Interfaces	Synchronous or asychronous (RS-232C, MIL-STD-188-114A)
PHYSICAL	
Dimensions with Battery Case	10.5 W x 3.5 H x 13.2 D in. (~26.7 W x 8.1 H x 34.3 D cm)
Weight	10 lbs (4.7 kg without batteries)
TRANSMIT	
Power Output	HF: 1, 2, 20 Watts PEP, -1/+2 dB VHF: 1, 5, 10 Watts FM
Audio Input	1.5 mV at 150 Ohm or 0 dBm at 600 Ohm for full rated output
Carrier Suppression	Greater than 60 dB below PEP output (J3E mode)
Undesired Sideband Suppression	Greater than 60 dB below PEP output

RECEIVE	
Sensitivity	SSB: -113 dBM (0.5 µV) for 10 dB SINAD
Audio Output	15 mV at 1000 Ohm to external handset
Squelch	Front panel adjustable, active squelch selectable
IF Rejection	Greater than 80 dB
Image Rejection **AGC**	Greater than 80 dB (1st IF image) N/A
Intermodulation Distortion	-80 dB or better for two -30 dBm signals separated 30 kHz or more
Overload Protection	Receiver protected to 32 VRMS
ENVIRONMENTAL	
Test Method	Per MIL-STD-810G

STANDARD KITS	
10515-0103-4100	Operator Manual
10515-0103-4001	Operator Card
10372-0240-02	OE-505 Manpack Antenna Kit
10372-1260-01	Antenna Assembly Adapter
10075-1399	H-250/U Lightweight Handset (Modified)
10513-4800-02	Battery Box
10511-0704-012	KDU Extension Cable, 6 ft. (~1.8 m)
10303-1008-01	Ground Stake Kit (includes 15 in. (~38 cm) stake, 6 ft. (~1.8 m) strap)
RF-6550H	Radio Programming Application
10535-0775-A006	Simultaneous Control and Data Cable Assembly, 6 ft. (~1.8 m)
RF-6551H	Tactical Chat Communications Software
RF-5930-CA002	Falcon II Ranger Bag

ACCESSORIES

See accessories on pages 127-129 and the Accessories chapter for additional antenna, and common accessories.

FALCON II TO FALCON III ADAPTERS

20 WATT HF FALCON II TO FALCON III ADAPTER

RF-7800H-AD020

The RF-7800H-AD020 allows the user to operate the RF-7800H-MP with the RF-5800H-V006 Vehicular Adapter (ordered separately). The radio is mounted directly to the adapter without the battery case. Power is supplied to the transceiver via a power amplifier control cable connected between the adapter and the external power source.

The functional design of this adapter allows it to be easily removed with the RF-7800H-MP transceiver, and a RF-5800H or AN/PRC-150(C) (ordered separately) installed in its place if desired. The transceiver can be removed from this adapter and connected to a battery case with battery for dismount operation. Color: Black.

FEATURES

- Small size and weight
- Simple installation
- Compatible with Falcon II HF cables
- Fully ruggedized per MIL-STD-810G
- Operates from 26.5 VDC nominal

The RF-7800H-AD020 Adapter includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7800H-AD020	RF-7800H 20 Watt Shock Mount Adapter	1
10515-6625	RF-7800H 20 Watt Adapter System Install Instructions	1

125 WATT HF FALCON II TO FALCON III ADAPTER

RF-7800H-AD125

The RF-7800H-AD125 allows the user to operate the RF-7800H-MP Falcon III HF manpack transceiver with Falcon II 125 watt HF systems. By swapping out the Falcon II transceiver and shock mount, this shock mounted adapter can be used to transform an existing Falcon II 125 watt HF system into a Falcon III RF-7800H-MP 125 watt HF system. The transceiver can be removed from this mount and connected to a battery case with battery for dismount operation.

FEATURES

- Small size and weight
- Compatible with Falcon II HF cables
- Fully ruggedized per MIL-STD-810G

The RF-7800H-AD0125 Adapter includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7800H-AD125	RF-7800H 125 Watt Shock Mount Adapter	1
10515-6665	RF-7800H Adapter System Install Instructions	1

150 WATT HF FALCON II TO FALCON III ADAPTER

RF-7800H-AD150

The RF-7800H-AD150 allows the user to operate the RF-7800H-MP Falcon III HF manpack transceiver with the RF-5833H-PA 150 watt Power Amplifiers (ordered separately). The functional design of this adapter allows simple installation on the RF-5833H-PA amplifier. The transceiver can be removed from this mount and connected to a battery case with battery for dismount operation. Color: Green.

FEATURES

- Simple installation
- Compatible with Falcon II HF cables
- Fully ruggedized per MIL-STD-810G
- Operates from 26.5 VDC nominal

The RF-7800H-AD150 Adapter includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7800H-AD150	RF-7800H 150 Watt Shock Mount Adapter with install hardware	1
10515-6624	RF-7800H Adapter System Install Instructions	1
10475-1504-A18	Coax Cable Assembly (Radio to PA)	1

400 WATT HF FALCON II TO FALCON III ADAPTER

RF-7800H-AD400

The RF-7800H-AD400 allows the user to operate the RF-7800H-MP Falcon III HF manpack transceiver with Falcon II 400 watt HF systems. By swapping out the Falcon II transceiver and shock mount, this shock mounted adapter can be used to transform an existing Falcon II 400 watt HF system into a Falcon III RF-7800H-MP 400 watt HF system. The transceiver can be removed from this mount and connected to a battery case with battery for dismount operation.

FEATURES

- Small size and weight
- Compatible with Falcon II HF cables
- Fully ruggedized per MIL-STD-810G

The RF-7800H-AD400 Adapter includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7800H-AD400	RF-7800H 400 Watt Shock Mount Adapter	1
10515-6665	RF-7800H Adapter System Install Instructions	1

VEHICULAR SYSTEMS

20 WATT HF/VHF VEHICULAR ADAPTER

RF-7800H-V006

The RF-7800H-V006 provides the equipment complement necessary to transform an RF-7800H-MP manpack radio (ordered separately) to a 20 watt HF-SSB (10 watt VHF-FM) vehicular system using the internal power amplifier. The adapter facilitates rapid conversion to a manportable configuration. This system is recommended for vehicular applications where the radio-to-antenna separation is greater than 3.3 feet (~1 meter). Color: Black.

RF-5800H-V006 also available for the RF-5800H-MP or AN/PRC-150(C).

FEATURES

- Distribution unit on shock mount with power conditioning and switched auxiliary power output for a speaker or accessories
- 1.6-60 MHz frequency range
- Fully ruggedized per MIL-STD-810G
- Matches standard 8 ft. (~2.4 m), 10 ft. (~3 m), 16 ft. (~5 m), and 35 ft. (~11 m) whip antennas (with external coupler)
- Operation from 26.5 VDC nominal
- Overload protection
- Built-In Test (BIT)

The RF-7800H-V006 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-5211VSM-052	R/T Vehicular Shock Mount with Distribution Unit	1
RF-7800H-AD020	RF-7800H 20 Watt Adapter	1
12045-5700-A30	R/T to Distribution Box Cable	1
10181-9826-020	Power Cable Assembly, 20 ft. (~6.1 m)	1
10515-0289-4200	20 Watt System Installation Manual	1

125 WATT HF VEHICULAR ADAPTER

RF-7800H-V004

The RF-7800H-V004 provides the equipment complement necessary to transform an RF-7800H-MP manpack radio (ordered separately) into a 125 watt HF-SSB vehicular system. The adapter facilitates rapid conversion to a manportable configuration. Color: Green.

Note: Configuration is for HF communications only and will not operate in the 30 to 60 MHz frequency band.

RF-5800H-V004 also available for the RF-5800H-MP or AN/PRC-150(C).

FEATURES

- USB, LSB, CW, and AME operation in the 1.6-30 MHz HF frequency band
- Solid-state, broadband RF power amplifier (not pictured)
- Small size and weight
- Fully ruggedized and submersible per MIL-STD-810G
- Overload protection
- Operates from 26.5 VDC nominal
- Built-In Test (BIT)

The RF-7800H-V004 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7800H-AD125	RF-7800H 125 Watt Shock Mount Adapter	1
RF-5071VSM-03	PA Vehicular Shock Mount	1
RF-5832H-PA101	125 Watt Power Amplifier (PA)	1
10535-0720-A020	Control Cable Assembly, PA to R/T, 20 ft. (~6.1 m)	1
10181-9821-020	Coax Cable Assembly, 20 ft. (~6.1 m)	1
10181-9826-020	Power Cable Assembly, 20 ft. (~6.1 m)	1
10515-0124-4200	125 Watt Installation Manual	1
10400-1136-A006	Ground Strap	1

FALCON II® & III® HF RADIOS

150 WATT HF/VHF VEHICULAR AMPLIFIER

RF-7800H-V001

The RF-7800H-V001 provides the equipment complement necessary to transform an RF-7800H-MP manpack radio (ordered separately) into a 150 watt PEP/Average HF-SSB (60 watt VHF-FM) vehicular system. The adapter facilitates rapid conversion to a manportable configuration. Color: Green.

RF-5800H-V001 also available for the RF-5800H-MP or AN/PRC-150(C).

FEATURES

- USB, LSB, CW, AME, and FM operation from 1.6-60 MHz
- Solid-state, broadband RF power amplifier
- Built-in loudspeaker
- Independent HF and VHF RF outputs
- Small size and weight
- Fully ruggedized per MIL-STD-810G
- Heatsink and fan for continuous keydown
- Overload protection
- Operates from 26.5 VDC
- Built-In Test (BIT)

The RF-7800H-V001 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-5073VSM	PA Vehicular Shock Mount	1
RF-5833H-PA001	150 Watt Power Amplifier	1
RF-7800H-AD150	RF-7800H 150 Watt Adapter	1
10475-1504-A18	Coax Cable Assembly, 18 in. (~46 cm)	1
10497-5036-01	Audio Cable Assembly, 1 ft. (~30.5 cm)	1
10181-9826-020	Power Cable Assembly, 20 ft. (~6.1 m)	1
10515-0122-4200	150 Watt Installation Manual	1
10535-0720-B17	Control Cable Assembly (PA to R/T), 17 in. (~43 cm)	1
12045-4006-A16	Ground Strap	1

150 WATT HF/VHF VEHICULAR AMPLIFIER W/COLLOCATION FILTERING

RF-7800H-V002

The RF-7800H-V002 provides the equipment complement necessary to transform an RF-7800H-MP manpack radio (ordered separately) into a 150 watt PEP/Average HF-SSB (60 watt VHF-FM) vehicular system. The adapter includes the RF-5245 Pre/postselector and an HF low-pass filter for the attenuation of unwanted signals in collocated applications. The adapter facilitates rapid conversion to a manportable configuration. Color: Green.

RF-5800H-V002 also available for the RF-5800H-MP or AN/PRC-150(C).

FEATURES

- USB, LSB, CW, AME, and FM operation from 1.6-60 MHz
- Solid-state, broadband RF power amplifier
- Built-in loudspeaker
- Built-in pre/postselector provides attenuation of unwanted signals at frequencies 10% or greater from the carrier
- Integral low-pass filter provides additional attenuation of unwanted signals at frequencies >25 MHz
- Independent HF and VHF RF outputs
- Small size and weight
- Fully ruggedized per MIL-STD-810G
- Heatsink and fan for continuous keydown
- Operates from 26.5 VDC
- Built-In Test (BIT)

The RF-7800H-V002 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-5073VSM	PA Vehicular Shock Mount	1
RF-5833H-PA004	150 Watt Power Amplifier with RF-5245 internal pre/postselector and 25 MHz Low-Pass Filter	1
RF-7800H-AD150	RF-7800H 150 Watt Adapter	1
10475-1504-A18	Coax Cable Assembly, 18 in. (~46 cm)	1
10497-5036-01	Audio Cable Assembly, 1 ft. (~30.5 cm)	1
10181-9826-020	Power Cable Assembly, 20 ft. (~6.1 m)	1
10515-0122-4200	150 Watt Installation Manual	1
10535-0720-B17	Control Cable Assembly (PA to R/T), 17 in. (~43 cm)	1
12045-4006-A16	Ground Strap	1

400 WATT HF VEHICULAR SYSTEM

RF-7800H-V003

The RF-7800H-V003 provides the equipment complement necessary to transform an RF-7800H-MP manpack radio (ordered separately) into a 400 watt PEP/Average HF-SSB vehicular system. The adapter facilitates rapid conversion to a manportable configuration. Color: Green.

Note: Configuration is for HF communications only and will not operate in the 30 to 60 MHz frequency band.

RF-5800H-V003 also available for the RF-5800H-MP or AN/PRC-150(C).

FEATURES

- SSB, LSB, CW and AME operation in the 1.6-30 MHz HF frequency band
- Solid-state, broadband RF power amplifier
- Small size and weight
- Fully ruggedized per MIL-STD-810G
- Overload protection
- Operates from 26.5 VDC nominal
- Built-In Test (BIT)

The RF-7800H-V003 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-5834H-PA101	400 Watt Power Amplifier	1
10181-5074-03	PA Vehicular Shock Mount	1
RF-7800H-AD400	RF-7800H 400 Watt Shock Mount Adapter	1
10181-9821-020	Coax Cable Assembly, 20 ft. (~6.1 m)	1
10181-9828-020	Power Cable Assembly, 20 ft. (~6.1 m)	1
10515-0123-4200	400 Watt Installation Manual	1
10535-0720-A020	Control Cable Assembly (PA to R/T), 20 ft. (~6.1 m)	1
12045-4006-A16	Ground Strap	1

BASE SYSTEMS

125 WATT HF BASE STATION SYSTEM

RF-7800H-B004

The RF-7800H-B004 provides the equipment complement necessary to transform a RF-7800H-MP manpack radio (ordered separately) into a 125 watt PEP/Average HF-SSB base station system. The adapter facilitates rapid conversion to a manportable configuration. A U.S. power connector (NEMA 5-15P) is supplied as the standard AC power connector. Order UK or EU power cord separately. Color: Green.

Note: Configuration is for HF communications only and will not operate in the 30 to 60 MHz frequency band.

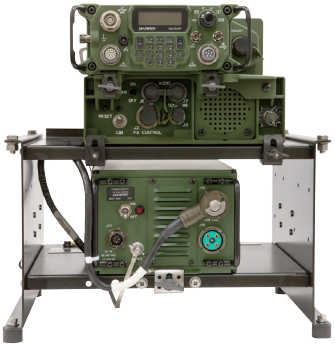
FEATURES

- USB, LSB, CW, and AME operation in the 1.6-30 MHz HF frequency band
- Solid-state, broadband RF power amplifier
- Small size and weight
- Integrated loudspeaker
- Fully ruggedized per MIL-STD-810G
- Overload protection
- 115 or 230 VAC, 47-400 Hz power operation
- Built-In Test (BIT)
- Removable radio tray

The RF-7800H-B004 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-5832H-PA101	Falcon II® 125 Watt Power Amplifier	1
10558-2000-14	Base Station Mount	1
12097-1700-02	RF-7800H Adapter	
RF-5051-PS001	AC Power Supply	1
RF-5980-SA001	Loudspeaker	1
10535-0707-A003	Speaker Audio Cable Assembly, 3 ft. (~0.9 m)	1
10535-0706-A015	Speaker Power Cable Assembly, 15 ft. (~4.6 m)	1
10181-9821-015	Coax Cable Assembly, 15 ft. (~4.6 m)	1
10181-9833-004	DC Power Cable Assembly, 4 ft. (~1.2 m)	1
10515-0124-4200	125 Watt Installation Manual	1
10535-0720-A015	Control Cable Assembly (PA to R/T), 15 ft. (~4.6 m)	1
10400-1136-A006	Ground Strap	1

150 WATT HF/VHF BASE STATION SYSTEM



RF-7800H-B001

The RF-7800H-B001 provides the equipment complement necessary to transform a RF-7800H-MP manpack radio (ordered separately) into a 150 watt PEP/Average HF-SSB (60 watt VHF-FM) base station system. The adapter facilitates rapid conversion to a manportable configuration. A U.S. power connector (NEMA 5-15P) is supplied as the standard AC power connector. Order UK or EU power cord separately. Color: Green.

RF-5800H-B001 also available for the RF-5800H-MP or AN/PRC-150(C).

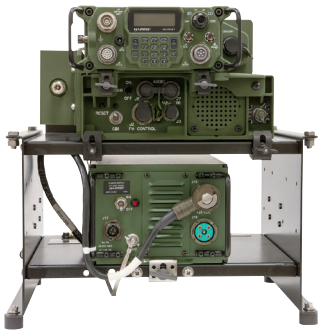
FEATURES

- USB, LSB, CW, AME, and FM operation from 1.6-60 MHz
- Solid-state, broadband RF power amplifier
- Built-in loudspeaker
- Separate HF and VHF RF outputs
- Small size and weight
- Fully ruggedized per MIL-STD-810G
- Heatsink fan for continuous keydown
- Overload protection
- 115 or 230 VAC, 47-400 Hz power operation
- Built-In Test (BIT)

The RF-7800H-B001 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
10497-0850-03	Stack Bracket (Black)	1
RF-5833H-PA001	Power Amplifier—150 Watt PEP/Average	1
RF-7800H-AD150	RF-7800H 150 Watt Adapter	1
RF-5051-PS001	AC Power Supply	1
10475-1504-A18	Coax Cable Assembly, 18 in. (~46 cm)	1
10497-5036-01	Audio Cable Assembly, 1 ft. (~30.5 cm)	1
10515-0122-4200	150 Watt Installation Manual	1
10535-0720-B17	Control Cable Assembly (R/T to PA), 17 in. (~43 cm)	1
10181-9833-004	DC Power Cable Assembly, 4 ft. (~1.2 m)	1
12045-4006-A16	Ground Cable	1

150 WATT HF/VHF BASE STATION SYSTEM W/ COLLOCATION FILTERING



RF-7800H-B002

The RF-7800H-B002 provides the equipment complement necessary to transform an RF-7800H-MP manpack radio (ordered separately) into a 150 watt PEP/Average HF-SSB (60 watt VHF-FM) base station system. The adapter includes the RF-5245 Pre/postselector and an HF low-pass filter for the attenuation of unwanted signals in collocated applications. The adapter facilitates rapid conversion to a manportable configuration. A U.S. power connector (NEMA 5-15P) is supplied as the standard AC power connector. Order UK or EU power cord separately. Color: Green.

RF-5800H-B002 also available for the RF-5800H-MP or AN/PRC-150(C).

FEATURES

- USB, LSB, CW, AME, and FM operation from 1.6-60 MHz
- Solid-state, broadband RF power amplifier
- Built-in loudspeaker
- Built-in pre/postselector provides attenuation of unwanted signals at frequencies 10% or greater from the carrier
- Integral low-pass filter provides additional attenuation of unwanted signals at frequencies >25 MHz
- Separate HF and VHF RF outputs
- Small size and weight
- Fully ruggedized per MIL-STD-810G
- Heatsink fan for continuous keydown
- Overload protection
- 115 or 230 VAC, 47-400 Hz power operation
- Built-In Test (BIT)

The RF-7800H-B002 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
10497-0850-03	Stack Bracket	1
RF-5833H-PA004	150 Watt Power Amplifier with RF-5245 and 25 MHz Low-Pass Filter	1
RF-7800H-AD150	RF-7800H 150 Watt Adapter	1
RF-5051-PS001	AC Power Supply	1
10475-1504-A18	Coax Cable Assembly, 18 in. (~46 cm)	1
10497-5036-01	Audio Cable Assembly, 1 ft. (~30.5 cm)	1
10515-0122-4200	150 watt Installation Manual	1
10535-0720-B17	Control Cable Assembly (R/T to PA), 17 in. (~43 cm)	1
10181-9833-004	DC Power Cable Assembly, 4 ft. (~1.2 m)	1
12045-4006-A16	Ground Cable	1

400 WATT HF BASE STATION SYSTEM

RF-7800H-B003

The RF-7800H-B003 provides the equipment complement necessary to transform an RF-7800H-MP manpack radio (ordered separately) into a 400 watt PEP/Average HF-SSB base station system. The adapter facilitates rapid conversion to a manportable configuration. A U.S. power connector (NEMA 5-15P) is supplied as the standard AC power connector. Order UK or EU power cord separately. Color: Green.

Note: Configuration is for HF communications only and will not operate in the 30 to 60 MHz frequency band. RF-5800H-B003 also available for the RF-5800H-MP or AN/PRC-150(C).

FEATURES

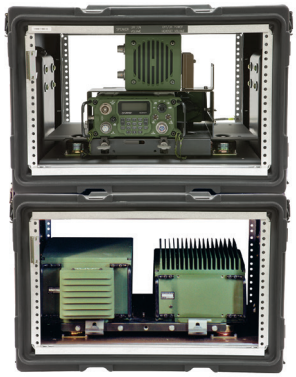
- USB, LSB, CW, and AME operation in the 1.6-30 MHz HF frequency band
- Solid-state, broadband RF power amplifier
- Small size and weight
- Integrated loudspeaker
- Fully ruggedized per MIL-STD-810G
- Overload protection
- 115 or 230 VAC, 47-400 Hz power operation
- Built-In Test (BIT)

The RF-7800H-B003 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-5834H-PA101	400 Watt Power Amplifier	1
12097-1700-02	RF-7800H Adapter	1
10558-2000-13	Base Station Mount	1
RF-5051-PS001	AC Power Supply	2
RF-5980-SA001	Tactical Loudspeaker	1
10535-0707-A003	Speaker Audio Cable Assembly, 3 ft. (~0.9 m)	1
10535-0706-A015	Speaker Power Cable Assembly, 15 ft. (~4.6 m)	1
10181-9821-015	Coax Cable Assembly, 15 ft. (~4.6 m)	1
10181-9834-004	DC Power Cable Assembly, 4 ft. (~1.2 m)	1
10515-0123-4200	400 Watt Installation Manual	1
10535-0720-A015	Control Cable Assembly (R/T to PA), 15 ft. (~4.6 m)	1
12045-4006-A12	Ground Strap	2
12045-4006-A30	Ground Strap	2
12045-4006-A48	Ground Strap	1
10181-9836-002	DC/DC Jumper Cable Assembly	1

TRANSPORTABLE SYSTEMS

125 WATT HF MINI-TRANSIT CASE SYSTEM



RF-7800H-TM004

The RF-7800H-TM004 provides the equipment complement necessary to transform an RF-7800H-MP manpack radio (ordered separately) into a 125 watt PEP/Average HF-SSB mini-transit case system. The transit case adapter provides the durability of a base station with the transport flexibility and portability of a vehicular system. A clip on each corner of the case can be used to clamp the cases together to create a portable rack. If the cases are installed in a shelter and the system needs to be removed, they can be easily separated. All interface cables store in the cases for easy equipment deployment. The adapter facilitates rapid conversion to a manportable configuration. A U.S. power connector (NEMA 5-15P) is supplied as the standard AC power connector. Order UK or EU power cord separately. Color: Black.

Note: Configuration is for HF communications only and will not operate in the 30 to 60 MHz frequency band. RF-5800H-TM004 also available for the RF-5800H-MP or AN/PRC-150(C).

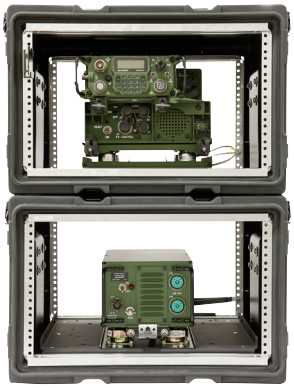
FEATURES

- USB, LSB, CW, and AME operation in the 1.6-30 MHz HF frequency band
- Solid-state, broadband RF power amplifier
- Black double-ended, environmentally sealed cases
- Weight: <80 lbs. (~36.3 kg) per case
- Integrated loudspeaker
- Fully ruggedized per MIL-STD-810G
- Overload protection
- 115 or 230 VAC

The RF-7800H-TM004 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-5832H-PA101	125 Watt Power Amplifier	1
RF-5051-PS001	AC Power Supply	1
RF-5980-SA001	Loudspeaker	1
10535-0707-A003	Speaker Audio Cable Assembly, 3 ft. (~0.9 m)	1
10535-0706-A015	Speaker Power Cable Assembly, 15 ft. (~4.6 m)	1
10181-9821-015	Coax Cable Assembly, 15 ft. (~4.6 m)	1
10181-9833-004	DC Power Cable Assembly, 4 ft. (~1.2 m)	1
10515-0240-4200	125 Watt Installation Manual	1
10535-0720-A015	Control Cable Assembly (PA to R/T), 15 ft. (~4.6 m)	1

150 WATT HF/VHF MINI-TRANSIT CASE SYSTEM



RF-7800H-TM001

The RF-7800H-TM001 provides the equipment complement necessary to transform an RF-7800H-MP manpack radio (ordered separately) into a 150 watt PEP/Average HF-SSB/VHF-FM Mini-Transit Case system. The transit case adapter provides the durability of a base station with the transport flexibility and portability of a vehicular system. A clip on each corner of the case can be used to clamp the cases together to create a portable rack. If the cases are installed in a shelter and the system needs to be removed, the cases easily separate from each other. All interface cables store in the cases for easy equipment deployment. The adapter facilitates rapid conversion to a manportable configuration. A U.S. power connector (NEMA 5-15P) is supplied as the standard AC power connector. Order UK or EU power cord separately. Color: Black (Tan system available by special order).

RF-5800H-TM001 also available for the RF-5800H-MP or AN/PRC-150(C).

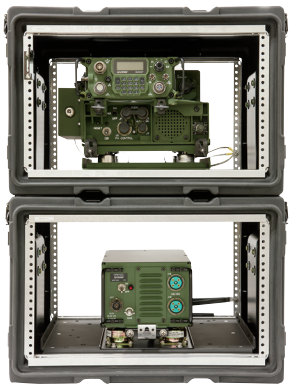
FEATURES

- USB, LSB, CW, AME and FM operation from 1.6-60 MHz
- Solid-state, broadband RF power amplifier
- Built-in loudspeaker
- Separate HF and VHF RF outputs
- Small size and weight
- Fully ruggedized per MIL-STD-810G
- Heatsink fan for continuous keydown
- Overload protection
- 115 or 230 VAC, 47-400 Hz power operation
- Built-In Test (BIT)

The RF-7800H-TM001 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7800H-AD150	RF-7800H 150 Watt Adapter	1
RF-5833H-PA001	150 Watt Power Amplifier	1
RF-5051-PS001	AC Power Supply	1
RF-5071VSM-03	Shock Mount	1
10475-1504-A18	Coax Cable Assembly, 18 in. (~46 cm)	1
10497-5036-01	Audio Cable Assembly, 1 ft. (~30.5 cm)	1
10181-9833-004	DC Power Cable, 4 ft. (~1.2 m)	1
10515-0122-4200	150 Watt Installation Manual	1
10535-0720-B17	Control Cable Assembly (PA to R/T), 17 in. (~43 cm)	1
12045-4006-A18/A24	Ground Cable	1

150 WATT HF/VHF MINI-TRANSIT CASE SYSTEM W/COLLOCATION FILTERING



RF-7800H-TM002

The RF-7800H-TM002 provides the equipment complement necessary to transform an RF-7800H-MP manpack radio (ordered separately) into a 150 watt PEP/Average HF-SSB/VHF-FM mini-transit case system. The adapter includes the RF-5245 Pre/postselector and an HF low-pass filter for the attenuation of unwanted signals in collocated applications. The transit case adapter provides the durability of a base station with the transport flexibility and portability of a vehicular system. A clip on each corner of the case can be used to clamp the cases together to create a portable rack. If the cases are installed in a shelter and the system needs to be removed, the cases separate easily from each other. All interface cables store in the cases for easy equipment deployment. The adapter facilitates rapid conversion to a manportable configuration. A U.S. power connector (NEMA 5-15P) is supplied as the standard AC power connector. Order UK or EU power cord separately. Color: Black.

RF-5800H-TM002 also available for the RF-5800H-MP or AN/PRC-150(C).

FEATURES

- USB, LSB, CW, AME and FM operation in the 1.6-60 MHz frequency band
- 150 watt HF/SSB from 1.6-30 MHz; 60 watt VHF-FM from 30-60 MHz
- Built-in pre/postselector provides attenuation of unwanted signals in collocated applications
- Integral low-pass filter provides attenuation of unwanted signals at frequencies >25 MHz
- Solid-state, broadband RF power amplifier
- Separate HF and VHF RF outputs
- Heatsink fan for continuous keydown operation
- Black double-ended, environmentally sealed cases
- Weight: <80 lbs. (~36.3 kg) per case
- Integral loudspeaker
- Fully ruggedized per MIL-STD-810E
- Overload protection
- 115 or 230 VAC, 47-400 Hz power operation

The RF-7800H-TM002 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7800H-AD150	RF-7800H 150 Watt Adapter	1
RF-5833H-PA004	150 Watt Power Amplifier with RF-5245 Pre/postselector and 25 MHz Low-Pass Filter	1
RF-5051-PS001	AC Power Supply	1
RF-5071VSM-03	Shock Mount	1
10475-1504-A18	Coax Cable Assembly, 18 in. (~46 cm)	1
10497-5036-01	Audio Cable Assembly, 1 ft. (~30.5 cm)	1
10181-9833-004	DC Power Cable, 4 ft. (~1.2 m)	1
10515-0122-4200	150 Watt Installation Manual	1
10535-0720-B17	Control Cable Assembly (PA to R/T), 17 in. (~43 cm)	1
12045-4006-A18/A24	Ground Cable	1

400 WATT HF MINI-TRANSIT CASE SYSTEM

RF-7800H-TM003

The RF-7800H-TM003 provides the equipment complement necessary to transform an RF-7800H-MP manpack radio (ordered separately) into a 400 watt PEP/Average HF-SSB mini-transit case system. The transit case adapter provides the durability of a base station with the transport flexibility and portability of a vehicular system. A clip on each corner of the case can be used to clamp the cases together to create a portable rack. If the cases are installed in a shelter and the system needs to be removed, the cases separate easily. All interface cables store in the cases for easy equipment deployment. The adapter facilitates the conversion to a manportable configuration. A U.S. power connector (NEMA 5-15P) is supplied as the standard AC power connector. Order UK or EU power cord separately. Color: Black

Note: Configuration is for HF communications only and will not operate in the 30 to 60 MHz frequency band. RF-5800H-TM003 also available for the RF-5800H-MP or AN/PRC-150(C).

FEATURES

- USB, LSB, CW, and AME operation in the 1.6-30 MHz HF frequency band
- Solid-state, broadband RF power amplifier
- Black double-ended, environmentally sealed cases
- Weight: <80 lbs. (~36.3 kg) per case
- Integrated loudspeaker
- Fully ruggedized per MIL-STD-810G
- Overload protection
- 115 or 230 VAC, 47-400 Hz power operation
- Built-In Test (BIT)

The RF-7800H-TM003 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-5834H-PA101	400 Watt Power Amplifier	1
10181-9836-002	DC Power Jumper Cable, 2 ft. (~61 cm)	1
RF-5051-PS001	AC Power Supply	2
RF-5980-SA001	Tactical Loudspeaker	1
10181-9821-008	Coax Cable Assembly, 8 ft. (~2.4 m)	1
10535-0707-A002	Speaker Audio Cable Assembly, 2 ft. (~61 cm)	1
10535-0706-A008	Speaker Power Cable Assembly, 8 ft. (~2.4 m)	1
10535-0720-A008	Control Cable Assembly (PA to R/T), 8 ft. (~2.4 m)	1
10515-0123-4200	400 Watt Installation Manual	1
10181-9821-008	R/T to PA (RF) Cable Assembly	1
10181-9834-004	DC Power Cable Assembly	1
12045-4006-A24	Ground Cable	1

150 WATT ANTENNA COUPLER MINI-TRANSIT TWO-CASE SET

RF-5382H-TM001

The RF-5382H-TM001 is a set of two cases designed to complement the RF-5800H-TM001, -TM002, and -TM004 transit mini-case systems. Case 1 contains the antenna coupler, ruggedly mounted on a removable tray. A whip antenna mount is located on the coupler tray. Case 2 is used to store the control and coax cable assemblies that interface to the radio system. Color: Black.

The RF-5382H-TM001 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-5382H-CU001	Antenna Coupler	1
12020-1460-A250	Control Cable, 250 ft. (~76.2 m)	1
10181-9824-250	Coax Cable, 250 ft. (~76.2 m)	1

Case 1:
Weight: 60 lbs. (~27.2 kg)
Dimensions: 22.5 W x 22.5 D x 14.5 H in. (~57.2 W x 57.2 D x 36.8 H cm)

Case 2:
Weight: 20 lbs. (~9 kg)
Dimensions: 22.5 W x 22.5 D x 24.5 H in. (~57.2 W x 57.2 D x 62.2 H cm)

400 WATT ANTENNA COUPLER MINI-TRANSIT TWO-CASE SET

RF-382A-15TM

The RF-382A-15TM is a set of two cases designed to complement the RF-5800H-TM003 400 watt Transit Mini-Case System. Case 1 contains the antenna coupler, ruggedly mounted on a removable tray. A whip antenna mount is located on the coupler tray. Case 2 is used to store the control and coax cable assemblies that interface to the radio system. Color: Black.

The RF-382A-15TM includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-382A-15	Antenna Coupler	1
10181-9823-250	Coupler Control Cable, 250 ft. (~76.2 m)	1
10181-9824-250	Coax Cable, 250 ft. (~76.2 m)	1

Case 1:
Weight: 65 lbs. (~29.5 kg)
Dimensions: 22.5 W x 22.5 D x 14.5 H in. (~57.2 W x 57.2 D x 36.8 H cm)

Case 2:
Weight: 20 lbs. (~9 kg)
Dimensions: 22.5 W x 22.5 D x 24.5 H in. (~57.2 W x 57.2 D x 62.2 H cm)

FALCON II & III HF POWER AMPLIFIERS

OVERVIEW

RF-5832-PA101: 125 WATT HF POWER AMPLIFIER

The RF-5832H-PA101 amplifies the output of the RF-7800H-MP, RF-5800H-MP or AN/PRC-150(C) manpack radio HF transceivers to 125 watt PEP/Average. RF-7800H-MP requires use of RF-7800H-AD125 Adapter (ordered separately). The RF-5832H-PA101 is a solid-state, broadband, 1.6 to 30 MHz RF power amplifier containing an integral power supply, control circuits, and harmonic filters. Control is derived from the HF transceiver. The power amplifier can be remoted from the HF transceiver up to distances of 150 feet (~46 meters). An external automatic antenna coupler, RF-5382H-CU001 or RF-382A-15, is required for proper operation with a whip or other non-broadband antennas.

STANDARD FEATURES

- Supports external reprogramming capability
- Solid-state power amplifier
- Small size and weight
- Ruggedized for reliable operation in extreme environments; MIL-STD-810G compliant
- Overload protection
- Built-In Test (BIT)

RF-5833H-PA: 150 WATT HF/VHF POWER AMPLIFIER

The RF-5833H-PAXXX is a solid-state, broadband RF power amplifier (PA) that covers 1.6 to 60 MHz. It includes an integral power supply and control circuits. This PA increases the output power of the RF-7800H-MP, RF-5800H-MP or AN/PRC-150(C) manpack radio HF transceivers to 150 watt PEP/Average power for SSB and 60 watt PEP/Average power for FM. The RF-5833H-PA, coupled with a transceiver, provides base station range, performance, and features in a "jerk-and-run" application. The RF-5833H-PA includes a standard fan for continuous keydown and an optional built-in pre/postselector for optimum collocation performance. Its compact profile uses half the space of a comparable power amplifier and pre/postselector.

STANDARD FEATURES

- "Jerk-and-run" configuration
- Internal digital pre/postselector (in RF-5833H-PA002/PA004 version)
- Heatsink fan for continuous keydown
- External programming
- Compact profile
- Dual antenna outputs (HF and VHF)
- Fully ruggedized design per MIL-STD-810G
- Overload protection
- Built-In-Test (BIT)

RF-5834H-PA101: 400 WATT HF POWER AMPLIFIER

The RF-5834H-PA101 Power Amplifier (PA) increases the output of the RF-7800H-MP, RF-5800H-MP or AN/PRC-150(C) manpack radio HF transceivers to 400 watt PEP/Average and is used in high-power applications. The RF-7800H-MP requires use of the RF-7800H-AD400 Adapter (ordered separately). The RF-5834H-PA is a solid-state, broadband, 1.6 to 30 MHz RF power amplifier containing an integral power supply, control circuits, and harmonic filters.

STANDARD FEATURES

- Solid-state power amplifier
- Improved performance
- Ruggedized for reliable operation in extreme environments; MIL-STD-810G compliant
- Overload protection
- Built-In Test (BIT)

SPECIFICATIONS FOR FALCON II & III POWER AMPLIFIERS

GENERAL	RF-5832-PA101	RF-5833H-PAXXX	RRF-5834H-PA101
Frequency Range	1.600000 to 29.99999 MHz	1.60000 to 59.99999 MHz	1.60000 to 29.99999 MHz
Modes of Operation	• J3E (single sideband, upper or lower, suppressed carrier telephony) • H3E (compatible AM single sideband plus full carrier telephony) • J2A MCW (single sideband suppressed carrier keyed tone)	• JJ3E (single sideband, upper or lower, suppressed carrier telephony) • JH3E (compatible AM single sideband plus full carrier telephony) • JF3E (FM Telephone) AIA, J2A, selectable (compatible CW)	• JJ3E (single sideband, upper or lower, suppressed carrier telephony) • H3E (compatible AM single sideband plus full carrier telephony) • J2A MCW (single sideband suppressed carrier keyed tone)
RF Input/Output Impedance	50 ohm nominal, unbalance	50 ohm (nominal), unbalanced	50 ohm (nominal), unbalanced
RF Output	N/A	50 ohm nominal load impedance unbalanced HF connector: Type N VHF connector: Type BNC	N/A
Power Input	+26.4 VDC nominal, @15 Amps., maximum	+28.0 VDC @ 20 Amps, maximum	+26.4 VDC (per MIL-STD-1275) @ 55 Amps, maximum
Temperature Range	–40°C to +70°C	–40°C to +70°C	Continuous Duty: –40°C to +55°C; Voice and High-Speed Data: –40°C to +70°C
PHYSICAL			
Dimensions	7.5 W x 10.0 D x 5.5 H in. (~19.0 W x 25.5 D x 14.0 H cm)	**RF-5833H-PA001:** 10.4 W x 15.5 D x 6.6 H in. (~26.4 W x 39.4 D x 16.8 H cm) **RF-5833H-PA002:** 12.8 W x 15.5 D x 6.6 W in. (~32.5 W x 39.4 D x 16.8 H cm)	12 W x 16.4 D x 7.7 W in. (~30.5 W x 41.7 D x 19.6 H cm)
Weight	13.0 lbs. (~5.9 kg)	27 lbs. (~12 kg)	45 lbs. (~20.5 kg)
Color	CARC Green 383	N/A	N/A
ENVIRONMENTAL			
Shock/Vibration	MIL-STD-810E	MIL-STD-810E	MIL-STD-810D
Leakage	MIL-STD-810E (1 meter depth)	MIL-STD-810E (1 meter depth for PA without cooling fan)	MIL-STD-810D (1 meter depth)
Humidity	MIL-STD-810E (0 to 95%)	MIL-STD-810E (0 to 95%)	MIL-STD-810D (0 to 95%)
POWER AMPLIFIER			
Power Output	125 watts PEP/average into 50 ohm (Variable level control from transceiver to –12dB maximum)	150 watts PEP/average into 50 ohm ±1 dB (1.6 MHz to 29.99999 MHz) 60 watts PEP/Average into 50 ohm (30.0 MHz to 59.99999)	400 Watt PEP/average into 50 ohms (Variable level control from transceiver to –15 dB maximum
RF Drive Requirements	Nominal 100 mW (+20 dBm)	Nominal 100 mW (+20 dBm)	Nominal 100 mW (+20 dBm)
Intermodulation Distortion	–30 dB from either tone of a two-tone envelope at 125 watts PEP	–25 dB from either tone of a two-tone envelope at 150 watts PEP	–30 dB below PEP
Harmonic Output	–40 dB	–45 dBc below 150 watts PEP	–40 dB
CONFIGURATION OPTIONS			
RF-5833H-PA001	N/A	150 Watt Power Amplifier	N/A
RF-5833H-PA002	N/A	150 Watt Power Amplifier with embedded (25 dB) Pre/postselector	N/A
RF-5833H-PA003	N/A	150 Watt Power Amplifier with low pass filter	N/A
RF-5833H-PA004	N/A	150 Watt Power Amplifier with low pass filter and embedded (25 dB) Pre/postselector	N/A

COLLOCATION AND FILTERING

DIGITAL PRE/POSTSELECTOR AND LOW-PASS FILTERS

RF-5245

The RF-5245 is an internal, compact solution to collocation filtering for RF-5833H-PA 150 watt HF/VHF radio systems. Used in high interference or collocated environments, the Pre/postselector provides superior radio system performance. Built-in test of this option is provided by the comprehensive BITE of the standard RF-7800H-MP or RF-5800H-MP radio system.

FEATURES

- 1.6-30 MHz frequency range
- 25 dB of attenuation of unwanted signals at frequencies 10% or greater from the carrier
- Fully automatic tuning and switching with no user control required
- Ruggedized for reliable operation in extreme environments
- Rapid tune time of 20 ms or less
- Fully protected against signals up to 300 VRMS
- Embedded in the RF-5833H-PA002 and RF-5833H-PA004 150 Watt Power Amplifier

The RF-5245 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
10497-1800-01	Digital Pre/postselector Module	1
10497-1802-01	Support Block	1
10497-1131-01	Cable Assembly, BNC-to-SMB, 1 ft. (~30.5 cm)	1
10497-1132-03	Cable Assembly, SMB-to-SMB, 3 ft. (~0.9 m)	1

200 WATT LOW-PASS FILTER KIT FOR THE RF-5832H-PA 125 WATT POWER AMPLIFIER

10497-0340-01

The 10497-0340-01 Low-Pass Filter Kit is used to reduce transmitter and receiver signals from 25 MHz and above. Its ultimate stop band is greater than -60 dB from 25 to 90 MHz. Finish/Color: CARC Green 383.

The kit contains all items necessary to mount the low-pass filter to a flat surface:

PRODUCT NUMBER	PRODUCT NAME	QTY
10497-0350-01	Low-Pass Filter, 200 watt	1
10497-0358-A08	Ground Strap	1
10497-0356-01	Mounting Plate	1

200 WATT LOW-PASS FILTER KIT FOR THE RF-5833H-PA 150 WATT POWER AMPLIFIER

10497-0360-02

The 10497-0360-02 Low-Pass Filter Kit is used to reduce transmitter and receiver signals from 25 MHz and above. Its ultimate stop band is greater than -60 dB from 25 to 90 MHz. The 10497-0360-02 is included in the RF-5800H-V002 Vehicular Adapter, RF-5800H-B002 Base Station Adapter, and the RF-5800H-TM002 Transit Case Adapter. Finish/Color: CARC Green 383.

The kit contains all items necessary to attach to the RF-5833H-PA:

PRODUCT NUMBER	PRODUCT NAME	QTY
10497-0350-01	Low-Pass Filter, 200 watt	1
10497-0357-01	Ground Strap	1
10497-0363-01	Coax Cable	1

500 WATT LOW-PASS FILTER KIT FOR THE RF-5834H-PA 400 WATT POWER AMPLIFIER AND THE RF-7800H-V003 400 WATT VEHICULAR ADAPTER

10286-0900-01

The 10286-0900-01 Low-Pass Filter Kit is used to reduce transmitter and receiver signals from 25 MHz and above. Its ultimate stop band is greater than -60 dB from 25 to 90 MHz. Finish/Color: CARC Green 383.

The kit contains all items necessary to mount to the low-pass filter in the RF-5800H-V003 Vehicular Adapter:

PRODUCT NUMBER	PRODUCT NAME	QTY
10564-1720-05	Low-Pass Filter, 500 Watt	1
10181-9825-002	Coax Cable, N-to-N, 1 ft. (~30.5 cm)	1
10400-1136-A30	Ground Strap	1
10286-1162-01	Bracket	1

500 WATT LOW-PASS FILTER KIT FOR THE RF-5834H-PA 400 WATT POWER AMPLIFIER AND THE RF-5800H-B003 400 WATT BASE STATION ADAPTER

10286-0900-02

The 10286-0900-02 Low-Pass Filter Kit is used to reduce transmitter and receiver signals from 25 MHz and above. Its ultimate stop band is greater than -60 dB from 25 to 90 MHz. Finish/Color: CARC Green 383.

The kit contains all items necessary to mount to the low-pass filter in the RF-5800H-B003 Base Station Adapter:

PRODUCT NUMBER	PRODUCT NAME	QTY
10564-1720-05	Low-Pass Filter, 500 watt	1
10181-9825-001	Coax Cable, N-to-N, 1 ft. (~30.5 cm)	1
10400-1136-A09	Ground Strap	1

DIGITAL PRE/POSTSELECTOR FOR HF SYSTEMS

RF-5845H-PP101

The Pre/postselector provides significant attenuation of both unwanted receive signals and spurious transmitter outputs for 125 watt and 400 watt HF systems. Used in high-interference or collocated environments, the Pre/postselector provides greater than 40 dB attenuation of unwanted signals at frequencies 10% removed from the carrier frequency. Built-in test (BIT) and all operational controls are from the transceiver front panel. CARC Green 383.

FEATURES

- 1.6-30 MHz frequency range
- Fully automatic tuning and switching with no user controls required
- Ruggedized for reliable operation in extreme environments; MIL-STD-810D compliant
- Rapid tune time of less than 20 ms
- Fully protected against signals up to 300 volts RMS

The RF-5845H-PP101 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
10394-1140-01	Coax Cable, Pre/postselector J3 to J4, N-to-BNC, 1 ft. (~30.5 cm)	1
RF-5845H-PP101	Digital Pre/postselector	1
10394-9011-006	Control Cable, Pre/postselector to Power Amplifier, 6 ft. (~1.8 m)	1
10394-9020-006	Coax Cable, R/T to Pre/postselector, BNC-to-BNC, 6 ft. (~1.8 m)	1
10394-9050-006	Coax Cable, Pre/postselector to Power Amplifier, N-to-N, 6 ft. (~1.8 m)	1
10535-0720-C006	Control Cable, R/T to Pre/postselector, 6 ft. (~1.8 m)	1
10394-9021-006	Coax Cable, Pre/postselector to Power Amplifier, BNC-to-BNC, 6 ft. (~1.8 m)	1
10515-0246-4100	Operations Manual	1

ANTENNA COUPLERS

150 WATT HF FAST-TUNE ANTENNA COUPLER

RF-5382H-CU001

The RF-5382H-CU001 automatically matches the output of transceivers and power amplifiers to a wide variety of whip, dipole, and long-wire antennas over the 1.6 to 30 MHz frequency range. The coupler features Built-In Test (BIT), overload, and lightning surge protection and is designed to handle 150 watt PEP/Average. It includes a 50-ohm output connector (type N female) for applications where it is desirable to quickly change from tuning a whip antenna to tuning a 50-ohm antenna. It provides automatic switching to the 50-ohm port for VHF (30 to 60 MHz) operation. Typical tune time is 150 milliseconds after an initial learning tune cycle of typically less than one second. The antenna coupler requires lengths of coaxial and control cable for operation; see the Cables section in the Common Accessories chapter. Finish/Color: CARC Green 383 (CARC Tan and Navy Gray available by special order.)

The RF-5382H-CU001 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12020-0003-01	Ground Strap	1
12020-1350-02	High Voltage Safety Shield	1
10181-9824-XXX	Common Coupler Interface Cables	1
12020-1460-XXX	Common Coupler Interface Cables	1

COAX AND CONTROL CABLES

PRODUCT NUMBER	PRODUCT NAME
10181-9824-XXX	Coaxial Cable
12020-1460-AXXX	Coupler Control Cable

XXX - Indicates length in feet; 250 feet is the maximum length.

400 WATT HF FAST-TUNE AUTOMATIC ANTENNA COUPLER

RF-382A-15

The RF-382A-15 automatically matches the output of power amplifiers to a wide variety of whip, dipole, and long-wire antennas over the 1.6 to 30 MHz frequency range. The coupler features Built-In Test (BIT), overload, and lightning surge protection. It includes a 50-ohm output connector (type N female) for applications where a quick change from tuning a whip antenna to tuning a 50-ohm antenna is desirable. Its tune time is 200 milliseconds after an initial learning tune cycle of typically less than three seconds. The antenna coupler requires lengths of coaxial and control cable for operation; see Cables section in the Common Accessories chapter. Finish/Color: CARC Green 383.

The RF-382A-15 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
10515-0379-4300	Intermediate Maintenance Manual	1
10208-0009	Ground Strap	1
10181-9823-XXX	Common Coupler Interface Cables	1
10181-9824-XXX	Common Coupler Interface Cables	1

COAX AND CONTROL CABLES

PRODUCT NUMBER	PRODUCT NAME
10181-9824-XXX	Coaxial Cable
10181-9823-XXX	Coupler Control Cable

XXX - Indicates length in feet; 250 feet is the maximum length.

HF ACCESSORIES

The RF-7800H is compatible with Falcon II HF accessories. See the Common Accessories and Antennas chapters for more information.

ADAPTERS

PRODUCT NUMBER	DESCRIPTION
RF-7800H-AD020	Adapter to use the RF-7800H-MP with RF-5800H-V006 20 Watt System
RF-7800H-AD125	Adapter to use the RF-7800H-MP with RF-5832H-125W PA Power Amplifiers
RF-7800H-AD150	Adapter to use the RF-7800H-MP with RF-5833H-150W PA Power Amplifiers
RF-7800H-AD400	Adapter to use the RF-7800H-MP with RF-5834H-400W PA Power Amplifiers

ANTENNA COUPLERS

PRODUCT NUMBER	PRODUCT NAME
RF-5382H-CU001	150 Watt HF Fast-Tune Antenna Coupler
RF-382A-15	400 Watt HF Fast-Tune Antenna Coupler (RF-382 is only interfaced to RF-7800H through an external power amplifier)
RF-5382H-TM001	150 Watt Antenna Coupler Mini-Transit Two Case Set
RF-382A-15TM	400 Watt Antenna Coupler Mini-Transit Two Case Set
RF-5382H-TM001	150 Watt Antenna Coupler Mini-Transit Two Case Set
10181-9832-XXX	Coupler Control Cable
10181-9824-XXX	Coax Cable
12020-1460-AXXX	Coupler Control Cable

AUDIO PRODUCTS

PRODUCT NUMBER	PRODUCT NAME
10075-1399	H-250/U Lightweight Handset (Modified)
RF-3016-03	CW Key with Knee Clip
RF-3016-04	CW Key—Base Station
RF-3014-02	Headset with Boom Microphone–Dual Earpiece
RF-3020-HSXXX	Lightweight Submersible Headset
RF-5980-SA001	Tactical Amplified Speaker
RF-5982-SA001	Amplified Speaker
RF-5983-SA001	KDU Speaker

BATTERIES

Operation with non-rechargeable batteries will result in lower power output due to battery limitations.

PRODUCT NUMBER	PRODUCT NAME
BB-2590/U	Rechargeable Li Ion
BB-390B/U	Rechargeable NiMH
BA-5590/U	Non-Rechargeable Li Ion
BA-5390/U	Non-Rechargeable Li Mn Ion

BATTERY CHARGERS

PRODUCT NUMBER	PRODUCT NAME
RF-5058-CH002	Two-Bay Charger/Conditioner
RF-5058-CH006	Six-Bay Charger/Conditioner

CABLES

PRODUCT NUMBER	PRODUCT NAME
10535-0740-A006	ASCII Remote Control Cable, 6 ft. (~1.8 m)
10535-0760-AXXX	ASCII Remote Control via Rear D-Connector
10535-0730-A1	ASCII Remote Control and PA Control Y-Cable
10535-0775-AXXX	RF-5800H-MP Simultaneous Control and Data PPP/RDP RS-232
10535-0780-AXXX	Synchronous DTE Data
10511-0704-XXX	KDU Extension Cable
10372-1230	Microphone Y-Adapter Cable
10518-1694-AXXX	Data and Remote Control Y-Cable, J3
10535-0707-AXXX	Audio Speaker Cable
10012-0714-01	RF-5800H-MP to RF-3045 Audio Remote Control
10535-0704-AXXX	AN/VIC-3 Audio to R/T, RF-5800H-MP to Intercom
10564-1670-AXXX	AN/VIC-1 Audio to R/T
10564-1671-A006	AN/VIC-3 Audio and Data to R/T, 6 ft. (~1.8 m)
10564-1672-AXXX	AN/VIC-1 Audio and Data to R/T
10511-0707-AXXX	Generic Audio/Data Cable, J3
10535-0720-AXXX	Power Amplifier Control Cable
10181-9824-XXX	RF Coax Cable, N-to-N
10181-9826-XXX	DC Power Cable, 5-Pin to Pigtail, Vehicle to PA
10181-9828-XXX	DC Power Cable, 4-Pin to Pigtail, Vehicle to PA
10181-9834-XXX	DC Power Cable, 4-Pin 400W Amplifier to 4-Pin Power Supply
10181-9833-XXX	DC Power Cable, 5-Pin Amplifier to 4-Pin Power Supply
12020-0710-XXX	Cable Assembly, RF-5382 Antenna Coupler to R/T
E75-0017-XXX	GPS Extension Cable, R/T to 10511-0400-01 GPS Antenna, 15 ft. (~4.6 m)
10535-0720-A006	PA Control Cable, 6 ft. (~1.8 m)
10181-9824-006	RF Coax Cable, 6 ft. (~1.8 m)
10535-0720-XXX	PA Control Cable
10535-0720-B17	PA to R/T Control Cable, 17 in. (~43 cm)
10181-9821-XXX	RF Coax Cable, R/T to PA
10181-9825-XXX	RF Coax Cable, PA to Coupler
10181-9823-XXX	PA to Coupler Control Cable
12045-5700-AXX	R/T to Distribution Panel
12020-1460-XXX	Coupler Control Cable
10369-7211-XXX	RF Coaxial Cable (N-to-BNC) for 20 Watt Systems (RF-5800H-V006)
12020-1460-AXXX	Coupler Control Cable (RF-5382H-CU001)
12020-0710-BX	Cable Assembly, RF-5382 Antenna Coupler to R/T (100 ft./~30.1 m max)

COLLOCATION AND FILTERING

PRODUCT NUMBER	PRODUCT NAME
10497-0340-01	Low-Pass Filter Kit for the RF-5832H-PA101 125 Watt Power Amplifier
10497-0360-01	Low-Pass Filter Kit for the RF-5833H-PA 150 Watt Power Amplifier
RF-5245	Digital Pre/postselector Option for the RF-5833H-PA 150 Watt Power Amplifier
10286-0900-01	500 Watt Low-Pass Filter Kit for the RF-5834H-PA001/PA101 400 Watt Power Amplifier and RF-5800H-V003 400 Watt Vehicular Adapter
10286-0900-02	500 Watt Low-Pass Filter Kit for the RF-5834H-PA001/PA101 400 Watt Power Amplifier and RF-5800H-B003 400 Watt Base Station Adapter
RF-5845H-PP101	Digital Pre/postselector
10497-0360-02	Low-Pass Filter Kit for the RF-5833H-PA 150 Watt Power Amplifier

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
RF-5211VSM	R/T Shock Mount
10372-0874-01	Security Locking Kit for RF-5211VSM
RF-5870-VM001	Adjustable Shock Mount for the RF-5800H-MP with Batteries or Battery Eliminator
RF-5870-VM002	Security Locking Kit for RF-5870-VM001
RF-5071VSM-03	Single Shock Mount for RF-5832H-PA101 125 Watt Power Amplifier or RF-5051-PS125 Power Supply
RF-5072VSM-03	Dual Shock Mount for two RF-5832H-PA101 Power Amplifiers, two RF-5051-PS Power Supplies, or RF-5845H-PP001 Pre/postselector
RF-5073VSM	System Shock Mount for RF-5833H-PA 150 Watt Power Amplifier
10497-0870-01	Security Locking Kit for the 150 Watt System
RF-5074VSM-03	Single Shock Mount for RF-5834H-PA 400 Watt Power Amplifier
RF-5384VM-01	Shock Mount (required for mobile applications)
RF-383VM-01	Shock Mount for Tracked Vehicles (required for mobile applications)
RF-384VM-03	Shock Mount for Wheeled Vehicles (required for mobile applications)

POWER ADAPTER

PRODUCT NUMBER	PRODUCT NAME
RF-5054-PS001	AC/DC Power Supply

POWER SUPPLIES

PRODUCT NUMBER	PRODUCT NAME
RF-5850-PS001	AC/DC Power Adapter
RF-5851-AD001	DC Power Adapter
RF-5054-PS001	AC/DC Power Supply
RF-5910-PS003	Power Supply—AC/DC Input with Li Ion battery
RF-5051-PS001	AC Power Supply
RF-5055PS	AC/DC Power Supply
RF-5056PS	12/24 Volt DC/DC Converter
RF-5061-PS001	12/24 Volt DC/DC Converter

REMOTE CONTROL

PRODUCT NUMBER	PRODUCT NAME
12027-0050-075	Short Distance Remoting Kit
RF-7800R-RC011	Remote Control System
12097-0100-01	FII Remote KDU Kit, Green, 6 ft. (~1.8 m)

SHIELDING

PRODUCT NUMBER	DESCRIPTION
12020-1194-01	Antenna Coupler Sun Shield. Painted aluminum shield to protect RF-5382H-CU001 Antenna Coupler from prolonged exposure to direct sunlight in tropic and subtropic environments where daytime temperatures typically exceed 95° F (35° C). This unit is intended for base station or vehicular-mounted antenna couplers and may be added to existing installations.
12020-1350-02	High Voltage Shield Assembly
10330-9250	Sun Shield for the RF-382A-15 Antenna Coupler. Painted aluminum shield to protect RF-382A-15 Antenna Coupler from prolonged exposure to direct sunlight in tropic and subtropic environments where daytime temperatures typically exceed 95° F (35° C). This unit is intended for base station or vehicular-mounted antenna couplers, and may be added to existing installations.
10208-0014-01	High-Voltage Safety Cover for the RF-382A-15 Antenna Coupler. Cover assembly snaps onto the antenna coupler handle to enclose the insulator assembly.

