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KENWOOD

LAND MOBILE RADIO GUIDE



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<Standard Key Model> <Full Key Model>

All NX-5000 series portables include:

- Belt Clip (KBH-11)
- Universal Connector Cap
- User Guide
- Premium Warranty: 3 Years*

All Accessories / options: 1 Year

Purchase Battery, Charger, Antenna separately

*Note:

1. To meet IP grades and MIL, the universal connector cap or KENWOOD official accessory must be installed/connected.
2. To maintain immersion specs (IP67/68), all warranty service must be done by one of the three National Kenwood Authorized Service Centers. IP67/68 Certification is valid under the 3 year premium warranty. No re-certification is available.

Because of spurious signal (birdie), the following frequencies (and $\pm 10\text{kHz}$ ranges) are not allowed;

- | | | |
|------------|------------|------------|
| • 144.0000 | • 384.0000 | • 460.8000 |
| • 147.4560 | • 403.2000 | • 480.0000 |
| • 153.6000 | • 422.4000 | • 499.2000 |
| • 172.0325 | • 432.0000 | • 518.4000 |
| • 172.8000 | • 441.6000 | |

Approved by CSA-us International Inc. for Classes I, II & III, Div. 1, Groups D, E, F, G and are also approved for non-Incendive use in Class I, Div. 2, Groups A, B, C hazardous locations.

Note: Environmental conditions are less than 32°F (0°C), KENWOOD carrying cases must be used.

STANDARD

■ GENERAL FEATURES

- 6 W (136-174 MHz) Models
- 5 W (380-470, 450-520 MHz) Models
- 1024 CH-GID / 128 Zones
- Standard Key Models (w/o numeric keypad)
- Full Key Models (w/ numeric keypad)
- Full Color 1.74" (240 x 180 pixels) Transflective TFT Display
- Multi-line Text Display
- Function/Status Icons
- Multi-Language Display
- Date & 12/24 Hour Time Clock
- Transmit/Busy/Call Alert/Warn LED
- On/Off Volume Knob
- 16-Position Mechanical Selector (w/ a stopper)
- 4-way Directional-pad (D-pad)
- 2 Position Lever Switch
- Emergency/AUX Key
- 3 Side PF Keys
- 1W Speaker Audio
- Multi Digital Protocol ¹
- Emergency Call Features
- Built-in GPS Receiver / Antenna
- Built-in Bluetooth® 4.0 Module
- Built-in Motion Sensor
- Built-in 56-bit DES Encryption (4 keys programmable by KPG-D1(N)K)
- Active Noise Reduction (ANR)
- KPG-D1N Windows® FPU
- Flash Firmware Upgrading
- MIL-STD-810 C/D/E/F/G
- IP67/68 Immersion
- Color Housing Option
- Digital Encode/Decode Format

1. Multi Digital Protocol can be used for two(2) of the three(3) Digital Protocols set by programming software. P25/DMR Digital Protocols are options.

■ DIGITAL – NXDN® MODE

- NXDN® Conventional / TYPE-C (Gen1/Gen2) Trunking
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming (requires KPG-180AP OTAP Manager Software)
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill/Check
- Short & Long Data Messages
- GPS Location
- NXDN® Scrambler

■ DIGITAL – DMR MODE

- DMR Tier 2 Conventional Option
- DMR Tier 3 Trunking Option
- DMR Auto Slot Select (DASS)
- AMBE+2™ VOCODER
- 12.5 kHz Channels
- Call Interrupt (Direct & Repeater Mode)
- Paging Call
- Emergency Call
- All Group Call
- Late Entry
- Status Messaging
- Remote Control by Subscriber Units
- ARC4 Encryption Optional
- Site Roaming

■ ANALOG MODE

- Conventional Zones
- LTR® Zones
- FleetSync®/II: PTT ID ANI, Caller ID Display, Selective/Group Call, Emergency Status, Text Messages
- MDC-1200: PTT ID ANI, Caller ID Display, Emergency, Radio Check & Inhibit
- QT / DQT
- Two-Tone (Conventional Zones Only)
- DTMF

OPTIONAL FEATURES

■ GENERAL FEATURES

- 4000 Channel (KWD-5000CH)
- Front Panel Programming (KWD-5001FP)
- microSD/microSDHC Memory Card Slot (KWD-5002SD)
- Built-in Bluetooth® Module for Data (KWD-5003BT)
- Remote Control Commands by Subscriber Units (KWD-5007RC)
- 256-bit AES Encryption (KWD-AE30K/31K Encryption Module required)
- Battery Management Solution (KSC-Y32K Charger & KAS-12K Software License Key required)

■ DIGITAL – P25 MODE

- Conventional Features (KWD-5100CV)
- Phase 1 Trunking Features (KWD-5100CV & 5101TR)
- Phase 2 Trunking Features (KWD-5100CV & 5101TR & 5102TR)
- Conventional OTAR (KWD-5103RK)
- Trunking OTAR (KWD-5103RK & 5106DT)
- Conventional Voting Scan (KWD-5105VT)
- Packet Data required for Trunked OTAR/GPS (KWD-5106DT)
- Link Layer Authentication (KWD-5100CV & KWD-5101TR & KWD-AE3x Encryption Board Required)

■ DIGITAL – DMR MODE

- DMR Tier 2 Conventional Features (KWD-5300CV)
- DMR Tier 3 Trunking Features (KWD-5300CV & KWD-5301TR)

RADIO

Standard Key Models

| | | |
|-----------|-----------------------------|---|
| NX-5200K2 | VHF (136-174MHz), 6.0 Watts | NXDN Conventional / TYPE-C (Gen1/Gen2) Trunking |
| NX-5300K2 | UHF (450-520MHz), 5.0 Watts | NXDN Conventional / TYPE-C (Gen1/Gen2) Trunking |
| NX-5300K5 | UHF (380-470MHz), 5.0 Watts | NXDN Conventional / TYPE-C (Gen1/Gen2) Trunking |

Full Key Models

| | | |
|-----------|-----------------------------|---|
| NX-5200K3 | VHF (136-174MHz), 6.0 Watts | NXDN Conventional / TYPE-C (Gen1/Gen2) Trunking |
| NX-5300K3 | UHF (450-520MHz), 5.0 Watts | NXDN Conventional / TYPE-C (Gen1/Gen2) Trunking |
| NX-5300K6 | UHF (380-470MHz), 5.0 Watts | NXDN Conventional / TYPE-C (Gen1/Gen2) Trunking |

CSA US APPROVED MODELS

Must Order L-5039 & "KNB-LS5CU or KNB-LS7M" Intrinsically Safe Battery per radio

**Note: microSD card is not allowed to use as Intrinsically Safe Option.*

| | | |
|---------------|-----------------------------|---|
| NX-5200-ISCK2 | VHF (136-174MHz), 6.0 Watts | NXDN Conventional / TYPE-C (Gen1/Gen2) Trunking |
| NX-5200-ISCK3 | VHF (136-174MHz), 6.0 Watts | NXDN Conventional / TYPE-C (Gen1/Gen2) Trunking |
| NX-5300-ISCK2 | UHF (450-520MHz), 5.0 Watts | NXDN Conventional / TYPE-C (Gen1/Gen2) Trunking |
| NX-5300-ISCK3 | UHF (450-520MHz), 5.0 Watts | NXDN Conventional / TYPE-C (Gen1/Gen2) Trunking |
| NX-5300-ISCK5 | UHF (380-470MHz), 5.0 Watts | NXDN Conventional / TYPE-C (Gen1/Gen2) Trunking |
| NX-5300-ISCK6 | UHF (380-470MHz), 5.0 Watts | NXDN Conventional / TYPE-C (Gen1/Gen2) Trunking |

FIELD PROGRAMMING UNIT (FPU)

| | |
|----------|---|
| KPG-D1NK | License Key for KPG-D1NK Programming Software for NX-5000 Portable/Mobile (Windows® Vista/7/8/8.1/10) Note: Requires KPT-300LMC for authentication |
|----------|---|

P25 Trunked Programming Capability (licensed by either 1 or 2 below):

1. USB Key Type: Advanced System Key (ASK)- See KWD-ASK-MK and AK

- For NX-5000 series radios.
- KWD-ASK-MK (Master Key): For trunked system operator (SYSOP). Required for activating KWD-ASK-AK Access keys. Securely embeds/encrypts the HSID.
- KWD-ASK-AK (Access Key): For Dealers/contractors. Activated by KWD-ASK-MK Master Key.
- KPG-D1NK supports up to 16 KWD-ASK-AK Access Keys (16 trunked networks).

2. Software Key Type: System Key File (SKF)- See L-5005

- For NX-5000 series radios.
- 3-digit HEX System ID (HSID) with verifiable written authorization required from SYSOP.
- Utilized by both SYSOPs and Dealers/Contractors. But Dealers/Contractors must be permitted from SYSOP to order and use SKF.
- Kenwood ships an encrypted *.SKF file via E-Mail to the address provided on the P25 Trunking System Keys Request Form placed on Kenwood Tools.
- The *.SKF securely embeds/encrypts the HSID.

OVER THE AIR PROGRAMMING (OTAP)

| | |
|-----------|--|
| KPG-180AP | OTAP Manager Software (Windows® Vista/7/8/8.1/10) • License includes Fifty (50) radios / One(1) NXDN Conventional and Type-C Air Communication Profile and One(1) NXDN Conventional and Type-C IP Communication Profile |
|-----------|--|

Note:

- Requires KPT-300LMC for authentication
- Radio to Radio OTAP for P25 Conventional system, requires KWD-AP3-P25 license.
- NEXEDGE Type-D Trunking and DMR System not supported.

SOFTWARE UPGRADE LICENSES FOR KPG-180AP

Note: Includes package license for additional subscriber unit or license for additional profile attached to one computer running KPG-180AP software. All additional licenses require KPT-300LMC for authentication.

| | |
|-------------|--|
| KWD-AP5100 | Additional 100 Radio Package License for 1 PC Note: License includes 100 subscriber radios OTAP License. |
| KWD-AP5250 | Additional 250 Radio Package License for 1 PC Note: License includes 250 subscriber radios OTAP License. |
| KWD-AP5500 | Additional 500 Radio Package License for 1 PC Note: License includes 500 subscriber radios OTAP License. |
| KWD-AP1-CA | Additional NXDN Conventional Type-C Air Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used as NEXEDGE Base Station Serial Interface for both Conventional and Trunking (Type-C Gen1/Gen2). |
| KWD-AP2-CP | Additional NXDN Conventional Type-C IP Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used NEXEDGE Repeater IP Interface for both Conventional and Trunking (Type-C Gen1/Gen2) . |
| KWD-AP3-P25 | P25 Radio to Radio Air Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used as P25 Base Station Serial Interface for only Radio to Radio Communication. |

-- IMPORTANT NOTES--

Base radios are connected to a computer using the KPG-36XM USB adapter for portables, or a KPG-46XM for mobiles.
Requires firmware version 1.4 or higher for the NX-5000 Series portables and mobiles
Requires firmware version 2.5 or higher for the NXR-x00/NXR-x10 repeaters.
Requires firmware version 1.0 or higher for the NXR-5xxx repeaters

BATTERY READER

KAS-12K License Key for KAS-12
Battery Reader Software for KNB-L1/2/3/N4/LS5 & KSC-Y32 (Windows® Vista/7/8/8.1)
Note: Requires KPT-300LMC for authentication

SOFTWARE UPGRADE LICENSES FOR KAS-12

Note: Upgrade License attaches to one computer running KAS-12 software. All additional licenses require KPT-300LMC for authentication.

KAS-12PRO Add Battery Management with Database
Must require KAS-12K Battery Reader Software to upgrade
Note:
- A Windows® PC may be required as a Database Server which KAS-12DU (Free) software is installed.
- Requires KPT-300LMC for authentication

Offline Authentication Option

KWD-OFL-USB USB License Storage Hardware key for Radio Feature License
Note:
- Must purchase Radio Feature Licenses separately.
- Can be used with only one (1) Account Registration Key.
- Requires KPT-300LMC V1.10 or higher.
- Cancellation rule is difference with standard Online/Offline Authentication. Please refer to a leaflet bundled with KWD-OFL-USB.
Warranty Information:
- Damaged USB License Storage "KWD-OFL-USB"
a. Remaining Licenses will not be warranted.
b. Licenses not uploaded to the License Management Server will not be warranted.

General Radio Features

KWD-5000CH License Key for 4000 Channel Expansion
KWD-5001FP License Key for Front Panel Programming
KWD-5002SD License Key for microSD Memory Card Slot Activation
KWD-5003BT License Key for Bluetooth Data (Required for Data Communication)
Note: Voice Communication for Bluetooth Head Set does NOT require KWD-5003BT.
You can pair with any Bluetooth audio device without this option.
KWD-5007RC License Key for Remote Control by Subscriber Units
Note:
- P25 Mode is NOT available.
- This license may be used by Administrator due to Stun/Revive/Kill.
- The license is required for only Transmitting of Remote Control.
- PC command for Remote Control does NOT require the license.

P25 Radio Features

KWD-5100CV License Key for P25 Conventional
KWD-5101TR License Key for P25 Phase 1 Trunking (requires KWD-5100CV)
Note: Required for Link Layer Authentication
KWD-5102TR License Key for P25 Phase 2 Trunking (requires KWD-5100CV & KWD-5101TR)
KWD-5103RK License Key for P25 OTAR (requires KWD-5106DT for a Trunking Operation)
KWD-5105VT License Key for P25 Conventional Voting Scan
KWD-5106DT License Key for P25 Trunking OTAR / GPS
Note: Conventional (OTAR/GPS) does NOT require KWD-5106DT.

DMR Radio Features

| | |
|------------|---|
| KWD-5300CV | License Key for DMR Tier 2 Conventional |
| KWD-5301TR | License Key for DMR Tier 3 Trunking (requires KWD-5300CV) |
| KWD-5500EE | License Key for DMR ARC4 Enhanced Encryption |

ANTENNAS

| | |
|----------|--|
| KRA-26M | VHF helical antenna 146-162 MHz |
| KRA-26M2 | VHF helical antenna 162-174 MHz |
| KRA-26M3 | VHF helical antenna 136-150 MHz |
| KRA-27M | UHF whip antenna 440-490 MHz |
| KRA-27M2 | UHF whip antenna 470-520 MHz |
| KRA-27M3 | UHF whip antenna 400-450 MHz |
| KRA-22M | VHF low-profile helical antenna 148-162 MHz |
| KRA-22M2 | VHF low-profile helical antenna 162-174 MHz |
| KRA-22M3 | VHF low-profile helical antenna 136-150 MHz |
| KRA-23M | UHF low-profile helical antenna 450-490 MHz |
| KRA-23M2 | UHF low-profile helical antenna 470-512 MHz |
| KRA-23M3 | UHF low-profile helical antenna 403-430 MHz |
| KRA-25 | High gain VHF helically loaded whip antenna 148-162 MHz |
| KRA-28 | Broad-band VHF helically loaded whip antenna 140-170 MHz |
| KRA-29 | Broad Band UHF Whip Antenna 380-430 MHz |

BATTERIES AND CHARGERS

***All of batteries listed below except KBP-8M is compatible with IP67/68 when it is used with a radio.**

| | |
|-----------|---|
| KNB-L1M | Li-ion 2000mAh (Compact Slim) |
| KNB-L2M | Li-ion 2600mAh (Standard) |
| KNB-L3M | Li-ion 3400mAh (High Capacity) |
| KNB-N4M | Ni-MH 2500mAh |
| KNB-LS5CU | CSA US Intrinsically Safe Battery Li-ion 2000mAh Note: Due to the I.S. circuitry on the KNB-LS5CU, the cells may lose charge during storage. To prevent loss of capacity during storage, charge the battery for 10 minutes at least every 4 months with the KSC-32, KSC-Y32K, KSC-326K or KSC-326AK. [Intrinsically Safe Option] |
| KNB-LS7M | CSA US Intrinsically Safe Battery Li-ion 3800mAh Note: Due to the I.S. circuitry on the KNB-LS7M, the cells may lose charge during storage. To prevent loss of capacity during storage, charge the battery for 10 minutes at least every 4 months with the KSC-32, KSC-Y32K, KSC-326K or KSC-326AK. [Intrinsically Safe Option] |
| KBP-8M | AA Alkaline Refillable Battery Pack (12 AA: 9V). Cells not included. Note: The color of the case is International Orange. |
| KSC-Y32K | Rapid rate single unit charger (Long-Life Charge Mode capable with KAS-12 Software) |
| KSC-32 | Rapid rate single unit charger |
| KSC-326AK | Rapid rate 6-unit charger CEC Compliant |
| KVC-15 | Rapid rate DC vehicular charger adapter for the KSC-32 (chargers not included; includes KSC-mobile bracket & cigarette lighter cable DC adapter) |
| KVC-23 | Rapid rate DC vehicular charger for TK-5x10/5x20, NX-5x00/x00/x10/x20, TK-x180, TK-x170, & TK-x360 portables with Lithium Ion /Lithium Polymer/NiMH packs only |

CARRYING ACCESSORIES

| | |
|-----------|--|
| KBH-11 | Spring action belt clip (2.5") |
| KBH-8DS | Leather swivel belt loop with portable D-Ring attachment |
| KLH-6SW | Leather swivel belt loop / detachable swivel D-Ring back |
| KLH-137ST | Firemen's Heavy-Duty Leather Shoulder Strap for a Heavy-Duty Leather Case |
| KLH-200K3 | Heavy duty leather carrying case for NX-5000 series with KNB-L1/L2/L3/LS5CU (for both keypad models) |
| KLH-201K3 | Nylon carrying case for NX-5000-series with KNB-L1/L2/L3/LS5CU (for both keypad models) |

SPECIAL COLOR HOUSING

| | |
|-------------|--|
| KWD-YH-5000 | Yellow Housing Kit for NX-5000 series Portables (Standard Key Model K2/K5 Only) Order L-5024 for Factory Install. (Eligible for warranty of IP67/68 immersion / Intrinsically Safe Option must be installed by Kenwood.) Note: If you order only housing and perform Dealer Installation, IP67/68 Warranty Claim will not be eligible. |
| KWD-OH-5000 | Orange Housing Kit for NX-5000 series Portables (Standard Key Model K2/K5 Only) Order L-5025 for Factory Install. (Eligible for warranty of IP67/68 immersion / Intrinsically Safe Option must be installed by Kenwood.) Note: If you order only housing and perform Dealer Installation, IP67/68 Warranty Claim will not be eligible. |

MICROPHONES & AUDIO ACCESSORIES

***IP grades for microphones and audio accessories are decided by each item.**

| | |
|------------|--|
| KMC-54WDM | MIL-SPEC, IP67 (Immersion) Speaker Mic Compatible with ANR Feature Note: only compatible with a NX-5000 series portable [Intrinsically Safe Option] |
| KMC-42WDM | MIL-SPEC, IP67 (Immersion) Noise-canceling Speaker Mic [Intrinsically Safe Option] |
| KMC-49 | MIL-SPEC, Speaker Mic. with Antenna Connector Note: 5/16" Coax cable hex wrench included (antenna is not included). [Intrinsically Safe Option] |
| KEP-1 | 3.5mm earphone kit for KMC-41/42W/54W Speaker Mics [Intrinsically Safe Option] |
| KEP-2 | 2.5mm earphone kit for KMC-49 Speaker Mic [Intrinsically Safe Option] |
| KCT-51 | Hirose 6-pin Adapter (adapts KVL/aftermarket audio acc. to portable connector) [Intrinsically Safe Option] |
| KHS-11BL | 2-wire palm mic w/earphone, universal connector (Black) [Intrinsically Safe Option] |
| KHS-12BL | 3-wire mini lapel mic w/earphone, universal connector (Black) Note: NOT compatible with TDMA operations [Intrinsically Safe Option] |
| KHS-14 | Lt. Wt. Single muff headset w/boom mic & In-line PTT Note: NOT compatible with TDMA operations [Intrinsically Safe Option] |
| KHS-15D-BH | Hvy-duty noise reduction behind-the-headset w/noise cancelling boom mic & PTT [Intrinsically Safe Option] |
| KHS-15D-OH | Hvy-duty noise reduction over-the-headset w/noise cancelling boom mic & PTT [Intrinsically Safe Option] |

ENCRYPTION & OPTION MODULES

| | |
|-----------|--|
| KWD-AE30K | AES FIPS140-2 & DES Encryption Module (Multi-Key) Order a Labor Code L-5003 if installation is required. (Eligible for warranty of IP67/68 immersion / Intrinsically Safe Option must be installed by Kenwood. If you order only a Module and perform Dealer Installation, IP67/68 Warranty Claim will not be eligible.) KWD-AE30K requires: a Motorola KVL3000 Plus/4000 key loader device. KWD-AE30K is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1). Note: Required for Link Layer Authentication [Intrinsically Safe Option]- Must be Kenwood installed for I.S. |
| KWD-AE31K | AES & DES Encryption Module (Multi-Key) Order a Labor Code L-5004 if installation is required. (Eligible for warranty of IP67/68 immersion / Intrinsically Safe Option must be installed by Kenwood. If you order only a Module and perform Dealer Installation, IP67/68 Warranty Claim will not be eligible.) Note: Requires KPG-AE1/DE1 software key loader or Motorola KVL3000 Plus/4000 key loader device. KWD-AE31K is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1) Note: Required for Link Layer Authentication [Intrinsically Safe Option]- Must be Kenwood installed for I.S. |
| KCT-48VU | External Vibration Unit Note: Audio accessories cannot be used when this option installed. KCT-48VU does not support the P25 digital mode calling or paging features [Intrinsically Safe Option] |
| KPG-AE1K | AES/DES Encryption Software Key Loader for KWD-AE31K Authentication by KPT-300LMC is required Note: KPG-AE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A). |

ENCRYPTION & OPTION MODULES, CON'T

| | |
|----------|---|
| KPG-DE1K | DES Encryption Software Key Loader for KWD-AE31K Authentication by KPT-300LMC is required Note: KPG-DE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D992A.1). |
|----------|---|

SERVICE RELATED ACCESSORIES

| | |
|------------|---|
| KPG-36XM | Full Speed USB Programming interface cable Note: This cable with USB mode may used for SD Card Direct Access. |
| KPG-93 | Encryption Key Loader Interface Cable for Motorola KVL-3000/3000 Plus/4000 |
| KPG-93AUT | KVL-4000 Radio Authentication Cable Note: Only capable for P25 Radio Authentication. Not available for Encryption Key Loading. |
| KWD-ASK-AK | Access Key for KPG-D1NK P25 trunked programming Notes: Enables P25 Trunked system programming privileges in a KPG-D1NK. • For NX-5000 series only. • Must be activated by trunked system operator (SYSOP) with KWD-ASK-MK Master Key. • Must have KPG-D1NK. • Configurable expiration period of KWD-ASK-AK set by KWD-ASK-MK is available for 3 years for built in battery. USB Key must be replaced since the expiration set up dose not work after 3 years. |
| KWD-ASK-MK | Master Key for activating KWD-ASK-AK Access Keys - Restricted Purchase Requirements - Notes: • For NX-5000 series only. • Sold to trunked system operator (SYSOP) or SYSOP authorized entities only • Must have KPG-D1NK. • SYSOP must provide 3-digit HEX HSID to Kenwood with P25 Trunking System Keys Request Form placed on Kenwood Tools. • Purchase KWD-ASK-AK Access Keys if needed. |

INSTALLATION / TUNING CHARGES

| | |
|--------|---|
| L-5001 | Factory Activation of Radio Feature Licenses (per Radio) Note: Must purchase Radio Feature Licenses separately. <u>KPT-300LMC's History Menu will not display the Radio Features activated by Factory.</u> |
| L-5002 | NX-5200/5300/5400 Programming (with basic TX/RX check) |
| L-5003 | Install KWD-AE30K in NX-5000 series Portable (Must purchase module separately) |
| L-5004 | Install KWD-AE31K in NX-5000 series Portable (Must purchase module separately) |
| L-5005 | KPG-D1NK System Key File (SKF) Note: Enables P25 Trunked system programming privileges in a KPG-D1NK. - Restricted Purchase Requirements - • Trunked system operator (SYSOP) must provide 3-digit HEX HSID to Kenwood with P25 Trunking System Keys Request Form placed on Kenwood Tools. • Must have KPG-D1NK. • Kenwood ships an encrypted *.SKF file via E-Mail to the address provided on the P25 Trunking System Keys Request Form placed on Kenwood Tools. • Non-SYSOP entities ordering L-5005 must provide verifiable written authorization from SYSOP to receive an *.SKF file. • 3-digit HEX HSID are securely encrypted & embedded in the *.SKF file. |
| L-5024 | Assemble Yellow Housing KWD-YH-5000 with NX-5000 series Portable |
| L-5025 | Assemble Orange Housing KWD-OH-5000 with NX-5000 series Portable |
| L-5039 | Configure NX-5200/5300/5400 for CSA US Intrinsically Safe Must order KNB-LS5CU and KNB-LS7M I.S. battery |
| L-5051 | P25 CAP Compliance of Non-Encrypted Radio - Disable Built-in DES |

-- IMPORTANT NOTES regarding ENCRYPTION MODULES--

Encryption modules, key loaders and radios containing encryption are export controlled by the U.S. Department of Commerce Bureau of Industry & Security EAR regulations and may either require an Export License, are eligible for a License Exception (ENC) or are exportable with No License Required (NLR) depending on the country, the consignee and the intended use. High level encryption is a special commodity that may require an export license to most countries. See www.bis.gov for more information regarding export regulations. DO NOT SHIP encryption items outside the U.S. without proper DOC/BIS Export Licenses and/or compliances.

Kenwood may request the following information to be submitted at time of order (this information must meet Kenwood internal approvals prior to shipment even if being returned to Kenwood later:

a) Initial Destination: Initial delivery point if different from Ultimate Destination (customer distribution center, headquarters, dealership, manufacturer's representative)

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

b) Ultimate Destination: Final delivery point(s); deployment/distribution

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

c) Intended Use of Radios: Law enforcement, security, operations, etc.

KWD-AE30 AES FIPS140-2 SCM , NIST Validation & Customer Shipping

A secure delivery method direct to the end user customer is required by the NIST AES FIPS 140-2 validation rules. For U.S. Federal Government entities the SCM must ship from Kenwood USA Corporation directly to the end user customer by a trusted carrier (FEDEX, UPS or a designated Kenwood USA Corporation employee); shipping/handling by a dealer or other entity is not acceptable. This may or may not be required by local/state government agencies or business/industrial users. Please check with the end use customer about their AES encryption handling requirements before ordering. Kenwood will not be responsible for shipments of KWD-AE30K modules to erroneous destinations specified on an order.



<Standard Key Model >

<Full Key Model >

All NX-5400 series portables include:

- Belt Clip (KBH-11)
- Universal Connector Cap
- User Guide
- Premium Warranty: 3 Years*

All Accessories / options: 1 Year

Purchase Battery, Charger, Antenna separately

*Note:

1. To meet IP grades and MIL, the universal connector cap or KENWOOD official accessory must be installed/connected.
2. To maintain immersion specs (IP67/68), all warranty service must be done by one of the three National Kenwood Authorized Service Centers. IP67/68 Certification is valid under the 3 year premium warranty. No re-certification is available.

Due to spurious signal (birdie), the following frequencies (and ± 10 kHz ranges) are not allowed:

- 864.000

Approved by CSA-us International Inc. for Classes I, II & III, Div. 1, Groups D, E, F, G and are also approved for non-Incendive use in Class I, Div. 2, Groups A, B, C hazardous locations.

Note: Environmental conditions are less than 32°F (0°C), KENWOOD carrying cases must be used.

STANDARD

■ GENERAL FEATURES

- 3 W (700/800 MHz) Models
- 1024 CH-GID / 128 Zones
- Standard Key Models (w/o numeric keypad)
- Full Key Models (w/ numeric keypad)
- Full Color 1.74" (240 x 180 pixels) Transflective TFT Display
- Multi-line Text Display
- Function/Status Icons
- Multi-Language Display
- Date & 12/24 Hour Time Clock
- Transmit/Busy/Call Alert/Warn LED
- On/Off Volume Knob
- 16-Position Mechanical Selector (w/ a stopper)
- 4-way Directional-pad (D-pad)
- 2 Position Lever Switch
- Emergency/AUX Key
- 3 Side PF Keys
- 1W Speaker Audio
- Multi Digital Protocol ¹
- Emergency Call Features
- Built-in GPS Receiver / Antenna
- Built-in Bluetooth® 4.0 Module
- Built-in Motion Sensor
- Built-in 56-bit DES Encryption (4 keys programmable by KPG-D1(N)K)
- Active Noise Reduction (ANR)
- KPG-D1N Windows® FPU
- Flash Firmware Upgrading
- MIL-STD-810 C/D/E/F/G
- IP67/68 Immersion
- Color Housing Option

1. Multi Digital Protocol can be used for two(2) of the three(3) Digital Protocols set by programming software. P25/DMR Digital Protocols are options.

■ DIGITAL – NXDN® MODE

- NXDN® Conventional
- NXDN® TYPE-C (Gen1/Gen2) Trunking (only in 800MHz)
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming (require KPG-180AP OTAP Manager Software)
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill/Check
- Short & Long Data Messages
- GPS Location
- NXDN® Scrambler

■ DIGITAL – DMR MODE

- DMR Tier 2 Conventional Option
- DMR Tier 3 Trunking Option
- DMR Auto Slot Select (DASS)
- AMBE+2™ VOCODER
- 12.5 kHz Channels
- Call Interrupt (Direct & Repeater Mode)
- Paging Call
- Emergency Call
- All Group Call
- Late Entry
- Status Messaging
- Remote Control by Subscriber Units
- ARC4 Encryption Optional
- Site Roaming

■ ANALOG MODE

- NPSPAC Channels
- Conventional Zones
- LTR® Zones
- FleetSync®/II: PTT ID ANI, Caller ID Display, Selective/Group Call, Emergency Status, Text Messages
- MDC-1200: PTT ID ANI, Caller ID Display, Emergency, Radio Check & Inhibit
- QT / DQT
- Two-Tone (Conventional Zones Only)

OPTIONAL FEATURES

■ GENERAL FEATURES

- 4000 Channel (KWD-5000CH)
- Front Panel Programming (KWD-5001FP)
- microSD/microSDHC Memory Card Slot (KWD-5002SD)
- Built-in Bluetooth® Module for Data (KWD-5003BT)
- Remote Control Commands by Subscriber Units (KWD-5007RC)
- 256-bit AES Encryption (KWD-AE30K/31K Encryption Module required)
- Battery Management Solution (KSC-Y32K Charger & KAS-12K Software License Key required)

■ DIGITAL – P25 MODE

- Conventional Features (KWD-5100CV)
- Phase 1 Trunking Features (KWD-5100CV & 5101TR)
- Phase 2 Trunking Features (KWD-5100CV & 5101TR & 5102TR)
- Conventional OTAR (KWD-5103RK)
- Trunking OTAR (KWD-5103RK & 5106DT)
- Conventional Voting Scan (KWD-5105VT)
- Packet Data required for Trunked OTAR/GPS (KWD-5106DT)
- Link Layer Authentication (KWD-5100CV & KWD-5101TR & KWD-AE3x Encryption Board Required)

■ DIGITAL – DMR MODE

- DMR Tier 2 Conventional Features (KWD-5300CV)
- DMR Tier 3 Trunking Features (KWD-5300CV & KWD-5301TR)

RADIO

NX-5400K2

700 / 800 MHz, 3.0 Watts NXDN Conventional / TYPE-C (Gen1/Gen2) Trunking
Standard Key Model



NX-5400

Table of Contents

700/800MHz Digital & FM Analog Portable Radio

RADIO, CON'T

| | |
|-----------|--|
| NX-5400K3 | 700 / 800 MHz, 3.0 Watts NXDN Conventional / TYPE-C (Gen1/Gen2) Trunking Full Key Model |
|-----------|--|

CSA US APPROVED MODELS

Must Order L-5039 & "KNB-LS5CU or KNB-LS7M" Intrinsically Safe Battery per radio

***Note: microSD card is not allowed to use as Intrinsically Safe Option.**

| | |
|---------------|--|
| NX-5400-ISCK2 | 700 / 800 MHz, 3.0 Watts NXDN Conventional / TYPE-C (Gen1/Gen2) Trunking Standard Key Model |
| NX-5400-ISCK3 | 700 / 800 MHz, 3.0 Watts NXDN Conventional / TYPE-C (Gen1/Gen2) Trunking Full Key Model |

FIELD PROGRAMMING UNIT (FPU)

| | |
|----------|--|
| KPG-D1NK | License Key for KPG-D1NK Programming Software for NX-5000 Portable/Mobile (Windows® Vista/7/8/8.1) Note: Requires KPT-300LMC for authentication |
|----------|--|

P25 Trunked Programming Capability (licensed by either 1 or 2 below):

1. USB Key Type: Advanced System Key (ASK)- See KWD-ASK-MK and AK

- For NX-5000 series radios.
- KWD-ASK-MK (Master Key): For trunked system operator (SYSOP). Required for activating KWD-ASK-AK Access keys. Securely embeds/encrypts the HSID.
- KWD-ASK-AK (Access Key): For Dealers/contractors. Activated by KWD-ASK-MK Master Key.
- KPG-D1NK supports up to 16 KWD-ASK-AK Access Keys (16 trunked networks).

FIELD PROGRAMMING UNIT (FPU), CONT

2. Software Key Type: System Key File (SKF)- See L-5005

- For NX-5000 series radios.
- 3-digit HEX System ID (HSID) with verifiable written authorization required from SYSOP.
- Utilized by both SYSOPs and Dealers/Contractors. But Dealers/Contractors must be permitted from SYSOP to order and use SKF.
- Kenwood ships an encrypted *.SKF file via E-Mail to the address provided on the P25 Trunking System Keys Request Form placed on Kenwood Tools.
- The *.SKF securely embeds/encrypts the HSID.

OVER THE AIR PROGRAMMING (OTAP)

KPG-180AP OTAP Manager Software (Windows® Vista/7/8/8.1/10)
• License includes Fifty (50) radios / One(1) **NXDN** Conventional and Type-C **Air** Communication Profile and One(1) **NXDN** Conventional and Type-C **IP** Communication Profile

Note:

- Requires KPT-300LMC for authentication
- Radio to Radio OTAP for P25 Conventional system, requires KWD-AP3-P25 license.
- NEXEDGE Type-D Trunking and DMR System not supported.