SOFT GOODS (CARRYING ACCESSORIES)

PRODUCT NUMBER	PRODUCT NAME
RF-5930-CA001	Falcon II Backpack
RF-5931-CAXXX	KDU Pouch

SOFTWARE

PRODUCT NUMBER	PRODUCT NAME
RF-6760W-03EN	Wireless Messaging Terminal
RF-6705-SW001	IP-based Tactical Messaging
RF-5410-EN001	FalconCommand
RF-6550K	Key Generation Application
RF-3700H-02EN	HUITS PCMCIA
RF-3700H-04EN	HUITS PCI
10535-0725-02	EPI Kit

SPARES KITS

PRODUCT NUMBER	DESCRIPTION
RF-5834H-SK001	For the RF-5834H-PA001/PA101 400 Watt Power Amplifier
RF-5834H-SK101	For the RF-5834H-PA001/PA101 400 Watt Power Amplifier

TECHNICAL MANUALS

PRODUCT NUMBER	PRODUCT NAME
10515-0413-4200	Operator's Manual
10515-0413-4100	Field Reference Guide
10515-0413-4000	Operator's Card
10515-6648	Instruction Sheet for Dismount Dipole Adapter
10515-0413-4300	Intermediate Maintenance Manual
10515-0103-4100	Operation Manual
10515-0103-4001	Operator Reference Guide
10515-0103-4300	Intermediate Maintenance Manual
10515-0103-7200	IMITS AN/PRC-150 Level 2
10515-0101-7100	Video Tutorial AN/PRC-150
10515-0245-4300	Intermediate Maintenance Manual
10515-0122-4300	Power Amplifier Intermediate Maintenance Manual
10515-0289-4200	20 Watt System Installation Manual
10515-0124-4200	125 Watt Installation Manual
10515-0122-4200	Power Amplifier Installation Manual
10515-0122-4200	Power Amplifier Installation Manual
10515-0123-4300	400 Watt Power Amplifier Intermediate Maintenance Manual
10515-0123-4200	400 Watt Installation Manual
10515-0154-4300	Intermediate Maintenance Manual

HF/LF DATA MODEM

9600/19,200 BPS HF/LF DATA MODEM

RF-5710A-MD001

The RF-5710A-MD001 is an advanced, high-speed HF, dual-channel data modem that provides 19,200 bps data. It operates from 85 to 264 VAC, 47 to 440 Hz and also supports higher speed LF/MF transmissions using the STANAG 5065 MSK waveform. It is compliant with the waveform and performance requirements of MIL-STD-188-110B, STANAG 4285, STANAG 4481, STANAG 4529, STANAG 4415, STANAG 5065 and MIL-STD-188-110B Appendices C and F.

A powerful adaptive equalizer eliminates the effects of inter-symbol interference from HF multi-path, and performance is further enhanced by convolutional Forward Error Correction (FEC) and Viterbi soft decision decoding at all data rates from 75 to 9600 bits per second (bps). The RF-5710A-MD001 has the ability to auto-detect incoming signals of MIL-STD-188-110B Serial Tone, MIL-STD-188-110B QAM (9600 bps), and STANAG 4415, allowing fully automatic operation from 75 to 12,800 bps. Adaptive excision filtering, which can automatically remove up to four simultaneous interfering signals, provides considerable protection against co-channel interference.

Waveform, data rate and other modem parameters are selectable from the front panel keys and LCD display or via the remote control interface. The RF-5710A-MD001 is provided with a "multidrop" remote control bus that can address multiple modems on the same bus. The remote control commands comply with the requirements of STANAG 5066 Annex E. The RF-5710A-MD001 also provides flexible electrical interfaces that ensure compatibility with a wide range of radio, cryptographic and terminal equipment.

The RF-5710A-MD001 is interoperable with the RF-5285MD(E), the RF-5800H-MP embedded modem, and the RF-5710A-MD002. The RF-5710A-MD001 modem includes a rack kit for mounting a single RF-5710A in a standard 19-inch (~48-centimeter) rack. Modems can be mounted in pairs (side-by-side) with the optional RF-5710A-RM001 Dual Rack Mount Kit. Both a European standard VII dual earthing power cord and a U.S. power cord are included. Product documentation, including a manual, is provided on CD-ROM. Color: Navy Gray.

RF-5710A-MD001 WAVEFORMS

WAVEFORM	MODE	DATA RATES
MIL-STD-188-110B, Appendix C, STANAG 4539*	Coded PSK/QAM Uncoded QAM	3200, 4800, 6400, 8000, 9600 bps 12800 bps
MIL-STD-188-110B, Appendix F	Coded PSK/QAM	9600, 12800, 16000, 19200 bps
MIL-STD-188-110B, Appendix B	Coded 39 tone QSPSK	75, 150, 300, 600, 1200, 2400 bps
STANAG 4285	Coded PSK Uncoded PSK	75, 150, 300, 600, 1200, 2400 bps 1200, 2400, 3600 bps
MIL-STD-188-110B*	Coded PSK Uncoded PSK	75, 150, 300, 600, 1200, 2400 bps 4800 bps
STANAG 4529	Coded PSK Uncoded PSK	75, 150, 300, 600, 1200 bps 600, 1200, 1800 bps
STANAG 4415*	Coded PSK	75 bps (NATO Robust Waveform)
STANAG 4481	Coded PSK/FSK	300 bps/75 bps
FSK	FSK	50, 75, 100, 150, 300, 600 bps
STANAG 5065	MSK (LF)/FSK (LF)	300 bps/75 bps

**Includes auto-detect between MIL-STD-188-110B (Serial Tone), MIL-STD-188-110B/STANAG 4539 (QAM), and STANAG 4415.*

ACCESSORIES

See the Common Accessories and Antennas chapters for more information.

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
RF-5710A-RM001	Dual Rack Mount Kit

TECHNICAL MANUALS

PRODUCT NUMBER	PRODUCT NAME
10515-0135-4300	HF/LF Modem Intermediate Maintenance Manual (Paper copy)
10515-0135-6000	HF/LF Modem Intermediate Maintenance Manual (CD-ROM)

BATTLE MANAGEMENT SYSTEMS

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SOFTWARE

The latest addition to the Harris software products is a suite of Android Applications designed for the RF-3590 Ruggedized Tablet. These applications leverage and reinforce the unique data capabilities of Falcon II® and Falcon III® tactical radios beyond voice communications, allowing users to control radio functionality from an Android edge device, send messages and pictures, watch video from Unmanned Aerial Vehicles and see their positions on a map relative to other forces. In addition to Android development, the Harris ruggedized, fully tested computers continue to provide high-performing command and control (C2), data and imaging products that are fully integrated with Windows operating systems.

FalconCommand™ is a Windows-based integrated command and control system with features such as digital map display, situational awareness, Blue Force Tracking, terrain and mobility analysis, instant messaging and collaborative planning. These products also interoperate with Falcon II and Falcon III radios.

The RF-6760W Wireless Message Terminal (WMT) software provides transparent email and file transfer over HF, VHF, UHF and other media, while RF-6705 Tactical Chat IP provides reliable exchange of generic text messages and imagery files among field and data terminals and networked computing devices using Falcon II and Falcon III radios.

The RF-6650 Communications Planning Application (CPA) provides planning and programming capability for Harris Falcon II and Falcon III tactical radio products.

HARRIS®

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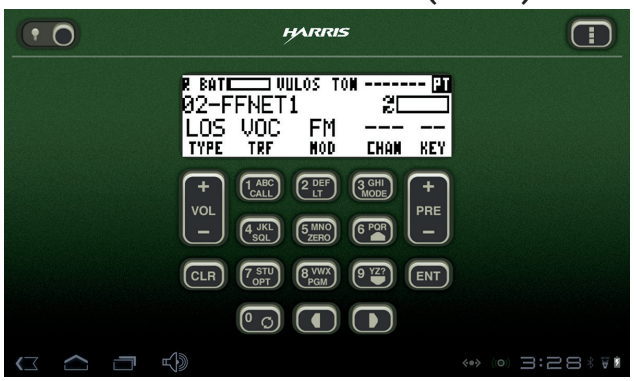
ANDROID APPLICATIONS

SOFT KEYPAD DISPLAY UNIT (SKDU)



RF-ANDKDU-SW001

The RF-ANDKDU allows the user to control an AN/PRC-117G, AN/PRC-152A, RF-7800M-MP or RF-7800M-HH using an Android Application, when tethered to the RF-3590 Ruggedized Tablet. All features typically accessed via the radio's front panel are controlled through an Android device instead, allowing the radio to remain stowed away in a rucksack, vehicular installation, or side holster.

The application is optimized to run on the RF-3590 Harris Ruggedized Tablet, Android v.4.0 (Ice Cream Sandwich) and future releases. It can be scaled to an Android widget for home screen customization and includes light and dark themes for sunlight readability, as well as landscape and portrait orientations.

FEATURES

- Provides direct radio control from Harris RF-3590 Ruggedized Tablet
- Full control of all radio features accessible through radio's physical front panel
- Light and dark themes for optimal readability in varying light conditions
- Android widget support
- Portrait and landscape orientations

ORDERING INFORMATION

SOFTWARE	MEDIA	OPERATING SYSTEM REQUIREMENTS	SUPPORTED RADIO EQUIPMENT
RF-ANDKDU	SD Card	Android 4.0 (Ice Cream Sandwich) and newer versions	AN/PRC-117G, AN/PRC-152A, RF-7800M-MP, RF-7800M-HH, RF-330E

ACCESSORIES

See the Common Accessories chapter or the Tactical ISR and Network Systems chapter for more information.

PRODUCT NUMBER	PRODUCT NAME
RF-3590	Ruggedized Tablet Series
12043-2750-A006	USB Programming Cable

TACTICAL CHAT™ IP ANDROID

RF-6705AN-SW001

The RF-6705AN Tactical Chat IP Android software was modeled after its Windows-based predecessor, the RF-6705 Tactical Chat IP. The RF-6705AN has the look, feel, and ease-of-use found in today's commercial instant messaging applications. Text messages, picture messages and files over Internet Protocol (IP) networks can be reliably transferred.

Like the RF-6705 Tactical Chat IP, the RF-6705AN Android variant supports both point-to-point and subnet-directed broadcast data transfer among members on an IP subnetwork. Messages can easily be exchanged between wired (Ethernet LAN) and wireless network users (Wi-Fi or Harris radio networking) by leveraging the IP data capabilities of Harris Falcon II® and Falcon III® radios.

Unique to the RF-6705AN is the ability to seamlessly take a picture using the RF-3590 Ruggedized Tablet's camera, attach it to a message, and distribute to other users. Files and images already saved in the Tablet's gallery can also be attached and sent.

The application is optimized to run on the RF-3590 Harris Ruggedized Tablet, Android v.4.0 (Ice Cream Sandwich) and future releases. It includes light and dark themes for sunlight readability, as well as landscape and portrait orientations.

The RF-6705AN runs on Android devices and connects to the radio via USB interface. No additional communications equipment is required.

FEATURES

- Chat message application modeled after commercial instant messaging
- Seamlessly integrates with gallery and on-board RF-3590 Ruggedized Tablet camera for image distribution
- Reliable message/file transfer over tactial radio networks even when voice links cannot be established
- Compatible with RF-6705 (Windows version}

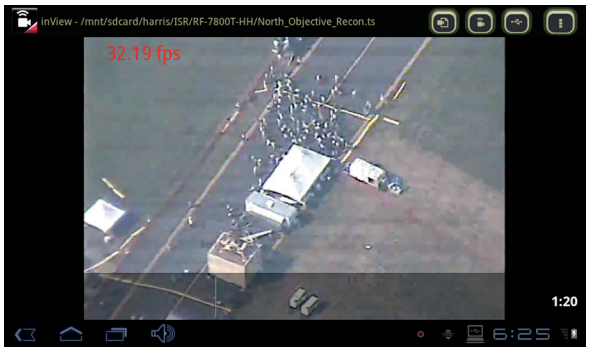
ORDERING INFORMATION

SOFTWARE	MEDIA	OPERATING SYSTEM REQUIREMENTS
RF-6705AN	SD Card	Android 4.0 (Ice Cream Sandwich) and newer versions

ACCESSORIES

See the Common Accessories chapter or the Tactical ISR and Network Systems chapter for more information.

HARRIS VIDEO PLAYER (HVP)



RF-ANDVP-SW001

View streaming, networked, or saved video files on the RF-3590 Ruggedized Tablet by running the RF-ANDVP-SW001 Harris Video Player (HVP). Unlike commercial market offerings, the RF-ANDVP has the ability to decode and display ROVER analog waveform streams and Small Unmanned Aerial System (SUAS) Digital Data Links (DDL).

When running on a RF-3590 Ruggedized Tablet, the RF-ANDVP enables video viewing on a mobile platform via direct connect to Falcon III® radios such as the RF-7800T, AN/PRC-152A, AN/PRC-117G and the RF-7800M-MP. Video feeds captured by others in a tactical network can be sent over wideband protocols such as ANW2, SRW or WNW and viewed on the RF-ANDVP.

The HVP is optimized to run on the RF-3590 Harris Ruggedized Tablet, Android v.4.0 (Ice Cream Sandwich) and future releases. It includes light and dark themes for sunlight readability, as well as landscape and portrait orientations.

FEATURES

- View ROVER video feeds and SUAS DDL video feeds on the RF-3590 Ruggedized Tablet or other Android platform when directly connected to an RF-7800T, AN/PRC-152A, AN/PRC-117G and the RF-7800H-MP
- Supports H.264 MPEG-4/AVC video
- Supports RSTP/RTP network streams
- View local video files in the .3gp/.mp4 format
- Maintains active video source listing and files for quick viewing
- Standard player controls for video file viewing

ORDERING INFORMATION

SOFTWARE	MEDIA	OPERATING SYSTEM REQUIREMENTS	SUPPORTED RADIO EQUIPMENT
RF-ANDVP	SD Card	Android 4.0 (Ice Cream Sandwich) and newer versions	RF-7800T, AN/PRC-117G, AN/PRC-152A, RF-7800M-MP

ACCESSORIES

See the Common Accessories chapter or the Tactical ISR and Network Systems chapter for more information.

SOFTWARE INTEROPERABILITY

RADIO & MINIMUM FIRMWARE	CABLE	APPLICATION		
		RF-ANDKDU	RF-6705AN	RF-ANDVP
AN/PRC-117G v4.3	12131-0270-A006	•	•	•
AN/PRC-152A v8.1.1	12131-0270-A006 and 12041-5663-01/-02	•	•	•
RF-7800M-MP v3.2	12131-0270-A006	•	•	•
RF-7800M-HH v1.1	12131-0270-A006 and 12041-5663-01/-02	•	•	•
RF-7800V-HH / V511	12067-5800-A0XX		•	
RF-7800S-TR	12055-0718-XXX		•	•
RF-7800H-MP	12131-0270-A006		Narrowband only	
RF-5800H-MP	10535-0775-AXXX* and 12131-7110-01		•	
RF-7800T	121100-7230-A006*			•
RF-5800M-HH	12011-0775-AXXX and 12131-200-04		•	
AN/PRC-117F HPW IP	10513-0710-A006* and 12131-0200-04		•	
AN/PRC-152 HPW IP	12041-7180-AXXX and 12131-0200-04		•	
RF-5800V-HH	12011-0775-AXXX and 12131-200-04		•	
RF-5800V-MP	10513-0775-AXXX* and 12131-0200-004		•	
RF-7400E TVP	12055-0718-XXX			•

FalconCommand™ ANDROID

RF-5410AN-SW001

The RF-5410AN-SW001 FalconCommand™ Android application brings situational awareness to the edge, where it's needed the most by today's modern warfighter. An intuitive, streamlined interface allows the user to easily navigate his surroundings relative to those around him when connected to a radio network. Global Positioning System (GPS) reports from Falcon II® and Falcon III® radios within the network display on a digital map or image (Blue Force Tracking).

Additionally, the user can add hostile, neutral or unknown units to the map with the RF-5410AN, which supports the MIL-STD-2525 symbols library. Unit details are revealed with a touch, highlighting the immediate area behind it and displaying critical information. The user can quickly select the correct icon from 4,000+ supported symbols through an easy-to-use drill-down menu that opens a small subset of results. If icons and symbology aren't enough, the user can create free-form line drawings, circles, arrows and other images. This information is georeferenced and sent to other devices in the network.

Unique to the FalconCommand Android is Augmented Reality & Radar view. Augmented reality leverages the RF-3590 Ruggedized Tablet's cameras to overlay database mapping information onto the camera view of the Tablet (or EUD). This mode allows the user a different perspective of blue and red force position locations.

The application is optimized to run on the RF-3590 Harris Ruggedized Tablet, Android v.4.0 (Ice Cream Sandwich) and future releases. It includes light and dark themes for sunlight readability.

FEATURES

- Shared Common Operational Picture (COP) including hostile, neutral and unknown forces
- Peer-to-peer syncrhonization; scale up echelon with FalconCommand PC 2.0
- Integrated with Tactical Chat™ IP
- Supports MIL-STD-2525 icons, battle management graphics and whiteboarding

ORDERING INFORMATION

SOFTWARE	MEDIA	OPERATING SYSTEM REQUIREMENTS
RF-5410AN	SD Card	Android 4.0 (Ice Cream Sandwich) and newer versions

ACCESSORIES

See the Common Accessories chapter or the Tactical ISR and Network Systems chapter for more information.

RF-5410AN-SW001 FalconCommand ANDROID

RADIO	CONNECTIVITY	SIMPLE SHARE UNICAST	SIMPLE SHARE BROADCAST	SIMPLE SHARE MULTICAST	MULTICAST FULL SYNC
RF-5800H-MP	PPP	Hub and Spoke	N/A	N/A	N/A
RF-7800H-MP	PPP	Hub and Spoke	N/A	N/A	N/A
RF-5800V & M-HH	PPP	Peer to Peer	Future release	N/A	N/A
RF-5800V-MP	PPP	Peer to Peer	Future release	N/A	N/A
RF-7800M-MP	RNDIS	N/A	N/A	Peer to Peer	OK
RF-7800M-HH	RNDIS	N/A	N/A	Peer to Peer	OK
AN/PRC-117G	RNDIS	N/A	N/A	Peer to Peer	OK
AN/PRC-152A	RNDIS	N/A	N/A	Peer to Peer	OK
RF-7800S	RNDIS	Future release	N/A	Future release	Future release

PC APPLICATIONS

FalconCommand™ BATTLE MANAGEMENT SYSTEM

RF-5410FC-EN001

The RF-5410FC-EN001 FalconCommand is an integrated, next-generation Harris Command and Control (C2) software application. It provides a number of status monitoring and planning tools to assist in operations planning, plus greatly enhances the user's situational awareness during tactical operations.

FalconCommand has built-in support for all Harris tactical radios and, when connected to the radio network, monitors and displays Global Positioning System (GPS) location of all Falcon II® and Falcon III® radios within the network on a digital map or image (Blue Force Tracking). Bridging across multiple networks is also supported when connected to multiple different radios. Mobile users can access easy-to-use navigation tools, including a self-oriented map, compass, and waypoint features. FalconCommand contains a full set of drawing tools that allows the user to create tactical operations overlays, routes, plans, and military tactical objects on the same map display.

Networked via radio or Local Area Network (LAN), FalconCommand shares all battlefield information to create and show a synchronized Common Operational Picture (COP). Enemy positions, navigational routes and military overlays or planning graphics are automatically transferred in real time to all FalconCommand users in a network. Instead of a central server, FalconCommand uses a synchronized peer-to-peer communications protocol that allows real time collaborative planning with overlays and planning graphics. This networking architecture ensures that the COP is damage-tolerant and self-healing, with no single point of failure in the system.

FalconCommand also provides multiple messaging features that include military messaging using the Variable Message Format (VMF) and instant messaging/chat. Its message center indicates when a message is sent, received, and read by the recipient, and allows the user to create and save pre-formatted messages. Multiple security features allow destruction of the software to prevent capture.

FalconCommand extends situational awareness down to the individual soldier. With seamless interface to Harris Falcon II and III radios and synchronized shared data, FalconCommand provides fully integrated, highly survivable battle management to Battalion and below command echelons, plus interfaces to currently fielded BMS applications from other vendors. An export license is required for FalconCommand.

MAPS AND RECONNAISSANCE IMAGERY

Harris provides a basic world map with the software, which shows an outline of the continents and oceans. Three samples of aerial imagery showing the world map, Harris Rochester, NY and San Diego, CA offices are also included. Harris does not provide other maps or imagery as part of this product offering. Maps and aerial or satellite imagery are typically available in the commercial marketplace or may already exist in the customer's inventory. FalconCommand supports multiple 2D and 3D map display windows using a variety of digital map/imagery formats, including: VPF, ADRG, CADRG, DNC, S-57, OSM, SHP, TIFF (GeoTiff), SRTM and DTED (Level 1 and 2). Users may also import and georeference their own JPG/JPEG imagery. Within some of these formats, there may be some uncommon variations not usable with FalconCommand. Contact Harris Product Management with any questions regarding map/image formats.

FEATURES

- Built-in Falcon II/III radio interface, with automatic data throttling to prevent network overload
- Integrated and automatic GPS position reporting
- Track display and creation using MIL-STD-2525C symbology
- Fully synchronized data sharing for COP with no single point of failure
- Accepted digital map formats: GeoTiff, ADRG, CADRG, DTED, VPF, SRTM, CIB
- Military overlay graphics and route tools
- IP-based communications for use in wireless Falcon II/III radio networks or a wired network computing environment

The RF-5410FC-EN001 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12124-8600-1	FalconCommand™ Installation CD with FalconCommand Software User's Guide (digital copy), Release Notes and network configuration utility	1

LICENSING

The FalconCommand software is licensed for a specific computer. When ordered with a computer (RF-3577-16EN, RF-3577-28EN or RF-3577-75EN) and installed by Harris, the software ships with a permanent license key. When the software is ordered without an accompanying computer, the software is shipped with a temporary license key. The customer must furnish Harris Product Service with the MAC address of the target computer upon receipt of the software. Product Service will then obtain a permanent software license key and provide that to the customer. Detailed instructions outlining this process are provided within the FalconCommand packaging.

OPTIONS

COMPUTERS

The RF-5410FC-EN001 software is compatible with the following computers:

- RF-3577-16EN
- RF-3577-28EN
- RF-3577-75EN

RECOMMENDED MINIMUM PC CAPABILITIES FOR THE RF-5410FC-EN001

- Windows XP Professional SP3 operating system or Windows 7 Pro (XP Compatibility mode)
- 1 GHz CPU
- 40 GB hard drive
- 512 MB of RAM

ACCESSORIES

See the Common Accessories chapter for more information. For connection into a local area network, Harris recommends using an RF-6010 Tactical Network Access Hub to combine multiple radio networks together with a single computer.

CABLES

RADIO	CABLE SET
RF-5800V-MP	10512-0775-A006
RF-5800H-MP, AN/PRC-150(C)	10535-0775-AXXX*
RF-5800V-HH, RF-5800M-HH	12011-0775-A006
AN/PRC-117F(C)	10513-0710-AXXX**
RF-7800V-HH	10267-5400-01 OR 10267-5420-01
RF-7800S	12055-0710-A003
12043-2760-AXXX	Ethernet Cable

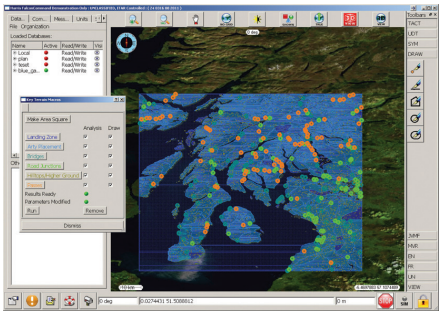
**10535-0775-A006 cables come standard with the RF-5800H-MP and the AN/PRC-150(C).*

***10513-0710-A006 cable comes standard with the AN/PRC-117F(C).*

TECHNICAL MANUAL

PRODUCT NUMBER	PRODUCT NAME
12124-8600-1	FalconCommand Installation CD with Software User's Guide (digital copy)

TERRAIN ANALYSIS KIT (TAK) FOR FalconCommand™



RF-5410TK

The RF-5410TK Terrain Analysis Kit (TAK) software application is a specialized software package that provides a number of terrain and mobility analysis functions to assist FalconCommand users in planning and Intelligence Preparation of the Battlefield (IPB). Designed specifically for use with RF-5410FC FalconCommand, TAK analyzes Digital Terrain Elevation Data (DTED), Vector Map (VMAP) data, and user-defined data to provide a comprehensive summary of the battlefield terrain, including contour maps, slope analysis overlays, and elevation profiles. It can also determine mobility categorizations for terrain, identify mobility corridors, calculate and show optimal routes between locations, and estimate vehicle or personnel travel range in a certain amount of time. Users choose which analysis results to display on the FalconCommand map display.

Designed for use with FalconCommand, TAK is the fastest terrain and mobility analysis solution currently available. It returns analysis results in seconds and can perform analyses multiple times to gain different battlefield terrain perspectives as users are moving. All calculations are made using raw terrain data, eliminating the need for time-consuming preprocessing. TAK is available in English. An export license is required for TAK.

Note: The user must have FalconCommand installed first to use TAK.

TERRAIN DATA

Harris does not provide terrain data as part of this product offering. Terrain data is typically available in the commercial marketplace or may already exist in the customer's inventory. TAK supports the following terrain data formats: VPF and DTED (Level 1 and 2). Within these formats, there may be some uncommon variations not usable with TAK. Contact Harris Product Management with any questions regarding terrain data formats.

FEATURES

- Intervisibility overlays, covered and concealed areas
- Optical or weapons line-of-sight from a designated point
- Elevation profile (side view) of terrain along a line
- Elevation relief maps
- Bands of elevation and slope
- Categorizes area-specific terrain as unrestricted, restricted, and severely restricted
- Determines and displays mobility corridors within an area based on supported tactical echelons
- Identifies key terrain features:

- Restricted mountain passes
- Bridges
- Road intersections
- Helicopter landing zones

› Calculates distance and time to travel the fastest path between two points

› Displays areas reachable in given timeframe by specific vehicles

The RF-5410TK includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12124-8500-03	TAK Installation CD (English) with TAK Software User's Guide (digital copy) and Release Notes	1

LICENSING

The TAK software is licensed for a specific computer. When ordered with a computer (RF-3577-16EN, RF-3577-28EN or RF-3577-75EN) and installed by Harris, the software ships with a permanent license key. When the software is ordered without an accompanying computer, the software is shipped with a temporary license key. The customer must furnish Harris Product Service with the MAC address of the target computer upon receipt of the software. Product Service will then obtain a permanent software license key and provide that to the customer. Detailed instructions outlining this process are provided within the TAK packaging.

OPTIONS

COMPUTERS

The RF-5410TK software is compatible with the following computers:

› RF-3577-16EN

› RF-3577-28EN

› RF-3577-75EN

RECOMMENDED MINIMUM PC CAPABILITIES FOR THE RF-5410TK SOFTWARE

› Windows XP Professional SP3 Operating System or Windows 7 Pro (XP Compatibility mode)

› 1 GHz CPU

› 40 GB hard drive

› 512 MB of RAM

SOFTWARE

The RF-5410TK software is compatible with the RF-5410FC-EN001 FalconCommand software.

Note: FalconCommand is required to use the RF-5410TK TAK software.

ACCESSORIES

See the Common Accessories chapter for more information.

TECHNICAL MANUAL

PRODUCT NUMBER	PRODUCT NAME
12124-8500-3	TAK Installation CD (English)

WIRELESS MESSAGE TERMINAL SOFTWARE

RF-6760W

The Wireless Message Terminal (WMT) software runs on standard desktop and mobile PC platforms, on both Harris-supplied and customer-supplied PCs. It sends and receives messages and files over stressed media and is designed to work with Harris HF, VHF, and multiband radios, but can also interface to other radios. The RF-6760W is a full function mail server with message handling capability. A lightweight version, RF-6760W-HPW, is supplied with all AN/PRC-117F radios and performs only asynchronous messaging.

The WMT includes an embedded Harris HF/VHF/UHF protocol engine, which provides error-free data using STANAG 5066. For HF systems, it interfaces to Harris MIL-STD-188-110A/B modems and MIL-STD-188-141A and STANAG 4538 ALE controllers to provide fully automatic HF data transmission. When used with a RF-7800H-MP, RF-5800H-MP or AN/PRC-150(C) radio, the WMT uses the radio's embedded STANAG 4538 or FED-STD-1052 capability, or its own software-based STANAG 5066 capabilities. The WMT also includes the Harris Imager application for viewing, annotating, compressing, sending, and receiving images via the WMT, plus the Harris STANAG 5066 Internet Protocol (IP) client that permits IP traffic to be sent over NATO standard STANAG 5066 links.

Several bandwidth-preserving capabilities are incorporated into the WMT. The "pull messaging" feature allows the distant station to decide which messages should be downloaded from the remote mail server to their local WMT. When using the "resume messaging" feature, failed file transfers will resume from the point of failure. An export license is required for the WMT.

SOFTWARE	RADIOS SUPPORTED
RF-6760W-03EN software only. (Includes HPW)	RF-7800H, RF-5800H, RF-5800M-HH, AN/PRC-117F, AN/PRC-117G, AN/PRC-150, AN/PRC-152, AN-PRC-152A
RF-6760W-05EN includes RF-6800-AD027 5800H data cable	RF-5800H and AN/PRC-150
RF-6760W-HF software only	RF-5800H, RF-7800H and AN/PRC-150
RF-6760W-HPW software only.	AN/PRC-117F, AN/PRC-117G, AN/PRC-150, AN/PRC-152 and AN-PRC-152A

FEATURES/CAPABILITIES	RF-6760W (FULL VERSION)	RF-6760W-HF (HF LITE)	RF-6760W-HPW
Outstation use case support	•	•	•
Email client support	•	•	•
"Narrowband" STANAG 5066 HF Communications over legacy WF (110A, 110B, etc.)	•	•	
STANAG 5066 Communications over "Other WF" for generic sync operation	•	•	
Support for HF Adaptive Wideband Data	•	•	
RF-7800H-MP USB direct connect support	•	•	
RF-7800H-MP Ethernet dongle support	•	•	
"Narrowband" STANAG 4538/3G	•	•	
HFGCS/SCOPE command interoperable	•	•	
HF ARQ	•	•	
Includes Harris Imager	•	•	
Single mailbox per WMT	•	•	•
Domain-to-Node and Node-to-Node routing	•	•	•
Resume messaging (Suspend and Resume)	•	•	•
STANAG 5066 over LOS link	•		
HPW support	•		•
CSV address book import	•		•
Base Station use case support (Gateway)	•		
STANAG 5066 IP Client	•		
Microsoft Exchange interoperability (Mail Server)	•		
Pull Messaging	•		
LAN support	•		
Allows multiple users and email clients per WMT	•		
Domain restrictions	•		

SOFTWARE

OPERATING SYSTEM & MAIL CLIENT APPLICATIONS COMPATIBILITY

RF-6760W-HF WMT are compatible with the following Microsoft Operating Systems and Microsoft & Lotus applications:

OPERATING SYSTEMS
Windows 7 Professional Edition SP1 (32 & 64 bit, English-Language)
Windows XP Professional Edition SP2 (32 & 64 bit, English-Language)
Windows XP Professional Edition SP3 (32 bit, English-Language)
Windows XP Tablet Edition (32 & 64 bit, English-Language)
Windows 2003 Server SP1 (32 & 64 bit, English-Language)
Windows 2003 Server R2 (32 & 64 bit, English-Language)
Windows 2008 Server SP2 (32 & 64 bit, English-Language)
Windows 2008 Server R2 SP1 (64 bit, English-Language)
Windows Vista Business SP2 (32 & 64 bit, English-Language)

MAIL CLIENTS
Any POP3/SMTP Compliant Mail Client (English-Language)
Lotus Notes Client R6.5.4 (English-Language)
Microsoft Outlook 2000 SR-1 (English-Language)
Microsoft Outlook 2000 SP2 (English-Language)
Microsoft Outlook 2000 SP3 (English-Language)
Microsoft Outlook 2002 SP1 (English-Language)
Microsoft Outlook 2002 SP2 (English-Language)
Microsoft Outlook 2003 SP2, SP3 (English-Language)
Microsoft Outlook 2007 (English-Language)
Microsoft Outlook 2010 (English-Language)
Microsoft Outlook Express V6.0 SP1, SP2 (English-Language)
Windows Mail (Vista, Server 2008, English-Language)
Windows Live Mail 2011 (Win 7, Server 2008 R2, English-Language)

OPERATING SYSTEM, MAIL SERVER & MAIL CLIENT APPLICATIONS COMPATIBILITY

RF-6760W-03EN and -05EN WMT are compatible with the following Microsoft Operating Systems and Microsoft & Lotus applications:

OPERATING SYSTEMS
Windows 7 Professional Edition (32 & 64 bit, English-Language)
Windows 7 Professional Edition SP1 (32 & 64 bit, English-Language)
Windows XP Professional Edition SP1 (32 & 64 bit, English-Language)
Windows XP Professional Edition SP2 (32 & 64 bit, English-Language)
Windows XP Professional Edition SP3 (32 & 64 bit, English-Language)
Windows XP Tablet Edition (32 & 64 bit, English-Language)
Windows 2003 Server SP1 (32 & 64 bit, English-Language)
Windows 2003 Server R2 (32 & 64 bit, English-Language)
Windows 2008 Server (64 bit, English-Language)
Windows 2008 Server R2 (64 bit, English-Language)
Windows Vista Business (32 & 64 bit, English-Language)
Windows Vista Business SP1 (32 & 64 bit, English-Language)

MAIL CLIENTS
Any POP3/SMTP Compliant Mail Client (English-Language)
Lotus Notes Client R6.5.4 (English-Language)
Microsoft Outlook 2000 SR-1 (English-Language)
Microsoft Outlook 2000 SP2 (English-Language)
Microsoft Outlook 2000 SP3 (English-Language)
Microsoft Outlook 2002 SP1 (English-Language)
Microsoft Outlook 2002 SP2 (English-Language)
Microsoft Outlook 2003 SP2, SP3 (English-Language)
Microsoft Outlook 2007 (English-Language)
Microsoft Outlook 2010 (English-Language)
Microsoft Outlook Express V6.0 SP1, SP2 (English-Language)
Windows Mail (Vista, Server 2008, English-Language)
Windows Live Mail 2011 (Win 7, Server 2008 R2, English-Language)

MAIL SERVERS
Microsoft Exchange Server 2000 (English), SP2/SP3
Microsoft Exchange Server 2003 (English), SP1/SP2/SP3
Microsoft Exchange Server 2007 (English), SP1
Microsoft Exchange Server 2010 (English), SP1/SP2
IceWarp (Merak) Server versions 8.0, 9.0, and 10.0 (English)
Domino Server 6.5.4 (English)

BROWSERS
Microsoft Internet Explorer 6.0
Microsoft Internet Explorer 6.0 SP1
Microsoft Internet Explorer 6.0 SP2
Microsoft Internet Explorer 7.0

CABLE RF-6760W WIRELESS MESSAGING TERMINAL SOFTWARE

Below are the latest system configurations that utilize USB cables. Additional kits are also available for interface to the RF-6750W, KG-84A, KG-84C, KIV-7, KY-99, and other cryptographic devices. Replacement cables for legacy systems that use PCI/PCMCIA sync cards are also available. Consult Harris Product Management for product numbers.

CABLE	RADIOS & INTERFACES
12043-2850-A006 (Included with RF-7800H)	RF-7800H USB Wideband HF
10518-0775-A006 (Included with RF-7800H)	RF-5800H PPP 3G STANG 4538 AN/PRC-150
RF-6800-AD027 (Included with RF-6760W-05EN)	RF-5800H USB to SYNC DTE and PPP 2G ALE & STANAG 5066 AN/PRC-150
12083-0707-A003	Ethernet RF-7800H, RF-7800M-MP, AN/PRC-117G
RF-6800-AD018	RF-5800M-HH SYNC DTE
12043-2710-A006	AN/PRC-117G PPP HPW
12043-2750-A006 (included with AN/PRC-117G)	AN/PRC-117G USB HPW
12041-2710-A006	AN/PRC-152/AN/PRC-152A PPP HPW
12043-2850-A006 with 12041-5662-01 or -02	AN/PRC-152A USB HPW
10513-0710-A006 (included with AN/PRC-117F)	AN/PRC-117F PPP HPW
RF-6800-AD127	AN/PRC-117F USB HPW and SYNC DTE

TECHNICAL MANUALS

PRODUCT NUMBER	PRODUCT NAME
10515-0316-4100	System Manual for Wireless Message Terminal (WMT)
10515-0316-4200	User's Guide WMT

SOFTWARE

TACTICAL CHAT IP FOR PCs

RF-6705-SW001

The RF-6705-SW001 Tactical Chat IP application provides reliable exchange of text messages and files among field and networked data terminals. The RF-6705-SW001 application supports both point-to-point (ARQ) and broadcast (non-ARQ) data transfer among the members of an IP sub-network. The application uses the IP data capability of Harris Falcon II® and Falcon III® radios, which enables data to be easily exchanged between wired (Ethernet, LAN) and wireless network users. The software runs on PCs and connects to the radio via an asynchronous RS-232 or USB interface.

The underlying communications protocol has been carefully engineered to provide the best performance possible over both wired and wireless links. Protocol parameters are dynamically adjusted as messages are exchanged among application users, yielding a progressively optimized network. Because the application protocol utilizes IP, messages can be exchanged across a standard commercial infrastructure, such as LANs, WANs, and 802.11 WiFi links.

The RF-6705-SW001 user interface has been modeled after commercial instant messaging applications and allows the user to quickly address another station in the network via a friendly name selected from the address book. The user can type a message or select from a list of predefined messages. File transfer—including imagery files—is also supported, with the ability for partial file transfers to be resumed at the point of failure. A log of message exchanges, which can be viewed and saved, is recorded.

A significant new feature of the RF-6705-SW001 is the Image Editor, available in the Tactical Messaging PC version. The Image Editor can be used to interactively manipulate and images, including JPEG 2000 compression; view, zoom and crop images; image resize; and annotations.

The PC version runs on Microsoft Windows 2000 Professional, Windows XP Professional, Windows Vista or Windows 7 Professional operating systems. The PDA version runs on Windows Mobile 2003, Windows Mobile 5.0, and Windows Mobile 6.0. The application is compatible with customer- or Harris-supplied PCs using these operating systems. The RF-6705-SW001 application is supplied on a CD.

MINIMUM RECOMMENDED PC REQUIREMENTS

COMPONENT	SPECIFICATIONS
CPU	Intel Pentium 500 MHz or minimum required for OS, whichever is greater
Operating System	Windows 2008 Server, Windows 2003 Server, Windows 2000, Windows XP, Windows XP Tablet Edition, Windows Vista, Windows 7 (English language version only)
Memory (RAM)	512 MB or minimum required for OS, whichever is greater
Display	800 x 600 resolution
I/O	Standard RS-232C serial port Ethernet USB

ACCESSORIES

See the Common Accessories chapter for more information.

DEVICES

PRODUCT NUMBER	PRODUCT NAME
RF-3577	Personal Computers

CABLES

RADIO EQUIPMENT	CABLE SET
RF-5800H-MP, AN/PRC-150(C)	10535-0775-AXXX*
RF-5800M-HH	12011-0775-A006
AN/PRC-117F(C)	10513-0710-AXXX**
AN/PRC-117G(V)1(C)	12043-2760-AXXX
AN/PRC-152A	12083-0707-AXXX
RF-7800H	10535-0775-AXXX
RF-7800M-HH	12041-7227-02
RF-7800M-MP	12043-0760-A006
RF-7800W	Ethernet
RF-7800V-HH	12067-5220-01
RF-6010	RJ45 Ethernet
RF-7800S	12055-0710-AXXX 12055-0711-AXXX

**10535-0775-A006 cables come standard with the RF-5800H-MP and the AN/PRC-150(C).*

***10513-0710-A006 cable comes standard with the AN/PRC-117F(C).*

TECHNICAL MANUAL

PRODUCT NUMBER	PRODUCT NAME
10515-0294-4500	Student Guide

COMMUNICATIONS PLANNING APPLICATION

RF-6650M

The Communications Planning Application (CPA) is an easy-to-use Windows software application that supports planning and programming for Harris tactical radios. An intuitive graphical user interface (GUI) makes it easy to configure the radios for deployment of complex radio networks. Graphical system planning features allow users to draw systems, including networking connectivity, resulting in automatic IP routing configuration to ensure communication. See product list below for supported radio products.

FEATURES

- Single application for network planning and radio programming
- Simple and intuitive graphical interface
- Key management
- Validates plan integrity
- Generates plan reports
- Supports multiple use models for complex networking scenarios or simple network creation

PRODUCT NUMBER	PRODUCT NAME	INCLUDES	QTY
RF-6650M	Falcon III® Communications Planning Application	CD Media CPA Platform Radio Support Packages for AN/PRC-117G(C), AN/PRC-152(C), AN/PRC-117F(C)	1
RF-6652	CPA for RF-310M-H	CD Media, CPA Platform and CPA Radio Support Software for RF-310M-HH, Radio Operation Manual, Radio Reference Guide, Radio Operation Card	1
AN/PRC-117F-SW001	CPA for AN/PRC-117F(C)	CD Media, CPA Platform and CPA Radio Support Software for AN/PRC-117F(C)	1
AN/PRC-152-SW001	CPA for AN/PRC-152(C)	CD Media, CPA Platform and CPA Radio Support Software for AN/PRC-152(C), Radio Operation Manual	1
AN/PRC-150-SW001	CPA for AN/PRC-150(C)	CD Media, CPA Platform, NRDI, PNRDI, ITS HF Propagation and CPA Radio Support Software for AN/PRC-150(C), HF RPA to CPA Transition Guide	1
10518-2488-01	Falcon III® Communications Planning Application DAMA NATO	CD Media, CPA Platform and CPA Radio Support Software for AN/PRC-117F(C)	1
RF-7800MM-SW001	CPA for RF-7800M-MP	CD Media, CPA Platform and CPA Radio Support Software for RF-7800M-MP	1
RF-7800MH-SW001	CPA for RF-7800M-HH	CD Media, CPA Platform and CPA Radio Support Software for RF-7800M-HH, Radio Operation Manual, Radio Field Reference Guide Quick Start Guide	1
RF-7800VH-SW001	CPA for RF-7800V-HH	CD Media, CPA Platform, PNRDI and CPA Radio Support Software for RF-7800V-HH, Radio Operation Manual, Radio Quick Reference Guide	1
RF-5800MH-SW001	CPA for RF-5800M-HH	CD Media, CPA Platform, NRDI and CPA Radio Support Software for RF-5800M-HH, Radio Operation Manual, Radio Quick Reference Guide, Radio TALON Operation Supplement	1
RF-5800VH-SW001	CPA for RF-5800V-HH	CD Media, CPA Platform, NRDI and CPA Radio Support Software for RF-5800V-HH, Radio Operation Manual, Radio Operator Card	1
RF-7800S-SW001 (also provided by RF-7800S-PK001, RF-7800S-PK002)	CPA for RF-7800S	CD Media, CPA Platform, Drivers and CPA Radio Support Software for RF-7800S-TR, RF-7800S-V and RF-7800S-LR Radios, Radio Field Reference Guide, Radio and SPR Utility Software Operation Manual, Radio Operator Cards	1
RF-7800H-SW001	CPA for RF-7800H-MP	CD Media, CPA Platform, NRDI, PNRDI, ITS HF Propagation and CPA Radio Support Software for RF-7800H-MP, HF RPA to CPA Transition Guide	1
RF-5800H-SW001	CPA for RF-5800H-MP	CD Media, CPA Platform, NRDI, PNRDI, ITS HF Propagation and CPA Radio Support Software for RF-5800H-MP, HF RPA to CPA Transition Guide	1
RF-330ETR-SW001	CPA for RF-330E	CD Media, CPA Platform and CPA Radio Support Software for RF-330E	1
RF-7800W-SW001	CPA for RF-7800W Radio	CD Media, CPA Platform and CPA Radio Support Software for RF-7800W	1
RF-7850SH-SW001	CPA for RF-7850S	CD Media, CPA Platform and CPA Radio Support Software for RF-7850S	1
RF-5800VM-SW001	CPA for RF-5800V-MP Radio	CD Media, CPA Platform and CPA Radio Support Software for RF-5800V-MP	1

SOFTWARE

SUPPORTED OPERATING SYSTEMS

- Windows XP
- Windows Vista 32/64-bit
- Windows 7 32/64-bit
- Windows 2003 Server 32/64-bit
- Windows 2008 Server 32/64-bit
- Windows 2008 Server R2 64-bit
- OS with FIPS Compliance enabled
- Foreign Language OS

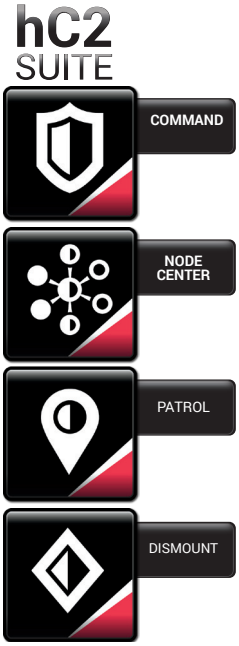
APPLICATION INTEROPERABILITY

- Tactical Chat IP (RF-6705)
- Key Generation Application (RF-6550K)
- HF RPA (RF-6550H)
- VHF-UHF RPA (RF-6550V)
- International Line-of-Sight RPA (RF-7850I)
- Network Management Application (supporting RF-6010)
- Wireless Messaging Terminal (RF-6760W/RF-6760W-HPW)

SOFTWARE

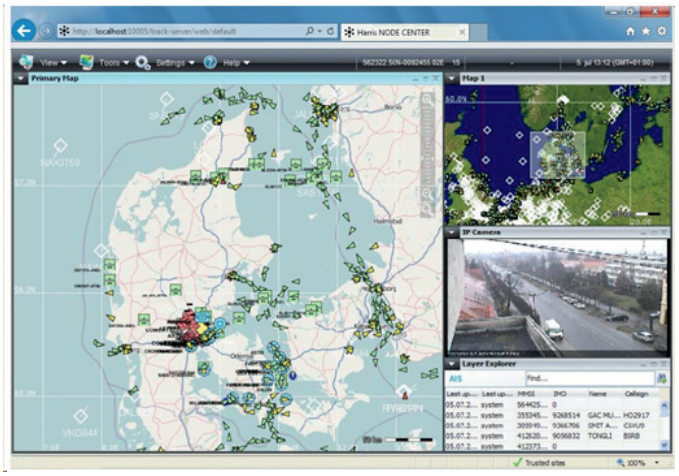
hC2 SUITE

The hC2 Suite is a complete Command and Control (C2) solution that offers clarity, simplicity, and high performance that addresses real world C2 challenges at all echelon levels. Effective action depends on the best possible situational awareness. The hC2 Suite connects the headquarters all the way down the echelon to the tactical edge with its four products: NODE CENTER, COMMAND, PATROL, and DISMOUNT. The hC2 Suite provides forces with information where and when they need it most.



hC2 NODE CENTER. COMMAND, PATROL and DISMOUNT are fully integrated through hC2 Tactical Communications, which is the communication core of the hC2 Suite. hC2 NODE CENTER uses the Node Server and hC2 COMMAND uses the hC2 COP Server to communicate with hC2 Tactical Communications. hC2 Tactical Communications provides networked command and control and shared situational awareness, from the higher headquarters right down to the commander at the tactical edge. It is a network optimized for low bandwidth, high latency tactical radio data communication with a high FFT refresh rate. It allows the exchange of information across Battle Group vehicles without requiring point-to-point contracts or end-to-end routing of an underlying network. It supports IP and non-IP radios and can handle different types of radios, even within the same vehicle.

RF-7800N-BM100



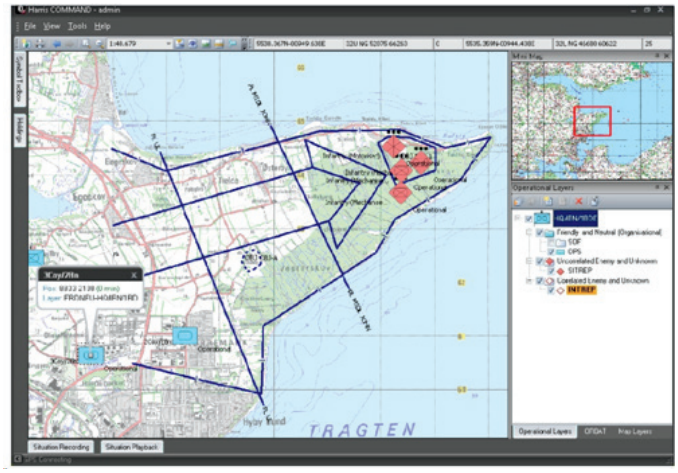
The RF-7800N-BM100 hC2 NODE CENTER is a web-based client designed to provide a joint Common Operational Picture (COP) in higher level headquarters within land and joint domains. It is comprised of the hC2 NODE CENTER client and the hC2 Node Server. This client/server system provides the tools required to collect, fuse, and analyze situational data. Since hC2 NODE CENTER is a web browser-based client application, it does not require the installation or sustainment of any software on client computers. It also maximizes accessibility to the situational picture to any authorized user within the land and joint headquarters, as well as all authorized users on the wide area network. It is interoperable across many domains as it can receive, convert, and forward tracking information from and to many sources. The hC2 Node Server is capable of handling thousands of live feed tracks from external sensors and servers such as AIS (maritime), OTH-T Gold (maritime), Link 16 (air and/or maritime), and NFFI (land).

FEATURES

- Web-based client: no installation required, minimal deployment time and costs, and maximized accessibility
- Uses Web Map Services (WMS) standard to access map data facilitating access to all available WMS map servers and multiple data sources
- Cascading filter allows user to highlight important tracks and hide unimportant tracks
- Integrates with hC2 COMMAND to make situational picture available to any authorized user on the network
- Built-in interoperability through support of contemporary military and civilian data feed communication standards: AIS, Link16, NFFI, JCOP/NVG, and ADatP-3 ACO/ACM messages

SOFTWARE

RF-7800N-BM200



The RF-7800N-BM200 hC2 COMMAND is a C2 Information System designed to support operational staff in planning and executing missions. It supports key operational activities such as situational awareness, Mission Planning, Mission Execution, and Mission Reporting. hC2 COMMAND is intended for installation as required from the highest to the lowest command levels, primarily for use in environments where computers have full monitor display, keyboard, mouse, and LAN/WAN network connections. It is comprised of the C2 COMMAND client and the hC2 COP Server. hC2 COMMAND is extendable and adaptable through an open API, enabling the incorporation of add-on modules and customized features into a deployable solution. The concepts and semantics in hC2 COMMAND are based on MIP's (Multilateral Interoperability Programme) JC3IEDM standard (Joint Consultation, Command, and Control Information Exchange Data Model). hC2 COMMAND works in conjunction with hC2 PATROL through hC2 Tactical Communications to provide a unified C2 system across echelons of the command chain from the battlefield frontline vehicles to the command headquarters.

FEATURES

- Geographical Information System (GIS) supports the widest range of military map formats, terrain data, and terrain tools, in both 2D and 3D
- Mission Planning: Collaboratively constructing textual and graphical plans & orders, allowing input to the planning cycle from different physical installations. Plan templates are customizable and distributable
- Mission Execution: Supports current operations, providing a joint set of customizable military and civilian symbols, supporting multiple types of layers such as current friendly situation, uncorrelated enemy, globally significant, plan overlays, etc.
- Mission Reporting: Reporting of logistic information such as unit consumables, equipment, and personnel holdings, enabling viewing of unit capabilities (nominal holdings) and reporting of current holding status
- Situation Record & Playback capability, for debriefing or after-action review of specific parts or periods of an operation
- Interoperability: The highest degree of interoperability is achieved through simultaneous support of MIP Block 2 and 3

RF-7800N-BM300

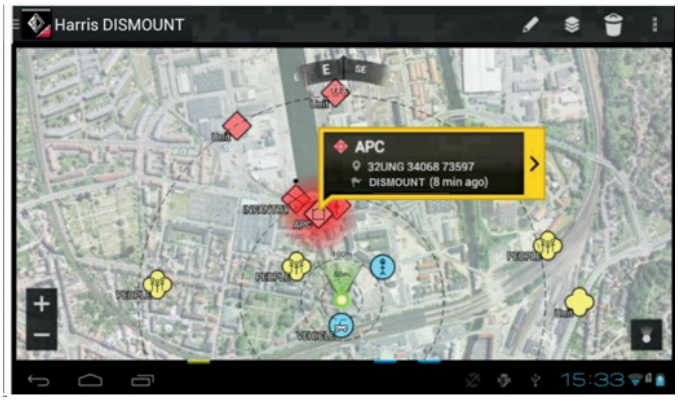
The RF-7800N-BM300 hC2 PATROL is a battle and crisis management system for the mounted and dismounted frontline commander. Designed with operational simplicity in mind, hC2 PATROL fits into any organization by providing precisely the tools needed by battlefield commanders. Its design and features address both military and civilian commanders at lower organizational levels. hC2 PATROL has a unique two-part solution: User Interface and hC2 Tactical Communications. This solution facilitates mobility with dismounted installation that enables the operator to mount and dismount vehicles in the application, while ensuring that his location is always accurately known by other participants.

hC2 PATROL is fully integrated with hC2 COMMAND and hC2 DISMOUNT though hC2 Tactical Communications to provide networked command and control and shared situational awareness, from the higher headquarters right down to the commander at the tactical edge. With its ease of installation, ease of deployment, and intuitive interface, it makes upkeep and upgrades manageable.

FEATURES

- High update rate for FFT over tactical radios achieved through the hC2 Tactical Communications protocol
- Easy vehicle transfer through the user application, enabling commanders to change vehicles and still be accurately represented in the FFT picture and without any user reconfiguration
- Lean GIS with small software footprint that offers high performance visualization with no need for a database server
- Optimized for small to medium displays, including displays as small as 8 inches (~20 cm)
- Backwards compatibility through tactical communications, enabling the software to interoperate across software versions without needing to upgrade all vehicles simultaneously
- Provides interoperability from squad level to the highest level of command as part of the hC2 suite of software products

RF-7800N-BM400



The RF-7800N-BM400 hC2 DISMOUNT is an Android-based battle management system for the dismounted commander at the tactical edge. Designed with operational simplicity in mind, hC2 DISMOUNT provides the commander with rapid and clear FFT pictures, shared tactical situation pictures and latest intelligence overlays all contributing to enhancing force protection. It is capable of exchanging Command Layers, illustrating complex maneuvers on a map and sharing with subordinates via tactical data communication. This expedites operation execution while saving valuable voice time. Users can exchange their own position location and spot reports as well as Command Layers between subordinates, superiors, and peers through the network of tactical radios.

hC2 DIMSOUNT is fully integrated with hC2 COMMAND and hC2 PATROL through hC2 Tactical Communication to provide networked command and control and situational awareness.

FEATURES

- Superior situational awareness on Android devices: own position, FFT, tactical reports, intelligence pictures and plans
- High update rates for FFT over tactical radios achieved through hC2 Tactical Communications protocol
- Exceptional performance over intermittent, low bandwidth tactical radio networks
- Ability to send and receive Command Layers for quickly illustrating maneuvers and tactical situations
- Quickly report and share spotted targets
- Uses same deployment tools as hC2 PATROL, enabling configuration and deployment of both systems in one workflow

LICENSES

hC2 SOFTWARE LICENSES

The hC2 Software Suite includes: NODE CENTER, COMMAND, PATROL, and DISMOUNT battle management software.

DEVICES

PRODUCT NUMBER	PRODUCT NAME	MIN QTY*
RF-7800N-BM100	hC2 NODE CENTER	5
RF-7800N-BM200	hC2 COMMAND	2
RF-7800N-BM300	hC2 PATROL	5
RF-7800N-BM400	hC2 DISMOUNT	10

**Price breaks available for larger license quantities. Inquire for more information.*

SOFTWARE MAINTENANCE AGREEMENTS

ANNUAL MAINTENANCE

Harris offers maintenance agreements for hC2 licenses. Maintenance ensures the hC2 Suite always includes the most up-to-date software. Maintenance is sold in one year increments and is effective immediately upon shipment. It is subject to discounts dependent upon total license sale and duration of maintenance. While maintenance agreements are in effect, users have access to all future product updates with service packs, as well as, newly released functionality and features. Maintenance also includes Harris support when issues arise.

MAINTENANCE

PRODUCT NUMBER	PRODUCT NAME	MAX. DURATION*
RF-7800N-BM101	hC2 NODE CENTER Maintenance	5 year
RF-7800N-BM201	hC2 COMMAND Maintenance	5 year
RF-7800N-BM301	hC2 PATROL Maintenance	5 year
RF-7800N-BM401	hC2 DISMOUNT Maintenance	5 year

**Maintenance is renewable and extendable prior to expiration of maintenance agreement. Inquire for more information.*

SOFTWARE

hMANAGER SOFTWARE SUITE

The hManager Software Suite provides all the tools necessary to plan, configure, provision, deploy and maintain a Tactical Area Communications System. As communication networks grow more complex, communications professionals depend on a variety of tools, applications and areas of expertise to configure, deploy and manage Combat Net Radio (CNR), telephony and data networks. The hManager Software Suite unites those functions under a single user interface and shared data model called the hManager Core™. This creates a more efficient, easier to train, and easier to use experience for today's signals professionals.

The hManager Core provides a set of shared services and interface elements that are used by all applications in the hManager Software Suite. The hManager Core facilitates communication and information sharing between applications for a unified experience. The rest of the hManager Software Suite consists of three applications, each with distinct roles and responsibilities:

- hManager Plan™: Planning, configuration and provisioning of wired and wireless networking assets
- hManager Spectrum™: RF analysis and frequency management
- hManager Monitor™: Monitoring and management of deployed, operational networks

The shared data model of the hManager Software Suite allows seamless sharing of information between applications, eliminating the opportunity to introduce errors by a cumbersome import and export, or copy and paste operations. Current technology typically requires a planner to create an IP plan in a document or spreadsheet and program each piece of equipment in its own application, web page or Command Line Interface (CLI). After provisioning, this information often must be re-entered into a network monitoring and management application to deploy and manage the network, or a complex network discovery task must execute. The hManager Core ensures that information need only be entered once, minimizing the opportunity for error.

FEATURES

- Shared data model that persists between applications.
- State-of-the-art user interface promotes simplified training and operation of applications.
- Integrated, role-based user authentication and authorization.
- Modular, service oriented architecture supports extensibility and adaptability.

HMANAGER SUITE PRODUCTS

PRODUCT NUMBER	CORE	PLAN	SPECTRUM	MONITOR
RF-7800N-SW100	•	•	•	•
RF-7800N-SW101	•	•	•	
RF-7800N-SW102	•		•	•
RF-7800N-SW103	•	•		•
RF-7800N-SW110	•	•		
RF-7800N-SW120	•		•	
RF-7800N-SW130	•			•

hMANAGER ASSET PLUG-INS

The hManager Software Suite is capable of configuring, programming, modeling and monitoring a variety of communication assets. These assets are represented by software plug-ins which are installed separately and available either through installation media (CDs) or downloaded from the Harris Premier web site.

PRODUCT NUMBER	PRODUCT NAME
12189-2501-01	RF-7800M-MP Asset Plug-in CD
12189-2502-01	Cisco Networking Products Asset Plug-in CD

LICENSES

hMANAGER SOFTWARE LICENSES

The hManager Software Suite is licensed for a specific computer. Detailed instructions outlining this process are provided within the hManager Software Suite packaging and on the Harris Premier Customer website at http://premier.harris.com/.

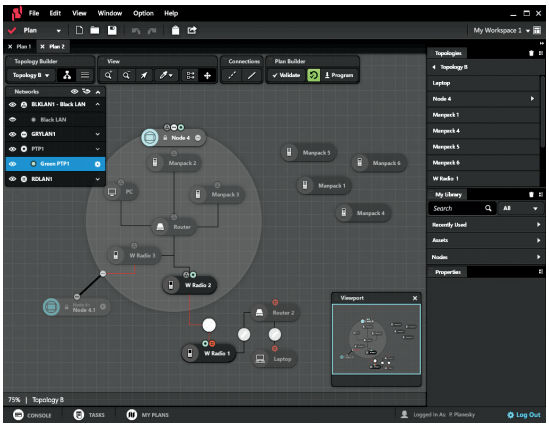
SOFTWARE MAINTENANCE AGREEMENTS

MAINTENANCE

Harris offers software maintenance agreements to accompany licenses of hManager Software. Maintenance licenses are sold in 1 year increments, and up to 5 years may be purchased simultaneously (subject to volume discounts). While software maintenance agreements are in effect (i.e., between the time of installation and the duration of the purchased software maintenance agreement), customers are entitled to software updates and revisions to their installed software. These software updates can be obtained by contacting Harris Product Service or accessing the Harris Premier Customer web site.

PRODUCT NUMBER	PRODUCT NAME
12189-7000-01	RF-7800N-SW100 1 Year Maintenance
12189-7001-01	RF-7800N-SW101 1 Year Maintenance
12189-7002-01	RF-7800N-SW102 1 Year Maintenance
12189-7003-01	RF-7800N-SW103 1 Year Maintenance
12189-7004-01	RF-7800N-SW110 1 Year Maintenance
12189-7005-01	RF-7800N-SW111 1 Year Maintenance
12189-7006-01	RF-7800N-SW120 1 Year Maintenance
12189-7007-01	RF-7800N-SW130 1 Year Maintenance
12189-7008-01	hManager Monitor Device 1 Year Maintenance

hMANAGER PLAN™



hManager Plan enables network planners and administrators to create and deploy flexible networks of diverse communications equipment within dynamic environments and applications. Plan features an intuitive interface for connecting, configuring, validating and provisioning commercial networking equipment and Harris Falcon III® wideband networking radios.

hManager Plan reduces overall training costs and operational delays by supporting both wired and wireless network planning for a wide variety of equipment. Operators and administrators learn a single interface and set of tools that assist not only in network planning, but in the other applications of the hManager suite.

hManager Plan works in conjunction with the other applications in the hManager Software Suite, sharing asset inventory, topologies and configuration details. Communication planners can directly use information from Plan in hManager Spectrum™ to validate the performance of planned radio networks and make any necessary changes before provisioning and deploying equipment. Once the network has been planned and validated, the asset inventory can be imported into hManager Monitor™ for performance monitoring and management. This eliminates lag time between overall network planning, RF analysis and validation, and network monitoring and maintenance.

FEATURES

- Configuration and provisioning of commercial networking devices and Harris Falcon III® wideband networking radios
- Logical, node-based grouping of assets according to organizational architecture
- Network move and redeployment planning support
- Persistent asset and node inventory to easily create multiple plans with the same equipment
- Integration with other applications in the hManager Software Suite™

Products that include hManager Plan:

PRODUCT NUMBER	CORE	PLAN	SPECTRUM	MONITOR
RF-7800N-SW100	•	•	•	•
RF-7800N-SW101	•	•	•	
RF-7800N-SW103	•	•		•
RF-7800N-SW110	•	•		

LICENSES

hMANAGER SOFTWARE LICENSES

The hManager Software Suite is licensed for a specific computer. Detailed instructions outlining this process are provided within the hManager Software Suite packaging and on the Harris Premier Customer website at http://premier.harris.com/.

SOFTWARE MAINTENANCE AGREEMENTS

MAINTENANCE

Harris offers software maintenance agreements to accompany licenses of hManager Plan and Connect PC. Maintenance licenses are sold in 1 year increments, .d up to 5 years may be purchased simultaneously (subject to volume discounts). While software maintenance agreements are in effect (i.e., between the time of installation and the duration of the purchased software maintenance agreement), customers are entitled to software updates and revisions to their installed software. These software updates can be obtained by contacting Harris Product Service or accessing the Harris Premier Customer web site.

hMANAGER CONNECT PC™

RF-7800N-SW111

hManager Connect PC provides an interface for operators to load and configure radios and networking equipment configured by hManager Plan. It provides just enough capability for those operators to execute the planned communication changes.

LICENSE

The hManager Connect PC software is licensed for a specific computer. Detailed instructions outlining this process are provided within the hManager Connect PC packaging and on the Harris Premier Customer website at http://premier.harris.com/.

The RF-7800N-SW111 includes:

PRODUCT NUMBER	PRODUCT NAME
12189-2503-01	hManager Connect PC CD
12189-7504-01	hManager Connect PC Software License

hMANAGER SPECTRUM™

hManager Spectrum provides tools necessary to successfully plan deployments of radio networks in a variety of frequency bands and environmental conditions. Spectrum delivers software models of Harris Falcon III® tactical radios and can be extended to include other radio equipment.

hManager Spectrum enables users to perform line-of-sight (LOS) and area coverage predictions, visualizing them in an interactive, map-based geographic information service (GIS) interface. These predictions are translated into potential performance to give communication planners a reasonable expectation of field performance considering a variety of inputs.

The mapping engine supporting hManager Spectrum allows a variety of GIS and terrain data types. Please contact Harris Product Service for information about the types of data supported.

Spectrum integrates with the other applications in the hManager suite for a smooth and fully integrated experience. By sharing information directly with hManager Plan, network planners can move smoothly from network and IP planning into RF analysis and validation.

FEATURES

- Integrated GIS view for operational visualization and planning
- Multiple models for path and area coverage analysis for Harris Falcon III® and other radio products
- Custom software models of Harris Falcon III® tactical radio products
- Customizable templates for other generic radio products
- Integration with other applications in the hManager Software Suite

Products that include hManager Spectrum:

PRODUCT NUMBER	CORE	PLAN	SPECTRUM	MONITOR
RF-7800N-SW100	•	•	•	•
RF-7800N-SW101	•	•	•	
RF-7800N-SW102	•	•	•	•
RF-7800N-SW120	•		•	

LICENSE

hMANAGER SOFTWARE LICENSE

The hManager Software Suite is licensed for a specific computer. Detailed instructions outlining this process are provided within the hManager Software Suite packaging and on the Harris Premier Customer website at http://premier.harris.com/.

SOFTWARE MAINTENANCE AGREEMENTS

MAINTENANCE

Harris offers software maintenance agreements to accompany licenses of hManager Spectrum. Maintenance licenses are sold in 1 year increments, and up to 5 years may be purchased simultaneously (subject to volume discounts). While software maintenance agreements are in effect (i.e., between the time of installation and the duration of the purchased software maintenance agreement), customers are entitled to software updates and revisions to their installed software. These software updates can be obtained by contacting Harris Product Service or accessing the Harris Premier Customer web site.

hMANAGER MONITOR™

hManager Monitor provides a powerful, enterprise-class network monitoring and management solution tailored for dynamic, highly flexible environments. Designed from the ground up to be flexible and scalable, hManager Monitor provides a global view of the network while operating with federated installations located throughout the network. This translates to situational awareness at the local level, reduced over-the-air management bandwidth and increased change management capability.

Monitor incorporates a powerful rules engine, enabling network administrators to focus on key performance measures to make automated decisions to resolve common problems.

Monitor integrates with other applications in the hManager suite to reduce setup and change time, and provide users an improved overall experience. Monitor can directly import asset inventories and configuration information from hManager Plan™ and display all important performance information to communication planners working on deployments, or redeployments of units and assets.

FEATURES

- Support for distributed peer-to-peer or hierarchical network management model
- Fault monitoring and reporting
- Event correlation and analysis
- Integration with other applications in the hManager Software Suite

Products that include hManager Monitor:

PRODUCT NUMBER	CORE	PLAN	SPECTRUM	MONITOR
RF-7800N-SW100	•	•	•	•
RF-7800N-SW102	•		•	•
RF-7800N-SW103	•	•		•
RF-7800N-SW130	•			•

LICENSES

hMANAGER SOFTWARE LICENSE

The hManager Software Suite is licensed for a specific computer. Detailed instructions outlining this process are provided within the hManager Software Suite packaging and on the Harris Premier Customer website at http://premier.harris.com/.

DEVICE LICENSING

A device monitoring license must be installed along with the hManager Monitor software per monitored device. These licenses can be obtained by contacting Product Service or connecting to the Harris Premier Customer website at http://premier.harris.com/.

PRODUCT NUMBER	PRODUCT NAME
12189-7505-01	hManager Monitor Device License

SOFTWARE MAINTENANCE AGREEMENTS

MAINTENANCE

Harris offers software maintenance agreements to accompany licenses of hManager Monitor. Maintenance licenses are sold in 1 year increments, and up to 5 years may be purchased simultaneously (subject to volume discounts). While software maintenance agreements are in effect (i.e., between the time of installation and the duration of the purchased software maintenance agreement), customers are entitled to software updates and revisions to their installed software. These software updates can be obtained by contacting Harris Product Service or accessing the Harris Premier Customer web site.

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ENHANCING INTELLIGENCE, SURVEILLANCE & RECONNAISSANCE MISSIONS

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TACTICAL ISR & NETWORK SYSTEMS

The ability to observe and understand the intent of potentially hostile elements is a key objective for military and law enforcement agencies. Harris provides a family of integrated products and systems that enhance Intelligence, Surveillance and Reconnaissance (ISR) missions. Whether the mission requires capturing or distributing live full motion video and other Situational Awareness (SA) data, Harris has the technology solutions needed for today's threat environment.

The RF-7800T Situational Awareness Video Receiver (SAVR) provides a cost-effective and smaller generation of Remote Video Terminal (RVT) technology, delivering UAS full motion video reception into the hands of warfighters in both dismounted and vehicle-based missions.

The RF-3590 Ruggedized Tablet is a 7-inch (~17.8 centimeter) Android tablet that provides high performance application and computing capabilities at the tactical edge. The RF-3590's computing resources allow users to access full motion ISR video, display situational awareness (SA) information, access tactical databases, and run training or other secure applications simultaneously.

The RF-7800N-CP Mobile Computing Platform (MCP) is at the center of the vehicular system. It provides a powerful rugged full router, network switch, server and VoIP call manager all in one device. The MCP hosts mission critical multimedia applications, supporting an integrated and versatile network platform. The rugged RF-7800N-CP interoperates with Harris Falcon II and Falcon III tactical radios, the RF-7800I Vehicular Intercom System, and other military, government, public safety, and commercial devices.

continued on next page

HARRIS®

The RF-6020-NW001 is a ruggedized router that utilizes the Commercial Off-the-Shelf (COTS) Cisco 5915 Embedded Services Router (ESR) with Advanced IOS. The RF-6020-NW001 brings the commercial baseband network capability to the tactical operations environment.

NOTE: In addition to the RVT products described in this section, customers can purchase the RF-300M-UK001 L-Band ROVER Receive Kit to upgrade their new or existing AN/PRC-117G(V)1(C) to enable video reception for display at resolutions up to 720 x 480 at 15 fps. See the Falcon III® Multiband Radios chapter for additional details.

TACTICAL ISR SYSTEMS

FALCON III® SAVR (SITUATIONAL AWARENESS VIDEO RECEIVER)

RF-7800T-HH

The RF-7800T SAVR (Situational Awareness Video Receiver) is a handheld ISR video receiver designed specifically for the dismounted warfighter, yet configurable for vehicular and TOC-based applications. The SAVR hosts a JTRS Software Communications Architecture (SCA) v2.2 operating environment.

Analog and digitally enabled, the SAVR receives over 95% of fielded downlinks from manned and unmanned secure air assets, including Ravens, Shadows, Predators, and C-130 gunships. The SAVR also supports SUAS DDL, a Type III AES encrypted waveform—and the preferred downlink of most modern small, unmanned systems.

In addition to acting as a standalone handheld video receiver, the SAVR is compatible with other Harris multiband radios such as the AN/PRC-152A and the AN/PRC-117G. The 7800T SAVR can also inject streaming video into a tactical MANET, providing others on the network access to video downlinks. The SAVR supports a variety of displays, including laptop computers and the Harris RF-3590 Ruggedized Tablet.

The RF-7800T SAVR is also compatible with the TM-NVG and SENVG+ goggles from Exelis Geospatial Systems. Goggles and cabling must be ordered separately from Exelis; contact Product Management for details.

FEATURES

- Rugged, handheld form factor with "jerk-and-run" vehicular functionality
- Network enabled
- USB video class 1.0 support
- Embedded GPS with relative position reporting (bearing and distance calculation to the UAV when receiving SUAS DDL)
- Channel scanning across all bands
- 99 channel presets with seek capability
- Information bar overlay on video feed, providing enhanced situational awareness
- Powered by widely fielded batteries
- MIL-STD-810F qualified

HELMET-MOUNTED VIEWER KIT

RF-7800T-DS012 (DoD)
RF-7800T-DS097 (International)

The Helmet-Mounted Viewer Kit includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
A30-0371-002	Helmet-Mounted Viewing Display	1
RF-7800T-HH	ISR Video Receiver	1
12110-7110-A24	Display Cable	1
12110-7120-A24	Display Cable	1
12041-2200-01	Rechargeable, High-Capacity Li Ion Battery	1
12110-2700-001	L, S, C-Band Antenna	1
12110-7230-A006	Cable Assembly, USB Type A	1
10515-0373-4000	Quick Reference Guide	1

SAVR EYEGLASS WORN KIT

RF-7800T-DS013 (DoD)
RF-7800T-DS098 (International)

The Situational Awareness Video Receiver (SAVR) Eyeglass Worn Kit includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
A30-0825-001	Eyeglass Worn Viewing Display	1
RF-7800T-HH	ISR Video Receiver	1
12110-7110-A24	Display Cable	1
12041-2200-01	Rechargeable, High-Capacity Li Ion Battery	1
12110-2700-01	L, S, C-Band Antenna	1
12110-7230-A006	Cable Assembly, USB Type A	1
10515-0373-4000	Quick Reference Guide	1

ORBITAL-MOUNTED VIEWER KIT

RF-7800T-DS014 (DoD)
RF-7800T-DS099 (International)

The Orbital-Mounted Viewer Kit includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
A30-0855-001	Orbital-Mounted Viewing Display	1
RF-7800T-HH	ISR Video Receiver	1
12110-7110-A24	Display Cable	1
12041-2200-01	Rechargeable, High-Capacity Li Ion Battery	1
12110-2700-01	L, S, C-Band Antenna	1
12110-7180-A006	Cable Assembly, ISR VGA, HD 15 m (~49 ft.)	1
12110-7230-A006	Cable Assembly, USB Type A	1
10515-0373-4000	Quick Reference Guide	1

VEHICULAR CONFIGURATION

RF-7800T-HV001 VEHICULAR KIT

The RF-7800T-HV001 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12006-0017-01	GPS Straight SMB Connector, Magnetic Mount	1
12011-0110-A015	DC Cable, Unterminated, 15 ft. (~4.6 m)	1
12110-2801-01	ISR Vehicular Antenna and Cable Assembly	1
E75-0017-180	Cable Extension, SMB Male to SMB Female	1
RF-5852-CH011	Vehicular Handheld Charger/Power Supply	1
12067-5700-01	Adapter Assembly, USB, Mini AB	1
W95-0011-302	Cable Assembly, Shield Type A Plug to Mini B Plug	1

ACCESSORIES

The RF-7800T utilizes Falcon III batteries, chargers and soft goods. See the Common Accessories chapter for selection and more information.

CARRYING ACCESSORIES AND SOFTWARE

PRODUCT NUMBER	PRODUCT NAME
12110-7180-A006	Cable Assembly, ISR VGA, HD 15 m (~49 ft.)
RF-5936-CAXXX	Handheld Radio Holster
RF-5937-CAXXX	Handheld Radio Flip-Down Holster
12041-1595-01	Handset Radio Accessory Bag
12110-1050-01	Programming Kit

C4ISR

RUGGEDIZED TABLET

RF-3590-RT200

The Harris RF-3590 is a 7-inch (~17.8 centimeter) ruggedized Android tablet that provides high performance application and computing capabilities at the tactical edge. The low-profile RF-3590 is lightweight and ruggedized to MIL-STD-810G standards to ensure reliable operation in extreme tactical environments. The Tablet's 1.5 GHz dual core processor and extensive interface capability allow the user to access full motion ISR video at the tactical edge, display situational awareness (SA), access tactical databases, and run training or other secure applications simultaneously.

FEATURES

- Android OS
- 1.5 GHz dual core processor
- Up to 128 GB internal non-volatile memory, 2 GB LPDDR2
- 7-inches (~17.8 cm) sunlight readable, glove touch screen
- MIL-STD-810G, MIL-STD-461G
- Wireless connectivity: Bluetooth, 802.11n (WiFi only)
- Ethernet and USB 2.0
- Docking and expansion connectors

The RF-3590-RT200 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12131-1000-04	Display Unit Assembly	1
A10-0239-001	Power Supply Kit, AC to DC	1
12131-0160-03	Mini-Dock (RJ45)	1
W95-0011-301	Cable Assembly, Shield Type A Plug to Mini B	1
10515-0418-4000	Quick Start Guide, RF-3590-RT	1
A30-1331-002	SD Memory Card, 4 GB	1

RF-3590-RT300

The Harris RF-3590-RT300 includes the same features as the RF-3590-RT 200 and additionally LTE Band 13/14 Cellular.

OPTIONS

Will work with the RF-7800M-MP, RF-7800M-HH, AN/PRC-152A, and AN/PRC-117G.

ENHANCED KDU (EKDU) KIT

12131-4020-02

The EKDU Kit includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-3590-RT200	RF-3590 Tablet, including battery and stylus	1
12131-0273-A006 and 12131-0274-A12	AN/PRC-117G/Tablet USB/Power Cable with BA5590	1
RF-ANDKDU-SW001	Soft KDU Application	1
RF-6705AN-SW001	TacChat IP Android Application	1
12131-2015-01	Single Bay Battery Charger	1
12131-2100-02	Spare Battery (standard capacity)	1

Note: Compatible with RF-7800M-MP.

VEHICULAR KIT

12131-4010-02

The Vehicular Kit includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-3590-RT200	RF-3590 Tablet, including battery and stylus	1
12043-2850-A006	AN/PRC-117G/Tablet USB Cable	1
RF-ANDKDU-SW001	Soft KDU Application	1
RF-6705AN-SW001	TacChat IP Android Application	1
12131-2015-01	Single Bay Battery Charger	1
12131-2100-02	Spare Battery (standard capacity)	1
12131-0300-01	Tablet Vehicle Dock	1
Z95-0018-001	Vehicle Mount	1

Note: Compatible with RF-7800M-MP.

ACCESSORIES

See the Common Accessories and Antennas chapters for more information.

SOFTWARE INTEROPERABILITY

RADIO & MINIMUM FIRMWARE	CABLE	APPLICATION		
		RF-ANDKDU	RF-6705AN	RF-ANDVP
AN/PRC-117G v4.3	12131-0270-A006	•	•	•
AN/PRC-152A v8.1.1	12131-0270-A006 and 12041-5663-01/-02	•	•	•
RF-7800M-MP v3.2	12131-0270-A006	•	•	•
RF-7800M-HH v1.1	12131-0270-A006 and 12041-5663-01/-02	•	•	•
RF-7800V-HH/V511	12067-5800-A0XX		•	
RF-7800S-TR	12055-0718-A006		•	•
RF-7850S	12164-0718-A006			
RF-7800H-MP	12131-0270-A006		Narrowband Only	
RF-7850M	D067-5800-A006 6 ft. (~1.8 m) USB-Ethernet D067-5800-A020 20 ft. (~6 m) USB-Ethernet			
RF-5800H-MP	10535-0775-AXXX* and 12131-7110-01		•	
RF-7800T	121100-7230-A006*			•
RF-5800M-HH	12011-0775-AXXX and 12131-200-04		•	
AN/PRC-117F HPW IP	10513-0710-A006* and 12131-0200-04		•	
AN/PRC-152 HPW IP	12041-7180-AXXX and 12131-0200-04		•	
RF-5800V-HH	12011-0775-AXXX and 12131-200-04		•	
RF-5800V-MP	10513-0775-AXXX* and 12131-0200-004		•	
RF-7400E TVP	12055-0718-XXX			•

BATTERIES AND CHARGERS

PRODUCT NUMBER	PRODUCT NAME
12131-2100-02	Lithium Ion Battery, 5.2 A-HR
12131-2000-01 12131-2000-02 12131-2000-06	Battery Charger, TDU Single Bay Dual Bay Six Bay

CARRYING ACCESSORIES

PRODUCT NUMBER	PRODUCT NAME
12131-0410-06	Soft Carrying Pouch

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
12131-0300-01	Tablet Vehicular Dock

Note: Dock only, mount is ordered separately.

SPARE PARTS KITS

PRODUCT NUMBER	PRODUCT NAME
12131-0100-05	Stylus Pack (Qty. 5)
12131-1020-01	Screen Protector Kit (Qty. 3)

TACTICAL VIDEO PROCESSOR (TVP)

RF-7400E-VP001

The RF-7400E-VP is a body-worn Tactical Video Processor (TVP) that enables soldiers at the squad and platoon levels to store and stream full motion video back to tactical command centers or combat vehicle operations. Unlike other video processors and video recorders, the TVP combines these capabilities into a single ruggedized package that allows soldiers to deploy into the battlefield with confidence. Users have full control over the video output and can stream video over a radio link by utilizing the interoperability of Falcon III radios such as the RF-7800S SPR, the RF-7800M-MP Multiband Networking Radio, the AN/PRC-117G Type-1 Multiband Networking Radio RF-7850M, RF-7850A-MR, RF-7850S and the AN/PRC-152A Wideband Networking Radio.

RF-74OOE-VP INCLUDES

- Tactical Video Processor (Black)
- TVP Quick Reference Guide
- 12055-0710-A006 Programming Cable
- 12055-2105-01 High Capacity Battery
- USB drivers
- 10515-6613 Operator Manual

GENERAL SPECIFICATIONS

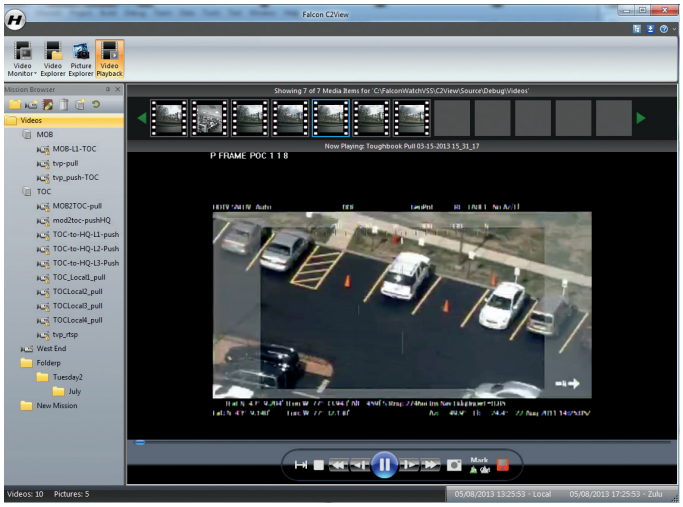
Video Input	NTSC/PAL Analog Video
Compression	ITU H.264 (MPEG-4 Part 10/AVC)
Transport Protocol	MPEG-2 Transport Stream
Video Protocol	Supported video formats: RTP using MPEG 2-TS, H.264 Straight MPEG 2-TS, H.264 RTSP using RTP with MPEG 2-TS, H.264
Digital Video Output	USB 1.1
Frame Rate	5-30 fps (frames per second)
Frame Size	NTSC: 704 x 480 to 352 x 240 PAL: 704 x 576 to 352 x 288
Streaming Bit Rate	64 Kbps/1 Mbps
Storage	8 hours of 1 Mbps/30 fps video
Bullet Camera Power Supply Output	12 VDC @ 250mA
Battery Life using supplied bullet camera (constant stream/storage[1])	High-Capacity Lithium-Ion Battery: 8 hours

[1]SPR Battery

PHYSICAL & ENVIRONMENTAL

Size without Battery	3.5 W x 3 H x 1.3 D in. (~8.9 W x 7.6 H x 3.3 D cm)
Weight without Battery	8.5 oz. (0.25 kg)
Temperature	-22°F to 140°F (-30°C to +60 °C)
Environmental Standards	MIL-STD-810G
Immersion	1 Meter
Color	Black

FALCON C2VIEW – VIDEO MANAGEMENT APPLICATION



RF-7400E-CV001

RF-7400E-CV Falcon C2View is a video management application optimized for processing and managing tactical video and audio information. Falcon C2View allows users to acquire, view and manage incoming video streams from the RF-7400E-VP Tactical Video Processor (TVP) and provides the ability to archive data locally for later playback and analysis. In addition, it allows selection of video streams and forwarding to higher echelon commanders and analysts.

Falcon C2View is specifically designed to operate in challenging radio communication environments where packet loss and data errors are encountered. Unlike many commercial video decoders, Falcon C2View is able to quickly resynchronize automatically on the received video stream, maintain minimum latency in the displayed video, and maintain the best quality of video over a wide range of operational scenarios. Falcon C2View allows received video streams to be logically archived using customizable folders to reflect your missions. The Video Explorer View allows these folders to be easily accessed and video files chosen for playback by video thumbnails. Playback of the video files can be paused at any point, single frames (snapshots) can be selected for exporting to other applications, and any point in the playback video can be quickly accessed with the use of a slider bar.

Additionally, Falcon C2View provides intuitive control of TVP functionality. Falcon C2View allows access to the TVP configuration webpage via a hyperlink, where video files recorded by the TVP can be quickly downloaded with only a few mouse clicks. Falcon C2View can remotely command the TVP to start and stop video streaming over the radio communication link.

FEATURES

- Customize video archives according to missions
- Archive incoming video as it is streamed live
- Start/Stop the stream from the TVP remotely
- Standard play/pause/stop/fwd/rev speed controls
- Select video file to forward to upper echelon commanders or analysts
- Select a single frame for export out of a larger video clip (snapshot)
- Supported video formats:
  - RTP using MPEG 2-TS, H.264
  - Straight MPEG 2-TS, H.264
  - RTSP using RTP with MPEG 2-TS, H.264

Note: C2View does not support Rover or DDL video from the RF-7800T

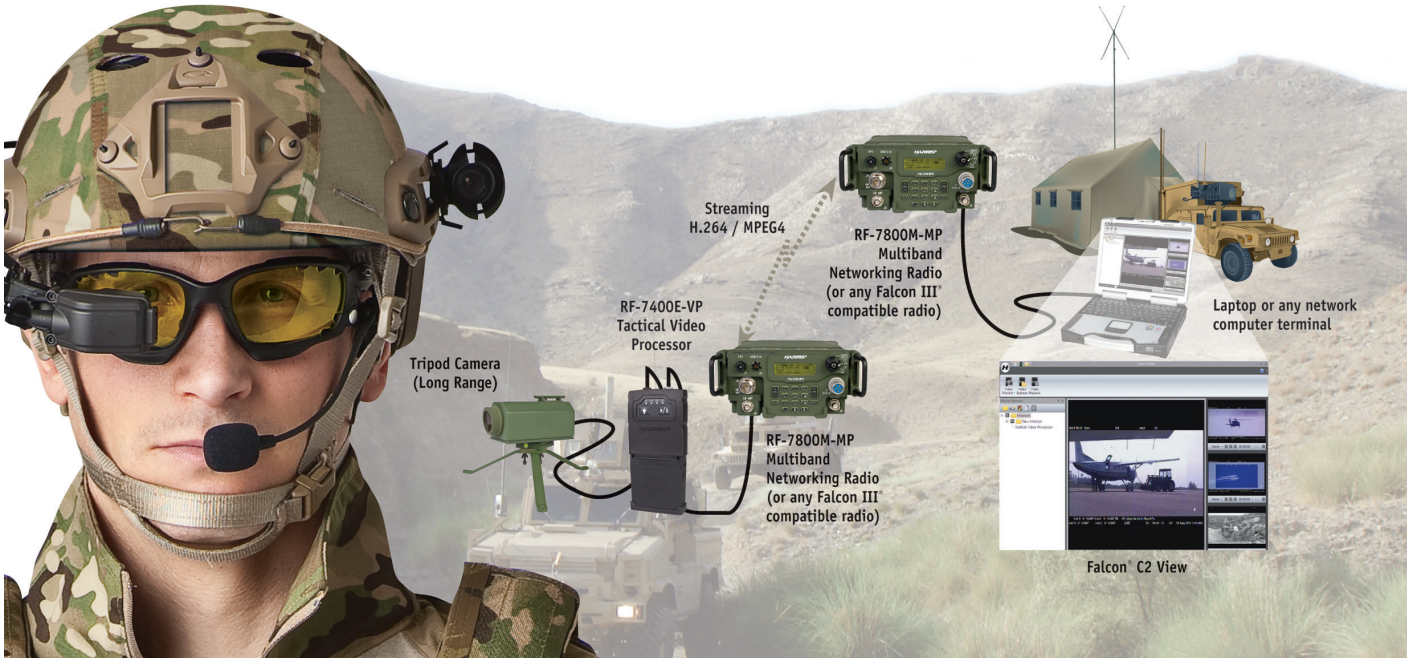
Recommended minimum PC capabilities for the RF-7400E-CV:

- Windows XP Professional SP2 operating system
- Windows 7
- 1.6 GHz dual core processor
- 1.8 GB ram
- 80 GB hard drive

RECOMMENDED RF-7800S SPR VIDEO CONFIGURATION

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7400E-VP001	TVP (includes battery and data cable)	1
RF-7400E-IK001	TVP Helmet Bullet Camera (helmet not included)	1
12085-2211-A004	Cable, TVP to SPR	1
RF-7800S-TRXXX	SPR Team Radio (includes battery and antenna)	2
RF-3038-HS001	SPR Ranger Lightweight Headset	2
12128-6060-XX	Carrying Pouch for TVP	1
12055-6060-XX	Carrying Pouch for SPR	2
RF-7400E-CV001	Falcon C2View (Video Management Application Software CD)	1
RF-3577-2XXX	Rugged Laptop Computer	1

RECOMMENDED RF-7800M-MP (OR AN/PRC-117G) VIDEO CONFIGURATION



PRODUCT NUMBER	PRODUCT NAME	QTY
RF-7400E-VP001	TVP (includes battery and data cable)	1
RF-7400E-IK002	TVP Long Range Camera (200-meter) with Tripod	1
RF-7800M-MPXXX or AN/PRC-117G	RF-7800M-MP Radio or AN/PRC-117G Radio	2
RF-7800M-DK001 or RF-300M-DK001 (for AN/PRC-117G)	Radio Dismount Kit	2
12085-2216-A004	Cable, TVP to RF-7800M-MP or AN/PRC-117G	1
12043-2760-AXXX	Cable, Ethernet Data for RF-7800M-MP or AN/PRC-117G	1
12128-6060-XX	Carrying Pouch for TVP	1
RF-5935-CAXXX	Carrying Pouch for RF-7800M-MP or AN/PRC-117G	2
RF-7400E-CV001	Falcon C2View (Video Management Application Software CD)	1
RF-3577-2XXX	Rugged Laptop Computer	1

TVP ACCESSORIES

CAMERA OPTIONS

PRODUCT NUMBER	PICTURE	PRODUCT NAME	INCLUDES	COMPATIBLE RADIOS
RF-7400E-IK001		TVP Helmet/Weapon Bullet Camera	• 12085-2213-A001 Day/Night Bullet Camera • 12085-2215-A004 Cable Camera to TVP • A30-0864-001 Picatinny Mount 254 mm (black) *Note IK001 does NOT include a Picatinny mounting rail*	RF-7400E-VP
RF-7400E-IK002		TVP Long Range Camera (200 meter)	• 11184-1110-01 Long Range Camera • 12085-2208-A006 Cable, Camera to TVP	RF-7400E-VP
RF-7400E-CV001		Falcon C2View	Video Management Application Software. Purchase one per installation.	RF-7400E-VP

CABLES & CABLE KITS

PART NUMBER	DESCRIPTION	RADIOS SUPPORTED/WHERE USED
12085-2225-01	Kit, AN/PRC-152A M-HH USB/KDU, Top Exit	AN/PRC-152, AN/PRC-152A, RF-7800M-HH includes Handheld Adapter and Cable
12085-2211-A004	Cable Assembly, TVP USB to SPR	RF-7800S
12085-2212-A004	Cable Assembly, TVP USB to RF-7850M	RF-7850M-HH, RF-7850M-V511 (For use with ANW2 ONLY)
12085-2216-A006	Cable Assembly, TVP USB to RF-7800M/AN/PRC-117G	AN/PRC-117G, RF-7800M-MP
12085-2226-01	Cable Kit for TVP Camera (with power) *Cable Kit for use with generic/third party cameras requiring power.*	• 12085-2219-A006 Y Cable. Cable includes a 12 DC to a standard 2.1mm DC plug. TVP connection and 3 each BNC adapters • BNC to 3.5 mm Mono • BNC to RCA Male • BNC to RCA Female
12085-2226-02	Cable Kit for TVP Camera (no power) *Cable Kit for use with generic/third party cameras with independent battery power.*	• 12085-2220-A006 Cable, TVP to camera and 3 each BNC adapters • BNC to 3.5 mm Mono • BNC to RCA Male • BNC to RCA Female

POWER AND CHARGING OPTIONS

SPARE BATTERIES

PRODUCT NUMBER	PICTURE	PRODUCT NAME	COMPATIBLE EQUIPMENT
12055-2105-01		Spare High-Capacity Lithium-Ion Rechargeable Battery	RF-7400E-VP SPR Team Radio
12055-2102-01		AA Battery Adapter (AA batteries not included, requires 6)	RF-7400E-VP SPR Team Radio
B41-0007-000		AA Zinc-Manganese Dioxide Battery	12055-2102-01 AA Battery Adapter
B41-0010-200		AA Lithium (Single Use)	12055-2102-01 AA Battery Adapter

CHARGERS

PRODUCT NUMBER	PICTURE	PRODUCT NAME	USED WITH
RF-5854-CH001		Single-Bay Battery Charger (AC)	12055-2105-01 High-Capacity Lithium-Ion Rechargeable Battery
RF-5854-CH006		6-Bay Battery Charger (AC)	12055-2105-01 High-Capacity Lithium-Ion Rechargeable Battery
RF-5955-CH008		Vehicle 8-Bay Battery Charger (DC)	12055-2105-01 High-Capacity Lithium-Ion Rechargeable Battery
RF-5905-CH001 RF-5905-CH002 RF-5905-CH003		2-Bay Solar Charger, Traditional Camouflage Pattern Desert Camouflage Pattern Digital Camouflage Pattern	12055-2105-01 High-Capacity Lithium-Ion Rechargeable Battery

CABLES

PRODUCT NUMBER	PICTURE	CATEGORY	PRODUCT NAME	TVP CONNECTION	ACCESSORY CONNECTION	COMPATIBLE WITH
12055-0710-AXXX (003, 004, 006)		Programming & Data	Fill/Data Cable, USB Specify length in feet: 003 for 3 ft. (~0.9 m) 004 for 4 ft. (~1.2 m) 006 for 6 ft. (~1.8 m)	TVP-Black Connector	Standard USB Connector (Type A)	RF-7400E-VP SPR Team Radio SPR Vehicle Radio
12055-0711-AXXX (003, 004, 006)		Programming & Data	Fill/Data Cable, Mini-USB Specify length in feet: 003 for 3 ft. (~0.9 m) 004 for 4 ft. (~1.2 m) 006 for 6 ft. (~1.8 m)	TVP-Black Connector	Standard Mini-USB Connector (Type Mini B-5)	RF-7400E-VP SPR Team Radio SPR Vehicle Radio
12085-2211-A004		Radio Interface	Cable, TVP to SPR	TVP-Black Connector	SPR-DAT Connector	RF-7400E-VP SPR Team Radio SPR Vehicle Radio
12085-2216-A004		Radio Interface	Cable, TVP to RF-7800M-MP or AN/PRC-117G	TVP-Black Connector	RF-7800M-MP or AN/PRC-117G Top Connector	RF-7400E-VP RF-7800M-MP AN/PRC-117G
12085-2225-01		Radio Interface	Cable, TVP to AN/PRC-152A	TVP-Black Connector	AN/PRC-152A Side Connector	RF-7400E-VP AN/PRC-152A
12028-2226-01		Camera Interface	Cable, TVP to Camera Video and Power	TVP-Silver Connector	Cameras	NTSCPAL Cameras
12085-2226-02		Camera Interface	Cable, TVP to Camera Video Only	TVP-Silver Connector	Cameras	NTSCPAL Cameras
12055-0727-A006		Audio	Cable, SPR to PC, Falcon C2View records Audio with Video	None	SPR Black Fisher	SPR and Falcon C2View

SOFT GOODS (CARRYING ACCESSORIES)

PRODUCT NUMBER	PICTURE	PRODUCT NAME
12128-6060-01		MOLLE Compatible Holster for RF-7400E-VP Tactical Video Processor (TVP), Olive Drab Green
12128-6060-02		Coyote Tan
12128-6060-03		Traditional Digital Camouflage
12128-6060-04		Desert Digital Camouflage
12128-6060-05		Black
12128-6060-06		Multicam

COLOR OPTIONS

OLIVE DRAB GREEN | COYOTE TAN | TRADITIONAL DIGITAL CAMO | DESERT DIGITAL CAMO | BLACK | MULTICAM

C4ISR

MOBILE COMPUTING PLATFORM (MCP)

RF-7800N-CP001 Green
RF-7800N-CP002 Tan
RF-7800N-CP003 Black

The versatile Harris Mobile Computing Platform (MCP) is the center of the mobile data network. It digitally connects and manages voice, data, and video within and across networks. Also incorporated into the unit are a powerful rugged network router, network switch, server, Voice over Internet Protocol (VoIP) call manager, and an optional video manager. The MCP hosts mission critical multimedia applications, providing an integrated and versatile communications server for military, public safety, C4ISR, and other network-centric communications systems. MCP configuration is done through an easy-to-use web-based graphical user interface which is hosted on the MCP.

The MCP's small footprint, mounting flexibility, and low power consumption make it an ideal solution for vehicle installations, where space and power are often limited. With a variety of interfaces, including GigE and fast Ethernet, USB, serial, video, and CanBus, the MCP allows connectivity to several networking services with one compact device.

The RF-7800N-CP includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
11194-1200-XX	Mobile Computing Platform	1

The RF-7800N-CP includes an ancillary kit that contains:

PRODUCT NUMBER	PRODUCT NAME	QTY
11194-1205-01	Ancillary Kit	1
10400-1136-A12	Cable Assembly, Ground Strap	1
11194-1402-A020	Cable Assembly, DC Power	1
11194-1410-A012	Cable Assembly, Multi-radio	1
10515-042-6000	e-Publication, including manual and mounting template	1

FEATURES

- Rugged vehicular server, router and managed switch
- Voice Over Internet Protocol (VOIP) call manager
- Removable solid state hard drive
- Multiple Ethernet, USB, video and serial port connections
- Vehicle CanBus connection
- Video encoding, storage, streaming, and playback software option

ACCESSORIES

CABLES

PRODUCT NUMBER	PRODUCT NAME
11194-1410-A006	Multi-radio/MCP to Ethernet/USB Cable
11194-1430-A006	MCP Gigabit Ethernet Cable
11194-1440-A006	MCP Multi-radio Full I/O Cable
11194-1445-A006	MCP Multi-radio High Speed I/O Cable

TECHNICAL MANUAL

PRODUCT NUMBER	PRODUCT NAME
10515-0421-4200	System Installation/Administration Manual

MCP VIDEO MANAGEMENT APPLICATION SOFTWARE

RF-7800N-AP110

The RF-7800N-AP110 Video Server Application (VSA) transforms the RF-7800N-CP MCP into a powerful Intelligence, Surveillance, and Reconnaissance (ISR) device that provides simultaneous video encoding, storage, streaming, and real time playback capabilities. Ideal for applications such as remote video surveillance, multi-camera security and recording, and real-time situational awareness, the MCP allows crew members to collect information from inside a vehicle or a secured fixed location. The MCP's removable solid-state hard drive provides storage for long duration video recording and increased data security.

The VSA option includes one RF-7400E-CV001 Falcon C2View software application for personal computer clients.

MCP SOFTWARE/APPLICATIONS OPTION

PRODUCT NUMBER	PRODUCT NAME
RF-7800N-AP110	Video Server Application

ROUTERS AND NETWORKING

TACTICAL ROUTER

RF-6020-NW001 Tan
RF-6020-NW002 Green

The RF-6020-NW is a ruggedized routing device that utilizes the Commercial Off-the-Shelf (COTS) Cisco 5915 Embedded Services Router (ESR) with Advanced IOS. The RF-6020-NW brings commercial baseband network capability to the tactical operations environment. It addresses both vehicular and fixed tactical networking needs by providing high speed router operation with PoE (Power over Ethernet), and includes tactical features such as blackout and zeroize. The RF-6020-NW comes ready to mount in a vehicle.

The RF-6020-NW includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
12025-5000-01	Tactical Router	1
12025-5130-A1	Vehicular DC Power Cable	1
10515-6669	Rugged Router Ops Card	1

MULTIPLE CHANNEL TACTICAL NETWORK ACCESS HUB

RF-6010-NW001

The RF-6010-NW001 Multiple Channel Tactical Network Access Hub provides Falcon II® and Falcon III® radio users with easy-to-use access to other voice and data communication networks and systems. The RF-6010 enhances radio networks operating the following Falcon II and Falcon III radios: RF-5800H-MP, AN/PRC-150(C), RF-5800V-MP, RF-5800M-HH, MPR-9600, RF-7800H, RF-7800V-HH, RF-7800V-V5XX and AN/PRC-117F(C) (base station AN/PRC-117F(C) radios must have Firmware version 5.0 or newer). The RF-5800V-HH radio can be used as an outstation radio in RF-6010/VHF networks. When an AN/PRC-117F(C) is connected to an RF-6010 in a SATCOM or SINCGARS net, outstation radios can be any compatible radio type within those nets.

Depending on operational telephony needs, the RF-6010 and Falcon II/III radios can operate as a standalone telephony system with local phones, or integrate with any Private Branch Exchange (PBX) or tactical phone switch. There are direct connections for four POTS (Plain Old Telephone Service) local phones and eight two-wire analog connections to a telephone switch. The RF-6010 provides independent switching capability between four Falcon II/III radio networks and all 12 telephony connections. Use of the phone switch lines requires a tactical or commercial telephone switch that provides linking services between external phone users and the RF-6010. The RF-6010 is designed to FCC, NET4, CTR21, JATE and country-specific point-to-talk specifications. It is designed to FCC Part 68, EN55022, EN55024, and country-specific standards.

The RF-6010 Network Management Application (NMA), provided with the RF-6010, is used to configure and program the unit. The NMA provides the ability to tailor the interfaces between the RF-6010 and local phones, phone switches, Ethernet networks and Falcon II/III radios. HF and VHF-UHF Radio Programming Application (RPA) files and Communication Planning Application (CPA) files can be imported for easy set-up of the radio networks. Color: Green.

SINGLE CHANNEL TACTICAL NETWORK ACCESS HUB

RF-6010-NW002

The RF-6010-NW002 Single Channel Tactical Network Access Hub connects to a single RF-5800H-MP, AN/PRC-150(C), AN/PRC-117F(C), MPR-9600, RF-5800M-HH, or RF-5800V-MP base station radio. All other interfaces and features are identical to the RF-6010-NW001 Multiple Channel Tactical Network Access Hub. Color: Green.

FEATURES

RADIO INTERFACES

- Simultaneous support of one to four Falcon II radio networks
- Base station radios: RF-5800H-MP, AN/PRC-150(C), RF-5800V-MP, AN/PRC-117F(C), RF-5800M-HH, RF-7800H, RF-7800V-HH, RF-7800V-5XX, RF-7800H-MP
- Outstation radios: RF-5800H-MP, AN/PRC-150(C), MPR-9600, RF-5800V-MP, RF-5800V-HH, RF-5800M-HH, RF-7800H, RF-7800V-HH, RF-7800V-V5XX

TELEPHONY

- Local operator connections: 4 POTS telephones
- External phone lines: 8 (switch-based PABX/PBX)
- Configurable voice prompts
- Supports a variety of call scenarios depending on connected radio
- Local phone-to-radio/radio-to-local phone
- External phone-to-radio/radio-to-external phone
- Radio-to-radio crossnet
- Radio net-to-phone/phone-to-radio net
- Phone-to-phone over HF and VHF
- Supports voice or manually activated radio keying from local and external phones
- Supports configurations that utilize the CD115E tactical phone switch and ET-10 tactical phone

- Supports connection to voice-over-internet-protocol (VOIP) networks utilizing CISCO® or Asterisk® call managers

The RF-6010-NW001 and RF-6010-NW002 include:

PRODUCT NUMBER	PRODUCT NAME	QTY
12025-2986-A4	Phone Line Breakout Box and Cable (4 Local, 8 External RJ-11 connections) with DC Power Cable, 10 ft. (~3 m)	1
10513-4800-02	Battery Box	1
A05-0009-001	RJ-11 Standard Telephone Cables	1
W95-0009-810	Ethernet and ASCII Y-Cable	1
W95-0009-901	Ethernet Cable Accessories	1
12025-7106-01	RF-6010 Network Management Application	1

OPTIONS

UPGRADE FOR THE RF-6010 SERIES

RF-6010-UK001

The RF-6010-UK001 provides a version upgrade to the latest version of the RF-6010 firmware and Network Management Application.

ACCESSORIES

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
RF-5211VSM	R/T Shock Mount
RF-5870-VM001	Shock Mount, Adjustable

POWER SUPPLIES

PRODUCT NUMBER	PRODUCT NAME
RF-5850-PS001	Power Supply—AC/DC Input

COMBAT TELEPHONE

RF-6015-HS001

This rugged combat telephone provides traditional handset-style operation for the field user. This phone is well suited for tactical operational environments.

FIELD TELEPHONE

RF-6015-HS002

This compact handheld field telephone offers a rugged, lightweight option to mobile RF-6010 users. Contact Product Management for availability or information on additional commercial telephone models.

TECHNICAL MANUAL

PRODUCT NUMBER	PRODUCT NAME
10515-0262-4200	User's Manual

FUSION™ TACTICAL CELLULAR

RF-8000F-TC

Fusion™ Tactical Cellular is a robust and easily deployable turnkey system that brings commercial 4G LTE cellular and wireless networking to the tactical environment. It is a complete, standalone solution, providing users the benefit of high bandwidth, lower latency wireless data services directly leveraged from the commercial standard. The Fusion Tactical Cellular system fits many use cases, including Tactical Operation Centers, mobile vehicles, and temporary deployments for disaster relief missions. The system includes high throughput backhaul options using standard, IP-based networking interfaces that create flexible and straightforward integration with customer networks. Communication networks are scalable by interconnecting Fusion™ Tactical Cellular networks creating wider areas of operation as necessary.

The product is offered in two configurations: a basic kit ready for integration into a vehicle, and a fixed-site kit that adds the RF-5051 power supply and backhaul data cables. To support unique system requirements, the 4G LTE User Equipment (UE) and mounting/mast accessories are sold separately. See the following tables for adding optional equipment. Both product kit configurations are available in either green or tan and include the following components to deploy a 4G LTE network:

- Rugged, Band 13 eNodeB
- Rugged Mobile Computing Platform (MCP) hosting the Evolved Packet Core (EPC) software
- Two LTE antennas and GPS antenna (with RF cables)
- eNodeB and MCP DC power cables*
- S1 gigabit data cable between eNodeB and MCP
- Fast Ethernet programming/data cable for the MCP**
- Twenty provisioned Harris SIM cards

** The TC001/002 Vehicle Kits include unterminated DC power cables. No power supply is included in the Vehicle Kits. The TC101/102 Fixed Site Kits include DC power cables compatible with the RF-5051 that is also included.*

*** The TC101/102 Fixed Site Kits add a gigabit Ethernet backhaul cable and two additional Fast Ethernet data cables.*

FEATURES

- 4G LTE Frequency Band 13 (746-756 MHz uplink, 777-787 MHz downlink)
- 10 MHz channel bandwidth
- 2x2 MIMO (Multi-In Multi-Out) base station antenna system
- 5 Watts average transmit power output per channel
- System capacity: up to 32 active users, over 100 registered users
- Centralized, self-contained LTE core: MME, SGW, PGW, and HSS
- Built-in VoIP call manager, network gateway, and router
- High throughput IP backhaul options: 1x Gigabit Ethernet and 6x Fast Ethernet

SYSTEM CONFIGURATIONS

PRODUCT NUMBER	PRODUCT NAME
RF-8000F-TC001	Fusion Tactical Cellular, Vehicular System, Green
RF-8000F-TC002	Fusion Tactical Cellular, Vehicular System, Tan
RF-8000F-TC101	Fusion Tactical Cellular, Fixed Site System, Green
RF-8000F-TC102	Fusion Tactical Cellular, Fixed Site System, Tan

ANTENNAS

PRODUCT NUMBER	PRODUCT NAME
12146-0510-01	LTE Antenna, Green
12146-0510-02	LTE Antenna, Tan
12146-0510-03	LTE Antenna, Black
12069-3150-01	GPS Antenna

ACCESSORIES

PRODUCT NUMBER	PRODUCT NAME
RF-3590-RT300	Rugged Tablet w/ LTE Band 13/14
RF-3595-RH300	InTouch Rugged Phone w/ LTE Band 13/14
12146-5100-01	SIM Cards
12069-0040-01	Lightning Arrestor

CABLES

PRODUCT NUMBER	PRODUCT NAME
10369-7210-XX	N Male to N Male Coax Cable, RF Antenna
12146-4040-A100	Power Cable, eNodeB to RF-5051 (100 ft, ~30.5 m)
11194-1405-A010	Power Cable, MCP to RF-5051 (10 ft, ~3m)
12069-0031-A050	CAT6 Ethernet, with one backshell (50 ft, ~15 m)
12069-0031-A100	CAT6 Ethernet, with one backshell (100 ft, ~30.5 m)
12069-0030-A050	CAT6 Ethernet, with two backshells (50 ft, ~15 m)
12069-0030-A100	CAT6 Ethernet, with two backshells (100 ft, ~30.5 m)
11194-1450-A006	MCP to eNodeB Data Cable, J11 Gigabit Ethernet, (1) RJ45 RCPT
11194-1460-A006	MCP Data Cable, (2) RJ45 RCPT
11194-1410-A006	MCP Data Cable, (1) RJ45 RCPT, (1) USB Type-A RCPT
11194-1440-A006	MCP Data Cable, (2) RJ45 RCPT, (2) USB Type-A RCPT, (2) Serial 9-pin
11194-1430-A006	MCP Data Cable, J10 Gigabit Ethernet, Network Backhaul

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
RF-5941-LM101	Mast, 10 m (~33 ft.) Lift Up, with Winch
12146-4095-01	Fusion Tactical Cellular Mounting Kit, RF-5941-LM101 Mast
RF-5941-LM155	Mast, 15 m (~50 ft.) Lift Up, with Winch
12146-4097-01	Fusion Tactical Cellular Mounting Kit, RF-5941-LM155 Mast
10181-5178-06	HMMWV Antenna Mounting Kit
RF-292	Antenna Mount, NATO

POWER ADAPTERS

PRODUCT NUMBER	PRODUCT NAME
RF-5051-PS001	Power Supply, RF-5051, Green
RF-5051-PS005	Power Supply, RF-5051, Tan

TECHNICAL MANUALS

PRODUCT NUMBER	PRODUCT NAME
10515-0457-4200	System Install Manual, Tactical Cellular

INFORMATION
SECURITY
AT ITS HIGHEST

Sierra™ II

Programmable Cryptographic ASIC 173

Chips and Modules

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SecNet® Products

SecNet 54 174

SecNet 54 Cryptographic Module (CMOD). 175

SecNet 54 Radio Module (RMOD) 176

SecNet 54 Ethernet Module (EMOD) 176

COMMUNICATIONS SECURITY PRODUCTS

When it comes to information assurance, Harris offers the highest-grade encryption available worldwide, utilizing open standard and proprietary algorithms to secure demanding products and systems.

The Harris Sierra II cryptographic chipsets and modules—National Security Agency (NSA) certified up to and including Secret and TOP SECRET/SCI communications, respectively—are the core technologies behind these information assurance products and services.

From cryptographic modules embedded in custom hardware designs to product and system-level services, Harris Corporation provides the highest levels of security available to the U.S. government, including all military branches and federal law enforcement agencies, as well as international militaries and embassies.

- Custom embedded encryption products and systems
  - Sierra II-based cryptographic ASICs
- Infrastructure networking products
- SecNet 54 with Ethernet Module
- HAIPE client edge devices
  - SecNet 54 with Radio Module
  - SecNet 54 with Ethernet Module

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SIERRA™ II

PROGRAMMABLE CRYPTOGRAPHIC ASIC

SIERRA II LARGE PACKAGE, 608-PIN BGA
0N682401-3

SIERRA II SMALL PACKAGE, 280-PIN BGA
0N682403-5

SIERRA II B SMALL PACKAGE, 280-PIN BGA
0N809812-2

The National Security Agency (NSA)-certified Sierra™ II supports data rates up to 300 Mbps, legacy and modernized algorithms, and can support Type-1 Suite A/Suite B, Type-1 Suite B or Type-3 applications. Its lower power consumption makes Sierra II suitable for battery-powered applications.

The Sierra ASIC contains redundant RISC processors and cryptographic hardware accelerators. The ASIC is manufactured in two different packages, with the larger package featuring more "bonded-out" interfaces (32-bit versus 16-bit data busses, for example) for higher-speed applications. Sierra II's advanced software programming provides a low-cost solution for future communications equipment upgrades. Sierra is available with reference design for custom applications.

FEATURES

- Data rates up to 300 Mbps (dependent on mode/algorithm)
- Available in two packages
- Operating temperature: -40° to +85° C
- ASIC supply voltage: 1.8 volts
- Field software reprogrammable
- Cryptographic bypass
- Non-CCI when certified for Suite B use
- Non-CCI prior to Type-1 programming for Suite B use
- Designed to protect voice/data traffic up through TS/SCI Level

CERTIFIED ALGORITHMS

TYPE-1 SUITE A AND SUITE B

- MEDLEY, BATON, SAVILLE, PADSTONE, KEESEE, CRAYON, WALBURN, GOODSPEED
- FIREFLY/Enhanced FIREFLY
- ACCORDION (v1.3 and v3.0)
- JOSEKI Decrypt
- Advanced Encryption Standard: AES 128-bit and 256-bit
- Elliptic Curve Diffie-Hellman: ECDH-256, ECDH-384
- AES key wrap
- WATARI Decrypt
- Secure Hash Algorithm: SHA-256, SHA-384
- Elliptic Curve Digital Signature: ECDSA-256, ECDSA-384

TYPE-3

- DES, Triple DES
- AES
- Digital Signature Standard (DSS)
- Secure Hash Algorithm (SHA-1)
- Additional algorithms can be programmed

KEY MANAGEMENT

- SARK/PARK (KY-57, KYV-5, and KG-84A/C OTAR)
- DS-101 and DS-102 key fill
- SINCGARS Mode 2/3 fill

CHIPS AND MODULES

CITADEL™ II

CRYPTOGRAPHIC INTEGRATED CIRCUIT
12024-1000-01

LEAD-FREE CRYPTOGRAPHIC INTEGRATED CIRCUIT
12024-1000-02

The Citadel™ II Integrated Circuit is a digital encryption device that provides high-grade information security for both present and future communication systems. The device contains Harris proprietary, customizable, military-grade algorithms and the NIST standard (FIPS-197 certified) AES algorithm. This suite of algorithms addresses the encryption requirements for military, government products, homeland security, and commercial applications handling highly sensitive information.

FEATURES

CRYPTOGRAPHIC
- Configurable key lengths
- Proven secure against differential and linear cryptanalysis
- Third-party verified
- Block Cipher Feedback
- Self-Sync Cipher Feedback/CFB-1 Minimum Error Propagation/ Counter
- Multiple cryptographic modes

DATA RATE
- 54 Mbps for MK-256 algorithm
- 90 Mbps for standard AES-256 algorithm

POWER
- 1.8 volt core and I/O supply

MULTIPLE ALGORITHMS
- Harris Proprietary Algorithm (MK-256)
- AES 128-, 192- and 256-bit algorithms (standard and customizable)

KEY MANAGEMENT
- On-chip storage for 2 TEKs and 2 KEKs
- Key generation
- Key updates
- Wrap/unwrap to support off-chip storage and Over-the-Air Re-key (OTAR)

SECNET® PRODUCTS

SECNET® 54

KIV-54RM01
KIV-54EM01

SecNet 54 is a HAIPE-compliant encryption product family designed to bring HAIPE capabilities to the user's desktop. SecNet eliminates the requirement for expensive Protected Distributed Systems (PDS) while keeping data, voice, and video communications secure. It includes a Cryptographic Module (CMOD) that provides all security-critical functions, a Radio Module (RMOD) that handles the transport of encrypted data over 802.11a/b/g protocols, and an Ethernet Module (EMOD) that handles the transport of encrypted data over wired Ethernet networks. Configured as a Radio Module supporting 802.11a/b/g links up to 54 Mbps or an Ethernet Module supporting connection rates up to 100 Mbps, SecNet 54 serves as a Type-1 encryptor that handles up to TOP SECRET/SCI communications at tactical and garrison/enterprise levels.

SecNet 54's modular design enables the attachment of a variety of external modules (XMODs), allowing secure utilization of standard communication technologies such as wired 802.3 Ethernet and wireless 802.11. With its versatility, small size, and TS/SCI wireless and wired communications capabilities, SecNet 54 offers a scalable, cost-effective alternative to traditionally bulky inline network encryption devices.

As a secure wireless local area network (SWLAN) device, SecNet 54's Ethernet port is used to connect either to a host computer (station mode) or directly to a LAN (access point and wireless bridge mode). As an inline network encryptor (INE) device, SecNet 54 can service an individual client or scale to host classified enclaves of many users, limited only by bandwidth requirements. SecNet 54 is also self-hosted, requiring no additional drivers.

SecNet 54 is designed for use by all branches of the U.S. Department of Defense, federal and homeland security agencies, and the intelligence community. The SecNet 54 products are Controlled Cryptographic Items (CCI) that can only be procured by organizations with COMSEC accounts, including the U.S. Department of Defense and federal agencies.