SOFTWARE UPGRADE LICENSES FOR KPG-180AP

Note: Includes package license for additional subscriber unit or license for additional profile attached to one computer running KPG-180AP software. All additional licenses require KPT-300LMC for authentication.

| | |
|-------------|--|
| KWD-AP5100 | Additional 100 Radio Package License for 1 PC Note: License includes 100 subscriber radios OTAP License. |
| KWD-AP5250 | Additional 250 Radio Package License for 1 PC Note: License includes 250 subscriber radios OTAP License. |
| KWD-AP5500 | Additional 500 Radio Package License for 1 PC Note: License includes 500 subscriber radios OTAP License. |
| KWD-AP1-CA | Additional NXDN Conventional Type-C Air Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used as NEXEDGE Base Station Serial Interface for both Conventional and Trunking (Type-C Gen1/Gen2). |
| KWD-AP2-CP | Additional NXDN Conventional Type-C IP Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used NEXEDGE Repeater IP Interface for both Conventional and Trunking (Type-C Gen1/Gen2) . |
| KWD-AP3-P25 | P25 Radio to Radio Air Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used as P25 Base Station Serial Interface for only Radio to Radio Communication. |

-- IMPORTANT NOTES--

Base radios are connected to a computer using the KPG-36XM USB adapter for portables, or a KPG-46XM for mobiles.
Requires firmware version 1.4 or higher for the NX-5000 Series portables and mobiles
Requires firmware version 2.5 or higher for the NXR-x00/NXR-x10 repeaters.
Requires firmware version 1.0 or higher for the NXR-5xxx repeaters

BATTERY READER

KAS-12K License Key for KAS-12
Battery Reader Software for KNB-L1/2/3/N4/LS5 & KSC-Y32 (Windows® Vista/7/8/8.1)
Note: Requires KPT-300LMC for authentication

SOFTWARE UPGRADE LICENSES FOR KAS-12

Note: Upgrade License attaches to one computer running KAS-12 software. All additional licenses require KPT-300LMC for authentication.

BATTERY READER, CONT

| | |
|-----------|--|
| KAS-12PRO | <p>Add Battery Management with Database Must require KAS-12K Battery Reader Software to upgrade Note: - A Windows® PC may be required as a Database Server which KAS-12DU (Free) software is installed. - Requires KPT-300LMC for authentication</p> |
|-----------|--|

Offline Authentication Option

| | |
|-------------|---|
| KWD-OFL-USB | <p>USB License Storage Hardware key for Radio Feature License Note: - Must purchase Radio Feature Licenses separately. - Can be used with only one (1) Account Registration Key. - Requires KPT-300LMC V1.10 or higher. - Cancellation rule is difference with standard Online/Offline Authentication. Please refer to a leaflet bundled with KWD-OFL-USB. Warranty Information: - Damaged USB License Storage "KWD-OFL-USB" a. Remaining Licenses will not be warranted. b. Licenses not uploaded to the License Management Server will not be warranted.</p> |
|-------------|---|

General Radio Features

| | |
|------------|--|
| KWD-5000CH | License Key for 4000 Channel Expansion |
| KWD-5001FP | License Key for Front Panel Programming |
| KWD-5002SD | License Key for microSD Memory Card Slot Activation |
| KWD-5003BT | <p>License Key for Bluetooth Data (Required for Data Communication) Note: Voice Communication for Bluetooth Head Set does NOT require KWD-5003BT. You can pair with any Bluetooth audio device without this option.</p> |
| KWD-5007RC | <p>License Key for Remote Control by Subscriber Units Note: - P25 Mode is NOT available. - This license may be used by Administrator due to Stun/Revive/Kill. - The license is required for only Transmitting of Remote Control. - PC command for Remote Control does NOT require the license.</p> |

P25 Radio Features

| | |
|------------|--|
| KWD-5100CV | License Key for P25 Conventional |
| KWD-5101TR | <p>License Key for P25 Phase 1 Trunking (requires KWD-5100CV) Note: Required for Link Layer Authentication</p> |
| KWD-5102TR | License Key for P25 Phase 2 Trunking (requires KWD-5100CV & KWD-5101TR) |
| KWD-5103RK | License Key for P25 OTAR (requires KWD-5106DT for a Trunking Operation) |
| KWD-5105VT | License Key for P25 Conventional Voting Scan |
| KWD-5106DT | <p>License Key for P25 Trunking OTAR / GPS Note: Conventional (OTAR/GPS) does NOT require KWD-5106DT.</p> |

DMR Radio Features

| | |
|------------|---|
| KWD-5300CV | License Key for DMR Tier 2 Conventional |
| KWD-5301TR | License Key for DMR Tier 3 Trunking (requires KWD-5300CV) |
| KWD-5500EE | License Key for DMR ARC4 Enhanced Encryption |

ANTENNAS

| | |
|---------|----------------------------|
| KRA-32K | 700/800 MHz Whip Antenna |
| KRA-36 | 700/800 MHz Stubby Antenna |

BATTERIES AND CHARGERS

***All of batteries listed below except KBP-8M is compatible with IP67/68 when it is used with a radio.**

| | |
|-----------|--|
| KNB-L1M | Li-ion 2000mAh (Compact Slim) |
| KNB-L2M | Li-ion 2600mAh (Standard) |
| KNB-L3M | Li-ion 3400mAh (High Capacity) |
| KNB-N4M | Ni-MH 2500mAh |
| KNB-LS5CU | CSA US Intrinsically Safe Battery Li-ion 2000mAh Note: Due to the I.S. circuitry on the KNB-LS5CU, the cells may lose charge during storage. To prevent loss of capacity during storage, charge the battery for 10 minutes at least every 4 months with the KSC-32, KSC-Y32K, KSC-326K or KSC-326AK. [Intrinsically Safe Option] |
| KNB-LS7M | CSA US Intrinsically Safe Battery Li-ion 3800mAh Note: Due to the I.S. circuitry on the KNB-LS7M, the cells may lose charge during storage. To prevent loss of capacity during storage, charge the battery for 10 minutes at least every 4 months with the KSC-32, KSC-Y32K, KSC-326K or KSC-326AK. [Intrinsically Safe Option] |
| KBP-8M | AA Alkaline Refillable Battery Pack (12 AA: 9V). Cells not included. Note: The color of the case is International Orange. |
| KSC-Y32K | Rapid rate single unit charger (Long-Life Charge Mode capable with KAS-12 Software) |
| KSC-32 | Rapid rate single unit charger |
| KSC-326AK | Rapid rate 6-unit charger CEC Compliant |
| KVC-15 | Rapid rate DC vehicular charger adapter for the KSC-32 (chargers not included; includes KSC-mobile bracket & cigarette lighter cable DC adapter) |
| KVC-23 | Rapid rate DC vehicular charger for TK-5x10/5x20, NX-5x00/x00/x10/x20, TK-x180, TK-x170, & TK-x360 portables with Lithium Ion /Lithium Polymer/NiMH packs only. |

CARRYING ACCESSORIES

| | |
|-----------|--|
| KBH-11 | Spring action belt clip (2.5") |
| KBH-8DS | Leather swivel belt loop with portable D-Ring attachment |
| KLH-6SW | Leather swivel belt loop / detachable swivel D-Ring back |
| KLH-137ST | Firemen's Heavy-Duty Leather Shoulder Strap for a Heavy-Duty Leather Case |
| KLH-200K3 | Heavy duty leather carrying case for NX-5000 series with KNB-L1/L2/L3/LS5CU (for both keypad models) |
| KLH-201K3 | Nylon carrying case for NX-5000-series with KNB-L1/L2/L3/LS5CU (for both keypad models) |

SPECIAL COLOR HOUSING

| | |
|-------------|--|
| KWD-YH-5000 | Yellow Housing Kit for NX-5000 series Portables (Standard Key Model K2/K5 Only) Order L-5024 for Factory Install. (Eligible for warranty of IP67/68 immersion / Intrinsically Safe Option must be installed by Kenwood.) Note: If you order only housing and perform Dealer Installation, IP67/68 Warranty Claim will not be eligible. |
| KWD-OH-5000 | Orange Housing Kit for NX-5000 series Portables (Standard Key Model K2/K5 Only) Order L-5025 for Factory Install. (Eligible for warranty of IP67/68 immersion / Intrinsically Safe Option must be installed by Kenwood.) Note: If you order only housing and perform Dealer Installation, IP67/68 Warranty Claim will not be eligible. |

MICROPHONES & AUDIO ACCESSORIES

***IP grades for microphones and audio accessories are decided by each item.**

| | |
|-----------|--|
| KMC-54WDM | MIL-SPEC, IP67 (Immersion) Speaker Mic Compatible with ANR Feature Note: only compatible with a NX-5000 series portable [Intrinsically Safe Option] |
| KMC-42WDM | MIL-SPEC, IP67 (Immersion) Noise-canceling Speaker Mic [Intrinsically Safe Option] |
| KMC-49 | MIL-SPEC, Speaker Mic. with Antenna Connector Note: 5/16" Coax cable hex wrench included (antenna is not included). [Intrinsically Safe Option] |
| KEP-1 | 3.5mm earphone kit for KMC-41/42W/54W Speaker Mics [Intrinsically Safe Option] |

MICROPHONES & AUDIO ACCESSORIES, CON'T

| | |
|------------|---|
| KEP-2 | 2.5mm earphone kit for KMC-49 Speaker Mic [Intrinsically Safe Option] |
| KCT-51 | Hirose 6-pin Adapter (adapts KVL/aftermarket audio acc. to portable connector) [Intrinsically Safe Option] |
| KHS-11BL | 2-wire palm mic w/earphone, universal connector (Black) [Intrinsically Safe Option] |
| KHS-12BL | 3-wire mini lapel mic w/earphone, universal connector (Black) Note: NOT compatible with TDMA operations [Intrinsically Safe Option] |
| KHS-14 | Lt. Wt. Single muff headset w/boom mic & In-line PTT Note: NOT compatible with TDMA operations [Intrinsically Safe Option] |
| KHS-15D-BH | Hvy-duty noise reduction behind-the-headset w/noise cancelling boom mic & PTT [Intrinsically Safe Option] |
| KHS-15D-OH | Hvy-duty noise reduction over-the-headset w/noise cancelling boom mic & PTT [Intrinsically Safe Option] |

ENCRYPTION & OPTION MODULES

| | |
|-----------|--|
| KWD-AE30K | AES FIPS140-2 & DES Encryption Module (Multi-Key) Order a Labor Code L-5003 if installation is required. (Eligible for warranty of IP67/68 immersion / Intrinsically Safe Option must be installed by Kenwood. If you order only a Module and perform Dealer Installation, IP67/68 Warranty Claim will not be eligible.) KWD-AE30K requires: a Motorola KVL3000 Plus/4000 key loader device. KWD-AE30K is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1). Note: Required for Link Layer Authentication [Intrinsically Safe Option]- Must be Kenwood installed for I.S. |
| KWD-AE31K | AES & DES Encryption Module (Multi-Key) Order a Labor Code L-5004 if installation is required. (Eligible for warranty of IP67/68 immersion / Intrinsically Safe Option must be installed by Kenwood. If you order only a Module and perform Dealer Installation, IP67/68 Warranty Claim will not be eligible.) Note: Requires KPG-AE1/DE1 software key loader or Motorola KVL3000 Plus/4000 key loader device. KWD-AE31K is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1) Note: Required for Link Layer Authentication [Intrinsically Safe Option]- Must be Kenwood installed for I.S. |
| KCT-48VU | External Vibration Unit Note: Audio accessories cannot be used when this option installed. KCT-48VU does not support the P25 digital mode calling or paging features [Intrinsically Safe Option] |
| KPG-AE1K | AES/DES Encryption Software Key Loader for KWD-AE31K Authentication by KPT-300LMC is required Note: KPG-AE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A) |
| KPG-DE1K | DES Encryption Software Key Loader for KWD-AE31K Authentication by KPT-300LMC is required Note: KPG-DE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D992A.1) |

SERVICE RELATED ACCESSORIES

| | |
|------------|--|
| KPG-36XM | Full Speed USB Programming interface cable Note: This cable with USB mode may be used for SD Card Direct Access. |
| KPG-93 | Encryption Key Loader Interface Cable for Motorola KVL-3000/3000 Plus/4000 |
| KPG-93AUT | KVL-4000 Radio Authentication Cable Note: Only capable for P25 Radio Authentication. Not available for Encryption Key Loading. |
| KWD-ASK-AK | Access Key for KPG-D1NK P25 trunked programming Notes: Enables P25 Trunked system programming privileges in a KPG-D1NK. • For NX-5000 series only • Must be activated by trunked system operator (SYSOP) with KWD-ASK-MK Master Key • Must have KPG-D1NK • Configurable expiration period of KWD-ASK-AK set by KWD-ASK-MK is available for 3 years for built in battery. USB Key must be replaced since the expiration set up dose not work after 3 years. |

SERVICE RELATED ACCESSORIES, CON'T

| | |
|------------|---|
| KWD-ASK-MK | Master Key for activating KWD-ASK-AK Access Keys - Restricted Purchase Requirements - Notes: • For NX-5000 series only. • Sold to trunked system operator (SYSOP) or SYSOP authorized entities only • Must have KPG-D1NK • SYSOP must provide 3-digit HEX HSID to Kenwood with P25 Trunking System Keys Request Form placed on Kenwood Tools. • Purchase KWD-ASK-AK Access Keys if needed. |
|------------|---|

INSTALLATION / TUNING CHARGES

| | |
|--------|---|
| L-5001 | Factory Activation of Radio Feature Licenses (per Radio) Note: Must purchase Radio Feature Licenses separately. <u>KPT-300LMC's History Menu will not display the Radio Features activated by Factory.</u> |
| L-5002 | NX-5200/5300/5400 Programming (with basic TX/RX check) |
| L-5003 | Install KWD-AE30K in NX-5000 series Portable (Must purchase module separately) |
| L-5004 | Install KWD-AE31K in NX-5000 series Portable (Must purchase module separately) |
| L-5005 | KPG-D1NK System Key File (SKF) Note: Enables P25 Trunked system programming privileges in a KPG-D1NK. - Restricted Purchase Requirements - • Trunked system operator (SYSOP) must provide 3-digit HEX HSID to Kenwood with P25 Trunking System Keys Request Form placed on Kenwood Tools. • Must have KPG-D1NK. • Kenwood ships an encrypted *.SKF file via E-Mail to the address provided on the P25 Trunking System Keys Request Form placed on Kenwood Tools. • Non-SYSOP entities ordering L-5005 must provide verifiable written authorization from SYSOP to receive an *.SKF file. • 3-digit HEX HSID are securely encrypted & embedded in the *.SKF file. |
| L-5024 | Assemble Yellow Housing KWD-YH-5000 with NX-5000 series Portable |
| L-5025 | Assemble Orange Housing KWD-OH-5000 with NX-5000 series Portable |
| L-5039 | Configure NX-5200/5300/5400 for CSA US Intrinsically Safe Must order KNB-LS5CU and KNB-LS7M I.S. battery |
| L-5051 | P25 CAP Compliance of Non-Encrypted Radio - Disable Built-in DES |

-- IMPORTANT NOTES regarding ENCRYPTION MODULES--

Encryption modules, key loaders and radios containing encryption are export controlled by the U.S. Department of Commerce Bureau of Industry & Security EAR regulations and may either require an Export License, are eligible for a License Exception (ENC) or are exportable with No License Required (NLR) depending on the country, the consignee and the intended use. High level encryption is a special commodity that may require an export license to most countries. See www.bis.gov for more information regarding export regulations. DO NOT SHIP encryption items outside the U.S. without proper DOC/BIS Export Licenses and/or compliances.

Kenwood may request the following information to be submitted at time of order (this information must meet Kenwood internal approvals prior to shipment even if being returned to Kenwood later:

a) Initial Destination: Initial delivery point if different from Ultimate Destination
(customer distribution center, headquarters, dealership, manufacturer's representative)

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

b) Ultimate Destination: Final delivery point(s); deployment/distribution

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

c) Intended Use of Radios: Law enforcement, security, operations, etc.

KWD-AE30 AES FIPS140-2 SCM , NIST Validation & Customer Shipping

A secure delivery method direct to the end user customer is required by the NIST AES FIPS 140-2 validation rules. For U.S. Federal Government entities the SCM must ship from Kenwood USA Corporation directly to the end user customer by a trusted carrier (FEDEX, UPS or a designated Kenwood USA Corporation employee); shipping/handling by a dealer or other entity is not acceptable. This may or may not be required by local/state government agencies or business/industrial users. Please check with the end use customer about their AES encryption handling requirements before ordering. Kenwood will not be responsible for shipments of KWD-AE30K modules to erroneous destinations specified on an order.



NEXEDGE®
DMR

NX-3200/3300

Table of Contents

VHF/UHF Digital & FM Analog Portable Radios

STANDARD



Basic Standard Key Full Key

All NX-3000 series portables include:

- Belt Clip (KBH-11)
- Accessory Cover
- Channel Stopper
- User Guide
- Premium Warranty: 3 Years*

All Accessories / options: 1 Year

Purchase Battery, Charger, Antenna separately

*Note:

1. To meet IP grades and MIL, the universal connector cap or KENWOOD official accessory must be installed/connected.
2. To maintain immersion specs (IP67/68), all warranty service must be done by one of the three National Kenwood Authorized Service Centers. IP67/68 Certification is valid under the 3 year premium warranty. No re-certification is available.

Because of spurious signal (birdie), the following frequencies (and ± 7.5 kHz ranges) are not allowed ;

- | | | |
|------------|------------|------------|
| • 139.2000 | • 403.2000 | • 460.8000 |
| • 144.0000 | • 408.0000 | • 465.6000 |
| • 148.8000 | • 412.8000 | • 470.4000 |
| • 153.6000 | • 417.6000 | • 475.2000 |
| • 158.4000 | • 422.4000 | • 480.0000 |
| • 160.0000 | • 427.2000 | • 484.8000 |
| • 163.2000 | • 432.0000 | • 489.6000 |
| • 168.0000 | • 436.8000 | • 494.4000 |
| • 172.8000 | • 441.6000 | • 499.2000 |
| | • 446.4000 | • 504.0000 |
| | • 451.2000 | • 508.8000 |
| | • 456.0000 | • 513.6000 |
| | | • 518.4000 |

■ GENERAL FEATURES

- 5 W (136-174 MHz) Models
- 5 W (400-520 MHz) Models
- 512 CH-GID / 128 Zones
- 64 CH-GID / 4 Zones (For Basic Models)
- Basic Models (w/o LCD and keypad)
- Standard Keypad Models (w/ LCD and D-pad/4key)
- Full Keypad Models (w/ LCD and D-pad/12 key)
- 4-Line Basic Frame (2-Line Main/Sub-LCD, icon & key guide)
- 5-Line Text Message Frame (3 Lines of Text, icon & key guide)
- Multi-Language Display
- Date & 12/24 Hour Time Clock
- 7-color Light Bar Indicator
- Transmit/Busy/Call Alert/Warn LED
- Remote Stun/Kill/Check
- On/Off Volume Knob
- 16-Position Mechanical Selector
- 4-way Directional-pad (For Standard/Full Keypad)
- Emergency Key
- 2 Side PF Keys
- 1W Speaker Audio
- Dual Digital Protocol¹
- Emergency Call Features
- Built-in GPS Receiver / Antenna
- Built-in Bluetooth® 4.0 Module
- Built-in Motion Sensor
- Active Noise Reduction (ANR)
- KPG-D3N Windows® FPU
- Flash Firmware Upgrading
- Optional Software-based DES and AES . Encryptions (Digital Only)
- MIL-STD-810 C/D/E/F/G
- IP54/55² Water & Dust Intrusion
- IP67² Immersion
- Digital Encode/Decode Format

1. Designed to operate digital, DMR OR NXDN, along with analog FM; a single FM digital protocol is selected with programming software.

2. Must equip **Accessory Cover** included with a Radio. Speaker Microphone does not cover IPs.

■ DIGITAL – NXDN® MODE

- NXDN® Conventional
- NXDN® TYPE-C (Gen1/Gen2) Trunking Option
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming (requires KPG-180AP OTAP Manager Software)
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill/Check
- Short & Long Data Messages
- GPS Location
- NXDN® Scrambler

■ DIGITAL – DMR MODE

- DMR Tier 2 Conventional
- DMR Tier 3 Trunking Option
- DMR Auto Slot Select (DASS)
- AMBE+2™ VOCODER
- 12.5 kHz Channels
- Site Roaming
- Call Interrupt (Direct & Repeater Mode)
- Paging Call
- Emergency Call
- All Group Call
- Late Entry
- Status Messaging
- Remote Control by Subscriber Units
- ARC4 Encryption Option

■ ANALOG MODE

- Conventional Zones
- LTR® Zones
- FleetSync®/II: PTT ID ANI, Caller ID Display, Selective/Group Call, Emergency Status, Text Messages
- MDC-1200: PTT ID ANI, Caller ID Display, Emergency, Radio Check & Inhibit
- QT / DQT
- Two-Tone (Conventional Zones Only)
- DTMF

OPTIONAL FEATURES

- 1000 Channel (**KWD-3000CH**)
- Front Panel Programming (**KWD-3001FP**)
- Built-in Bluetooth® Module for Data (**KWD-3002BT**)
- Digital NXDN Trunking (**KWD-3501TR**)
- DMR Tier 2 Conventional (**Factory Installed**)
- DMR Tier 3 Trunking (**KWD-3302TR**)
- DMR ARC4 Enhanced Encryption (**KWD-3502EE**)
- AES/DES Encryption (**KWD-3503AE**)
- Remote Control Command by Subscriber Units (**KWD-3504RC**)

Approved by CSA-us International Inc. for Classes I, II & III, Div. 1, Groups C, D, E, F, G and are also approved for non-Incendive use in Class I, Div. 2, Groups A, B hazardous locations.

RADIO

| | |
|-----------|---|
| NX-3200K | VHF (136-174MHz), 5.0 Watts, 64 CH, Basic Model |
| NX-3200K2 | VHF (136-174MHz), 5.0 Watts, 512 CH, Standard Key Model |
| NX-3200K3 | VHF (136-174MHz), 5.0 Watts, 512 CH, Full Key Model |
| NX-3300K | UHF (400-520MHz), 5.0 Watts, 64 CH, Basic Model |
| NX-3300K2 | UHF (400-520MHz), 5.0 Watts, 512 CH, Standard Key Model |
| NX-3300K3 | UHF (400-520MHz), 5.0 Watts, 512 CH, Full Key Model |

Li-ion VALUE PACKAGES (Preferred for Trunked Mode Usage)

| | |
|-----------------|--|
| NX-3200K2-XLKVP | VHF Extra-Cap Li-Ion Value Pack : NX-3200K2+KNB-78L(2860mAh)+KSC-25LSK+KRA-26M |
| NX-3300K2-XLKVP | UHF Extra-Cap Li-Ion Value Pack : NX-3300K2+KNB-78L(2860mAh)+KSC-25LSK+KRA-27M |
| NX-3200K2LAKVP | VHF Hi-Cap Li-Ion Value Pack : NX-3200K2+KNB-57LAM(2000mAh)+KSC-25LSK+KRA-26M |
| NX-3300K2LAKVP | UHF Hi-Cap Li-Ion Value Pack : NX-3300K2+KNB-57LAM(2000mAh)+KSC-25LSK+KRA-27M |

Li-ion VALUE PACKAGES (Preferred for Conventional Mode Usage)

| | |
|-----------------|--|
| NX-3200K2-SLKVP | VHF Li-Ion Value Pack : NX-3200K2+KNB-55L(1480mAh)+KSC-25LSK+KRA-26M |
| NX-3300K2-SLKVP | UHF Li-Ion Value Pack : NX-3300K2+KNB-55L(1480mAh)+KSC-25LSK+KRA-27M |

CSA US APPROVED MODELS

Must Order L-5062 & KNB-79LCM Intrinsically Safe Battery per radio

| | |
|---------------|---|
| NX-3200-ISCK | VHF (136-174MHz), 5.0 Watts, 64 CH, Basic Model |
| NX-3200-ISCK2 | VHF (136-174MHz), 5.0 Watts, 512 CH, Standard Key Model |
| NX-3200-ISCK3 | VHF (136-174MHz), 5.0 Watts, 512 CH, Full Key Model |
| NX-3300-ISCK | UHF (400-520MHz), 5.0 Watts, 64 CH, Basic Model |
| NX-3300-ISCK2 | UHF (400-520MHz), 5.0 Watts, 512 CH, Standard Key Model |
| NX-3300-ISCK3 | UHF (400-520MHz), 5.0 Watts, 512 CH, Full Key Model |

Note: KNB-68LC for NX-x20 series cannot be used with NX-3000 series as an Intrinsically Safe battery.

Field Programming Unit (FPU)

| | |
|----------|---|
| KPG-D3NK | License Key for KPG-D3NK Programming Software for NX-3000 Portable/Mobile <u>Note:</u> Requires KPT-300LMC for authentication |
|----------|---|

Over The Air Programming (OTAP)

| | |
|-----------|---|
| KPG-180AP | Licence Key for KPG-180AP OTAP Manager Software • License includes Fifty (50) radios / One(1) NXDN Conventional and Type-C Air Communication Profile and One(1) NXDN Conventional and Type-C IP Communication Profile <u>Note:</u> - Requires KPT-300LMC for authentication - NEXEDGE Type-D Trunking and DMR System not supported. |
|-----------|---|

SOFTWARE UPGRADE LICENSES FOR KPG-180AP

Note: Includes package license for additional subscriber unit or license for additional profile attached to one computer running KPG-180AP software. All additional licenses require KPT-300LMC for authentication.

| | |
|------------|---|
| KWD-AP5100 | Additional 100 Radio Package License for 1 PC Note: License includes 100 subscriber radios OTAP License. |
| KWD-AP5250 | Additional 250 Radio Package License for 1 PC Note: License includes 250 subscriber radios OTAP License. |
| KWD-AP5500 | Additional 500 Radio Package License for 1 PC Note: License includes 500 subscriber radios OTAP License. |

Over The Air Programming (OTAP), CON'T

| | |
|------------|--|
| KWD-AP1-CA | Additional NXDN Conventional Type-C Air Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used as NEXEDGE Base Station Serial Interface for both Conventional and Trunking (Type-C Gen1/Gen2). |
| KWD-AP2-CP | Additional NXDN Conventional Type-C IP Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used NEXEDGE Repeater IP Interface for both Conventional and Trunking (Type-C Gen1/Gen2) . |

-- IMPORTANT NOTES--

Base radios are connected to a computer using the KPG-36XM USB adapter for portables, or a KPG-46XM for mobiles.
 Requires firmware version 2.5 or higher for the NXR-x00/NXR-x10 repeaters.
 Requires firmware version 1.0 or higher for the NXR-5xxx repeaters.

Encryption Software Keyloaders

| | |
|----------|--|
| KPG-AE1K | License Key for AES/DES Encryption Software Key Loader for KWD-3503AE <u>Note:</u> - Requires KPT-300LMC for authentication - KPG-AE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A). |
| KPG-DE1K | License Key for DES Encryption Software Key Loader for KWD-3503AE <u>Note:</u> - Requires KPT-300LMC for authentication - KPG-DE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A). |

Offline Authentication Option

| | |
|-------------|---|
| KWD-OFL-USB | <p>USB License Storage Hardware key for Radio Feature License</p> <p>Note:</p> <ul style="list-style-type: none"> - Must purchase Radio Feature Licenses separately. - Can be used with only one (1) Account Registration Key. - Requires KPT-300LMC V1.10 or higher. - Cancellation rule is difference with standard Online/Offline Authentication. Please refer to a leaflet bundled with KWD-OFL-USB. <p>Warranty Information:</p> <ul style="list-style-type: none"> - Damaged USB License Storage "KWD-OFL-USB" a. Remaining Licenses will not be warranted. b. Licenses not uploaded to the License Management Server will not be warranted. |
|-------------|---|

Radio Features

| | |
|------------|--|
| KWD-3000CH | License Key for 1000 Channel Expansion |
| KWD-3001FP | License Key for Front Panel Programming |
| KWD-3002BT | <p>License Key for Bluetooth Data (Required for Data Communication)</p> <p>Note: Voice Communication for Bluetooth Head Set does NOT require KWD-3002BT. You can pair with any Bluetooth audio device without this option.</p> |
| KWD-3302TR | License Key for DMR Tier 3 Trunking |
| KWD-3501TR | License Key for Digital Trunking (Includes NXDN Type-C and Type-C Gen2) |
| KWD-3502EE | License Key for DMR ARC4 Enhanced Encryption |
| KWD-3503AE | <p>License Key for AES/DES Encryption</p> <p>Note:</p> <ol style="list-style-type: none"> 1. Factory Installation only. Must order L-5054. 2. Requires KPG-AE1/DE1 software key loader to encrypt. 3. KWD-3503AE is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1) Please see descriptions at the bottom. |
| KWD-3504RC | <p>License Key for Remote Control by Subscriber Unit</p> <p>Note:</p> <ul style="list-style-type: none"> - This license may be used by Administrator due to Stun/Revive/Kill. - The license is only required for transmission of Remote Control commands. - PC command for Remote Control does NOT require the license. |
| KWD-3505DE | <p>License Key for DES Encryption</p> <p>Note:</p> <p>Requires KPG-AE1/DE1 software key loader to load encryption keys</p> |

ANTENNAS

| | |
|----------|--|
| KRA-22M | VHF Low-profile helical antenna 148-162 MHz |
| KRA-22M2 | VHF Low -profile helical antenna 162-174 MHz |
| KRA-22M3 | VHF Low-profile helical antenna 136-150 MHz |
| KRA-23M | UHF Low-profile helical antenna 450-490 MHz |
| KRA-23M2 | UHF Low-profile helical antenna 470-512 MHz |
| KRA-23M3 | UHF Low-profile helical antenna 403-430 MHz |
| KRA-26M | VHF helical antenna 146-162 MHz |
| KRA-26M2 | VHF helical antenna 162-174 MHz |
| KRA-26M3 | VHF helical antenna 136-150 MHz |
| KRA-27M | UHF whip antenna 440-490 MHz |
| KRA-27M2 | UHF whip antenna 470-520 MHz |
| KRA-27M3 | UHF whip antenna 400-450 MHz |
| KRA-25 | High gain VHF helically loaded whip antenna 148-162 MHz |
| KRA-28 | Broad-band VHF helically loaded whip antenna 140-170 MHz |

BATTERIES AND CHARGERS

| | |
|-----------|--|
| KNB-78LM | 2860 mAh, Li-ion battery, IP67, battery only, best for trunked mode operation |
| KNB-57LAM | 2000 mAh, Li-ion battery, IP67, battery only, best for conventional mode operation |
| KNB-55L | 1480 mAh, Li-ion battery, IP67, battery only |
| KNB-56N | 1400 mAh, Ni-MH battery, IP67, battery only |
| KNB-79LCM | CSA US Intrinsically Safe Battery Li-ion 2860mAh, IP67, battery only [Intrinsically Safe Option] |

BATTERIES AND CHARGERS, CON'T

| | |
|-----------|---|
| KBP-5 | AA Alkaline Refillable Battery Pack (6 AA; 9V) cells not included |
| KSC-25LSK | 100~240 volt rapid rate single unit charger for KNB-40LC(V)/55L/57L/68LC/78LM/79LCM Li-ion Battery |
| KSC-25SK | 110 volt Rapid rate single unit charger for KNB-26N/40LC(V)/55L/56N/57L/68LC/78LM/79LCM |
| KSC-256AK | Rapid rate 6-Unit charger for KNB-26N/55L/56N/57L/68LC/78LM/79LCM |
| KMB-16 | Six Unit Charger Adapter for the KSC-16/20/24/25/25L chargers (chargers not included) |
| KMB-23 | Six Unit Charger Adapter for the KSC-16/20/24/25/25L/32 chargers (chargers not included) |
| KVC-4 | Vehicular charger adapter for the KSC-16/18/20/24/25SK chargers (chargers not included) *KSC-25LSK is not compatible with KVC-4. |
| KVC-23 | Rapid rate DC vehicular charger for TK-5x10/5x20, NX-5x00/NX-3x00/x00/x10/x20, TK- x180, TK-x170, & TK-x360 portables with Lithium Ion /Lithium Polymer/NiMH packs only. |

CARRYING ACCESSORIES

| | |
|-----------|--|
| KBH-11 | Spring action belt clip (2.5") |
| KBH-8DS | Leather swivel belt loop with portable D-Ring attachment |
| KLH-206K | Heavy-Duty Leather Case w/Swivel Belt Loop for Basic Model |
| KLH-206K2 | Heavy-Duty Leather Case w/Swivel Belt Loop for Standard Keypad Model |
| KLH-206K3 | Heavy-Duty Leather Case w/Swivel Belt Loop for Full Keypad Model |
| KLH-207K | Nylon carrying case for Basic Model |
| KLH-207K2 | Nylon carrying case for Standard Keypad Model |
| KLH-207K3 | Nylon carrying case for Full Keypad Model |

SPECIAL COLOR HOUSING

| | |
|--------------|---|
| KWD-YH-3000U | Yellow Housing Kit for NX-3x00 series Portables (Standard Key Model Only) Must order L-5068 for Factory Install. Eligible for warranty of IP67 immersion. |
|--------------|---|

MICROPHONES & AUDIO ACCESSORIES

***IP grades for microphones and audio accessories are decided by each item.**

| | |
|-----------|---|
| KMC-54WDM | MIL-SPEC, IP67 (Immersion) Speaker Mic Compatible with ANR Feature Note: ANR Feature with KMC-54WDM is only compatible with a NX-5000/3000 series portable [Intrinsically Safe Option] |
| KMC-40 | MIL-SPEC, Speaker Mic. with Antenna Connector Note: 5/16" Coax cable hex wrench included (antenna is not included). [Intrinsically Safe Option] |
| KMC-41M | MIL-SPEC, IP54/55 Noise-canceling Speaker Mic Note: Not compatible with TDMA operation [Intrinsically Safe Option] |
| KMC-42WDM | MIL-SPEC, IP67 (Immersion) Noise-canceling Speaker Mic [Intrinsically Safe Option] |
| KEP-1 | 3.5mm earphone kit for KMC-41/42W/54W Speaker Mics [Intrinsically Safe Option] |
| KHS-11BL | 2-wire palm mic w/earphone, universal connector (Black) [Intrinsically Safe Option] |
| KHS-12BL | 3-wire mini lapel mic w/earphone, universal connector (Black) Note: Not compatible with TDMA operations [Intrinsically Safe Option] |

MICROPHONES & AUDIO ACCESSORIES, CON'T

| | |
|------------|--|
| KHS-14 | Lt. Wt. Single muff headset w/boom mic & In-line PTT Note: Not compatible with TDMA operations [Intrinsically Safe Option] |
| KHS-15D-BH | Hvy-duty noise reduction behind-the-headset w/noise cancelling boom mic & PTT [Intrinsically Safe Option] |
| KHS-15D-OH | Hvy-duty noise reduction over-the-headset w/noise cancelling boom mic & PTT [Intrinsically Safe Option] |

OPTION MODULES

| | |
|----------|--|
| KCT-48VU | External Vibration Unit Note: Audio accessories cannot be used when this option installed. |
|----------|--|

SERVICE RELATED ACCESSORIES

| | |
|----------|--|
| KPG-36XM | Full Speed USB Programming interface cable |
|----------|--|

INSTALLATION / TUNING CHARGES

| | |
|--------|---|
| L-836 | Assemble KMB-16 with six KSC-25/25L |
| L-961 | Assemble KMB-23 with six KSC-24/25/25L/32 (Rapid Rate, 120 Volt versions only) |
| L-5001 | Factory Activation of Radio Feature Licenses (per Radio) Note: Must purchase Radio Feature Licenses separately. <u>KPT-300LMC's History Menu will not display the Radio Features activated by Factory.</u> |
| L-5052 | NX-3000 Series Portables Programming (with basic TX/RX check) |
| L-5054 | Installation AES/DES for NX-3000 Portable/Mobile |
| L-5062 | Configure NX-3000 series for CSA US Intrinsically Safe Note: NX-3000 series I.S. radios must be used with matching I.S. battery KNB-79LCM. |
| L-5068 | Assemble Yellow Housing KWD-YH-3000U/P with NX-3000 series Portable |

-- IMPORTANT NOTES regarding ENCRYPTION SOFTWARE OPTION--

Encryption Software Option, key loaders and radios containing encryption are export controlled by the U.S. Department of Commerce Bureau of Industry & Security EAR regulations and may either require an Export License, are eligible for a License Exception (ENC) or are exportable with No License Required (NLR) depending on the country, the consignee and the intended use. High level encryption is a special commodity that may require an export license to most countries. See www.bis.gov for more information regarding export regulations. DO NOT SHIP encryption items outside the U.S. without proper DOC/BIS Export Licenses and/or compliances.