FEATURES

- Power-over Ethernet (PoE) compatible
- Dual DC power inputs for use with supplied AC power pack and/or battery

TYPE-1 SECURE COMMUNICATIONS

- Up to TOP SECRET/SCI
- HAIPE v1.3.5
- Small form factor
- Lightweight: 11 oz. (~312 g)

EASY TO CONFIGURE

- Secure browser-based management

CLASSIFIED INTERFACES

- 10/100 base-TX (wired Ethernet)
- 100 base-TX (optical Ethernet)

NO SOFTWARE DRIVERS TO LOAD

- CMOD, EMOD and RMOD are self-hosting
- Browser-based configuration
- Compatible with any host computer supporting Java 1.4.2 and a Web browser

ACCESSORIES

CABLES

PRODUCT NUMBER	PRODUCT NAME
SN54-FC01	SecNet 54 Key Fill Cable
SN54-BC01	SecNet 54 Battery Cable, 6 ft. (~1.8 m)
SN54-SD01	SecNet 54 Software Upgrade Kit

SOFT GOODS (CARRYING ACCESSORIES)

PRODUCT NUMBER	PRODUCT NAME
SN54-SC-1	SecNet 54 Small Carrying Case
SN54-MC-5	SecNet 54 Medium Carrying Case
SN54-LC-10	SecNet 54 Large Carrying Case

TECHNICAL MANUAL

PRODUCT NUMBER	PRODUCT NAME
SN54-ACC-03	SecNet 54 Quick Reference Guide

SECNET® 54 CRYPTOGRAPHIC MODULE (CMOD)

KIV-54

The SecNet 54 Cryptographic Module (CMOD) is a Type-1, National Security Agency (NSA)-certified encryption device. It is designed to work with the Radio Module (RM01) or the Ethernet Module (EM01) to encrypt data up to and including TOP SECRET/SCI. Utilizing the Harris Sierra™ II cryptographic processor—also NSA certified for TOP SECRET/SCI voice, data, and video traffic—the CMOD supports HAIPE 1.3.5 and can interoperate with other HAIPE 1.3.5-compliant inline network encryptors (INEs).

The KIV-54 includes:

- Power adapter
- Ethernet cable
- Software utilities
- User manual

FEATURES

- Full HAIPE 1.3.5 compliance
- Path MTU Discovery
- Dynamic Discovery
- IKE
- FF/EFF and PPK
- VLAN pass-through
- Support for multiple dePacs
- Secure browser-based device management
- Power over Ethernet (PoE)
- External AC and DC connections with built-in Uninterruptable Power Supply (UPS) controller to provide priority-based automatic switching
- 10/100 base-TX (wired Ethernet)
- 100 base-TX (optical Ethernet)
- Completely self-hosted (no drivers required on host devices)
- Size: 3.18 W x 5.26 D x 1.13 H in. (~8.08 W x 13.4 D x 2.87 H cm) with Radio Module (RMOD) attached
- Weight: 11 oz. (~312 g) with External Module attached
- Data rates: 54 Mbps with Radio Module (RMOD), 100 Mbps connection rate with Ethernet Module (EMOD)

SECNET® 54 RADIO MODULE (RMOD)

RM01

For secure wireless LAN (WLAN) applications, the RM01 is an 802.11a/b/g Radio Module (RMOD) that attaches to the SecNet 54 Cryptographic Module (CMOD), making it a Type-1 secure wireless local area network (SWLAN) IP encryptor. The RMOD can be configured as an access point, wireless bridge, infrastructure client, or ad-hoc station.

The RMOD is based on a standard 802.11a/b/g chip set and supports data rates up to 54 Mbps (22 Mbps effective throughput). It is compatible with commercial off-the-shelf (COTS) wireless LAN equipment and can leverage the existing infrastructure by using IPSec Tunnels to communicate with other remotely located SecNet 54 devices or other HAIPE-compliant COMSEC equipment.

The RMOD includes a 2.4/5 GHz antenna.

FEATURES

DATA RATES

- Up to 11 Mbps in 802.11b mode
- Up to 54 Mbps in 802.11a/g mode

FREQUENCY BANDS

- 2.4 GHz (802.11b/g)
- 5 GHz (802.11a)

CHANNELS

- 802.11b/g has 11 channels, 3 non-overlapping
- 802.11a has 12 non-overlapping channels

OPERATING MODES

- Access point
- Infrastructure client
- Bridge
- Ad-hoc station

TRANSMIT POWER

- 14 dBm at 54 Mbps
- 17 dBm at 11 Mbps, SecNet 54 Ethernet Module (EMOD)

SECNET® 54 ETHERNET MODULE (EMOD)

EM01

For secure local area network (LAN) or wireless area network (WAN) applications, the EM01 is an Ethernet Module (EMOD) that is attached to the SecNet 54 Cryptographic Module (CMOD), making it a Type-1 inline network encryptor (INE). The EMOD has two Black side Ethernet connections, one supporting connections to either a LAN or WAN for the transmission of HAIPE traffic, and an auxiliary port that enables the EMOD to support an unclassified PC or network connection. These two black side connections allow the EMOD to support both Classified and Unclassified enclaves.

The EMOD includes a standard Ethernet cable.

FEATURES

DATA RATES

- Connection speeds of 100 Mbps
- Encrypted TCP/IP throughput up to 33 Mbps
- Encrypted UDP throughput up to 49 Mbps

LOCAL PASS-THROUGH PORT

- VPN client software (no need for external VPN hardware)
- VPN with NAT-T
- Local Unclassified DHCP Acquisition
- Local Unclassified DHCP Server

ANTENNAS

HF Antennas by Application

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VHF and UHF Antenna Accessories

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HF ANTENNAS BY APPLICATION

PAGE	ANTENNA	DESCRIPTION	DIMENSIONS	BASE	TILT ADAPTER	MAX. POWER	COLOR
MANPACK							
181	10372-0245-01 (OE-505)	3M Whip (included with HF manpack)	10 ft. (~3 m)	HF Manpack	N/A	20W	Green
MANPORTABLE							
181	RF-1941	Portable Dipole	250 ft. (~76.2 m)	N/A	No	400W	Green
182	RF-1944-AT020	Broadband Dipole	164 ft. (~50.3 m)	N/A	No	20W	Green
182	RF-1944-AT150	Broadband	164 ft. (~50.3 m)	N/A	No	150W	Green
182	RF-1944-AT400	Broadband	164 ft. (~50.3 m)	N/A	No	400W	Green
187	RF-1936P-XX	NVIS	15 ft. (~4.6 m)	N/A	No	400W	CARC Green, CARC Tan, Green
VEHICULAR							
183	RF-3122-AT320	16 ft. Tilt Whip	16 ft. (~4.9 m)	Locking spring with tilt whip	Included with base	1 kW	Green
184	RF-3120-AT360	35 ft. Tilt Whip	35 ft. (~10 m)	Locking spring with tilt whip	Included with base	400W	Green
182	SB-V16FHD	Heavy Duty 16 ft. Whip	16 ft. (~4.9 m)	Feed-through	N/A	1kW	Green
182	SB-V16B	16 ft. Whip	16 ft. (~4.9 m)	Feed-through	N/A	1 kW	Green
182	SB-V16C	16 ft. Whip	16 ft. (~4.9 m)	Flange	N/A	1 kW	Green
182	SB-V16F	16 ft. Whip	16 ft. (~4.9 m)	Spring	N/A	1 kW	Green
183	SB-V16T (metal)	16 ft. Whip	16 ft. (~4.9 m)	Feed-through	N/A	400W	Green
183	SB-V35B	32 ft. Whip	32 ft. (~9.8 m)	Feed-through	N/A	1 kW	Green
183	SB-V35C	32 ft. Whip	32 ft. (~9.8 m)	Flange	N/A	1 kW	Green
183	SB-V35F	32 ft. Whip	32 ft. (~9.8 m)	Spring	N/A	1 kW	Green
185	RF-1942-AT001	35 ft. Tilt Whip	250 ft. (~76 m)	Locking spring base	Yes	1 kW	Green with Black spring base
191	RF-3134-AT00X	Full Loop	59 in. x 59 in. (150 cm x 150 cm)	N/A	N/A	150W	Black
VEHICULAR/TRANSPORTABLE							
185	RF-1936V-XX	Crossed Dipole	61 ft. (~19 m)	HF Whip Base	No	400W	CARC Green, CARC Tan, Green
SHIPBOARD/STATIONARY							
184	SB-V35S	35 ft. Whip	35 ft. (~11 m)	Self-supporting flange	N/A	5 kW (2-30 MHz) 1 kW (1.6-2 MHz)	Gray
184	RF-1930CHD	24 ft. Whip	24 ft. (~7.3 m)	Flange	N/A	1 kW	White
STATIONARY							
190	RF-1912B-AT001	Dipole/Telescoping Mast	105 ft. (~32 m)	N/A	N/A	1 kW	Black
TRANSPORTABLE							
186	RF-1912E-AT001	Dipole (element only)	105 ft. (~32 m)	N/A	N/A	1 kW	Black wire
186	RF-1912T-AT00X	Dipole Sectional Mast	105 ft. (~32 m)	N/A	N/A	1 kW	Black wire, aluminum masts
187	RF-1912T-AT10X	Dipole Telescoping Mast	105 ft. (~32 m)	N/A	N/A	1 kW	Green
187	RF-1936P-XX	NVIS	61 ft. (~19 m)	N/A	N/A	400W	CARC Green, CARC Tan, Green
188	RF-1937	Groundwave/Skywave	32 ft. (~19 m)	N/A	N/A	1 kW	Green
188	RF-1938AT-XX	NVIS	61 ft. (~19 m)	N/A	N/A	400W	CARC Green, Green
189	SB-A150 (field expedient)	Broadband Antenna Kit (build your own antenna)	150 ft. (~46 m)	N/A	N/A	1 kW	Copper
189	RF-1944-AT150	Broadband Antenna	164 ft. (~59.9 m)	N/A	N/A	150W	Green
189	RF-1944-AT400	Broadband Antenna	164 ft. (~59.9 m)	N/A	N/A	400W	Green
ROOFTOP							
190	RF-1950-AT001	Inverted V dipole NVIS and Medium Range Skyway	50 x 33 ft. (~15 x 10 m)	N/A	N/A	1 kW	Green

Some antennas may require an antenna coupler. Please contact your sales representative for assistance.

RANGE CHART

The following diagram is for comparison purposes only. It shows typical transmit range capabilities for each antenna, assuming that appropriate power levels and transmit frequencies are selected.

GROUNDWAVE		SKYWAVE	
0-80 KM	NVIS 0-500 KM	MED. RANGE 500-2000 KM	LONG RANGE 2000-10,000 KM
RF-1912 in monopole configuration			RF-1912 in monopole configuration
	RF-1912 in dipole configuration		
	RF-1936V-10, RF-1938AT-10		
RF-1936/38 w/ monopole conversion kit			
RF-1937		RF-1937	
	RF-1940 dipole		
RF-1940/41 in "L" configuration			
	RF-1940/41 in sloping configuration		
	RF-1941 dipole		
RF-1942-AT001 antenna kit			
	RF-1944 (no coupler needed)		
	RF-1950-AT001		
RF-3120-AT360			
SB-V16F		SB-V16F	
SB-V16 (B/C)		SB-V16 (B/C)	
	SB-V16/35 tilted w/ tilt whip adapter on RF-3122 spring base		
	SB-V16/35 tilted w/ tilt whip		
SB-V35F	SB-V35F		
SB-V35 (B/C)	SB-V35 (B/C)		
	Special Order LPA Antennas		
10372-0245-01 ("OE-505")			

Please contact your sales representative for further information.

HF MANPACK ANTENNAS

OE-505 MANPACK HF/VHF WHIP ANTENNA KIT

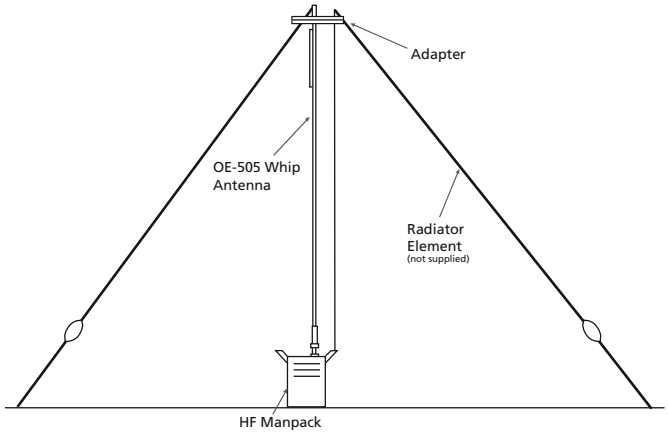
10372-0245-01

This antenna kit is a standard lightweight, collapsible whip antenna kit for the HF manpack radios. The 10372-0245-01 is capable of 20 watt operation from 2 to 60 MHz and is utilized for groundwave communications. The antenna is automatically tuned by the radio's internal coupler. Color: Green.

The antenna kit is supplied with the RF-5800H-MP and AN/PRC-150(C) radios and includes:

- Collapsible whip antenna
- Flexible base
- Base adapter
- Antenna bag

DISMOUNT DIPOLE ADAPTER



10372-1270-01

The Compact Dismount Dipole Adapter (patent pending) is designed for use with a standard OE-505 HF manpack whip antenna. With user supplied field wire, it provides a lightweight, simple, effective and adaptable NVIS antenna system that can be rapidly deployed during dismounted operation and provides improved gain over the dipole antenna on the ground. The Dismount Dipole Adapter can be configured to create various wire antenna types, including: dipole, inverted Vee, sloping vee, and inverted L. For users that choose not to provide their own field wire, an optional kit (product number 12006-0200-01) is available that includes antenna wire, guys and stakes.

MANPORTABLE HF DIPOLE ANTENNAS

RF-1941

The RF-1941 is a lightweight, durable, portable dipole antenna capable of 400 watt maximum operation from 2 to 30 MHz. It is utilized for NVIS communications and can be configured for other requirements. This antenna is stored on self-contained flat spools that form an integral part of the antenna. During operation, the spool is unwound to the appropriate frequency marker and deployed; the unused portion of wire remains on the spool. Each spool contains throwing weights for connection to trees, buildings, or masts.

The RF-1941 can be directly connected to the RF-5800H-MP or AN/PRC-150(C) HF manpack radios using the radio's built-in antenna coupler or connected to an external antenna coupler for ALE operation. The antenna can be configured as a dipole, sloping dipole, or a sloping Vee. The antenna bag has clip points to attach to a military rucksack.

The RF-1941 includes:

- Heavy-duty carrying bag
- RG-58 coaxial cable, 33 ft. (~10 m), with BNC male connectors
- BNC-to-type N adapter
- Instruction card (product number 10515-0040-4200)

Deployed max size:	250 ft. (~76.2 m)
Transport size:	6 W x 12 H x 3 D in. (~15 x 30 x 8 cm)
Weight:	5 lbs. (~2 kg)
Color:	Green

20 WATT MANPORTABLE BROADBAND INVERTED VEE ANTENNA

RF-1944-AT020

The RF-1944-AT020 antenna is a lightweight, manportable broadband dipole antenna that provides radiation patterns ideal for HF skywave communications from zero to 500 miles (~800 kilometers). Used for up to 20 watts, the RF-1944-AT020 supports a rugged, yet simple design that allows quick installation into its primary inverted Vee configuration. The antenna does not include a mast.

The RF-1944-AT020 includes:

- Balun
- Dipole radiating elements (2)
- Terminating loads (2)
- Ground stakes (2)
- Coaxial cable with male BNC connectors for direct balun attachment
- Weighted throwing line
- Carrying bag
- Instruction card (product number 10515-6390)

Deployed length:	164 ft. (~59.9 m)
Transport size:	12 W x 7 H x 3 D in. (~30 x 20 x 8 cm)
Weight:	4 lbs. (~2 kg)
Color:	Green

150 WATT MANPORTABLE BROADBAND INVERTED VEE ANTENNA

RF-1944-AT150

The RF-1944-AT150 antenna is similar to the RF-1944-AT020 above except that it is used for up to 150 watts. The antenna does not include a mast.

400 WATT MANPORTABLE BROADBAND INVERTED VEE ANTENNA

RF-1944-AT400

The RF-1944-AT400 antenna is similar to the RF-1944-AT020 above except that it is used for up to 400 watts. The antenna does not include a mast.

HF VEHICULAR ANTENNAS

16-FOOT HF WHIP ANTENNAS

SB-V16B Feed-Through Base
SB-V16C Flange Base
SB-V16F Spring Base
SB-V16FHD Heavy Duty with Spring Base

The SB-V16 series antennas are self-supporting, fiberglass whip antennas that are easily assembled and raised. Capable of 1 kW maximum operation from 2 to 30 MHz, they provide an omni-directional, low-angle radiation pattern for groundwave propagation. The antenna sections are constructed by embedding the RF conductor in a sheath of woven fiberglass that produces an exceptionally tough, but flexible, antenna. Deployed size is 16 feet (~4.8 meters) and an antenna coupler is required. Color: Green.

The SB-V16 series antennas include:

- Four tapered 4-ft. (~1-m) sections, extendable to 16 ft. (~4.8 m)
- Mounting hardware
- Instruction manual (product number 100-0010)

SB-V16 SERIES ANTENNA CONFIGURATIONS

	SB-V16B	SB-V16C	SB-V16F
Application	Vehicular	Stationary	Vehicular
Base	Feed-though	Flange	Spring
Mounting	2-in. (~5 cm) diameter cut-out	6 bolt holes, 0.406-in. (~1.032 cm) diameter each, on a 7.75-in (~20 cm) bolt circle	4 bolt holes, 0.375-in. (~0.953 cm) diameter each, on a 4.5-in (~11 cm) bolt circle with a 3.5-inch (~8.9 cm) diameter cut-out
Weight	5 lbs. (~2 kg)	9 lbs. (~4 kg)	14 lbs. (~6.4 kg)
Accessories (ordered separately)	RF-292-01 Universal Antenna Mount	None	RF-292-01 Universal Antenna Mount 10181-5178-06 HMMWV Antenna Mounting Kit

Please contact your sales representative for further information.

SELF-SUPPORTING 16-FOOT HF METAL WHIP ANTENNA

SB-V16T

The SB-V16T is a coated metal whip antenna capable of 400 watt maximum operation from 2 to 30 MHz. It provides an omni-directional, low-angle radiation pattern for groundwave propagation. This antenna requires the use of an antenna coupler. The SB-V16T can be affixed to an RF-292-01 Universal Antenna Mount (ordered separately) via the 2-inch (~5-centimeter) hole adapter plate included with the RF-292-01. The SB-V16T antenna may not be used with any of the RF-1980-AT001 series tilt whip adapters.

The SB-V16T includes:

- Feed-through base
- Five 3-ft. (~0.9-m) metallic sections, extendable to 16 ft. (~4.8 m)
- Mounting hardware for attachment to RF-292-01 Universal Antenna Mount (ordered separately)
- Instruction manual (product number 10251-0045)

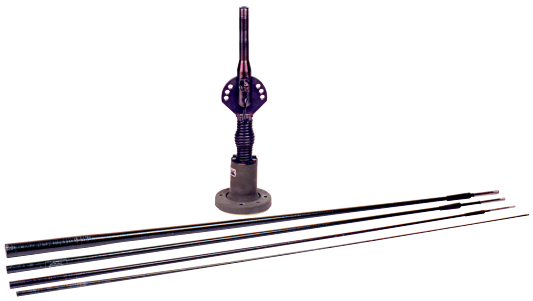
Deployed size: 16 ft. (~4.8 m)
Weight: 5 lbs. (~2 kg)
Color: Green

ACCESSORIES

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
RF-292-01	Universal Antenna Mount

SPRING BASE 16-FOOT HF TILT WHIP ANTENNA



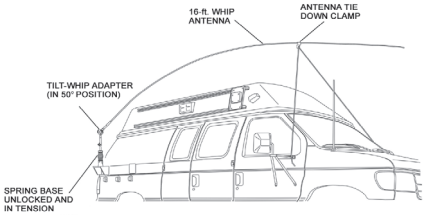
RF-3122-AT320 CARC Green
RF-3122-AT324 CARC Tan

The RF-3122 is a self-supporting, fiberglass whip antenna that is easily assembled. The antenna is capable of 1 kW maximum operation from 2 to 30 MHz and provides an omni-directional, low-angle radiation pattern for groundwave communication, or can be tilted over for skywave communication. This antenna requires the use of an antenna coupler.

The RF-3122 antenna sections contain the RF conductor embedded in a sheath of woven fiberglass to produce an exceptionally tough, but flexible, antenna. The locking tilt adapter mechanism allows the antenna to tilt at 0 degrees (vertical), 50 degrees, 70 degrees, and 90 degrees (horizontal). This unique capability allows a groundwave whip to tilt over and become ideal for NVIS communications on the move. The RF-3122 bolts directly to a NATO standard 4.5-inch (~11-centimeter) bolt circle. Antenna mount must be ordered separately.

The RF-3122-ATXXX includes:

- Spring base
- Tilt whip adapter
- Four tapered 4-ft. (~1.2-m) sections, extendable to 16 ft. (~5 m)
- Instruction manual (product number 100-0010)



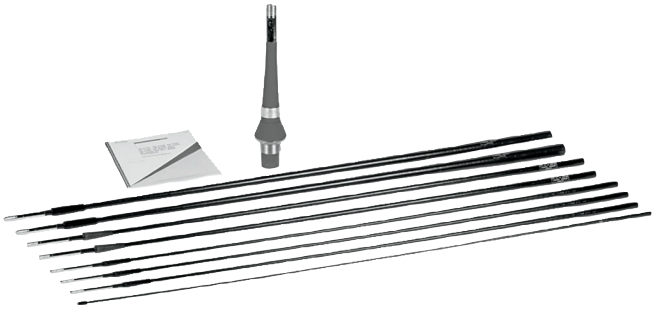
Deployed size: 16 ft. (~4.8 m)
Weight: 25 lbs. (~11 kg)

ACCESSORIES

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
RF-292-01	Universal Antenna Mount
10181-5178-06	HMMWV Antenna Mounting Kit

32-FOOT HF WHIP ANTENNAS



SB-V35B
SB-V35C
SB-V35F

The SB-V35 series antennas are self-supporting fiberglass whip antennas capable of 1 kW maximum operation from 2 to 30 MHz. They provide an omni-directional, low-angle radiation pattern for groundwave and skywave propagation. The antenna sections contain the RF conductor embedded in a sheath of woven fiberglass that produces an exceptionally tough, but flexible, antenna. Deployed size is 32 feet (~9.7 meters) and an antenna coupler (ordered separately) is required. Color: Green.

The SB-V35 series antennas include:

- Four straight 4-ft. (~1-m) sections, extendable to 32.5 ft. (~9.91 m)
- Four tapered 4-ft. (~1-m) sections, extendable to 32.5 ft. (~9.91 m)
- Mounting hardware
- Instruction manual (product number 100-0010)

SB-V35 SERIES ANTENNA CONFIGURATIONS

	SB-V35B	SB-V35C	SB-V35F
Application	Vehicular	Stationary	Vehicular
Base	Feed-though (with bottom feed)	Flange (with side feed)	Locking spring (with bottom feed)
Mounting	2-in (~5 cm) diameter cut-out	6 bolt holes, 0.406-in. (~1.032 cm) diameter each, on a 7.75-in. (~20 cm) bolt circle	NATO standard 4 bolt holes, 0.375-in. (~0.953 cm) diameter each, on a 4.5-in. (~11 cm) bolt circle with a 3.5-in. (~8.9 cm) diameter cut-out
Weight	11 lbs. (~3.4 kg)	15 lbs. (~6.8 kg)	20 lbs. (~9.1 kg)
Accessories (ordered separately)	RF-292-01 Universal Antenna Mount	E75-0013-001 Guy Rope Assembly for the SB-V35C	RF-292-01 Universal Antenna Mount 10181-5178-06 HMMWV Antenna Mounting Kit

LOCKING SPRING BASE 35-FOOT HF WHIP ANTENNA WITH HIGH VOLTAGE PROTECTION

RF-3120-AT360

The RF-3120-AT360 is a self-supporting, fiberglass whip antenna that includes a locking spring base with tilt whip adapter and insulator boot to protect against contact with high-voltage current. The antenna is capable of 400 watts maximum operation from 2 to 30 MHz. It provides an omni-directional, low-angle radiation pattern for groundwave and skywave propagation.

The spring base permits the flexible spring to be locked in either a rigid vertical position (stationary operations) or left in a flexible mode (mobile or NVIS operations). The antenna sections contain the RF conductor embedded in a sheath of woven fiberglass that produces an exceptionally tough, but flexible, antenna. The RF-3120-AT360 mounts directly to a NATO standard 4.5-inch (~11-centimeter) bolt circle. Antenna mount and coupler must be ordered separately.

The RF-3120-AT360 includes:

- Locking tilt high-voltage base, 35 ft. (~10.6 m)
- HF antenna insulator boot
- Four straight sections, 16 ft. (~5 m) total length
- Four tapered extension sections, 16 ft. (~5 m) total length
- Mounting hardware
- Instruction manual

Deployed size: 35 ft. (~10.6m) including base and tilt adapter
Weight: 20 lbs. (~9 kg)
Color: Green

ACCESSORIES

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
RF-292-01	Universal Antenna Mount
10181-5178-06	HMMWV Antenna Mounting Kit

SHIPBOARD FLANGE BASE 35-FOOT HF WHIP ANTENNA

SB-V35S

The SB-V35S is a heavy-duty fiberglass whip antenna intended for shipboard or stationary use. The antenna is capable of 5 kW maximum operation from 2 to 30 MHz, or 1 kW maximum operation from 1.6 to 2.0 MHz. It provides an omni-directional, low-angle radiation pattern for groundwave and skywave propagation. The SB-V35S mounting flange uses four bolts around a 6-inch (~15-centimeter) bolt circle. The SB-V35S is not compatible with the RF-1980-AT001 series of tilt whip adapters. An antenna coupler is required.

The SB-V35S includes:

- Flange base
- Two sections, extendable to 35 ft. (~11 m)
- Instruction manual (product number 100-0012)

Deployed size: 35 ft. (~11 m)
Weight: 65 lbs. (~30 kg)
Color: Navy Gray

SHIPBOARD FLANGE BASE 24-FOOT HF WHIP ANTENNA

RF-1930CHD

The RF-1930CHD is a heavy-duty fiberglass whip antenna intended for shipboard or stationary use. The antenna is capable of 1 kW maximum operation from 2 to 30 MHz and provides an omni-directional, low-angle radiation pattern for groundwave and skywave propagation. The RF-1930CHD mounting flange uses four bolts around a 5-inch (13-centimeter) bolt circle. This antenna is not compatible with the RF-1980-AT001 series of tilt whip adapters. An antenna coupler is required.

Please contact your sales representative for further information.

The RF-1930CHD includes:

- Feed-through base
- Two sections, extendable to 24 ft. (~7.3 m)
- Instruction manual (product number 100-0018)

Deployed size: 24 ft. (~7.3 m)
Weight: 8 lbs. (~4 kg)
Color: White

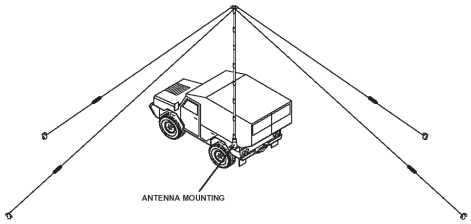
PORTABLE VEHICLE MOUNTED HF CROSSED DIPOLE ANTENNA

RF-1936V-10 CARC Green
RF-1936V-20 CARC Tan
RF-1936V-30 Green

The RF-1936V-XX is a portable, vehicle mounted, rapid-deployment crossed dipole antenna. It is designed for NVIS communications and is capable of 400 watt maximum operation from 2 to 30 MHz. This 12-pound (~5.5-kilogram) antenna is easy to carry and can be raised by two people in five minutes. The RF-1936V-XX is used in conjunction with the SB-V16B, SB-V16C, SB-V16F, SB-V35B, SB-V35C, or SB-V35F whip antenna mounting bases to provide improved operation when the vehicle is in a fixed, temporary location. This antenna can also be used with the RF-5351-ATXXX Siting Kits. The RF-1936V-XX requires an antenna coupler and is not compatible with the SB-V16T, SB-V35S or RF-1930CHD bases. An HF whip base is not included.

The RF-1936V-XX includes:

- NVIS antenna adapter with ground strap
- Tie-down stakes (4) and sledge hammer
- Instruction manual (product number 12051-0007)



Deployed size: 61 L x 61 W x 15 H ft. (~18 x 18 x 4.6 m)
Transport size: 7-in. diameter x 26 in. (~20-cm diameter x 65 cm)
Weight: 15 lbs. (~6.8 kg)

HF VEHICULAR ANTENNA KIT

RF-1942-AT001

The RF-1942-AT001 HF antenna kit includes all the accessories needed for quick deployment of mobile and stationary configurations. The antenna is capable of 1 kW maximum operation from 2 to 30 MHz and requires an antenna coupler. The RF-1942-AT001 is a combination of antennas that can be configured into a 32-foot (~9.8-meter) whip for exceptionally efficient groundwave and low-angle skywave, a 16-foot (~4.8-meter) tilt whip for on-the-move NVIS communications, or an inverted Vee for enhanced skywave performance.

The antenna is stowed in a canvas bag for transportability. The RF-1942-AT001 mounts to a standard NATO 4.5-inch (~11-centimeter) bolt circle pattern. Antenna mount must be ordered separately.

The RF-1942-AT001 includes:

- Whip sections
- Locking spring base
- Stakes (3) and antenna tie-down
- Dipole kit
- Guy assembly
- Tilt whip adapter
- Canvas bag and instruction manual (product number 10251-0051)

Deployed size: (Inverted Vee) 72 W x 16.4 H ft. (~22 x 5 m)
Weight: 37 lbs. (~17 kg)
Color: Green antenna, black dipole elements

ACCESSORIES

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
RF-292-01	Universal Antenna Mount
10181-5178-06	HMMWV Antenna Mounting Kit

HF TRANSPORTABLE ANTENNAS

HF FAN DIPOLE ANTENNA RADIATING ELEMENT

RF-1912E-AT001

The RF-1912E-AT001 (shown above in the stowed configuration) is a fan dipole antenna radiating element capable of 1 kW maximum operation from 1.6 to 30 MHz. The RF-1912E-AT001 has been optimized for both NVIS communications between 1.6 and 10 MHz and medium-range skywave for 10 to 30 MHz. The element length and height above ground have been designed to optimize take-off-angle for HF skywave propagation. The antenna can also be configured as a top-loaded monopole for short-range groundwave and long-range skywave. It achieves near 100% radiation efficiency because it does not contain any resistive loads. An antenna coupler is required. Antenna mast is not included.

The RF-1912E-AT001 includes:

- Radiating elements
- 24 ft. (~7.3 m) of vertical feedline
- 100 ft. (~30 m) of rope for attaching to mast
- Instruction manual (product number 10515-0120-4200)

Deployed size:	105 L x 26 W x 30 H ft. (~32 x 7.9 x 9 m) typical (Actual width and height are determined by customer-provided mast system.)
Transport size:	18 L x 8 W x 4 H in. (~206 x 20 x 10 cm)
Weight:	7 lbs. (~3 kg)
Color:	Radiating element is black

ACCESSORIES

INTEGRATED MULTIMEDIA INTERACTIVE TRAINING SYSTEM (IMITS)

PRODUCT NUMBER	PRODUCT NAME
10515-0120-7200	Video Tutorial for HF Dipole Antennas

HF FAN DIPOLE ANTENNA WITH SECTIONAL MAST

RF-1912T-AT001 (Tan storage bags)
RF-1912T-AT002 (Green storage bags)

The RF-1912T-AT00X is a transportable fan dipole antenna with lightweight mast sections that includes all the components needed to transport and temporarily install the antenna. The antenna is capable of 1 kW maximum operation from 1.6 to 30 MHz, and has been optimized for both NVIS communications between 1.6 and 10 MHz and medium-range skywave for 10 to 30 MHz. The element length and height above ground have been designed to optimize take-off-angle for HF skywave propagation. The antenna can also be configured as a top-loaded monopole for short-range groundwave and long-range skywave. It achieves near 100% radiation efficiency because it does not contain any resistive loads. An antenna coupler is required.

The RF-1912T-AT00X includes all materials for transportable construction:

- Aluminum masts (2)
- Guy assemblies
- Halyards
- Ground stakes
- Pre-constructed radiating element assembly
- Vertical feedline
- Transportable storage bags (2)
- Instruction manual (product number 10515-0120-4200)

Deployed size:	105 L x 26 W x 30 H ft. (~32 x 7.9 x 9 m)
Transport size:	Bag 1: 81 L x 11 W x 7 H in. (~206 x 28 x 20 cm) Bag 2: 23 L x 14 W x 12 H in. (~58 x 35 x 30 cm)
Weight:	135 lbs. (~61.4 kg)
Color:	Radiating element is black

ACCESSORIES

INTEGRATED MULTIMEDIA INTERACTIVE TRAINING SYSTEM (IMITS)

PRODUCT NUMBER	PRODUCT NAME
10515-0120-7200	Video Tutorial for HF Dipole Antennas

SPARES KIT

PRODUCT NUMBER	PRODUCT NAME
6906-3117-01	Spare Parts Kit

Please contact your sales representative for further information.

HF FAN DIPOLE ANTENNA WITH TELESCOPING MASTS

RF-1912T-AT101 (Tan storage bags)
RF-1912T-AT102 (Green storage bags)

The RF-1912T-AT10X is a transportable fan dipole antenna with telescoping mast that includes all the components needed to transport and temporarily install the antenna. The antenna is capable of 1 kW maximum operation from 1.6 to 30 MHz and has been optimized for both NVIS communications between 1.6 and 10 MHz and medium-range skywave for 10 to 30 MHz. The element length and height above ground have been designed to optimize take-off-angle for HF skywave propagation. The antenna can also be configured as a top-loaded monopole for short-range groundwave and long-range skywave. The antenna achieves near 100% radiation efficiency because it does not contain any resistive loads. Broadband operation requires an antenna coupler.

The RF-1912T-AT10X antenna includes:

- 30-ft. (~9.1-m) fiberglass telescoping masts (2)
- Guy assemblies
- Halyards
- Pre-constructed radiating element assembly
- Vertical feedline
- Ground stakes and transportable storage bags
- Instruction manual (product number 10515-0120-4200)

Deployed size:	30-ft. L x 3.3-in. diameter base (~9.1 m x 8.4 cm)
Transport size:	Bag 1: 23 L x 14 W x 12 H in. (~58 x 36 x 30 cm) Bag 2: 79 L x 8 W x 8 H in. (~2 m x 20 x 20 cm) Bag 3: 79 L x 8 W x 8 H in. (~2 m x 20 x 20 cm)
Weight:	100 lbs. (~50 kg)
Color:	Radiating element is black, masts are green

ACCESSORIES

INTEGRATED MULTIMEDIA INTERACTIVE TRAINING SYSTEM (IMITS)

PRODUCT NUMBER	PRODUCT NAME
10515-0120-7200	Video Tutorial for HF Dipole Antennas

SPARES KIT

PRODUCT NUMBER	PRODUCT NAME
6906-3117-01	Spare Parts Kit

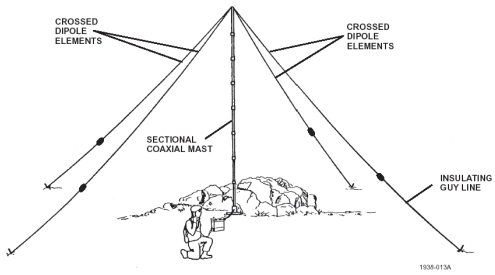
PORTABLE HF CROSSED DIPOLE ANTENNA

RF-1936P-10 CARC Green
RF-1936P-20 CARC Tan
RF-1936P-30 Green

The RF-1936P-XX is a manportable, rapid-deployment crossed dipole antenna designed for NVIS communications and is capable of 400 watt maximum operation from 2 to 30 MHz. This antenna is easy to carry and can be assembled by two people in five minutes. The RF-1936P-XX is designed for freestanding operation when set up on the ground or on flat surfaces. An antenna coupler is required.

The RF-1936P-XX includes:

- Antenna base
- NVIS antenna
- Ground rod, strap and stakes
- Sledge hammer
- Instruction manual (product number 12051-0007)



RF-1936 Portable Configuration

Deployed size:	61 L x 61 W x 15 H ft. (~19 x 19 x 4.6 m)
Transport size:	7 in. diameter x 26 in. (~20 cm diameter x 66 cm)
Weight:	15 lbs. (~6.8 kg)

ACCESSORIES

INTEGRATED MULTIMEDIA INTERACTIVE TRAINING SYSTEM (IMITS)

PRODUCT NUMBER	PRODUCT NAME
10251-0007-7200	Video Tutorial for RF-1936/1938 HF Transportable Crossed Dipole Antenna

TRANSPORTABLE HF GROUND STAKE ANTENNA KIT

RF-1937

The RF-1937 is a transportable, vertically raised, ground stake antenna with a design based on vehicular SB-V series whip antennas. The antenna is capable of 1 kW maximum operation from 2 to 30 MHz and is intended for use for groundwave or long distance skywave communications. It can be set up with whip heights between 16 feet (~5 meters) and 32 feet (~10 meters), and requires an antenna coupler. The RF-1937 is designed for ground-level mounting. The base mount is installed on a base stake driven into the ground. One person can easily carry this antenna.

The RF-1937 includes:

- Guy rope assembly
- Ground radials on wheels (4)
- Canvas carrying bag
- Instruction manual (product number 10251-0033)

Deployed size:	70 W x 32 H ft. (~20 x 10 m)
Transport size:	6 L x 6 W x 54 H in. (~15 x 15 x 140 cm)
Weight:	10 lbs. (~5 kg)
Color:	Green

ACCESSORIES

INTEGRATED MULTIMEDIA INTERACTIVE TRAINING SYSTEM (IMITS)

PRODUCT NUMBER	PRODUCT NAME
10515-0261-7200	Video Tutorial for RF-1937 HF Ground Stake Antenna

EXTENDED HEIGHT HF CROSSED DIPOLE ANTENNA

RF-1938AT-10 CARC Green
RF-1938AT-30 Green

The RF-1938AT-XX is a transportable, rapid-deployment crossed dipole antenna designed for NVIS communications. It is capable of 400 watts maximum operation from 2 to 30 MHz. The RF-1938AT-10 has an extended height of 29 feet (~8.7 meters) to provide up to 10 dB of additional NVIS antenna gain at low operating frequencies (2 to 4 MHz), as compared to smaller crossed dipoles. The RF-1938AT-10 can be used both in portable and vehicular applications and requires an antenna coupler.

The RF-1938AT-XX includes:

- Antenna base
- NVIS antenna adapter
- Ground rod and strap
- Stakes and sledge hammer
- Instruction manual (product number 10251-0007)

Deployed size:	61 L x 61 W x 28 H ft. (~19 x 19 x 9 m)
Transport size:	7 in. diameter x 26 in. (~20 x 66 cm) (two bags)
Weight:	27 lbs. (~12 kg)

ACCESSORIES

INTEGRATED MULTIMEDIA INTERACTIVE TRAINING SYSTEM (IMITS)

PRODUCT NUMBER	PRODUCT NAME
10251-0007-7200	Video Tutorial for RF-1936/1938 HF Transportable Crossed Dipole Antenna

Please contact your sales representative for further information.

150 WATT TRANSPORTABLE HF BROADBAND INVERTED VEE ANTENNA

RF-1944-AT150

The RF-1944-AT150 is a low-profile, lightweight, tactical broadband dipole antenna for operation in an inverted Vee configuration. The antenna is capable of 150 watts maximum operation from 1.6 to 30 MHz and is utilized for NVIS communications. The RF-1944-ATXXX antenna provides instantaneous bandwidth performance over the entire frequency range by properly terminating the dipole ends. This bandwidth makes this antenna an excellent choice when operating with frequency-agile waveforms because an antenna coupler is not required. Antenna masts are not included.

The RF-1944-AT150 includes:

- Balun
- Dipole elements
- Termination resistors
- 33-ft. (~10-m) coaxial cable
- Halyard
- Ground stakes
- Canvas bag
- Instruction manual (product number 10515-0177-4200)

Deployed size:	164 ft. (~49.9 m)
Transport size:	12 L x 20 W x 3 H in. (~30 x 50 x 8 cm)
Weight:	11 lbs. (~4.9 kg)
Color:	Green

400 WATT TRANSPORTABLE HF BROADBAND INVERTED VEE ANTENNA

RF-1944-AT400

The RF-1944-AT400 is a low-profile, lightweight, tactical broadband dipole antenna for operation in an inverted Vee configuration. The antenna is capable of 400 watt maximum operation from 1.6 to 30 MHz and is utilized for NVIS communications. The RF-1944-AT400 antenna provides instantaneous bandwidth performance over the entire frequency range by properly terminating the dipole ends. This bandwidth makes the RF-1944-AT400 antenna an excellent choice when operating with frequency-agile waveforms because an antenna coupler is not required. Antenna mast is not included.

The RF-1944-AT400 includes:

- Balun
- Dipole elements
- Termination resistors
- 33-ft. (~10-m) coaxial cable
- Halyard
- Canvas bag
- Instruction manual (product number 10515-0177-4200)

Deployed size:	164 ft. (~49.9 m)
Transport size:	12 L x 20 W x 3 H in. (~30 x 50 x 8 cm)
Weight:	13 lbs. (~5.9 kg)
Color:	Green

HF LONG-WIRE ANTENNA KIT

SB-A150

The SB-A150 includes all materials required to construct a 150-foot (~46-meter) long-wire antenna. The antenna is capable of 1 kW maximum operation from 1.6 to 30 MHz. It is intended for groundwave or long-distance skywave communications and can be cut to a specific frequency for single-channel operation, or used with an antenna coupler for a wide range of frequencies.

The SB-A150 kit includes:

- Ground rod
- Insulators
- Wire
- Braided nylon support rope
- Instruction sheet (product number PM-0070)

Transport size:	6 ft. (~2 m) ground rod with wire spool
Weight:	5 lbs. (~2 kg)
Color:	Copper

HF FIXED INSTALLATION ANTENNAS

FIXED HF FAN DIPOLE ANTENNA

RF-1912B-AT001

The RF-1912B-AT001 is a fixed-installation, fan dipole antenna that includes all the components needed to transport and permanently install the antenna. It is capable of 1 kW maximum operation from 1.6 to 30 MHz and has been optimized for both NVIS communications from 1.6 to 10 MHz and medium-range skywave for 10 to 30 MHz. The element length and height above ground have been designed to optimize take-off-angle for HF skywave propagation. It can also be configured as a top-loaded monopole for short-range groundwave and long-range skywave. The antenna achieves near 100% radiation efficiency because it does not contain any resistive loads. Broadband operation requires an antenna coupler.

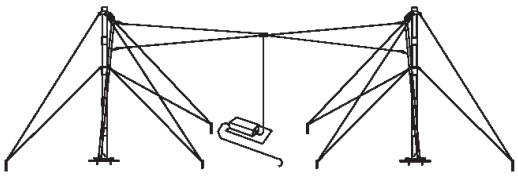
The RF-1912B-AT001 includes:

- Masts (2)
- Guy assemblies
- Halyards
- Guy anchors
- Pre-constructed radiating element assembly
- Vertical feedline
- Antenna coupler base plate
- Installation and spare parts kits
- Instruction manual (product number 10515-0120-4200)

ACCESSORIES

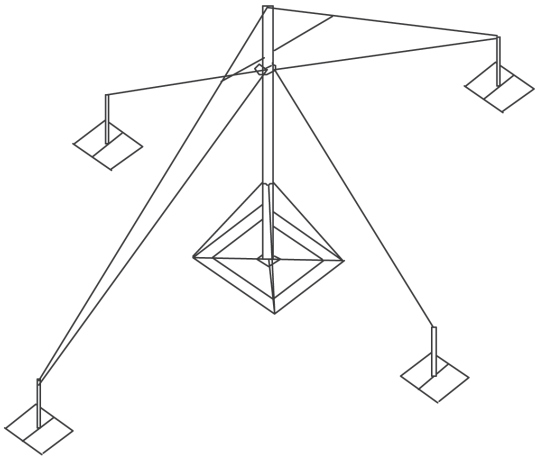
SPARES KIT

PRODUCT NUMBER	PRODUCT NAME
6906-3120-01	Spare Parts Kit



Deployed size: 105 L x 26 W x 30 H ft. (~32 x 7.9 x 9.1 m)
Weight: 428 lbs. (~194 kg)
Color: Black

ROOF-MOUNTED INVERTED VEE HF DIPOLE ANTENNA



RF-1950-AT001

The RF-1950-AT001 is a roof-mounted, inverted Vee dipole antenna designed for non-penetrating rooftop installation. The antenna is capable of 1 kW maximum operation from 2 to 30 MHz. The RF-1950-AT001 has been optimized for both NVIS communications from 1.6 to 10 MHz and medium-range skywave for 10 to 30 MHz. It incorporates galvanized steel bases and a fiberglass mast to support the antenna elements. One platform holds the fiberglass mast and four small platforms support the guys and elements. The large platform allows direct bolting of the required RF-5382, RF-382A, and RF-2601 series antenna couplers.

The RF-1950-AT001 includes:

- Mast sections
- Guy assembly
- Roof mount
- Mast support frame with guy
- Instruction manual

Deployed size: 50 L x 33 W x 26 H ft. (~15 x 10 x 7.9 m)
Transport size: 83.5 L x 21.5 W x 17.25 H in. (~212 x 55 x 44 cm)
Weight: 580 lbs. (~260 kg) with shipping crate
Color: Green

Please contact your sales representative for further information.

HF NVIS LOOP ANTENNA

RF-3134-AT003 (for RF-382A coupler)
RF-3134-AT005 (for RF-5382 coupler)

The RF-3134-AT00X HF Full Loop Antenna is designed for HF near vertical incidence skywave (NVIS) communications. It is a Hi-Q magnetic loop antenna with an extremely narrow bandwidth, making it optimal for NVIS and for operation where multiple antennas are co-located. The RF-3134-AT00X provides limited groundwave capability to maintain line-of-sight (LOS) links. It works with the RF-382A and RF-5382 couplers, differing only in the associated power and control cable. Its light weight and loop profile make it easy to install and uninstall from the standard RF-292 Antenna Mount (ordered separately) for quick interchange to other types of antennas. It does not depend on a ground plane and can be mounted on most vehicles, masts/tripods, or fixed installations. In vehicular installations, it can provide improved NVIS Communications-on-the-Move (COTM).

The RF-3134-AT00X includes:

- HF magnetic full loop antenna elements and tower
- Protective boot
- Coupler/Power Amplifier cable
- High voltage cable installation kit
- Operator's manual

HF ANTENNA ACCESSORIES

CABLES AND CONNECTORS

See the Common Accessories chapter for more information.

PRODUCT NUMBER	PRODUCT NAME
M17/74-RG213	Flexible Coaxial Cable
10369-7210-XXX	Coaxial Cable Assembly (M17/74-RG213) Type N (M)-To-Type N (M)
10369-7211-XXX	Coaxial Cable Assembly (M17/74-RG213) Type N (M)-To-BNC (M)
10369-7212-XXX	Coaxial Cable Assembly (M17/74-RG213) BNC (M)-To-BNC (M)
10513-0810-AXXX	Low-Loss Type N (M)-To-Type N (M)
10513-0811-AXXX	Low-Loss Type N (M)-To-BNC (M)
10513-0812-AXXX	Low-Loss BNC (M)-To-BNC (M)
12011-0120-AXXX	RF Cable, TNC (M)-To-BNC (M)
W-1887	Semi-Rigid, Foam Dielectric Coax Cable
J95-0004-000	Connector, Type N (M) For W-1887, Semi-Rigid Foam Dielectric Coax Cable
M39012/01-0005	Connector, Type N (M) For M17/74-RG-213 (RG-213/U) Coaxial Cable
UG-959A/U	Connector, Type BNC (M) For M17/74-RG-213 (RG-213U) Coaxial Cable
M55339/14-00306	Adapter, Right-Angle, Type BNC (M)-To-Type BNC (F)

MOUNTING HARDWARE

VEHICULAR ANTENNA ADAPTER FOR THE RF-1936P-10

RF-1936-01

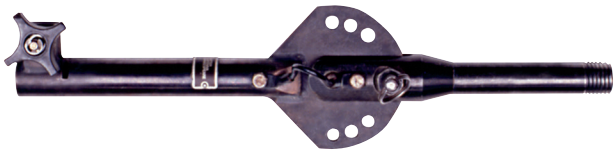
The RF-1936-01 allows the RF-1936P-XX antennas to be mounted on SB-V16B, SB-V16C, and SB-V16F or SB-V35B, SB-V35C, and SB-V35F antenna bases. The RF-1936-01 cannot be used with SB-V16T, SB-V35S or RF-1930CHD whip antenna bases.

FLAT SURFACE MOUNTING PLATE FOR THE RF-1936V-10

RF-1936-02

The RF-1936-02 is a mounting plate that allows RF-1936V-XX antennas to be raised on the ground or on flat surfaces. It is a part of the RF-1936P antennas.

TILT WHIP ADAPTER



RF-1980-AT001

The RF-1980-AT001 is similar to the RF-1980F-AT001 Tilt Whip Adapter, except it mounts directly on a standard SB-V16 series or SB-V35 series whip base. This tilt whip adapter converts these bases into a tilt whip base. If used with a locking spring base or flange base, a 35-foot (~11-meter) whip antenna may be used.Color: Black.

TILT WHIP ADAPTER, SPRING BASE

RF-1980F-AT001 Green
RF-1980F-AT002 Tan

The RF-1980F-AT00X is a tilt mechanism built into a spring base that is designed for use with the SB-V16 series whip antennas. The RF-1980F-AT001 accepts up to a 16-foot (~4.9-meter) whip antenna and provides the flexibility to tilt from 0 degrees (vertical), 50 degrees, 70 degrees, and 90 degrees (horizontal), with locking pin. The RF-1980F-AT00X bolts directly to the RF-292-01 Universal Antenna Mount or the 10181-5178-06 HMMWV Mount (ordered separately).

TACTICAL GROUND ROD KIT

12006-1508-01

This kit includes:

- Four 2-ft. (~0.6-m), 5/8-in. (~2-cm) diameter sections
- Bronze couplings (4)
- Steel driving stud
- Clamp

GROUND ROD

E-0250

The E-0250 is a one-piece ground rod. It is copper-clad steel, 6 feet (~2 meters) long with a 5/8-inch (~2-centimeter) diameter.

LIGHTNING ARRESTOR

RF-1918

The RF-1918 provides in-line protection for a variety of 50-ohm antennas. It features flange mounting and is supplied with two type N female connectors. Length is 1.5 W x 2.5 H inches (~38 x 62 centimeters).

MAST/TOWER MOUNT

RF-1584

The RF-1584 is a rugged aluminum bracket for 1- to 2-inch (~3- to 5-centimeter) diameter masts or towers. It is designed to mount vehicular antennas to a standard NATO four-hole mounting pattern. A mount and mast mounting hardware are included. The RF-1584 is designed for use with center-fed antennas.

The RF-1584 can be used with the following antennas:

PRODUCT NUMBER	PRODUCT NAME
RF-387-ATXXX	VHF Low-Band Vehicular Whip Antenna
RF-3184-ATXXX	UHF Vertical Dipole Antenna
RF-397	UHF Vertical Dipole Antenna
RF-398-XX	VHF Low-Band Vertical Whip Antenna

TRIPOD ANTENNA MOUNT

RF-392-AT001

The RF-392-AT001 is a rugged aluminum mount that provides a stable, well-grounded surface for mounting VHF and UHF vehicular antennas in a tactical environment. The mount has a standard NATO four-hole mounting pattern and hardware to mount most any vehicular-style antennas with the same mounting pattern. The RF-392-AT001 is equipped with three fiberglass-coated conductive legs that act as the ground plane. Each leg has changeable feet that allow for fixed mounting on the ground, as well as to a structure. Tripod is approximately 7 feet (~2 meters) high. Color: Black/green.

Please contact your sales representative for further information.

TOWER MOUNT

RF-392-AT002

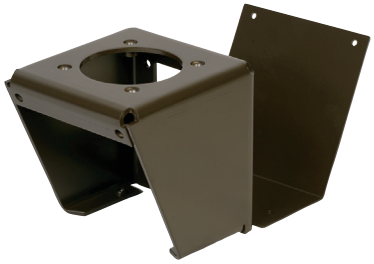
The RF-392-AT002 is a rugged aluminum mount that provides the necessary ground plane for maximum performance for end-fed VHF and UHF antennas on a tower. The mount has a standard NATO four-hole mounting pattern and hardware to mount most any vehicular-style antennas with the same mounting pattern. The RF-392-AT002 mounts to the RF-9071 Mounting Mast (ordered separately) via 1.315 by 11.5 National Pipe Thread (NPT). Color: Black.

MOUNTING MAST FOR RF-9070 ANTENNA AND RF-392-AT002 ANTENNA MOUNT

RF-9071

The RF-9071 provides a 6.5-foot (~1.5-meter) long, 1.3-inch (~3.3-centimeter) diameter mast complete with mounting clamps. The mast is threaded at one end, with a 1.315 by 11.5 National Pipe Thread (NPT) to match the mounting hub of the RF-392-AT002 Tower Mount and RF-9070 Antenna. Color: Black

UNIVERSAL ANTENNA MOUNT



RF-292-01 CARC Green 383
RF-292-02 CARC Tan

The RF-292-XX is used to mount antennas to a vehicle, transportable shelter, watercraft, fixed station, et cetera. The bolt hole pattern is four 0.375-inch (~0.953-centimeter) diameter holes spaced 90 degrees apart on a 4.5-inch (~11-centimeter) bolt circle with a 3.5-inch (~8.9-centimeter) diameter cut-out. Mounting hardware is included. Not recommended for use on certain HMMWV platforms.

MOUNT COMPATIBILITY

PRODUCT NUMBER	PRODUCT NAME	RF-292-01 UNIVERSAL ANTENNA MOUNT	10181-5178-06 ANTENNA MOUNTING KIT
RF-3183-ATXXX	VHF/UHF GPS Multiband Vehicular Whip Antenna	•	•
RF-387-ATXXX	VHF Low-Band Vehicular Whip Antenna	•	•
RF-390-ATXXX	VHF/UHF Multiband Vehicular Whip Antenna	•	•
RF-394	VHF High-Band Vertical Dipole Antenna	•	•
RF-397	UHF Vertical Dipole Antenna	•	•
RF-398-XX	VHF Low-Band Vertical Whip Antenna	•	•
SB-V16B	Feed-Through Base 16-Foot (~4.9-meter) HF Whip Antenna	•	
SB-V16F	Spring Base 16-Foot (~4.9-meter) HF Whip Antenna	•	•
SB-V16T	Self-Supporting 16 Foot (~4.9 meter) HF Whip Antenna	•	
SB-V35B	Feed-Through Base 32-Foot (~9.8-meter) HF Whip Antenna	•	
SB-V35F	Locking Spring Base 32-Foot (~9.8-meter) HF Whip Antenna	•	•

MASTS

9-METER SECTIONAL MAST

RF-5941-SM901

The RF-5941-SM901 is a transportable 9 meter (~30 ft.) fiberglass sectional mast. It consists of 1 meter (~3.2 ft.) sections that may be used to raise antennas to heights up to 9 meters (~30 ft.). Mast sections interlock to prevent antenna rotation once The RF-5941-SM901 includes:

- Mast base, sections, and brackets
- Stakes, hammer, and storage/transport bag
- Guy line on winder, 10 m (~32.8 ft.) and 14 m (~46 ft.)
- Mast section with cleat
- Halyard with pulley and connection points (2), 9 m (~29.5 ft.)
- Installation manual (product number: 12006-1900)

Transport size:	37 x 12 x 12 in. (~94 x 30 x 30 cm)
Weight:	37 lbs. (~16 kg)
Color:	Green

7-METER PUSH-UP MAST

RF-5941-PM701

The RF-5941-PM701 is a 23 foot (~7 m) aluminum mast without antenna mounting accessories.

The mast includes:

- Tripod
- Guy lines
- Ground stakes and storage bag

Transport size:	54 x 14 x 14 in. (~137 x 36 x 36 cm)
Weight:	45 lbs. (~20 kg)
Color:	Black

9-METER PUSH-UP MAST

RF-5941-PM901

The RF-5941-PM901 is a 30 foot (~9 m) aluminum push-up mast that includes an HF pulley kit.

The mast includes:

- Tripod
- Guy lines
- Ground stakes and storage bag

Transport size:	54 x 14 x 14 in. (~137 x 36 x 36 cm)
Weight:	59 lbs. (~27 kg)
Color:	Black

9-METER TELESCOPIC MAST

RF-5941-TM901

The RF-5941-TM901 is a transportable 9 meter (~30 ft) telescopic mast made of fiberglass sections. The mast is operated by locking mechanisms and pushed up by hand. Its height is adjustable up to 9 meters (~30 ft.).

The mast includes:

- Guy lines
- Ground stakes and storage bag
- Halyard assembly
- Operator card (product number: 10515-6406)

Transport size:	6 ft. (~2 m)
Weight:	26 lbs. (~12 kg)
Color:	Green

Please contact your sales representative for further information.

RF-5941 9-METER MAST ANTENNA COMPATIBILITY CHART

When raising an antenna using a mast, ground plane radials may be required.

PRODUCT NUMBER	PRODUCT NAME	NUMBER OF MASTS	RF-5941-SM901	RF-5941-PM901
RF-1912E-AT001	HF Fan Dipole Antenna Radiating Element	2	•	•
RF-1940-AT001	Portable HF Dipole Antenna	1-2	•	•
RF-1941	Portable HF Dipole Antenna	1-2	•	•
RF-1944-AT020	20 watt Manportable Broadband Inverted Vee Antenna	1	•	•
RF-1944-AT15X	150 watt Transportable HF Broadband Inverted Vee Antenna	1	•	•
RF-1944-AT400	400 watt Transportable HF Broadband Inverted Vee Antenna	1	•	•
RF-3183-ATXXX	VHF/UHF GPS Multiband Vehicular Whip Antenna	1		•
RF-3191-ATXXX	VHF Lightweight Communications Antenna	1		•
RF-387-ATXXX	VHF Low-Band Vehicular Whip Antenna	1		•
RF-390-ATXXX	VHF/UHF Multiband Vehicular Whip Antenna	1		•
RF-394	VHF High-Band Vertical Dipole Antenna	1		•
RF-397	UHF Vertical Dipole Antenna	1		•
RF-398-XX	VHF Low-Band Vertical Whip Antenna	1		•
SB-A150	HF Long-Wire Antenna Kit	1-2	•	

RECOMMENDED HF ANTENNA/MAST COMBINATIONS

(Mast assemblies include coaxial cable on winders)

ANTENNA	NUMBER OF MASTS	RF-5941-SM901 9-M (~30-FT.) SECTIONAL MAST	RF-5941-PM701 7-M (~23-FT.) PUSH-UP MAST	RF-5941-TM901 9-M (~30-FT.) TELESCOPIC MAST
RF-1940 Manportable Dipole Antenna	1-2	•	•	•
RF-1941 Manportable Dipole Antenna	1-2	•	•	•
RF-1944-AT020 Inverted Vee Antenna (20 watt)	1	•		
RF-1944-AT150 RF-1944-AT400 Inverted Vee Antenna (150 and 400 watt)	1 1	•	•	•
RF-1912E-AT001 Fan Dipole Antenna	2	•	•	•
SB-A150 150-Foot Long Wire Antenna	1-2	•	•	•

VHF AND UHF ANTENNAS BY APPLICATION

DISMOUNT COMPATIBILITY CHART

PAGE	ANTENNA	RADIOS	LENGTH/SIZE	TYPE	FREQUENCY
HANDHELD					
198	12011-2700-01	RF-5800V-HH, RF-5800M-HH, RF-7800V-HH, RF-7800M-HH, RF-7850V, AN/PRC-152(C), AN/PRC-152(A),	45 in. (~114 cm)	End-fed, Monopole blade	30-108 MHz
198	12011-2710-01	RF-310M-HH, RF-5800M-HH, RF-7800M-HH, AN/PRC-152(C), AN/PRC-152(A)	14 in. (~34 cm)	Mini-blade, 20 m submersible	30-512 MHz
198	12011-2720-01	RF-5800V-HH, RF-5800M-HH, RF-7800V-HH, RF-7850V, RF-7800M-HH, AN/PRC-152(C), AN/PRC-152A(C)	45 in. (~114 cm)	Blade, 20 m submersible	30-108 MHz
198	12011-2730-01	RF-330E-TR	10.8 in. (~27.4 cm)	Flexible gooseneck	225-1850 MHz
198	12031-2700-01	RF-310M-HH, RF-5800M-HH, RF-7800M-HH, AN/PRC-152(C), AN/PRC-152(A)	9.3 in. (~23.5 cm)	Whip antenna	30-108 MHz
200	12121-2730-01	RF-330E-TR, RF-3590-RT, AN/PRC-152(C), AN/PRC-152(A), RF-7800M, RF-7850M	45 in. (~114 cm)	Dual-band blade	30-512 MHz
198	RF-3163-AT001	AN/PRC-152(C), AN/PRC-152(A)	21 in. (~54 cm)	SATCOM LNA whip	243-323 MHz

PAGE	ANTENNA	RADIOS	LENGTH/SIZE	TYPE	FREQUENCY
199	RF-3161-AT001	RF-5800V-HH, AN /PRC-152(C), AN/PRC-152(A)	69 in. (~175 cm)	Body-worn gooseneck with flexible blade	30-108 MHz
199	RF-3162DB-AT001	AN/PRC-152(C), AN/PRC-117G, RF-7800M-MP, AN/PRC-152(A)	40 in. (~100 cm)	Soldier-worn, dual band	Dual band, 30-512 MHz
199	RF-3162-AT001	RF-5800M-HH, AN/PRC-152(C), AN/PRC-152(A)	65 in. (~165 cm)	Body-worn gooseneck with flexible blade	30-512 MHz
199	RF-3162SP-AT001	RF-7800S	34 in. (~85 cm)	Soldier-worn	350-450 MHz
MANPACK					
200	10511-0400-XX	RF-5800H-MP, RF-5800V-MP, RF-5800M-HH, RF-5800M-MP, RF-7800M-MP	6 ft. (~1.8 m) cable	L1 GPS	1575 MHz
201	10512-0201-01	AN/PRC-117F(C), RF-5800V-MP, RF-5800M-MP	3 ft. (~91 cm) 4 ft. (~122 cm) with goose neck adapter (included)	Blade	30-108 MHz
201	10512-0240-01	AN/PRC-117F(C), RF-5800V-MP, RF-5800M-MP	8.7 ft. (~2.7 m) 9 ft. (~3 m) with spring base adapter (included)	Whip	30-108 MHz
201	12006-0017-XX	RF-5800H-MP, RF-5800V-MP, RF-5800M-MP, RF-7800M-MP	2 x 2 in. (~5 x 5 cm)	L1 GPS	1575 MHz
201	RF-3070-AT242	AN/PRC-117G, RF-340M-MP	2 x 2 x 0.75 in. (~5 x 5 x 2 cm)	L1/L2 GPS	L1: 1575 MHz L2: 1228 MHz
201	RF-3073-AT242	AN/PRC-117G, RF-340M-MP	1.25 x 1.25 x 1.25 in. (~3.2 x 3.2 x 3.2 cm)	Push-on L1/L2 GPS	L1: 1575 MHz L2: 1228 MHz
202	10369-0205	AN/PRC-117F(C), RF-5800M-MP	13 in. (~33 cm)	Nightstick	115-512 MHz
202	RF-3080-AT001	AN/PRC-117G/RF-300M-V255, AN/PRC-117F(C), AN/VRC-103(V), AN/VRC-110, RF-340M-MP	40 x 24 x 24 in. (~102 x 61 x 61 cm) deployed size	SATCOM crossed Yagi	240-400 MHz SATCOM
202	RF-3150-AT152	AN/PRC-117G, RF-7800M-MP, RF-340M-MP	49 in. (~124 cm)	Monopole blade	30-108 MHz
202	RF-3152-AT152	AN/PRC-117G, RF-7800M-MP, RF-340M-MP	20 in. (~51 cm)	Flexible gooseneck with flexible blade	30-512 MHz Wideband
202	RF-3165-AT122	AN/PRC-117G, RF-7800M-MP, RF-340M-MP	22 in. (~56 cm)	Flexible gooseneck with flexible blade	225 MHz-2 GHz Wideband
203	12006-9000-01	AN/PRC-117G/RF-300M-V255, AN/PRC-117F(C), AN/VRC-103, AN/VRC-110, RF-340M-MP	77 x 26 x 16 in. (~196 x 66 x 61 cm) deployed size	High-gain crossed Yagi	225-320 MHz SATCOM

VEHICULAR COMPATIBILITY CHART

PAGE	ANTENNA	RADIOS	LENGTH/SIZE	TYPE	FREQUENCY
200	RF-3071-ATXXX	AN/PRC-117G, RF-340M-MP	Flat "hockey puck" with 6 ft. (~1.8 m) cable	L1/L2 GPS	L1: 1575 MHz L2: 1228 MHz
203	RF-398-01	RF-5800V-MP/-HH, RF-5800M-MP /-HH, AN/PRC-117F(C), AN/VRC-103, AN/VRC-110, AN/PRC-117G, RF-340M-MP	75 in. (~130 cm)	Low-profile whip	30-90 MHz
204	RF-390-ATXXX	AN/PRC-117G, RF-5800M-VXXX, AN/PRC-117F(C), RF-300M-V255, AN/VRC-110, AN/VRC-103, RF-5800M-VXXX, RF-340M-MP	110 in. (~279 cm)	Whip	30-512 MHz
204	RF-387-AT001, -AT003	RF-5800V-MP/-HH, RF-5800M-MP/-HH, AN/PRC-117F(C), AN/PRC-117G, AN/VRC-103, AN/VRC-110, RF-300M-V255, RF-340M-MP	120 in. (~305 cm)	Whip	30-108 MHz
204	RF-387-AT002, -AT004	RF-5800V-MP/-HH, RF-5800M-MP/-HH, AN/VRC-110	65 in. (~165 cm)	Whip with built-in GPS	30-108 MHz
206	RF-394	RF-5800V-MP/-HH, RF-5800M-MP/-HH, AN/PRC-117F(C), AN/PRC-117G, AN/VRC-103, AN/VRC-110, RF-300M-V255, RF-340M-MP	42 in. (~61 cm)	Vehicular dipole	116-174 MHz

Please contact your sales representative for further information.

PAGE	ANTENNA	RADIOS	LENGTH/SIZE	TYPE	FREQUENCY
204	RF-398-03	RF-5800V-MP/-HH, RF-5800M-MP/-HH, AN/PRC-117F(C), AN/PRC-117G, AN/VRC-103, AN/VRC-110, RF-300M-V255, RF-340M-MP	117 in. (~297 cm)	Whip	30-108 MHz
205	RF-3183-ATXXX	AN/PRC-117G, RF-5800M-VXXX AN/PRC-117F(C), RF-300M-V255, AN/VRC-110, AN/VRC-103, RF-5800M-VXXX, RF-340M-MP	110 in. (~279 cm)	Whip	30-512 MHz
206	RF-3184-ATXXX	AN/PRC-117G, RF-300M-V255, RF-7800M-VXXX, RF-340M-MP	35 in. (~89 cm)	Vehicular dipole	225-450 MHz
206	RF-3186-ATXXX	AN/PRC-117G, RF-300M-V255, RF-7800M-VXXX, RF-340M-MP	40 in. (~102 cm)	Vehicular dipole	500 MHz-2 GHz
207	RF-3187-ATXXX	AN/PRC-117G, RF-7800M-MP, RF-340M-MP	83 in. (~211 cm)	Whip	30 MHz-2 GHz
208	12006-900X-01	AN/PRC-117G, AN/PRC-117F(C), AN/PRC-152(C), AN/VRC-103, AN/VRC-110, RF-300M-V255, RF-340M-MP	19 L x 19 W x 11 H in. (~48 x 48 x 28 cm)	SATCOM X-wing with magnetic mount	225-400 MHz
203	12006-9000-01	AN/PRC-117G, AN/PRC-117F(C), AN/PRC-152(C), AN/VRC-103(V), AN/VRC-110, RF-300M-V255, AN/VRC-114, RF-340M-MP	77 L x 26 W x 16 H in. (~196 x 66 x 40 cm)	Crossed Yagi SATCOM	225-320 MHz
208	12006-9001-01	AN/PRC-117G, AN/PRC-117F(C), AN/PRC-152(C), AN/VRC-103, AN/VRC-110, RF-300M-V255, AN/VRC-114, RF-340M-MP	19 L x 19 W x 11 H in. (~48 x 48 x 28 cm)	SATCOM X-wing	225-400 MHz
203	12006-9005-01	AN/PRC-117G, AN/PRC-117F(C), AN/PRC-152(C), AN/VRC-103, AN/VRC-110, RF-300M-V255, RF-340M-MP	18 L x 18 W x 4 H in. (~45 x 45 x 10 cm)	High gain crossed Yagi SATCOM	225-320 MHz
208	12006-9007-01	AN/PRC-117G, AN/PRC-117F(C), AN/PRC-152(C), AN/VRC-103, AN/VRC-110, RF-300M-V255, RF-340M-MP	19 L x 19 W x 11 H in. (~48 x 48 x 28 cm)	Foldable SATCOM X-wing	225-400 MHz

TRANSPORTABLE COMPATIBILITY CHART

PAGE	ANTENNA	RADIOS	LENGTH/SIZE	TYPE	FREQUENCY
209	RF-290	AN/PRC-117F(C), AN/VRC-103, AN/VRC-110, AN/PRC-117G, RF-300M-V255, RF-340M-MP	Includes 33 ft. (~10 m) mast	Bicone	30-88 MHz, usable to 108 MHz
209	RF-291-AT001	AN/PRC-117F(C), AN/VRC-103, AN/VRC-110, AN/PRC-117G, RF-300M-V255, RF-340M-MP	Includes 28 ft. (~8.5 m) mast	Discone	100-512 MHz, usable to 1 GHz
209	RF-289B-AT001	AN/PRC-117F(C), AN/VRC-103, AN/VRC-110, AN/PRC-117G, RF-300M-V255, RF-340M-MP	20 ft. (~6 m) on mast	Log periodic	30-108 MHz
207	RF-3141-AT32X	RF-300UL-V150/V250, RF7800UL-V150/V250	39 in. (~99 cm)	Omni-directional center-fed dipole	1250-1850 MHz
207	RF-3187-AT32X	AN/PRC-117G, RF-300M-V250, RF-7800M-MP, RF-340M-MP	83 in. (~2.1 m)	Multiband antenna	30 MHz-2 GHz
209	RF-3192C-AT422	AN/PRC-117G, RF-300M-V255, RF-7800M-MP, RF-340M-MP	40 x 32 in. (~102 x 81 cm)	Transportable LPA	225-450 MHz
210	RF-3193DB-AT420	AN/PRC-117F(C), AN/VRC-103, AN/VRC-110, AN/PRC-117G, RF-300M-V255, RF-7800M-MP, RF-340M-MP	33 ft. (~10 m)	Mast/antenna set	Dual band, 30-88 and 108-512 MHz
210	RF-3193DB-AT520	AN/PRC-117F(C), AN/VRC-103, AN/VRC-110, AN/PRC-117G, RF-300M-V255, RF-7800M-MP, RF-340M-MP	10 ft. (~3 m)	Tripod antenna set	Dual band, 30-88 and 108-512 MHz
211	RF-3193TB-AT420	AN/PRC-117G, RF-300M-V255, RF-7800M-MP, RF-340M-MP	10 ft. 4 in. (~3 m)	Tripod antenna set	30 MHz-2 GHz
211	RF-3193TB-AT520	AN/PRC-117G, RF-300M-V255, RF-7800M-MP, RF-340M-MP	33 ft. 8 in. (~10 m) with mast	Tripod antenna set	30 MHz-2 GHz
210	RF-5941-SM902	AN/PRC-117F(C), AN/VRC-103, AN/VRC-110, AN/PRC-117G, RF-300M-V255, RF-340M-MP	23 or 30 ft. (~7 or ~9 m)	VHF antenna/ mast system	30-108 MHz
210	RF-5941-SM903	AN/PRC-117F(C), AN/VRC-103, AN/VRC-110, AN/PRC-117G, RF-300M-V255, RF-340M-MP	30 ft. (~9 m)	Multiband antenna/mast system	30-512 MHz
211	RF-9072-AT001	AN/PRC-117F(C), AN/VRC-103, AN/VRC-110, AN/PRC-117G, RF-300M-V255, RF-340M-MP	10 x 7 ft. (~3 x 2 m)	Discone	30-108 MHz
212	RF-9070	AN/PRC-117F(C), AN/VRC-103, AN/VRC-110, AN/PRC-117G, RF-300M-V255, RF-340M-MP	6 x 5 ft. (~2 x 1.5 m)	Biconical	100-400 MHz (usable 90-470 MHz)

VHF AND UHF HANDHELD ANTENNAS

Whip antennas for the handheld radio are common examples of vertically polarized monopole antennas. In general, they are antennas with a single driven element and ground plane. The length of the whip determines its wavelength. These antennas are widely used for mobile applications and handheld radios.

VHF HANDHELD BLADE ANTENNA

12011-2700-01

The 12011-2700-01 is a 30 to 108 MHz VHF end-fed, monopole blade antenna for use with the RF-5800V-HH, RF-5800M-HH, RF-7800V-HH, RF-7800M-HH and AN/PRC-152A(C) radios. The antenna is 45 inches (~114 centimeters) long and is 1 meter (~3 feet) immersion capable. The 12011-2700-01 incorporates a flexible gooseneck for orienting the antenna. The assembly also includes a bi-directionally folding blade for stowage. Color: Black.

12011-2710-01

The 12011-2710-01 is a dismount, 30 to 512 MHz end-fed monopole antenna for use with the RF-5800M-HH and AN/PRC-152(C) handheld radios. The antenna is 13.5 inches (~34.3 centimeters) in length and connects directly to the RF connector on the transceiver via a male TNC connector. The antenna assembly incorporates a bidirectional folding blade and hook-and-loop strap, enabling the antenna to be folded in half and secured in place. This capability is advantageous when integrated with vehicular systems in limited space installations. The antenna has been designed to meet the immersion requirements of 20-meter-qualified (~66-foot) handheld radios. Color: Black.

HANDHELD BLADE ANTENNA

12011-2720-01

The 12011-2720-01 is a 30 to 108 MHz VHF end-fed monopole blade antenna for use with the RF-5800V-HH, RF-5800M-HH, RF-7800V-HH, and AN/PRC-152(C) radios. The antenna is 45 inches (~114 centimeters) long and is 20 meters (~66 feet) immersion capable. The 12011-2720-01 incorporates a flexible gooseneck for orienting the antenna. The assembly also includes a bi-directionally folding blade for stowage. This antenna offers superior communication range performance over the 12011-2710-01 Mini-Blade Antenna in the VHF band. Color: Black.

COMBINED 30-512 MHZ HANDHELD ANTENNA

12011-2730-01

The 12011-2730-01 is a 30 to 512 MHz antenna that combines the VHF performance of the VHF Blade Antenna with the UHF performance of the Multiband Mini-Blade. It is designed to operate across the band while folded for UHF performance; when additional VHF performance is required, it can be extended to its full length. The antenna is 45 inches (~114 centimeters) in length and is 20 meters (~66 feet) immersion capable. The 12011-2730-01 incorporates a flexible gooseneck for orienting the antenna. The assembly includes a Velcro strap that can be used to stow the bi-directionally folding blade. This antenna offers the performance of the two-antenna set in a single antenna for ease of use across the available band. Color: Black.

UHF HANDHELD BLADE ANTENNA

12031-2700-01

The 12031-2700-01 is a 225 to 450 MHz whip antenna for use with the RF-310M-HH, RF-7800M-HH, AN/PRC-152(C) and AN/PRC-152A(C) radios. The antenna is 9.3 inches (~23.5 centimeters) long and is 1 meter (~3 feet) immersion capable. Color: Black.

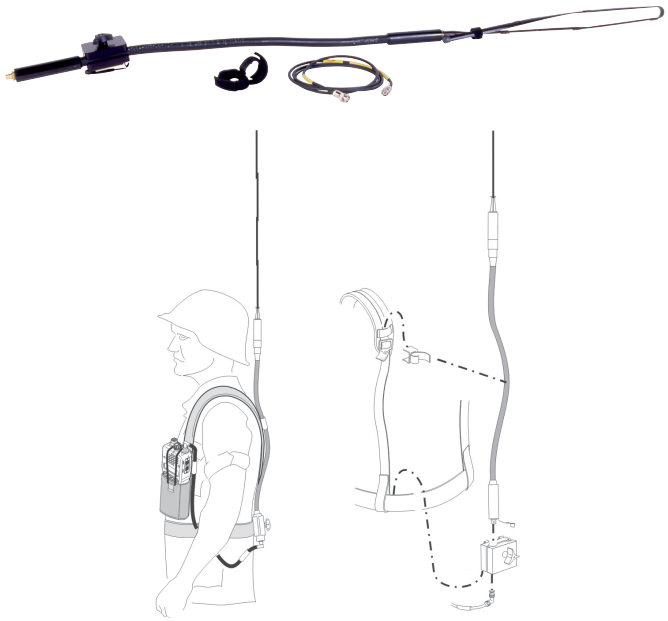
TACTICAL SATCOM LNA ANTENNA

RF-3163-AT001

This SATCOM-on-the-move antenna attaches directly to the AN/PRC-152(C), allowing low-profile, mobile SATCOM in geographically advantageous locations. It includes a low noise amplifier (LNA) that can be selectively activated via the front panel of the radio to provide amplification of low power signals. May not be suitable for all applications; contact Product Management for more details. Color: Black.

Please contact your sales representative for further information.

VHF DISMOUNT SOLDIER ANTENNA



RF-3161-AT001

The VHF Dismount Soldier Antenna is a self-contained antenna that attaches to the RF-5800V-HH radio via a 3.3-foot (~1-meter) coaxial cable. The antenna is a 69-inch (~180-centimeter) flexible gooseneck and flexible blade antenna with a sophisticated matching circuitry to allow the full 30 to 108 MHz range. It is designed for users requiring communication ranges with the RF-5800V-HH approaching that of a 10 watt manpack radio.

This ergonomic antenna comes with clamps to attach to standard web gear or rucksack and conforms to and moves with the body. The Soldier Antenna can be used in a low-profile mode, increasing mobility for urban combat but decreasing range. It can also be elevated into a tree or other structure for extended range when required. Accessories are listed in the chart below. Color: Black.

THE DUAL BAND DISMOUNT SOLDIER ANTENNA

RF-3162DB-AT001

The RF-3162DB-AT001 is a soldier-worn, 30 to 512 MHz lightweight dipole antenna that features significantly increased range over traditional "rubber duck" and mini-blade antennas. The antenna measures approximately 40 inches (~100 centimeters), weighs 1.3 pounds (~485 grams), and can be folded for storage to approximately 6 x 12 inches (~15 x 30 centimeters). Designed to operate with all UHF, VHF, and multiband handheld and manpack radios, it provides handheld radio users with communication ranges approaching those of a 10 watt manpack radio. The antenna connects to the radio via the supplied TNC/BNC cable.

This ergonomic antenna conforms to and moves with the body, and comes with clips to attach to standard web gear. It can be used in low-profile mode, decreasing range but increasing mobility for urban combat. The antenna does not require a ground-plane and can be elevated into a tree or other structure for extended range, when required, using the accompanying elevation kit. Accessories are listed in the chart below. Color: Black.

MULTIBAND DISMOUNT SOLDIER ANTENNA

RF-3162-AT001

The Multiband Dismount Soldier Antenna is very similar to the VHF version, except it has a wider frequency band—30 to 512 MHz—for compatibility with the RF-5800M-HH and AN/PRC-152(C) radios. This 65-inch (~170-centimeter) antenna has three gooseneck sections and a flexible blade with several sophisticated matching circuits along its length. It is designed for multiband handheld radio users who require communication ranges approaching those of a 10 watt manpack radio.

This ergonomic antenna conforms to and moves with the body. It comes with clips to attach to standard web gear or rucksack and can be used in low-profile mode where the gooseneck and blade conform to the body, decreasing range but increasing mobility for urban combat. The antenna can also be elevated into a tree or other structure for extended range when required. Color: Black.

DISMOUNT SOLDIER ANTENNA FOR RF-7800S SECURE PERSONAL RADIO (SPR)

RF-3162SP-AT001

The RF-3162SP-AT001 is a UHF soldier-worn antenna specifically designed for the RF-7800S Secure Personal Radio (SPR). Integrating the RF-3162SP-AT001 with the SPR increases the overall system performance as compared to use with the standard short whip antenna. The RF-3162SP-AT001 covers the 350 to 450 MHz frequency range in a small package (approximately 32 inches [~82 centimeters]). Once attached to PALS webbing with the included clips, its ergonomic flexible gooseneck design allows the antenna to bend and conform to the body's movements. It can also be worn folded for limited urban communications or elevated into a tree or other structure for extended range, when required, using the accompanying elevation kit. Color: Black.

The SPR Dismount Soldier Antenna includes:

- 3-ft. (~0.9-m) coaxial cable with rugged SMA compatible with the SPR
- MOLLE attachment clips (2)
- Elevation kit (coax, rope, and throwing weight)
- Hook and loop strap
- Operations card

ACCESSORIES

CABLE

PRODUCT NUMBER	PRODUCT NAME
12011-0120-AXXX	RF Cable, TNC (M)-to-BNC (M)

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
12006-2425-01	Elevation Kit for RF-3161-AT001 VHF Dipole Antenna
12006-2425-02	Elevation Kit for RF-3162-AT001 Multiband Dipole Antenna
12006-2425-03	Elevation Kit for RF-3162DB-AT001 Multiband Dipole Antenna
12011-0120-AXXX	RF Cable, TNC (M)-to-BNC (M)

HANDHELD ANTENNA (225-1850 MHZ)

12121-2730-01

The 12121-2730-01 is a dismount, 225 to 1850 MHz handheld antenna. The antenna is optimized for RF-330E frequency ranges of 225 to 450 MHz, 1250 to 1390 MHz and 1755 to1850 MHz. It incorporates a flexible gooseneck for orienting the antenna. This antenna is 10.8 inches (~27.4 centimeters) in length and connects directly to the transceiver via a male TNC connector. Color: Black.

RF-330E-TR/RUGGED TABLET GPS ANTENNA

12121-2730-01

A removable active antenna designed for use with the RF-330E and Rugged Tablet.

HANDHELD L1 GPS ANTENNA

12041-6550-01

The 12041-6550-01 is a compact L1 GPS antenna for use with the AN/PRC-152(C), AN/PRC-152A(C), RF-310M-HH, RF-5800M-HH, RF-5800V-HH and RF-7800M-HH radios with GPS option. The antenna is 1.5 inches (~3.8 centimeters) in length and connects directly to a connector on the transceiver. Color: Black.

GPS MANPACK ANTENNAS

GPS ANTENNA KIT (L1 BAND), FALCON II

10511-0400-01 Green
10511-0400-02 Tan

The 1575 MHz GPS Antenna Kit can be used with the RF-5800H-MP, RF-5800V-MP, RF-5800M-MP and RF-7800M-MP radios (antenna may be included with the manpack radio if ordered with GPS option; see individual radio products for details). The included dual lock fastener is for use when a magnetic mount location is unavailable.

The 10511-0400-XX includes:

- Small, flat active antenna
- Pigtailed 6 ft. (~1.8 m) cable, custom SMB female connector
- Very high bond, re-closable, dual lock fastener for attachment to non-magnetic surfaces

VEHICULAR L1/L2 GPS ANTENNA KIT

RF-3071-AT230 383 Green
RF-3071-AT232 Black
RF-3071-AT234 686 Tan

The RF-3071-ATXXX is an active L1/L2 GPS antenna kit for use with the AN/PRC-117G manpack radio. The kit consists of an active L1/L2 GPS antenna and a connectorized 12-foot (~3.6-meter) long RG-174 coaxial cable. The 2.7-inch (~6.8-centimeter) diameter by 0.75 inches (~1.9 centimeters) tall, 4-ounce (~110-gram) GPS antenna incorporates band-pass filtering, a limiter, a 33 dB LNA, and four flush-mounted magnets.

Please contact your sales representative for further information.

The connector on the antenna is SMA female. The RG-174 coaxial cable incorporates two connectors, specifically an SMA male that connects to the antenna and a right angle SMB plug connector that connects directly to the AN/PRC-117G manpack radio.

SOLDIER L1/L2 GPS ANTENNA

RF-3070-AT242

The RF-3070-AT242 is an active L1/L2 GPS antenna for use with the AN/PRC-117G manpack radio. The 2 W x 2 D x 0.75 H inches (~5 x 5 x 1.9 centimeters), 2.9-ounce (~82-gram) antenna connects directly to the GPS connector on the AN/PRC-117G radio via an integrated 3-foot (~0.9-meter) RG-174 coaxial pendant cable. The active antenna incorporates bandpass filtering, a limiter, a 33 dB LNA, and can be conveniently inserted into a rucksack pocket. Color: Black.

SOLDIER L1/L2 PUSH-ON GPS ANTENNA

RF-3073-AT242

The RF-3073-AT242 is an active L1/L2 GPS antenna for use with the AN/PRC-117G manpack radio. The 1.25 W x 1.25 D x 1.25 H inches (~3.2 x 3.2 x 3.2 centimeters), 2.0-ounce (~57-gram) antenna is designed for permanent mounting directly to the GPS connector on the AN/PRC-117G. The antenna contains an internal switch that bypasses the RF-3073-AT242 when activated by attaching an external L1/L2 GPS antenna to the top SLB connector. The active antenna incorporates bandpass filtering, a limiter, a Low Noise Amplifier (LNA) with gain of 25 dB on L1 and 29 dB on L2. Color: Black.

GPS ANTENNA

12006-0017-XX

The 12006-0017-XX is an active L1 GPS antenna. The assembly incorporates an integrated 6-foot (~1.8-meter) long RG-316 cable and two magnetic mounts. The approximately 1.75 W x 1.75 D x 0.25 H inches (~4.5 x 4.5 x 0.7 centimeters), 2.6-ounce (~73.7-gram) antenna incorporates bandpass filtering and a 33 dB gain, 2.7 to 5.5 VDC, active LNA. The coaxial cable has a custom straight SMB connector that enables connection to the RF-7800M-MP manpack radio.

Specify antenna by replacing 'XX' above with a product number from the following chart:

PRODUCT NUMBER	LENGTH +2.0/-0.0	VOLTAGE	COLOR
-01	72.0	3-5 VDC	Army Green
-02	72.0	2.7-6 VDC	Army Green
-03	72.0	3-5 VDC	Army Green
-05	72.0	3-5 VDC	Tan
-06	72.0	2.7-6 VDC	Tan
-07	72.0	3-5.5 VDC	Tan
-08	36.0	3-5.5 VDC	Tan

VHF AND UHF MANPACK ANTENNAS

VHF BLADE ANTENNA (30-108 MHZ)

10512-0201-01

The 10512-0201-01 is a 48-inch (~120-centimeter), 30 to 108 MHz antenna designed to fit the AN/PRC-117F(C), RF-5800V-MP, and RF-5800M-MP manpack radios. This antenna consists of a blade antenna attached to a flexible gooseneck base, and can be conveniently folded and secured on itself for increased soldier mobility. Finish/Color: CARC Green 383.

MANPACK VHF WHIP ANTENNA KIT (30-108 MHZ)

10512-0240-01

The 10512-0240-01 is an 8.7-foot (~2.7-meter, with spring base), 30 to 108 MHz whip antenna built of collapsible sections. It is an AS-4266A/PRC with a spring-base adapter designed for the AN/PRC-117F(C), RF-5800V-MP, and RF-5800M-MP manpack radios. This antenna allows extended range beyond that of the 10512-0201-01 Blade Antenna. Carry bag is included. Color: CARC Green 383.

DUAL-BAND VHF/UHF NIGHTSTICK ANTENNA (115-512 MHZ)

10369-0205

The Nightstick Antenna is a 13-inch (~33-centimeter) long, 1.25-inch (~3.18-centimeter) diameter antenna covered with durable coating. This 115 to 512 MHz antenna has a swivel joint to allow the antenna to remain vertical while rotating an AN/PRC-117F(C) or RF-5800M-MP manpack radio. Color: Black.

VHF DISMOUNT ANTENNA, BLADE MONOPOLE, ANTENNA FOR THE LOW-BAND PORT (30-108 MHZ)

RF-3150-AT152

The RF-3150-AT152 VHF Antenna is a dismount, 30 to 108 MHz linearly polarized, end-fed monopole blade antenna for use with the AN/PRC-117G and RF-7800M-MP manpack radios. The 48.5-inch (~123-centimeter), 8.7-ounce (~250-gram) antenna connects directly to the radio's low-band port via a machined TNC-style connector. The antenna incorporates a flexible gooseneck for orientation and a flexible sleeved blade radiator. By folding the blade, the antenna's stowed length can be reduced to less than 17 inches (~43 centimeters). Optimal performance is achieved when the antenna is completely deployed and mounted on the radio chassis. Color: Black.

UHF DISMOUNT ANTENNA, SLEEVE DIPOLE, ANTENNA FOR THE HIGH BAND PORT (225-450 MHZ)

RF-3152-AT152

The RF-3152-AT152 is a dismount 30 to 512 MHz linearly polarized, center-fed dipole antenna for use with the AN/PRC-117G and RF-7800M-MP manpack radios. The 20-inch (~51-centimeter) long, 11-ounce (~310-gram) antenna connects directly to the high-band port of the manpack radio via a machined N-style connector. The antenna incorporates a flexible gooseneck for orienting the antenna and a flexible blade radiator. By folding the blade, the antenna's stowed length can be reduced to less than 16 inches (~41 centimeters). Color: Black.

UHF AND L-BAND DISMOUNT ANTENNA, SLEEVE DIPOLE, ANTENNA FOR THE HIGH BAND PORT (225-2000 MHZ)

RF-3165-AT122

The RF-3165-AT122 is a dismount 225 to 2000 MHz center-fed dipole antenna for use with the AN/PRC-117G and RF-7800M-MP manpack radios. The 23-inch (~57.2-centimeter) long, 14-ounce (~400-gram) antenna connects directly to the high-band port of the manpack radio via a machined N-style connector. The antenna incorporates a flexible gooseneck for orientation. By bending the gooseneck at 90 degrees, the antenna's stowed length can be reduced to less than 17 inches (~43 centimeters). Color: Black.

DISMOUNT/TRANSPORTABLE UHF SATCOM ANTENNAS

UHF FOLDABLE SATCOM ANTENNA SET

RF-3080-AT001

The RF-3080-AT001 is a 240 to 400 MHz rapid-deploy, high-gain, lightweight crossed Yagi antenna for SATCOM communications. The antenna gain varies between +7 dBic and +11 dBic and the polarization is right hand circular. The 3 dB radiation pattern beam width is 85 degrees. Deployment time is less than one minute. This antenna is designed for use with the AN/PRC-117G/RF-300M-V255, AN/PRC-117F(C)/AN/VRC-103(V) and AN/PRC-152(C)/AN/VRC-110 radios.

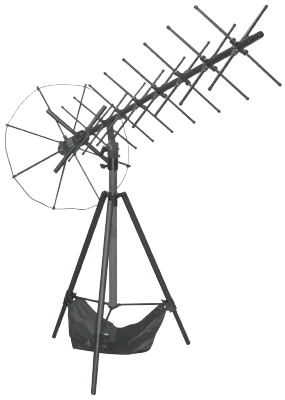
The RF-3080-AT001 includes:

- Crossed dipole-driven elements
- Set of reflectors
- Director extension kits (2)
- Tripod
- BNC coaxial cables (2)
- BNC-to-type N adapter
- Carrying case
- Instruction manual (product number 10515-0336-4100)

Please contact your sales representative for further information.

Deployed size: 40 W x 24 D x 24 H in. (~100 x 61 x 61 cm)
Transport size: 18.5 W x 6 D x 6 H in. (~46.9 x 15 x 15 cm)
Weight: 7 lbs. (~3 kg)
Color: Black

HIGH GAIN, FOLDABLE SATCOM ANTENNA



12006-9000-01

This SATCOM antenna is a 225 to 320 MHz, high gain, crossed Yagi SATCOM antenna for applications that require high gain in a tactical package. The antenna provides +9.0 to 15 dBic gain with right hand circular polarization and is rated to 200 watts of input power. Included are two coaxial cables with type N connectors and a carrying bag. The 12006-9000-01 weighs 35 pounds (~16 kilograms) and can be broken down for transport. Deployment time is less than three minutes. This antenna is designed for use with the AN/PRC-117G/RF-300M-V255, AN/PRC-117F(C)/AN/VRC-103(V) and AN/PRC-152(C)/AN/VRC-110 radios. Color: Black.

Deployed size: 77 W x 26 D x 16 H in. (~196 x 66 x 40 cm)
Transport size: 38 W x 15 D x 12 H in. (~97 x 38 x 30 cm)
Weight: 35 lbs. (~16 kg)
Color: Black

COMPACT UHF FOLDABLE SATCOM ANTENNA

12006-9005-01

The 12006-9005-01 antenna is a 240 to 320 MHz, high gain, crossed Yagi SATCOM antenna for applications that require high gain in a small tactical package. The antenna provides +6.5 to 10.5 dBic gain with right hand circular polarization and is rated to 50 watts of continuous input power. The 12006-9005-01 weighs less than 3 pounds (~1.4 kilograms) and can be broken down for transport into a 5-inch (~12.7 centimeter) diameter by 9-inch (22.9 centimeter) long carry case (included). Color: Black.

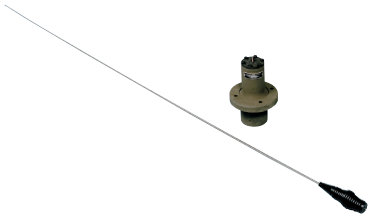
MINIATURE SATCOM ANTENNA

12006-9008-01

The 12006-9008-01 is a 240 to 320 MHz antenna that provides UHF SATCOM performance in a compact antenna. Its crossed Yagi design in a fully assembled package allows rapid deployment and storage, plus directional high gain performance. The antenna is lighter and smaller than other portable SATCOM antennas and the unique foldable design allows the antenna to be handheld, used with the integral tripod, or attached to a post. Color: Black

VHF AND UHF VEHICULAR ANTENNAS

VHF LOW-BAND VERTICAL WHIP ANTENNA



RF-398-01

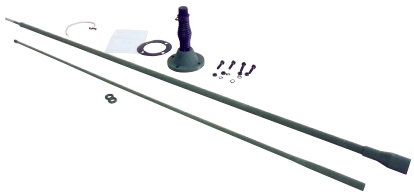
The RF-398-01 is a 75-inch (~1.9-meter) broadband (30 to 90 MHz), vertically polarized end-fed monopole antenna. It is a low-profile, EMP-protected vehicular antenna designed for installation where a short antenna length or low visibility is desired. The whip element is thin passivated stainless steel attached to a black oxide spring and mounted on a CARC painted base. The base mounts directly to an RF-292-01 Universal Antenna Mount or other mount (ordered separately) with a 4.5-inch (~11-centimeter) bolt circle used for vehicular installation. A tie-down is included. The antenna has a BNC female connector and power rating of 70 watts. Finish/Color: CARC Green base with black oxide spring.

ACCESSORIES

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
RF-292-01	Universal Antenna Mount
10181-5178-06	HMMWV Antenna Mounting Kit
RF-392-AT001	Tripod Antenna Mount
RF-392-AT002	Tower Mount
RF-9071	Mounting Mast, for use with RF-392-AT001 Tripod Antenna Mount

VHF LOW-BAND VEHICULAR WHIP ANTENNA



RF-387-AT001 Green
RF-387-AT003 Tan

The RF-387-ATXXX is a 30 to 108 MHz fiberglass, two-piece vehicular center-fed whip antenna with a flexible spring base. The antenna can handle 100 watts and is ground plane insensitive, making it ideal for tower or rooftop installations where a good ground plane is not available. Its length is nominal whip height: 120 inches (~300 centimeters) and 131 inches (~333 centimeters), including base. A BNC female connector on the underside of the base allows coaxial attachment. The RF-387-ATXXX mounts to a horizontal surface using four 0.4-inch (~1-centimeter) holes spaced 90 degrees on a 4.5-inch NATO flange.

VHF LOW-BAND VERTICAL WHIP ANTENNA

RF-398-03

The RF-398-03 is a two-piece fiberglass, center-fed, EMP protected 30 to 108 MHz broadband whip antenna designed for mounting on vehicles, shelters, towers, et cetera. The antenna is 117 inches (~297 centimeters) long, does not require a good ground plane for optimum performance, and can be mounted where a good ground plane is not available. The RF-398-03 is rated at 100 watts, with a nominal impedance of 50 ohm. The RF connector is BNC female. Order the RF-292-01 Universal Antenna Mount or 10181-5178-06 Antenna Mounting Kit for vehicular mounting, or the RF-1584 Mast/Tower Mount for mast mounting. Color: Green.

The RF-398-03 includes:

- Fiberglass radiating sections (2)
- Base with flexible spring
- Tie-down kit and mounting hardware

ACCESSORIES

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
RF-292-01	Universal Antenna Mount
10181-5178-06	HMMWV Antenna Mounting Kit
RF-392-AT001	Tripod Antenna Mount
RF-1584	Mast/Tower Mount

VHF LOW-BAND VEHICULAR WHIP WITH GLOBAL POSITIONING SYSTEM (GPS) ANTENNA

RF-387-AT002 Green
RF-387-AT004 Tan

The RF-387-ATXXX is a 30 to 108 MHz fiberglass, two-piece vehicular center-fed whip antenna with a flexible spring base and built-in L1 GPS antenna. It is intended for use in vehicular applications with RF-5800, AN/PRC-117F(C), AN/VRC-103(V) and AN/VRC-110 radios with the internal GPS option. This center-fed dipole is ground plane insensitive and can handle 100 watts. The whip length is 120 inches (~300 centimeters) nominal and 131 inches (~333 centimeters) with base.

Two connectors are provided on the bottom of the base, a BNC female (VHF) and SMA female connector (GPS). The antenna mounts to a horizontal surface using four 0.4-inch (~1-centimeter) holes spaced 90 degrees on a 4.5-inch (~11-centimeter) bolt circle with a 3.5-inch (~8.9-centimeter) center cutout. The antenna mounts directly to the RF-292-01 Universal Antenna Mount or 10181-5178-06 Antenna Mounting Kit (ordered separately) for installation on a vertical surface.

ACCESSORIES

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
RF-292-01	Universal Antenna Mount
10181-5178-06	HMMWV Antenna Mounting Kit
RF-1584	Mast/Tower Mount

VHF/UHF MULTIBAND VEHICULAR WHIP ANTENNA

RF-390-ATXXX

The RF-390-ATXXX multiband vehicular whip antenna is a two-piece sectional vertical whip for use from 30 to 512 MHz. Distributive passive components along the antenna's 110-inch (~2.8-meter) length obtain exceptional bandwidth. The RF-390-ATXXX has equivalent gain to other narrowband antennas and requires a ground plane. It is the ideal choice for multiband radios because it reduces the vertical signature by replacing three narrowband antennas with a single antenna.

This antenna comes with single or dual ports. The single-port version is compatible with the AN/PRC-117G since it may be installed on the single, combined VHF/UHF low band antenna port. The dual-port version is ideal for use with the AN/PRC-117F(C) and RF-300M-V255 vehicular adapters, which have separate VHF and UHF ports. The feed-through

Please contact your sales representative for further information.

spring base mounts directly to the RF-292-01 Universal Antenna Mount or 10181-5178-06 Antenna Mounting Kit (ordered separately). The RF-390-ATXXX power rating is 50 watts continuous with and without the diplexer.

Specify antenna by replacing 'ATXXX' above with a product number from the following chart:

PRODUCT NUMBER	PRODUCT NAME	COLOR
AT001	Dual BNC port, built-in diplexer	Green
AT002	Dual BNC port	Tan
AT003	Single Type N port	Green
AT004	Single Type N port	Tan

ACCESSORIES

PRODUCT NUMBER	PRODUCT NAME
RF-292-01	Universal Antenna Mount
10181-5178-06	HMMWV Antenna Mounting Kit
RF-392-AT001	Tripod Antenna Mount
RF-392-AT002	Tower Mount
RF-9071	Mounting Mast, for use with RF-392-AT001 Tripod Antenna Mount

VHF/UHF GPS MULTIBAND VEHICULAR WHIP ANTENNA

RF-3183-ATXXX

The RF-3183-ATXXX family of vehicular whip antennas is similar to the RF-390-ATXXX family. The single-port configurations are compatible with the AN/PRC-117G since they may be installed on the single, combined VHF/UHF low band antenna port. The dual-port configurations are enabled through the use of a diplexer and are ideal for use with the AN/PRC-117F(C) and RF-300M-V255 vehicular adapters, which have separate VHF and UHF ports.

The RF-3183-ATXXX power rating is 50 watts continuous without the diplexer (single port) and 50 watts/50 watts with the diplexer (dual port). The antenna is available both with and without a built-in GPS antenna. The GPS antenna is L1 band with 26 dB low noise amplifier and a 2.5 dB noise figure. The GPS antenna is powered from the radio by 5 volts DC in the coaxial cable with a standard SMA connector.

Specify antenna by replacing 'ATXXX' above with a product number from the following chart:

PRODUCT NUMBER (NO TIE-DOWN KIT)	PRODUCT NUMBER (INCLUDES TIE-DOWN KIT)	PRODUCT NAME	COLOR
AT001	AT101	RF dual BNC with diplexer, GPS port connectivity via coaxial cable and SMA connector	Green
AT002	AT102	RF dual BNC with diplexer, GPS port connectivity via coaxial cable and SMA connector	Tan
AT003	AT103	RF type N, GPS port connectivity via an SMA connector	Green
AT004	AT104	RF type N, GPS port connectivity via coaxial cable and SMA connector	Tan
AT005	AT105	RF port BNC, GPS port connectivity via coaxial cable and SMA connector	Green
AT006	AT106	RF port BNC, GPS port connectivity via coaxial cable and SMA connector	Tan
AT011	AT111	RF type N, no GPS	Green
AT012	AT112	RF dual BNC, diplexer, no GPS	Tan
AT013	AT113	RF dual BNC, diplexer, no GPS	Green
AT014	AT114	RF type N, no GPS	Tan
AT015	AT115	RF port BNC, no GPS	Green
AT016	AT116	RF port BNC, no GPS	Tan

ACCESSORIES

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
RF-292-01	Universal Antenna Mount
10181-5178-06	HMMWV Antenna Mounting Kit
RF-392-AT001	Tripod Antenna Mount
RF-392-AT002	Tower Mount
RF-9071	Mounting Mast, for use with RF-392-AT001 Tripod Antenna Mount

VHF HIGH-BAND VERTICAL DIPOLE ANTENNA

RF-394

The RF-394 is a military-grade, center-fed broadband antenna covering the 116 to 174 MHz frequency range. This 42-inch (~110-centimeter) antenna can be used in vehicular applications if installed on the RF-292-01 Universal Antenna Mount (ordered separately) or on the standard mounting brackets found on most military vehicles. The RF connector is BNC female. The RF-394 power rating is 70 watts. The unit includes the antenna and its mounting hardware. Finish/Color: CARC Green 383.

ACCESSORIES

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
RF-292-01	Universal Antenna Mount
10181-5178-06	HMMWV Antenna Mounting Kit
RF-392-AT001	Tripod Antenna Mount
RF-1584	Mast/Tower Mount

UHF VEHICULAR DIPOLE ANTENNA

RF-3184-AT320 Green
RF-3184-AT324 Tan

The RF-3184-ATXXX is a vehicular 225 to 450 MHz omni-directional, center-fed single element dipole antenna designed for wideband use with the RF-300M-V255 and RF-7800M-VXXX vehicular amplifier adapters. The antenna assembly consists of two sections, a black spring base and a fiberglass-encased dipole radiator. The fiberglass housing mounts directly to the base. The assembly is 35 inches (~89 centimeters) long and weighs 6.3 pounds (~2.9 kilograms). The antenna installs on the RF-292-01 Universal Antenna Mount (ordered separately) or on the standard mounting brackets found on most military vehicles or ships. The RF connector is type N female and the RF-3184-ATXXX power rating is 100 watts. The complete package includes the antenna assembly and mounting hardware.

Please contact your sales representative for further information.

ACCESSORIES

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
RF-292-01	Universal Antenna Mount
10181-5178-06	HMMWV Antenna Mounting Kit
RF-392-AT001	Tripod Antenna Mount
RF-1584	Mast/Tower Mount

DUAL UHF/L-BAND VEHICULAR DIPOLE ANTENNA ARRAY

RF-3186-AT320 Green
RF-3186-AT324 Tan

The RF-3186-ATXXX is a vehicular 500 MHz to 2.5 GHz omni-directional, center-fed multi-element dipole antenna array that operates with up to 100 watts of input power. This fiberglass-encased antenna is 40 inches (~102 centimeters) long and weighs 5.6 pounds (~2.54 kilograms). It connects to the high-band and SATCOM ports of the RF-300M-V255 and AN/VRC-114 vehicular amplifier adapters (for use with AN/PRC-117G and RF-7800M-MP radios). The RF Connector is type N female. The antenna can be mounted on the RF-292-01 Universal Antenna Mount (ordered separately) or a 4.5-inch (~11-centimeter) bolt circle with a 3.5-inch (~8.9-centimeter) center hole.

ACCESSORIES

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
RF-292-01	Universal Antenna Mount
10181-5178-06	HMMWV Antenna Mounting Kit
RF-392-AT001	Tripod Antenna Mount
RF-392-AT002	Tower Mount
RF-9071	Mounting Mast, for use with RF-392-AT001 Tripod Antenna Mount

BROAD FREQUENCY BAND ANTENNA

RF-3187-AT320 Green
RF-3187-AT324 Tan

The RF-3187-ATXXX is a vehicular 30 MHz to 2 GHz multiband antenna that combines two single-band antennas into one multiband antenna. It connects to the UHF, VHF and high-band ports of the RF-300M-V255 via the 10369-7212-AXXX or 10513-0811-AXXX coaxial cables with BNC connectors for the UHF/VHF ports. The 10369-7210-AXXX Type N Connector is needed for the high-band port. The antenna can also be connected directly to the AN/PRC-117G or RF-7800M-MP manpack radios. It is mounted using the RF-292-01 Universal Antenna Mount (ordered separately) or a 4.5-inch (~11-centimeter) bolt circle with a 3.5-inch (~8.9-centimeter) center hole. The antenna does require ground plane for the VHF band. It measures 83 inches (~2.1 meters) long and weighs 10 pounds (~4.5 kilograms).

ACCESSORIES

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
RF-292-01	Universal Antenna Mount
10181-5178-06	HMMWV Antenna Mounting Kit
RF-392-AT001	Tripod Antenna Mount
RF-392-AT002	Tower Mount

UHF/L-BAND VEHICULAR ANTENNA

RF-3188-AT320 Green
RF-3188-AT324 Tan

The RF-3188-AT32X is a vehicular 225 to 2000 MHz omnidirectional, center-fed dipole antenna array. The antenna consists of a black spring base and a dipole array within a fiberglass radome. The radome is not removable from the spring base. The antenna installs on the RF-292-0X Universal Antenna Mount (ordered separately) or on the standard mounting brackets found on most military vehicles.The antenna does not need any separate tuning. A single Type N connector is provided. It measures 46 inches (~117 centimeters) long and weighs 6.6 pounds (~3 kilograms).

L-BAND HIGH GAIN VEHICULAR ANTENNA

RF-3141-AT320 Green
RF-3141-AT324 Tan

The RF-3141-AT32X is a vehicular 1250 to 1850 MHz omnidirectional, center-fed dipole antenna array. It is designed for wideband use with the RF-300UL-V150/V250 and RF-7800UL-V150/V250 vehicular amplifier adapters. The antenna consists of a black spring base and a dipole array within a fiberglass radome. The radome is not removable from the spring base. The antenna installs on the RF-292-0X Universal Antenna Mount (ordered separately) or on the standard mounting brackets found on most military vehicles. The antenna does not need any separate tuning. A single Type N connector is provided. It measures 39 inches (~99 centimeters) long and weighs five pounds (~2.3 kilograms).

UHF RUGGEDIZED VEHICULAR ANTENNA

RF-3142-AT320 Green
RF-3142-AT324 Tan
RF-3142-AT326 Green with Magnetic Mount
RF-3142-AT328 Tan with Magnetic Mount

The RF-3142-AT32X is a vehicular 350 to 450 MHz omnidirectional, center-fed dipole antenna. The antenna consists of a black spring base and a dipole antenna within a sealed fiberglass radome. The radome is not removable from the spring base. The antenna installs on the RF-292-0X Universal Antenna Mount (ordered separately) or on the standard mounting brackets found on most military vehicles. The antenna does not need any separate tuning. A single Type N connector is provided. It measures 18.25 inches (~46 centimeters) long and weighs three pounds (~1.3 kilograms).

MULTIBAND VEHICULAR DIPOLE ANTENNA

RF-3143-AT320 Green
RF-3143-AT324 Tan

The RF-3143-AT32X is a vehicular 30 to 512 MHz and 1250 to 2000 MHz multiband antenna that combines two single-band antennas into one multiband antenna. It is designed for wideband use with the RF-300UL-V150/V250 or the RF-7800UL-V150/V250 vehicular amplifier adapters. BNC connects to the UHF port, VHF and type N connect to the high-band port. The antenna consists of a black spring base and a fiberglass-encased dipole radiator. The fiberglass housing screws directly to the base. The antenna installs on the RF-292-0X Universal Antenna Mount (ordered separately) or on the standard mounting brackets found on most military vehicles. It measures 61 inches (~1.5 meters) long and weighs 9.7 pounds (~3.9 kilograms).

SATCOM X-WING ANTENNA

12006-9001-01

The 12006-9001-01 is a bolt-on, 225 to 400 MHz dual mode antenna designed for SATCOM-on-the-move applications. It offers 50 watts maximum power and both high-angle circular polarized mode for SATCOM and low-angle linear polarized for line-of-sight (LOS). Two connector ports are located on the bottom of the antenna, type N female for high-angle and TNC (F) for low-angle. Mounts with four bolts on a 4.6 x 2.6-inch (~11.7 x 6.6-centimeter) rectangular bolt pattern. Color: Black.

SATCOM X-WING ANTENNA WITH MAGNETIC MOUNT

12006-900X-01

The SATCOM X-Wing Antenna is a 225 to 400 MHz, dual-mode antenna with a magnetic mount designed for SATCOM-on-the-move. It offers 50 watts maximum power and both high-angle circular polarization for SATCOM and low-angle linear polarization for line-of-sight (LOS) mode. Two connectors are located on the side of the antenna, type N female for high-angle and TNC (F) for low-angle. Color: Tan 12006-9002-01, Black 12006-9003-01, Green 12006-9004-01.

LOW PROFILE SATCOM ON-THE-MOVE (SOTM) ANTENNA

12006-9006-01

The 12006-9006-01 SATCOM-on-the-Move (SOTM) antenna is designed to be low profile and rugged, while offering exceptional low- and high-angle performance. Because of its design, it does not need a ground plane and is easier to install on multiple types of vehicles and fixed installations. The footprint of the antenna is 18.5 inches (~47 centimeters) square and it is approximately 4.7 inches (~12 centimeters) tall from the mounting flange. The antenna weighs approximately 10.7 pounds (~4.9 kilograms). Color: Green.

SATCOM FOLDABLE X-WING ANTENNA WITH MAGNETIC MOUNT

12006-9007-01

The 12006-9007-01 is a foldable X-wing antenna with 50 watts maximum power and a magnetic mount designed for SATCOM-on-the-move (SOTM). When removed from the vehicle, the antenna conveniently folds for easy storage. This 225 to 400 MHz antenna offers both high-angle circular polarization for SATCOM and low-angle linear polarization for line-of-sight (LOS) mode. It has two connectors, type N female for high-angle and TNC female for low-angle. Color: Black.

Please contact your sales representative for further information.

VHF AND UHF TRANSPORTABLE ANTENNAS

VHF LOW-BAND BICONE ANTENNA

RF-290

The RF-290 is an easily assembled, transportable omni-directional antenna designed for broadband operation from 30 to 88 MHz, usable up to 108 MHz with degraded performance. This antenna has 350 watts output power and is used for extended line-of-sight (LOS) range.

The RF-290 includes:

- Mast, 33 ft. (~10 m)
- Coaxial cable with BNC connectors, 80 ft. (~20 m)
- Ground stakes
- Mounting base
- Guy assemblies
- Hammer, canvas bag, and instructions

VHF HIGH-BAND/UHF DISCONE ANTENNA

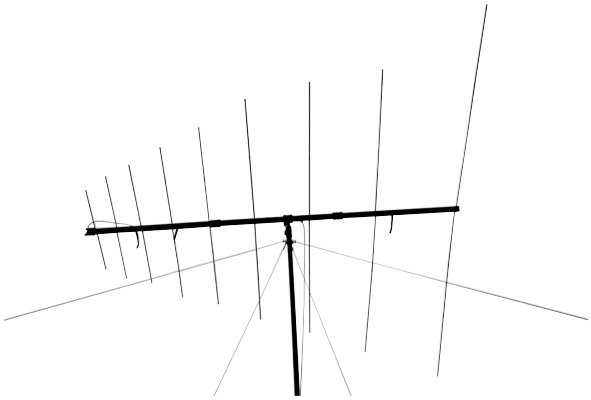
RF-291-AT001

The RF-291-AT001 is a tactical, omni-directional transportable antenna designed for broadband operation from 100 to 512 MHz (usable up to 1,000 MHz with degraded performance). The 12-pound (~5.4-kilogram) antenna is easily deployed on the sectional 28-foot (~8.5-meter) mast in less than 15 minutes.

The RF-291-AT001 includes:

- Discone
- Mast
- Coax cable with BNC connectors, 49 ft. (~15 m)
- Guylines
- Ground stakes, canvas bag and instructions

VHF LOW-BAND LOG-PERIODIC ANTENNA



RF-289B-AT001

The RF-289B-AT001 is a tactical, portable log-periodic antenna (LPA) system for 30 to 108 MHz (up to 512 MHz with optional LPA extension). The forward gain-over-average-soil condition is 7.0 dBi with a front-to-back ratio of 15 dB. This antenna may be configured in vertical or horizontal polarization and has a BNC connector. Color: Black.

Note: This antenna replaces the RF-289A LPA.

The RF-289B-AT001 includes:

- Sectional 20-ft. (~6-m) mast
- RF-58 cable, 50 ft. (~15 m)
- Ground stakes
- Mounting base
- Guy ropes
- Hammer and canvas bag

TRANSPORTABLE LOG-PERIODIC ANTENNA KIT

RF-3192C-AT422

The RF-3192C-AT422 is a transportable 225 to 450 MHz log-periodic antenna (LPA) supplying 100 watts maximum power. This 40 x 32-inch (~101 x 81-centimeter), 10-pound (~4.5-kilogram) antenna connects to the high-band port of the AN/PRC-117G, RF-7800M-MP, and RF-300M-V255 via an N-style connector using a type N male to type N male cable. The antenna can be mounted, using the supplied mounting

hardware, to a mast with a maximum 3-inch (~8-centimeter) diameter. For transporting, the antenna's unique folding mechanism enables it to fold for storage in a tube approximately 40 inches (~102 centimeters) long and 6 inches (~15 centimeters) in diameter. This kit includes two one-meter sections of fiberglass mast and a vehicular mounting plate to attach to a standard NATO mount. The antenna does not require a ground plane. Color: Black.

9-METER VHF ANTENNA/MAST SYSTEM

RF-5941-SM902

The RF-5941-SM902 is a sectional fiberglass 30-foot (~9-meter) VHF antenna/mast system that can be assembled to create either a 23- or 30-foot (~7- or 9-meter) mast with a 30 to 108 MHz VHF antenna. It supplies 100 watts maximum power. Color: Green mast and bag; black ground stakes.

The RF-5941-SM902 includes:

- Antenna
- Secondary guying lines
- Ground stakes
- Coaxial cable, 35 ft. (~10.7 m) on winder with BNC connectors
- Hammer and storage bag

9-METER SECTIONAL VHF/UHF ANTENNA/MAST SYSTEM

RF-5941-SM903

The RF-5941-SM903 is a sectional fiberglass 30-foot (~9-meter), multiband 30 to 512 MHz antenna/mast system that can be assembled to create either a 23- or 30-foot (~7- or 9-meter) mast with a 30 to 512 MHz multiband antenna (50 watts maximum power). Color: Green mast and bag; black ground stakes.

The RF-5941-SM903 includes:

- Antenna
- Guying kit
- Ground stakes
- Coaxial cable, 35 ft. (~10.7 m) on winder with BNC connectors
- Hammer and storage bag

9-METER SECTIONAL VHF/UHF ANTENNA/MAST SYSTEM

RF-5941-SM904

The RF-5941-SM904 is a sectional fiberglass 30-foot (~9-meter), multiband 225 to 450 MHz antenna/mast system that can be assembled to create either a 23- or 30-foot (~7- or 9-meter) mast with a 225 to 450 MHz multiband antenna (50 watts maximum power). Color: Green mast and bag; black ground stakes.