JVCKENWOOD may request the following information to be submitted at time of order (this information must meet JVCKENWOOD internal approvals prior to shipment even if being returned to JVCKENWOOD later:

a) Initial Destination: Initial delivery point if different from Ultimate Destination (customer distribution center, headquarters, dealership, manufacturer's representative)

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

b) Ultimate Destination: Final delivery point(s); deployment/distribution

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

c) Intended Use of Radios: Law enforcement, security, operations, etc.



All NX-3000 series portables include:

- Belt Clip (KBH-11)
- Antenna (KRA-38K)
- Accessory Cover
- Channel Stopper
- User Guide
- Premium Warranty: 3 Years*

All Accessories / options: 1 Year

Purchase Battery, Charger, Antenna separately

*Note:

1. To meet IP grades and MIL, the universal connector cap or KENWOOD official accessory must be installed/connected.
2. To maintain immersion specs (IP67/68), all warranty service must be done by one of the three National Kenwood Authorized Service Centers. IP67/68 Certification is valid under the 3 year

STANDARD

■ GENERAL FEATURES

- 3 W (806-941 MHz) Model
- 512 CH-GID / 128 Zones
- Full Keypad Model (w/ LCD and D-pad/12 key)
- 4-Line Basic Frame (2-Line Main/Sub-LCD, icon & key guide)
- 5-Line Text Message Frame (3 Lines of Text, icon & key guide)
- Multi-Language Display
- Date & 12/24 Hour Time Clock
- 7-color Light Bar Indicator
- Transmit/Busy/Call Alert/Warn LED
- Remote Stun/Kill/Check
- On/Off Volume Knob
- 16-Position Mechanical Selector
- 4-way Directional-pad (For Standard/Full Keypad)
- Emergency Key
- 2 Side PF Keys
- 1W Speaker Audio
- Dual Digital Protocol¹
- Emergency Call Features
- Built-in GPS Receiver / Antenna
- Built-in Bluetooth® 4.0 Module
- Built-in Motion Sensor
- Active Noise Reduction (ANR)
- KPG-D3N Windows® FPU
- Flash Firmware Upgrading
- Optional Software-based DES and AES . Encryptions (Digital Only)
- MIL-STD-810 C/D/E/F/G
- IP54/55² Water & Dust Intrusion
- IP67² Immersion
- Digital Encode/Decode Format

1. Designed to operate digital, DMR OR NXDN, along with analog FM; a single FM digital protocol is selected with programming software.
2. Must equip **Accessory Cover** included with a Radio. Speaker Microphone does not cover IPs.

■ DIGITAL – NXDN® MODE

- NXDN® Conventional
- NXDN® TYPE-C (Gen1/Gen2) Trunking
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming (requires KPG-180AP OTAP Manager Software)
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill/Check
- Short & Long Data Messages
- GPS Location
- NXDN® Scrambler

■ DIGITAL – DMR MODE

- DMR Tier 2 Conventional Option
- DMR Tier 3 Trunking Option
- DMR Auto Slot Select (DASS)
- AMBE+2™ VOCODER
- 12.5 kHz Channels
- Site Roaming
- Call Interrupt (Direct & Repeater Mode)
- Paging Call
- Emergency Call
- All Group Call
- Late Entry
- Status Messaging
- Remote Control by Subscriber Units
- ARC4 Encryption Option

■ ANALOG MODE

- Conventional Zones
- LTR® Zones
- FleetSync®/II: PTT ID ANI, Caller ID Display, Selective/Group Call, Emergency Status, Text Messages
- MDC-1200: PTT ID ANI, Caller ID Display, Emergency, Radio Check & Inhibit
- QT / DQT
- Two-Tone (Conventional Zones Only)
- DTMF
- Built-in Voice Inversion Scrambler

OPTIONAL FEATURES

- 1000 Channel (**KWD-3000CH**)
- Front Panel Programming (**KWD-3001FP**)
- Built-in Bluetooth® Module for Data (**KWD-3002BT**)
- Digital NXDN Trunking (**Factory Installed**)
- DMR Tier 2 Conventional (**KWD-3301CV**)
- DMR Tier 3 Trunking (**KWD-3301CV & KWD-3302TR**)
- DMR ARC4 Enhanced Encryption (**KWD-3502EE**)
- AES/DES Encryption (**KWD-3503AE**)
- Remote Control Command by Subscriber Units (**KWD-3504RC**)

RADIO

NX-3400K3

800/900MHz, 3.0 Watts, 512 CH, Full Key Model, NXDN Conv & Trunking

Field Programming Unit (FPU)

| | |
|----------|---|
| KPG-D3NK | License Key for KPG-D3NK Programming Software for NX-3000 Portable/Mobile Note: Requires KPT-300LMC for authentication |
|----------|---|

Over The Air Programming (OTAP)

| | |
|-----------|---|
| KPG-180AP | License Key for KPG-180AP OTAP Manager Software • License includes Fifty (50) radios / One(1) NXDN Conventional and Type-C Air Communication Profile and One(1) NXDN Conventional and Type-C IP Communication Profile Note: - Requires KPT-300LMC for authentication - NEXEDGE Type-D Trunking and DMR System not supported. |
|-----------|---|

SOFTWARE UPGRADE LICENSES FOR KPG-180AP

Note: Includes package license for additional subscriber unit or license for additional profile attached to one computer running KPG-180AP software. All additional licenses require KPT-300LMC for authentication.

| | |
|------------|---|
| KWD-AP5100 | Additional 100 Radio Package License for 1 PC Note: License includes 100 subscriber radios OTAP License. |
| KWD-AP5250 | Additional 250 Radio Package License for 1 PC Note: License includes 250 subscriber radios OTAP License. |
| KWD-AP5500 | Additional 500 Radio Package License for 1 PC Note: License includes 500 subscriber radios OTAP License. |

Over The Air Programming (OTAP), CON'T

| | |
|------------|--|
| KWD-AP1-CA | Additional NXDN Conventional Type-C Air Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used as NEXEDGE Base Station Serial Interface for both Conventional and Trunking (Type-C Gen1/Gen2). |
| KWD-AP2-CP | Additional NXDN Conventional Type-C IP Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used NEXEDGE Repeater IP Interface for both Conventional and Trunking (Type-C Gen1/Gen2) . |

-- IMPORTANT NOTES--

Base radios are connected to a computer using the KPG-36XM USB adapter for portables, or a KPG-46XM for mobiles.
Requires firmware version 2.5 or higher for the NXR-x00/NXR-x10 repeaters.
Requires firmware version 1.0 or higher for the NXR-5xxx repeaters.

Encryption Software Keyloaders

| | |
|----------|--|
| KPG-AE1K | License Key for AES/DES Encryption Software Key Loader for KWD-3503AE Note: - Requires KPT-300LMC for authentication - KPG-AE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A). |
| KPG-DE1K | License Key for DES Encryption Software Key Loader for KWD-3503AE Note: - Requires KPT-300LMC for authentication - KPG-DE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A). |

Offline Authentication Option

| | |
|-------------|---|
| KWD-OFL-USB | <p>USB License Storage Hardware key for Radio Feature License</p> <p>Note:</p> <ul style="list-style-type: none"> - Must purchase Radio Feature Licenses separately. - Can be used with only one (1) Account Registration Key. - Requires KPT-300LMC V1.10 or higher. - Cancellation rule is difference with standard Online/Offline Authentication. Please refer to a leaflet bundled with KWD-OFL-USB. <p>Warranty Information:</p> <ul style="list-style-type: none"> - Damaged USB License Storage "KWD-OFL-USB" a. Remaining Licenses will not be warranted. b. Licenses not uploaded to the License Management Server will not be warranted. |
|-------------|---|

Radio Features

| | |
|------------|--|
| KWD-3000CH | License Key for 1000 Channel Expansion |
| KWD-3001FP | License Key for Front Panel Programming |
| KWD-3002BT | <p>License Key for Bluetooth Data (Required for Data Communication)</p> <p>Note: Voice Communication for Bluetooth Head Set does NOT require KWD-3002BT. You can pair with any Bluetooth audio device without this option.</p> |
| KWD-3301CV | License Key for DMR Tier 2 Conventional |
| KWD-3302TR | License Key for DMR Tier 3 Trunking (Requires KWD-3301CV) |
| KWD-3502EE | License Key for DMR ARC4 Enhanced Encryption |
| KWD-3503AE | <p>License Key for AES/DES Encryption</p> <p>Note:</p> <ol style="list-style-type: none"> 1. Factory Installation only. Must order L-5054. 2. Requires KPG-AE1/DE1 software key loader to encrypt. 3. KWD-3503AE is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1) Please see descriptions at the bottom. |
| KWD-3504RC | <p>License Key for Remote Control by Subscriber Unit</p> <p>Note:</p> <ul style="list-style-type: none"> - This license may be used by Administrator due to Stun/Revive/Kill. - The license is only required for transmission of Remote Control commands. - PC command for Remote Control does NOT require the license. |
| KWD-3505DE | <p>License Key for DES Encryption</p> <p>Note:</p> <p>Requires KPG-AE1/DE1 software key loader to load encryption keys</p> |

ANTENNAS

| | |
|---------|----------------------------|
| KRA-32K | 700/800 MHz Whip Antenna |
| KRA-36 | 700/800 MHz Stubby Antenna |
| KRA-38K | 800/900 MHz Whip Antenna |
| KRA-39 | 900 MHz Stubby Antenna |

BATTERIES AND CHARGERS

| | |
|-----------|--|
| KNB-78LM | 2860 mAh, Li-ion battery, IP67, battery only, best for trunked mode operation |
| KNB-57LAM | 2000 mAh, Li-ion battery, IP67, battery only, best for conventional mode operation |
| KNB-55L | 1480 mAh, Li-ion battery, IP67, battery only |
| KNB-56N | 1400 mAh, Ni-MH battery, IP67, battery only |

BATTERIES AND CHARGERS, CON'T

| | |
|-----------|---|
| KBP-5 | AA Alkaline Refillable Battery Pack (6 AA; 9V) cells not included |
| KSC-25LSK | 100~240 volt rapid rate single unit charger for KNB-40LC(V)/55L/57L/68LC/78LM/79LCM Li-ion Battery |
| KSC-25SK | 110 volt Rapid rate single unit charger for KNB-26N/40LC(V)/55L/56N/57L/68LC/78LM/79LCM |
| KSC-256AK | Rapid rate 6-Unit charger for KNB-26N/55L/56N/57L/68LC/78LM/79LCM |
| KMB-16 | Six Unit Charger Adapter for the KSC-16/20/24/25/25L chargers (chargers not included) |
| KMB-23 | Six Unit Charger Adapter for the KSC-16/20/24/25/25L/32 chargers (chargers not included) |
| KVC-4 | Vehicular charger adapter for the KSC-16/18/20/24/25SK chargers (chargers not included) *KSC-25LSK is not compatible with KVC-4. |
| KVC-23 | Rapid rate DC vehicular charger for TK-5x10/5x20, NX-5x00/NX-3x00/x00/x10/x20, TK- x180, TK-x170, & TK-x360 portables with Lithium Ion /Lithium Polymer/NiMH packs only. |

CARRYING ACCESSORIES

| | |
|-----------|--|
| KBH-11 | Spring action belt clip (2.5") |
| KBH-8DS | Leather swivel belt loop with portable D-Ring attachment |
| KLH-206K3 | Heavy-Duty Leather Case w/Swivel Belt Loop for Full Keypad Model |
| KLH-207K3 | Nylon carrying case for Full Keypad Model |

MICROPHONES & AUDIO ACCESSORIES

***IP grades for microphones and audio accessories are decided by each item.**

| | |
|-----------|---|
| KMC-54WDM | MIL-SPEC, IP67 (Immersion) Speaker Mic Compatible with ANR Feature Note: ANR Feature with KMC-54WDM is only compatible with a NX-5000/3000 series portable |
| KMC-40 | MIL-SPEC, Speaker Mic. with Antenna Connector Note: 5/16" Coax cable hex wrench included (antenna is not included). |
| KMC-41M | MIL-SPEC, IP54/55 Noise-canceling Speaker Mic Note: Not compatible with TDMA operation |
| KMC-42WDM | MIL-SPEC, IP67 (Immersion) Noise-canceling Speaker Mic |
| KEP-1 | 3.5mm earphone kit for KMC-41/42W/54W Speaker Mics |
| KHS-11BL | 2-wire palm mic w/earphone, universal connector (Black) |
| KHS-12BL | 3-wire mini lapel mic w/earphone, universal connector (Black) Note: Not compatible with TDMA operations |

MICROPHONES & AUDIO ACCESSORIES, CON'T

| | |
|------------|--|
| KHS-14 | Lt. Wt. Single muff headset w/boom mic & In-line PTT Note: Not compatible with TDMA operations |
| KHS-15D-BH | Hvy-duty noise reduction behind-the-headset w/noise cancelling boom mic & PTT |
| KHS-15D-OH | Hvy-duty noise reduction over-the-headset w/noise cancelling boom mic & PTT |

OPTION MODULES

| | |
|----------|--|
| KCT-48VU | External Vibration Unit Note: Audio accessories cannot be used when this option installed. |
|----------|--|

SERVICE RELATED ACCESSORIES

| | |
|----------|--|
| KPG-36XM | Full Speed USB Programming interface cable |
|----------|--|

INSTALLATION / TUNING CHARGES

| | |
|--------|---|
| L-836 | Assemble KMB-16 with six KSC-25/25L |
| L-961 | Assemble KMB-23 with six KSC-24/25/25L/32 (Rapid Rate, 120 Volt versions only) |
| L-5001 | Factory Activation of Radio Feature Licenses (per Radio) Note: Must purchase Radio Feature Licenses separately. <u>KPT-300LMC's History Menu will not display the Radio Features activated by Factory.</u> |
| L-5052 | NX-3000 Series Portables Programming (with basic TX/RX check) |
| L-5054 | Installation AES/DES for NX-3000 Portable/Mobile |

-- IMPORTANT NOTES regarding ENCRYPTION SOFTWARE OPTION--

Encryption Software Option, key loaders and radios containing encryption are export controlled by the U.S. Department of Commerce Bureau of Industry & Security EAR regulations and may either require an Export License, are eligible for a License Exception (ENC) or are exportable with No License Required (NLR) depending on the country, the consignee and the intended use. High level encryption is a special commodity that may require an export license to most countries. See www.bis.gov for more information regarding export regulations. DO NOT SHIP encryption items outside the U.S. without proper DOC/BIS Export Licenses and/or compliances.

JVCKENWOOD may request the following information to be submitted at time of order (this information must meet JVCKENWOOD internal approvals prior to shipment even if being returned to JVCKENWOOD later:

a) Initial Destination: Initial delivery point if different from Ultimate Destination
(customer distribution center, headquarters, dealership, manufacturer's representative)

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

b) Ultimate Destination: Final delivery point(s); deployment/distribution

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

c) Intended Use of Radios: Law enforcement, security, operations, etc.

STANDARD



Basic Standard Key Full Key

All NX-3000 series portables include:

- Belt Clip (KBH-11)
- 2-PIN Accessory Cover
- Channel Stopper
- User Guide
- Premium Warranty: 3 Years*

All Accessories / options: 1 Year

Purchase Battery, Charger, Antenna separately

Note:

1. To meet IP grades and MIL, the 2-pin connector cap must be installed.
2. To maintain immersion specs (IP67/68), all warranty service must be done by one of the three National Kenwood Authorized Service Centers. IP67/68 Certification is valid under the 3 year premium warranty. No re-certification is available.

Because of spurious signal (birdie), the following frequencies (and ± 7.5 kHz ranges) are not allowed ;

- | | | |
|------------|------------|------------|
| • 139.2000 | • 403.2000 | • 460.8000 |
| • 144.0000 | • 408.0000 | • 465.6000 |
| • 148.8000 | • 412.8000 | • 470.4000 |
| • 153.6000 | • 417.6000 | • 475.2000 |
| • 158.4000 | • 422.4000 | • 480.0000 |
| • 160.0000 | • 427.2000 | • 484.8000 |
| • 163.2000 | • 432.0000 | • 489.6000 |
| • 168.0000 | • 436.8000 | • 494.4000 |
| • 172.8000 | • 441.6000 | • 499.2000 |
| | • 446.4000 | • 504.0000 |
| | • 451.2000 | • 508.8000 |
| | • 456.0000 | • 513.6000 |
| | | • 518.4000 |

■ GENERAL FEATURES

- 5 W (136-174 MHz) Models
- 5 W (400-520 MHz) Models
- 260 CH-GID / 128 Zones
- 64 CH-GID / 4 Zones (For Basic Models)
- Basic Models (w/o LCD and keypad)
- Standard Keypad Models (w/ LCD and D-pad/4key)
- Full Keypad Models (w/ LCD and D-pad/12 key)
- 4-Line Basic Frame (2-Line Main/Sub-LCD, icon & key guide)
- 5-Line Text Message Frame (3 Lines of Text, icon & key guide)
- Multi-Language Display
- Date & 12/24 Hour Time Clock
- 7-color Light Bar Indicator
- Transmit/Busy/Call Alert/Warn LED
- Remote Stun/Kill/Check
- On/Off Volume Knob
- 16-Position Mechanical Selector
- 4-way Directional-pad (For Standard/Full Keypad)
- Emergency Key
- 2 Side PF Keys
- 1W Speaker Audio
- Dual Digital Protocol¹
- Emergency Call Features
- Built-in GPS Receiver / Antenna
- Built-in Bluetooth® 4.0 Module
- Built-in Motion Sensor
- Active Noise Reduction (ANR)
- KPG-D3N Windows® FPU
- Flash Firmware Upgrading
- Optional Software-based DES and AES Encryptions (Digital Only)
- MIL-STD-810 C/D/E/F/G
- IP54/55² Water & Dust Intrusion
- IP67² Immersion

1. Designed to operate digital, DMR, OR NXDN, along with analog FM; a single FM digital protocol is selected with programming software.

2. Must equip **Accessory Cover** included with a Radio. Speaker / Microphone does not cover IPs.

■ DIGITAL – NXDN® MODE

- NXDN® Conventional
- NXDN® TYPE-C (Gen1/Gen2) Trunking Option
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming (requires KPG-180AP OTAP Manager Software)
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill/Check
- Short & Long Data Messages
- GPS Location
- NXDN® Scrambler

■ DIGITAL – DMR MODE

- DMR Tier 2 Conventional
- DMR Tier 3 Trunking Option
- DMR Auto Slot Select (DASS)
- AMBE+2™ VOCODER
- 12.5 kHz Channels
- Site Roaming
- Call Interrupt (Direct & Repeater Mode)
- Paging Call
- Emergency Call
- All Group Call
- Late Entry
- Status Messaging
- Remote Control by Subscriber Units
- ARC4 Encryption Option

■ ANALOG MODE

- Conventional Zones
- LTR® Zones
- FleetSync®/II: PTT ID ANI, Caller ID Display, Selective/Group Call, Emergency Status, Text Messages
- MDC-1200: PTT ID ANI, Caller ID Display, Emergency, Radio Check & Inhibit
- QT / DQT
- Two-Tone (Conventional Zones Only)
- DTMF
- Built-in Voice Inversion Scrambler

OPTIONAL FEATURES

- 1000 Channel (**KWD-3000CH**)
- Front Panel Programming (**KWD-3001FP**)
- Built-in Bluetooth® Module for Data (**KWD-3002BT**)
- Digital NXDN Trunking (**KWD-3501TR**)
- DMR Tier 2 Conventional (**Factory Installed**)
- DMR Tier 3 Trunking (**KWD-3302TR**)
- DMR ARC4 Enhanced Encryption (**KWD-3502EE**)
- AES/DES Encryption (**KWD-3503AE**)
- Remote Control Command by Subscriber Units (**KWD-3504RC**)

Approved by CSA-us International Inc. for Classes I, II & III, Div. 1, Groups D, E, F, G and are also approved for non-Incendive use in Class I, Div. 2, Groups A, B, C hazardous locations.

RADIO

| | |
|-----------|--|
| NX-3220K | VHF (136-174MHz), 5.0 Watts, 64 CH, Basic Model |
| NX-3220K2 | VHF (136-174MHz), 5.0 Watts, 260CH, Standard Key Model |
| NX-3220K3 | VHF (136-174MHz), 5.0 Watts, 260CH, Full Key Model |
| NX-3320K | UHF (400-520MHz), 5.0 Watts, 64 CH, Basic Model |
| NX-3320K2 | UHF (400-520MHz), 5.0 Watts, 260CH, Standard Key Model |
| NX-3320K3 | UHF (400-520MHz), 5.0 Watts, 260CH, Full Key Model |

RADIO TRUNKING PACKAGE

| | |
|--------------|---|
| NX-3220K-TR | VHF (136-174MHz), 5.0 Watts, 64 CH, Basic Model with NXDN Trunking |
| NX-3220K2-TR | VHF (136-174MHz), 5.0 Watts, 260CH, Standard Key Model with NXDN Trunking |
| NX-3220K3-TR | VHF (136-174MHz), 5.0 Watts, 260CH, Full Key Model with NXDN Trunking |
| NX-3320K-TR | UHF (400-520MHz), 5.0 Watts, 64 CH, Basic Model with NXDN Trunking |

RADIO TRUNKING PACKAGE, CON'T

| | |
|--------------|--|
| NX-3320K2-TR | UHF (400-520MHz), 5.0 Watts, 260CH, Standard Key Model with Digital Trunking |
| NX-3320K3-TR | UHF (400-520MHz), 5.0 Watts, 260CH, Full Key Model with Digital Trunking |

Li-ion VALUE PACKAGES (Preferred for Trunked Mode Usage)

| | |
|-----------------|--|
| NX-3220K2-XLKVP | VHF Extra-Cap Li-Ion Value Pack : NX-3220K2+KNB-78L(2860mAh)+KSC-25LSK+KRA-26M |
| NX-3320K2-XLKVP | UHF Extra-Cap Li-Ion Value Pack : NX-3320K2+KNB-78L(2860mAh)+KSC-25LSK+KRA-27M |
| NX-3220K2LAKVP | VHF Hi-Cap Li-Ion Value Pack : NX-3220K2+KNB-57LAM(2000mAh)+KSC-25LSK+KRA-26M |
| NX-3320K2LAKVP | UHF Hi-Cap Li-Ion Value Pack : NX-3320K2+KNB-57LAM(2000mAh)+KSC-25LSK+KRA-27M |

Li-ion VALUE PACKAGES (Preferred for Conventional Mode Usage)

| | |
|-----------------|--|
| NX-3220K2-SLKVP | VHF Li-Ion Value Pack : NX-3220K2+KNB-55L(1480mAh)+KSC-25LSK+KRA-26M |
| NX-3320K2-SLKVP | UHF Li-Ion Value Pack : NX-3320K2+KNB-55L(1480mAh)+KSC-25LSK+KRA-27M |

CSA US APPROVED MODELS

Must Order L-5062 & KNB-79LCM Intrinsically Safe Battery per radio

| | |
|---------------|---|
| NX-3220-ISCK | VHF (136-174MHz), 5.0 Watts, 64 CH, Basic Model |
| NX-3220-ISCK2 | VHF (136-174MHz), 5.0 Watts, 512 CH, Standard Key Model |
| NX-3220-ISCK3 | VHF (136-174MHz), 5.0 Watts, 512 CH, Full Key Model |
| NX-3320-ISCK | UHF (400-520MHz), 5.0 Watts, 64 CH, Basic Model |
| NX-3320-ISCK2 | UHF (400-520MHz), 5.0 Watts, 512 CH, Standard Key Model |
| NX-3320-ISCK3 | UHF (400-520MHz), 5.0 Watts, 512 CH, Full Key Model |

Note: KNB-68LC for NX-x20 series cannot be used with NX-3000 series as an Intrinsically Safe battery.

Field Programming Unit (FPU)

| | |
|----------|---|
| KPG-D3NK | License Key for KPG-D3NK Programming Software for NX-3000 Portable/Mobile Note: Requires KPT-300LMC for authentication |
|----------|---|

Over The Air Programming (OTAP)

| | |
|-----------|---|
| KPG-180AP | License Key for KPG-180AP OTAP Manager Software • License includes Fifty (50) radios / One(1) NXDN Conventional and Type-C Air Communication Profile and One(1) NXDN Conventional and Type-C IP Communication Profile Note: - Requires KPT-300LMC for authentication - NEXEDGE Type-D Trunking and DMR System not supported. |
|-----------|---|

SOFTWARE UPGRADE LICENSES FOR KPG-180AP

Note: Includes package license for additional subscriber unit or license for additional profile attached to one computer running KPG-180AP software. All additional licenses require KPT-300LMC for authentication.

| | |
|------------|--|
| KWD-AP5100 | Additional 100 Radio Package License for 1 PC Note: License includes 100 subscriber radios OTAP License. |
| KWD-AP5250 | Additional 250 Radio Package License for 1 PC Note: License includes 250 subscriber radios OTAP License. |
| KWD-AP5500 | Additional 500 Radio Package License for 1 PC Note: License includes 500 subscriber radios OTAP License. |
| KWD-AP1-CA | Additional NXDN Conventional Type-C Air Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used as NEXEDGE Base Station Serial Interface for both Conventional and Trunking (Type-C Gen1/Gen2). |
| KWD-AP2-CP | Additional NXDN Conventional Type-C IP Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used NEXEDGE Repeater IP Interface for both Conventional and Trunking (Type-C Gen1/Gen2) . |

-- IMPORTANT NOTES--

Base radios are connected to a computer using the KPG-22UM USB adapter for portables, or a KPG-46XM for mobiles.
Requires firmware version 2.5 or higher for the NXR-x00/NXR-x10 repeaters.

Requires firmware version 1.0 or higher for the NXR-5xxx repeaters.

Encryption Software Keyloaders

| | |
|----------|--|
| KPG-AE1K | License Key for AES/DES Encryption Software Key Loader for KWD-3503AE Note: - Requires KPT-300LMC for authentication - KPG-AE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A). |
| KPG-DE1K | License Key for DES Encryption Software Key Loader for KWD-3503AE Note: - Requires KPT-300LMC for authentication - KPG-DE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A). |

Offline Authentication Option

| | |
|-------------|---|
| KWD-OFL-USB | <p>USB License Storage Hardware key for Radio Feature License</p> <p>Note:</p> <ul style="list-style-type: none"> - Must purchase Radio Feature Licenses separately. - Can be used with only one (1) Account Registration Key. - Requires KPT-300LMC V1.10 or higher. - Cancellation rule is difference with standard Online/Offline Authentication. Please refer to a leaflet bundled with KWD-OFL-USB. <p>Warranty Information:</p> <ul style="list-style-type: none"> - Damaged USB License Storage "KWD-OFL-USB" a. Remaining Licenses will not be warranted. b. Licenses not uploaded to the License Management Server will not be warranted. |
|-------------|---|

Radio Features

| | |
|------------|--|
| KWD-3000CH | License Key for 1000 Channel Expansion |
| KWD-3001FP | License Key for Front Panel Programming |
| KWD-3002BT | <p>License Key for Bluetooth Data (Required for Data Communication)</p> <p>Note: Voice Communication for Bluetooth Head Set does NOT require KWD-3002BT. You can pair with any Bluetooth audio device without this option.</p> |
| KWD-3302TR | License Key for DMR Tier 3 Trunking |
| KWD-3501TR | License Key for Digital Trunking (Includes NXDN Type-C and Type-C Gen2) |
| KWD-3502EE | License Key for DMR ARC4 Enhanced Encryption |
| KWD-3503AE | <p>License Key for AES/DES Encryption</p> <p>Note:</p> <ol style="list-style-type: none"> 1. Factory Installation only. Must order L-5054. 2. Requires KPG-AE1/DE1 software key loader to encrypt. 3. KWD-3503AE is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1) Please see descriptions at the bottom. |
| KWD-3504RC | <p>License Key for Remote Control by Subscriber Unit</p> <p>Note:</p> <ul style="list-style-type: none"> - This license may be used by Administrator due to Stun/Revive/Kill. - The license is only required for transmission of Remote Control commands. - PC command for Remote Control does NOT require the license. |
| KWD-3505DE | <p>License Key for DES Encryption</p> <p>Note:</p> <p>Requires KPG-AE1/DE1 software key loader to load encryption keys</p> |

ANTENNAS

| | |
|----------|--|
| KRA-22M | VHF Low-profile helical antenna 148-162 MHz |
| KRA-22M2 | VHF Low -profile helical antenna 162-174 MHz |
| KRA-22M3 | VHF Low-profile helical antenna 136-150 MHz |
| KRA-23M | UHF Low-profile helical antenna 450-490 MHz |
| KRA-23M2 | UHF Low-profile helical antenna 470-512 MHz |
| KRA-23M3 | UHF Low-profile helical antenna 403-430 MHz |
| KRA-26M | VHF helical antenna 146-162 MHz |
| KRA-26M2 | VHF helical antenna 162-174 MHz |
| KRA-26M3 | VHF helical antenna 136-150 MHz |
| KRA-27M | UHF whip antenna 440-490 MHz |
| KRA-27M2 | UHF whip antenna 470-520 MHz |
| KRA-27M3 | UHF whip antenna 400-450 MHz |
| KRA-25 | High gain VHF helically loaded whip antenna 148-162 MHz |
| KRA-28 | Broad-band VHF helically loaded whip antenna 140-170 MHz |

BATTERIES AND CHARGERS

| | |
|-----------|--|
| KNB-78LM | 2860 mAh, Li-ion battery, IP67, battery only, best for trunked mode operation |
| KNB-57LAM | 2000 mAh, Li-ion battery, IP67, battery only, best for conventional mode operation |
| KNB-55L | 1480 mAh, Li-ion battery, IP67, battery only |
| KNB-56N | 1400 mAh, Ni-MH battery, IP67, battery only |
| KNB-79LCM | CSA US Intrinsically Safe Battery Li-ion 2860mAh, IP67, battery only [Intrinsically Safe Option] |
| KBP-5 | AA Alkaline Refillable Battery Pack (6 AA; 9V) cells not included |

BATTERIES AND CHARGERS, CON'T

| | |
|-----------|---|
| KSC-25LSK | 100~240 volt rapid rate single unit charger for KNB-40LC(V)/55L/57L/57LAM/68LC/78LM/79LCM Li-ion Battery |
| KSC-25SK | 110 volt Rapid rate single unit charger for KNB-26N/40LC(V)/55L/56N/57L/57LAM/68LC/78LM/79LCM |
| KSC-256AK | Rapid rate 6-Unit charger for KNB-26N/55L/56N/57L/57LAM/68LC/78LM/79LCM |
| KMB-16 | Six Unit Charger Adapter for the KSC-16/20/24/25/25L chargers (chargers not included) |
| KMB-23 | Six Unit Charger Adapter for the KSC-16/20/24/25/25L/32 chargers (chargers not included) |
| KVC-4 | Vehicular charger adapter for the KSC-16/18/20/24/25SK chargers (chargers not included) *KSC-25LSK is not compatible with KVC-4. |
| KVC-23 | Rapid rate DC vehicular charger for TK-5x10/5x20, NX-5x00/NX-3x00/x00/x10/x20, TK- x180, TK-x170, & TK-x360 portables with Lithium Ion /Lithium Polymer/NiMH packs only. |

CARRYING ACCESSORIES

| | |
|-----------|--|
| KBH-11 | Spring action belt clip (2.5") |
| KBH-8DS | Leather swivel belt loop with portable D-Ring attachment |
| KLH-206K | Heavy-Duty Leather Case w/Swivel Belt Loop for Basic Model |
| KLH-206K2 | Heavy-Duty Leather Case w/Swivel Belt Loop for Standard Keypad Model |
| KLH-206K3 | Heavy-Duty Leather Case w/Swivel Belt Loop for Full Keypad Model |
| KLH-207K | Nylon carrying case for Basic Model |
| KLH-207K2 | Nylon carrying case for Standard Keypad Model |
| KLH-207K3 | Nylon carrying case for Full Keypad Model |

SPECIAL COLOR HOUSING

| | |
|--------------|---|
| KWD-YH-3000P | Yellow Housing Kit for NX-3x20 series Portables (Standard Key Model Only) Must order L-5068 for Factory Install. Eligible for warranty of IP67 immersion. |
|--------------|---|

MICROPHONES & AUDIO ACCESSORIES

***IP grades for microphones and audio accessories are decided by each item.**

| | |
|------------|---|
| KMC-45D | MIL-SPEC, IP54/55 Speaker microphone (Built-in 2.5mm miniature earphone jack) Note: KMC-45 (Non D version) is not compatible with DMR (TDMA) operation. [Intrinsically Safe Option] |
| KMC-21 | Compact speaker microphone [Intrinsically Safe Option] |
| KEP-2 | 2.5mm earphone kit for KMC-17/45 Speaker Mic [Intrinsically Safe Option] |
| KHS-7 | Single muff headset w/boom mic [Intrinsically Safe Option] |
| KHS-7A | Lt. Wt Single muff headset w/boom mic & in-line PTT Note: Available for Analog and NXDN (FDMA) only. NOT compatible with DMR (TDMA) operations. [Intrinsically Safe Option] |
| KHS-8BL | Two-Wire palm mic w/earphone (black) Note: Available for Analog and NXDN (FDMA) only. NOT compatible with DMR (TDMA) operations. [Intrinsically Safe Option] |
| KHS-9BL | Three-Wire lapel mic w/earphone (black) Note: Available for Analog and NXDN (FDMA) only. NOT compatible with DMR (TDMA) operations. |
| KHS-10D-BH | Hvy-duty noise reduction behind-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Option] |
| KHS-10D-OH | Hvy-duty noise reduction over-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Option] |
| KHS-22 | Behind-the-Head Headset with flexible boom mic and in-line PTT single ear receiver (low profile wire head band) [Intrinsically Safe Option] |
| KHS-26 | Clip Mic w/earphone |
| KHS-27A | D-Ring Ear Hanger w/PTT & Mic |
| KHS-31C | C-Ring Ear Hanger w/PTT & Mic |

SERVICE RELATED ACCESSORIES

| | |
|----------|---------------------------------|
| KPG-22UM | USB Programming interface cable |
|----------|---------------------------------|

INSTALLATION / TUNING CHARGES

| | |
|--------|--|
| L-836 | Assemble KMB-16 with six KSC-25/25L |
| L-961 | Assemble KMB-23 with six KSC-24/25/25L/32 (Rapid Rate, 120 Volt versions only) |
| L-5001 | Factory Activation of Radio Feature Licenses (per Radio) Note: Must purchase Radio Feature Licenses separately. KPT-300LMC's History Menu will not display the Radio Features activated by Factory. |
| L-5052 | NX-3000 Series Portables Programming (with basic TX/RX check) |
| L-5054 | Installation AES/DES for NX-3000 Portable/Mobile |
| L-5062 | Configure NX-3000 series for CSA US Intrinsically Safe Note: NX-3000 series I.S. radios must be used with matching I.S. battery KNB-79LCM. |
| L-5068 | Assemble Yellow Housing KWD-YH-3000U/P with NX-3000 series Portable |

-- IMPORTANT NOTES regarding ENCRYPTION SOFTWARE OPTION--

Encryption Software Option, key loaders and radios containing encryption are export controlled by the U.S. Department of Commerce Bureau of Industry & Security EAR regulations and may either require an Export License, are eligible for a License Exception (ENC) or are exportable with No License Required (NLR) depending on the country, the consignee and the intended use. High level encryption is a special commodity that may require an export license to most countries. See www.bis.gov for more information regarding export regulations. DO NOT SHIP encryption items outside the U.S. without proper DOC/BIS Export Licenses and/or compliances.