The RF-5941-SM904 includes:

- Antenna
- Guying kit
- Ground stakes
- Coaxial cable, 35 ft. (~10.7 m) on winder with BNC connectors
- Hammer and storage bag

TRANSPORTABLE DUAL BAND ANTENNA/MAST SET

RF-3193DB-AT420

The RF-3193DB-AT420 is a transportable 30 to 512 MHz dipole antenna with 75 watts maximum power. The antenna connects to the low-band port of the AN/PRC-117G, RF-7800M-MP, and RF-300M-V255 via a TNC-style connector using the included cables. It can be mounted and elevated using the tripod, mast and mounting hardware included in the kit. The antenna does not require ground plane. It weighs less than 45 pounds (~20 kilograms) and stores in the included Cordura bag.

DUAL BAND TRIPOD ANTENNA SET

RF-3193DB-AT520

The RF-3193DB-AT420 is a transportable 30 to 512 MHz dipole antenna operable at a maximum power of 100 watts. The antenna connects to the low-band port of the AN/PRC-117G, RF-7800M-MP, and RF-300M-V255 via TNC-style connector using the included cable. It can be mounted using the included tripod and mounting hardware. The antenna does not require ground-plane. It weighs less than 45 pounds (~20 kilograms) and stores in the included Cordura bag.

Please contact your sales representative for further information.

TRANSPORTABLE TRI BAND ANTENNA/MAST SET

RF-3193TB-AT420

The RF-3193TB-AT420 is a transportable 30 to 2000 MHz dipole antenna with 100 watts maximum power. The antenna connects to the low-band port of the AN/PRC-117G, RF-7800M-MP, and RF-300M-V255 via a TNC-style connector using the included cables. It can be mounted and elevated using the tripod, mast and mounting hardware included in the kit. The antenna does not require ground plane and stores in the included Cordura bag. Includes a 27-foot telescoping mast.

TRI BAND TRIPOD ANTENNA SET

RF-3193TB-AT520

The RF-3193DB-AT420 is a transportable 30 to 2000 MHz dipole antenna operable at a maximum power of 100 watts. The antenna connects to the low-band port of the AN/PRC-117G, RF-7800M-MP, and RF-300M-V255 via TNC-style connector using the included cable. It can be mounted using the included tripod and mounting hardware. The antenna does not require ground plane and stores in the included Cordura bag.

TACTICAL ANTENNA ARRAY

RF-3195-AT001

The RF-3195-AT001 Tactical Antenna Array is a transportable 225 MHz to 2000 MHz antenna system with a 9-meter (~29.5-foot) sectional mast kit designed for special missions where portability and extended line of-sight are required. The RF-3195-AT001 Tactical Antenna Array is deployable as an individual antenna assembly, as an array of two antennas for increased gain, or in a repeater configuration.

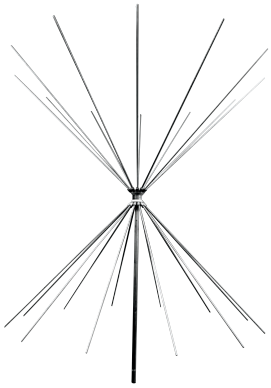
VHF AND UHF FIXED INSTALLATION ANTENNAS

VHF LOW-BAND DISCONE BASE STATION ANTENNA

RF-9072-AT001

The RF-9072-AT001 is a 30 to 108 MHz broadband antenna with 2-dBi gain that is designed to provide excellent vertically polarized omni-directional coverage. Its lightweight construction of composite material allows the 10-foot (~3-meter) tall by 7.2-foot (~2.2-meter) wide discone to weigh only 16 pounds (~7.3 kilograms) for easy mounting. Internally, a transformer provides the broadband match to under 3:1 VSWR with 100 watt average power capability. It is supplied with a mounting arm that attaches to any vertical mast or tower. The antenna has a type N female connector.

HF/UHF LOW-BAND BICONICAL BASE STATION ANTENNA



RF-9070

The RF-9070 biconical antenna is a broadband VHF/UHF (100 to 420 MHz, usable 90 to 470 MHz) antenna covering commercial and military communications frequencies. Its power handling capability is 400 watts and it has an omni-directional radiation pattern. The unit weighs approximately 20 pounds (~9 kilograms). The antenna uses a type N female connector and comes with a 10-foot (~3-meter) coaxial cable with a type N male connector on the antenna end and a type N female on the radio end. Mounting is by a 1.3-inch (~3.3-centimeter) threaded hole for the RF-9071 mast (ordered separately). Color: Black.

ACCESSORIES

MOUNTING HARDWARE

PRODUCT NUMBER	PRODUCT NAME
RF-9071	Mounting Mast, for use with RF-9070 and RF-392-AT002

UHF LOG-PERIODIC ANTENNA

RF-3170-AT420

The RF-3170-AT420 is a fixed site, 100 watt, 225 to 450 MHz log-periodic antenna (LPA) designed for use with mast systems. The average gain of the antenna is 7.0 dBi, and its front-to-back ratio is greater than 15 dB. The antenna is designed to be end-mounted on masts with diameters less than 3 inches (~8 centimeters) using a set of u-bolts and a mounting bracket that are included with the antenna. The LPA incorporates a pin and axle joint that allows the dipole elements to be aligned either vertically or horizontally during installation. The radiating elements and boom can be separated from the mount for ease in stowage and deployment.

Please contact your sales representative for further information.

VHF AND UHF ANTENNA ACCESSORIES

See the Common Accessories chapter for more information.

CABLES AND CONNECTORS

Cable lengths must be specified. Refer to the Common Accessories chapter for more information, available cable lengths, and special cable recommendations for cable lengths exceeding 100 feet (~30.1 meters).

PRODUCT NUMBER	PRODUCT NAME
10511-0730-AXXX	Coaxial Cable Assembly
UG-146A/U	Type N (M)-To-PL-259 (UHF) (F) Converter
UG-27A/U	Right Angle Adapter, Type N (M)-To-Type N (F)
M17/74-RG213	Flexible Coaxial Cable (ordered by length in feet)
10369-7210-XXX	Coaxial Cable Assembly (M17/74-RG213) Type N (M)-To-Type N (M)
10369-7211-XXX	Coaxial Cable Assembly (M17/74-RG213) Type N (M)-To-BNC (M)
10369-7212-XXX	Coaxial Cable Assembly (M17/74-RG213) BNC (M)-To-BNC (M)
10513-0810-AXXX	Low-Loss Type N (M)-To-Type N (M)
10513-0811-AXXX	Low-Loss Type N (M)-To-BNC (M)
10513-0812-AXXX	Low-Loss BNC (M)-To-BNC (M)
12011-0120-AXXX	RF Cable, TNC (M)-To-BNC (M)
W-1887	Semi-Rigid, Foam Dielectric Coax Cable (ordered by length in feet)
J95-0004-000	Connector, Type N (M) For W-1887, Semi-Rigid Foam Dielectric Coax Cable
M39012/01-0005	Connector, Type N (M) For M17/74-RG213 (RG-213/U) Coaxial Cable
UG-959A/U	Connector, Type BNC (M) For M17/74-RG-213 (RG-213U) Coaxial Cable
M55339/14-00306	Right Angle Adapter, Type BNC (M)-To-Type BNC (F)

ANTENNA ACCESSORIES

CABLES (CONNECTOR/CABLE/CONNECTOR)

ANTENNA	10369-7211-XXX TYPE N/RG-213/BNC	10369-7212-XXX BNC/RG-213/BNC	10511-0730-AXXX SMA/M17/152-00001/SMB	10564-3070-01 DIPLEXER (IF 20-W SYSTEM)	10564-2420-01
RF-387-AT001, -AT003VHF Low-Band Vehicular Whip		•			
RF-387-AT002, -AT004 VHF Low-Band Vehicular Whip with GPS		•	•		
RF-390-AT001, -AT002 VHF/UHF Multiband Vehicular Whip, dual BNC port		• Qty. 2			
RF-390-AT003, -AT004 VHF/UHF Multiband Vehicular Whip, single type N port	•			•	•
RF-390-AT005, -AT006 VHF/UHF Multiband Vehicular Whip, single BNC port		•		•	•
RF-394 VHF High-Band Vertical Dipole		•			
RF-397 UHF Vertical Dipole	•				
RF-398-01, -03 VHF Low-Band Vertical Whip		•			
RF-3183-AT005, -AT006 VHF/UHF GPS Multiband Vehicular Whip, RF port BNC, GPS port SMA		•		•	•

ANTENNA ADAPTER SWITCH FOR THE AN/PRC-152(C)

12049-0500-01

This "T-connector" allows the user to quickly attach an antenna with BNC cable to the AN/PRC-152(C) handheld radio without disconnecting the broadband whip antenna. The adapter contains TNC-male, TNC-female, and BNC-female connectors. When a BNC cable is connected to the adapter, an internal high-performance switch automatically directs RF signals to the attached BNC device. The adapter is compatible with existing BNC cables.

DIPLEXERS

DIPLEXER, LOW-BAND VHF AND HIGH-BAND VHF/UHF

10564-2420-01

The 10564-2420-01 combines the AN/PRC-117F(C) and RF-5800M-MP radios' antenna ports into one port to allow use of a single port multiband antenna. The diplexer mounts directly on the radio using the antenna ports. The low-band VHF diplexer is 30 to 90 MHz and the high-band VHF/UHF diplexer is 120 to 512 MHz.

DIPLEXER, HIGH-BAND VHF/UHF

10369-0400-01

The 10369-0400-01 splits or combines the high-band VHF/UHF output/input of the RF-5800M-VXXX vehicular systems into two separate bands, 116 to 174 MHz and 225 to 420 MHz. The 10369-0400-01 is required when separate antennas are used for high-band VHF (116 to 174 MHz) and UHF (225 to 420 MHz). Its input/output connectors are type N female. The power-handling capability is 50 watts. A mounting bracket is included.

Please contact your sales representative for further information.

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COMPUTERS

The RF-3577 standard commercial-off-the-shelf (COTS) PCs have been selected for their quality and compatibility with the data and imaging software products. These PCs come standard with a U.S. power cord.

RF-3577-16EN

The RF-3577-16EN is a computer tower intended for an office environment. See table below for features.

RF-3577-28EN

The RF-3577-28EN is a rugged laptop intended for general-purpose sheltered environments. See table below.

RF-3577-75EN

The RF-3577-75EN is a small, rugged laptop intended for transportable applications where small size and light weight are required. See table below for features.

PC ORDERING INFORMATION AND MINIMUM SPECIFICATIONS FOR RF-3577

MINIMUM SPECIFICATIONS								
PLATFORM	PC	WINDOWS OS	PCI CARD SLOTS	PCMCIA CARD SLOTS	CPU	HARD DRIVE	RAM	I/O
Office Tower	RF-3577-16EN	Windows 7 Professional English	1	N/A	3.2 GHz	500 GB	2 GB	Flat panel monitor, 1 serial comm port, DVD-ROM, 2 Type A USB ports, Ethernet, English keyboard
Rugged Laptop	RF-3577-28EN	Windows 7 Professional English	N/A	1	2.5 GHz	320 GB	4 GB	LCD touch screen display, 1 serial comm port, DVD-RW, 1 USB port, wireless and wired Ethernet, 1 Bluetooth port, English keyboard
Rugged Mini-laptop	RF-3577-75EN	Windows 7 Professional English	N/A	1	2.5 GHz	320 GB	4 GB	LCD touch screen display, 1 serial comm port, DVD-RW (external), 2 USB ports, wireless and wired Ethernet, 1 Bluetooth port, English keyboard

Harris reserves the right to substitute computers with equal or superior performance and features.

SOFTWARE COMPATIBILITY WITH RF-3577 SERIES COMPUTERS

PRODUCT NUMBER	PRODUCT NAME	RF-3577 VERSION		
		-16EN	-28EN	-75EN
RF-6760W-03EN	WMT	•	•	•
RF-6750W-03EN	Wireless Gateway	•	•	•
RF-6705-SW001	TacChat IP	•	•	•
RF-6650	CPA	•	•	•
RF-5410FC-EN001	FalconCommand BMS	•	•	•
RF-6910-SW002	C2PC-CNR	•	•	•

PC OPTION COMPATIBILITY WITH RF-3577 SERIES PCS

PRODUCT NUMBER	PRODUCT NAME	RF-3577 VERSION		
		-16EN	-28EN	-75EN
10518-5150-02	USB-to-Serial Adapter	•	•	•
11105-4010-01	12-32 VDC Adapter		•	•
W80-0022-001	European 2.5 Amp Power Cord Set/C7 Connector	•		
W80-0023-101	Continental European 10 Amp Power Cord Set/C13 Connector	•		
W80-0028-501	UK/Ireland 2.5 Amp Power Cord Set/C5 Connector		•	•
W80-0028-601	UK/Ireland 2.5 Amp Power Cord Set/C7 Connector		•	•

HEADSETS

COMPATIBILITY CHART

PAGE	PRODUCT NUMBER	PRODUCT NAME	PTT	EARPIECE	HEARING PROTECTION	OPTIONS	POWER	CONNECTOR	WATER IMMERSION	RF-7800S-TR, RF-7800S RF-7800S-V, RF-7850S	AN/PRC-152	AN/PRC-152A	RF-310M-HH	RF-330E-TR	RF-5800M-HH, RF-5800V-HH	RF-5800M-HH115	RF-7800M-HH	RF-7800V-HH, RF-7800M-HH	AN/PRC-117F	AN/PRC-117G, RF-340M-MP	AN/PRC-150, RF-5800H-MP	RF-7800H-MP	RF-7800M-MP	RF-7800I	RF-3590
LIGHTWEIGHT HEADSETS																									
225	12500-4000-01	Single-sided Lightweight in the Ear Headset with PTT	Single Inline PTT	Single Left In-the-Ear	N/A	None	N/A	a	*		•		•		•					•					
226	12500-4010-01	Dual-sided Lightweight in the Ear Headset	N/A	Dual in-the-Ear	Passive (SNR 32 dB, NRR 29 dB)	None	N/A	a	2 m		•		•		•					•					
56	RF-3031-HS001	Breeze Ultra-Lightweight Headset without PTT	None	Single Left Pad	N/A	None	N/A	b	No	•															
58	RF-3034-HS001	Helmet Compatible Headset	Single Flat PTT	Dual Pads	No	None	N/A	b	*	•															
58	RF-3035-HS001	Hurricane Tactical Headset	Torpedo Single Inline PTT	Dual In-the-Ear	Passive (NRR 29 dB)	Alternative secondary wired PTT	N/A	b	*	•															
56	RF-3038-HS001	Ranger Headset with in-line PTT	Torpedo Single Inline PTT	Single Left Pad	N/A	Secondary wired PTT	N/A	b	*	•															
229	RF-5961-HS005	Breeze Ultra-Lightweight Headset with In-Line PTT	Torpedo Single Inline PTT	Single Left Pad	N/A	None	N/A	a	No		•	•	•		•			•							
226	RF-5965-HS001	Dual Sided Lighweight in-the-ear Headset with PTT and cable assemblies for connecting two Falcon HH radios	X50 Dual Inline PTT (Interchangable)	Dual In-the-Ear with Talk-through	Passive (SNR 32 dB, NRR 29 dB)	Accepts secondary radio	Battery Powered, AA	a	2 m		•	•	•	•	•	•	•	•	•	•		•	•		

a = U229/U239 style
b = Fischer® SPR style
c = Amphenol Nexus style
d = Harris Intercom
** = Contact Harris for more information*

PAGE	PRODUCT NUMBER	PRODUCT NAME	PTT	EARPIECE	HEARING PROTECTION	OPTIONS	POWER	CONNECTOR	WATER IMMERSION	RF-7800S-TR, RF-7800S RF-7800S-V, RF-7850S	AN/PRC-152	AN/PRC-152A	RF-310M-HH	RF-330E-TR	RF-5800M-HH, RF-5800V-HH	RF-5800M-HH115	RF-7800M-HH	RF-7800V-HH, RF-7800M-HH	AN/PRC-117F	AN/PRC-117G, RF-340M-MP	AN/PRC-150, RF-5800H-MP	RF-7800H-MP	RF-7800M-MP	RF-7800I	RF-3590
226	RF-5965-HS002	Dual Sided Lighweight in-the-ear Headset, with PTT and cable assemblies for connecting two SPR	X50 Dual Inline PTT (Interchangable)	Dual In-the-Ear with Talk-through	Passive (SNR 32 dB, NRR 29 dB)	Accepts secondary radio	Battery Powered, AA	b	2 m	•															
226	RF-5965-HS003	Dual Sided Lighweight in-the-ear headsetwith PTT and Cable Assemblies for connecting one Falcon HH radios and One SPR	X50 Dual Inline PTT (Interchangable)	Dual In-the-Ear with Talk-through	Passive (SNR 32 dB, NRR 29 dB)	Accepts secondary radio	Battery Powered, AA	a & b	2 m	•	•	•	•	•	•	•	•	•	•	•		•	•		
57	RF-5967-HS004	Headset with Hearing Protection Earpieces and Talk-through	V60 Dual Inline PTT (Interchangable)	Dual In-the-Ear with Talk-through	Passive (SNR 32 dB, NRR 29 dB)	Accepts secondary radio	Powered by SPR	b	2 m	•															
TACTICAL HEADSETS																									
56	11149-0910-03	Cobra Headset with Dual In-line PTT	Cobra Dual Inline PTT (interchangable)	Single Left Cup	N/A	N/A	N/A	b	2 m	•															
228	RF-3021-HS001	Lightweight Headset with Ear Cup and One PTT	Single Inline PTT	Single Left Cup	N/A	N/A	N/A	a	Rain			•													
229	RF-3021-HS002	Lightweight Headset with Ear Cup and Two PTT	Single Inline PTT and a Sniper Switch	Single Left Cup	N/A	N/A	N/A	a	Rain			•													
70	RF-3023-HS001	Headset, Dual PTT	Dual Inline PTT	Single Left Cup	N/A	N/A	N/A	a	No						•			•							
56	RF-3030-HS001	Lightweight Headset without PTT	N/A	Single Left Cup	N/A	N/A	N/A	b	1 m	•															

a = U229/U239 style
b = Fischer® SPR style
c = Amphenol Nexus style
d = Harris Intercom
** = Contact Harris for more information*

PAGE	PRODUCT NUMBER	PRODUCT NAME	PTT	EARPIECE	HEARING PROTECTION	OPTIONS	POWER	CONNECTOR	WATER IMMERSION	RF-7800S-TR, RF-7800S RF-7800S-V, RF-7850S	AN/PRC-152	AN/PRC-152A	RF-310M-HH	RF-330E-TR	RF-5800M-HH, RF-5800V-HH	RF-5800M-HH115	RF-7800M-HH	RF-7800V-HH, RF-7800M-HH	AN/PRC-117F	AN/PRC-117G, RF-340M-MP	AN/PRC-150, RF-5800H-MP	RF-7800H-MP	RF-7800M-MP	RF-7800I	RF-3590
SUBMERSIBLE HEADSETS																									
226	RF-3020-HS001	Submersible Headset with Ear Cup and PTT	Single Inline PTT	Single Left Cup	N/A	None	N/A	a	1 m		•	•	•		•		•								
227	RF-3020-HS002	Submersible Headset with Ear Cup and Two PTT	Single Inline PTT	Single Left Cup	N/A	None	N/A	a	1 m		•	•	•		•		•								
227	RF-3020-HS003	Submersible Headset without Ear Cup and One PTT	Single Inline PTT	Left, No Ear Cup	N/A	None	N/A	a	Rain		•	•	•		•		•								
228	RF-3020-HS004	Headset with Sniper Switch	Single Inline PTT	Left, No Ear Cup	N/A	None	N/A	a	Rain		•	•	•		•		•								
226	RF-3020-HS021	Lightweight Submersible Headset with Ear Cup and PTT	Single Inline PTT	Single Left Cup	N/A	None	N/A	a	1 m		•	•	•		•		•								
227	RF-3020-HS022	Lightweight Submersible Headset with Ear Cup and Two PTT	Single Inline PTT	Single Left Cup	N/A	None	N/A	a	1 m		•	•	•		•		•								
227	RF-3020-HS023	Lightweight Submersible Headset without Ear Cup and One PTT	Single Inline PTT	Left, No Ear Cup	N/A	None	N/A	a	Rain		•	•	•		•		•								
228	RF-3020-HS024	Lightweight Submersible Headset without Ear Cup and Two PTT	Single Inline PTT	Left, No Ear Cup	N/A	None	N/A	a	Rain		•	•	•		•		•								
229	RF-5963-HS001	20 M Submersible Headset	Single Inline PTT	Single Left Cup	N/A	None	N/A	a	20 m		•	•					•								

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d = Harris Intercom
** = Contact Harris for more information*

PAGE	PRODUCT NUMBER	PRODUCT NAME	PTT	EARPIECE	HEARING PROTECTION	OPTIONS	POWER	CONNECTOR	WATER IMMERSION	RF-7800S-TR, RF-7800S RF-7800S-V, RF-7850S	AN/PRC-152	AN/PRC-152A	RF-310M-HH	RF-330E-TR	RF-5800M-HH, RF-5800V-HH	RF-5800M-HH115	RF-7800M-HH	RF-7800V-HH, RF-7800M-HH	AN/PRC-117F	AN/PRC-117G, RF-340M-MP	AN/PRC-150, RF-5800H-MP	RF-7800H-MP	RF-7800M-MP	RF-7800I	RF-3590
HEAVY DUTY HEADSETS																									
106	A06-0013-001	Bose PICVC Integrated Helmet, Heavy ANR (Medium)	3 Position PTT on Left Earcup	Dual Cups	Active 30 dB avg	N/A	NiMH Recharge. in left Earcup	d	Rain															•	
106	A06-0013-002	Bose PICVC Integrated Helmet, Heavy ANR (Large)	3 Position PTT on Left Earcup	Dual Cups	Active 30 dB avg	N/A	NiMH Recharge. in left Earcup	d	Rain															•	
106	A06-0015-001	Racal Under Helmet, Light ANR	Single Inline PTT	Dual Cups with Talk-through	Active (SNR 26 dB, NRR 21 dB)	N/A	Battery Powered, 1 AA	d	Rain															•	
106	A30-0521-001	Racal Integrated Helmet, Heavy ANR	Single Inline PTT	Dual Cups with Talk-through	Active (SNR 26 dB, NRR 21 dB)	N/A	Battery Powered, 1 AA	d	Rain															•	
106	A30-0521-002	Racal Under Helmet, Heavy ANR	Single Inline PTT	Dual Cups with Talk-through	Active (SNR 26 dB, NRR 21 dB)	N/A	Battery Powered, 1 AA	d	Rain															•	
225	RF-3014-HS022	Dual Earpiece Headset	Inline PTT (interchangable)	Dual Cups with Talk-through	Active (SNR 26 dB, NRR 21 dB)	N/A	Battery Powered, 2 AAA	a	Rain		•										•	•			
57	RF-3039-HS001	Cleartrak Heavy Duty Headset (Behind-the-Head)	Single Built-In PTT	Dual Cups	Passive (NRR 24 dB)	N/A	N/A	b	Rain	•															
57	RF-3039-HS002	Cleartrak Heavy Duty Headset (Over-the-Head)	Single Built-In PTT	Dual Cups	Passive (NRR 24 dB)	N/A	N/A	b	Rain	•															
SPECIALTY MICS																									
57	RF-3033-HS001	Throat Mic System with Single In-line PTT (Professional)	Round (80 mm) Single Inline PTT	Single In-the-Ear (left/Right Sdjustable)	N/A	N/A	N/A	b	*	•															
57	RF-3033-HS002	Throat Mic System with Single In-line PTT (Standard)	Torpedo Single Inline PTT and Secondary Flat PTT	Single In-the-Ear (left/Right Sdjustable)	N/A	Alternative secondary wired PTT	N/A	b	*	•															
58	RF-3037-HS001	Skull Mic System	Round (80 mm) Single Inline PTT	Single Cup (Left/Right Adjustable)	N/A	N/A	N/A	b	*	•															

PAGE	PRODUCT NUMBER	PRODUCT NAME	PTT	EARPIECE	HEARING PROTECTION	OPTIONS	POWER	CONNECTOR	WATER IMMERSION	RF-7800S-TR, RF-7800S RF-7800S-V, RF-7850S	AN/PRC-152	AN/PRC-152A	RF-310M-HH	RF-330E-TR	RF-5800M-HH, RF-5800V-HH	RF-5800M-HH115	RF-7800M-HH	RF-7800V-HH, RF-7800M-HH	AN/PRC-117F	AN/PRC-117G, RF-340M-MP	AN/PRC-150, RF-5800H-MP	RF-7800H-MP	RF-7800M-MP	RF-7800I	RF-3590
COVERT AND SECURITY KITS																									
60	RF-3041-SK001	3-Wire Surveillance Kit with Mini-Lapel Mic	Fist Held Barrel PTT	Single In-the-Ear Coiled Air-tube	N/A	RF-3044-WR00X Covert Wireless Earpieces and Inductor	N/A	b	*	•															
60	RF-3041-SK002	3-Wire Surveillance Kit with Mini-Lapel Mic	Fist Held Barrel PTT	Single In-the-Ear Coiled Air-tube	N/A	RF-3044-WR00X Covert Wireless Earpieces and Inductor	N/A	b	*	•															
60	RF-3041-SK003	3-Wire Surveillance Kit with Clothing Clip Mic	Clothing Clip Flat PTT	Single In-the-Ear Coiled Air-tube	N/A	RF-3044-WR00X Covert Wireless Earpieces and Inductor	N/A	b	*	•															
60	RF-3041-SK004	3-Wire Surveillance Kit with Mini-Lapel Mic	Fist Held Flat PTT	Single In-the-Ear Coiled Air-tube	N/A	RF-3044-WR00X Covert Wireless Earpieces and Inductor	N/A	b	*	•															
60	RF-3044-WR001	Covert Wireless Earpiece (Beige)	N/A	Single Wireless In-the-Ear	N/A	Requires RF-3045 or RF-3047 Mating Inductor	Hearing Aid Battery	N/A	*	•															
60	RF-3044-WR002	Covert Wireless Earpiece (Brown)	N/A	Single Wireless In-the-Ear	N/A	Requires RF-3045 or RF-3047 Mating Inductor	Hearing Aid Battery	N/A	*	•															
60	RF-3045-PI001	Covert Mating Flat Inductor for Wireless Earpiece	N/A	N/A	N/A	None	N/A	N/A	*	•															

a = U229/U239 style
b = Fischer® SPR style
c = Amphenol Nexus style
d = Harris Intercom
** = Contact Harris for more information*

PAGE	PRODUCT NUMBER	PRODUCT NAME	PTT	EARPIECE	HEARING PROTECTION	OPTIONS	POWER	CONNECTOR	WATER IMMERSION	RF-7800S-TR, RF-7800S RF-7800S-V, RF-7850S	AN/PRC-152	AN/PRC-152A	RF-310M-HH	RF-330E-TR	RF-5800M-HH, RF-5800V-HH	RF-5800M-HH115	RF-7800M-HH	RF-7800V-HH, RF-7800M-HH	AN/PRC-117F	AN/PRC-117G, RF-340M-MP	AN/PRC-150, RF-5800H-MP	RF-7800H-MP	RF-7800M-MP	RF-7800I	RF-3590
60	RF-3047-NL001	Covert Mating Neck Loop Inductor for Wireless Earpiece	N/A	N/A	N/A	None	N/A	N/A	*	•															
60	RF-3053-HSXXX	1-Wire Tactical Security Kit	Single Inline PTT	Single In-the-Ear	N/A	None	N/A	b	*	•															
59	RF-3065-CK002	Covert Kit	Fist Held Barrel PTT	Single Wireless In-the-Ear	N/A	None	Hearing Aid Battery	b	*	•															
80	RF-5961-HS003	Security Force Communication Set	Single Sniper Switch	Single In-the-Ear	N/A	None	N/A	a	*		•	•	•		•			•							
PUSH-TO-TALK (PTT) DEVICES																									
226	12500-4020-01	Multi-Channel In-Line PTT. For use with 12500-4000-01 and 12500-4010-01 Headsets	Two Button Control Unit	N/A	N/A	W87-0002-001 Cable Assembly for Falcon I/II/III, W87-0002-002 Cable Assembly for SPR	N/A	a & b	2 m	•	•														
60	12055-0450-01	Wireless Dual PTT with Volume Control	Two Button PTT with Volume Up/Down	N/A	N/A	None	N/A	N.A.	*	•															
59	RF-3052-PT001	Sniper, Flat PTT	Sniper, Flat PTT	N/A	N/A	Secondary wired PTT	N/A	b	*	•															
59	RF-3052-PT002	Ring PTT	Ring PTT	N/A	N/A	Secondary wired PTT	N/A	b	*	•															
59	RF-3052-PT003	Barrel PTT	Barrel PTT	N/A	N/A	Secondary wired PTT	N/A	b	*	•															
59	RF-3052-PT004	Standard Flat PTT	Standard Flat PTT	N/A	N/A	Secondary wired PTT	N/A	b	*	•															

PAGE	PRODUCT NUMBER	PRODUCT NAME	PTT	EARPIECE	HEARING PROTECTION	OPTIONS	POWER	CONNECTOR	WATER IMMERSION	RF-7800S-TR, RF-7800S RF-7800S-V, RF-7850S	AN/PRC-152	AN/PRC-152A	RF-310M-HH	RF-330E-TR	RF-5800M-HH, RF-5800V-HH	RF-5800M-HH115	RF-7800M-HH	RF-7800V-HH, RF-7800M-HH	AN/PRC-117F	AN/PRC-117G, RF-340M-MP	AN/PRC-150, RF-5800H-MP	RF-7800H-MP	RF-7800M-MP	RF-7800I	RF-3590
59	RF-3052-PT005	Round (80 mm) PTT	Round (80 mm) Single Inline PTT	N/A	N/A	Secondary wired PTT	N/A	b	*	•															
SPEAKER-MIC/HANDSET																									
225	10075-1399	H-250/U Handset, Modified	Single Built-In PTT	Built into Handset	N/A	None	N/A	a	1 m										•	•	•	•	•		
225	12041-3100-XX	Lapel Speaker-Microphone with Audio Jack	Single Built-In PTT	None	N/A	None	N/A	a	Rain		•														
70	RF-3023-SM001	Dual PTT Speaker-Mic	Dual Built-In PTT	None	N/A	None	N/A	a	Rain									•							
70	RF-3023-HS005	H-250 Style Handset w/Dual PTT	Dual Built-In PTT	None	N/A	None	N/A	a	1m									•							
58	RF-3050-SM003	Dual PTT Speaker-Mic (Fist-Mic)	Dual Built-In PTT	None	N/A	Secondary earpiece (SPR audio connector) such as the M3 Tactical Earpiece	N/A	b	1 m	•															
SPEAKERS																									
230	RF-5980-SA101	Vehicle and base station tactical Amplifier/Speaker	N/A	N/A	N/A	None	26 VDC	a	1 m										•	•	•	•	•		
230	RF-5980-SA103	Vehicle and base station tactical Amplifier/Speaker	N/A	N/A	N/A	None	26 VDC	a	1 m										•	•	•	•	•		
230	RF-5980-SA104	Vehicle and base station tactical Amplifier/Speaker	N/A	N/A	N/A	None	26 VDC	a	1 m										•	•	•	•	•		
40	RF-5982-SA001	Amplifier/Speaker	N/A	N/A	N/A	None	*	a	1 m										•	•	•	•	•		
127	RF-5983-SA001	Speaker, KDU	N/A	N/A	N/A	None	*	a	1 m												•				

a = U229/U239 style
b = Fischer® SPR style
c = Amphenol Nexus style
d = Harris Intercom
** = Contact Harris for more information*

HANDSETS

LIGHTWEIGHT HANDSET—H-250/U (MODIFIED)

10075-1399

FEATURES

- Military Grade Handset
- Use with Harris Falcon II® and Falcon III® radios
- Cable with U-229B/U connector

LAPEL SPEAKER-MICROPHONE WITH AUDIO JACK

12041-3100-0X

FEATURES

- Lapel-worn speaker microphone
- Use with AN/PRC-152(C) handheld radios
- Inline push-to-talk (PTT)
- 12041-3100-03: 2.5 mm earphone jack
- 12041-3100-04: 3.5 mm earphone jack

HEADSETS WITH BOOM MICROPHONE

DUAL EARPIECE HEADSET

RF-3014-HS022

FEATURES

- Noise-canceling boom microphone and passive noise-reduction dual earpiece headset
- Use with Falcon II and Falcon III radios
- AN/PRC-152 push-to-talk (PTT) included
- Color: Green
- Cable with U-229/329 connector

SINGLE-SIDED LIGHTWEIGHT IN THE EAR HEADSET WITH PTT

12500-4000-01

FEATURES

- In the ear (ITE) headset with bone-conduction microphone (BCM) single earpiece headset
- Use with RF-5800M-HH, AN/PRC-152(C), RF-310M, RF-5800V-HH and AN/PRC-117F(C) radios
- Bias voltage is required on pin F of connector J1; not compatible with RF-5800H-MP, AN/PRC-150 and some radios delivered prior to June 2004
- Color: Black
- Cable with U-229/329 connector

HEARING PROTECTED EARPIECES WITH BONE-CONDUCTION MIC, TALK-THROUGH AND INLINE PTT HEADSET

RF-5965-HSXXX X5 EARPIECE, X50 PTT

FEATURES

- In the ear (ITE) headset with bone-conduction microphone (BCM) and passive and active noise-reduction (passive SNR 32 db and NRR 29 db) dual earpiece headset with natural hear-through
- Use with RF-5800M-HH, AN/PRC-152(C), RF-310M, RF-5800V-HH and AN/PRC-117F(C) radios
- Bias voltage is required on pin F of connector J1; not compatible with RF-5800H-MP, AN/PRC-150 and some radios delivered prior to June 2004
- Push-to-talk controls two devices simultaneously and control hear-through volume and communication volume; this device requires a single AA battery
- Color: Black
- Cable with U-229/329 connector

HEADSET AND RADIO KITS

PRODUCT NUMBER	PRODUCT NAME	QTY
RF-5965-HS001		
12500-4010-01	X5 Dual Sided In-Ear Headset	1
12500-4020-01	X50 Inline Dual PTT Assembly	1
W87-0002-001	Cable Assembly with U-229/329 audio connector	2
RF-5965-HS002		
12500-4010-01	X5 Dual Sided In-Ear Headset	1
12500-4020-01	X50 Inline Dual PTT Assembly	1
W87-0002-002	Cable Assembly with SPR fisher connector	2
RF-5965-HS003		
12500-4010-01	X5 Dual Sided In-Ear Headset	1
12500-4020-01	X50 Inline Dual PTT Assembly	1
W87-0002-001	Cable Assembly with U-229/329 audio connector	1
W87-0002-002	Cable Assembly with SPR fisher connector	1

A30-1075-001 V60 Control Unit

FEATURES

- Four push-to-talk (PTT) buttons dynamically assigned to radios (3 com ports for radios); special radio interface cable assemblies are required
- Interfaces with X5 and other headsets
- Submersible to 20 meters, IP68
- Color: Black

(Order cables and headset separately)

CABLES AND HEADSETS

PRODUCT NUMBER	PRODUCT NAME
A30-1073-001	Cable Assembly with U-229/329 Audio Connector
A30-0962-030	X5 Dual Sided In-Ear Headset
A30-0962-040	M3 Single Sided In-Ear Headset
A30-0962-050	M3S Single Sided In-Ear Headset (20-m Submersible)
A30-0962-060	Over-the-ear Style Dual Sided Headset and Boom Microphone with Hearing Protection
A30-0962-070	Over-the-ear Style Single Sided Headset and Boom Microphone

LIGHTWEIGHT SUBMERSIBLE HEADSET

RF-3020-HS001 Green Head Strap
RF-3020-HS021 Tan Head Strap

FEATURES

- Lightweight submersible single earphone in an ear cup headset
- One push-to-talk (PTT) button (typically chest mounted with clothing clip)
- Use with RF-5800M-HH, AN/PRC-152(C), RF-310M, RF-5800V-HH and RF-7800M-HH radios
- Noise cancelling adjustable gooseneck boom microphone
- Secured to user's head via adjustable cloth web and straps
- Submersible to 1 meter (~3 feet)
- Color: Black (ear cup, microphone, cable and PTT)
- Strap color: Specify product number for head strap color
- Cable with U-229/329 connector

LIGHTWEIGHT SUBMERSIBLE HEADSET

RF-3020-HS002 Green Head Strap
RF-3020-HS022 Tan Head Strap

FEATURES

- Lightweight submersible single earphone in an ear cup headset
- Two push-to-talk (PTT) buttons (one typically chest mounted with clothing clip; the other is a sniper switch typically worn on the palm)
- Use with RF-5800M-HH, AN/PRC-152(C), RF-310M, RF-5800V-HH and RF-7800M-HH radios
- Noise cancelling adjustable gooseneck boom microphone
- Secured to user's head via adjustable cloth web and straps
- Submersible to 1 meter (~3 feet)
- Color: Black (ear cup, microphone, cable and PTT)
- Strap color: Specify product number for head strap color
- Cable with U-229/329 connector

LIGHTWEIGHT WEATHERPROOF HEADSET

RF-3020-HS003 Green Head Strap
RF-3020-HS023 Tan Head Strap

FEATURES

- Lightweight weatherproof single earphone in a headset (no ear cup)
- One push-to-talk (PTT) button (typically chest mounted with clothing clip)
- Use with RF-5800M-HH, AN/PRC-152(C), RF-310M, RF-5800V-HH and RF-7800M-HH radios
- Noise cancelling adjustable gooseneck boom microphone
- Secured to user's head via adjustable cloth web and straps
- Weatherproof (not submersible)
- Color: Black (ear cup, microphone, cable and PTT)
- Strap color: Specify product number for head strap color
- Cable with U-229/329 connector

LIGHTWEIGHT WEATHERPROOF HEADSET

RF-3020-HS004 Green Head Strap
RF-3020-HS024 Tan Head Strap

FEATURES

- Lightweight weatherproof single earphone in a headset (ear cup)
- Two push-to-talk (PTT) buttons (one typically chest mounted with clothing clip; the other is a sniper switch typically worn on the palm)
- Use with RF-5800M-HH, AN/PRC-152(C), RF-310M RF-5800V-HH and RF-7800M-HH radios
- Noise cancelling adjustable gooseneck boom microphone
- Secured to user's head via adjustable cloth web and strap
- Weatherproof (not submersible)
- Color: Black (ear cup, microphone, cable and PTT)
- Cable with U-229/329 connector

LIGHTWEIGHT WEATHERPROOF HEADSET

RF-3021-HS001 Green Head Strap

FEATURES

- Lightweight weatherproof single earphone in a padded ear cup headset
- One push-to-talk (PTT) button (typically chest mounted with clothing clip)
- Use with RF-5800M-HH, AN/PRC-152(C), RF-310M, RF-5800V-HH and RF-7800M-HH radios
- Noise cancelling adjustable gooseneck boom microphone
- Secured to user's head via adjustable cloth web and straps
- Weatherproof (not submersible)
- Color: Black (ear cup, microphone, cable and PTT)
- Cable with U-229/329 connector

LIGHTWEIGHT WEATHERPROOF HEADSET

RF-3021-HS002 Green Head Strap

FEATURES

- Lightweight weatherproof single earphone in a padded ear cup headset
- Two push-to-talk (PTT) buttons (one typically chest mounted with clothing clip; the other is a sniper switch typically worn on the palm)
- Use with RF-5800M-HH, AN/PRC-152(C), RF-310M RF-5800V-HH and RF-7800M-HH radios
- Noise cancelling adjustable gooseneck boom microphone
- Secured to user's head via adjustable cloth web and strap
- Weatherproof (not submersible)
- Color: Black (ear cup, microphone, cable and PTT)
- Cable with U-229/329 connector

BREEZE ULTRA-LIGHT HEADSET WITH INLINE PTT

RF-5961-HS005

FEATURES

- Ultra-lightweight behind-the-head single earphone
- One push-to-talk (PTT) button (typically chest mounted with clothing clip)
- Use with RF-5800M-HH, AN/PRC-152(C), and RF-5800V-HH
- Flexible boom microphone
- Replaceable windscreen
- Color: Black
- Cable with U229/329 connector

20 M SUBMERSIBLE HEADSETS

RF-5963-HS001

FEATURES

- Lightweight submersible single earphone in a padded ear cup headset
- One push-to-talk (PTT) button (typically chest mounted with clothing clip)
- Use with AN/PRC-152(C)
- Adjustable gooseneck boom microphone
- Secured to user's head via adjustable cloth web and straps
- Submersible to 20 meters (~66 feet)
- Color: Black
- Cable with U229/329 connector

TALK GROUP SELECTOR

TALK GROUP SELECTOR (TGS)

RF-3055-TG001

FEATURES

- Use with RF-330E-TR, RF-340M-MP, and RF-152A*
- Connects between a standard audio accessory and the radio
- Three button Push-to-talk (PTT) and 5 position talk group selector switch
- Can be used in conjunction with standard audio PTT
- Color: Black
- Cable with U229/329 connector
- Includes TGS (product number: 12500-3000-01) and Holster (product number: 12500-3010-07)

**Compatibility dependent on firmware version. Contact sales staff to confirm compatibility.*

SPEAKERS

VEHICLE AND BASE STATION

TACTICAL AMPLIFIER/SPEAKER

RF-5980-SA101 CARC Green 383
RF-5980-SA103 Black
RF-5980-SA104 CARC Tan 686

FEATURES

- Tactical amplifier/speaker for vehicular and base station application
- Use with Falcon II® and Falcon III® radios
- Dual six-pin handset/headset connectors
- Handset/headset and speaker volume controls and power switches
- Dual Net
- Vehicular mounting bolt and bracket
- Ruggedized for operation in extreme environments per MIL-STD-810F
- 20 VDC to 33 VDC
- Requires audio power cable per chart below

CABLES

One audio cable and one external 26 VDC power cable are required; select from the chart below:

PRODUCT NUMBER	PRODUCT NAME
10535-0707-AXXX	6-Pin Speaker Audio-to-6-Pin Radio Audio Cable
10535-0706-AXXX	Speaker-to-4-Pin Connector (RF-5051, 5055, 5056, 5061 Power Supply, 26 VDC output)
10535-0708-AXXX	Speaker-to-26 VDC Power Cable, Pigtail Leads
11068-0018-AXXX	Speaker-to-RF-5850 Falcon II Manpacks Radio Battery Eliminator
10535-0713-AXXX	Speaker-to-RF-5910-PS005 Battery Eliminator
W80-0009-072	Speaker-to-RF-5910-PS003 Battery Eliminator

BATTERIES

BATTERY OVERVIEW

	BA-5390/U	BA-5590/U	BB-390B/U	BB-2590/U TYPE	12041-2200-0X/ 12041-2400-0X	12055-2105-01
NOMINAL CAPACITY (AH)	11.1	7.5	4.9	7.5 / 7.8	5.8 / 6.8	8.5
CHEMISTRY	Li-MNO2	Lithium	NiMH	Li Ion	Li Ion	Li Ion
TYPE	**Disposable**	**Disposable**	**Rechargeable**	**Rechargeable**	**Rechargeable**	**Rechargeable**
WEIGHT	2.3 lbs. (~1 kg)	2.3 lbs. (~1 kg)	3.8 lbs. (~1.8 kg)	3.1 lbs. (~1.4 kg)	0.9 lbs. (~0.4 kg)	0.6 lbs. (~0.3 kg)
RADIO	**Manpack**	**Manpack**	**Manpack**	**Manpack**	**Handheld**	**SPR/TVP**

RECHARGEABLE BATTERIES

RECHARGEABLE LI ION MANPACK BATTERY

BB-2590/U

- 20% lighter than the BB-390B/U and BB-590 batteries
- Color: Tan

ENHANCED CAPACITY LI ION HANDHELD BATTERY

12041-2400-01 Black
12041-2400-02 Green
12041-2400-03 Tan

- This advanced battery has a "smart" battery interface that provides an accurate measure of the remaining charge.
- Compatible with all Falcon II® and Falcon III® Handheld Radios
- 6.8 Ah

EXTENDED CAPACITY LI ION HANDHELD BATTERY

12041-2200-01 Black
12041-2200-02 Green
12041-2200-03 Tan

- This advanced battery has a "smart" battery interface that provides an accurate measure of the remaining charge.
- Compatible with all Falcon II and Falcon III Handheld Radios
- 5.8 Ah

NON-RECHARGEABLE BATTERY HOLDERS

AA BATTERY HOLDER

RF-5911-PS001

This AA battery holder for Falcon II and Falcon III handheld radios may be used in lieu of a 12041-2100-XX High-Capacity Rechargeable Li Ion Battery. The battery magazine of the RF-5911-PS001 must be loaded with a total of 16 fully charged AA batteries (not included). The magazine slips inside the AA battery holder case, which locks into the base of Falcon II and Falcon III handheld radios. Recommended battery types are AA-size Lithium/Iron Disulfide (Li/FeS2) and Alkaline Zinc-Manganese Dioxide (An/Mn02). Color: Green.

L123 BATTERY HOLDER

RF-5911-PS002

The RF-5911-PS002 is an L123 battery holder for Falcon II and Falcon III handheld radios that may be used in lieu of a 12041-2100-XX High-Capacity Rechargeable Li Ion Battery. The battery magazine of the RF-5911-PS002 must be loaded with a total of 10 fully charged L123 batteries (not included). The magazine slips inside the L123 battery holder case, which locks into the base of the Falcon II and Falcon III handheld radios. Recommended battery types are Energizer EL123 Lithium/Manganese Dioxide (Li/MnO2) with 3 VDC nominal voltage or Duracell DL123 Lithium/Manganese Dioxide (Li/Mn02) with 3 VDC nominal voltage. Color: Green.

CHARGERS

BATTERIES AND BATTERY CHARGER COMPATIBILITY

BATTERY CHARGER	STYLE	COLOR	BATTERIES SUPPORTED	NUMBER OF BAYS	CHARGE TIME	BATTERY COND-ITIONING	INPUT POWER	INCLUDES
RF-5058-CH002 RF-5058-CH006	Transportable Pelican Case	Black	BB-590/U, BB-390B/U, BB-2590/U, B41-0014-028	2 6	2.5-6 hours	Yes	95-260 VAC, 47-440 Hz, 12-36 VDC	Operator's Manual, 10515-0280-4200 (2-bay) or 10515-0281-4200 (6-bay), DC Power Cable with Alligator Clips, U.S. NEMA 5-15P Power Cord, European CEE 7/7 Power Cord, UK Power Cord
RF-5853-CH101 RF-5853-CH102 RF-5853-CH106	Desktop	Black	12041-2X00-0X	1 2 6	~6 hours	Yes	AC or DC	Operator's Manual (10515-0291-4100), U.S. AC Power Cord
RF-5903-CH00X	Handheld Battery Solar Charger, Soft Case	Traditional Camo (-CH001), Desert Camo (-CH002), Digital Camo (-CH003)	12041-2X00-0X	1	Dependent on sun	No	34W Solar	Tactical Charger, 34-watt Solar Panel, Interconnect Cable, Carrying Case, Stakes (4) and Operator Card
RF-5904-CH00X	Manpack Battery Solar Charger, Soft Case	Same as above	BB-2590/U, BB-390B/U	1	Dependent on sun	No	57W Solar	Tactical Charger, 57-watt Solar Panel, Interconnect Cable, Carrying Case, Stakes (4) and Operator Card
RF-5905-CH00X	SPR Battery Solar Charger, Soft Case	Same as above	12055-2105-01	1	Dependent on sun	No	34W Solar	Tactical Charger, 34-watt Solar Panel, Interconnect Cable, Carrying Case, Stakes (4) and Operator Card
RF-5057-AN004	Analyzer/ Charger	Green	BB-590/U, BB-390B/U, BB-2590/U, 12041-2100-XX to 12041-2X00-0X	4 bays for either 2 manpack or 4 handheld batteries	~6 hours	Yes	100-240 VAC, 50-60 Hz	Analyzer/Charging Unit

MULTI-BAY CHARGER/ CONDITIONERS

EIGHT-BAY TACTICAL BATTERY CHARGER/ CONDITIONER

RF-5902-CH008

- Up to eight manpack batteries, eight handheld batteries, or a combination of both may be charged at one time
- Indicators display the charge or conditioning status of each bay
- Charging and conditioning cycles are automatic and terminate when complete. Typical charge times range from 2.5 to 6 hours, but vary with temperature and battery type and age
- Watertight when closed for transportation or storage
- The Charger/Conditioner accepts both AC and DC input voltages (22 to 28 VDC, 90 to 260 VAC, 47 to 420 Hz)
- The Charger/Conditioner can be configured with up to four battery adapters at one time

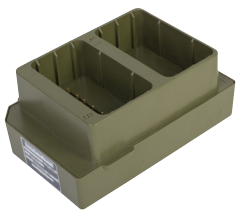
Battery adapters must be ordered separately.

The RF-5902-CH008 includes:

- User instructions (inside the cover)
- DC power cable with attached alligator clips
- U.S. power cord
- European power cord

OPTIONS

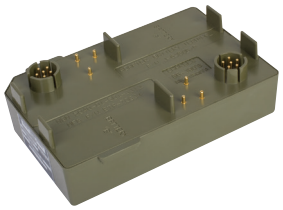
HANDHELD BATTERY ADAPTER



12051-1000-01

The Handheld Battery Adapter is used with the RF-5902-CH008 Tactical Eight-Bay Charger to charge 12041-2X00-0X Li Ion handheld batteries. Color: Green.

MANPACK BATTERY ADAPTER



12051-3000-01

The Manpack Battery Adapter is used with the RF-5902-CH008 Tactical Eight-Bay Charger to charge BB-390B/U, BB-590/U and BB-2590/U manpack batteries. Color: Green.

TWO-BAY OR SIX-BAY CHARGER/ CONDITIONER

RF-5058-CH002 or RF-5058-CH006

- Battery Charger/Conditioner for the Harris BB-590/U NiCd, BB-390B/U NiMH, and BB-2590/U Li Ion batteries
- Indicators display the charge or conditioning status of each bay. The charging and conditioning cycles are automatic and terminate when complete
- Charge time ranges from 2.5 to 6 hours and varies with temperature, battery type, and age
- Waterproof when closed for transportation or storage
- Accepts both AC and DC input voltages (12 to 36 VDC, 95 to 260 VAC, 47 to 440 Hz)
- Color: Black

Specify Product Number when ordering.

The RF-5058-CH002 and RF-5058-CH006 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
10515-0280-4200	Operator's Manual	1
W80-0034-001	DC Power Cable with attached Alligator Clips	1
W80-0025-001	U.S. NEMA 5-15P Power Cord	1
OPTIONAL		
W80-0023-101	European CEE 7/7 Power Cord	1
W80-0029-010	UK Power Cord	1

Specify international power cord if needed.

RF-5853-CH10X AC/DC HANDHELD BATTERY CHARGERS

- The RF-5853-CH10X Battery Chargers are compatible with the 12041-2X00-0X Li Ion Handheld Batteries

Available in one-, two- and six-bay versions:

RF-5853-CH101 One-Bay Charger
RF-5853-CH102 Two-Bay Charger
RF-5853-CH106 Six-Bay Charger

- Integrated battery conditioning and recovery capability
- Front panel indicators identify the battery charge, fault and conditioning states
- Designed for use in an office environment
- Color: Black

Specify Product Number when ordering.

The RF-5853-CH10X chargers include:

PRODUCT NUMBER	PRODUCT NAME	QTY
10515-0431-4100	Operator Card	1
W80-0025-001	U.S. AC/DC Power Cord	1
OPTIONAL		
W80-0023-101	European CEE 7/7 Power Cord	1
W80-0029-010	UK Power Cord	1

Specify Product Number and Color when ordering.

SOLAR BATTERY CHARGERS

SOLAR BATTERY CHARGER – HANDHELD

RF-5903-CH00X

The RF-5903-CH00X is a tactical solar charger for use with Harris 12041-2X00-0X Li Ion handheld batteries. Designed for fast, convenient battery charging, the unit is ruggedized to withstand outdoor conditions. It includes a 34-watt solar panel, interconnect cable, four stakes and carrying case.

SOLAR BATTERY CHARGER – MANPACK

RF-5904-CH00X

The RF-5904-CH00X is a tactical solar charger for use with Harris BA-2590/U and BB-390B/U Li Ion manpack batteries. Designed for fast, convenient battery charging, the unit is ruggedized to withstand outdoor conditions. It includes a 57-watt solar panel, interconnect cable, four stakes and carrying case.

SOLAR BATTERY CHARGER – SPR

RF-5905-CH00X

The RF-5905-CH00X is a tactical solar charger for use with Harris 12055-2105-01 Li Ion SPR batteries.

Color options available:

RF-590X-CH001 Traditional Camo
RF-590X-CH002 Desert Camo
RF-590X-CH003 Digital Camo

COLOR OPTIONS

DIGITAL CAMO | DESERT CAMO | TRADITIONAL CAMO

BATTERY ANALYZER FOR HANDHELD AND MANPACK BATTERIES

RF-5057-AN004

Designed as part of a comprehensive battery maintenance program, the RF-5057-AN004 is a battery analyzer for Harris handheld and manpack batteries. The analyzer is a laboratory device that can be used to verify the batteries' charge capacity. It runs 13 preprogrammed and four user-programmed routines for battery testing, conditioning, and rejuvenation.

Knowledge of battery chemistry and programming is required to fully utilize the RF-5057-AN004 Analyzer to run routines that can assist in extending battery life. It can be operated as a standalone unit or under computer control via RS-232. A three-level password-protection hierarchy inhibits access to various programs. The analyzer has four charging bays: manpack battery adapters occupy two bays each, and handheld battery adapters occupy one bay each.* The unit operates on 100 to 240 VAC, 50 to 60 Hz power.

**Adapters are required for operation and must be ordered separately.*

OPTIONS

BATTERY SHOP SOFTWARE

12027-0062-01

- Allows PC control of one Battery Analyzer and will keep track of the status of over 50,000 batteries
- Service dates and test results are stored for each battery under a unique identification number
- Performance readings, maintenance history and vendor information can also be stored for later retrieval

HANDHELD BATTERY ADAPTER

12027-0060-01

- Used to charge 12041-2X00-0X Li Ion handheld batteries
- Color: Black

MANPACK BATTERY ADAPTERS

12027-0061-01

- Used to charge BB-390B/U and BB-590/U manpack batteries
- Color: Black

12027-0061-02

- Used to charge BB-2590/U manpack batteries
- Color: Black

SPR BATTERY ADAPTER

12027-0063-01

- Used to charge 12055-2105-01 SPR batteries
- Color: Black

POWER SUPPLIES

AC/DC

RF-5051-PS001 Green
RF-5051-PS005 Tan
RF-5051-PS008 NATO Green
RF-5054-PS001 Green
RF-5054-PS005 Tan
RF-5054-PS008 NATO Green

- Switching power supply that provides 28 VDC at up to 30 amps
- For use with up to two Falcon II® and Falcon III® systems in base station, shipboard, or transportable systems, or amplified speaker applications
- Features advanced output capabilities and will automatically recover from many error conditions once the fault has been corrected
- Two RF-5051-PS001 units may be connected in parallel as an RF-5054-PS001, using a DC/DC jumper cable assembly, to provide power for 400-watt Falcon series systems. The RF-5054-PS001 provides 28 volt DC at up to 60 amps
- Finish/Color: Powder Coat Green 383.

FEATURES

- Configurations for 50, 125 and 400 watt systems
- Automatic self-fault recovery

The RF-5051-PS001 includes the 12045-4005-01 Ancillary Kit that contains:

PRODUCT NUMBER	PRODUCT NAME	QTY
10515-0153-4100	Operator Card	1
12045-4006-A12	Ground Strap	1
10181-9831-009	AC Power Cable, U.S. NEMA 5-15P	1

OPTIONS

AC AND DC CABLES FOR THE POWER SUPPLY

PRODUCT NUMBER	PRODUCT NAME
10181-9814-009	AC IN Power Cable, EU (CEE 7), 9 ft. (~2.7 m)
10181-9809-009	AC IN Power Cable, UK/Ireland (BS1363), 9 ft. (~2.7 m)
10181-9836-002	DC/DC Jumper Cable
10181-9834-XXX	DC Power Cable

10181-9836-002 used to create RF-5054-PSXXX configurations from two RF-5051-PSXXX Power Supplies

10181-9834 used to power 400 watt HF systems from RF-5054-PSXXX configurations

AC/DC POWER SUPPLIES

RF-5055PS

- Regulated 26.4 volts DC at 18 amps in a low-profile package
- For use with the RF-5833H-PA 150 watt power amplifiers in tactical installations with duty cycles up to 20%
- When used with the RF-5056PS DC/DC converter, the RF-5055PS is designed to supply power to the RF-5056PS auxiliary input to conserve vehicular battery life when AC power is available
- U.S. AC power cable is provided; contact Product Management to specify international requirements
- May be mounted on the RF-5071VSM-03 Shock Mount (ordered separately)
- Color: Green 383

FEATURES

- Input automatically accepts 115 or 230 VAC, 47 to 63 Hz input
- Compact size
- Ruggedized construction; MIL-STD-810F
- Submersible
- 16 amp continuous output at +25° C (+77° F) ambient
- 12 amp continuous output at +70° C (+158° F) ambient

The RF-5055PS includes the 10520-0150-01 Ancillary Kit that contains:

PRODUCT NUMBER	PRODUCT NAME	QTY
10181-9831-009	AC Power Cable	1
7147-1167-1	Ground Strap	1
7147-1167-3	Ground Strap	1

OPTIONS

AC AND DC CABLES FOR THE POWER SUPPLY

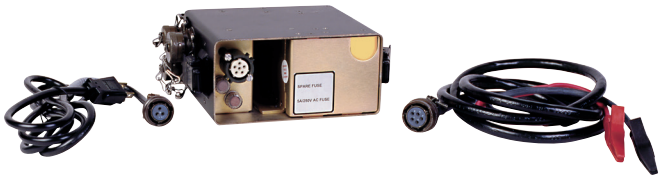
PRODUCT NUMBER	PRODUCT NAME
10181-9814-009	AC Power Cable, EU (CEE 7), 9 ft. (~2.7 m)
10181-9809-009	AC Power Cable, UK/Ireland (BS1363), 9 ft. (~2.7 m)

RF-5850-PS001

- May be used in place of a wide-body Falcon II® battery box to power the RF-5800H-MP, RF-5800M-MP, AN/PRC-117F(C), AN/PRC-150(C) manpack transceivers and the RF-6010
- AC input range of 85 to 270 VAC, 47 to 440 Hz, or 9 to 36 VDC
- Contains a battery to permit radio operation for short time periods (less than one hour) without external prime power
- The battery is recharged when external prime power is reapplied
- The resulting system may be mounted for mobile operation using the RF-5870-VM001 Shock Mount and optional RF-5870-VM002 Security Lock (both ordered separately)
- Color: Green 383

The RF-5850-PS001 includes:

PRODUCT NUMBER	PRODUCT NAME
10513-0516-A1	DC Power Cable with Alligator Clips, 6 ft. (~1.8 m)
10513-0515-A1	AC Power Cable, 6 ft. (~1.8 m)
Z52-0003-006	European AC Plug Adapter
10515-0304-4100	Instruction Manual



RF-5850-PS002

- May be used in place of the narrow-body Falcon II® battery box to provide operation from 85 to 270 VAC, 47 to 440 Hz, or 9 to 36 VDC
- Does not have an internal backup battery
- For use with the RF-5800V-MP and the RF-5800R-RC remote controls
- Color: Green 383

The RF-5850-PS002 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
10515-0284-4200	Instruction Manual	1
10513-0516-A1	DC Power Cable with Alligator Clips, 6 ft. (~1.8 m)	1
10513-0515-A1	AC Power Cable with U.S. NEMA 5-15P Plug, 6 ft. (~1.8 m)	1

ADAPTER, DC POWER

RF-5851-AD001

- Provides DC voltage limiting and filtering to power several models of Falcon II® radio transceivers directly from 22 to 32 VDC vehicle power when use of the full vehicular adapter kit is not required
- It is designed to meet MIL-STD-1275 for vehicular power
- Mounts directly to the rear of the transceiver, in place of the standard battery box, and can be used with the RF-5800H-MP, RF-5800M-MP, AN/PRC-117F(C), AN/PRC-150(C) and RF-6010
- May be mounted on a RF-5870-VM001 Shock Mount and optional RF-5870-VM002 Security Lock (both ordered separately) to provide vehicular mounting. Order Power Cable 12027-0205-A020 (20 ft.; ~6 m) separately
- Color: Green 383

FALCON II AND III BATTERY ELIMINATORS

BATTERY ELIMINATOR, FALCON II—AC/DC INPUT

RF-5910-PS003 with Li Ion Battery Backup

- Used in place of a wide-body Falcon II® battery box to power a manpack transceiver from 95 to 270 VAC at 47 to 440 Hz or 11 to 36 VDC
- Contains a Li Ion battery to permit short-term operation (nominal capacity, 6.2 Ah) of the radio without external power
- The Li Ion battery is recharged when the external power is applied.
- For use with the RF-5800H, RF-5800M-MP, AN/PRC-117F(C), AN/PRC-150(C) manpack transceivers and RF-6010
- May be mounted on a RF-5870-VM001 Shock Mount (ordered separately) for mobile operation
- Color: Green 383

The RF-5910-PS003 includes:

PRODUCT NUMBER	PRODUCT NAME
10515-0301-4100 OR 10515-0302-4100	Instruction Manual for RF-5910 PS003 OR Instruction Manual for RF-5910-PS004
10513-0605-A1	DC Power Cable with Alligator Clips, 6 ft. (~1.8 m)
10513-0604-A1	AC Power Cable Assembly, 6 ft. (~1.8 m)

BATTERY ELIMINATOR, FALCON III

RF-5910-PS005

- May be used in place of a Falcon III® battery box to power the RF-7800R-RC remote control, AN/PRC-117G, and RF-7800M from 85 to 265 VAC and 10.5 to 34.5 VDC
- Designed to supply power to the Falcon III manpacks through a TX-RX frequency range of 30 MHz to 2 GHz
- It contains a rechargeable backup battery with instantaneous cutover if both the AC and DC inputs fail
- Color: Green 383

Includes the 10513-0305-01 Ancillary Kit that contains:

PRODUCT NUMBER	PRODUCT NAME	QTY
Z52-0003-006	Universal AC Plug Adapter	1
10181-9831-006	AC Power Cable, 6 ft. (~1.8 m)	1
10513-0306-A006	DC Power Cable with Alligator Clips, 6 ft. (~1.8 m)	1
10515-6420	Operator Card	1

Please contact Product Management for use with RF-7800H-MP.

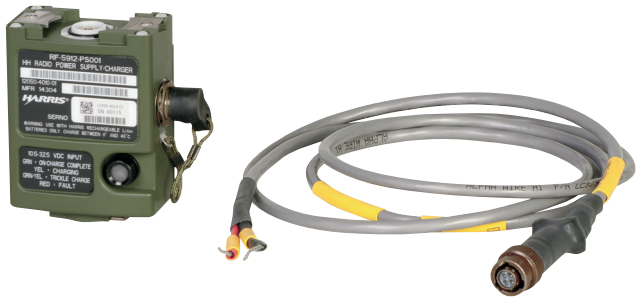
VEHICULAR HANDHELD POWER SUPPLY/ BATTERY CHARGER

VEHICULAR HANDHELD POWER SUPPLY/CHARGER

RF-5852-CH011

- A vehicular mount for the RF-5800V-HH, RF-5800M-HH, RF-7800V-HH, RF-7850M-HH, RF-330E, RF-7850S, RF-7800M-HH, AN/PRC-152(C), AN/PRC-152(A) handheld radios
- Designed to withstand the rugged environment of a vehicular installation and can simultaneously power the radio and charge the battery
- The entire handheld radio with attached battery is secured into the unit, providing a quick-release vehicular or desktop docking mount
- When attached to the Charger/Power Supply, the handheld radio can use its own antenna or can be connected to an external vehicular or fixed-station antenna using the cables listed
- Indicator lights show the status of both the power supply and the charger
- Operates from 9 to 33 VDC and can support radio power boost mode up to 10 watts
- For fixed station use, the unit can also be powered from the 12011-0130-01 AC/DC Converter or from the ruggedized RF-5051-PS001 or RF-5055PS AC/DC Power Supply
- Includes and instruction sheet and installation instructions. Cables are the same for the RF-5912-PS001. A power input option must be selected from the accessory/cable list below and ordered separately
- Color: Black

HANDHELD POWER ADAPTER



RF-5912-PS001

The RF-5912-PS001 Handheld Power Adapter provides a regulated output voltage to Falcon II® and Falcon III® handheld radios from 10.5 to 32.5 volts, while vehicle power simultaneously charges the handheld battery. The adapter can also be used to power the radio without a battery attached. It mounts between the radio and a 12041-2X00-XX HH Li Ion Battery. The RF-5912-PS001 includes indicator lights that display the DC voltage, charging status and charger fault. A power input option must be selected from the accessory/cable list below and ordered separately. Color: Green 383.

ACCESSORIES

CABLES FOR THE RF-5852-CH011 OR RF-5912-PS001

PRODUCT NUMBER	PRODUCT NAME
12011-0110-A006 12011-0110-A015 12011-0110-A025	DC Power Cable, unterminated on vehicle end, 6 ft. (~1.8 m) 15 ft. (~4.6 m) 25 ft. (~7.6 m)
12011-0130-01	AC/DC Converter (operates 115 or 230 VAC), with U.S. NEMA 5-15P AC Cable
12011-0131-A006	DC Cable, AC/DC Converter-to-RF-5852-CH011, 6 ft. (~1.8 m)
12011-0140-A006	DC Cable, RF-5055PS-to-RF-5852-CH011, 6 ft. (~1.8 m)
12011-0120-A010 12011-0120-A015 12011-0120-A025	Cable, Radio TNC (M)-to-Antenna BNC (M), 10 ft. (~3.0 m) 15 ft. (~4.6 m) 25 ft. (~7.6 m)
12050-4006-A006	DC Power Cable, 12V, cigarette lighter type connector
12050-4008-A006	DC Power Cable, 12V, banana plugs, alligator clips

DC/DC

12/24 VOLT DC/DC CONVERTER

RF-5056-PS001

The RF-5056-PS001 DC/DC converter provides a regulated 26.5 volts at 20 amps peak when supplied with 12, 24, or 28 volts from a vehicle DC system. It permits operation of the RF-5833H-PA 150 Watt Power Amplifiers in tactical installations with duty cycles up to 20%. This DC/DC converter will also accept an auxiliary input from the RF-5055PS AC/DC Power Supply. While power is present at the auxiliary input, the DC/DC converter shuts its regulator down to conserve vehicular battery life. The DC/DC converter's low-profile design allows mounting under the RF-5832H-PA001 Power Amplifier and RF-5055PS Power Supply while sharing the same shock tray. The RF-5056-PS001 may be mounted on the RF-5071VSM-03 Shock Mount (ordered separately) for use in the most severe environments. Color: Green 383.

FEATURES

- Output: Sustained voice and multi-tone data operation and intermittent FSK for 150 watt HF systems; continuous duty for 10 or 50 watt VHF systems
- Input automatically accepts DC input from 12, 24, 28 VDC systems
- Compact size
- Ruggedized construction; MIL-STD-810E
- Submersible
- 16-amp output

The RF-5056-PS001 includes:

PRODUCT NUMBER	PRODUCT NAME	QTY
10373-0030-A015	DC Power Cable Assembly, 15 ft. (~4.6 m)	1
10521-0150-01	Ancillary Kit that contains ground strap, fuse (CER 30 A), rubber bushing	1

DC/DC CONVERTER

RF-5061-PS001

The RF-5061-PS001 is a 12 to 28 VDC DC/DC converter intended for use in 12 VDC vehicles. The RF-5061-PS001 is capable of providing 30 amps at 28 VDC and is compatible with the Falcon II® and Falcon III® product families. The RF-5061-PS001 is qualified for tactical environments and does not require shock tray mounting. A DC output cable must be ordered separately. Color: Black.

FEATURES

- 30-amp output
- Ruggedized construction for tactical environments
- Compact size
- Immersion tolerant

The RF-5061-PS001 includes:

- DC Input Cable Kit
- Ground strap
- Mounting hardware
- Instruction manual (product number 10515-0288-4100)

RF-5061-PS002

The RF-5061-PS002 is a 12 to 28 VDC DC/DC converter intended for use in 12 VDC vehicles. The RF-5061-PS002 is capable of providing 20 amps at 28 VDC and is compatible with the Falcon II® and Falcon III® product families. The RF-5061-PS002 offers a shorter, lighter package for applications that require lower power, yet still maintains the same mounting configuration. The RF-5061-PS002 is qualified for tactical environments and does not require shock tray mounting. A DC output cable must be ordered separately. Color: Black.

FEATURES

- 20-amp output
- Ruggedized construction for tactical environments
- Compact size
- Immersion tolerant

The RF-5061-PS002 includes:

- DC Input Cable Kit (11081-5009-01)
- Ground strap
- Mounting hardware
- Instruction manual (10515-0288-4100)

ACCESSORIES

POWER AMPLIFIER

RF-300W-PA050

Includes two bi-directional half duplex RF power amplifiers (PAs) that provide transmit amplification for the following bands: 30 to 512 MHz FM/AM line-of-sight (LOS), 30 to 88 MHz FM SINCGARS frequency hopping, 292 to 318 MHz UHF tactical SATCOM and 225 to 450 MHz ANW2 and SRW wideband networking. A low-noise amplifier provides receive gain for the 242 to 268 MHz UHF Tactical SATCOM receive band, suitable for vehicular, airborne, man-portable or fixed-station applications. It is compatible with most military and commercial radios operating in the 30 to 512 MHz frequency spectrum. The operation of the amplifier can be controlled locally via front panel switches, or from USB and RS-232 interfaces for remote control operation. There is also a Bias Tee 3 available for remote operation of the amplifier.

There is a DC input connection, a radio port and three mode-specific antenna ports. The LOS mode port is for AM and FM frequency hopping (non-wideband) and multiband line-of-site operation from 30 to 512 MHz. The SATCOM mode port is band limited to UHF TACSAT frequencies for 5 and 25 KHz channels, and DAMA and IW communications. The wideband mode port is used for wideband networking and wideband frequency hopping networking modes.

UNIVERSAL REMOTE CONTROL SYSTEM

RF-7800R-RCXXX

Includes two remote control units whose modular design allows either unit to function as the Local Control Unit (LCU) or the Remote Control Unit (RCU). All radio functions controlled by the Keypad/Display Unit (KDU) can be controlled by the RF-7800R, including Automatic Link Establishment (ALE), frequency hopping and modem selections. The system provides TX/RX, data and control legacy functions using field wire, and also adds capabilities/interfaces for Ethernet and fiber optic (external media converter required and not included). May be mounted on the RF-5871-VM011 Shock Mount (ordered separately). The RF-7800R-RCXXX includes battery boxes for power by BA or BB series batteries, but can also be powered by the RF-5910-PS005 Battery Eliminator.

The RF-7800R-RCXXX includes:

- Remote Control Units (2) and battery boxes (2)
- H-250 Handset and radio-specific cables
- Operator card

RF-7800R-RC CONFIGURATIONS

PRODUCT NUMBER	INCLUDES	RADIO COMPATIBILITY
RF-7800R-RC010	Interface Cables (3)	RF-5800V-MP and VAA RF-5800M-MP and VAA AN/PRC-117F and VAA RF-5800H-MP and VAA AN/PRC-150 and VAA AN/PRC-152 and VAA RF-300M-TV RF-7800M-MP and VAA AN/PRC-117G and VAA
RF-7800R-RC110	Interface Cables (3) Keypad/Display Unit (KDU) and Speaker (RF-5983-SA00X)	RF-5800V-MP and VAA RF-5800M-MP and VAA AN/PRC-117F and VAA RF-5800H-MP and VAA AN/PRC-150 and VAA AN/PRC-152 and VAA RF-300M-TV RF-7800M-MP and VAA AN/PRC-117G and VAA
RF-7800R-RC011	Cable	RF-5800V-MP and VAA RF-5800M-MP and VAA AN/PRC-117F and VAA RF-5800H-MP and VAA AN/PRC-150 and VAA
RF-7800R-RC012	Cable and Keypad/ Display Unit (KDU)	AN/PRC-152 and VAA RF-300M-TV
RF-7800R-RC013	Cable and Keypad/ Display Unit (KDU)	RF-7800M-MP and VAA AN/PRC-117G and VAA
RF-7800R-RC014	Cable and Keypad/ Display Unit (KDU)	RF-5800M-HH with VAA only

OPTIONS

CABLES

PRODUCT NUMBER	PRODUCT NAME	MODES/APPLICATIONS	INCLUDES
AN/PRC-150			
12078-0700-A36	LCU Interface Cable	N/A	N/A
12078-0726-A006	PPP Cable	RPA, WMT (3G), TacChat	N/A
12078-0720-A006	Sync/Async "Y" Cable	PPP, WMT, RPA	N/A
12078-0750-01	USB Kit	N/A	12078-0733-A006 Cable 12078-0760-01 Driver CD
12078-0756-01	Ethernet and USB Data Link Kit	N/A	12078-0731-A006 RJ45 Cable (2) 12078-0733-A006 USB Cable 12078-0760-01 Driver CD
12078-0754-01	High Speed Internet (HSI) Kit (RS-530/RS-422)	N/A	12078-0730-A006 Cable (2)
AN/PRC-117F			
12078-0700-A36	LCU Interface Cable	N/A	N/A
12078-0720-A006	PPP Cable	HPW, HPW IP, SA	N/A
12078-0720-A006	Sync/Async "Y" Cable	WMT, RPA/CPA, ASCII	N/A
12078-0750-01	USB Kit	N/A	12078-0733-A006 Cable 12078-0760-01 Driver CD
12078-0756-01	Ethernet and USB Data Link Kit	N/A	12078-0731-A006 RJ45 Cable (2) 12078-0733-A006 USB Cable 12078-0760-01 Driver CD
12078-0754-01	High Speed Internet (HSI) Kit (RS-530/RS-422)	N/A	12078-0730-A006 Cable (2)
AN/PRC-117G			
12078-0703-A36	LCU Interface Cable	N/A	N/A
12078-0726-A006	PPP Cable	HPW, HPW IP, SA	N/A
12078-0720-A006	Sync/Async "Y" Cable	WMT, RPA/CPA, ASCII	N/A
12078-0750-01	USB Kit	N/A	12078-0733-A006 Cable 12078-0760-01 Driver CD
120780-0755-01	Ethernet Kit (ANW2/USB)	N/A	12078-0731-A006 Cable (2)
12078-0756-01	Ethernet and USB Data Link Kit	N/A	12078-0731-A006 RJ45 Cable (2) 12078-0733-A006 USB Cable 12078-0760-01 Driver CD
12078-0754-01	High Speed Internet (HSI) Kit (RS-530/RS-422)	N/A	12078-0730-A006 Cable (2)
AN/PRC-152			
12078-0702-A36	LCU Interface Cable	N/A	N/A
12078-0726-A006	PPP Cable	HPW, HPW IP, SA	N/A
12078-0720-A006	Sync/Async "Y" Cable	WMT, RPA/CPA, ASCII	N/A
12078-0750-01	USB Kit	N/A	12078-0733-A006 Cable 12078-0760-01 Driver CD
12078-0756-01	Ethernet and USB Data Link Kit	N/A	12078-0731-A006 RJ45 Cable (2) 12078-0733-A006 USB Cable 12078-0760-01 Driver CD
12078-0754-01	High Speed Internet (HSI) Kit (RS-530/RS-422)	N/A	12078-0730-A006 Cable (2)

FALCON III® KDU REMOTE CONTROL KITS

REMOTE CONTROL KIT FOR FALCON II MANPACK AND FALCON III MANPACK RADIOS

10553-0100-01 Black
10553-0100-02 Green
10553-0100-03 Tan

- Compatible with the following Falcon II and Falcon III radios:
  - AN/PRC-117G(V)1(C)
  - RF-340M-MP
  - RF-7800M-MP
  - RF-5800M-MP
  - RF-5800V-MP
  - AN/PRC-117F(C)
- Compatible with base station and vehicular systems using the above radios

Note: When used with the AN/PRC-117G, RF-340M-MP, and RF-7800M-MP radios, cable length is limited to less than 50 feet (~15 meters).

The 10553-0100-0X includes:

PRODUCT NUMBER	PRODUCT NAME
10553-1300-0X	Falcon III Remote KDU Assembly
10553-1450-01	Falcon III KDU Wrist Strap (Black)
10515-6465	Falcon III Remote KDU Instructions
10511-0704-012	KDU Extension Cable for Falcon II and Falcon III manpacks, 6 ft. (~1.8 m)

REMOTE CONTROL KIT FOR AN/PRC-152(C) HANDHELD RADIO

10553-0200-01 Black
10553-0200-02 Green
10553-0200-03 Tan

- Compatible with the Falcon III AN/PRC-152(C) radio
- Compatible with base station and vehicular systems using the above radio

The 10553-0200-XX includes:

PRODUCT NUMBER	PRODUCT NAME
10553-1300-0X	Falcon III Remote KDU Assembly
10553-1450-01	Falcon III KDU Wrist Strap (Black)
10515-6465	Falcon III Remote KDU Instructions
12041-5490-A006	KDU Extension Cable for AN/PRC-152(C), 6 ft. (~1.8 m)

REMOTE CONTROL TO CONTROL TWO RADIOS (C2R)

10553-1400-01 Black
10553-1400-02 Green
10553-1400-03 Tan

- Simultaneous control of two radios with one remote control device.
- Compatible with the following Falcon II and Falcon III radios:
  - AN/PRC-117G(V)1(C)
  - RF-340M-MP
  - RF-7800M-MP
  - AN/PRC-152(C)
  - RF-5800M-MP
  - RF-5800V-MP
  - AN/PRC-117F(C)
- Compatible with base station and vehicular systems using the above radios

Note: When used with the AN/PRC-117G, RF-340M-MP, and RF-7800M-MP radios, cable length is limited to less than 50 feet (~15 meters).

OPTIONS

CABLES

PRODUCT NUMBER	PRODUCT NAME
10511-0704-012	KDU Extension Cable for Falcon II® and Falcon III® Manpack Radios, 6 ft. (~1.8 m)
12041-5490-A006	KDU Extension Cable for AN/PRC-152(C), 6 ft. (~1.8 m)

KDU CARRY AIDES

REMOTE CONTROL KDU MOLLE ATTACHMENT STRAP

RF-5939-CA005 (KDU not included)

- Used to attach 10553-1300-XX Remote Control with GPS to standard PALS webbing
- Remote control and GPS ordered separately
- Color: Coyote Brown

REMOTE CONTROL KDU WRIST STRAP

10553-1450-01

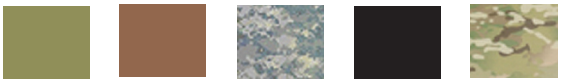
- Used to attach 10553-1300-XX Remote Control to the wrist or forearm
- Remote control ordered separately
- Color: Black

REMOTE CONTROL KDU POUCH

RF-5929-CA001 Green
RF-5929-CA002 Black
RF-5929-CA003 Multicam
RF-5929-CA004 Digital Camouflage
RF-5929-CA005 Coyote Brown

- Used to protect and store 10553-1300-XX Remote Control and cable
- Made from nylon
- MOLLE/PALS compatible for attachment
- Can be mounted horizontally or vertically using the included Blackhawk™ Speed Clip
- Allows the KDU cable to exit the pouch from either side

COLOR OPTIONS



REMOTE CONTROL MOUNTS

KDU GIMBALED MOUNTS

FALCON II® AND FALCON III® KDU

RF-5940-MT002

- Used to remote mount a Falcon II or Falcon III radio Keypad/Display Unit (KDU) away from the transceiver
- Used in vehicles and desktop applications
- Easily repositioned by loosening a thumbscrew, reorienting the KDU, and tightening the thumbscrew
- For "jerk-and-run" operation:
- Falcon II KDU simply unlatches from the mount and re-latches into the radio
- Falcon II KDU quickly snaps into and out of the mount
- Used with 10511-0704-XXX and 12041-5492-XXX Extension Cables.
- Includes required installation hardware
- Does not include KDU and cables
- Color: Black

SHORT-DISTANCE REMOTING KIT

12027-0050-075

- Used with the RF-5800H-MP, RF-5800M-MP, RF-5800V-MP, AN/PRC-117F(C) and AN/PRC-150(C) radios
- Used with RF-5800V-V5XX and RF-5800M-V5XX vehicular and base station systems utilizing the above radios as receiver-transmitters (RTs)
- Capable of operating up to a distance of 75 feet (~23 meters) from the radio
- Allows operation of all radio functions that can be controlled via the Keyboard/Display Unit (KDU). There is no encryption of audio and/or data between the KDU and radio
- Compatible with all Harris KDUs
- The kit includes:
  - 75 ft. (~23 m) KDU extension cable (10511-0704-150)
  - 75 ft. (~23 m) speaker power cable (10535-0706-A075)
  - 75 ft. (~23 m) speaker audio cable (10535-0707-A075)
  - Tactical Speaker (RF-5980-SA101)
- KDU available separately

MOUNTING SYSTEMS

EQUIPMENT AND SHOCK MOUNT COMPATIBILITY

RADIO/EQUIPMENT	RF-383VM-01 TRACKED SHOCK MOUNT	RF-384VM-03 WHEELED SHOCK MOUNT	12005-1920-01 SHOCK TRAY	RF-5071VSM-03 SINGLE SHOCK MOUNT	RF-5072VSM-03 DUAL SHOCK MOUNT	RF-5073VSM PA SHOCK MOUNT
AN/PRC-117F(C)						
RF-5800M-MP						
AN/PRC-150(C)						
RF-5800H-MP						
AM-7588			•			
AN/VRC-103			•			
RF-5800M-VXXX			•			
RF-5051-PSXXX				•		
RF-5054-PSXXX					•	
RF-5055PS				•		
RF-5056PS				•		
RF-5382H-CU001						
RF-5832H-PA101				•	•	
RF-5833H-PA						•
RF-5834H-PA						
RF-5845H-PP					•	
RF-382A-15	•	•				
RF-6010						
RF-7800W-IU100				•	•	
RF-5800V-MP						
Locking Kit			12005-1200-01			10497-0870-01

RADIO/ EQUIPMENT	RF-5074VSM-03 POWER AMPLIFIER SHOCK MOUNT	RF-5211VSM SHORT PROFILE MOUNT	RF 5211VSM-050 VEHICULAR MOUNT	RF-5384VM-01 COUPLER SHOCK MOUNT	RF-5870-VM001 ADJUSTABLE SHOCK MOUNT	RF-5871-VM011 SHOCK TRAY NB	RF-5871-VM002 SECURITY LOCKING KIT	RF-7871-VM001 VEHICULAR SHOCK MOUNT	RF-7871-VM002 VEHICULAR SHOCK MOUNT
AN/PRC-117F(C)			•		•				
RF-5800M-MP			•		•				
AN/PRC-150(C)		•	•		•				
RF-5800H-MP		•	•		•				
AM-7588									
AN/VRC-103									
RF-5800M-VXXX									
RF-5051-PSXXX									
RF-5054-PSXXX									
RF-5055PS									
RF-5056PS									
RF-5382H-CU001				•					
RF-5832H-PA101									
RF-5833H-PA									
RF-5834H-PA	•								
RF-5845H-PP									
RF-382A-15									
RF-6010		•	•		•				
RF-7800W-IU200									
RF-5800V-MP						•	•		
RF-5800R-RC						•	•		
RF-7800R-RC						•	•		
AN/PRC-117G								•	•
RF-7800M-MP								•	•
Locking Kit		10372-0874-01	10372-0874-01		RF-5870-VM002	RF-5871-VM002	RF-5871-VM002	Included	Included

SHOCK MOUNTS

MOUNTING SYSTEMS

R/T SHOCK MOUNTS

RF-5211VSM

The RF-5211VSM is a short profile vehicular mount for the RF-5800H-MP and AN/PRC-150(C) manpacks that is used specifically in vehicles with space constraints. The radio is mounted directly to the shock mount without the battery case. Power is supplied to the transceiver via a power amplifier control cable connected between the radio and the external power amplifier. The transceiver can be removed from this mount and connected to a battery case with batteries for "jerk-and-run" operation. Color: Black.

RF-5211VSM-050

The RF-5211VSM-050 is a vehicular mount for the AN/PRC-117F, RF-5800M-MP, AN/PRC-150(C), RF-5800H-MP and RF-6010. It allows the radios to be mounted directly to the shock mount without the battery case and permits connection to vehicular power or other DC sources. The DC power connection is made via a power block on the rear of the shock mount. The transceivers can be removed from this mount and connected to a battery case with batteries for "jerk-and-run" operation. Color: Black.

SECURITY LOCKING KIT FOR THE RF-5211VSM AND RF-5811VSM-050

10372-0874-01

The Security Locking Kit attaches to the RF-5211VSM and RF-5811VSM-050 Shock Mounts to prevent unauthorized removal of the radio transceiver from the shock mount. The 10372-0874-01 requires a padlock, which is not included.

ADJUSTABLE SHOCK MOUNT FOR THE RF-5800H-MP WITH BATTERIES, BATTERY ELIMINATOR, OR ADAPTER

RF-5870-VM001

The RF-5870-VM001 is an adjustable shock mount that mounts the RF-5800H-MP, AN/PRC-150, RF-5800M-MP, or AN/PRC-117F transceivers for use in mobile systems when a full vehicular adapter kit is not required. The mount is adjustable to secure the manpack when used with the battery pack, RF-5850-PS001 Power Supply, or RF-5851-AD001 DC Adapter. Color: Black.

SECURITY LOCKING KIT FOR THE RF-5870-VM001

RF-5870-VM002

The RF-5870-VM002 Security Locking Kit attaches to the RF-5870-VM001 Shock Mount to prevent unauthorized removal of the radio transceiver from the shock mount. The RF-5870-VM002 requires a padlock, which is not included.

NARROW BODY VEHICULAR MOUNT FOR USE WITH BATTERY OR BATTERY ELIMINATOR

RF-5871-VM011

The RF-5871-VM011 is a vehicular shock mount for the RF-5800-RCXXX and RF-5800V-MP manpack radio used with either the battery box or with the RF-5850-PS002. It can also be used with the RF-7800R-RCXXX Remote Controls and either the battery box or with the RF-5850-PS002 Power Supplies. Color: Black.

SECURITY LOCKING KIT FOR THE RF-5871 VM001/011/003

RF-5871-VM002

The RF-5871-VM002 attaches to the RF-5871-VM001 or RF-5871-VM003 Shock Mount to prevent unauthorized removal of the RF-5800R-RCXXX and RF-7800R-RCXXX Remote Controls and the RF-5800V-MP manpack radio from the shock mount. The locking kit requires a padlock, which is not included.

NARROW BODY VEHICULAR MOUNT WITH POWER BLOCK

RF-5871-VM003

The RF-5871-VM003 is a vehicular shock mount for the RF-5800R-RCXXX and RF-7800R-RCXXX Remote Controls and the RF-5800V-MP manpack radio. The mount permits connection to vehicular power or other DC sources. The DC power connection is made via a power block on the rear of the shock mount. Color: Black.

SINGLE SHOCK MOUNT FOR RF-5832H-PA 125 WATT POWER AMPLIFIER OR RF-5051-PS POWER SUPPLY

RF-5071VSM-03

The RF-5071VSM-03 is a single shock mount for the RF-5832H-PA Power Amplifier or RF-5051-PSXXX Power Supply that provides isolation from high-impact shock and vibration in vehicular installations. Color: Black.

DUAL SHOCK MOUNT FOR TWO RF-5832H-PA POWER AMPLIFIERS, TWO RF-5051-PS POWER SUPPLIES, OR RF-5845H-PP PRE/POSTSELECTOR

RF-5072VSM-03

The RF-5072VSM-03 is a dual shock mount for two RF-5832H-PAs or two RF-5051-PSXXX Power Supplies. The RF-5072VSM-03 may also be used to mount one RF-5845H-PP Digital Pre/postselector. The unit provides isolation from high-impact shock and vibration in vehicular installations. Color: Black.

SYSTEM SHOCK MOUNT FOR RF-5833H-PA 150 WATT POWER AMPLIFIER

RF-5073VSM

The RF-5073VSM is a System Shock Mount for the RF-5833H-PA Power Amplifier. Finish/Color: CARC Green 383.

SECURITY LOCKING KIT FOR THE 150 WATT SYSTEM

10497-0870-01

The 10497-0870-01 is a locking kit for securing the RF-5800H-MP or AN/PRC-150 manpack radio to the RF-5833H-PA Power Amplifier, which locks to the RF-5073VSM Shock Mount. The Security Locking Kit prevents unauthorized removal of the radio transceiver from the shock mount and requires two padlocks, which are not included. Color: Black.

SINGLE SHOCK MOUNT FOR RF-5834H-PA 400 WATT POWER AMPLIFIER

RF-5074VSM-03

The single shock mount provides isolation from high-impact shock and vibration in vehicular installations. Color: Black.

SHOCK MOUNT FOR RF-5382H-CU ANTENNA COUPLER

RF-5384VM-01

This quick-release shock mount for the RF-5382H-CU Antenna Coupler provides isolation from the high-impact shock and vibration encountered in wheeled and tracked vehicles. The shock mount incorporates a quick-release feature that allows rapid relocation of the RF-5382H-CU between the vehicle and the RF-5351-ATXXX Siting Kits. Color: Black.

SHOCK MOUNT FOR RF-382A-15 ANTENNA COUPLER FOR TRACKED VEHICLES

RF-383VM-01

This quick-release shock mount for the RF-382A-15 Antenna Coupler provides isolation from the shock and vibration of tracked vehicles such as MB Tanks, APCs, and SPGs. The shock mount incorporates a quick-release feature that allows rapid interchangeability between the vehicle and the RF-5351-ATXXX Siting Kits. The Antenna Coupler must be mounted horizontally when using this mount. Finish/Color: CARC Green 383.

SHOCK MOUNT FOR RF-382A-15 ANTENNA COUPLER FOR WHEELED VEHICLES

RF-384VM-03

This quick-release shock mount for the RF-382A-15 Antenna Coupler provides isolation from the high-impact shock and vibration encountered in wheeled vehicles such as a military HMMWV. The shock mount incorporates a quick-release feature that allows rapid relocation of the RF-382A-15 between the vehicle and the RF-5351-ATXXX Siting Kits. Finish/Color: CARC Green 383.

FALCON III® VEHICULAR MOUNT FOR USE WITH BATTERY OR BATTERY ELIMINATOR

RF-7871-VM001

The RF-7871-VM001 is a vehicular shock mount for the AN/PRC-117G and RF-7800M-MP manpack radios, when used with either the battery (battery box sold separately) or the RF-5910-PS005 Power Supply. The mount includes a locking kit to prevent unauthorized removal of the battery eliminator from the shock tray. Color: Black.

FALCON III® VEHICULAR MOUNT WITH POWER BLOCK

RF-7871-VM002

The RF-7871-VM002 is a vehicular shock mount for the AN/PRC-117G and RF-7800M-MP manpack radios that permits connection to vehicular power or other DC sources. The DC power connection is made via a power block on the rear of the shock mount. The mount includes a locking kit to prevent unauthorized removal of the battery eliminator from the shock tray. Color: Black.

CARRYING ACCESSORIES

BACKPACKS

FALCON II® RANGER BAG

RF-5930-CA002

Heavily padded and designed with HERCULON reinforced areas, this bag is intended for use in airborne jump applications. It features adjustable web to set the carrying depth of the radio and room to store cables and other ancillary equipment, including two spare batteries and two loose nylon socks for antenna storage. The bag is designed to fit inside a larger Alice rucksack. It is a general purpose bag for storing various radios, including the AN/PRC-150(C), AN/PRC-117F(C), RF-5800V-MP, RF-5800H-MP and RF-5800M-MP. Color: Green.

FALCON II® BACKPACK

RF-5930-CA001 Green
RF-5930-CA011 Black
RF-5930-CA021 Tan

This padded backpack-style carrying bag with three-sided zipper closure is the recommended bag for carrying Falcon II® radios. Sometimes referred to as the "Wallace Bag," it is designed for short-duration, dismounted missions where communications on-the-move are essential. Openings in the top allow deployment of the antenna, GPS Antenna, Keypad/Display Unit Remoting Cable, handset cable, and other accessory cables to pass through while the bag is closed for marching. When unzipped from the rear while being worn, the back folds down to expose the strapped-in radio and a variety of pouches for accessories, antennas and two additional batteries.

The Harris Falcon II RF-5800 family and AN/PRC-117F(C) radios may be operated with the bag closed and a remoted Keypad/Display Unit positioned on the user's sleeve or chest. The bag has an internal compartment to accommodate the GPS Antenna (supplied with the internal GPS versions of the RF-5800) for GPS use on the move. The bag provides strap and clip points for attaching external accessory bags (e.g., laptop computer or other DMED), canteens, and other items.

FALCON III® BACKPACK

RF-5935-CA001 Green
RF-5935-CA002 Black

This manpack radio bag for the Falcon III® radio is designed for short duration, dismounted missions where communications on-the-move are essential. When unzipped from the rear while being worn, the back folds down to expose the strapped-in radio and up to four additional batteries. Openings in the top of the bag allow deployment of the antennas, GPS Antenna, Keypad/Display Unit Remoting Cable, handset cable, and other accessory cables to pass through while the bag is closed for marching. An externally mounted, zippered compartment holds a ruggedized laptop computer.

FALCON II® VENTED RADIO PACK WITH FRAME

RF-5930-CA004 Green
RF-5930-CA014 Black
RF-5930-CA024 Tan

This bag is designed to transport the Falcon II® RF-5800 family of radios and accessories. Consisting of a padded mesh vented back system on an internal aluminum frame, the pack is designed to be lightweight and allow maximum air circulation around the equipment.

FALCON III® RADIO OPERATOR'S 3-DAY PACK

RF-5934-CA006

The "tear drop" style 3-Day Pack is designed to accommodate three days' worth of gear in a temperate climate, which might include a manpack radio, a dismount RF-7800B BGAN Terminal, and all the necessary cables and batteries. The 3-Day Pack features heavy-duty construction, exterior side pouches for hydration bottles, built-in GPS antenna pouch and accessory pockets, and an integrated main compartment security strap for airborne operations. A modular, removable radio pouch (RF-5938-CA006) specifically designed for the AN/PRC-117G radio is included; pouches for other Harris manpack radios are also available (ordered separately). This backpack is compatible with the RF-7800H-MP. Color: Multicam.

POUCHES AND HOLSTERS

KDU POUCH

RF-5931-CA001 Green
RF-5931-CA002 Black
RF-5931-CA003 Tan

This pouch provides a strap assembly to mount the removable Keypad/Display Unit (KDU) away from the Falcon II® RF-5800 family of radios for convenient operation on-the-move. Made from nylon, the pouch has Velcro fasteners to permit size adjustment. It also features an Alice clip and D-ring for mounting to the Falcon II bags, LBE/LCE/MOLLE, or other equipment.

COLOR OPTIONS

GREEN | COYOTE BROWM | DIGITAL CAMO | BLACK | MULTICAM | TAN

HANDHELD RADIO HOLSTER FOR AN/PRC-152(C) AND RF-5800M-HH HANDHELD RADIOS

RF-5932-CA001 Digital Camouflage
RF-5932-CA002 Black
RF-5932-CA003 Green

This lightweight radio holster is made of durable Cordura fabric and incorporates Molle straps for attachment to a variety of load-bearing vests and other gear. The radio can be secured in the holster to prevent loss during missions. Openings in the front and side of the holster provide access to radio interface and data connections, allowing full operation of the radio while it is secured in the holster.

HANDHELD RADIO HOLSTER FOR RF-7800V-HH HANDHELD RADIO

RF-5936-CA001 Digital Camouflage
RF-5936-CA002 Black
RF-5936-CA003 Green
RF-5936-CA004 Tan
RF-5936-CA005 Coyote

This lightweight radio holster is made of durable Cordura fabric and incorporates Molle straps for attachment to a variety of load-bearing vests and other gear. The radio can be secured in the holster to prevent loss during missions. Openings in the front and side of the holster provide access to radio interface and data connections, allowing full operation of the radio while it is secured in the holster.

HANDHELD RADIO FLIP-DOWN HOLSTER FOR AN/PRC-152(C), RF-310M-HH, AND RF-5800M-HH HANDHELDS

RF-5933-CA001 Digital Camouflage
RF-5933-CA002 Black
RF-5933-CA003 Coyote Brown

This holster is a made of durable nylon fabric and incorporates Molle straps for attachment to a variety of load-bearing vests and other gear. The flip-down feature allows access to the radio front-panel Keypad/Display Unit (KDU) without removing the radio from the holster. Openings in the side of the holster provide access to radio interface and data connections for full radio operation. The radio can be secured in the holster to prevent loss during missions.

ACCESSORIES

HANDHELD RADIO FLIP-DOWN HOLSTER FOR RF-7800V-HH HANDHELD RADIO

RF-5937-CA001 Digital Camouflage
RF-5937-CA002 Black
RF-5937-CA003 Green
RF-5937-CA004 Tan
RF-5937-CA005 Coyote

This holster is a made of durable nylon fabric and incorporates Molle straps for attachment to a variety of load-bearing vests and other gear. The flip-down feature allows the user to access the radio front-panel Keypad/Display Unit (KDU) without removing the radio from the holster. Openings in the side of the holster provide access to radio interface and data connections, allowing full operation of the radio. The radio can be secured in the holster to prevent loss during operations.

AN/PRC-117G RADIO POUCH

RF-5938-CA006

The AN/PRC-117G Radio Pouch is designed to give the user the flexibility to configure the carried radio system based on operational needs. The Radio Pouch can be connected directly to body armor for the Direct Action (DA) role or connected to the Condor (or similar) LBE system for the admin or operations Other Than War (OTW) role. If desired, standard MOLLE shoulder strap/suspenders (not included) can be attached to the pouch. For extended missions, the Radio Pouch attaches quickly and easily to the inside of the Falcon III Radio Operator's 3-Day Pack. Features include a GPS pouch, double-layered mesh for ventilation, PALS webbing, and integrated side pockets for cables and accessories. Color: Multicam.

BAGS

HANDHELD RADIO ACCESSORY BAG

12041-1595-01

This lightweight accessory bag is made of durable nylon and incorporates Molle straps for attachment to a variety of load bearing vests and other gear. The outside pocket accommodates a holstered radio while the inside pockets are large enough to accommodate several accessories, including spare batteries, antennas and headsets.

Length: 9 W x 15 H x 5 D in. (~12 W x 38 H x 13 D cm)
Color: Green

FALCON III® ANTENNA BAG

10372-0349-01 Green
10372-0349-02 Tan
10372-0349-03 Coyote

This antenna carrying bag is sectionalized into several pockets to store the radio handset and five antennas used with the Falcon III® manpack radios. Labeled pockets are provided for correct stowage of the RF-3150-AT152 VHF Dismount Antenna, RF-3152-AT152 UHF Dismount Antenna, RF-3164-AT122 UHF Dismount Antenna, RF-3165-AT122 UHF L-Band Dismount Antenna and RF-3070-AT242 Soldier L1/L2 GPS Antenna.

CABLES

COMPATIBILITY CHART

			MANPACK RADIOS								HANDHELD RADIOS						
PAGE	PRODUCT NUMBER	PRODUCT NAME	AN/PRC-117F(C)	RF-5800M-MP	AN/PRC-150(C)	RF-5800H-MP	RF-7800H-MP	RF-5800V-MP	AN/PRC-117G	RF-7800M-MP	AN/PRC-152(C)	RF-310M-HH	RF-5800M-HH	RF-5800V-HH	RF-7800M-HH	RF-7800S	RF-7800V-HH
ASYNCHRONOUS (RS-232)/SYNCHRONOUS (DTE) "Y" CABLES																	
257	10513-0730-AX	Data and Remote Control "Y" Cable, J3	•	•													
257	10518-1694-AXXX	Data and Remote Control "Y" Cable, J3			•	•											
257	12043-2730-A006	Data and Remote Control "Y" Cable							•	•							
257	12041-7110-A1	Data and Remote Control "Y" Cable									•	•			•		
257	12011-0220-A006	Data and Remote Control "Y" Cable											•	•			
257	12067-7110-A66	Data and Remote Control "Y" Cable															•
257	10518-1697-A006	Data/Remote Control "Y" Cable with Vehicular Adapter Unit (VAU)						•									
ASYNCHRONOUS OR SYNCHRONOUS (RS-232) DATA CABLES																	
257	10535-0770-AXXX	Synchronous/Asynchronous Data Cable, DB 9			•	•											
REMOTE CONTROL/PROGRAMMING CABLES																	
257	10513-0750-A006	Remote/Data Cable, J3	•	•													
257	10513-0740-AXXX	Remote/Data Cable, J6	•	•													
258	10535-0740-A006	Remote/Data Cable, J6			•	•											
258	12011-0200-01	Configuration Fill Cable											•	•			
258	12055-0710-AXXX	Programming/Data Cable														•	
USB CABLES/ADAPTERS																	
258	12043-2750-A006	USB Programming Cable					•		•	•							
258	12067-5600-01	USB Configuration Adapter, Type A															•
258	12067-5700-01	USB Configuration Adapter, Mini AB															•
PPP CABLES																	
258	10513-0710-AXXX	PPP Cable (HPW/SA)	•														
258	10535-0775-AXXX	PPP Cable			•	•	•										
258	10512-0775-A006	PPP Cable						•									
258	12041-7180-A006	PPP Cable									•				•		
258	12011-0775-A006	PPP Cable											•	•			
258	12043-2710-AXXX	PPP Cable							•	•							
ETHERNET CABLES																	
259	12043-2760-AXXX	Ethernet Networking Cable (Male)							•	•							
259	12043-2765-A006	Ethernet Networking Cable (Female)							•	•							
259	12055-0714-A003	SPR Ethernet Adaptive Cable														•	
259	12069-0020-XX	Broadband Ethernet Cable															
259	12067-5220-01	Ethernet Programming/Remote Control Cable															•
KDU EXTENSION CABLES																	
259	10511-0704-XXX	KDU Extension Cable, Side Connection	•	•	•	•		•	•	•	•						
259	11071-0205-AXXX	KDU Extension Cable, Rear Connection	•	•	•	•		•	•	•	•						

ACCESSORIES

			MANPACK RADIOS								HANDHELD RADIOS						
PAGE	PRODUCT NUMBER	PRODUCT NAME	AN/PRC-117F(C)	RF-5800M-MP	AN/PRC-150(C)	RF-5800H-MP	RF-7800H-MP	RF-5800V-MP	AN/PRC-117G	RF-7800M-MP	AN/PRC-152(C)	RF-310M-HH	RF-5800M-HH	RF-5800V-HH	RF-7800M-HH	RF-7800S	RF-7800V-HH
PLGR/DAGR/NEMA GPS CABLES																	
259	12005-0730-A006	PLGR/DAGR Interface Cable	•		•												
259	12005-0740-A006	NEMA Interface Cable	•		•												
259	12041-7170-AXXX	GPS Interface Cable									•	•					
259	12006-4241-AXXX	Coaxial Cable, GPS Antenna							•								
260	10511-0730-AXXX	Coaxial Cable, GPS/Multiband Antenna		•		•	•	•	•		•						
260	E75-0017-180	GPS Antenna Coaxial Extension Cable		•		•	•	•	•		•		•			•	•
RETRANSMISSION CABLES																	
260	12005-0717-AXXX	Retransmission Cable Assembly	•	•				•									
260	10511-0717-01	Retransmission Cable Assembly	•	•				•									
260	12041-7130-A1	Retransmission Cable Assembly									•	•			•		
260	12011-0230-AXXX	Retransmission Cable Assembly											•	•			
260	12067-5250-01	Retransmission Cable Assembly															•
260	12043-2740-AXXX	Digital Retransmission Cable Assembly							•	•							
CRYPTO CABLES																	
260	10535-0701-A004	KY-99(A) Black Audio			•	•											
260	10535-0702-A1	KY-99(A) Data			•	•											
260	12041-7150-A1	Crypto Programming Cable							•		•	•					
260	12053-6400-03	P25 to KVL3000+ Adapter Cable, Handheld									•	•					
260	12053-6400-04	P25 to KVL3000+ Adapter Cable, AN/PRC-117G							•								
CLONING CABLES																	
261	12013-0720-AXXX	Cloning Cable, Front Panel	•	•													
261	10513-0700-A006	Cloning Cable, Rear Panel	•	•													
AC POWER CABLES																	
261	10181-9831-XXX	AC Power Cable, RF-5051/5054/5055															
261	10181-9809-009	AC Power Cable, RF-5051/5054/5055, UK/Ireland															
261	10181-9814-009	AC Power Cable, RF-5051/5054/5055, EU (CEE 7)															
261	12011-0130-01	AC to DC Converter with DC Cables									•	•	•	•			•
DC POWER CABLES																	
261	10570-0716-AXXX	DC Power Cable, Power Supply to Vehicular Adapter Unit (VAU)															
261	10570-0717-AXXX	DC Power Cable, Power Supply to Vehicular Adapter Unit (VAU)	•	•													
261	10570-0720-XX	DC Install Kit, Vehicular	•	•													
261	12027-0205-A020	DC Power Cable, RF-5851 Vehicular Configuration	•	•	•	•	•										
261	12011-0110-AXXX	DC Power Cable, 4-pos Connector									•	•	•	•			•
262	10181-9826-XXX	DC Power Cable, HF Vehicular															
262	10181-9828-XXX	DC Power Cable, HF Vehicular															
262	10181-9833-XXX	DC Power Cable, Power Supply to Amplifier															
262	10181-9834-XXX	DC Power Cable, Power Supply to Amplifier															
262	10181-9836-XXX	DC Power Cable, DC Jumper Cable															
262	12050-4006-A006	DC Power Cable, Cigar Lighter									•	•	•	•			•
262	12050-4008-A006	DC Power Cable, Banana Plugs, Alligator Clips									•	•	•	•			•

PAGE	PRODUCT NUMBER	PRODUCT NAME	MANPACK RADIOS								HANDHELD RADIOS						
			AN/PRC-117F(C)	RF-5800M-MP	AN/PRC-150(C)	RF-5800H-MP	RF-7800H-MP	RF-5800V-MP	AN/PRC-117G	RF-7800M-MP	AN/PRC-152(C)	RF-310M-HH	RF-5800M-HH	RF-5800V-HH	RF-7800M-HH	RF-7800S	RF-7800V-HH
AUDIO AND SPEAKER CABLES																	
262	10372-1230	Microphone "Y" Adapter			•	•	•										
262	11042-0104-AXXX	Cable Assembly, Handset Extension	•	•	•	•	•	•	•	•	•	•	•	•			•
262	10570-3573-AXXX	Speaker Audio, RF-5982-SA	•	•	•	•	•	•	•	•	•	•	•	•			•
262	10570-3572-AXXX	Speaker Power, RF-5982/RF-5910	•	•	•	•	•		•	•							
263	10570-3574-AXXX	Speaker Power, RF-5982/4-pin Power															
263	10570-3575-AXXX	Speaker Power, RF-5982/3-pin Power															
263	10570-3577-AXXX	Speaker Power, RF-5982/RF-5850	•	•	•	•	•	•	•	•	•	•	•	•			•
263	10535-0707-AXXX	Speaker Audio, RF-5980-SAXXX	•	•	•	•	•	•	•	•	•	•	•	•			•
263	10535-0706-AXXX	Speaker Power, RF-5980/4-pin Power															
263	10535-0708-AXXX	Speaker Power, RF-5980/Pigtail Leads															
263	10535-0713-AXXX	Speaker Power, RF-5980/3-pin Power															
263	11068-0018-AXXX	Speaker Power, RF-5980/RF-5850	•	•	•	•	•	•									
POWER AMPLIFIER CONTROL CABLES																	
263	10535-0730-AX	Remote and PA Control "Y" Cable			•	•	•										
264	10535-0720-AXXX	PA Control Cable			•	•	•										
COUPLER CONTROL CABLES																	
264	12020-1460-AXXX	Coupler Control Cable, RF-5382H-CU001			•								•				
264	10181-9823-XXX	Coupler Control Cable, RF-382A-15															
COAXIAL CABLES																	
264	10369-7210-XXX	Coaxial Cable, RG-213, Type N to Type N							•	•							
264	10369-7211-XXX	Coaxial Cable, RG-213, Type N to BNC	•	•	•	•	•	•	•	•							
264	10369-7212-XXX	Coaxial Cable, RG-213, BNC to BNC	•	•	•	•	•	•	•	•							
265	10513-0810-AXXX	Coaxial Cable, Low Loss, Type N to Type N															
265	10513-0811-AXXX	Coaxial Cable, Low Loss, Type N to BNC	•	•	•	•	•	•	•	•							
265	10513-0812-AXXX	Coaxial Cable, Low Loss, BNC to BNC	•	•	•	•	•	•	•	•							
265	12011-0120-AXXX	Coaxial Cable, RG-400, TNC to BNC							•		•	•	•	•			•
265	12053-1400-A2	Coaxial Cable, RT Angle Connector, TNC to BNC									•	•	•	•			•
265	10181-9824-XXX	Coaxial Cable, RG-213, Type N to N															
265	11080-3918-A050	Coaxial Cable, RG-400, BNC to Type N (F)	•						•								
265	11080-3933-AXXX	Coax Cable, RG-142, TNC (RT Angle) to BNC	•						•								
266	11080-3934-AXXX	Coax Cable, RG-142, Type N (RT Angle) to BNC	•						•								
TEST/PRE-TERMINATED CABLES																	
266	10511-0707-A006	Generic Audio/Data Cable, J3	•	•	•	•	•	•									
266	12041-7250-A006	Test Cable, 32-pin									•	•					
266	12043-2820-A015	Cable Assembly, J3, Full Pin-out							•	•							

ACCESSORIES

PAGE	PRODUCT NUMBER	PRODUCT NAME	MANPACK AMPLIFIERS									HANDHELD AMPLIFIERS			
			AM-7588/-7588A	RF-5800M-V0XXX	RF-5211VSM-050, 20 WATT HF	RF-5211VSM-052, 20 WATT HF	125 WATT HF	150 WATT HF	400 WATT HF	RF-5800V-B2XX, RF-5800V-V2XX, RF-5800V-MP	RF-7800M-VXXX	RF-300M-HVXXX, AN/VRC-110	RF-5800M-V5XX	RF-5800V-V5XX	RF-7800V-V50X
ASYNCHRONOUS (RS-232)/SYNCHRONOUS (DTE) "Y" CABLES															
257	10513-0730-AX	Data and Remote Control "Y" Cable, J3	•	•											
257	10518-1694-AXXX	Data and Remote Control "Y" Cable, J3													
257	12043-2730-A006	Data and Remote Control "Y" Cable													
257	12041-7110-A1	Data and Remote Control "Y" Cable										•			
257	12011-0220-A006	Data and Remote Control "Y" Cable											•	•	
257	12067-7110-A66	Data and Remote Control "Y" Cable													•
257	10518-1697-A006	Data/Remote Control "Y" Cable with Vehicular Adapter Unit (VAU)								•					
ASYNCHRONOUS OR SYNCHRONOUS (RS-232) DATA CABLES															
257	10535-0770-AXXX	Synchronous/Asynchronous Data Cable, DB 9													
REMOTE CONTROL/PROGRAMMING CABLES															
257	10513-0750-A006	Remote/Data Cable, J3	•	•											
257	10513-0740-AXXX	Remote/Data Cable, J6													
258	10535-0740-A006	Remote/Data Cable, J6	•	•											
258	12011-0200-01	Configuration Fill Cable											•	•	
USB CABLES/ADAPTERS															
258	12067-5600-01	USB Configuration Adapter, Type A													•
258	12067-5700-01	USB Configuration Adapter, Mini AB													•
PPP CABLES															
258	10513-0710-AXXX	PPP Cable	•												
258	10535-0775-AXXX	PPP Cable													
258	10512-0775-A006	PPP Cable		•											
258	12041-7180-A006	PPP Cable										•			
258	12011-0775-A006	PPP Cable											•	•	
258	12043-2710-AXXX	PPP Cable													
ETHERNET CABLES															
259	12043-2760-AXXX	Ethernet Networking Cable													
259	12069-0020-XX	Broadband Ethernet Cable													
259	12067-5220-01	Ethernet Programming/Remote Control Cable													•
KDU EXTENSION CABLES															
259	10511-0704-XXX	KDU Extension Cable, Side Connection										•	•	•	
259	11071-0205-AXXX	KDU Extension Cable, Rear Connection										•	•	•	
PLGR/DAGR/NEMA GPS CABLES															
259	12005-0730-A006	PLGR/DAGR Interface Cable	•												
259	12005-0740-A006	NEMA Interface Cable	•												
259	12041-7170-AXXX	GPS Interface Cable										•			
259	12006-4241-AXXX	Coaxial Cable, GPS Antenna													
260	10511-0730-AXXX	Coaxial Cable, GPS/Multiband Antenna													
260	E75-0017-180	GPS Antenna Coaxial Extension Cable		•											•

			MANPACK AMPLIFIERS									HANDHELD AMPLIFIERS			
PAGE	PRODUCT NUMBER	PRODUCT NAME	AM-7588/-7588A	RF-5800M-V0XXX	RF-5211VSM-050, 20 WATT HF	RF-5211VSM-052, 20 WATT HF	125 WATT HF	150 WATT HF	400 WATT HF	RF-5800V-B2XX, RF-5800V-V2XX, RF-5800V-MP	RF-7800M-VXXX	RF-300M-HVXXX, AN/VRC-110	RF-5800M-V5XX	RF-5800V-V5XX	RF-7800V-V50X
RETRANSMISSION CABLES															
260	12005-0717-AXXX	Retransmission Cable Assembly	•	•											
260	10511-0717-01	Retransmission Cable Assembly	•	•											
260	12041-7130-A1	Retransmission Cable Assembly										•			
260	12011-0230-AXXX	Retransmission Cable Assembly											•	•	
260	12067-5250-01	Retransmission Cable Assembly													•
260	12043-2740-AXXX	Digital Retransmission Cable Assembly													
CRYPTO CABLES															
260	10535-0701-A004	KY-99(A) Black Audio													
260	10535-0702-A1	KY-99(A) Data													
260	12041-7150-A1	Crypto Programming Cable													
260	12053-6400-03	P25 to KVL3000+ Adapter Cable, Handheld										•			
260	12053-6400-04	P25 to KVL3000+ Adapter Cable, AN/PRC-117G													
CLONING CABLES															
261	12013-0720-AXXX	Cloning Cable, Front Panel	•	•											
261	10513-0700-A006	Cloning Cable, Rear Panel	•	•											
AC POWER CABLES															
261	10181-9831-XXX	AC Power Cable, RF-5051/5054/5055	•	•	•	•	•	•	•	•	•	•	•	•	•
261	10181-9809-009	AC Power Cable, RF-5051/5054/5055, UK/Ireland	•	•	•	•	•	•	•	•	•	•	•	•	•
261	10181-9814-009	AC Power Cable, RF-5051/5054/5055, EU (CEE 7)	•	•	•	•	•	•	•	•	•	•	•	•	•
261	12011-0130-01	AC to DC Converter with DC Cables													
DC POWER CABLES															
261	10570-0716-AXXX	DC Power Cable, Power Supply to Vehicular Adapter Unit (VAU)	•	•						•	•	•	•	•	•
261	10570-0717-AXXX	DC Power Cable, Power Supply to Vehicular Adapter Unit (VAU)	•	•						•	•	•	•	•	•
261	10570-0720-XX	DC Install Kit, Vehicular	•	•						•	•	•	•	•	•
261	12027-0205-A020	DC Power Cable, RF-5851 Vehicular													
261	12011-0110-AXXX	DC Power Cable, 4-pos Connector			•										
262	10181-9826-XXX	DC Power Cable, HF Vehicular				•	•	•							
262	10181-9828-XXX	DC Power Cable, HF Vehicular							•						
262	10181-9833-XXX	DC Power Cable, Power Supply to Amplifier				•	•	•							
262	10181-9834-XXX	DC Power Cable, Power Supply to Amplifier							•						
262	10181-9836-XXX	DC Power Cable, DC Jumper Cable							•						
262	12050-4006-A006	DC Power Cable, Cigar Lighter													
262	12050-4008-A006	DC Power Cable, Banana Plugs, Alligator Clips													

ACCESSORIES

			MANPACK AMPLIFIERS									HANDHELD AMPLIFIERS			
PAGE	PRODUCT NUMBER	PRODUCT NAME	AM-7588/-7588A	RF-5800M-V0XXX	RF-5211VSM-050, 20 WATT HF	RF-5211VSM-052, 20 WATT HF	125 WATT HF	150 WATT HF	400 WATT HF	RF-5800V-B2XX, RF-5800V-V2XX, RF-5800V-MP	RF-7800M-VXXX	RF-300M-HVXXX, AN/VRC-110	RF-5800M-V5XX	RF-5800V-V5XX	RF-7800V-V50X
AUDIO AND SPEAKER CABLES															
262	10372-1230	Microphone "Y" Adapter													
262	11042-0104-AXXX	Cable Assembly, Handset Extension													
262	10570-3573-AXXX	Speaker Audio, RF-5982-SA													
262	10570-3572-AXXX	Speaker Power, RF-5982/RF-5910													
263	10570-3574-AXXX	Speaker Power, RF-5982/4-pin Power	•	•			•	•	•	•	•	•	•	•	•
263	10570-3575-AXXX	Speaker Power, RF-5982/3-pin Power				•		•			•	•	•	•	•
263	10570-3577-AXXX	Speaker Power, RF-5982/RF-5850													
263	10535-0707-AXXX	Speaker Audio, RF-5980-SAXXX													
263	10535-0706-AXXX	Speaker Power, RF-5980/4-pin Power	•	•			•	•	•	•	•	•	•	•	•
263	10535-0708-AXXX	Speaker Power, RF-5980/Pigtail Leads	•	•	•	•	•	•	•	•	•	•	•	•	•
263	10535-0713-AXXX	Speaker Power, RF-5980/3-pin Power				•		•			•	•	•	•	•
263	11068-0018-AXXX	Speaker Power, RF-5980/RF-5850													
POWER AMPLIFIER CONTROL CABLES															
263	10535-0730-AX	Remote and PA Control "Y" Cable						•	•						
264	10535-0720-AXXX	PA Control Cable						•	•						
COUPLER CONTROL CABLES															
264	12020-1460-AXXX	Coupler Control Cable, RF-5382H-CU001				•	•	•							
264	10181-9823-XXX	Coupler Control Cable, RF-382A-15					•	•	•						
COAXIAL CABLES															
264	10369-7210-XXX	Coaxial Cable, RG-213, Type N to Type N	•	•				•		•	•	•	•	•	
264	10369-7211-XXX	Coaxial Cable, RG-213, Type N to BNC	•	•				•		•	•	•	•	•	•
264	10369-7212-XXX	Coaxial Cable, RG-213, BNC to BNC	•	•		•	•	•	•	•	•	•	•	•	•
265	10513-0810-AXXX	Coaxial Cable, Low Loss, Type N to Type N				•	•	•	•		•				
265	10513-0811-AXXX	Coaxial Cable, Low Loss, Type N to BNC	•	•				•		•	•	•	•	•	•
265	10513-0812-AXXX	Coaxial Cable, Low Loss, BNC to BNC	•	•		•	•	•	•	•	•	•	•	•	•
265	12011-0120-AXXX	Coaxial Cable, RG-400, TNC to BNC									•				
265	12053-1400-A2	Coaxial Cable, RT Angle Connector, TNC to BNC										•	•	•	•
265	10181-9824-XXX	Coaxial Cable, RG-213, Type N to N				•	•	•	•						
265	11080-3918-A050	Coaxial Cable, RG-400, BNC to Type N (F)	•								•	•			
265	11080-3933-AXXX	Coax Cable, RG-142, TNC (RT Angle) to BNC	•								•	•			
265	11080-3934-AXXX	Coax Cable, RG-142, Type N (RT Angle) to BNC	•								•	•			
TEST/PRE-TERMINATED CABLES															
266	10511-0707-A006	Generic Audio/Data Cable, J3													
266	12041-7250-A006	Test Cable, 32-pin										•			
266	12043-0820-A015	Cable Assembly, J3, Full Pin-out									•				

ASYNCHRONOUS (RS-232)/SYNCHRONOUS (DTE) "Y" CABLES

DATA AND REMOTE CONTROL "Y" CABLES, J3

10513-0730-AX

This cable is used to connect manpack radios to a computer for asynchronous (RS-232) and synchronous (DTE) data applications such as RF-3700H HUITS or RF-6760W WMT. This cable can also be used with either the RF-6550M Radio Programming Application (RPA) or the RF-6650M Communications Planning Application (CPA). This "Y" cable features 25-pin and 9-pin D connectors for attaching to data devices. Standard length is 6 feet (~1.8 meters).