JVCKENWOOD may request the following information to be submitted at time of order (this information must meet JVCKENWOOD internal approvals prior to shipment even if being returned to JVCKENWOOD later:

a) Initial Destination: Initial delivery point if different from Ultimate Destination

(customer distribution center, headquarters, dealership, manufacturer's representative)

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

b) Ultimate Destination: Final delivery point(s); deployment/distribution

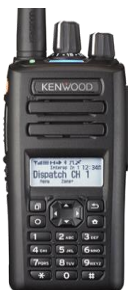
* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

c) Intended Use of Radios: Law enforcement, security, operations, etc.



All NX-3420 portables include:

- Belt Clip (KBH-11)
- Antenna (KRA-38K)
- 2-PIN Accessory Cover
- Channel Stopper
- User Guide
- Premium Warranty: 3 Years*

All Accessories / options: 1 Year

Purchase Battery, Charger, Antenna separately

Note:

1. To meet IP grades and MIL, the 2-pin connector cap must be installed.
2. To maintain immersion specs (IP67/68), all warranty service must be done by one of the three National Kenwood Authorized Service Centers. IP67/68 Certification is valid under the 3 year

Because of spurious signal (birdie), the following frequencies (and $\pm 6.25\text{kHz}$ ranges) are not allowed ;

- 854.4000 • 936.0000
- 859.2000 • 940.8000
- 864.0000
- 868.8000

STANDARD

■ GENERAL FEATURES

- 3 W (806-941 MHz) Model
- 260 CH-GID / 128 Zones
- Full Keypad Model (w/ LCD and D-pad/12 key)
- 4-Line Basic Frame (2-Line Main/Sub-LCD, icon & key guide)
- 5-Line Text Message Frame (3 Lines of Text, icon & key guide)
- Multi-Language Display
- Date & 12/24 Hour Time Clock
- 7-color Light Bar Indicator
- Transmit/Busy/Call Alert/Warn LED
- Remote Stun/Kill/Check
- On/Off Volume Knob
- 16-Position Mechanical Selector
- 4-way Directional-pad (For Standard/Full Keypad)
- Emergency Key
- 2 Side PF Keys
- 1W Speaker Audio
- Dual Digital Protocol¹
- Emergency Call Features
- Built-in GPS Receiver / Antenna
- Built-in Bluetooth® 4.0 Module
- Built-in Motion Sensor
- Active Noise Reduction (ANR)
- KPG-D3N Windows® FPU
- Flash Firmware Upgrading
- Optional Software-based DES and AES . Encryptions (Digital Only)
- MIL-STD-810 C/D/E/F/G
- IP54/55² Water & Dust Intrusion
- IP67² Immersion
- Digital Encode/Decode Format

1. Designed to operate digital, DMR OR NXDN, along with analog FM; a single FM digital protocol is selected with programming software.

2. Must equip **Accessory Cover** included with a Radio. Speaker Microphone does not cover IPs.

■ DIGITAL – NXDN® MODE

- NXDN® Conventional
- NXDN® TYPE-C (Gen1/Gen2) Trunking
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming (requires KPG-180AP OTAP Manager Software)
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill/Check
- Short & Long Data Messages
- GPS Location
- NXDN® Scrambler

■ DIGITAL – DMR MODE

- DMR Tier 2 Conventional Option
- DMR Tier 3 Trunking Option
- DMR Auto Slot Select (DASS)
- AMBE+2™ VOCODER
- 12.5 kHz Channels
- Site Roaming
- Call Interrupt (Direct & Repeater Mode)
- Paging Call
- Emergency Call
- All Group Call
- Late Entry
- Status Messaging
- Remote Control by Subscriber Units
- ARC4 Encryption Option

■ ANALOG MODE

- Conventional Zones
- LTR® Zones
- FleetSync®/II: PTT ID ANI, Caller ID Display, Selective/Group Call, Emergency Status, Text Messages
- MDC-1200: PTT ID ANI, Caller ID Display, Emergency, Radio Check & Inhibit
- QT / DQT
- Two-Tone (Conventional Zones Only)
- DTMF
- Built-in Voice Inversion Scrambler

OPTIONAL FEATURES

- 1000 Channel (**KWD-3000CH**)
- Front Panel Programming (**KWD-3001FP**)
- Built-in Bluetooth® Module for Data (**KWD-3002BT**)
- Digital NXDN Trunking (**Factory Installed**)
- DMR Tier 2 Conventional (**KWD-3301CV**)
- DMR Tier 3 Trunking (**KWD-3301CV & KWD-3302TR**)
- DMR ARC4 Enhanced Encryption (**KWD-3502EE**)
- AES/DES Encryption (**KWD-3503AE**)
- Remote Control Command by Subscriber Units (**KWD-3504RC**)

RADIO

NX-3420K3

800/900MHz, 3.0 Watts, 260 CH, Full Key Model, NXDN Conv & Trunking

Field Programming Unit (FPU)

KPG-D3NK License Key for KPG-D3NK
 Programming Software for NX-3000 Portable/Mobile
 ***Note:** Requires KPT-300LMC for authentication*

Over The Air Programming (OTAP)

KPG-180AP Licence Key for KPG-180AP OTAP Manager Software
 • License includes Fifty (50) radios / One(1) **NXDN** Conventional and Type-C **Air** Communication Profile
 and One(1) **NXDN** Conventional and Type-C **IP** Communication Profile
 Note:
 - Requires KPT-300LMC for authentication
 - NEXEDGE Type-D Trunking and DMR System not supported.

SOFTWARE UPGRADE LICENSES FOR KPG-180AP

Note: Includes package license for additional subscriber unit or license for additional profile attached to one computer running KPG-180AP software. All additional licenses require KPT-300LMC for authentication.

| | |
|------------|--|
| KWD-AP5100 | Additional 100 Radio Package License for 1 PC Note: License includes 100 subscriber radios OTAP License. |
| KWD-AP5250 | Additional 250 Radio Package License for 1 PC Note: License includes 250 subscriber radios OTAP License. |
| KWD-AP5500 | Additional 500 Radio Package License for 1 PC Note: License includes 500 subscriber radios OTAP License. |
| KWD-AP1-CA | Additional NXDN Conventional Type-C Air Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used as NEXEDGE Base Station Serial Interface for both Conventional and Trunking (Type-C Gen1/Gen2). |
| KWD-AP2-CP | Additional NXDN Conventional Type-C IP Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used NEXEDGE Repeater IP Interface for both Conventional and Trunking (Type-C Gen1/Gen2) . |

-- IMPORTANT NOTES--

Base radios are connected to a computer using the KPG-22UM USB adapter for portables, or a KPG-46XM for mobiles.

Requires firmware version 2.5 or higher for the NXR-x00/NXR-x10 repeaters.

Requires firmware version 1.0 or higher for the NXR-5xxx repeaters.

Encryption Software Keyloaders

| | |
|----------|--|
| KPG-AE1K | License Key for AES/DES Encryption Software Key Loader for KWD-3503AE Note: - Requires KPT-300LMC for authentication - KPG-AE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A). |
| KPG-DE1K | License Key for DES Encryption Software Key Loader for KWD-3503AE Note: - Requires KPT-300LMC for authentication - KPG-DE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A). |

Offline Authentication Option

| | |
|-------------|--|
| KWD-OFL-USB | USB License Storage Hardware key for Radio Feature License Note: - Must purchase Radio Feature Licenses separately. - Can be used with only one (1) Account Registration Key. - Requires KPT-300LMC V1.10 or higher. - Cancellation rule is difference with standard Online/Offline Authentication. Please refer to a leaflet bundled with KWD-OFL-USB. Warranty Information: - Damaged USB License Storage "KWD-OFL-USB" a. Remaining Licenses will not be warranted. b. Licenses not uploaded to the License Management Server will not be warranted. |
|-------------|--|

Radio Features

| | |
|------------|--|
| KWD-3000CH | License Key for 1000 Channel Expansion |
| KWD-3001FP | License Key for Front Panel Programming |
| KWD-3002BT | License Key for Bluetooth Data (Required for Data Communication) Note: Voice Communication for Bluetooth Head Set does NOT require KWD-3002BT. You can pair with any Bluetooth audio device without this option. |
| KWD-3301CV | License Key for DMR Tier 2 Conventional |
| KWD-3302TR | License Key for DMR Tier 3 Trunking (Requires KWD-3301CV) |
| KWD-3502EE | License Key for DMR ARC4 Enhanced Encryption |
| KWD-3503AE | License Key for AES/DES Encryption Note: 1. Factory Installation only. Must order L-5054. 2. Requires KPG-AE1/DE1 software key loader to encrypt. 3. KWD-3503AE is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1) Please see descriptions at the bottom. |
| KWD-3504RC | License Key for Remote Control by Subscriber Unit Note: - This license may be used by Administrator due to Stun/Revive/Kill. - The license is only required for transmission of Remote Control commands. - PC command for Remote Control does NOT require the license. |
| KWD-3505DE | License Key for DES Encryption Note: Requires KPG-AE1/DE1 software key loader to load encryption keys |

ANTENNAS

| | |
|---------|----------------------------|
| KRA-32K | 700/800 MHz Whip Antenna |
| KRA-36 | 700/800 MHz Stubby Antenna |
| KRA-38K | 800/900 MHz Whip Antenna |
| KRA-39 | 900 MHz Stubby Antenna |

BATTERIES AND CHARGERS

| | |
|-----------|--|
| KNB-78LM | 2860 mAh, Li-ion battery, IP67, battery only, best for trunked mode operation |
| KNB-57LAM | 2000 mAh, Li-ion battery, IP67, battery only, best for conventional mode operation |
| KNB-55L | 1480 mAh, Li-ion battery, IP67, battery only |
| KNB-56N | 1400 mAh, Ni-MH battery, IP67, battery only |
| KBP-5 | AA Alkaline Refillable Battery Pack (6 AA; 9V) cells not included |

BATTERIES AND CHARGERS, CON'T

| | |
|-----------|--|
| KSC-25LSK | 100~240 volt rapid rate single unit charger for KNB-40LC(V)/55L/57L/57LAM/68LC/78LM/79LCM Li-ion Battery |
| KSC-25SK | 110 volt Rapid rate single unit charger for KNB-26N/40LC(V)/55L/56N/57L/57LAM/68LC/78LM/79LCM |
| KSC-256AK | Rapid rate 6-Unit charger for KNB-26N/55L/56N/57L/57LAM/68LC/78LM/79LCM |
| KMB-16 | Six Unit Charger Adapter for the KSC-16/20/24/25/25L chargers (chargers not included) |
| KMB-23 | Six Unit Charger Adapter for the KSC-16/20/24/25/25L/32 chargers (chargers not included) |
| KVC-4 | Vehicular charger adapter for the KSC-16/18/20/24/25SK chargers (chargers not included) *KSC-25LSK is not compatible with KVC-4. |
| KVC-23 | Rapid rate DC vehicular charger for TK-5x10/5x20, NX-5x00/NX-3x00/x00/x10/x20, TK-x180, TK-x170, & TK-x360 portables with Lithium Ion /Lithium Polymer/NiMH packs only. |

CARRYING ACCESSORIES

| | |
|-----------|--|
| KBH-11 | Spring action belt clip (2.5") |
| KBH-8DS | Leather swivel belt loop with portable D-Ring attachment |
| KLH-206K3 | Heavy-Duty Leather Case w/Swivel Belt Loop for Full Keypad Model |
| KLH-207K3 | Nylon carrying case for Full Keypad Model |

MICROPHONES & AUDIO ACCESSORIES

***IP grades for microphones and audio accessories are decided by each item.**

| | |
|------------|---|
| KMC-45D | MIL-SPEC, IP54/55 Speaker microphone (Built-in 2.5mm miniature earphone jack) Note: KMC-45 (Non D version) is not compatible with DMR (TDMA) operation. |
| KMC-21 | Compact speaker microphone |
| KEP-2 | 2.5mm earphone kit for KMC-17/45 Speaker Mic |
| KHS-7 | Single muff headset w/boom mic |
| KHS-7A | Lt. Wt Single muff headset w/boom mic & in-line PTT Note: Available for Analog and NXDN (FDMA) only. NOT compatible with DMR (TDMA) operations. |
| KHS-8BL | Two-Wire palm mic w/earphone (black) Note: Available for Analog and NXDN (FDMA) only. NOT compatible with DMR (TDMA) operations. |
| KHS-9BL | Three-Wire lapel mic w/earphone (black) Note: Available for Analog and NXDN (FDMA) only. NOT compatible with DMR (TDMA) operations. |
| KHS-10D-BH | Hvy-duty noise reduction behind-the-headset w/noise cancelling boom mic & in-line PTT |
| KHS-10D-OH | Hvy-duty noise reduction over-the-headset w/noise cancelling boom mic & in-line PTT |
| KHS-22 | Behind-the-Head Headset with flexible boom mic and in-line PTT single ear receiver (low profile wire head band) |
| KHS-26 | Clip Mic w/earphone |
| KHS-27A | D-Ring Ear Hanger w/PTT & Mic |
| KHS-31C | C-Ring Ear Hanger w/PTT & Mic |

SERVICE RELATED ACCESSORIES

KPG-22UM USB Programming interface cable

INSTALLATION / TUNING CHARGES

| | |
|--------|---|
| L-836 | Assemble KMB-16 with six KSC-25/25L |
| L-961 | Assemble KMB-23 with six KSC-24/25/25L/32 (Rapid Rate, 120 Volt versions only) |
| L-5001 | Factory Activation of Radio Feature Licenses (per Radio) Note: Must purchase Radio Feature Licenses separately. <u>KPT-300LMC's History Menu will not display the Radio Features activated by Factory.</u> |
| L-5052 | NX-3000 Series Portables Programming (with basic TX/RX check) |
| L-5054 | Installation AES/DES for NX-3000 Portable/Mobile |

-- IMPORTANT NOTES regarding ENCRYPTION SOFTWARE OPTION--

Encryption Software Option, key loaders and radios containing encryption are export controlled by the U.S. Department of Commerce Bureau of Industry & Security EAR regulations and may either require an Export License, are eligible for a License Exception (ENC) or are exportable with No License Required (NLR) depending on the country, the consignee and the intended use. High level encryption is a special commodity that may require an export license to most countries. See www.bis.gov for more information regarding export regulations. DO NOT SHIP encryption items outside the U.S. without proper DOC/BIS Export Licenses and/or compliances.

JVCKENWOOD may request the following information to be submitted at time of order (this information must meet JVCKENWOOD internal approvals prior to shipment even if being returned to JVCKENWOOD later:

a) Initial Destination: Initial delivery point if different from Ultimate Destination
(customer distribution center, headquarters, dealership, manufacturer's representative)

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

b) Ultimate Destination: Final delivery point(s); deployment/distribution

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

c) Intended Use of Radios: Law enforcement, security, operations, etc.



NX-5000* Mobiles include:

- Standard Microphone (KMC-65M)
- Mounting Bracket (KMB-33M)
- DC Cable
- Blade Fuse
- User Guide
- Premium Warranty: 3 Years

All Accessories / options: 1 Year

*BK-version comes with a RF deck only

STANDARD

■ GENERAL FEATURES

- 50 W (136-174 MHz) Models
- 45 W (380-470, 450-520 MHz) Models
- 35 W (700/800 MHz) Models
- 1024 CH-GID / 128 Zones
- Full Color 2.55" (154 x 422 pixels) TFT Display
- Multi-line Text Display
- Function/Status Icons
- Multi-Language Display
- Date & 12/24 Hour Time Clock
- Transmit/Busy/Call Alert/Warn LED
- Emergency/AUX Key
- 4W Speaker Audio
- DB-25 Accessory Connector
- Multi Digital Protocol ¹
- Emergency Call Features
- Built-in GPS Receiver
- Built-in Bluetooth® Module
- Built-in 56-bit DES Encryption (4 keys programmable by KPG-D1(N)K)
- Mobile Relay Station² (DMR Mode³)
- Cross Band Repeater (Only)
- Active Noise Reduction (ANR)
- KPG-D1N Windows® FPU
- Flash Firmware Upgrading
- MIL-STD-810 C/D/E/F/G
- IP54/55

1. Multi Digital Protocol can be used for two(2) of the three(3) Digital Protocols set by programming software. P25/DMR Digital Protocols are options.

2. Requires **L-5023** DB25 Cable between Decks.

■ DIGITAL – NXDN® MODE

- NXDN® Conventional
- NXDN® TYPE-C (Gen1/Gen2) Trunking (except 700MHz)
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming (requires KPG-180AP OTAP Manager Software)
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill/Check
- Short & Long Data Messages
- GPS Location
- NXDN® Scrambler

■ DIGITAL – DMR MODE

- DMR Tier 2 Conventional Option
- DMR Tier 3 Trunking Option
- DMR Auto Slot Select (DASS)
- AMBE+2™ VOCODER
- 12.5 kHz Channels
- Call Interrupt (Direct & Repeater Mode)
- Paging Call
- Emergency Call
- All Group Call
- Late Entry
- Status Messaging
- Remote Control by Subscriber Units
- ARC4 Encryption Optional
- Site Roaming

■ ANALOG MODE

- Conventional Zones
- LTR® Zones
- FleetSync®/II: PTT ID ANI, Caller ID Display, Selective/Group Call, Emergency Status, Text Messages
- MDC-1200: PTT ID ANI, Caller ID Display, Emergency, Radio Check & Inhibit
- QT / DQT
- Two-Tone (Conventional Zones Only)
- DTMF
- Built-in Voice Inversion Scrambler

OPTIONAL FEATURES & CONFIGURATIONS

■ GENERAL FEATURES

- 4000 Channel (KWD-5000CH)
- Front Panel Programming (KWD-5001FP)
- microSD/microSDHC Memory Card Slot (KWD-5002SD)
- Built-in Bluetooth® Module for Data (KWD-5003BT)
- Remote Control by Subscriber Units (KWD-5007RC)

■ DIGITAL – P25 MODE

- Conventional Features (KWD-5100CV)
- Phase 1 Trunking Features (KWD-5100CV & 5101TR)
- Phase 2 Trunking Features (KWD-5100CV & 5101TR & 5102TR)
- Conventional OTAR (KWD-5103RK)
- Trunking OTAR (KWD-5103RK & 5106DT)
- Conventional Voting Scan (KWD-5105VT)
- Packet Data required for Trunked OTAR/GPS (KWD-5106DT)

■ DIGITAL – DMR MODE

- DMR Tier 2 Conventional Features (KWD-5300CV)
- DMR Tier 3 Trunking Features (KWD-5300CV & KWD-5301TR)

■ MOUNTING & REMOTE CONFIGURATIONS

(Order L-5029-L-5038 for KENWOOD Factory assembling)

- KCH-20R Featured Control Head
- KCH-21R Handheld Control Head
- Single Remote Control Head (KRK Kit & KCT-71 or KCT-77 Cable required)
- Dual Remote Control Heads (KCH-19/20R/21R & KRK Kit & KCT-71 or KCT-77 Cables required)
- Multiple RF Decks (KRK Kit & KCT-71 or KCT-77 Control Cable + KWD-5004MR License Key Activation required*)

* ONLY for the radios with S/N: B5900000 or earlier.



RADIO

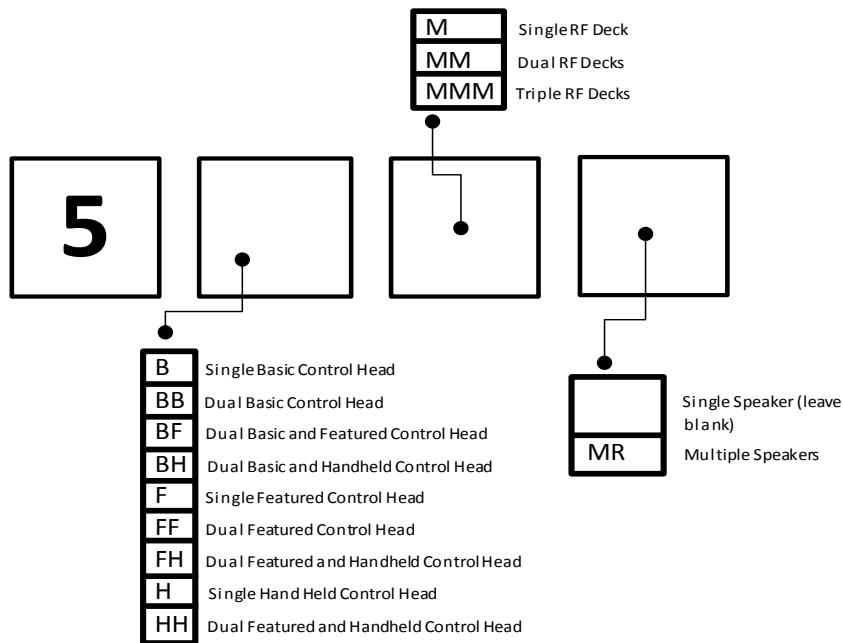
| | |
|-----------|---|
| NX-5700K | VHF (136-174MHz), 50 Watts NXDN Conventional / TYPE-C (Gen1/Gen2) Trunking |
| NX-5800K | UHF (450-520MHz), 45 Watts NXDN Conventional / TYPE-C (Gen1/Gen2) Trunking |
| NX-5800K2 | UHF (380-470MHz), 45 Watts NXDN Conventional / TYPE-C (Gen1/Gen2) Trunking |
| NX-5900K | 700 / 800 MHz, 30/35 Watts NXDN Conventional / 800MHz TYPE-C (Gen1/Gen2) Trunking |

RF Deck Only

MUST purchase necessary accessories separately

| | |
|------------|---|
| NX-5700BK | NX-5700K (50W, 136-174 MHz) RF Deck Only |
| NX-5800BK | NX-5800K (45W, 450-520 MHz) RF Deck Only |
| NX-5800BK2 | NX-5800K2 (45W, 380-470 MHz) RF Deck Only |
| NX-5900BK | NX-5900K (35W, 700/800 MHz) RF Deck Only |

ACCESSORY CONFIGURATION KITS



* Multiple Speakers configurations allow simultaneous monitoring of multiple RF Decks.

Remote Kit - Single Head / Single RF Deck

| | |
|--------|---|
| 5ABM | KMC-65M, KCH-19M, KRK-14HM, KRK-15BM, KCT-71M2, KCT-23M3, KMB-33M |
| 5AFM | KMC-65M, KCH-20RM, KRK-15BM, KCT-71M2, KCT-23M3, KMB-33M, KES-5, KCT-72M |
| 5AHM | KCH-21RM, KRK-15BM, KCT-77M2, KCT-23M3, KMB-33M |
| L-5029 | Factory Assembly & Factory Packing for Single Head Remote Kit and Radio Note: MUST purchase <u>NX-5x00(H)B</u> RF Deck and corresponding <u>Remote Kit</u> with this labor. |

Remote Kit - Dual Head / Single RF Deck

| | |
|-------|---|
| 5ABBM | KMC-65M(x2), KCH-19M(x2), KRK-14HM(x2), KRK-15BM, KCT-71M2(x2), KCT-23M3, KMB-33M |
|-------|---|

Remote Kit - Dual Head / Single RF Deck

| | |
|--------|--|
| 5AFFM | KMC-65M(x2), KCH-20RM(x2), KRK-15BM, KCT-71M2(x2), KCT-23M3, KMB-33M, KES-5(x2), KCT-72M(x2) |
| L-5030 | Factory Assembly & Factory Packing for Dual Head Remote Kit and Radio Note: MUST purchase NX-5x00(H)B RF Decks and corresponding Remote Kit with this labor. |

Remote Kit - Single Head / Dual RF Deck

| | |
|--------|--|
| 5ABMM | KMC-65M, KCH-19M, KRK-14HM, KRK-15BM(x2), KCT-71M2, KCT-71M4, KCT-23M3(x2), KMB-33M(x2) |
| 5AFMM | KMC-65M, KCH-20RM, KRK-15BM(x2), KCT-71M2, KCT-71M4, KCT-23M3(x2), KMB-33M(x2), KES-5, KCT-72M |
| 5AHMM | KCH-21RM, KRK-15BM(x2), KCT-77M2, KCT-71M4, KCT-23M3(x2), KMB-33M(x2) |
| L-5031 | Factory Assembly & Factory Packing for Single Head Remote Kit and Dual Deck Radio Note: MUST purchase NX-5x00(H)B RF Decks and corresponding Remote Kit with this labor. |

Remote Kit - Single Head / Dual RF Deck with External Speakers

| | |
|----------|---|
| 5ABMM-MR | KMC-65M, KCH-19M, KRK-14HM, KRK-15BM(x2), KCT-71M2, KCT-71M4, KCT-23M3(x2), KMB-33M(x2), KES-5(x2), KAP-2(x2) |
| 5AFMM-MR | KMC-65M, KCH-20RM, KRK-15BM(x2), KCT-71M2, KCT-71M4, KCT-23M3(x2), KMB-33M(x2), KES-5(x2), KAP-2(x2) |
| 5AHMM-MR | KCH-21RM, KRK-15BM(x2), KCT-77M2, KCT-71M4, KCT-23M3(x2), KMB-33M(x2), KES-5(x2), KAP-2(x2) |
| L-5032 | Factory Assembly & Factory Packing for Single Head / Dual Deck / Ext. Speakers Note: MUST purchase NX-5x00(H)B RF Decks and corresponding Remote Kit with this labor. Note: <u>MUST submit the Remote Mount Configuration Request Form.</u> |

Remote Kit - Dual Head / Dual RF Deck

| | |
|--------|---|
| 5ABBMM | KMC-65M(x2), KCH-19M(x2), KRK-14HM(x2), KRK-15BM(x2), KCT-71M2(x2), KCT-71M4, KCT-23M3(x2), KMB-33M(x2) |
| 5AFFMM | KMC-65M(x2), KCH-20RM(x2), KRK-15BM(x2), KCT-71M2(x2), KCT-71M4, KCT-23M3(x2), KMB-33M(x2), KES-5(x2), KCT-72M(x2) |
| L-5033 | Factory Assembly & Factory Packing for Dual Head and Dual Deck Radio Note: MUST purchase NX-5x00(H)B RF Decks and corresponding Remote Kit with this labor. Note: <u>MUST submit the Remote Mount Configuration Request Form.</u> |

Remote Kit - Dual Head / Dual RF Deck with External Speakers

| | |
|-----------|---|
| 5ABBMM-MR | KMC-65M(x2), KCH-19M(x2), KRK-14HM(x2), KRK-15BM(x2), KCT-71M2(x2), KCT-71M4, KCT-23M3(x2), KMB-33M(x2), KES-5(x2), KAP-2(x2) |
| 5AFFMM-MR | KMC-65M(x2), KCH-20RM(x2), KRK-15BM(x2), KCT-71M2(x2), KCT-71M4, KCT-23M3(x2), KMB-33M(x2), KES-5(x2), KAP-2(x2) |
| L-5034 | Factory Assembly & Factory Packing for Dual Head / Dual Deck / Ext. Speakers Note: MUST purchase NX-5x00(H)B RF Decks and corresponding Remote Kit with this labor. Note: <u>MUST submit the Remote Mount Configuration Request Form.</u> |

FRONT PANELS & REMOTE KITS

| | |
|------------|---|
| KCH-19M | Basic Control Panel |
| KCH-20RM | <p>Full Featured Remote Control Panel</p> <p>Note:</p> <ul style="list-style-type: none"> - microSD License (KWD-5002SD) and Bluetooth SPP License (KWD-5003BT) are NOT required for both KCH-20RM and connected RF Decks. KCH-20RM and connected RF Decks can be used of microSD and Bluetooth SPP with NO License Activation. - <u>Remote configuration only</u>. No Internal Speaker included. KES-5/3 is required. |
| KCH-21RM | <p>Hand Held Control Head for Long Cable <u>*Requires KCT-77M2 (17 ft.)</u></p> <p>Note:</p> <ul style="list-style-type: none"> - Bluetooth SPP License (KWD-5003BT) is NOT required for both KCH-21RM and connected RF Decks. KCH-21RM has built-in Bluetooth SPP license that will also activate the connected RF Decks. |
| KCH-21RM-S | <p>Hand Held Control Head with Short Cable (4 ft.)</p> <p>Note:</p> <ul style="list-style-type: none"> - Bluetooth SPP License (KWD-5003BT) is NOT required for both KCH-21RM and connected RF Decks. KCH-21RM has built-in Bluetooth SPP license that will also activate the connected RF Decks. |
| KRK-14HM | Control Head Interface Kit for KCH-19M |
| KRK-15BM | Control Head Remote Kit for a RF Deck |

CABLES

| | |
|------------|--|
| KCT-23M | DC Cable (35-50W Dash mount; pos/neg. 10 ft. leads) |
| KCT-23M3 | DC Cable (35-50W Remote mount; pos.23 ft.; neg. 3.3. ft. leads) |
| KCT-71M2 | Remote Control Cable (17 feet) |
| KCT-71M3 | Remote Control Cable (25 feet) |
| KCT-71M4 | Remote Control Cable (1.6 feet) |
| KCT-71A50 | <p>KCT-71A Extended Control Head Cable (up to 50 ft. max.)</p> <p>Note: Please specify exact length at 1ft. increments when ordering.</p> <p>Caution: Extended control head cables exhibit a loss in speaker audio power to the control heads.</p> |
| KCT-71A100 | <p>KCT-71A Extended Control Head Cable (up to 100 ft. max.)</p> <p>Note: Please specify exact length at 1ft. increments when ordering.</p> <p>Caution: Extended control head cables exhibit a loss in speaker audio power to the control heads.</p> |
| KCT-77M2 | Remote Control Cable for KCH-21RM (17 feet) |
| KCT-90USB | <p>USB Mobile Cable for SD Card Direct Access Support</p> <p>Note: microSD function requires KWD-5002SD license.</p> |
| KCT-91MRS | <p>DB25 Cable for Mobile Relay Station (Conventional Only)</p> <p>Note:</p> <ul style="list-style-type: none"> - Mobile Relay Station requires Multi RF Deck Configuration. The cable requires between Decks. - Built-in GPS and Bluetooth are not available with Mobile Relay Station. - DMR is not available and version up later. |

MOBILE INSTALLATION ACCESSORIES

| | |
|----------|---|
| KAP-2 | Horn Alert/P.A. Relay Option |
| KCT-46 | Ignition sense cable (plugs directly into mobile chassis ignition sense line) |
| KCT-72M | External Accessory Connection Cable for KCH-19M / KCH-20RM |
| KLF-2 | Line Filter (suppresses alternator whine, 25dB, 25A max). |
| KMB-10 | Key lock adapter |
| KMB-33M | Standard Mounting Bracket |
| KRA-40GM | GPS Antenna |

CONTROL STATION INSTALLATION ACCESSORIES

| | |
|---------|---|
| KMC-9C | <p>Control Station Desktop Microphone (8-pin mod. plug)</p> <p>Note: NOT compatible with TDMA operations</p> |
| KMC-59C | <p>Control Station Desktop Microphone (8-pin mod. plug)</p> <p>Note: Compatible with FDMA (analog / NXDN) and TDMA operations (P25 Phase 2 and DMR)</p> |
| KMB-34 | <p>Control Station Mounting Case for KPS-15 Power Supply and Mobiles (excludes TK-5x10/6110 series).</p> <p>(mobile mounting hardware included)</p> |
| KPS-15 | DC Switching Power Supply (117/230 VAC; 23A max. continuous, 25A peak) |

MICROPHONES AND SPEAKERS

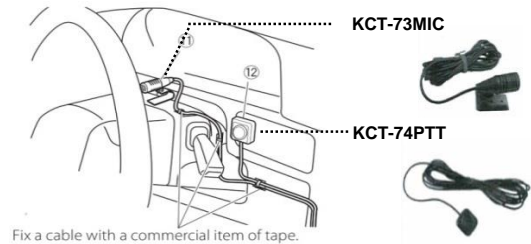
| | |
|-----------|--|
| KMC-65M | MIL-SPEC Standard electret mobile microphone (8-pin mod. plug) |
| KMC-66M | MIL-SPEC Standard electret mobile microphone with 12 keypad (8-pin mod. plug) |
| KES-5 | External speaker, 40W max input Note: requires KAP-2 (PA/HA unit) or KCT-72M (connection cable) installed. |
| KCT-73MIC | External Microphone kit w/ 9.8 ft. cord for Safer Driving |
| KCT-74PTT | External PTT Switch kit w/ 9.8 ft cord for Safer Driving |

Hands-free operation

To promote driver safety and meet hands-free regulations in certain regions, NX-5000 series mobile offers external microphone and PTT as options.

NOTE: Connecting to the radio via DB25 terminal on backside of RF Deck or via optional KCT-72 "Connection Cable" on backside of KCH-19M and KCH-20R*.

KCT-73MIC is not compatible with other NX/TK-mobile radios.



FIELD PROGRAMMING UNIT (FPU)

| | |
|----------|--|
| KPG-D1NK | License Key for KPG-D1NK Programming Software for NX-5000 Portable/Mobile (Windows® Vista/7/8/8.1) Note: Requires KPT-300LMC for authentication |
|----------|--|

FIELD PROGRAMMING UNIT (FPU)

P25 Trunked Programming Capability (licensed by either 1 or 2 below):

1. USB Key Type: Advanced System Key (ASK)- See KWD-ASK-MK and AK

- For NX-5000 series radios.
- KWD-ASK-MK (Master Key): For trunked system operator (SYSOP). Required for activating KWD-ASK-AK Access keys. Securely embeds/encrypts the HSID.
- KWD-ASK-AK (Access Key): For Dealers/contractors. Activated by KWD-ASK-MK Master Key.
- KPG-D1NK supports up to 16 KWD-ASK-AK Access Keys (16 trunked networks).

2. Software Key Type: System Key File (SKF)- See L-5005

- For NX-5000 series radios.
- 3-digit HEX System ID (HSID) with verifiable written authorization required from SYSOP.
- Utilized by both SYSOPs and Dealers/Contractors. But Dealers/Contractors must be permitted from SYSOP to order and use SKF.
- Kenwood ships an encrypted *.SKF file via E-Mail to the address provided on the P25 Trunking System Keys Request Form placed on Kenwood Tools.
- The *.SKF securely embeds/encrypts the HSID.

OVER THE AIR PROGRAMMING (OTAP)

KPG-180AP

OTAP Manager Software (Windows® Vista/7/8/8.1/10)

- License includes Fifty (50) radios / One(1) **NXDN** Conventional and Type-C **Air** Communication Profile and One(1) **NXDN** Conventional and Type-C **IP** Communication Profile

Note:

- Requires KPT-300LMC for authentication
- Radio to Radio OTAP for P25 Conventional system requires KWD-AP3-P25 license.
- NEXEDGE Type-D Trunking and DMR System not supported.

SOFTWARE UPGRADE LICENSES FOR KPG-180AP

Note: Includes package license for additional subscriber unit or license for additional profile attached to one computer running KPG-180AP software. All additional licenses require KPT-300LMC for authentication.

| | |
|-------------|--|
| KWD-AP5100 | Additional 100 Radio Package License for 1 PC Note: License includes 100 subscriber radios OTAP License. |
| KWD-AP5250 | Additional 250 Radio Package License for 1 PC Note: License includes 250 subscriber radios OTAP License. |
| KWD-AP5500 | Additional 500 Radio Package License for 1 PC Note: License includes 500 subscriber radios OTAP License. |
| KWD-AP1-CA | Additional NXDN Conventional Type-C Air Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used as NEXEDGE Base Station Serial Interface for both Conventional and Trunking (Type-C Gen1/Gen2). |
| KWD-AP2-CP | Additional NXDN Conventional Type-C IP Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used NEXEDGE Repeater IP Interface for both Conventional and Trunking (Type-C Gen1/Gen2) . |
| KWD-AP3-P25 | P25 Radio to Radio Air Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used as P25 Base Station Serial Interface for only Radio to Radio Communication. |

-- IMPORTANT NOTES--

Base radios are connected to a computer using the KPG-36XM USB adapter for portables, or a KPG-46XM for mobiles.
Requires firmware version 1.4 or higher for the NX-5000 Series portables and mobiles
Requires firmware version 2.5 or higher for the NXR-x00/NXR-x10 repeaters.
Requires firmware version 1.0 or higher for the NXR-5xxx repeaters

Offline Authentication Option

| | |
|-------------|---|
| KWD-OFL-USB | <p>USB License Storage Hardware key for Radio Feature License</p> <p>Note:</p> <ul style="list-style-type: none"> - Must purchase Radio Feature Licenses separately. - Can be used with only one (1) Account Registration Key. - Requires KPT-300LMC V1.10 or higher. - Cancellation rule is difference with standard Online/Offline Authentication. Please refer to a leaflet bundled with KWD-OFL-USB. <p>Warranty Information:</p> <ul style="list-style-type: none"> - Damaged USB License Storage "KWD-OFL-USB" a. Remaining Licenses will not be warranted. b. Licenses not uploaded to the License Management Server will not be warranted. |
|-------------|---|

General Radio Features

| | |
|------------|---|
| KWD-5000CH | License Key for 4000 Channel Expansion |
| KWD-5001FP | License Key for Front Panel Programming |
| KWD-5002SD | License Key for microSD Memory Card Slot Activation |
| KWD-5003BT | <p>License Key for Bluetooth Data (Required for Data Communication)</p> <p>Note: Voice Communication for Bluetooth Head Set does NOT require KWD-5003BT. You can pair with any Bluetooth audio device without this option.</p> |
| KWD-5004MR | <p>License Key for Multiple RF Decks Receiver</p> <p>Note: Required ONLY for the radios with S/N: B5900000 or earlier.</p> |
| KWD-5007RC | <p>License Key for Remote Control by Subscriber Units</p> <p>Note:</p> <ul style="list-style-type: none"> - P25 Mode is NOT available. - This license may be used by Administrator due to Stun/Revive/Kill. - The license is required for only Transmitting of Remote Control. - PC command for Remote Control does NOT require the license. |

P25 Radio Features

| | |
|------------|--|
| KWD-5100CV | License Key for P25 Conventional |
| KWD-5101TR | <p>License Key for P25 Phase 1 Trunking (requires KWD-5100CV)</p> <p>Note: Required for Link Layer Authentication</p> |
| KWD-5102TR | License Key for P25 Phase 2 Trunking (requires KWD-5100CV & KWD-5101TR) |
| KWD-5103RK | License Key for P25 OTAR (requires KWD-5106DT for a Trunking Operation) |
| KWD-5105VT | License Key for P25 Conventional Voting Scan |
| KWD-5106DT | <p>License Key for P25 Trunking OTAR / GPS</p> <p>Note: Conventional (OTAR/GPS) does NOT require KWD-5106DT.</p> |

DMR Features

| | |
|------------|---|
| KWD-5300CV | License Key for DMR Tier 2 Conventional |
| KWD-5301TR | License Key for DMR Tier 3 Trunking (requires KWD-5300CV) |
| KWD-5500EE | License Key for DMR ARC4 Enhanced Encryption |



NX-5700/5800/5900

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VHF/UHF/700/800MHz Digital & FM Analog Mobile Radios

Encryption & Option Modules

| | |
|-----------|---|
| KWD-AE30K | <p>AES FIPS140-2 & DES Encryption Module (Multi-Key)</p> <p>Order a Labor Code L-5003 if installation is required. (Eligible for warranty of IP67/68 immersion / Intrinsically Safe Option must be installed by Kenwood. If you order only a Module and perform Dealer Installation, IP67/68 Warranty Claim will not be eligible.)</p> <p>KWD-AE30K requires: a Motorola KVL3000 Plus/4000 key loader device.</p> <p>KWD-AE30K is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1).</p> <p>Note: Required for Link Layer Authentication</p> <p>[Intrinsically Safe Option]- Must be Kenwood installed for I.S.</p> |
| KWD-AE31K | <p>AES & DES Encryption Module (Multi-Key)</p> <p>Order a Labor Code L-5004 if installation is required. (Eligible for warranty of IP67/68 immersion / Intrinsically Safe Option must be installed by Kenwood. If you order only a Module and perform Dealer Installation, IP67/68 Warranty Claim will not be eligible.)</p> <p>Note: Requires KPG-AE1/DE1 software key loader or Motorola KVL3000 Plus/4000 key loader device.</p> <p>KWD-AE31K is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1)</p> <p>Note: Required for Link Layer Authentication</p> <p>[Intrinsically Safe Option]- Must be Kenwood installed for I.S.</p> |
| KPG-AE1K | <p>AES/DES Encryption Software Key Loader for KWD-AE31K</p> <p>Authentication by KPT-300LMC is required</p> <p>Note: KPG-AE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A)</p> |
| KPG-DE1K | <p>DES Encryption Software Key Loader for KWD-AE31K</p> <p>Authentication by KPT-300LMC is required</p> <p>Note: KPG-DE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D992A.1)</p> |

FleetSync® & NEXEDGE® AVL & MESSAGING

| | |
|--------|--|
| KAS-10 | <p>FleetSync & NEXEDGE AVL & Messaging Software with NEXEDGE Trunking VoIP Dispatch</p> <p>Note:</p> <ul style="list-style-type: none">- Users can chose to operate Messaging, AVL or VoIP or all three if desired. Compatible with Windows® XP, VISTA & 7 and Microsoft® MapPoint® 2006/2009/2010 (certain format bitmap images can be imported). Refer to KAS-10 product spec sheets and manuals for details.- NEXEDGE Gen2, Type-D Trunking and DMR System not supported. |
|--------|--|

SERVICE RELATED ACCESSORIES

| | |
|------------|---|
| KPG-46XM | <p>Full Speed USB Programming interface cable</p> <p>Note: This cable with USB mode may be used for SD Card Direct Access.</p> |
| KPG-115 | <p>Encryption Key Loader Interface Cable for Motorola KVL-3000/3000 Plus/4000</p> |
| KPG-115AUT | <p>KVL-4000 Radio Authentication Cable</p> <p>Note: Only capable for P25 Radio Authentication. Not available for Encryption Key Loading.</p> |
| KWD-ASK-AK | <p>Access Key for KPG-D1NK P25 trunked programming</p> <p>Notes: Enables P25 Trunked system programming privileges in a KPG-D1NK.</p> <ul style="list-style-type: none">• For NX-5000 series only• Must be activated by trunked system operator (SYSOP) with KWD-ASK-MK Master Key• Must have KPG-D1NK• Configurable expiration period of KWD-ASK-AK set by KWD-ASK-MK is available for 3 years for built in battery. USB Key must be replaced since the expiration set up dose not work after 3 years. |
| KWD-ASK-MK | <p>Master Key for activating KWD-ASK-AK Access Keys</p> <p>- Restricted Purchase Requirements -</p> <p>Notes:</p> <ul style="list-style-type: none">• For NX-5000 series only.• Sold to trunked system operator (SYSOP) or SYSOP authorized entities only• Must have KPG-D1NK• SYSOP must provide 3-digit HEX HSID to Kenwood with P25 Trunking System Keys Request Form placed on Kenwood Tools.• Purchase KWD-ASK-AK Access Keys if needed. |

INSTALLATION / TUNING CHARGES

| | |
|--------|--|
| L-5001 | <p>Factory Activation of Radio Feature Licenses (per Radio)</p> <p>Note: Must purchase Radio Feature Licenses separately.</p> <p><u>KPT-300LMC's History Menu will not display the Radio Features activated by Factory.</u></p> |
| L-5006 | <p>NX-5700/5800 Programming (with basic TX/RX check)</p> |
| L-5007 | <p>Install KWD-AE30K in NX-5000 series Mobile</p> <p>(Must purchase module separately)</p> |
| L-5008 | <p>Install KWD-AE31K in NX-5000 series Mobile</p> <p>(Must purchase module separately)</p> |

INSTALLATION / TUNING CHARGES, CON'T

| | |
|--------|---|
| L-5005 | <p>KPG-D1NK System Key File (SKF)</p> <p>Note: Enables P25 Trunked system programming privileges in a KPG-D1NK.</p> <p>- Restricted Purchase Requirements -</p> <ul style="list-style-type: none"> • Trunked system operator (SYSOP) must provide 3-digit HEX HSID to Kenwood with P25 Trunking System Keys Request Form placed on Kenwood Tools. • Must have KPG-D1NK. • Kenwood ships an encrypted *.SKF file via E-Mail to the address provided on the P25 Trunking System Keys Request Form placed on Kenwood Tools. • Non-SYSOP entities ordering L-5005 must provide verifiable written authorization from SYSOP to receive an *.SKF file. • 3-digit HEX HSID are securely encrypted & embedded in the *.SKF file. |
| L-5015 | <p>Install KAP-2 (Default) HR1/<u>INTERNAL</u> Sp./PA.</p> <p>Note: This labor code is only for individual orders for mobile configuration. The labor code (L-5032, 5034, 5036 and 5038) for Multi RF Deck Configuration Package includes installation of KAP-2.</p> |
| L-5016 | Assemble NX-5000 Mobile for Single Remote Head Control |
| L-5019 | <p>Install KAP-2 (Default) HR1/<u>EXTERNAL</u> Sp./PA.</p> <p>Note: This labor code is only for individual orders for mobile configuration. The labor code (L-5032, 5034, 5036 and 5038) for Multi RF Deck Configuration Package includes installation of KAP-2.</p> |
| L-5029 | <p>Package Single Deck Single Head Remote</p> <p>(MUST purchase NX-5x00(B) RF Deck and the Kit with this labor for full installation)</p> |
| L-5030 | <p>Package Single Deck Dual Head Remote</p> <p>(MUST purchase NX-5x00(B) RF Deck and the Kit with this labor for full installation)</p> |
| L-5031 | <p>Package Dual Deck Single Head Remote</p> <p>(MUST purchase NX-5x00(B) RF Decks and the Kit with this labor for full installation)</p> <p>Note: MUST submit the Remote Mount Configuration Request Form.</p> |
| L-5032 | <p>Package Dual Deck Single Head Dual Speaker Remote</p> <p>(MUST purchase NX-5x00(B) RF Decks and the Kit with this labor for full installation)</p> <p>Note: MUST submit the Remote Mount Configuration Request Form.</p> |
| L-5033 | <p>Package Dual Deck Dual Head Single Speaker Remote</p> <p>(MUST purchase NX-5x00(B) RF Decks and the Kit with this labor for full installation)</p> <p>Note: MUST submit the Remote Mount Configuration Request Form.</p> |
| L-5034 | <p>Package Dual Deck Dual Head Dual Speaker Remote</p> <p>(MUST purchase NX-5x00(B) RF Decks and the Kit with this labor for full installation)</p> <p>Note: MUST submit the Remote Mount Configuration Request Form.</p> |
| L-5035 | <p>Package Triple Deck Single Head Single Speaker Remote</p> <p>(MUST purchase NX-5x00(B) RF Decks and the Kit with this labor for full installation)</p> <p>Note: MUST submit the Remote Mount Configuration Request Form.</p> |
| L-5036 | <p>Package Triple Deck Single Head Triple Speaker Remote</p> <p>(MUST purchase NX-5x00(B) RF Decks and the Kit with this labor for full installation)</p> <p>Note: MUST submit the Remote Mount Configuration Request Form.</p> |
| L-5037 | <p>Package Triple Deck Dual Head Single Speaker Remote</p> <p>(MUST purchase NX-5x00(B) RF Decks and the Kit with this labor for full installation)</p> <p>Note: MUST submit the Remote Mount Configuration Request Form.</p> |
| L-5038 | <p>Package Triple Deck Dual Head Triple Speaker Remote</p> <p>(MUST purchase NX-5x00(B) RF Decks and the Kit with this labor for full installation)</p> <p>Note: MUST submit the Remote Mount Configuration Request Form.</p> |
| L-5051 | P25 CAP Compliance of Non-Encrypted Radio - Disable Built-in DES |



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VHF/UHF/700/800MHz Digital & FM Analog Mobile Radios

-- IMPORTANT NOTES regarding ENCRYPTION MODULES--

Encryption modules, key loaders and radios containing encryption are export controlled by the U.S. Department of Commerce Bureau of Industry & Security EAR regulations and may either require an Export License, are eligible for a License Exception (ENC) or are exportable with No License Required (NLR) depending on the country, the consignee and the intended use. High level encryption is a special commodity that may require an export license to most countries. See www.bis.gov for more information regarding export regulations. DO NOT SHIP encryption items outside the U.S. without proper DOC/BIS Export Licenses and/or compliances.

Kenwood may request the following information to be submitted at time of order (this information must meet Kenwood internal approvals prior to shipment even if being returned to Kenwood later:

a) Initial Destination: Initial delivery point if different from Ultimate Destination

(customer distribution center, headquarters, dealership, manufacturer's representative)

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

b) Ultimate Destination: Final delivery point(s); deployment/distribution

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

c) Intended Use of Radios: Law enforcement, security, operations, etc.

KWD-AE30 AES FIPS140-2 SCM , NIST Validation & Customer Shipping

A secure delivery method direct to the end user customer is required by the NIST AES FIPS 140-2 validation rules. For U.S. Federal Government entities the SCM must ship from Kenwood USA Corporation directly to the end user customer by a trusted carrier (FEDEX, UPS or a designated Kenwood USA Corporation employee); shipping/handling by a dealer or other entity is not acceptable. This may or may not be required by local/state government agencies or business/industrial users. Please check with the end use customer about their AES encryption handling requirements before ordering. Kenwood will not be responsible for shipments of KWD-AE30K modules to erroneous destinations specified on an order.

NX-5700H

VHF Digital & FM Analog Mobile Radio



NX-5000HBF Mobiles include:

- High Power Radio
- User Guide
- Premium Warranty: 3 Years

All Accessories / options: 1 Year

STANDARD

■ GENERAL FEATURES

- 110 W (136-174 MHz) Model
- 110 W (39-50 MHz) Model *1
- 1024 CH-GID / 128 Zones
- Multi-Digital Operation in NXDN/P25
- Support NX-5000 Remote Control Head Options
- Multi-RF Deck Configuration Available (Lowband, VHF, 380-470, 450-520, 7&800)
- Built-in Micro USB A-B Interface
- Horn Alert / Public Address
- Built-in GPS Receiver
- Built-in Bluetooth® Module
- Built-in 56-bit DES Encryption (4 keys programmable by KPG-D1N)
- Optional 256-bit AES Encryption
- 12 Watt Audio Output
- DB-25 & Molex 9-pin Accessory Connector
- Active Noise Reduction (ANR)
- KPG-D1N Windows® FPU
- Flash Firmware Upgrading
- MIL-STD-810 C/D/E/F/G

■ DIGITAL – P25 MODE

- P25 Conventional
- P25 Phase 1 Trunking Option
- P25 Phase 2 Trunking Option
- Conv/Trunking OTAR Option
- Packet Data Option for P25 OTAR & GPS
- Conventional Voting Scan Option
- Text Data
- Radio Authentication

■ DIGITAL – NXDN® MODE

- NXDN® Conventional
- NXDN® TYPE-C (Gen1/Gen2) Trunking
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming (requires KPG-180AP OTAP Manager Software)
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill/Check
- Short & Long Data Messages
- GPS Location
- NXDN® Scrambler

■ ANALOG MODE

- Conventional Zones
- FleetSync®/II: PTT ID ANI, Caller ID Display, Selective/Group Call, Emergency Status, Text Messages
- MDC-1200: PTT ID ANI, Caller ID Display, Emergency, Radio Check & Inhibit
- QT / DQT
- Two-Tone (Conventional Zones Only)
- DTMF
- Built-in Voice Inversion Scrambler

*1. Future Release

OPTIONAL FEATURES & CONFIGURATIONS

■ GENERAL FEATURES

- 4000 Channel ([KWD-5000CH](#))
- Front Panel Programming ([KWD-5001FP](#))
- microSD/microSDHC Memory Card Slot ([KWD-5002SD](#))
- Built-in Bluetooth® Module for Data ([KWD-5003BT](#))
- Remote Control by Subscriber Units ([KWD-5007RC](#))

■ DIGITAL – P25 MODE

- Conventional Features ([Factory Installed](#))
- Phase 1 Trunking Features ([KWD-5101TR](#))
- Phase 2 Trunking Features ([KWD-5101TR](#) & [5102TR](#))
- Conventional OTAR ([KWD-5103RK](#))
- Trunking OTAR ([KWD-5103RK](#) & [5106DT](#))
- Conventional Voting Scan ([KWD-5105VT](#))
- Packet Data required for Trunked OTAR/GPS ([KWD-5106DT](#))

■ MOUNTING & REMOTE CONFIGURATIONS

(Order L-5029-L-5038 for KENWOOD Factory assembling)

- [KCH-19](#) Basic Control Head
- [KCH-20R](#) Featured Control Head
- [KCH-21R](#) Handheld Control Head
- Single Remote Control Head ([KRK Kit](#) & [KCT-71](#) or [KCT-77](#) Cable required)
- Dual Remote Control Heads ([KCH-19/20R/21R](#) & [KRK Kit](#) & [KCT-71](#) or [KCT-77](#) Cables required)
- Multiple RF Decks ([KRK Kit](#) & [KCT-71](#) or [KCT-77](#) Control Cable)



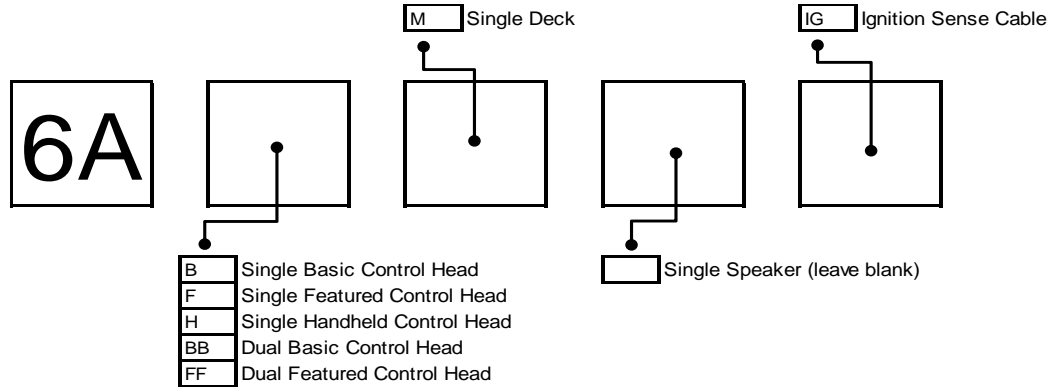
RF Deck Only

MUST purchase necessary accessories separately

NX-5700HBF

NX-5700HBF (110W, 136-174 MHz) RF Deck Only, NXDN Conv/Trunk & P25 Conv
(Remote Control Head, Microphone, Bracket, DC Cable not included)

ACCESSORY CONFIGURATION KITS



Note :

1. For multi-deck(band) configuration, use KCT-71M4 cable to connect each decks.
2. NX-5000H series RF deck is capable to connect up to three decks(bands) & two remote control heads.
3. NX-5000H high power RF deck can be multi-decked with NX-5000 mid power mobiles.
4. Refer to Service Manual for details.

Single Head Remote Mount Kit

| | |
|--------|---|
| 6ABMIG | KMC-65M, KCH-19M, KRK-14HM, KCT-71M2, KCT-23M4, KCT-18, KMB-36 |
| 6AFMIG | KMC-65M, KCH-20RM, KCT-71M2, KCT-23M4, KCT-72M, KES-5, KCT-18, KMB-36 |
| 6AHMIG | KCH-21RM, KCT-77M2, KCT-23M4, KCT-18, KMB-36 |
| L-5029 | Factory Assembly & Factory Packing for Single Head Remote Kit and Radio Note: MUST purchase <u>NX-5x00HB</u> RF Deck and the <u>Remote Kit</u> with this labor. |

Single Deck Dual Head Remote Mount

| | |
|---------|---|
| 6ABBMIG | KMC-65M(x2), KCH-19M(x2), KRK-14HM(x2), KCT-71M2(x2), KCT-23M4, KCT-18, KMB-36 |
| 6AFFMIG | KMC-65M(x2), KCH-20RM(x2), KCT-71M2(x2), KCT-23M4, KCT-72M(x2), KES-5(x2), KCT-18, KMB-36 |
| L-5030 | Factory Assembly & Factory Packing for Dual Head Remote Kit and Radio Note: MUST purchase <u>NX-5x00HB</u> RF Deck and the <u>Remote Kit</u> with this labor. |

REMOTE CONTROL KITS

| | |
|------------|---|
| KCH-19M | Basic Control Panel |
| KRK-14HM | Control Head Interface Kit for KCH-19M |
| KCH-20RM | Full Featured Remote Control Panel Note: - microSD License (KWD-5002SD) and Bluetooth SPP License (KWD-5003BT) are NOT required for both KCH-20RM and connected RF Decks . KCH-20RM and connected RF Decks can be used of microSD and Bluetooth SPP with NO License Activation. - <u>Remote configuration only</u> . No Internal Speaker included. KES-5/3 is required. |
| KCH-21RM | Hand Held Control Head for Long Cable <u>*Requires KCT-77M2 (17 ft.)</u> Note: - Bluetooth SPP License (KWD-5003BT) is NOT required for both KCH-21RM and connected RF Decks. KCH-21RM has built-in Bluetooth SPP license that will also activate the connected RF Decks. |
| KCH-21RM-S | Hand Held Control Head with Short Cable (4 ft.) Note: - Bluetooth SPP License (KWD-5003BT) is NOT required for both KCH-21RM and connected RF Decks. KCH-21RM has built-in Bluetooth SPP license that will also activate the connected RF Decks. |

CABLES

| | |
|------------|--|
| KCT-23M2 | DC Cable (75/110W) 10 feet |
| KCT-23M4 | DC Cable (75/110W) 23 feet |
| KCT-71M2 | Remote Control Cable (17 feet) |
| KCT-71M3 | Remote Control Cable (25 feet) |
| KCT-71M4 | Remote Control Cable (1.6 feet) |
| KCT-71A50 | KCT-71A Extended Control Head Cable (up to 50 ft. max.) Note: Please specify exact length at 1ft. increments when ordering. Caution: Extended control head cables exhibit a loss in speaker audio power to the control heads. |
| KCT-71A100 | KCT-71A Extended Control Head Cable (up to 100 ft. max.) Note: Please specify exact length at 1ft. increments when ordering. Caution: Extended control head cables exhibit a loss in speaker audio power to the control heads. |
| KCT-77M2 | Remote Control Cable for KCH-21RM (17 feet) |
| KCT-90USB | USB Mobile Cable for SD Card Direct Access Support Note: microSD function requires KWD-5002SD license. |
| KCT-91MRS | DB25 Cable for Mobile Relay Station (Conventional Only) Note: - Mobile Relay Station requires Multi RF Deck Configuration. The cable requires between Decks. - Built-in GPS and Bluetooth are not available with Mobile Relay Station. |

MOBILE INSTALLATION ACCESSORIES

| | |
|----------|---|
| KCT-18 | Ignition sense cable |
| KCT-72M | External Accessory Connection Cable for KCH-19M / KCH-20RM |
| KLF-2 | Line Filter (suppresses alternator whine, 25dB, 25A max). |
| KMB-36 | Mounting Bracket for NX-5000H, TK-5x10H, TK-690H High Power RF Deck |
| KRA-40GM | GPS Antenna |

CONTROL STATION INSTALLATION ACCESSORIES

| | |
|---------|---|
| KMC-9C | Control Station Desktop Microphone (8-pin mod. plug) Note: NOT compatible with TDMA operations |
| KMC-59C | Control Station Desktop Microphone (8-pin mod. plug) Note: Compatible with FDMA (analog / NXDN) and TDMA operations (P25 Phase 2 and DMR) |

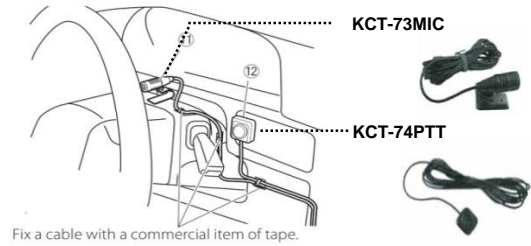
| MICROPHONES AND SPEAKERS | | DEALER | LIST |
|--------------------------|---|--------|-------|
| KMC-65M | MIL-SPEC Standard electret mobile microphone (8-pin mod. plug) | 31.50 | 52.50 |
| KMC-66M | MIL-SPEC Standard electret mobile microphone with 12 keypad (8-pin mod. plug) | 56.70 | 94.50 |
| KES-5 | External speaker, 40W max input | 36.80 | 61.25 |
| KCT-73MIC | External Microphone kit w/ 9.8 ft. cord for Safer Driving | 16.00 | 27.00 |
| KCT-74PTT | External PTT Switch kit w/ 9.8 ft cord for Safer Driving | 14.00 | 23.00 |

Hands-free operation

To promote driver safety and meet hands-free regulations in certain regions, NX-5000 series mobile offers external microphone and PTT as options.

NOTE: Connecting to the radio via DB25 terminal on backside of RF Deck or via optional KCT-72 "Connection Cable" on backside of KCH-19M and KCH-20R*.

KCT-73MIC is not compatible with other NX/TK-mobile radios.



FIELD PROGRAMMING UNIT (FPU)

| | |
|---|---|
| KPG-D1NK | License Key for KPG-D1NK Programming Software for NX-5000 Portable/Mobile (Windows® Vista/7/8/8.1) |
| Note: Requires KPT-300LMC for authentication | |

FIELD PROGRAMMING UNIT (FPU)

P25 Trunked Programming Capability (licensed by either 1 or 2 below):

1. USB Key Type: Advanced System Key (ASK)- See KWD-ASK-MK and AK

- For NX-5000 series radios.
- KWD-ASK-MK (Master Key): For trunked system operator (SYSOP). Required for activating KWD-ASK-AK Access keys. Securely embeds/encrypts the HSID.
- KWD-ASK-AK (Access Key): For Dealers/contractors. Activated by KWD-ASK-MK Master Key.
- KPG-D1NK supports up to 16 KWD-ASK-AK Access Keys (16 trunked networks).

2. Software Key Type: System Key File (SKF)- See L-5005

- For NX-5000 series radios.
- 3-digit HEX System ID (HSID) with verifiable written authorization required from SYSOP.
- Utilized by both SYSOPs and Dealers/Contractors. But Dealers/Contractors must be permitted from SYSOP to order and use SKF.
- Kenwood ships an encrypted *.SKF file via E-Mail to the address provided on the P25 Trunking System Keys Request Form placed on Kenwood Tools.
- The *.SKF securely embeds/encrypts the HSID.

OVER THE AIR PROGRAMMING (OTAP)

KPG-180AP

OTAP Manager Software (Windows® Vista/7/8/8.1/10)

- License includes Fifty (50) radios / One(1) **NXDN** Conventional and Type-C **Air** Communication Profile and One(1) **NXDN** Conventional and Type-C **IP** Communication Profile

Note:

- Requires KPT-300LMC for authentication
- Radio to Radio OTAP for P25 Conventional system requires KWD-AP3-P25 license.
- NEXEDGE Type-D Trunking and DMR System not supported.

SOFTWARE UPGRADE LICENSES FOR KPG-180AP

Note: Includes package license for additional subscriber unit or license for additional profile attached to one computer running KPG-180AP software. All additional licenses require KPT-300LMC for authentication.

| | |
|-------------|--|
| KWD-AP5100 | Additional 100 Radio Package License for 1 PC Note: License includes 100 subscriber radios OTAP License. |
| KWD-AP5250 | Additional 250 Radio Package License for 1 PC Note: License includes 250 subscriber radios OTAP License. |
| KWD-AP5500 | Additional 500 Radio Package License for 1 PC Note: License includes 500 subscriber radios OTAP License. |
| KWD-AP1-CA | Additional NXDN Conventional Type-C Air Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used as NEXEDGE Base Station Serial Interface for both Conventional and Trunking (Type-C Gen1/Gen2). |
| KWD-AP2-CP | Additional NXDN Conventional Type-C IP Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used NEXEDGE Repeater IP Interface for both Conventional and Trunking (Type-C Gen1/Gen2) . |
| KWD-AP3-P25 | P25 Radio to Radio Air Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used as P25 Base Station Serial Interface for only Radio to Radio Communication. |

-- IMPORTANT NOTES--

Base radios are connected to a computer using the KPG-36XM USB adapter for portables, or a KPG-46XM for mobiles.

Requires firmware version 1.4 or higher for the NX-5000 Series portables and mobiles

Requires firmware version 2.5 or higher for the NXR-x00/NXR-x10 repeaters.