Specify cable length by replacing 'AX' above:

A1	6 ft. (~1.8 m)
A2	10 ft. (~3 m)

10518-1694-AXXX

This cable is used to connect manpack radios to a computer for asynchronous (RS-232) and synchronous (DTE) data applications such as RF-3700H HUITS or RF-6760W WMT. This cable can also be used with the RF-6550H Radio Programming Application (RPA). This "Y" cable features 25-pin and 9-pin D connectors for attaching to data devices. Standard length is 6 feet (~1.8 meters).

Specify cable length by replacing 'AXXX' above:

A006	6 ft. (~1.8 m)	A015	15 ft. (~4.6 m)
A010	10 ft. (~3 m)	A020	20 ft. (~6 m)

DATA AND REMOTE CONTROL "Y" CABLES

12043-2730-A006

This cable is used to connect manpack radios to a computer for asynchronous (RS-232) and synchronous (DTE) data applications such as the RF-6760W WMT. This cable can also be used with either the RF-6550M Radio Programming Application (RPA) or the RF-6650M Communications Planning Application (CPA). This "Y" cable features 25-pin and 9-pin D connectors for attaching to data devices. Length is 6 feet (~1.8 meters).

12041-7110-A1

This cable is used to connect handheld radios to a computer for asynchronous (RS-232) and synchronous (DTE) data applications such as RF-3700H HUITS or RF-6760W WMT. This cable can also be used with either the RF-6550M Radio Programming Application (RPA) or the RF-6650M Communications Planning Application (CPA). This "Y" cable features 25-pin and 9-pin D connectors for attaching to data devices. Length is 6 feet (~1.8 meters).

12011-0220-A006

This cable is used to connect Falcon II® handheld radios and amplifiers to a computer for asynchronous (RS-232) and synchronous (DTE) data applications such as the RF-6760W WMT. This cable can also be used with the RF-6550M Radio Programming Application (RPA). This "Y" cable features 25-pin and 9-pin D connectors for attaching to data devices. Length is 6 feet (~1.8 meters).

12067-7110-A66

This cable is used to connect a handheld radio and amplifier to a computer for asynchronous (RS-232) and synchronous (DTE) data applications such as the RF-6760W WMT. This "Y" cable features 25-pin and 9-pin D connectors for attaching to data devices. Length is 5.5 feet (~1.7 meters).

DATA/REMOTE CONTROL "Y" CABLE WITH VEHICULAR ADAPTER UNIT (VAU)

10518-1697-A006

This cable is used to connect the RF-5800V-MP VHF manpack radio and Vehicular Adapter Unit (VAU) to a computer for asynchronous (RS-232) and synchronous (DTE) data applications such as RF-3700H HUITS or RF-6760W WMT. This cable can also be used with the RF-6550V Radio Programming Application (RPA). This "Y" cable features 25-pin and 9-pin D connectors for attaching to data devices and a connection to the VAU. Length is 6 feet (~1.8 meters).

ASYNCHRONOUS OR SYNCHRONOUS (RS-232) DATA CABLES

SYNC/ASYNC DATA CABLE, DB 9

10535-0770-AXXX

This cable's data terminal connection utilizes a 9-pin D connector. The cable allows the DTE interface of RS-232 synchronous or asynchronous data to the radio internal modem. This cable is typically used for RF-3700H HUITS operation. Standard length is 6 feet (~1.8 meters).

Specify cable length by replacing 'AXXX' above:

A006	6 ft. (~1.8 m)
A015	15 ft. (~4.6 m)

REMOTE CONTROL/PROGRAMMING CABLES

REMOTE/DATA CABLE, J3

10513-0750-A006

This cable supports remote control and programming capability for either the RF-6550M Radio Programming Application (RPA) or the RF-6650M Communications Planning Application (CPA) and control systems on the data J3 connector. The data terminal connection utilizes a 9-pin D connector. Standard length is 6 feet (~1.8 meters).

REMOTE/DATA CABLES, J6

10513-0740-AXXX

This cable supports remote control and programming capability for either the Radio Programming Application (RPA) or the Communications Planning Application (CPA) and control systems on the accessory J6 connector. The data terminal connection utilizes a 9-pin D connector. Standard length is 6 feet (~1.8 meters).

Specify cable length by replacing 'AXXX' above:

A006	6 ft. (~1.8 m)
A015	15 ft. (~4.6 m)

10535-0740-A006

This cable supports remote control and programming capability for the Radio Programming Application (RPA) and control systems on the accessory J6 connector. The data terminal connection utilizes a 9-pin D connector. Length is 6 feet (~1.8 meters).

CONFIGURATION FILL CABLE

12011-0200-01

This cable is used for loading the Radio Programming Application (RPA) into Falcon II® handheld radios. The cable is actually a kit that contains a 9 D-to-9 D cable assembly and 9 D-to-18 pos adapter that connects to the radio. Length is 6 feet (~1.8 meters).

PROGRAMMING/DATA CABLE

12055-0710-AXXX

Cable for the RF-7800S Secure Personal Radio (SPR) family and RF-7400E-VP Tactical Video Processor (TVP). It connects to the SPR-DAT port and to a standard USB port (Type A).

Specify cable length by replacing 'AXXX' above:

A003	3 ft. (~0.9 m)
A004	4 ft. (~1.2 m)
A006	6 ft. (~1.8 m)

USB CABLES/ADAPTERS

USB PROGRAMMING CABLE

12043-2750-A006

The USB Programming Cable is used to connect manpack radios to a computer when loading waveforms and plan data. The cable can be used with either the RF-6550M Radio Programming Application (RPA) or the RF-6650M Communications Planning Application (CPA). A USB interface permits drag-and-drop radio programming. Length is 6 feet (~1.8 meters).

USB CONFIGURATION ADAPTER, TYPE A

12067-5600-01

Used for handheld radio configuration, fill and programming, this cable also allows connection of USB mass storage devices via a USB Type A connector. The cable can be used with commercially available USB cables.

USB CONFIGURATION ADAPTER, TYPE MINI AB

12067-5700-01

Used for handheld radio configuration, fill and programming, this cable also allows connection of USB mass storage devices via a USB Mini Type AB connector. The cable can be used with commercially available USB cables.

PPP CABLES

PPP CABLES

10513-0710-AXXX

This cable is an asynchronous PPP cable for use with the High Performance Waveform (HPW) and Internet Protocol (IP) functions on the AN/PRC-117F(C). It connects to the front-panel J3 data and a COM port on a computer using a 9-pin D style connector. Standard length is 6 feet (~1.8 meters).

Specify cable length by replacing 'AXXX' above:

A006	6 ft. (~1.8 m)
A015	15 ft. (~4.6 m)
A025	25 ft. (~7.6 m)

10535-0775-AXXX

This cable is typically used to connect the RF-6760W or RF-6750W terminal and an HF radio, as well as the Radio Programming Application (RPA) and RF-6705 TacChat. It uses the PPP/RDP RS-232 link for radio control and asynchronous data communications. Standard length is 6 feet (~1.8 meters).

Specify cable length by replacing 'AXXX' above:

A003	3 ft. (~0.9 m)	A015	15 ft. (~4.6 m)
A006	6 ft. (~1.8 m)	A025	25 ft. (~7.6 m)
A010	10 ft. (~3 m)	A050	50 ft. (~15 m)

10512-0775-A006

This cable is typically used to connect the RF-6760W or RF-6750W terminal and a VHF radio, as well as the Radio Programming Application (RPA) and RF-6705 TacChat. It uses the PPP/RDP RS-232 link for radio control and asynchronous data communications. Length is 6 feet (~1.8 meters).

12041-7180-A006

This cable is used to connect an external computer to the AN/PRC-152(C) radio for data applications such as the Harris RF-6760W-HPW Wireless Messaging Terminal. Length is 6 feet (~1.8 meters).

12011-0775-A006

This cable is typically used to connect the RF-6750W software applications and a Falcon II® handheld radio, as well as the Radio Programming Application (RPA) and RF-6705 TacChat. It uses the PPP/RDP RS-232 link for radio control and asynchronous data communications. Standard length is 6 feet (~1.8 meters).

12043-2710-AXXX

This cable is used to connect an external computer to the AN/PRC-117G manpack radio for data applications such as the Harris RF-6760W-HPW Wireless Messaging Terminal. Standard length is 6 feet (~1.8 meters).

Specify cable length by replacing 'AXXX' above:

A006	6 ft. (~1.8 m)
A015	15 ft. (~4.6 m)
A025	25 ft. (~7.6 m)

ETHERNET CABLES

ETHERNET NETWORKING CABLE

12043-2760-AXXX

This cable is used by the AN/PRC-117G manpack radio for Ethernet networking. The cable consists of a manpack data connector and a RJ-45 Ethernet connector. Standard length is 6 feet (~1.8 meters).

Specify cable length by replacing 'AXXX' above:

A006	6 ft. (~1.8 m)
A015	15 ft. (~4.6 m)
A025	25 ft. (~7.6 m)

12043-2765-A006

This cable is used by the AN/PRC-117G manpack radio for Ethernet networking. The cable consists of a manpack data connector and a RJ-45 Female Ethernet connector. Standard length is 6 feet (~1.8 meters).

SPR ETHERNET ADAPTIVE CABLE

12055-0714-A003

Cable for the RF-7800S-TR Team Radio and the RF-7800S-V Vehicle Radio. It connects to the SPR-DAT port and has a standard Ethernet jack (RJ-45).

BROADBAND ETHERNET CABLE

12069-0020-XX

Double-shielded CAT-5e outdoor cables with a ruggedized, quick-locking RJ-45 based Ethernet connector compatible with the RF-7800W-OU500 HCLOS Radio. Standard length is 49 feet (~14.9 meters).

Specify cable length by replacing 'XX' above:

01	49 ft. (~14.9 m)
02	99 ft. (~30.2 m)
03	299 ft. (~91 m)

ETHERNET PROGRAMMING/REMOTE CONTROL CABLE

12067-5220-01

Used for handheld radio configuration, fill, programming, IP data and remote control, the cable consists of a radio connector to RJ-45 plug. Standard length is 6 feet (~1.8 meters).

KDU EXTENSION CABLES

KDU EXT CABLE, SIDE CONNECTION

10511-0704-XXX

This cable interconnects a Falcon II® manpack radio Keypad/Display Unit (KDU) side connector with the radio's KDU connector. Standard length is 6 feet (~1.8 meters); this cable is included with all Falcon II manpack radios.

Specify cable length by replacing 'XXX' above:

012	6 ft. (~1.8 m)	080	40 ft. (~12 m)
020	10 ft. (~3 m)	100	50 ft. (~15 m)
040	20 ft. (~6 m)	150	75 ft. (~23 m)
050	25 ft. (~7.6 m)	200	100 ft. (~30 m)
066	33 ft. (~10 m)	300	150 ft. (~46 m)

KDU EXT CABLE, REAR CONNECTION

11071-0205-AXXX

This cable interconnects a Falcon II® manpack radio's Keypad/Display Unit (KDU) rear connector with the radio's KDU connector. Standard length is 6 feet (~1.8 meters).

Specify cable length by replacing 'AXXX' above:

A006	6 ft. (~1.8 m)	A040	40 ft. (~12 m)
A010	10 ft. (~3 m)	A050	50 ft. (~15 m)
A012	12 ft. (~3.7 m)	A075	75 ft. (~23 m)
A015	15 ft. (~4.6 m)	A110	110 ft. (~33.5 m)
A020	20 ft. (~6 m)		

PLGR/DAGR/NEMA GPS CABLES

PLGR/DAGR INTERFACE CABLE

12005-0730-A006

Interface cable to connect a PLGR/DAGR GPS device to the radio via the front-panel J2 connector. Length is 6 feet (~1.8 meters).

NEMA INTERFACE CABLE

12005-0740-A006

Interface cable to connect a NEMA-compatible GPS receiver to the radio via the front-panel J2 connector. GPS end is a 9-pin D male connector. Length is 6 feet (~1.8 meters).

GPS INTERFACE CABLE

12041-7170-AXXX

This cable is used to connect an external GPS receiver to the AN/PRC-152(C) handheld radio for Time-of-Day synchronization and position reporting operations. The cable is compatible with PLGR and DAGR GPS receivers. Standard length is 6 feet (~1.8 meters).

Specify cable length by replacing 'AXXX' above:

A006	6 ft. (~1.8 m)
A015	15 ft. (~4.6 m)
A030	30 in. (~76.2 cm)

COAXIAL CABLE, GPS ANTENNA

12006-4241-AXXX

The GPS Coaxial Cable is for use with RF-3071-ATXXX L1/L2 Active GPS Vehicular Antennas (cable is supplied with the antenna). Standard length is 12 feet (~3.7 meters).

Specify cable length by replacing 'AXXX' above:

A003	3 ft. (~0.9 m)	A008	8 ft. (~2.4 m)
A006	6 ft. (~1.8 m)	A012	12 ft. (~3.7 m)

ACCESSORIES

COAXIAL CABLE, GPS/MULTIBAND ANTENNA

10511-0730-AXXX

Interconnects transceivers with internal GPS devices to RF-387-AT002 and RF-3183-AT antennas' GPS connectors. The connectors are SMB male on the transceiver end and SMA male on the antenna end. Standard length is 25 feet (~7.6 meters).

Specify cable length by replacing 'AXXX' above:

A015	15 ft. (~4.6 m)	A035	35 ft. (~10.7 m)
A025	25 ft. (~7.6 m)	A050	50 ft. (~15 m)

COAXIAL CABLE, GPS ANTENNA EXTENSION

E75-0017-180

Interconnects transceivers with internal GPS devices to "hockey puck" type GPS antennas. The connectors are SMB male on the transceiver end and SMB female on the antenna end. Length is 15 feet (~4.6 meters).

RETRANSMISSION CABLES

RETRANSMISSION CABLE ASSEMBLIES

12005-0717-AXXX

Interconnects two radios via the J3 data connector to provide retransmission capability. Standard length is 6 feet (~1.8 meters).

Specify cable length by replacing 'AXXX' above:

A002	2 ft. (~0.6 m)	A024	24 ft. (~7.3 m)
A006	6 ft. (~1.8 m)	A030	30 ft. (~9 m)
A012	12 ft. (~3.7 m)	A050	50 ft. (~15 m)
A018	18 ft. (~5.5 m)	A075	75 ft. (~23 m)

10511-0717-01

Interconnects two radios via the J3 data connector to provide retransmission capability. Cable length is 50 feet (~15 meters).

12041-7130-AX

The Retransmission Cable Assembly is used when connecting two AN/PRC-152(C) radios in a repeater configuration. A high-power retransmission system can be created when using this cable with the AN/VRC-110 or RF-300M-HV power amplifiers. Internal collocation filtering in the amplifier reduces the need for external filters.

Specify cable length by replacing 'AX' above:

A1	50 ft. (~15 m)
A2	32.5 in. (~82.6 cm)

12011-0230-AXXX

The Retransmission Cable Assembly is used when connecting two Falcon II® handheld radios in a repeater configuration. A high-power retransmission system can be created when using this cable with the handheld radio power amplifiers. Standard length is 50 feet (~15 meters).

Specify cable length by replacing 'AXXX' above:

A002	2 ft. (~0.6 m)
A015	15 ft. (~4.6 m)
A050	50 ft. (~15 m)

12067-5250-01

The Retransmission Cable is used when connecting two RF-7800V-HH handhelds or RF-7800V-V50X amplifiers in a repeater configuration. Standard length is 50 feet (~15 meters).

DIGITAL RETRANSMISSION CABLE ASSEMBLY

12043-2740-AXXX

The Digital Retransmission Cable is used when connecting two AN/PRC-117G manpack radios in a repeater configuration. Standard length is 6 feet (~1.8 meters).

Specify cable length by replacing 'AXXX' above:

A003	3 ft. (~0.9 m)
A006	6 ft. (~1.8 m)
A050	50 ft. (~15 m)

CRYPTO CABLES

KY-99(A) BLACK AUDIO

10535-0701-A004

This cable facilitates RF-6750W or RF-6760W operation with the HF transceiver and KY-99 crypto. It is a "Y" cable with a DB-25 terminal connector, HF transceiver data port connection and a KY-99 black audio connection. Length is 4 feet (~1.2 meters).

KY-99(A) DATA

10535-0702-A1

This cable interconnects the KY-99(A) black data to the HF radio. Length is 6 feet (~1.8 meters).

CRYPTO PROGRAMMING CABLE

12041-7150-A1

The Crypto Programming Cable is used when programming the Sierra II™ reprogrammable cryptographic module embedded within the AN/PRC-152(C) radio. The cable contains a DB-9 connector for interfacing to the crypto loader and a 6-pin circular connector for attaching to the radio audio/fill connector. Length is 6 feet (~1.8 meters).

P25 TO KVL3000+ ADAPTER CABLE, HANDHELD

12053-6400-03

This cable is used to connect the KVL3000+ to the AN/PRC-152(C) and RF-310M-HH handheld radios for loading APCO-P25 keys. Use of the adapter also allows loading of type III P25 DES and AES keys.

P25 TO KVL3000+ ADAPTER CABLE, AN/PRC-117G

12053-6400-04

This cable is used to connect the KVL3000+ to the AN/PRC-117G manpack radio for loading APCO-P25 keys. Use of the adapter also allows loading of type III P25 DES and AES keys.

CLONING CABLES

CLONING CABLE, FRONT PANEL

12013-0720-AXXX

This cable supports cloning of the AN/PRC-117F(C) and RF-5800M-MP radios via the J6 accessory connector. Standard length is 6 feet (~1.8 meters).

Specify cable length by replacing 'AXXX' above:

A006	6 ft. (~1.8 m)
A010	10 ft. (~3 m)
A025	25 ft. (~7.6 m)

CLONING CABLE, REAR PANEL

10513-0700-A006

This cable supports cloning of the radio via the J9 rear-panel connector. Standard length is 6 feet (~1.8 meters).

AC POWER CABLES

AC POWER CABLE, RF-5051/5054/5055

10181-9831-XXX

NEMA 5-15 U.S. AC power cable for use with the RF-5051-PSXXX, RF-5054-PSXXX, and RF-5055PS AC/DC power supplies. A 9-foot (~2.7-meter) cable is provided with each power supply.

Specify cable length by replacing 'XXX' above:

004	4 ft. (~1.2 m)	015	15 ft. (~4.6 m)
006	6 ft. (~1.8 m)	025	25 ft. (~7.6 m)
008	8 ft. (~2.4 m)	030	30 ft. (~9 m)
009	9 ft. (~2.7 m)	050	50 ft. (~15 m)
010	10 ft. (~3 m)		

AC POWER CABLE, RF-5051/5054/5055, UK/IRELAND

10181-9809-009

For radio systems using the RF-5051-PSXXX, RF-5055PS, or RF-5054PS-400C AC power supplies, the included power cables are provided with a U.S. power connector (NEMA 5-15P). UK/Ireland power cables may be substituted at no additional charge if specified when the order is placed. Length is 9 feet (~2.7 meters).

AC POWER CABLE, RF-5051/5054/5055, EU (CEE 7)

10181-9814-009

For radio systems using the RF-5051-PSXXX, RF-5055PS, or RF-5054PS-400C AC power supplies, the included power cables are provided with a U.S. power connector (NEMA 5-15P). European CEE 7 power cables may be substituted at no additional charge if specified when the order is placed. Length is 9 feet (~2.7 meters).

AC TO DC CONVERTER WITH DC CABLES

12011-0130-01

A 115/230 VAC to DC converter with cables, most commonly used with the RF-5912-PS001 Handheld Power Adapter and RF-5852-CH011 Battery Charger for handheld radios.

DC POWER CABLES

DC POWER CABLES, POWER SUPPLY TO VEHICULAR ADAPTER UNIT (VAU)

10570-0716-AXXX

Connects DC power supplies to various Vehicular Adapter Units (VAUs) and amplifiers via 4-pin Mil circular connectors. Maximum recommended length is 25 feet (~7.6 meters). Standard length is 6 feet (~1.8 meters).

Specify cable length by replacing 'AXXX' above:

A002	2 ft. (~0.6 m)	A012	12 ft. (~3.7 m)
A003	3 ft. (~0.9 m)	A020	20 ft. (~6 m)
A006	6 ft. (~1.8 m)	A025	25 ft. (~7.6 m)
A008	8 ft. (~2.4 m)		

10570-0717-AXXX

Connects DC power supplies to various Vehicular Adapter Units (VAUs) and amplifiers via 4-pin Mil circular connectors. Maximum recommended length is 25 feet (~7.6 meters). Standard length is 12 feet (~3.7 meters).

Specify cable length by replacing 'AXXX' above:

A002	2 ft. (~0.6 m)	A012	12 ft. (~3.7 m)
A003	3 ft. (~0.9 m)	A020	20 ft. (~6 m)
A006	6 ft. (~1.8 m)	A025	25 ft. (~7.6 m)
A008	8 ft. (~2.4 m)		

DC INSTALL KIT, VEHICULAR

10570-0720-XX

Interconnects single vehicular adapter kits and power amplifiers to vehicle power system. A mating power connector is on the vehicular adapter/power amplifier end; the vehicular end is left unterminated. Includes in-line fuse kit. Replace 'XX' with '01' for 20 foot (~6 meter) cable or '02' for 35 foot (~10.7 meter).

DC POWER CABLE, RF-5851 VEHICULAR

12027-0205-A020

Connects RF-5851-AD001 DC Power Adapters to vehicular power via a mating connector on adapter end and pigtail leads on vehicle end. Length is 20 feet (~6 meters).

DC POWER CABLE, 4-POS CONNECTOR

12011-0110-AXXX

DC power cable for use with the RF-5211VSM-050, RF-5910-PS001, and RF-5852-CH011. Cable assembly is terminated at the mount end and has pigtail leads at the power supply end.

Specify cable length by replacing 'AXXX' above:

A006	6 ft. (~1.8 m)
A015	15 ft. (~4.6 m)
A025	25 ft. (~7.6 m)

DC POWER CABLES, HF VEHICULAR

10181-9826-XXX

Vehicular DC power cable for use with the RF-5211VSM-050 and the 125 watt and 150 watt HF systems. Cable assembly is terminated at the HF equipment end and has pigtail leads at the other end for connection to vehicle power.

Specify cable length by replacing 'XXX' above:

010	10 ft. (~3 m)
014	14 ft. (~4.2 m)
020	20 ft. (~6 m)

10181-9828-XXX

Vehicular DC power cable for use with 400 watt HF systems. Cable assembly is terminated at the HF equipment end and has pigtail leads at the other end for connection to vehicle power.

Specify cable length by replacing 'XXX' above:

010	10 ft. (~3 m)
020	20 ft. (~6 m)

DC POWER CABLES, POWER SUPPLY TO AMPLIFIER

10181-9833-XXX

Connects DC power supplies to various 20-, 125-, and 150 watt HF amplifiers via 4-pin Mil circular connectors. Maximum recommended length is 25 feet (~7.6 meters).

Specify cable length by replacing 'XXX' above:

001	1 ft. (~0.3 m)	010	10 ft. (~3 m)
002	2 ft. (~0.6 m)	012	12 ft. (~3.7 m)
003	3 ft. (~0.9 m)	015	15 ft. (~4.6 m)
004	4 ft. (~1.2 m)	020	20 ft. (~6 m)
006	6 ft. (~1.8m)	025	25 ft. (~7.6 m)
007	7 ft. (~2.1 m)		

10181-9834-XXX

Connects DC power supplies to 400 watt HF amplifiers via 4-pin Mil circular connectors. Maximum recommended length is 25 feet (~7.6 meters).

Specify cable length by replacing 'XXX' above:

002	2 ft. (~0.6 m)	008	8 ft. (~2.4 m)
004	4 ft. (~1.2 m)	010	10 ft. (~3 m)
006	6 ft. (~1.8 m)	013	13 ft. (~4 m)

DC POWER CABLE, DC JUMPER CABLE

10181-9836-XXX

Cable used to jumper together two RF-5051-PS001 DC Power Supplies for use with 400 watt HF systems. A 2 foot (~0.6 meter) cable (-002) is supplied with 400 watt systems.

Specify cable length by replacing 'XXX' above:

002	2 ft. (~0.6 m)	010	10 ft. (~3 m)
003	3 ft. (~0.9 m)	012	12 ft. (~3.7 m)

DC POWER CABLE, CIGAR LIGHTER

12050-4006-A006

DC power cable, with 4-pin connector on one end and "cigar lighter" plug on the other, for use in "commercial-type" vehicles equipped with this type plug. Most common use is with the RF-5912-PS001 Handheld Power Adapter and RF-5852-CH011 Battery Charger for handheld radios. Length is 6 feet (~1.8 meters).

DC POWER CABLE, BANANA PLUGS

12050-4008-A006

DC power cable with 4-pin connector on one end and "banana" plugs with alligator clip attachments on the other. Most common use is with the RF-5912-PS001 Handheld Power Adapter and RF-5852-CH011 Battery Charger for handheld radios. Length is 6 feet (~1.8 meters).

AUDIO AND SPEAKER CABLES

MICROPHONE "Y" ADAPTER

10372-1230

This cable provides duplicate audio interfaces of the RF-5800H-MP handset connector. A typical application is the simultaneous handset and CW-key operation. Length is 12 feet (~3.7 meters).

CABLE ASSEMBLY, HANDSET EXTENSION

11042-0104-AXXX

This cable connects to the radio audio connector and allows extension of the radio handset for remoting applications. The assembly has one male and one female audio connector.

Specify cable length by replacing 'AXXX' above:

A012	12 ft. (~3.7 m)
A015	15 ft. (~4.6 m)
A033	33 ft. (~10 m)

SPEAKER AUDIO, RF-5982-SA

10570-3573-AXXX

Audio cable for connection between the radio and the RF-5982-SA001 Tactical Amplified Speaker. Standard length is 10 feet (~3 meters).

Specify cable length by replacing 'AXXX' above:

A002	2 ft. (~0.6 m)	A015	15 ft. (~4.6 m)
A006	6 ft. (~1.8 m)	A020	20 ft. (~6 m)
A010	10 ft. (~3 m)	A075	75 ft. (~23 m)

SPEAKER POWER, RF-5982/RF-5910

10570-3572-AXXX

Speaker power cable for connection between the RF-5982-SA001 Tactical Amplified Speaker and RF-5910-PS Power Supply. Standard length is 10 feet (~3 meters).

Specify cable length by replacing 'AXXX' above:

A006	6 ft. (~1.8 m)	A015	15 ft. (~4.6 m)
A010	10 ft. (~3 m)	A020	20 ft. (~6 m)

SPEAKER POWER, RF-5982/4-PIN POWER

10570-3574-AXXX

Speaker power cable for connection between the RF-5982-SA001 Tactical Amplified Speaker and DC sources with M55181 4-pin power connectors. Standard length is 10 feet (~3 meters).

Specify cable length by replacing 'AXXX' above:

A006	6 ft. (~1.8 m)	A015	15 ft. (~4.6 m)
A010	10 ft. (~3 m)	A020	20 ft. (~6 m)

SPEAKER POWER, RF-5982/3-PIN POWER

10570-3575-AXXX

Speaker power cable for connection between the RF-5982-SA001 Tactical Amplified Speaker and 3-pin power connectors. Standard length is 10 feet (~3 meters).

Specify cable length by replacing 'AXXX' above:

A006	6 ft. (~1.8 m)	A015	15 ft. (~4.6 m)
A010	10 ft. (~3 m)	A020	20 ft. (~6 m)

SPEAKER POWER, RF-5982/RF-5850

10570-3577-AXXX

Speaker power cable for connection between the RF-5982-SA001 Tactical Amplified Speaker and RF-5850-PS Power Supply. Standard length is 10 feet (~3 meters).

Specify cable length by replacing 'AXXX' above:

A006	6 ft. (~1.8 m)	A015	15 ft. (~4.6 m)
A010	10 ft. (~3 m)	A020	20 ft. (~6 m)

SPEAKER AUDIO, RF-5980-SA

10535-0707-AXXX

Audio cable for connection between the radio and the RF-5980-SA001 Tactical Amplified Speaker. Standard length is 9 feet (~2.7 meters).

Specify cable length by replacing 'AXXX' above:

A002	2 ft. (~0.6 m)	A015	15 ft. (~4.6 m)
A003	3 ft. (~0.9 m)	A020	20 ft. (~6 m)
A005	5 ft. (~1.5 m)	A050	50 ft. (~15 m)
A006	6 ft. (~1.8 m)	A075	75 ft. (~23 m)
A009	9 ft. (~2.7 m)		

SPEAKER POWER, RF-5980/4-PIN POWER

10535-0706-AXXX

Speaker power cable for connection between the RF-5980-SA001 Tactical Amplified Speaker and DC sources with M55181 4-pin power connectors. Standard length is 9 feet (~2.7 meters).

Specify cable length by replacing 'AXXX' above:

A005	5 ft. (~1.5 m)	A020	20 ft. (~6 m)
A006	6 ft. (~1.8 m)	A025	25 ft. (~7.6 m)
A008	8 ft. (~2.4 m)	A040	40 ft. (~12 m)
A009	9 ft. (~2.7 m)	A050	50 ft. (~15 m)
A015	15 ft. (~4.6 m)	A075	75 ft. (~23 m)

SPEAKER POWER, RF-5980/PIGTAIL LEADS

10535-0708-AXXX

Speaker power cable for connection between the RF-5980-SA001 Tactical Amplified Speaker and 24 VDC vehicular power systems. Terminated on one end and pigtail leads on the other for connection to the power system. Standard length is 9 feet (~2.7 meters).

Specify cable length by replacing 'AXXX' above:

A005	5 ft. (~1.5 m)	A020	20 ft. (~6 m)
A009	9 ft. (~2.7 m)	A050	50 ft. (~15 m)
A015	15 ft. (~4.6 m)	A075	75 ft. (~23 m)

SPEAKER POWER, RF-5980/3-PIN POWER

10535-0713-AXXX

Speaker power cable for connection between the RF-5980-SAXXX Tactical Amplified Speaker and RF-5910-PS005 Battery Eliminator (RF-7800M-MP and AN/PRC-117G) via 3-pin power connectors. Standard length is 10 feet (~3 meters).

Specify cable length by replacing 'AXXX' above:

A002	2 ft. (~0.6 m)	A020	20 ft. (~6 m)
A009	9 ft. (~2.7 m)	A075	75 ft. (~23 m)
A015	15 ft. (~4.6 m)		

SPEAKER POWER, RF-5980/RF-5850

11068-0018-AXXX

Speaker power cable for connection between the RF-5980-SAXXX Tactical Amplified Speaker and RF-5850-PS Power Supply. Standard length is 9 feet (~2.7 meters).

Specify cable length by replacing 'AXXX' above:

A009	9 ft. (~2.7 m)	A020	20 ft. (~6 m)
A015	15 ft. (~4.6 m)	A075	75 ft. (~23 m)

POWER AMPLIFIER CONTROL CABLES

REMOTE AND POWER AMPLIFIER (PA) CONTROL "Y" CABLE

10535-0730-AX

This cable allows for simultaneous operation of the radio RS-232 ASCII remote control interface and control of HF power amplifiers. Since both of these interfaces are present on the J6 accessory port, this cable is in a "Y" configuration. The '-A1' configuration has a 10 foot (~3-meter) separation between the R/T and power amplifier and 10 feet (~3 meters) between the R/T and DTE. The '-A2' configuration has a 2 foot (~0.6-meter) separation between the R/T and power amplifier and 7 feet (~2.1 meters) between the R/T and DTE. The data terminal connection utilizes a 9-pin D connector. Overall length is 10 feet (~3 meters).

POWER AMPLIFIER (PA) CONTROL CABLE

10535-0720-AXXX

Cable that interconnects the HF radio and various power amplifiers, including the RF-5832H-PA101, RF-5833H-PA, and RF-5834H-PA001. A version of this cable is included with each RF-5800H-VXXX Vehicular Adapter and RF-5800H-BXXX Base Station Adapter. This cable is not recommended for lengths greater than 150 feet (~46 meters). Standard length is 20 feet (~6 meters).

Specify cable length by replacing 'AXXX' above:

A002	2 ft. (~0.6 m)	A020	20 ft. (~6 m)
A004	4 ft. (~1.2 m)	A024	24 ft. (~7 m)
A006	6 ft. (~1.8 m)	A030	30 ft. (~9 m)
A008	8 ft. (~2.4 m)	A040	40 ft. (~12 m)
A010	10 ft. (~3 m)	A050	50 ft. (~15 m)
A012	12 ft. (~3.7 m)	A060	60 ft. (~18.3 m)
A015	15 ft. (~4.6 m)		

COUPLER CONTROL CABLES

COUPLER CONTROL CABLE, RF-5382H-CU001

12020-1460-AXXX

Coupler control cable for the RF-5382H-CU001 150-watt HF Fast-Tune Antenna Coupler. Maximum recommended length is 250 feet (~76 meters).

Specify cable length by replacing 'AXXX' above:

A003	3 ft. (~0.9 m)	A050	50 ft. (~15 m)
A010	10 ft. (~3 m)	A075	75 ft. (~23 m)
A020	20 ft. (~6 m)	A100	100 ft. (~30 m)
A025	25 ft. (~7.6 m)	A150	150 ft. (~46 m)
A030	30 ft. (~9 m)	A200	200 ft. (~60 m)
A040	40 ft. (~12 m)	A250	250 ft. (~76 m)

COUPLER CONTROL CABLE, RF-382A-15

10181-9823-XXX

Coupler control cable for the RF-382A-15 400-watt HF Fast-Tune Antenna Coupler. Maximum recommended length is 250 feet (~76 meters).

Specify cable length by replacing 'XXX' above:

003	3 ft. (~0.9 m)	050	50 ft. (~15 m)
010	10 ft. (~3 m)	075	75 ft. (~23 m)
020	20 ft. (~6 m)	100	100 ft. (~30 m)
025	25 ft. (~7.6 m)	150	150 ft. (~46 m)
030	30 ft. (~9 m)	200	200 ft. (~60 m)
040	40 ft. (~12 m)	250	250 ft. (~76 m)

COAXIAL CABLES

COAXIAL CABLE, RG-213, TYPE N TO TYPE N

10369-7210-XXX

Preassembled M17/74-RG-213 coaxial cable assembly with two type N male connector ends. Due to losses at higher frequencies, the maximum recommended cable length for VHF High and UHF is 100 feet (~30 meters).

Specify cable length by replacing 'XXX' above:

007	7 in. (~17.8 cm)	040	40 ft. (~12 m)
009	9 ft. (~2.7 m)	050	50 ft. (~15 m)
010	10 ft. (~3 m)	090	90 ft. (~27 m)
015	15 ft. (~4.6 m)	099	99 ft. (~30 m)
020	20 ft. (~6 m)	150	150 ft. (~46 m)
025	25 ft. (~7.6 m)		

COAXIAL CABLE, RG-213, TYPE N TO BNC

10369-7211-XXX

Preassembled M17/74-RG-213 coaxial cable assembly with one type N male and one BNC male connector end. Due to losses at higher frequencies, the maximum recommended cable length for VHF High and UHF is 100 feet (~30 meters).

Specify cable length by replacing 'XXX' above:

007	7 ft. (~2.1 m)	050	50 ft. (~15 m)
009	9 ft. (~2.7 m)	075	75 ft. (~23 m)
010	10 ft. (~3 m)	080	80 ft. (~24 m)
015	15 ft. (~4.6 m)	090	90 ft. (~27 m)
020	20 ft. (~6 m)	099	99 ft. (~30 m)
025	25 ft. (~7.6 m)	130	130 ft. (~39.6 m)
030	30 ft. (~9 m)	150	150 ft. (~46 m)
040	40 ft. (~12 m)		

COAXIAL CABLE, RG-213, BNC TO BNC

10369-7212-XXX

Preassembled M17/74-RG-213 coaxial cable assembly with BNC male connectors. Due to losses at higher frequencies, the maximum recommended cable length for VHF High and UHF is 100 feet (~30 meters). Not recommended for use on VHF or UHF for lengths over 100 feet (~30 meters) due to cable loss.

Specify cable length by replacing 'XXX' above:

005	5 ft. (~1.5 m)	060	60 ft. (~18.3 m)
010	10 ft. (~3 m)	075	75 ft. (~23 m)
015	15 ft. (~4.6 m)	080	80 ft. (~24 m)
020	20 ft. (~6 m)	090	90 ft. (~27 m)
025	25 ft. (~7.6 m)	100	100 ft. (~30 m)
030	30 ft. (~9 m)	117	117 ft. (~35.6 m)
040	40 ft. (~12 m)	150	150 ft. (~46 m)
050	50 ft. (~15 m)	250	250 ft. (~76 m)

COAXIAL CABLE, LOW LOSS, TYPE N TO TYPE N

10513-0810-AXXX

Low-loss preassembled coaxial cable, with type N male connectors, especially designed for antenna runs in an outdoor environment. The cable is designed for 20-year outdoor use, incorporating a UV resistant jacket and waterproofing compound inside the jacket. The shielding is typically 90 dB versus 40 dB for single shielded cables, making it ideal for reducing interference in multi-radio environments. Typical attenuation is 0.7 dB/100 feet (~30 meters) at 30 MHz and 2.7 dB/100 feet (~30 meters) at 450 MHz.

Specify cable length by replacing 'AXXX' above:

A006	6 ft. (~1.8 m)	A100	100 ft. (~30 m)
A010	10 ft. (~3 m)	A150	150 ft. (~46 m)
A025	25 ft. (~7.6 m)	A200	200 ft. (~60 m)
A050	50 ft. (~15 m)	A250	250 ft. (~76 m)
A075	75 ft. (~23 m)		

COAXIAL CABLE, LOW LOSS, TYPE N TO BNC

10513-0811-AXXX

This low-loss preassembled coaxial cable, with one type N male and one type BNC connector, is especially designed for antenna runs in an outdoor environment. The cable is designed for 20-year outdoor use, incorporating a UV resistant jacket and waterproofing compound inside the jacket. The shielding is typically 90 dB versus 40 dB for single shielded cables, making it ideal for reducing interference in multi-radio environments. Typical attenuation is 0.7 dB/100 feet (~30 meters) at 30 MHz and 2.7 dB/100 feet (~30 meters) at 450 MHz.

Specify cable length by replacing 'AXXX' above:

A010	10 ft. (~3 m)	A075	75 ft. (~23 m)
A025	25 ft. (~7.6 m)	A100	100 ft. (~30 m)
A030	30 ft. (~9 m)	A150	150 ft. (~46 m)
A050	50 ft. (~15 m)		

COAXIAL CABLE, LOW LOSS, BNC TO BNC

10513-0812-AXXX

Low-loss preassembled coaxial cable, with type BNC male connectors, that is especially designed for antenna runs in an outdoor environment. The cable is designed for 20 year outdoor use, incorporating a UV resistant jacket and waterproofing compound inside the jacket. The shielding is typically 90 dB versus 40 dB for single shielded cables, making it ideal for reducing interference in multi-radio environments. Typical attenuation is 0.7 dB/100 feet (~30 meters) at 30 MHz and 2.7 dB/100 feet (~30 meters) at 450 MHz.

Specify cable length by replacing 'AXXX' above:

A010	10 ft. (~3 m)	A100	100 ft. (~30 m)
A025	25 ft. (~7.6 m)	A150	150 ft. (~46 m)
A030	30 ft. (~9 m)	A200	200 ft. (~60 m)
A050	50 ft. (~15 m)	A250	250 ft. (~76 m)
A085	85 ft. (~26 m)		

COAXIAL CABLE, RG-400, TNC TO BNC

12011-0120-AXXX

Preassembled M17/128-RG-400 coaxial cable assembly with one TNC male and one BNC male connector end. Due to losses at higher frequencies, the maximum recommended cable length for VHF High and UHF is 100 feet (~30 meters).

Specify cable length by replacing 'AXXX' above:

A006	6 ft. (~1.8 m)
A015	15 ft. (~4.6 m)
A025	25 ft. (~7.6 m)

COAXIAL CABLE, RT ANGLE CONNECTOR, TNC TO BNC

12053-1400-A2

Coaxial cable used to connect the handheld transceivers directly from the radio to their associated vehicular amplifiers. Length is 8.25 inches (~21 centimeters).

COAXIAL CABLE, RG-213, TYPE N TO N

10181-9824-XXX

M17/74-RG-213 cable with type N male connectors. Commonly used to interconnect RF-5832H-PA101, RF-5834H-PA001, or RF-5835H-PA001 HF Power Amplifiers to the RF-382A-15 or RF-5382H-CU001 Antenna Couplers, but can be used in other applications. Maximum recommended length is 250 feet (~76 meters).

Specify cable length by replacing 'XXX' above:

002	2 ft. (~0.6 m)	030	30 ft. (~9 m)
004	4 ft. (~1.2 m)	040	40 ft. (~12 m)
005	5 ft. (~1.5 m)	050	50 ft. (~15 m)
006	6 ft. (~1.8 m)	070	70 ft. (~20 m)
008	8 ft. (~2.4 m)	075	75 ft. (~23 m)
010	10 ft. (~3 m)	080	80 ft. (~24 m)
012	12 ft. (~3.7 m)	100	100 ft. (~30 m)
013	13 ft. (~4 m)	120	120 ft. (~37 m)
015	15 ft. (~4.6 m)	150	150 ft. (~46 m)
016	16 ft. (~4.9 m)	165	165 ft. (~50 m)
020	20 ft. (~6 m)	200	200 ft. (~60 m)
025	25 ft. (~7.6 m)	250	250 ft. (~76 m)

COAXIAL CABLE, RG-400, BNC TO TYPE N (F)

11080-3918-A050

A SATCOM extension cable, typically used with the High-Gain Foldable SATCOM Antenna. The cable has one BNC male and one type N female connector. Length is 50 feet (~15 meters).

COAX CABLE, RG-142, TNC (RIGHT ANGLE) TO BNC

11080-3933-AXXX

Cable, for use with the bolt-on X-Wing Antenna, that provides a right-angle connection to the low angle port of the antenna. Standard length is 15 feet (~4.6 meters).

Specify cable length by replacing 'AXXX' above:

A015	15 ft. (~4.6 m)
A020	20 ft. (~6 m)

COAX CABLE, RG-142, TYPE N (RIGHT ANGLE) TO BNC

11080-3934-AXXX

Cable, for use with the bolt-on X-Wing Antenna, that provides a right-angle connection to the high angle port of the antenna. Standard length is 15 feet (~4.6 meters).

Specify cable length by replacing 'AXXX' above:

A015 15 ft. (~4.6 m)
A020 20 ft. (~6 m)

TEST/PRE-TERMINATED CABLES

GENERIC AUDIO/DATA CABLE, J3

10511-0707-A006

This is a generic cable that is terminated on one end with a data connector (J3 orange dot) and unterminated on the other end. This cable is used for test and "build your own" applications. Length is 6 feet (~1.8 meters).

TEST CABLE, 32-PIN

12041-7250-A006

This cable has a molded 32-pin side connector for connection to the AN/PRC-152(C) handheld radio. The other end of the cable is unterminated. This cable is used for test and "build your own" applications. Length is 6 feet (~1.8 meters).

CABLE ASSEMBLY, J3, FULL PINOUT

12043-2820-A015

This cable assembly consists of a 32-pin connector that is fully terminated by a 32-conductor cable. It is used to connect to the J3 port on the AN/PRC-117G manpack radio and amplifiers. The other end of the cable is unterminated. It is used for test and "build your own" applications. Length is 15 feet (~4.6 meters).

CONNECTORS

COMPATIBILITY CHART

			MANPACK RADIOS							HANDHELD RADIOS					HCLOS
PAGE	PRODUCT NUMBER	PRODUCT NAME	AN/PRC-117F(C)	RF-5800M-MP	AN/PRC-150(C)	RF-5800H-MP	RF-5800V-MP	AN/PRC-117G	RF-7800M-MP	AN/PRC-152(C)	RF-310M-HH	RF-5800M-HH	RF-5800V-HH	RF-7800S	RF-7800W-OU500
CIRCULAR SIGNAL CABLE CONNECTORS															
269	J69-0016-001	"Data" Cable Connector (orange dot)	•	•	•	•	•								
269	J69-0016-002	"Accessory" Cable Connector (blue dot)	•	•	•	•	•								
269	J09-0039-001	Backshell for J69-0069 Cable Connectors	•	•	•	•	•								
269	J69-0001-623	6-pin Audio Cable Connectors	•	•	•	•	•	•	•	•	•	•	•		
269	J29-0007-107	KDU Cable Connector	•	•	•	•	•	•	•						
269	J29-0014-017	GPS Cable Connector	•		•										
"D" SIGNAL CABLE CONNECTORS															
269	J22-0126-026	"Accessory" D Cable Connector	•	•	•	•	•								
269	J55-0015-515	Backshell for J22-0126-026 Cable Connector	•	•	•	•	•								
COAXIAL CABLE CONNECTORS															
269	UG-88C/U	BNC (M) Cable Connector	•	•	•	•	•	•							
269	UG-959A/U	BNC (M) Cable Connector	•	•	•	•	•	•							
269	M39012/01-0005	Type N (M) Coaxial Cable Connector						•	•						
269	J95-0004-000	Type N (M) Cable Connector for W-1887						•	•						
COAXIAL ADAPTERS															
269	M17/74-RG213	Flexible Coaxial Cable													
269	W-1887	Semi-rigid, Foam Dielectric Coaxial Cable													
CIRCULAR SIGNAL CABLE CONNECTORS															
269	M55339/14-00306	Adapter, Right Angle, BNC (M) to BNC (F)	•	•	•	•	•	•							
269	UG-27A/U	Adapter, Right Angle, Type N (M) to Type N(F)													
269	UG-146/U	Adapter, Type N (M), PL-259 (UHF) (F)													
DC POWER CABLE CONNECTORS															
269	M55181/3-03	Four-pin Power Cable Connector (M)													
269	M55181/1-03	Four-pin Power Cable Connector (F)													
270	MS3106A24-12S	Plug Connector, DC Power Input													
270	M85049/2-16C	Backshell for MS3106A24-12S													
270	MS3116J14-5S	Plug Connector, DC Power Input													

ACCESSORIES

			MANPACK AMPLIFIERS								HANDHELD AMPS			COUPLER		PP	POWER SUPPLIES			
PAGE	PRODUCT NUMBER	PRODUCT NAME	AM-7588	RF-5800M-V0XXX	RF-5211VSM-052, 20 WATT HF	125 WATT HF	150 WATT HF	400 WATT HF	RF-5800V-B2XX RF-5800V-V2XX	RF-7800M-VXXX	RF-300M-HVXXX, AN/VRC-110	RF-5800M-V5XX	RF-5800V-V5XXX	RF-5382H-CU001	RF-382A-15	RF-5845H-PP101	RF-5051-PSXXX/RF-5054-PSXXX	RF-5055PS	RF-5056PS	RF-5061-PS001
CIRCULAR SIGNAL CABLE CONNECTORS																				
269	J69-0016-001	"Data" Cable Connector (orange dot)																		
269	J69-0016-002	"Accessory" Cable Connector (blue dot)																		
269	J09-0039-001	Backshell for J69-0069 Cable Connectors																		
269	J69-0001-623	6-pin Audio Cable Connectors							•		•									
269	J29-0007-107	Keypad/Display Unit (KDU) Cable Connector																		
269	J29-0014-017	GPS Cable Connector																		
"D" SIGNAL CABLE CONNECTORS																				
269	J22-0126-026	"Accessory" D Cable Connector																		
269	J55-0015-515	Backshell for J22-0126-026 Cable Connector																		
COAXIAL CABLE CONNECTORS																				
269	UG-88C/U	BNC (M) Cable Connector	•	•		•	•	•	•	•	•	•	•			•			•	•
269	UG-959A/U	BNC (M) Cable Connector	•	•		•	•	•	•	•	•	•	•			•			•	•
269	M39012/01-0005	Type N (M) Coaxial Cable Connector				•	•	•		•				•	•	•			•	•
269	J95-0004-000	Type N (M) Cable Connector for W-1887				•	•	•		•				•	•	•			•	•
COAXIAL ADAPTERS																				
269	M17/74RG213	Flexible Coaxial Cable				•	•	•						•	•	•			•	•
269	W-1887	Semi-rigid, Foam Dielectric Coaxial Cable				•	•	•						•	•	•			•	•
CIRCULAR SIGNAL CABLE CONNECTORS																				
269	M55339/1400306	Adapter, Right Angle, BNC (M) to BNC (F)	•	•		•	•	•	•	•	•	•	•			•			•	•
269	UG-27A/U	Adapter, Right Angle, Type N (M) to Type N (F)				•	•	•							•	•	•		•	•
269	UG-146/U	Adapter, Type N (M), PL-259 (UHF) (F)				•	•	•							•	•	•		•	•
DC POWER CABLE CONNECTORS																				
269	M55181/3-03	4-pin Power Cable Connector (M)															•	•	•	•
269	M55181/1-03	4-pin Power Cable Connector (F)	•	•				•	•	•	•	•	•							
270	MS3106A24-12S	Plug Connector, DC Power Input																	•	•
270	M85049/2-16C	Backshell for MS3106A24-12S																	•	•
270	MS3116J14-5S	Plug Connector, DC Power Input			•	•	•												•	

CIRCULAR SIGNAL CABLE CONNECTORS

"DATA" CABLE CONNECTOR (ORANGE DOT)
J69-0016-001

Circular Mil cable connector for the radio "Data" connector. See J09-0039-001 for backshell.

"ACCESSORY" CABLE CONNECTOR (BLUE DOT)
J69-0016-002

Circular Mil cable connector for the radio front panel "Accessory" port. See J09-0039-001 for backshell.

BACKSHELL FOR J69-0069 CABLE CONNECTORS
J09-0039-001

Backshell for J69-0016-001 and J69-0016-002 circular Mil cable connectors.

6-PIN AUDIO CABLE CONNECTORS
J69-0001-623

Circular Mil cable connector for attachment to radio's audio (microphone) connector.

KDU CABLE CONNECTOR
J29-0007-107

Cable connector for the Keypad/Display Unit (KDU) that is used on both the radio and the KDU's side connector.

GPS CABLE CONNECTOR
J29-0014-017

Cable connector for the GPS connector on radios that require external GPS devices, like the PLGR/DAGR.

"D" SIGNAL CABLE CONNECTORS

"ACCESSORY" D CABLE CONNECTOR
J22-0126-026

"D" shell cable connector for the rear panel "Accessory" port.

BACKSHELL FOR J22-0126-026 CABLE CONNECTOR
J55-0015-515

Backshell for J22-0126-026 "D" cable connectors.

COAXIAL CABLE CONNECTORS

BNC (M) CABLE CONNECTOR
UG-88C/U

BNC male connector for use with RG-58, RG-223, RG-141, and RG-142 coaxial cables.

BNC (M) CABLE CONNECTOR
UG-959A/U

BNC male connector for use with RG-213 coaxial cable.

TYPE N (M) COAXIAL CABLE CONNECTOR
M39012/01-0005

Type N male connector for use with RG-213, RG-214, and RG-11 coaxial cables.

TYPE N (M) CABLE CONNECTOR FOR W-1887
J95-0004-000

Type N male connector for use with W-1887 Semi-rigid Foam Dielectric Coaxial Cable.

COAXIAL CABLE

FLEXIBLE COAXIAL CABLE
M17/74-RG213

RG-213 coaxial cable for use with M39012/01-0005 and UG-959A/U connectors.

SEMI-RIGID, FOAM DIELECTRIC COAXIAL CABLE
W-1887

Heliax cable, 7/8 inch (~2.2 centimeter) diameter foam dielectric, 50 ohm.

COAXIAL ADAPTERS

ADAPTER, RT ANGLE, BNC (M) TO BNC (F)
M55339/14-00306

Right-angle adapter, for use on type BNC connectors, with one male and one female end.

ADAPTER, RT ANGLE, TYPE N (M) TO TYPE N (F)
UG-27A/U

Right-angle adapter, for use on type N connectors, with one male and one female end.

ADAPTER, TYPE N (M), PL-259 (UHF) (F)
UG-146/U

Type N male to UHF female adapter for use when existing cabling has UHF male connector installed. Allows reuse of existing cabling when retrofitting systems.

DC POWER CABLE CONNECTORS

4-PIN POWER CABLE CONNECTOR (M)
M55181/3-03

Circular Mil 4-pin connector with male pins.

4-PIN POWER CABLE CONNECTOR (F)
M55181/1-03

Circular Mil 4-pin connector with female sockets. It does not connect directly to handheld amplifiers or the RF-7800M-V. For these units, connection is to Vehicular Interface Module or SINCGARS Mount.

ACCESSORIES

PLUG CONNECTOR, DC POWER INPUT
MS3106A24-12S

DC input power cable connector for DC to DC converters.

BACKSHELL FOR MS3106A24-12S
M85049/2-16C

Backshell for MS3106A24-12S connector.

PLUG CONNECTOR, DC POWER INPUT
MS3116J14-5S

Mil circular power connector, with sockets.

INTERCOMS

INTERCOM SET INTERCONNECT DEVICES FOR FALCON II® RADIO SYSTEMS

This table identifies interface cables and devices required for interfacing the Falcon II radios to the AN/VIC-1 and AN/VIC-3 Intercom Sets. Connection to/from the Falcon II transceivers is made via the front panel data connector J3. Since connector J3 carries both audio and data, a "Y" cable is required if both audio and data I/O are to be used. For proper intercom operation, the 10564-1660-01 Intercom Interface Unit (IIU) is required for most applications. The IIU receives power from the radio, and a cable is required to connect the IIU to the radio and a second cable to connect the IIU to the intercom. The RF-5800H-MP and AN/PRC-150(C) require an IIU for use with the VIC-1.

INTERCOM CABLES

Standard cables lengths are 6 feet (~1.8 meters); additional lengths available by special order.

CABLES FOR RF-5800H-MP AND AN/PRC-150(C)	
10535-0704-A006	Connects J3 directly to AN/VIC-3. Audio only
10564-1670-A006	Connects J3 to IIU. Audio only
10564-1671-A006	Connects J3 directly to AN/VIC-3. Audio and data
10564-1672-A006	Connects J3 to IIU. Audio and data
10564-1674-A006	Connects IIU to AN/VIC-1
CABLES FOR RF-5800V-MP, RF-5800M-MP AND AN/PRC-117F(C)	
10564-1670-A006	Connects J3 to IIU. Audio only
10564-1672-A006	Connects J3 to IIU. Audio and data
10564-1673-A006	Connects IIU to AN/VIC-3
10564-1674-A006	Connects IIU to AN/VIC-1
CABLES FOR RF-5800V-VXXX VEHICULAR ADAPTER KITS	
10564-1673-A006	Connects IIU to AN/VIC-3
10564-1674-A006	Connects IIU to or AN/VIC-1
10564-1682-A006	Connects VAU J3 to IIU

INTERCOM INTERFACE UNIT
RF-5985-AD001

The Intercom Interface Unit (IIU) is designed for insertion in the audio path between the Falcon or Falcon II radios and the AN/VIC-1 and AN/VIC-3 intercom sets. The IIU will provide audio level and impedance changes as well as sidetone generation. The IIU is powered by the radios. It connects to the radios and the various intercoms using the cables specified in the Cable Assemblies chart. Color: Black.

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RF-1944-AT020	5985015607814
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