Requires firmware version 1.0 or higher for the NXR-5xxx repeaters

Offline Authentication Option

| | |
|-------------|---|
| KWD-OFL-USB | <p>USB License Storage Hardware key for Radio Feature License</p> <p>Note:</p> <ul style="list-style-type: none"> - Must purchase Radio Feature Licenses separately. - Can be used with only one (1) Account Registration Key. - Requires KPT-300LMC V1.10 or higher. - Cancellation rule is difference with standard Online/Offline Authentication. Please refer to a leaflet bundled with KWD-OFL-USB. <p>Warranty Information:</p> <ul style="list-style-type: none"> - Damaged USB License Storage "KWD-OFL-USB" a. Remaining Licenses will not be warranted. b. Licenses not uploaded to the License Management Server will not be warranted. |
|-------------|---|

General Radio Features

| | |
|------------|---|
| KWD-5000CH | License Key for 4000 Channel Expansion |
| KWD-5001FP | License Key for Front Panel Programming |
| KWD-5002SD | License Key for microSD Memory Card Slot Activation |
| KWD-5003BT | <p>License Key for Bluetooth Data (Required for Data Communication)</p> <p>Note: Voice Communication for Bluetooth Head Set does NOT require KWD-5003BT. You can pair with any Bluetooth audio device without this option.</p> |
| KWD-5007RC | <p>License Key for Remote Control by Subscriber Units</p> <p>Note:</p> <ul style="list-style-type: none"> - P25 Mode is NOT available. - This license may be used by Administrator due to Stun/Revive/Kill. - The license is required for only Transmitting of Remote Control. - PC command for Remote Control does NOT require the license. |

P25 Radio Features

| | |
|------------|--|
| KWD-5101TR | <p>License Key for P25 Phase 1 Trunking</p> <p>Note: Required for Link Layer Authentication</p> |
| KWD-5102TR | License Key for P25 Phase 2 Trunking (requires KWD-5101TR) |
| KWD-5103RK | License Key for P25 OTAR (requires KWD-5106DT for a Trunking Operation) |
| KWD-5105VT | License Key for P25 Conventional Voting Scan |
| KWD-5106DT | <p>License Key for P25 Trunking OTAR / GPS</p> <p>Note: Conventional (OTAR/GPS) DO NOT require KWD-5106DT.</p> |

Encryption & Option Modules

| | |
|-----------|---|
| KWD-AE30K | <p>AES FIPS140-2 & DES Encryption Module (Multi-Key) Order a Labor Code L-5003 if installation is required. (Eligible for warranty of IP67/68 immersion / Intrinsically Safe Option must be installed by Kenwood. If you order only a Module and perform Dealer Installation, IP67/68 Warranty Claim will not be eligible.) KWD-AE30K requires: a Motorola KVL3000 Plus/4000 key loader device. KWD-AE30K is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1). Note: Required for Link Layer Authentication [Intrinsically Safe Option]- Must be Kenwood installed for I.S.</p> |
| KWD-AE31K | <p>AES & DES Encryption Module (Multi-Key) Order a Labor Code L-5004 if installation is required. (Eligible for warranty of IP67/68 immersion / Intrinsically Safe Option must be installed by Kenwood. If you order only a Module and perform Dealer Installation, IP67/68 Warranty Claim will not be eligible.) Note: Requires KPG-AE1/DE1 software key loader or Motorola KVL3000 Plus/4000 key loader device. KWD-AE31K is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1) Note: Required for Link Layer Authentication [Intrinsically Safe Option]- Must be Kenwood installed for I.S.</p> |
| KPG-AE1K | <p>AES/DES Encryption Software Key Loader for KWD-AE31K Authentication by KPT-300LMC is required Note: KPG-AE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A)</p> |
| KPG-DE1K | <p>DES Encryption Software Key Loader for KWD-AE31K Authentication by KPT-300LMC is required Note: KPG-DE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D992A.1)</p> |

FleetSync® & NEXEDGE® AVL & MESSAGING

| | |
|--------|---|
| KAS-10 | <p>FleetSync & NEXEDGE AVL & Messaging Software with NEXEDGE Trunking VoIP Dispatch Note: - Users can chose to operate Messaging, AVL or VoIP or all three if desired. Compatible with Windows® XP, VISTA & 7 and Microsoft® MapPoint® 2006/2009/2010 (certain format bitmap images can be imported). Refer to KAS-10 product spec sheets and manuals for details. - NEXEDGE Gen2, Type-D Trunking and DMR System not supported.</p> |
|--------|---|

SERVICE RELATED ACCESSORIES

| | |
|------------|---|
| KPG-46XM | <p>Full Speed USB Programming interface cable Note: This cable with USB mode may be used for SD Card Direct Access.</p> |
| KPG-115 | Encryption Key Loader Interface Cable for Motorola KVL-3000/3000 Plus/4000 |
| KPG-115AUT | <p>KVL-4000 Radio Authentication Cable Note: Only capable for P25 Radio Authentication. Not available for Encryption Key Loading.</p> |
| KWD-ASK-AK | <p>Access Key for KPG-D1NK P25 trunked programming Notes: Enables P25 Trunked system programming privileges in a KPG-D1NK. • For NX-5000 series only • Must be activated by trunked system operator (SYSOP) with KWD-ASK-MK Master Key • Must have KPG-D1NK • Configurable expiration period of KWD-ASK-AK set by KWD-ASK-MK is available for 3 years for built in battery. USB Key must be replaced since the expiration set up dose not work after 3 years.</p> |
| KWD-ASK-MK | <p>Master Key for activating KWD-ASK-AK Access Keys - Restricted Purchase Requirements - Notes: • For NX-5000 series only. • Sold to trunked system operator (SYSOP) or SYSOP authorized entities only • Must have KPG-D1NK • SYSOP must provide 3-digit HEX HSID to Kenwood with P25 Trunking System Keys Request Form placed on Kenwood Tools. • Purchase KWD-ASK-AK Access Keys if needed.</p> |

INSTALLATION / TUNING CHARGES

| | |
|--------|--|
| L-5001 | <p>Factory Activation of Radio Feature Licenses (per Radio) Note: Must purchase Radio Feature Licenses separately. KPT-300LMC's History Menu will not display the Radio Features activated by Factory.</p> |
| L-5006 | NX-5700/5800 Programming (with basic TX/RX check) |

INSTALLATION / TUNING CHARGES, CON'T

L-5005

KPG-D1NK System Key File (SKF)

Note: Enables P25 Trunked system programming privileges in a KPG-D1NK.**- Restricted Purchase Requirements -**

- Trunked system operator (SYSOP) must provide 3-digit HEX HSID to Kenwood with P25 Trunking System Keys Request Form placed on Kenwood Tools.
- Must have KPG-D1NK.
- Kenwood ships an encrypted *.SKF file via E-Mail to the address provided on the P25 Trunking System Keys Request Form placed on Kenwood Tools.
- Non-SYSOP entities ordering L-5005 must provide verifiable written authorization from SYSOP to receive an *.SKF file.
- 3-digit HEX HSID are securely encrypted & embedded in the *.SKF file.

L-5051

P25 CAP Compliance of Non-Encrypted Radio - Disable Built-in DES

-- IMPORTANT NOTES regarding ENCRYPTION MODULES--

Encryption modules, key loaders and radios containing encryption are export controlled by the U.S. Department of Commerce Bureau of Industry & Security EAR regulations and may either require an Export License, are eligible for a License Exception (ENC) or are exportable with No License Required (NLR) depending on the country, the consignee and the intended use. High level encryption is a special commodity that may require an export license to most countries. See www.bis.gov for more information regarding export regulations. DO NOT SHIP encryption items outside the U.S. without proper DOC/BIS Export Licenses and/or compliances.

Kenwood may request the following information to be submitted at time of order (this information must meet Kenwood internal approvals prior to shipment even if being returned to Kenwood later:

a) Initial Destination: Initial delivery point if different from Ultimate Destination

(customer distribution center, headquarters, dealership, manufacturer's representative)

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

b) Ultimate Destination: Final delivery point(s); deployment/distribution

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

c) Intended Use of Radios: Law enforcement, security, operations, etc.

KWD-AE30 AES FIPS140-2 SCM , NIST Validation & Customer Shipping

A secure delivery method direct to the end user customer is required by the NIST AES FIPS 140-2 validation rules. For U.S. Federal Government entities the SCM must ship from Kenwood USA Corporation directly to the end user customer by a trusted carrier (FEDEX, UPS or a designated Kenwood USA Corporation employee); shipping/handling by a dealer or other entity is not acceptable. This may or may not be required by local/state government agencies or business/industrial users. Please check with the end use customer about their AES encryption handling requirements before ordering. Kenwood will not be responsible for shipments of KWD-AE30K modules to erroneous destinations specified on an order.



All NX-3000 Series Mobiles include:

- Standard Microphone (KMC-65M)
- Mounting Bracket
- DC Cable
- Blade Fuse
- User Guide
- Premium Warranty: 3 Years

All Accessories / options: 1 Year

Because of spurious signal (birdie), the following frequencies (and ± 7.5 kHz ranges) are not allowed ;

- | | | |
|------------|------------|------------|
| • 139.2000 | • 403.2000 | • 460.8000 |
| • 144.0000 | • 408.0000 | • 465.6000 |
| • 148.8000 | • 412.8000 | • 470.4000 |
| • 153.6000 | • 417.6000 | • 475.2000 |
| • 158.4000 | • 422.4000 | • 480.0000 |
| • 163.2000 | • 427.2000 | • 484.8000 |
| • 166.4000 | • 432.0000 | • 489.6000 |
| • 168.0000 | • 436.8000 | • 494.4000 |
| • 172.8000 | • 441.6000 | • 499.2000 |
| | • 446.4000 | • 504.0000 |
| | • 451.2000 | • 508.8000 |
| | • 456.0000 | • 513.6000 |
| | | • 518.4000 |

STANDARD

■ GENERAL FEATURES

- 50 W (136-174 MHz) Models
- 45 W (400-470, 450-520 MHz) Models
- 512 CH / 128 Zones
- 4-Line Basic Frame (2-Line Main/Sub-LCD, icon & key guide) / 14 characters
- 4-Line Text Message Frame (2 Lines of Text, icon & key guide)
- Function/Status LCD Icons
- Multi-Language Display
- Date & 12/24 Hour Time Clock
- 7-color LED Indicator
- Transmit/Busy/Call Alert/Warn LED
- Emergency/AUX Key
- 4W Speaker Audio
- DB-15 Accessory Connector
- Dual Digital Protocol ¹
- Emergency Call Features
- Built-in GPS Receiver
- Built-in Bluetooth® Module
- Active Noise Reduction (ANR)
- KPG-D3N Windows® FPU
- Flash Firmware Upgrading
- Optional Software-based DES and AES Encryptions (Digital Only)
- MIL-STD-810 C/D/E/F/G
- IP-54 Water & Dust Intrusion
- Digital Encode/Decode Format

1. Designed to operate digital, DMR OR NXDN, along with analog FM; a single digital protocol selected with programming software.

■ DIGITAL – NXDN® MODE

- NXDN® Conventional
- NXDN® TYPE-C (Gen1/Gen2) Trunking Option
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming (requires KPG-180AP OTAP Manager Software)
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill/Check
- Short & Long Data Messages
- GPS Location
- NXDN® Scrambler

■ DIGITAL – DMR MODE

- DMR Tier 2 Conventional
- DMR Tier 3 Trunking Option
- DMR Auto Slot Select (DASS)
- AMBE+2™ VOCODER
- 12.5 kHz Channels
- Site Roaming
- Call Interrupt (Direct & Repeater Mode)
- Paging Call
- Emergency Call
- All Group Call
- Late Entry
- Status Messaging
- Remote Control by Subscriber Units
- ARC4 Encryption Option

■ ANALOG MODE

- Conventional Zones
- LTR® Zones
- FleetSync®/II: PTT ID ANI, Caller ID Display, Selective/Group Call, Emergency Status, Text Messages
- MDC-1200: PTT ID ANI, Caller ID Display, Emergency, Radio Check & Inhibit
- QT / DQT
- Two-Tone (Conventional Zones Only)
- DTMF
- Built-in Voice Inversion Scrambler

OPTIONAL FEATURES

- 1000 Channel (**KWD-3000CH**)
- Front Panel Programming (**KWD-3001FP**)
- Built-in Bluetooth® Module for Data (**KWD-3002BT**)
- Digital NXDN Trunking (**KWD-3501TR**)
- DMR Tier 2 Conventional (**Factory Installed**)
- DMR Tier 3 Trunking (**KWD-3302TR**)
- DMR ARC4 Enhanced Encryption (**KWD-3502EE**)
- AES/DES Encryption (**KWD-3503AE**)

RADIO

| | |
|-------------|---|
| NX-3720HGK | VHF (136-174MHz), 50 Watts, 512 CH, 128 Zones |
| NX-3820HGK | UHF (450 - 520MHz), 45 Watts, 512 CH, 128 Zones |
| NX-3820HGK2 | UHF (400 - 470MHz), 45 Watts, 512 CH, 128 Zones |

RADIO TRUNKING PACKAGE

| | |
|----------------|--|
| NX-3720HGK-TR | VHF (136-174MHz), 50 Watts, 512 CH, 128 Zones with NXDN Trunking |
| NX-3820HGK-TR | UHF (450 - 520MHz), 45 Watts, 512 CH, 128 Zones with NXDN Trunking |
| NX-3820HGK2-TR | UHF (400 - 470MHz), 45 Watts, 512 CH, 128 Zones with NXDN Trunking |

Field Programming Unit (FPU)

| | |
|----------|---|
| KPG-D3NK | License Key for KPG-D3NK Programming Software for NX-3000 Portable/Mobile Note: Requires KPT-300LMC for authentication |
|----------|---|

Over The Air Programming (OTAP)

| | |
|-----------|---|
| KPG-180AP | Licence Key for KPG-180AP OTAP Manager Software • License includes Fifty (50) radios / One(1) NXDN Conventional and Type-C Air Communication Profile and One(1) NXDN Conventional and Type-C IP Communication Profile Note: - Requires KPT-300LMC for authentication - NEXEDGE Type-D Trunking and DMR System not supported. |
|-----------|---|

SOFTWARE UPGRADE LICENSES FOR KPG-180AP

Note: Includes package license for additional subscriber unit or license for additional profile attached to one computer running KPG-180AP software. All additional licenses require KPT-300LMC for authentication.

| | |
|------------|--|
| KWD-AP5100 | Additional 100 Radio Package License for 1 PC Note: License includes 100 subscriber radios OTAP License. |
| KWD-AP5250 | Additional 250 Radio Package License for 1 PC Note: License includes 250 subscriber radios OTAP License. |
| KWD-AP5500 | Additional 500 Radio Package License for 1 PC Note: License includes 500 subscriber radios OTAP License. |
| KWD-AP1-CA | Additional NXDN Conventional Type-C Air Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used as NEXEDGE Base Station Serial Interface for both Conventional and Trunking (Type-C Gen1/Gen2). |

American Communication Systems

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<http://www.ameradio.com>



Over The Air Programming (OTAP), CON'T

| | |
|------------|---|
| KWD-AP2-CP | Additional NXDN Conventional Type-C IP Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used NEXEDGE Repeater IP Interface for both Conventional and Trunking (Type-C Gen1/Gen2) . |
|------------|---|

-- IMPORTANT NOTES--

Base radios are connected to a computer using the KPG-22XM USB adapter for portables, or a KPG-46XM for mobiles.
Requires firmware version 2.5 or higher for the NXR-x00/NXR-x10 repeaters.

Requires firmware version 1.0 or higher for the NXR-5xxx repeaters

Encryption Software Keyloaders

| | |
|----------|--|
| KPG-AE1K | License Key for AES/DES Encryption Software Key Loader for KWD-3503AE Note: - Requires KPT-300LMC for authentication - KPG-AE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A). |
| KPG-DE1K | License Key for DES Encryption Software Key Loader for KWD-3503AE Note: - Requires KPT-300LMC for authentication - KPG-DE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A). |

Offline Authentication Option

| | |
|-------------|--|
| KWD-OFL-USB | USB License Storage Hardware key for Radio Feature License Note: - Must purchase Radio Feature Licenses separately. - Can be used with only one (1) Account Registration Key. - Requires KPT-300LMC V1.10 or higher. - Cancellation rule is difference with standard Online/Offline Authentication. Please refer to a leaflet bundled with KWD-OFL-USB. Warranty Information: - Damaged USB License Storage "KWD-OFL-USB" a. Remaining Licenses will not be warranted. b. Licenses not uploaded to the License Management Server will not be warranted. |
|-------------|--|

Radio Features

| | |
|------------|--|
| KWD-3000CH | License Key for 1000 Channel Expansion |
| KWD-3001FP | License Key for Front Panel Programming |
| KWD-3002BT | License Key for Bluetooth Data (Required for Data Communication) Note: Voice Communication for Bluetooth Head Set does NOT require KWD-3002BT. You can pair with any Bluetooth audio device without this option. |
| KWD-3302TR | License Key for DMR Tier 3 Trunking |
| KWD-3501TR | License Key for Digital Trunking (Includes NXDN Type-C and Type-C Gen2) |
| KWD-3502EE | License Key for DMR ARC4 Enhanced Encryption |
| KWD-3503AE | License Key for AES/DES Encryption Note: 1. Factory Installation only. Must order L-5054. 2. Requires KPG-AE1/DE1 software key loader to encrypt. 3. KWD-3503AE is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1) Please see descriptions at the bottom. |
| KWD-3504RC | License Key for Remote Control by Subscriber Units Note: - This license may be used by Administrator due to Stun/Revive/Kill. - The license is required for only Transmitting of Remote Control. - PC command for Remote Control does NOT require the license. |

Radio Features, CON'T

| | |
|------------|--|
| KWD-3505DE | License Key for DES Encryption |
| | Note: Requires KPG-AE1/DE1 software key loader to load encryption keys |

CONTROL HEAD REMOTE KIT

| | |
|----------|----------------------------------|
| KRK-18HM | Interface Kit for a Control Head |
| KRK-19BM | Interface Kit for an RF Deck |

Note: Remote Control Cable must be purchased separately.

REMOTE CONTROL CABLES

| | |
|------------|--|
| KCT-71M2 | Remote Control Cable (17 feet) |
| KCT-71M3 | Remote Control Cable (25 feet) |
| KCT-71M4 | Remote Control Cable (1.6 feet) |
| KCT-71A50 | KCT-71A Extended Control Head Cable (up to 50 ft. max.) Note: Please specify exact length at 1ft. increments when ordering. Caution: Extended control head cables exhibit a loss in speaker audio power to the control heads. |
| KCT-71A100 | KCT-71A Extended Control Head Cable (up to 100 ft. max.) Note: Please specify exact length at 1ft. increments when ordering. Caution: Extended control head cables exhibit a loss in speaker audio power to the control heads. |

MOBILE INSTALLATION ACCESSORIES

| | |
|----------|--|
| KCT-60M | DB15-to-15pin Molex Adapter Cable |
| KCT-18 | Ignition sense cable (requires KCT-60M Acc. Cable Option) |
| KCT-36 | Extension Cable for KCT-34/35/39/40M/60M; 117.6 inches (9.8 ft.) |
| KCT-72M | External Accessory Connection Cable for KRK-18HM |
| KLF-2 | Line Filter (suppresses alternator whine, 25dB, 25A max). |
| KMB-10 | Key lock adapter |
| KRA-40GM | GPS Antenna |

CONTROL STATION INSTALLATION ACCESSORIES

| | |
|--------|--|
| KMB-34 | Control Station Mounting Case for KPS-15 Power Supply and Mobiles (excludes TK-5x10/6110 series). (mobile mounting hardware included) |
| KPS-15 | DC Switching Power Supply (117/230 VAC; 23A max. continuous, 25A peak) |

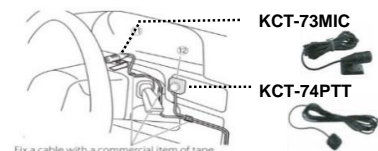
MICROPHONES AND SPEAKERS

| | |
|-----------|---|
| KMC-65M | MIL-SPEC Standard electret mobile microphone (8-pin mod. plug) |
| KMC-66M | MIL-SPEC Standard electret mobile microphone with 12 keypad (8-pin mod. plug) |
| KMC-9C | Control Station Desktop Microphone (8-pin mod. plug) Note: NOT compatible with TDMA operations |
| KMC-59C | Control Station Desktop Microphone (8-pin mod. plug) Note: Compatible with FDMA (analog / NXDN) and TDMA (DMR) Operation. |
| KES-5 | External speaker, 40W max input Note: requires KCT-60M installed. |
| KCT-73MIC | External Microphone kit w/ 9.8 ft. cord for Safer Driving <Limited Availability> |
| KCT-74PTT | External PTT Switch kit w/ 9.8 ft cord for Safer Driving <Limited Availability> |

Hands-free operation

To promote driver safety and meet hands-free regulations in certain regions, NX-3000 series mobile offers external microphone and PTT as options.

NOTE: Connecting through KCT-60M to the radio via DB15 terminal on backside of RF Deck or via optional KCT-72 "Connection Cable" on backside of KCH-18H.



SERVICE RELATED ACCESSORIES

| | |
|----------|--|
| KPG-46XM | Full Speed USB Programming interface cable Note: This cable with USB mode may be used for SD Card Direct Access. |
|----------|--|



NX-3720HG/3820HG

VHF/UHF Digital & FM Analog Mobile Radios

Table of Contents

INSTALLATION / TUNING CHARGES

| | |
|--------|---|
| L-5001 | Factory Activation of Radio Feature Licenses (per Radio) Note: Must purchase Radio Feature Licenses separately. <u>KPT-300LMC's History Menu will not display the Radio Features activated by Factory.</u> |
| L-5053 | NX-3720HG/3820HG/3920G/3921G Programming (with basic TX/RX check) |

INSTALLATION / TUNING CHARGES, CON'T

| | |
|--------|--|
| L-5054 | Installation for NX-3000 Portable/Mobile AES |
|--------|--|

-- IMPORTANT NOTES regarding ENCRYPTION SOFTWARE OPTION--

Encryption Software Option, key loaders and radios containing encryption are export controlled by the U.S. Department of Commerce Bureau of Industry & Security EAR regulations and may either require an Export License, are eligible for a License Exception (ENC) or are exportable with No License Required (NLR) depending on the country, the consignee and the intended use. High level encryption is a special commodity that may require an export license to most countries. See www.bis.gov for more information regarding export regulations. DO NOT SHIP encryption items outside the U.S. without proper DOC/BIS Export Licenses and/or compliances.

JVCKENWOOD may request the following information to be submitted at time of order (this information must meet JVCKENWOOD internal approvals prior to shipment even if being returned to JVCKENWOOD later:

a) Initial Destination: Initial delivery point if different from Ultimate Destination

(customer distribution center, headquarters, dealership, manufacturer's representative)

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

b) Ultimate Destination: Final delivery point(s); deployment/distribution

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

c) Intended Use of Radios: Law enforcement, security, operations, etc.



All NX-3000 Series Mobiles include:

- Standard Microphone (KMC-65M)
- Mounting Bracket
- DC Cable
- Blade Fuse
- User Guide
- Premium Warranty: 3 Years

All Accessories / options: 1 Year

Because of spurious signal (birdie), the following frequencies (and ± 6.25 kHz ranges) are not allowed ;

- 854.4000 • 936.0000
- 859.2000 • 940.8000
- 864.0000
- 868.8000

STANDARD

■ GENERAL FEATURES

- 15 W (800 MHz) Model
- 15 W (900 MHz) Model
- 512 CH / 128 Zones
- 4-Line Basic Frame (2-Line Main/Sub-LCD, icon & key guide) / 14 characters
- 4-Line Text Message Frame (2 Lines of Text, icon & key guide)
- Function/Status LCD Icons
- Multi-Language Display
- Date & 12/24 Hour Time Clock
- 7-color LED Indicator
- Transmit/Busy/Call Alert/Warn LED
- Emergency/AUX Key
- 4W Speaker Audio
- DB-15 Accessory Connector
- Dual Digital Protocol ¹
- Emergency Call Features
- Built-in GPS Receiver
- Built-in Bluetooth® Module
- Active Noise Reduction (ANR)
- KPG-D3N Windows® FPU
- Flash Firmware Upgrading
- Optional Software-based DES and AES Encryptions (Digital Only)
- MIL-STD-810 C/D/E/F/G
- IP-54 Water & Dust Intrusion
- Digital Encode/Decode Format

1. Designed to operate digital, DMR OR NXDN, along with analog FM; a single digital protocol selected with programming software.

■ DIGITAL – NXDN® MODE

- NXDN® Conventional
- NXDN® TYPE-C (Gen1/Gen2) Trunking
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming (requires KPG-180AP OTAP Manager Software)
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill/Check
- Short & Long Data Messages
- GPS Location
- NXDN® Scrambler

■ DIGITAL – DMR MODE

- DMR Tier 2 Conventional Option
- DMR Tier 3 Trunking Option
- DMR Auto Slot Select (DASS)
- AMBE+2™ VOCODER
- 12.5 kHz Channels
- Site Roaming
- Call Interrupt (Direct & Repeater Mode)
- Paging Call
- Emergency Call
- All Group Call
- Late Entry
- Status Messaging
- Remote Control by Subscriber Units
- ARC4 Encryption Option

■ ANALOG MODE

- Conventional Zones
- LTR® Zones
- FleetSync®/I: PTT ID ANI, Caller ID Display, Selective/Group Call, Emergency Status, Text Messages
- MDC-1200: PTT ID ANI, Caller ID Display, Emergency, Radio Check & Inhibit
- QT / DQT
- Two-Tone (Conventional Zones Only)
- DTMF
- Built-in Voice Inversion Scrambler

OPTIONAL FEATURES

- 1000 Channel (**KWD-3000CH**)
- Front Panel Programming (**KWD-3001FP**)
- Built-in Bluetooth® Module for Data (**KWD-3002BT**)
- Digital NXDN Trunking (**Factory Installed**)
- DMR Tier 2 Conventional (**KWD-3301CV**)
- DMR Tier 3 Trunking (**KWD-3301CV & KWD-3302TR**)
- DMR ARC4 Enhanced Encryption (**KWD-3502EE**)
- AES/DES Encryption (**KWD-3503AE**)

RADIO

| | |
|-----------|---|
| NX-3920GK | 800MHz, 15 Watts, 512 CH, 128 Zones, NXDN Conv & Trunking |
| NX-3921GK | 900MHz, 15 Watts, 512 CH, 128 Zones, NXDN Conv & Trunking |

Field Programming Unit (FPU)

| | |
|----------|---|
| KPG-D3NK | License Key for KPG-D3NK Programming Software for NX-3000 Portable/Mobile Note: Requires KPT-300LMC for authentication |
|----------|---|

Over The Air Programming (OTAP)

| | |
|-----------|---|
| KPG-180AP | Licence Key for KPG-180AP OTAP Manager Software • License includes Fifty (50) radios / One(1) NXDN Conventional and Type-C Air Communication Profile and One(1) NXDN Conventional and Type-C IP Communication Profile Note: - Requires KPT-300LMC for authentication - NEXEDGE Type-D Trunking and DMR System not supported. |
|-----------|---|

SOFTWARE UPGRADE LICENSES FOR KPG-180AP

Note: Includes package license for additional subscriber unit or license for additional profile attached to one computer running KPG-180AP software. All additional licenses require KPT-300LMC for authentication.

| | |
|------------|--|
| KWD-AP5100 | Additional 100 Radio Package License for 1 PC Note: License includes 100 subscriber radios OTAP License. |
| KWD-AP5250 | Additional 250 Radio Package License for 1 PC Note: License includes 250 subscriber radios OTAP License. |
| KWD-AP5500 | Additional 500 Radio Package License for 1 PC Note: License includes 500 subscriber radios OTAP License. |
| KWD-AP1-CA | Additional NXDN Conventional Type-C Air Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used as NEXEDGE Base Station Serial Interface for both Conventional and Trunking (Type-C Gen1/Gen2). |

Over The Air Programming (OTAP), CON'T

| | |
|------------|---|
| KWD-AP2-CP | Additional NXDN Conventional Type-C IP Communication Profile for 1 PC. Note: Price is per license on quantities of less than 16 licenses. Used NEXEDGE Repeater IP Interface for both Conventional and Trunking (Type-C Gen1/Gen2) . |
|------------|---|

-- IMPORTANT NOTES--

Base radios are connected to a computer using the KPG-22XM USB adapter for portables, or a KPG-46XM for mobiles.
Requires firmware version 2.5 or higher for the NXR-x00/NXR-x10 repeaters.

Requires firmware version 1.0 or higher for the NXR-5xxx repeaters

Encryption Software Keyloaders

| | |
|----------|--|
| KPG-AE1K | License Key for AES/DES Encryption Software Key Loader for KWD-3503AE Note: - Requires KPT-300LMC for authentication - KPG-AE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A). |
| KPG-DE1K | License Key for DES Encryption Software Key Loader for KWD-3503AE Note: - Requires KPT-300LMC for authentication - KPG-DE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A). |

Offline Authentication Option

| | |
|-------------|--|
| KWD-OFL-USB | USB License Storage Hardware key for Radio Feature License Note: - Must purchase Radio Feature Licenses separately. - Can be used with only one (1) Account Registration Key. - Requires KPT-300LMC V1.10 or higher. - Cancellation rule is difference with standard Online/Offline Authentication. Please refer to a leaflet bundled with KWD-OFL-USB. Warranty Information: - Damaged USB License Storage "KWD-OFL-USB" a. Remaining Licenses will not be warranted. b. Licenses not uploaded to the License Management Server will not be warranted. |
|-------------|--|

Radio Features

| | |
|------------|--|
| KWD-3000CH | License Key for 1000 Channel Expansion |
| KWD-3001FP | License Key for Front Panel Programming |
| KWD-3002BT | License Key for Bluetooth Data (Required for Data Communication) Note: Voice Communication for Bluetooth Head Set does NOT require KWD-3002BT. You can pair with any Bluetooth audio device without this option. |
| KWD-3301CV | License Key for DMR Tier 2 Conventional |
| KWD-3302TR | License Key for DMR Tier 3 Trunking (Requires KWD-3301CV) |
| KWD-3502EE | License Key for DMR ARC4 Enhanced Encryption |
| KWD-3503AE | License Key for AES/DES Encryption Note: 1. Factory Installation only. Must order L-5054. 2. Requires KPG-AE1/DE1 software key loader to encrypt. 3. KWD-3503AE is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1) Please see descriptions at the bottom. |
| KWD-3504RC | License Key for Remote Control by Subscriber Units Note: - This license may be used by Administrator due to Stun/Revive/Kill. - The license is required for only Transmitting of Remote Control. - PC command for Remote Control does NOT require the license. |

Radio Features, CON'T

| | |
|------------|--|
| KWD-3505DE | License Key for DES Encryption |
| | Note: Requires KPG-AE1/DE1 software key loader to load encryption keys |

CONTROL HEAD REMOTE KIT

| | |
|----------|----------------------------------|
| KRK-18HM | Interface Kit for a Control Head |
| KRK-19BM | Interface Kit for an RF Deck |

Note: Remote Control Cable must be purchased separately.

REMOTE CONTROL CABLES

| | |
|------------|--|
| KCT-71M2 | Remote Control Cable (17 feet) |
| KCT-71M3 | Remote Control Cable (25 feet) |
| KCT-71M4 | Remote Control Cable (1.6 feet) |
| KCT-71A50 | KCT-71A Extended Control Head Cable (up to 50 ft. max.) Note: Please specify exact length at 1ft. increments when ordering. Caution: Extended control head cables exhibit a loss in speaker audio power to the control heads. |
| KCT-71A100 | KCT-71A Extended Control Head Cable (up to 100 ft. max.) Note: Please specify exact length at 1ft. increments when ordering. Caution: Extended control head cables exhibit a loss in speaker audio power to the control heads. |

MOBILE INSTALLATION ACCESSORIES

| | |
|----------|--|
| KCT-60M | DB15-to-15pin Molex Adapter Cable |
| KCT-18 | Ignition sense cable (requires KCT-60M Acc. Cable Option) |
| KCT-36 | Extension Cable for KCT-34/35/39/40M/60M; 117.6 inches (9.8 ft.) |
| KCT-72M | External Accessory Connection Cable for KRK-18HM |
| KLF-2 | Line Filter (suppresses alternator whine, 25dB, 25A max). |
| KMB-10 | Key lock adapter |
| KRA-40GM | GPS Antenna |

CONTROL STATION INSTALLATION ACCESSORIES

| | |
|--------|--|
| KMB-34 | Control Station Mounting Case for KPS-15 Power Supply and Mobiles (excludes TK-5x10/6110 series). (mobile mounting hardware included) |
| KPS-15 | DC Switching Power Supply (117/230 VAC; 23A max. continuous, 25A peak) |

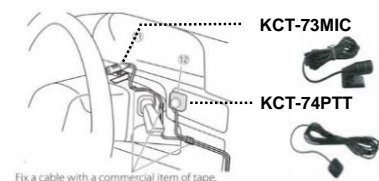
MICROPHONES AND SPEAKERS

| | |
|-----------|---|
| KMC-65M | MIL-SPEC Standard electret mobile microphone (8-pin mod. plug) |
| KMC-66M | MIL-SPEC Standard electret mobile microphone with 12 keypad (8-pin mod. plug) |
| KMC-9C | Control Station Desktop Microphone (8-pin mod. plug) Note: NOT compatible with TDMA operations |
| KMC-59C | Control Station Desktop Microphone (8-pin mod. plug) Note: Compatible with FDMA (analog / NXDN) and TDMA (DMR) Operation. |
| KES-5 | External speaker, 40W max input Note: requires KCT-60M installed. |
| KCT-73MIC | External Microphone kit w/ 9.8 ft. cord for Safer Driving <Limited Availability> |
| KCT-74PTT | External PTT Switch kit w/ 9.8 ft cord for Safer Driving <Limited Availability> |

Hands-free operation

To promote driver safety and meet hands-free regulations in certain regions, NX-3000 series mobile offers external microphone and PTT as options.

NOTE: Connecting through KCT-60M to the radio via DB15 terminal on backside of RF Deck or via optional KCT-72 "Connection Cable" on backside of KCH-18H.



SERVICE RELATED ACCESSORIES

| | |
|----------|--|
| KPG-46XM | Full Speed USB Programming interface cable Note: This cable with USB mode may be used for SD Card Direct Access. |
|----------|--|



NX-3920G/3921HG

800/900MHz Digital & FM Analog Mobile Radios

Table of Contents

INSTALLATION / TUNING CHARGES

| | |
|--------|---|
| L-5001 | Factory Activation of Radio Feature Licenses (per Radio) Note: Must purchase Radio Feature Licenses separately. <u>KPT-300LMC's History Menu will not display the Radio Features activated by Factory.</u> |
| L-5053 | NX-3720HG/3820HG/3920G/3921G Programming (with basic TX/RX check) |

INSTALLATION / TUNING CHARGES, CON'T

| | |
|--------|--|
| L-5054 | Installation for NX-3000 Portable/Mobile AES |
|--------|--|

-- IMPORTANT NOTES regarding ENCRYPTION SOFTWARE OPTION--

Encryption Software Option, key loaders and radios containing encryption are export controlled by the U.S. Department of Commerce Bureau of Industry & Security EAR regulations and may either require an Export License, are eligible for a License Exception (ENC) or are exportable with No License Required (NLR) depending on the country, the consignee and the intended use. High level encryption is a special commodity that may require an export license to most countries. See www.bis.gov for more information regarding export regulations. DO NOT SHIP encryption items outside the U.S. without proper DOC/BIS Export Licenses and/or compliances.

JVCKENWOOD may request the following information to be submitted at time of order (this information must meet JVCKENWOOD internal approvals prior to shipment even if being returned to JVCKENWOOD later:

a) Initial Destination: Initial delivery point if different from Ultimate Destination

(customer distribution center, headquarters, dealership, manufacturer's representative)

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

b) Ultimate Destination: Final delivery point(s); deployment/distribution

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

c) Intended Use of Radios: Law enforcement, security, operations, etc.

VHF/UHF Digital & FM Analog Portables (w/ Built-In GPS)

**All NX-G series portables include:**

- Belt Clip (KBH-11)
- Universal Connector Cap
- Instruction Manual
- Premium Warranty: 3 Years*

* All Accessories / options: 1 Year

Purchase Battery, Charger, Antenna separately.

Approved by CSA International Inc. for Classes I, II & III, Div. 1, Groups C, D, E, F, G and are also approved for non-Incendive use in Class I, Div. 2, Groups A, B, C, D hazardous locations.

Note: Class I, Div 2 Group A & B Gases require use of a portable carrying case.

GENERAL FEATURES

- 5 W (136-174 MHz) Models
- 5 W (400-470, 450-520 MHz) Models
- 512 CH-GID / 128 Zones
- 12-Key Keypad Models
- 14 Character Alphanumeric Aliases
- Backlit Dot Matrix LCD
- Function/Status LCD Icons
- Multi-Language Display
- Date & 12/24 Hour Time Clock
- Transmit/Busy/Call Alert/Warn LED
- On/Off Volume Knob
- 16-Position Mechanical Selector
- 6 Front PF & Menu Keys
- 2 Side PF Keys
- 500 mW Speaker Audio
- Emergency Call Features
- Built-in GPS Unit
(KRA-43G/44G is required for GPS operation)
- KMC-51/52 Digital Noise-Canceling Speaker Mic Option
- KPG-111D Windows® FPU
- Flash Firmware Upgrading
- MIL-STD-810 C/D/E/F/G
- IP54/55 Water & Dust Intrusion
- PC Serial Interface
- SDM Manual Input1
- Transparent Data Mode

DIGITAL – GENERAL

- NXDN® Digital Air Interface
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill/Check
- Short & Long Data Messages
- GPS Location with Voice
- NXDN® Scrambler Included
- DES Encryption Module Option
- AES & DES Encryption Module Option
- AES/DES Software Key Loader Option

DIGITAL – CONVENTIONAL MODE

- 64 Radio Access Numbers (RAN)
- Individual & Group Selective Call
- Mixed FM/Digital Operation
- Conventional IP Networks
- Site Roaming

DIGITAL – TRUNKING MODE

- Individual Private Call
- Group Call & Broadcast Call
- Telephone Interconnect
- Transmission Trunked Mode
- Message Trunked Mode
- Call Queuing with Priority
- Late Entry (UID & GID)
- 4 Priority Monitor ID's
- Remote Group Add
- System Auto Select

DIGITAL - MULTI-SITE IP NETWORKS**NEXEDGE Generation1 System**

- 48site Trunked IP Network
- Auto Roaming Registration
- Group Registration

NEXEDGE Generation1 System Bridge

- 8 Trunked Networks per radio (each in a zone)
- UID Lists for each network

NEXEDGE Generation2 System (option)

- 1,152 sites Wide Area System
- Direct Frequency Assignment

SCAN

- Single Zone / Multi-Zone / List Scan
- Dual Priority Scan (Conventional)

ANALOG MODE – GENERAL

- 25 & 12.5 kHz Channels
- Conventional & LTR® Zones
- FleetSync®/II, MDC-1200, DTMF
- QT / DQT & Two-Tone (Conventional Zones Only)
- Voice Inversion Scrambler
- Analog Scrambler Board Capability

MPT ZONES (option)

- Single-Site Trunking
- Multi-Site Network Trunking
- 8 Network Capacity
- Network Roaming / Registration

FleetSync®/II (FM)

- PTT ID ANI / Caller ID
- Selective / Group Call
- Emergency Status / Text Messages

MDC-1200

- PTT ID ANI / Caller ID
- Emergency / Radio Check & Inhibit

RADIO

| | |
|-----------|---|
| NX-200GK | 136-174MHz 5W, 14 characters Alphanumeric LCD, 6 Control Keys |
| NX-200GK2 | 136-174MHz 5W, 14 characters Alphanumeric LCD, Full Keypad |
| NX-300GK | 450-520MHz 5W, 14 characters Alphanumeric LCD, 6 Control Keys |
| NX-300GK2 | 400-470MHz 5W, 14 characters Alphanumeric LCD, 6 Control Keys |
| NX-300GK3 | 450-520MHz 5W, 14 characters Alphanumeric LCD, Full Keypad |
| NX-300GK4 | 400-470MHz 5W, 14 characters Alphanumeric LCD, Full Keypad |

CSA US APPROVED MODELS**Must Order L-1796 & an Intrinsically Safe Battery per radio**

| | |
|---------------|---|
| NX-200-ISCGK | 136-174MHz 5W, 14 characters Alphanumeric LCD, 6 Control Keys |
| NX-200-ISCGK2 | 136-174MHz 5W, 14 characters Alphanumeric LCD, Full Keypad |
| NX-300-ISCGK | 450-520MHz 5W, 14 characters Alphanumeric LCD, 6 Control Keys |
| NX-300-ISCGK2 | 400-470MHz 5W, 14 characters Alphanumeric LCD, 6 Control Keys |

VHF/UHF Digital & FM Analog Portables (w/ Built-In GPS)

CSA US APPROVED MODELS, CON'T

| | |
|---------------|--|
| NX-300-ISCGK3 | 450-520MHz 5W, 14 characters Alphanumeric LCD, Full Keypad |
| NX-300-ISCGK4 | 400-470MHz 5W, 14 characters Alphanumeric LCD, Full Keypad |

ANTENNAS

| | |
|-----------|--|
| KRA-43GM | VHF helical antenna 146-162 MHz (w/GPS) |
| KRA-43GM2 | VHF helical antenna 162-174 MHz (w/GPS) |
| KRA-43GM3 | VHF helical antenna 136-150 MHz (w/GPS) |
| KRA-44GM | UHF helical antenna 440-490 MHz (w/GPS) |
| KRA-44GM2 | UHF helical antenna 470-520 MHz (w/GPS) |
| KRA-44GM3 | UHF helical antenna 400-450 MHz (w/GPS) |
| KRA-26M | VHF helical antenna 146-162 MHz |
| KRA-26M2 | VHF helical antenna 162-174 MHz |
| KRA-26M3 | VHF helical antenna 136-150 MHz |
| KRA-27M | UHF whip antenna 440-490 MHz |
| KRA-27M2 | UHF whip antenna 470-520 MHz |
| KRA-27M3 | UHF whip antenna 400-450 MHz |
| KRA-22M | VHF low-profile helical antenna 148-162 MHz |
| KRA-22M2 | VHF low-profile helical antenna 162-174 MHz |
| KRA-22M3 | VHF Low-profile helical antenna 136-150 MHz |
| KRA-23M | UHF low-profile helical antenna 450-490 MHz |
| KRA-23M2 | UHF low-profile helical antenna 470-512 MHz |
| KRA-23M3 | UHF low-profile helical antenna 403-430 MHz |
| KRA-25 | High gain VHF helically loaded whip antenna 148-162 MHz |
| KRA-28 | Broad-band VHF helically loaded whip antenna 140-170 MHz |
| KRA-29 | Broad Band UHF Whip Antenna 380-430 MHz |

BATTERIES AND CHARGERS

| | |
|-----------------|--|
| KNB-47L | 1950 mAh, Li-ion battery - requires KSC-32/326K/326AK charger |
| KNB-48L | 2550 mAh, Li-ion battery - requires KSC-32/326K/326AK charger |
| KNB-50NC | 2000 mAh, Ni-MH battery - requires KSC-32/326K/326AK charger [CSA-us Intrinsically Safe Option] Note: FM Intrinsically Safe Option and repairs for FM certified radio are no longer available. Once repaired, radio loses FM certification and is required to be recertified to CSA-us to maintain the IS rating. |
| KNB-72LC-CSA-US | 1880 mAh, Li-ion battery - requires KSC-32/326K/326AK charger [CSA-us Intrinsically Safe Option] |
| KBP-7 | AA Alkaline Refillable Battery Pack (6 AA; 9V) cells not included Note: the color of the case is orange |
| KSC-32 | Rapid rate single unit charger for KNB-31A/32N/33L/41NC/43L/47L/48L/50NC Note: Includes 110/220V auto-switching AC adapter with U.S.-style line cord plug; requires plug adapter for 220V Euro-style outlets (not supplied). |
| KSC-326AK | Rapid rate 6-unit charger CEC Compliant |
| KMB-23 | Six Unit Charger Adapter for the KSC-16/20/24/25/25L/32 chargers (chargers not included) |
| KVC-15 | Rapid rate DC vehicular charger adapter for the KSC-32 (chargers not included; includes KSC-mobile bracket & cigarette lighter cable DC adapter) |
| KVC-23 | Rapid rate DC vehicular charger for TK-5x10/5x20, NX-5x00/x00/x10/x20, TK-x180, TK-x170, & TK-x360 portables with Lithium Ion /Lithium Polymer/NiMH packs only |

CARRYING ACCESSORIES

| | |
|-----------|---|
| KBH-11 | Spring action belt clip (2.5") |
| KBH-8DS | Leather swivel belt loop with portable D-Ring attachment |
| KLH-6SW | Leather swivel belt loop / detachable swivel D-Ring back |
| KLH-137ST | Firemen's Heavy-Duty Leather Shoulder Strap for a Heavy-Duty Leather Case (KLH-75B/76B/78B/79B//92/122/123/133/148/154) |
| KLH-148K | Heavy duty leather case for NX-200/300/TK-5220/5320 (Non DTMF keypad models) |
| KLH-148K2 | Heavy duty leather case for NX-200/300/TK-5220/5320 (DTMF keypad models) |

VHF/UHF Digital & FM Analog Portables (w/ Built-In GPS)

CARRYING ACCESSORIES, CON'T

| | |
|-----------|--|
| KLH-149K | Nylon carrying case for NX-200/300/TK-5220/5320 (Non DTMF keypad models) |
| KLH-149K2 | Nylon carrying case for NX-200/300/TK-5220/5320 (DTMF keypad models) |

SPECIAL COLOR HOUSING

| | |
|-------------|---|
| KWD-YH20-NX | Yellow Housing Kit for NX-x00 portables (6 Control Keys Version Only) Order L-1714 for Factory Install. (required for Intrinsically Safe & IP67 radio orders) |
| KWD-OH20-NX | Orange Housing Kit for NX-x00 portables (6 Control Keys Version Only) Order L-1739 for Factory Install. (required for Intrinsically Safe & IP67 radio orders) |

MICROPHONES & AUDIO ACCESSORIES

| | |
|------------|--|
| KMC-51DM | MIL-SPEC, IP54/55 DSP Digital Noise-canceling Speaker Mic [see note 2] [Intrinsically Safe Option] |
| KMC-52WDM | MIL-SPEC, IP67 (Immersion) DSP Digital Noise-canceling Speaker Mic [see note 2] Note: Radio does not have an IP67 Immersion option; meets MIL STD810 rain standards. [note 2]: To adjust microphone settings different from factory default, download KPG-147NC configuration software and special configuration firmware from Kenwood Tools (no charge). |
| KMC-47GPSD | GPS Speaker Microphone [Intrinsically Safe Option] |
| KMC-40 | MIL-SPEC, Speaker Mic. with Antenna Connector [Intrinsically Safe Approved Accessory] Note: 5/16" Coax cable hex wrench included (antenna is not included). |
| KMC-41M | MIL-SPEC, IP54/55 Noise-canceling Speaker Mic [Intrinsically Safe Approved Accessory] |
| KMC-42WDM | MIL-SPEC, IP67 (Immersion) Noise-canceling Speaker Mic [Intrinsically Safe Approved Accessory] Note: Radio does not have an IP67 Immersion option; meets MIL STD810 rain standards. |
| KEP-1 | 3.5mm earphone kit for KMC-25/26/41M/42WM Speaker Mics [Intrinsically Safe Approved Accessory] |
| KCT-51 | Hirose 6-pin Adapter (adapts KVL/aftermarket audio acc. to portable connector) [Intrinsically Safe Approved Accessory] |
| KHS-11BL | 2-wire palm mic w/earphone, universal connector (Black) [Intrinsically Safe Approved Accessory] |
| KHS-12BL | 3-wire mini lapel mic w/earphone, universal connector (Black) [Intrinsically Safe Approved Accessory] |
| KHS-14 | Lt. Wt. Single muff headset w/boom mic & In-line PTT [Intrinsically Safe Approved Accessory] |
| KHS-15D-BH | Hvy-duty noise reduction behind-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Approved Accessory] |
| KHS-15D-OH | Hvy-duty noise reduction over-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Approved Accessory] |

SOFTWARE & USB OPTIONS

| | |
|-------------|--|
| KPG-150AP | NEXEDGE OTAP Manager Windows Software. • License Includes 10 radios / 1 Serial Port* • To add more radios/serial ports, you must contact Kenwood Systems Division [1-800-TRUNKING] Note: NEXEDGE Type-D Trunking and DMR not supported. |
| KPG-AE1K | AES/DES Encryption Software Key Loader for KWD-AE31K Authentication by KPT-300LMC is required Note: KPG-AE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A). |
| KPG-DE1K | DES Encryption Software Key Loader for KWD-AE31K Authentication by KPT-300LMC is required Note: KPG-DE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D992A.1). |
| KWD-NX2G-10 | Gen2 Enhanced Option for NX-*00/*10/*11/*20 Portables & Mobiles Must order L-1812 for factory installation, or L-1813 for field-upgrade option |

VHF/UHF Digital & FM Analog Portables (w/ Built-In GPS)

SOFTWARE & USB OPTIONS, CON'T

KWD-LIC-USB USB Hardware Key for activating KWD-NX2G-10 options to NX-*00/*10/*11/*20 series **without ESN**. KWD-LIC-USB stores KWD-NX2G-10 options which are purchased separately and includes KPG-97USB software for activating radios.

Note:

- Must order L-1819.
- Must purchase KWD-NX2G-10 separately.
- KWD-LIC-USB Request Form that can be downloaded from Dealer Tools is required to order.
- KWD-LIC-USB cannot be rechargeable. Must purchase it per every orders.
- KWD-LIC-USB can store up to 50,000 KWD-NX2G-10 Gen2 Upgrade Options.
- The licenses (KWD-NX2G-10) installed to the KWD-LIC-USB is **NOT** eligible for warranty compensation.

OPTION MODULES

| | |
|-----------|--|
| KCT-48VU | External Vibration Unit [Intrinsically Safe Approved Accessory] Note: Audio accessories cannot be used when this option installed. |
| KCT-57MS | Man-Down Internal Tilt Switch (Non-Mercury) [Intrinsically Safe Approved Accessory] - Must be Kenwood installed for I.S. |
| KWD-AE30K | AES FIPS140-2 & DES Encryption Module (Multi-Key) Order a Labor Code L-1828 if installation is required. KWD-AE30K requires: a Motorola KVL3000 Plus/4000 key loader device. KWD-AE30K is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1). [Intrinsically Safe Option] - Must be Kenwood installed for I.S. Note: GPS Board must be removed to install this option. |
| KWD-AE31K | AES & DES Encryption Module (Multi-Key) Order a Labor Code L-1829 if installation is required. Note: Requires KPG-AE1/DE1 software key loader or Motorola KVL3000 Plus/4000 key loader device. KWD-AE31K is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1) [Intrinsically Safe Option] - Must be Kenwood installed for I.S. Note: GPS Board must be removed to install this option. |

SERVICE RELATED ACCESSORIES

| | |
|----------------------------------|--|
| KPG-111DNK (Ver 4.4 or newer) | Windows® Programming Software for NX-200/210/300/410/411/700/800/900/901 (Compliant with FCC Part 90 Narrowbanding) |
| KPG-36XM | USB Programming interface cable |

MPT FIRMWARE/ACCESSORIES/TUNING

| | |
|-------------|---|
| KPG-143DNK | Windows® Programming Software for NX series MPT (Compliant with FCC Part 90 Narrowbanding) (Dealer Level License ID included) Note: - Must order L-1727 for Network Level License ID & programming privileges. |
| KWD-NX10MPT | MPT Trunking Field Upgrade Kit for NX series radio Must order L-1729 Note: Not compatible with any other firmware options. Radio does not retain LTR trunking features once the MPT option is installed. |
| L-1726 | Install MPT option in NX series radio |
| L-1727 | Network Level License ID for KPG-143D(N) NX series Programmer |
| L-1728 | Retrofit Install of MPT option in NX series radio For previously purchased NX series radios. Order L-1728 through LMR order desk/rep. Ship radios to attn: Kenwood LMR Tuning, Long Beach for installation. Include Kenwood order number for L-1728 provided by order desk & copy of company P.O. or P.O. number. Note: see NX series MPT Introduction Sales Bulletin for details. |
| L-1729 | NX Series Radio MPT Firmware FIELD-UPGRADE (Must purchase KWD-NX10MPT separately) |
| L-1730 | Install KCT-57MS (for MPT Emergency Call) |

INSTALLATION / TUNING CHARGES

| | |
|-------|--|
| L-961 | Assemble KMB-23 with six KSC-32K's (Rapid Rate, 120 Volt version only) |
|-------|--|

VHF/UHF Digital & FM Analog Portables (w/ Built-In GPS)

INSTALLATION / TUNING CHARGES, CON'T

| | |
|--------|--|
| L-1084 | NX-200(S)/300(S) Programming (with basic TX/RX check) |
| L-1093 | NX-200(S)/300(S) Portable KCT-57MS Installation (for NXDN® / FleetSync®) |
| L-1100 | Multi-Channel Encoder Modification |
| L-1714 | Assemble Yellow Housing KWD-YH20-NX with NX-200K/300K/300K3 Portable |
| L-1739 | Assemble Orange Housing KWD-OH20-NX with NX-200K/300K/300K3 Portable |
| L-1796 | Configure NX-200G/300G for Intrinsically Safe Must order an I.S. battery |
| L-1812 | Install Gen2 Enhanced Option in NX series radio (Must purchase KWD-NX2G-10 separately) |
| L-1813 | NX Series Radio Gen2 Enhanced Option FIELD-UPGRADE (Must purchase KWD-NX2G-10 separately) |
| L-1819 | Create KWD-LIC-USB and store KWD-NX2G-10 (Must purchase KWD-NX2G-10 separately) |
| L-1828 | Install KWD-AE30K in NX-200G/300G series Portable (Must purchase module separately) |
| L-1829 | Install KWD-AE31K in NX-200G/300G series Portable (Must purchase module separately) |

-- IMPORTANT NOTES --

Encryption modules, key loaders and radios containing encryption are export controlled by the U.S. Department of Commerce Bureau of Industry & Security EAR regulations and may either require an Export License, are eligible for a License Exception (ENC) or are exportable with No License Required (NLR) depending on the country, the consignee and the intended use. High level encryption is a special commodity that may require an export license to most countries. See www.bis.gov for more information regarding export regulations. DO NOT SHIP encryption items outside the U.S. without proper DOC/BIS Export Licenses and/or compliances.

Kenwood may request the following information to be submitted at time of order (this information must meet Kenwood internal approvals prior to shipment even if being returned to Kenwood later:

a) Initial Destination: Initial delivery point if different from Ultimate Destination (customer distribution center, headquarters, dealership, manufacturer's representative)

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

b) Ultimate Destination: Final delivery point(s); deployment/distribution

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

c) Intended Use of Radios: Law enforcement, security, operations, etc.

KWD-AE30 AES FIPS140-2 SCM , NIST Validation & Customer Shipping

A secure delivery method direct to the end user customer is required by the NIST AES FIPS 140-2 validation rules. For U.S. Federal Government entities the SCM must ship from JVCKENWOOD USA Corporation directly to the end user customer by a trusted carrier (FEDEX, UPS or a designated JVCKENWOOD USA Corporation employee); shipping/handling by a dealer or other entity is not acceptable. This may or may not be required by local/state government agencies or business/industrial users. Please check with the end use customer about their AES encryption handling requirements before ordering. Kenwood will not be responsible for shipments of KWD-AE30K modules to erroneous destinations specified on an order.

VHF Digital & FM Analog Portables (w/ Built-In GPS)

**210G series portable include:**

- Belt Clip (KBH-11)
- Universal Connector Cap
- Instruction Manual
- Premium Warranty: 3 Years*

* All Accessories / options: 1 Year

Order packages to include Battery, Charger & Antenna, or purchase Battery, Charger, and Antenna separately.

Approved by CSA International Inc. for Classes I, II & III, Div. 1, Groups C, D, E, F, G and are also approved for non-Incendive use in Class I, Div. 2, Groups A, B, C, D hazardous locations.

Note: Class I, Div 2 Group A & B Gases require use of a portable carrying case.

GENERAL FEATURES

- 5 W (136-174 MHz) Model
- 512 CH-GID / 128 Zones
- 12-Key Keypad Model
- 14 Character Alphanumeric Aliases
- Backlit Dot Matrix LCD
- Function/Status LCD Icons
- Multi-Language Display
- Date & 12/24 Hour Time Clock
- Transmit/Busy/Call Alert/Warn LED
- On/Off Volume Knob
- 6 Front PF & Menu Keys
- 2 Side PF Keys
- Emergency/AUX Key
- 500 mW Speaker Audio
- Built-In GPS Unit
- KPG-111D Windows® FPU
- Flash Firmware Upgrading
- MIL-STD-810 C/D/E/F/G
- MIL-STD "Driven-Rain"
- IP54/55 Water & Dust Intrusion
- PC Serial Interface
- SDM Manual Input
- Transparent Data Mode

DIGITAL – GENERAL

- NXDN® Digital Air Interface
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill
- Remote Check
- Short & Long Data Messages
- GPS Location with Voice
- NXDN® Scrambler Included
- DES Encryption Module Option*
- AES & DES Encryption Module Option*
- AES/DES Software Key Loader Option

DIGITAL – CONVENTIONAL MODE

- 64 Radio Access Numbers (RAN)
- Individual & Group Selective Call
- Mixed FM/Digital Operation
- Conventional IP Networks
- Site Roaming

DIGITAL – TRUNKING MODE

- Individual Private Call
- Group Call & Broadcast Call
- Telephone Interconnect
- Transmission Trunked Mode
- Message Trunked Mode
- Call Queuing with Priority
- Late Entry (UID & GID)
- 4 Priority Monitor ID's
- Remote Group Add
- System Auto Select

DIGITAL - MULTI-SITE IP NETWORKSNEXEDGE Generation1 System

- 48site Trunked IP Network
- Auto Roaming Registration
- Group Registration

NEXEDGE Generation1 System Bridge

- 8 Trunked Networks per radio (each in a zone)
- UID Lists for each network

NEXEDGE Generation2 System (option)

- 1,152 sites Wide Area System
- Direct Frequency Assignment

SCAN

- Single Zone / Multi-Zone / List Scan
- Dual Priority Scan (Conventional)

ANALOG MODE – GENERAL

- 25 & 12.5 kHz Channels
- Conventional & LTR® Zones
- FleetSync®/II, MDC-1200, DTMF
- QT / DQT & Two-Tone (Conventional Zones Only)
- Voice Inversion Scrambler
- Analog Scrambler Board Capability

FleetSync®/II (FM)

- PTT ID ANI / Caller ID
- Selective / Group Call
- Emergency Status / Text Messages

MDC-1200

- PTT ID ANI / Caller ID
- Emergency / Radio Check & Inhibit

* Must remove GPS module to utilize these options

RADIO

NX-210GK2 136-174MHz 5W, 14 characters Alphanumeric LCD, 6 Control Keys, Full Keypad

CSA US APPROVED MODELS

Must Order L-1750 & an Intrinsically Safe Battery per radio

NX-210-ISCGK2 136-174MHz 5W, 14 characters Alphanumeric LCD, 6 Control Keys, Full Key (I.S.)

PACKAGE

NX-210GK2-LKP 136-174MHz 5W, 14 characters Alphanumeric LCD, 6 Control Keys, Full Keypad
VHF Li-Ion Battery Package (NX-210K2 + KNB-33L + KSC-32 + KBH-11 + KRA-26M)

VHF Digital & FM Analog Portables (w/ Built-In GPS)

| ANTENNAS | DEALER |
|---------------------------------|--|
| KRA-43GM | VHF helical antenna 146-162 MHz (w/GPS) |
| KRA-43GM2 | VHF helical antenna 162-174 MHz (w/GPS) |
| KRA-43GM3 | VHF helical antenna 136-150 MHz (w/GPS) |
| KRA-26M | VHF helical antenna 146-162 MHz |
| KRA-26M2 | VHF helical antenna 162-174 MHz |
| KRA-26M3 | VHF helical antenna 136-150 MHz |
| KRA-22M | VHF low-profile helical antenna 148-162 MHz |
| KRA-22M2 | VHF low-profile helical antenna 162-174 MHz |
| KRA-22M3 | VHF Low-profile helical antenna 136-150 MHz |
| KRA-25 | High gain VHF helically loaded whip antenna 148-162 MHz |
| KRA-28 | Broad-band VHF helically loaded whip antenna 140-170 MHz |
| BATTERIES AND CHARGERS | |
| KNB-41NC | 2500 mAh, Ni-MH battery - requires KSC-32/326K/326AK charger [CSA-us Intrinsically Safe Option] Note: FM Intrinsically Safe Option and repairs for FM certified radio are no longer available. Once repaired, radio loses FM certification and is required to be recertified to CSA-us to maintain the IS rating. |
| KNB-73LCM | 2000 mAh, Li-ion battery - requires KSC-32/326K/326AK charger [CSA-us Intrinsically Safe Option] |
| KNB-54N | 2500 mAh, Ni-MH battery - requires KSC-32/326K/326AK charger |
| KNB-33L | 2000 mAh, Li-ion battery - requires KSC-32/326K/326AK charger |
| KNB-43L | 3300 mAh, Li-Polymer battery - requires KSC-32/326K/326AK charger |
| KBP-6 | AA Alkaline Refillable Battery Pack (6 AA; 9V) cells not included Note: the color of the case is orange. |
| KSC-32 | Rapid rate single unit charger for KNB-31A/32N/33L/41NC/43L/47L/48L/50NC Note: Includes 110/220V auto-switching AC adapter with U.S.-style line cord plug; requires plug adapter for 220V Euro-style outlets (not supplied). |
| KSC-326AK | Rapid rate 6-unit charger CEC Compliant |
| KMB-23 | Six Unit Charger Adapter for the KSC-16/20/24/25/25L/32 chargers (chargers not included) |
| KVC-15 | Rapid rate DC vehicular charger adapter for the KSC-32 (chargers not included; includes KSC-mobile bracket & cigarette lighter cable DC adapter) |
| KVC-23 | Rapid rate DC vehicular charger for TK-5x10/5x20, NX-5x00/x00/x10/x20, TK-x180, TK-x170, & TK-x360 portables with Lithium Ion /Lithium Polymer/NiMH packs only |
| CARRYING ACCESSORIES | |
| KBH-10 | Low profile spring action belt clip (for use with KNB-33L Only) |
| KBH-11 | Spring action belt clip (2.5") |
| KBH-8DS | Leather swivel belt loop with portable D-Ring attachment |
| KLH-6SW | Leather swivel belt loop / detachable swivel D-Ring back |
| KLH-137ST | Firemen's Heavy-Duty Leather Shoulder Strap for a Heavy-Duty Leather Case (KLH-75B/76B/78B/79B/92/122/123/133/148/154) |
| KLH-154K2 | Heavy duty leather carrying case for NX-210K2/410K2/411K2 Note: No belt loop flap is included. Must order KLH-6SW for belt loop. |
| MICROPHONES & AUDIO ACCESSORIES | |
| KMC-51DM | MIL-SPEC, IP54/55 DSP Digital Noise-canceling Speaker Mic [see note 1] [Intrinsically Safe Approved Accessory] * CSA Intrinsically Safe Approved except for Group C gases. |
| KMC-52WDM | MIL-SPEC, IP67 (Immersion) DSP Digital Noise-canceling Speaker Mic [see note 1] Note: Radio does not have an IP67 Immersion option; meets MIL STD810 rain standards [Intrinsically Safe Approved Accessory] * CSA Intrinsically Safe Approved except for Group C gases. [note 1]: To adjust microphone settings different from factory default, download KPG-147NC configuration software and special configuration firmware from Kenwood Tools (no charge). |
| KMC-40 | MIL-SPEC, Speaker Mic. with Antenna Connector [Intrinsically Safe Approved Accessory] Note: 5/16" Coax cable hex wrench included (antenna is not included). |

VHF Digital & FM Analog Portables (w/ Built-In GPS)

MICROPHONES & AUDIO ACCESSORIES, CON'T

| | |
|------------|---|
| KMC-41M | MIL-SPEC, IP54/55 Noise-canceling Speaker Mic [Intrinsically Safe Approved Accessory] |
| KMC-42WDM | MIL-SPEC, IP67 (Immersion) Noise-canceling Speaker Mic [Intrinsically Safe Approved Accessory] Note: Radio does not have an IP67 Immersion option; meets MIL STD810 rain standards. |
| KEP-1 | 3.5mm earphone kit for KMC-25/26/41M/42WM Speaker Mics [Intrinsically Safe Approved Accessory] |
| KCT-51 | Hirose 6-pin Adapter (adapts KVL/aftermarket audio acc. to portable connector) [Intrinsically Safe Approved Accessory] |
| KHS-11BL | 2-wire palm mic w/earphone, universal connector (Black) [Intrinsically Safe Approved Accessory] |
| KHS-12BL | 3-wire mini lapel mic w/earphone, universal connector (Black) [Intrinsically Safe Approved Accessory] |
| KHS-14 | Lt. Wt. Single muff headset w/boom mic & In-line PTT [Intrinsically Safe Approved Accessory] |
| KHS-15D-BH | Hvy-duty noise reduction behind-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Approved Accessory] |
| KHS-15D-OH | Hvy-duty noise reduction over-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Approved Accessory] |

SOFTWARE & USB OPTIONS

| | |
|-------------|--|
| KPG-150AP | NEXEDGE OTAP Manager Windows Software. • License Includes 10 radios / 1 Serial Port* • To add more radios/serial ports, you must contact Kenwood Systems Division [1-800-TRUNKING] Note: NEXEDGE Type-D Trunking and DMR not supported. |
| KPG-AE1K | AES/DES Encryption Software Key Loader for KWD-AE31K Authentication by KPT-300LMC is required Note: KPG-AE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A). |
| KPG-DE1K | DES Encryption Software Key Loader for KWD-AE31K Authentication by KPT-300LMC is required Note: KPG-DE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D992A.1). |
| KWD-NX2G-10 | Gen2 Enhanced Option for NX-*00/*10/*11/*20 Portables & Mobiles Must order L-1812 for factory installation, or L-1813 for field-upgrade option |
| KWD-LIC-USB | USB Hardware Key for activating KWD-NX2G-10 options to NX-*00/*10/*11/*20 series without ESN. KWD-LIC-USB stores KWD-NX2G-10 options which are purchased separately and includes KPG-97USB software for activating radios. Note: - Must order L-1819. - Must purchase KWD-NX2G-10 separately. - KWD-LIC-USB Request Form that can be downloaded from Dealer Tools is required to order. - KWD-LIC-USB cannot be rechargeable. Must purchase it per every orders. - KWD-LIC-USB can store up to 50,000 KWD-NX2G-10 Gen2 Upgrade Options. - The licenses (KWD-NX2G-10) installed to the KWD-LIC-USB is NOT eligible for warranty compensaton. |

OPTION MODULES

| | |
|-----------|--|
| KCT-48VU | External Vibration Unit [Intrinsically Safe Approved Accessory] Note: Audio accessories cannot be used when this option installed. |
| KCT-57MS | Man-Down Internal Tilt Switch (Non-Mercury) [Intrinsically Safe Approved Accessory] - Must be Kenwood installed for I.S. |
| KWD-AE30K | AES FIPS140-2 & DES Encryption Module (Multi-Key) Order a Labor Code L-1832 if installation is required. KWD-AE30K requires: a Motorola KVL3000 Plus/4000 key loader device. KWD-AE30K is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1). [Intrinsically Safe Option] - Must be Kenwood installed for I.S. |
| KWD-AE31K | AES & DES Encryption Module (Multi-Key) Order a Labor Code L-1833 if installation is required. Note: Requires KPG-AE1/DE1 software key loader or Motorola KVL3000 Plus/4000 key loader device. KWD-AE31K is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1) [Intrinsically Safe Option] - Must be Kenwood installed for I.S. |

VHF Digital & FM Analog Portables (w/ Built-In GPS)

SERVICE RELATED ACCESSORIES

| | |
|------------|---|
| KPG-111DNK | Windows® Programming Software for NX-200/210/300/410/411/700/800/900/901 Note: Version 4.40 is required to program "G" models |
| KPG-36XM | USB Programming interface cable |

INSTALLATION / TUNING CHARGES

| | |
|--------|--|
| L-961 | Assemble KMB-23 with six KSC-32K's (Rapid Rate, 120 Volt version only) |
| L-1633 | NX-210 Programming (with basic TX/RX check) |
| L-1667 | Install VGS-1 Voice Guide & Storage Unit in NX-210 |
| L-1671 | NX-210/410/411 Portable KCT-57MS Installation (for NXDN® / FleetSync®) |
| L-1750 | Configure NX-210/210G/410/411 for Intrinsically Safe Must order an I.S. battery, |
| L-1812 | Install Gen2 Enhanced Option in NX series radio (Must purchase KWD-NX2G-10 separately) |
| L-1813 | NX Series Radio Gen2 Enhanced Option FIELD-UPGRADE (Must purchase KWD-NX2G-10 separately) |
| L-1819 | Create KWD-LIC-USB and store KWD-NX2G-10 (Must purchase KWD-NX2G-10 separately) |
| L-1832 | Install KWD-AE30K in NX-210G/410/411 series Portable (Must purchase module separately) |
| L-1833 | Install KWD-AE31K in NX-210G/410/411 series Portable (Must purchase module separately) |

-- IMPORTANT NOTES --

Encryption modules, key loaders and radios containing encryption are export controlled by the U.S. Department of Commerce Bureau of Industry & Security EAR regulations and may either require an Export License, are eligible for a License Exception (ENC) or are exportable with No License Required (NLR) depending on the country, the consignee and the intended use. High level encryption is a special commodity that may require an export license to most countries. See www.bis.gov for more information regarding export regulations. DO NOT SHIP encryption items outside the U.S. without proper DOC/BIS Export Licenses and/or compliances.

Kenwood may request the following information to be submitted at time of order (this information must meet Kenwood internal approvals prior to shipment even if being returned to Kenwood later:

- a) Initial Destination:** Initial delivery point if different from Ultimate Destination
(customer distribution center, headquarters, dealership, manufacturer's representative)
* Business/Agency Name:
* Address:
* Contact Person Name:
* Contact Phone:
- b) Ultimate Destination:** Final delivery point(s); deployment/distribution
* Business/Agency Name:
* Address:
* Contact Person Name:
* Contact Phone:
- c) Intended Use of Radios:** Law enforcement, security, operations, etc.

KWD-AE30 AES FIPS140-2 SCM , NIST Validation & Customer Shipping

A secure delivery method direct to the end user customer is required by the NIST AES FIPS 140-2 validation rules. For U.S. Federal Government entities the SCM must ship from JVCKENWOOD USA Corporation directly to the end user customer by a trusted carrier (FEDEX, UPS or a designated JVCKENWOOD USA Corporation employee); shipping/handling by a dealer or other entity is not acceptable. This may or may not be required by local/state government agencies or business/industrial users. Please check with the end use customer about their AES encryption handling requirements before ordering. Kenwood will not be responsible for shipments of KWD-AE30K modules to erroneous destinations specified on an order.

800/900 MHz Digital & FM Analog Portable Radios

**410 portable includes:**

- Belt Clip (KBH-11)
- Universal Connector Cap
- Instruction Manual
- Premium Warranty: 3 Years*

* All Accessories / options: 1 Year

Order packages to include Battery, Charger & Antenna, or purchase Battery, Charger, and Antenna separately.

* Approved by CSA International Inc. for Classes I, II & III, Div. 1, Groups C, D, E, F, G and are also approved for non-Incendive use in Class I, Div. 2, Groups A, B, C, D hazardous locations.

Note: Class I, Div 2 Group A & B Gases require use of a portable carrying case.

GENERAL FEATURES

- 3.0 W (806-870 MHz) Model
- 2.5 W (896-941 MHz) Model
- 512 CH-GID / 128 Zones
- 12-Key Keypad
- 14 Character Alphanumeric Aliases
- Backlit Dot Matrix LCD
- Function/Status LCD Icons
- Multi-Language Display
- Date & 12/24 Hour Time Clock
- Transmit/Busy/Call Alert/Warn LED
- On/Off Volume Knob
- 6 Front PF & Menu Keys
- 2 Side PF Keys
- Emergency/AUX Key
- 500 mW Speaker Audio
- KMC-47GPS Speaker Mic Option
- KPG-111D Windows® FPU
- Flash Firmware Upgrading
- MIL-STD-810 C/D/E/F/G
- IP54/55 Water & Dust Intrusion
- PC Serial Interface
- SDM Manual Input
- Transparent Data Mode

DIGITAL – GENERAL

- NXDN® Digital Air Interface
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill/Check
- Short & Long Data Messages
- GPS Location with Voice
- NXDN® Scrambler Included
- DES Encryption Module Option
- AES & DES Encryption Module Option
- AES/DES Software Key Loader Option

DIGITAL – CONVENTIONAL MODE

- 64 Radio Access Numbers (RAN)
- Individual & Group Selective Call
- Mixed FM/Digital Operation
- Conventional IP Networks
- Site Roaming

DIGITAL – TRUNKING MODE

- Individual Private Call
- Group Call & Broadcast Call
- Transmission Trunked Mode
- Message Trunked Mode
- Call Queuing with Priority
- Late Entry (UID & GID)
- 4 Priority Monitor ID's
- Remote Group Add
- System Auto Select

DIGITAL - MULTI-SITE IP NETWORKSNEXEDGE Generation1 System

- 48site Trunked IP Network
- Auto Roaming Registration
- Group Registration

NEXEDGE Generation1 System Bridge

- 8 Trunked Networks per radio (each in a zone)
- UID Lists for each network

NEXEDGE Generation2 System (option)

- 1,152 sites Wide Area System
- Direct Frequency Assignment

SCAN

- Single Zone / Multi-Zone / List Scan
- Dual Priority Scan (Conventional)

ANALOG MODES – GENERAL

- 25** & 12.5 kHz Channels
- NPSPAC Channels**
- Conventional & LTR® Zones
- FleetSync®/II, MDC-1200, DTMF
- QT / DQT (Conventional Zones Only)
- Voice Inversion Scrambler
- Analog Scrambler Board Capability

MPT ZONES (option)

- Single-Site Trunking
- Multi-Site Network Trunking
- 8 Network Capacity
- Network Roaming / Registration

FleetSync®/II

- PTT ID ANI / Caller ID
- Selective / Group Call
- Emergency, Status & Text Messages

MDC-1200

- PTT ID ANI / Caller ID
- Emergency, Radio Check & Inhibit

** 800 MHz model only.1

RADIO

NX-410K2 806-870MHz 3W, 14 characters Alphanumeric LCD, 6 Control Keys, Full Keypad

NX-411K2 896-941MHz 2.5W, 14 characters Alphanumeric LCD, 6 Control Keys, Full Keypad

CSA APPROVED I.S. MODEL

Must Order L-1750 & an Intrinsically Safe Battery per radio

NX-410-ISK2 806-870MHz 3W, 14 characters Alphanumeric LCD, 6 Control Keys, Full Key (I.S.)

NX-411-ISK2 896-941MHz 2.5W, 14 characters Alphanumeric LCD, 6 Control Keys, Full Key (I.S.)

PACKAGE

NX-410K2-LKP 806-870MHz 3W, 14 characters Alphanumeric LCD, 6 Control Keys, Full Keypad
Li-Ion Battery Package (NX-410K2 + KNB-33L + KSC-32 + KBH-11 + KRA-38K)

NX-411K2-LKP 896-941MHz 2.5W, 14 characters Alphanumeric LCD, 6 Control Keys, Full Keypad
Li-Ion Battery Package (NX-411K2 + KNB-33L + KSC-32 + KBH-11 + KRA-38K)

800/900 MHz Digital & FM Analog Portable Radios

ANTENNAS

| | |
|---------|----------------------------|
| KRA-32K | 700/800 MHz Whip Antenna |
| KRA-36 | 700/800 MHz Stubby Antenna |
| KRA-38K | 800/900 MHz Whip Antenna |
| KRA-39 | 900 MHz Stubby Antenna |

BATTERIES AND CHARGERS

| | |
|-----------|---|
| KNB-54N | 2500 mAh, Ni-MH battery - requires KSC-32/326K/326AK charger |
| KNB-33L | 2000 mAh, Li-ion battery - requires KSC-32/326K/326AK charger |
| KNB-41NC | 2500 mAh, Ni-MH battery - requires KSC-32/326K/326AK charger [CSA-us Intrinsically Safe Option] Note: FM Intrinsically Safe Option and repairs for FM certified radio are no longer available. Once repaired, radio loses FM certification and is required to be recertified to CSA-us to maintain the IS rating. |
| KNB-73LCM | 2000 mAh, Li-ion battery - requires KSC-32/326K/326AK charger [CSA-us Intrinsically Safe Option] |
| KNB-43L | 3300 mAh, Li-Polymer battery - requires KSC-32/326K/326AK charger |
| KBP-6 | AA Alkaline Refillable Battery Pack (6 AA; 9V) cells not included Note: the color of the case is orange. |
| KSC-32 | Rapid rate single unit charger for KNB-31A/32N/33L/41NC/43L/47L/48L/50NC Note: Includes 110/220V auto-switching AC adapter with U.S.-style line cord plug; requires plug adapter for 220V Euro-style outlets (not supplied). |
| KSC-326AK | Rapid rate 6-unit charger CEC Compliant |
| KMB-23 | Six Unit Charger Adapter for the KSC-16/20/24/25/25L/32 chargers (chargers not included) |
| KVC-15 | Rapid rate DC vehicular charger adapter for the KSC-32 (chargers not included; includes KSC-mobile bracket & cigarette lighter cable DC adapter) |
| KVC-23 | Rapid rate DC vehicular charger for TK-5x10/5x20, NX-5x00/x00/x10/x20, TK-x180, TK-x170, & TK-x360 portables with Lithium Ion /Lithium Polymer/NiMH packs only. |

CARRYING ACCESSORIES

| | |
|-----------|--|
| KBH-10 | Low profile spring action belt clip (for use with KNB-33L Only) |
| KBH-11 | Spring action belt clip (2.5") |
| KBH-8DS | Leather swivel belt loop with portable D-Ring attachment |
| KLH-6SW | Leather swivel belt loop / detachable swivel D-Ring back |
| KLH-137ST | Firemen's Heavy-Duty Leather Shoulder Strap for a Heavy-Duty Leather Case (KLH-75B/76B/78B/79B//92/122/123/133/148/154) |
| KLH-154K2 | Heavy duty leather carrying case for NX-210K2/410K2/411K2 Note: No belt loop flap is included. Must order KLH-6SW for belt loop. |

MICROPHONES & AUDIO ACCESSORIES

| | |
|------------|---|
| KMC-51DM | MIL-SPEC, IP54/55 DSP Digital Noise-canceling Speaker Mic [see note 1] [Intrinsically Safe Approved Accessory] * CSA Intrinsically Safe Approved except for Group C gases |
| KMC-52WDM | MIL-SPEC, IP67 (Immersion) DSP Digital Noise-canceling Speaker Mic [see note 1] Note: Radio does not have an IP67 Immersion option; meets MIL STD810 rain standards [Intrinsically Safe Approved Accessory] * CSA Intrinsically Safe Approved except for Group C gases [Note 1]: To adjust microphone settings different from factory default, download KPG-147NC configuration software and special configuration firmware from Kenwood Tools (no charge). |
| KMC-47GPSD | GPS Speaker Microphone [Intrinsically Safe Approved Accessory] * CSA Intrinsically Safe Approved except for Group C gases |
| KMC-40 | MIL-SPEC, Speaker Mic. with Antenna Connector [Intrinsically Safe Approved Accessory] Note: 5/16" Coax cable hex wrench included (antenna is not included). |
| KMC-41M | MIL-SPEC, IP54/55 Noise-canceling Speaker Mic [Intrinsically Safe Approved Accessory] |
| KMC-42WDM | MIL-SPEC, IP67 (Immersion) Noise-canceling Speaker Mic [Intrinsically Safe Approved Accessory] Note: Radio does not have an IP67 Immersion option; meets MIL STD810 rain standards |
| KEP-1 | 3.5mm earphone kit for KMC-25/26/41M/42WM Speaker Mics [Intrinsically Safe Approved Accessory] |

800/900 MHz Digital & FM Analog Portable Radios

MICROPHONES & AUDIO ACCESSORIES - CON'T

| | |
|------------|---|
| KCT-51 | Hirose 6-pin Adapter (adapts KVL/aftermarket audio acc. to portable connector) [Intrinsically Safe Approved Accessory] |
| KHS-11BL | 2-wire palm mic w/earphone, universal connector (Black) [Intrinsically Safe Approved Accessory] |
| KHS-12BL | 3-wire mini lapel mic w/earphone, universal connector (Black) [Intrinsically Safe Approved Accessory] |
| KHS-14 | Lt. Wt. Single muff headset w/boom mic & In-line PTT [Intrinsically Safe Approved Accessory] |
| KHS-15D-BH | Hvy-duty noise reduction behind-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Approved Accessory] |
| KHS-15D-OH | Hvy-duty noise reduction over-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Approved Accessory] |

SOFTWARE OPTIONS

| | |
|-------------|---|
| KPG-150AP | NEXEDGE OTAP Manager Windows Software. • License Includes 10 radios / 1 Serial Port* • To add more radios/serial ports, you must contact Kenwood Systems Division [1-800-TRUNKING] Note: NEXEDGE Type-D Trunking and DMR not supported. |
| KPG-AE1K | AES/DES Encryption Software Key Loader for KWD-AE31K Authentication by KPT-300LMC is required Note: KPG-AE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A). |
| KPG-DE1K | DES Encryption Software Key Loader for KWD-AE31K Authentication by KPT-300LMC is required Note: KPG-DE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D992A.1). |
| KWD-NX2G-10 | Gen2 Enhanced Option for NX-*00/*10/*11/*20 Portables & Mobiles Must order L-1812 for factory installation, or L-1813 for field-upgrade option |
| KWD-LIC-USB | USB Hardware Key for activating KWD-NX2G-10 options to NX-*00/*10/*11/*20 series without ESN. KWD-LIC-USB stores KWD-NX2G-10 options which are purchased separately and includes KPG-97USB software for activating radios. Note: - Must order L-1819. - Must purchase KWD-NX2G-10 separately. - KWD-LIC-USB Request Form that can be downloaded from Dealer Tools is required to order. - KWD-LIC-USB cannot be rechargeable. Must purchase it per every orders. - KWD-LIC-USB can store up to 50,000 KWD-NX2G-10 Gen2 Upgrade Options. - The licenses (KWD-NX2G-10) installed to the KWD-LIC-USB is NOT eligible for warranty compensation. |

OPTION MODULES

| | |
|-----------|--|
| KWD-AE30K | AES FIPS140-2 & DES Encryption Module (Multi-Key) Order a Labor Code L-1832 if installation is required. KWD-AE30K requires: a Motorola KVL3000 Plus/4000 key loader device. KWD-AE30K is a U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1). [Intrinsically Safe Option]- Must be Kenwood installed for I.S. |
| KWD-AE31K | AES & DES Encryption Module (Multi-Key) Order a Labor Code L-1833 if installation is required. Note: Requires KPG-AE1/DE1 software key loader or Motorola KVL3000 Plus/4000 key loader device. KWD-AE31K is a U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1) [Intrinsically Safe Option]- Must be Kenwood installed for I.S. |
| KCT-48VU | External Vibration Unit [Intrinsically Safe Approved Accessory] Note: Audio accessories cannot be used when this option installed. |
| KCT-57MS | Man-Down Internal Tilt Switch (Non-Mercury) [Intrinsically Safe Approved Accessory] - Must be Kenwood installed for I.S. |

SERVICE RELATED ACCESSORIES

| | |
|------------|--|
| KPG-111DNK | Windows® Programming Software for NX-200/210/300/410/411/700/800/900/901 (Compliant with FCC Part 90 Narrowbanding) |
|------------|--|

800/900 MHz Digital & FM Analog Portable Radios

INSTALLATION / TUNING CHARGES

| | |
|--------|--|
| L-961 | Assemble KMB-23 with six KSC-32K's (Rapid Rate, 120 Volt version only) |
| L-1671 | NX-210/410/411 Portable KCT-57MS Installation (for NXDN® / FleetSync®) |
| L-1691 | NX-410/411 Programming (with basic TX/RX check) |
| L-1750 | Configure NX-210/410/411 for Intrinsically Safe Must order an I.S. battery, |
| L-1812 | Install Gen2 Enhanced Option in NX series radio (Must purchase KWD-NX2G-10 separately) |
| L-1813 | NX Series Radio Gen2 Enhanced Option FIELD-UPGRADE (Must purchase KWD-NX2G-10 separately) |
| L-1819 | Create KWD-LIC-USB and store KWD-NX2G-10 (Must purchase KWD-NX2G-10 separately) |
| L-1832 | Install KWD-AE30K in NX-210G/410/411 series Portable (Must purchase module separately) |
| L-1833 | Install KWD-AE31K in NX-210G/410/411 series Portable (Must purchase module separately) |

MPT FIRMWARE/ACCESSORIES/TUNING

| | |
|-------------|---|
| KPG-143DNK | Windows® Programming Software for NX series MPT (Compliant with FCC Part 90 Narrowbanding) (Dealer Level License ID included) Note: - Must order L-1727 for Network Level License ID & programming privileges. |
| KWD-NX10MPT | MPT Trunking Field Upgrade Kit for NX series radio Must order L-1729 Note: Not compatible with any other firmware options. Radio does not retain LTR trunking features once the MPT option is installed. |
| L-1726 | Install MPT option in NX series radio |
| L-1727 | Network Level License ID for KPG-143D(N) NX series Programmer |
| L-1728 | Retrofit Install of MPT option in NX series radio For previously purchased NX series radios. Order L-1728 through LMR order desk/rep. Ship radios to attn: Kenwood LMR Tuning, Long Beach for installation. Include Kenwood order number for L-1728 provided by order desk & copy of company P.O. or P.O. number. Note: see NX series MPT Introduction Sales Bulletin for details. |
| L-1729 | NX Series Radio MPT Firmware FIELD-UPGRADE (Must purchase KWD-NX10MPT separately) |
| L-1730 | Install KCT-57MS (for MPT Emergency Call) |

800/900 MHz Digital & FM Analog Portable Radios

-- IMPORTANT NOTES --

Encryption modules, key loaders and radios containing encryption are export controlled by the U.S. Department of Commerce Bureau of Industry & Security EAR regulations and may either require an Export License, are eligible for a License Exception (ENC) or are exportable with No License Required (NLR) depending on the country, the consignee and the intended use. High level encryption is a special commodity that may require an export license to most countries. See www.bis.gov for more information regarding export regulations. DO NOT SHIP encryption items outside the U.S. without proper DOC/BIS Export Licenses and/or compliances.

Kenwood may request the following information to be submitted at time of order (this information must meet Kenwood internal approvals prior to shipment even if being returned to Kenwood later:

a) Initial Destination: Initial delivery point if different from Ultimate Destination
(customer distribution center, headquarters, dealership, manufacturer's representative)

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

b) Ultimate Destination: Final delivery point(s); deployment/distribution

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

c) Intended Use of Radios: Law enforcement, security, operations, etc.

KWD-AE30 AES FIPS140-2 SCM , NIST Validation & Customer Shipping

A secure delivery method direct to the end user customer is required by the NIST AES FIPS 140-2 validation rules. For U.S. Federal Government entities the SCM must ship from JVCKENWOOD USA Corporation directly to the end user customer by a trusted carrier (FEDEX, UPS or a designated JVCKENWOOD USA Corporation employee); shipping/handling by a dealer or other entity is not acceptable. This may or may not be required by local/state government agencies or business/industrial users. Please check with the end use customer about their AES encryption handling requirements before ordering. Kenwood will not be responsible for shipments of KWD-AE30K modules to erroneous destinations specified on an order.

800 MHz Digital & FM Analog Portable Radios

**All 420 series NX portables include:**

- Belt Clip (KBH-12)
- Antenna (KRA-38K)
- 2-PIN Connector Cap
- Instruction Manual
- Premium Warranty: 3 Years*

* All Accessories / options: 1 Year

Order packages to include Battery, & Charger, or purchase Battery, & Charger separately.

--- Must Order **L-1732**
for Intrinsically Safe Option ---

* Approved for Classes I, II & III,
Div. 1, Groups C, D, E, F, G
and are also approved for
non-Incendive use in Classes I, II & III
Div. 2, Groups A, B, C, D, F, G
hazardous locations.

GENERAL FEATURES

- 3.0 W (806 - 870 MHz)
- 260 CH-GID / 128 Zones
- 4 Front PF Keys, 12-Key Keypad
- 8 Character Alphanumeric Aliases
- Backlit LCD & Keys
- Function / Status LCD Icons
- Transmit / Busy / Call Alert / Warn LED
- On / Off Volume Knob
- 16-Position Selector
- 3 Side PF Keys
- Emergency / AUX Key
- Built-in Motion Sensor
- 500 mW Speaker Audio
- Zone / CH# Voice Announcement
- KMC-48GPS Speaker Mic Option
- KPG-141D/DN Windows® FPU
- Flash Firmware Upgrading
- MIL-STD-810 C/D/E/F/G
- IP54/55 Dust & Water Intrusion
- PC Serial Interface
- SDM Manual Input
- Transparent Data Mode

DIGITAL – GENERAL

- NXDN® Digital Air Interface
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun / Kill/Check
- Short & Long Data Messages
- GPS Location with Voice
- NXDN® Scrambler Included

DIGITAL – CONVENTIONAL MODE

- 64 Radio Access Numbers (RAN)
- Individual & Group Selective Call
- Mixed FM / Digital Operation
- Conventional IP Networks
- Site Roaming

DIGITAL – TRUNKING MODE

- Individual Private Call
- Group Call & Broadcast Call
- Telephone Interconnect
- Transmission Trunked Mode
- Message Trunked Mode
- Call Queuing with Priority
- Late Entry (UID & GID)
- 4 Priority Monitor ID's
- Remote Re-Grouping
- System Auto Select

DIGITAL - MULTI-SITE IP NETWORKSNEXEDGE Generation1 System

- 48site Trunked IP Network
- Auto Roaming Registration
- Group Registration

NEXEDGE Generation1 System Bridge

- 8 Trunked Networks per radio (each in a zone)
- UID Lists for each network

NEXEDGE Generation2 System (option)

- 1,152 sites Wide Area System
- Direct Frequency Assignment

SCAN

- Single Zone / Multi-Zone / List Scan
- Single Priority Scan (Conventional)

ANALOG MODES – GENERAL

- 25 & 12.5 kHz Channels
- NPSPAC Channels
- Conventional & LTR® Zones
- FleetSync® / II, MDC-1200, DTMF
- QT / DQT (Conventional Zones only)
- Voice Inversion Scrambler (16 Codes)

MPT ZONES (option)

- Single-Site Trunking
- Multi-Site Network Trunking
- 8 Network Capacity
- Network Roaming / Registration

FleetSync®/II

- PTT ID ANI / Caller ID
- Selective / Group Call
- Emergency, Status & Text Messages

MDC-1200

- PTT ID ANI / Caller ID
- Emergency, Radio Check & Inhibit

RADIO

NX-420K3 806 - 870 MHz 3W, 260 CH, 8 characters Alphanumeric LCD, 4 PF Keys, Full Keypad

Li-ion VALUE PACKAGES

NX-420K3-SLKVP Li-ion Value Pack (NX-420K3 + KNB-55L + KSC-25LSK)

NX-420K3LAKVP Hi-Cap Li-ion Value Pack (NX-420K3 + KNB-57LAM + KSC-25LSK)

PACKAGES

NX-420K3-SLKP Standard Slim Package (NX-420K3 + KNB-55L + KSC-25SK)

NX-420K3LAKP Premium Package (NX-420K3 + KNB-57LAM + KSC-25SK)

SGS US I.S. APPROVED MODELS

Must Order L-1732 & an Intrinsically Safe Battery per radio

NX-420-ISK3 806 - 870 MHz 3W, 260 CH, 8 characters Alphanumeric LCD, 4 PF Keys, Full Keypad

800 MHz Digital & FM Analog Portable Radios

ANTENNAS

| | |
|---------|--|
| KRA-24M | 800 MHz Whip Antenna 1/4 wave end feed |
| KRA-32K | 700/800 MHz Whip Antenna |
| KRA-36 | 700/800 MHz Stubby Antenna |
| KRA-38K | 800/900 MHz Whip Antenna |

BATTERIES AND CHARGERS

| | |
|-----------|--|
| KBP-5 | AA Alkaline Refillable Battery Pack (6 AA; 9V) cells not included |
| KMB-16 | Six Unit Charger Adapter for the KSC-16/20/24/25/25L chargers (chargers not included) |
| KMB-23 | Six Unit Charger Adapter for the KSC-16/20/24/25/25L/32 chargers (chargers not included) |
| KNB-68LC | 2000 mAh, Li-ion battery - requires KSC-25SK/25LSK/256K/256AK charger [Intrinsically Safe Option] |
| KNB-55L | 1480 mAh, Li-ion battery - requires KSC-25SK/25LSK/256K/256AK charger |
| KNB-56N | 1400 mAh, Ni-MH battery |
| KNB-57LAM | 2000 mAh, Li-ion battery - requires KSC-25SK/25LSK/256K/256AK charger |
| KSC-25SK | 110 volt Rapid rate single unit charger for KNB-26N/40LC(V)/55L/56N/57L/57LAM/68LC |
| KSC-256AK | Rapid rate 6-Unit charger for KNB-26N/55L/56N/57L/57LAM/68LC/78LM/79LCM |
| KSC-25LSK | 100~240 volt rapid rate single unit charger for KNB-40LC(V)/55L/57L/57LAM/68LC Li-ion Battery |
| KVC-4 | Vehicular charger adapter for the KSC-16/18/20/24/25SK chargers (chargers not included) *KSC-25LSK is not compatible with KVC-4. |
| KVC-23 | Rapid rate DC vehicular charger for TK-5x10/5x20, NX-5x00/x00/x10/x20, TK-x180, TK-x170, & TK-x360 portables with Lithium Ion /Lithium Polymer/NiMH packs only |

CARRYING ACCESSORIES

| | |
|-----------|--|
| KBH-12 | Spring action belt clip |
| KBH-13DS | Leather swivel belt loop with portable D-Ring attachment |
| KLH-179K3 | Heavy-Duty Leather Case w/Swivel Belt Loop for NX-220K3/320K3/K6/420K3 (Full Keypad) |
| KLH-180K3 | Nylon carrying case for NX-220K3/320K3/K6/420K3 (Full Keypad) |

MICROPHONES & AUDIO ACCESSORIES

| | |
|------------|---|
| KMC-48GPS | GPS Speaker Microphone [Intrinsically Safe Approval Accessory] |
| KMC-45D | MIL-SPEC, IP54/55 Speaker microphone (Built-in 2.5mm miniature earphone jack) [Intrinsically Safe Approval Accessory] |
| KMC-21 | Compact speaker microphone [Intrinsically Safe Approval Accessory] |
| KEP-2 | 2.5mm earphone kit for KMC-17/45 Speaker Mic [Intrinsically Safe Approval Accessory] |
| KHS-7 | Single muff headset w/boom mic [Intrinsically Safe Approval Accessory] |
| KHS-7A | Lt. Wt Single muff headset w/boom mic & in-line PTT [Intrinsically Safe Approval Accessory] |
| KHS-8BL | Two-Wire palm mic w/earphone (black) |
| KHS-9BL | Three-Wire lapel mic w/earphone (black) |
| KHS-10D-BH | Hvy-duty noise reduction behind-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Approval Accessory] |
| KHS-10D-OH | Hvy-duty noise reduction over-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Approval Accessory] |
| KHS-22 | Behind-the-Head Headset with flexible boom mic and in-line PTT single ear receiver (low profile wire head band) |

800 MHz Digital & FM Analog Portable Radios

MICROPHONES & AUDIO ACCESSORIES, CON'T

| | |
|---------|-------------------------------|
| KHS-26 | Clip Mic w/earphone |
| KHS-27A | D-Ring Ear Hanger w/PTT & Mic |
| KHS-31C | C-Ring Ear Hanger w/PTT & Mic |

SOFTWARE OPTIONS

| | |
|-------------|---|
| KPG-150AP | NEXEDGE OTAP Manager Windows Software. • License Includes 10 radios / 1 Serial Port* • To add more radios/serial ports, you must contact Kenwood Systems Division [1-800-TRUNKING] Note: NEXEDGE Type-D Trunking and DMR not supported. |
| KWD-MS10 | Stationary & Motion Detection Must Order L-1700 or L-1835 to activate this feature. |
| KWD-NX2G-10 | Gen2 Enhanced Option for NX-*00/*10/*11/*20 Portables & Mobiles Must order L-1812 for factory installation, or L-1813 for field-upgrade option Note: MPT Firmware and FPU do NOT compatible. MPTs will be available on 3Q FY2016 . |
| KWD-LIC-USB | USB Hardware Key for activating KWD-NX2G-10 options to NX-*00/*10/*11/*20 series without ESN . KWD-LIC-USB stores KWD-NX2G-10 options which are purchased separately and includes KPG-97USB software for activating radios. Note: - Must order L-1819. - Must purchase KWD-NX2G-10 separately. - KWD-LIC-USB Request Form that can be downloaded from Dealer Tools is required to order. - KWD-LIC-USB cannot be rechargeable. Must purchase it per every orders. - KWD-LIC-USB can store up to 50,000 KWD-NX2G-10 Gen2 Upgrade Options. - The licenses (KWD-NX2G-10) installed to the KWD-LIC-USB is NOT eligible for warranty compensation. |

SERVICE RELATED ACCESSORIES

| | |
|------------|--|
| KPG-141DNK | Windows® Programming Software for NX-220/320/420 (Compliant with FCC Part 90 Narrowbanding) |
| KPG-22UM | USB Programming interface cable |

INSTALLATION / TUNING CHARGES

| | |
|--------|--|
| L-836 | Assemble KMB-16 with six KSC-25/25L |
| L-961 | Assemble KMB-23 with six KSC-24/25/25L/32 (Rapid Rate, 120 Volt versions only) |
| L-1699 | NX-220/320/420 Programming (with basic TX/RX check) |
| L-1700 | Install KWD-MS10 Stationary & Motion Detection Option |
| L-1835 | KWD-MS10 Stationary & Motion Detection Option FIELD-UPGRADE |
| L-1732 | Configure NX-220/320/420 for Intrinsically Safe Must Order an I.S. Battery |
| L-1812 | Install Gen2 Enhanced Option in NX series radio (Must purchase KWD-NX2G-10 separately) |
| L-1813 | NX Series Radio Gen2 Enhanced Option FIELD-UPGRADE (Must purchase KWD-NX2G-10 separately) |
| L-1819 | Create KWD-LIC-USB and store KWD-NX2G-10 (Must purchase KWD-NX2G-10 separately) |

MPT FIRMWARE/ACCESSORIES/TUNING

| | |
|-------------|--|
| KPG-143DNK | Windows® Programming Software for NX series MPT (Compliant with FCC Part 90 Narrowbanding) (Dealer Level License ID included) Note: - Must order L-1727 for Network Level License ID & programming privileges. - Gen2 Enhanced Option (KWD-NX2G-10) for MPT will be available on 3Q FY2016. |
| KWD-NX10MPT | MPT Trunking Field Upgrade Kit for NX series radio Must order L-1729 Note: Not compatible with any other firmware options. Radio does not retain LTR trunking features once the MPT option is installed. |
| L-1726 | Install MPT option in NX series radio |
| L-1727 | Network Level License ID for KPG-143D(N) NX series Programmer |

800 MHz Digital & FM Analog Portable Radios

MPT FIRMWARE/ACCESSORIES/TUNING, CON'T

| | |
|--------|--|
| L-1728 | Retrofit Install of MPT option in NX series radio For previously purchased NX series radios. Order L-1728 through LMR order desk/rep. Ship radios to attn: Kenwood LMR Tuning, Long Beach for installation. Include Kenwood order number for L-1728 provided by order desk & copy of company P.O. or P.O. number. Note: see NX series MPT Introduction Sales Bulletin for details |
| L-1729 | NX Series Radio MPT Firmware FIELD-UPGRADE (Must purchase KWD-NX10MPT separately) |
| L-1730 | Install KCT-57MS (for MPT Emergency Call) |

VHF/UHF Digital & FM Analog Portable Radios

**All 40 series NX portables include:**

- Li-ion Battery (KNB-45L)
- Fast Charger (KSC-35SK)
- Antenna [KRA-26M(VHF)/27M(UHF)]
- Belt Clip (KBH-10)
- 2-PIN Connector Cap
- Instruction Manual
- Premium Warranty: 3 Years*

* All Accessories / options: 1 Year

GENERAL FEATURES

- 5 W (136-174 MHz) VHF
- 5 W (450-520, 400-470 MHz) UHF
- Max. 16 CH per Zone
- 2 Conventional Zones
- Transmit / Busy / Call Alert / Scan / Warn LED
- 4-Color LED (Blue/Red/Green/Orange)
- On/Off Volume Knob
- 2 PF Keys
- 1.0 W Speaker Audio
- 16-Position Mechanical Selector
- Zone / CH# Voice Announcement
- KMC-48GPS Speaker Mic Option
- VOX Ready
- Emergency Call Features
- Lone Worker Alert (per CH)
- Time Out Timer
- Busy Channel Lockout
- Low Battery Warning
- Battery Saver
- KPG-170D Windows FPU
- Wireless Cloning
- Password Protected
- MIL-STD-810 C/D/E/F/G
- IP-54/55 Water & Dust Intrusion
- Intrinsically Safe Option for Gas environment Only

GENERAL FEATURES

- NXDN® Digital Air Interface
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias (TX Only)
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill
- Remote Check
- GPS Location with Voice
- NXDN® Scrambler Included

DIGITAL – CONVENTIONAL MODE

- 64 Radio Access Numbers (RAN)
- Individual & Group Selective Call
- Site Roaming

DIGITAL – TYPE-D TRUNKING MODE *

- Individual Call
- Group Call & All Group Call
- Emergency Call
- Paging Call
- Transmission Trunked Mode
- Late Entry
- ESN Validation
- Status Messaging

* Hardware Version 2.0 can be available.

SCAN

- Single Zone Scan
- Single Priority Scan (Conventional)

ANALOG MODES – GENERAL

- 12.5 kHz Channels
- Conventional Zones
- FleetSync®/II, MDC-1200, DTMF
- QT/DQT/Two-Tone (Conv. Zones Only)
- Voice Inversion Scrambler (16 Codes)

FleetSync®/II

- PTT ID ANI
- Selective / Group Call
- Paging Call
- Emergency Status
- Send GPS Data

MDC-1200

- PTT ID ANI / Caller ID
- Emergency, Radio Check & Inhibit

* Approved for Class I, Div. 1, Groups D and are also approved for non-Incentive use in Class I, Div. 2, Groups A, B, C, D hazardous locations.

RADIO

| | |
|-----------|-------------------------------------|
| NX-240VK | 136-174 MHz VHF 5W, 16 Ch / 2 Zones |
| NX-340UK | 450-520 MHz UHF 5W, 16 Ch / 2 Zones |
| NX-340UK2 | 400-470 MHz UHF 5W, 16 Ch / 2 Zones |

CSA US APPROVED MODELS

All in one package with Radio, Antenna, Battery (KNB-82LCM Intrinsically Safe Battery) and Charger

| | |
|---------------|---|
| NX-240-ISCVK | 136-174 MHz VHF 5W, 16 Ch / 2 Zones Note: Can be used in Class I Gas Environment only |
| NX-340-ISCUK | 450-520 MHz UHF 5W, 16 Ch / 2 Zones Note: Can be used in Class I Gas Environment only |
| NX-340-ISCUK2 | 400-470 MHz UHF 5W, 16 Ch / 2 Zones Note: Can be used in Class I Gas Environment only |

VHF/UHF Digital & FM Analog Portable Radios

ANTENNAS

| | |
|----------|---|
| KRA-26M | VHF helical antenna 146-162 MHz |
| KRA-26M2 | VHF helical antenna 162-174 MHz |
| KRA-26M3 | VHF helical antenna 136-150 MHz |
| KRA-27M | UHF whip antenna 440-490 MHz |
| KRA-27M2 | UHF whip antenna 470-520 MHz |
| KRA-27M3 | UHF whip antenna 403-430 MHz |
| KRA-41M | VHF stubby antenna 148-162 MHz |
| KRA-41M2 | VHF stubby antenna 162-174 MHz |
| KRA-41M3 | VHF stubby antenna 136-150 MHz |
| KRA-42M | UHF stubby antenna 440-490 MHz |
| KRA-42M2 | UHF stubby antenna 470-520 MHz |
| KRA-42M3 | UHF stubby antenna 403-430 MHz |
| KRA-22M | VHF low profile antenna 148-162 MHz |
| KRA-22M2 | VHF low profile antenna 162-174 MHz |
| KRA-22M3 | VHF Low-profile helical antenna 136-150 MHz |

ANTENNAS, CON'T

| | |
|----------|-------------------------------------|
| KRA-23M | UHF low profile antenna 450-490 MHz |
| KRA-23M2 | UHF low profile antenna 470-520 MHz |
| KRA-23M3 | UHF low profile antenna 403-430 MHz |

BATTERIES AND CHARGERS

| | |
|-----------|--|
| KMB-28AK | Six Unit Charger Adapter for the KSC-35SK chargers (chargers not included) Note: The six KSC-xx AC wall Adapters are NOT used in the KMB-28 installation. A supplied in-line AC-DC switching power supply with six DC plugs supply the six installed KSC-xx charger bases. This unit is lower profile and less weight than similar Kenwood six unit charger adapters. |
| KNB-45L | 2000 mAh, Li-ion battery - requires KSC-35K/SK charger |
| KNB-69L | 2550 mAh, Li-ion battery - requires KSC-35K/SK charger |
| KNB-82LCM | CSA US Intrinsically Safe Battery Li-ion 2000mAh, battery only [Intrinsically Safe Option] |
| KNB-29N | 1500 mAh, NiMH battery - requires KSC-43K charger |
| KSC-35SK | 110-220 volt Fast rate single unit charger for KNB-45L/69L |
| KSC-43K | 110-220 volt Fast rate single unit charger for KNB-29N/45L/69L |
| KVC-22 | 110-220 volt Fast rate DC vehicular charger adapter for KSC-35SK charger & KNB-45L Li-ion battery (charger not included) |

CARRYING ACCESSORIES

| | |
|---------|---|
| KBH-10 | Spring action belt clip |
| KBH-8DS | Leather swivel belt loop with portable D-Ring attachment |
| KLH-187 | Nylon case for TK-*200/*202/*300/*302/*400/*402, NX-x40, TK-Dx40 Series |

VHF/UHF Digital & FM Analog Portable Radios

MICROPHONES & AUDIO ACCESSORIES

| | |
|------------|---|
| KMC-45D | MIL-SPEC, IP54/55 Speaker microphone (Built-in 2.5mm miniature earphone jack) [Intrinsically Safe Option] |
| KEP-2 | 2.5mm earphone kit for KMC-17/45 Speaker Mic [Intrinsically Safe Option] |
| KMC-21 | Compact speaker microphone [Intrinsically Safe Option] |
| KHS-10D-BH | Hvy-duty noise reduction behind-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Option] |
| KHS-10D-OH | Hvy-duty noise reduction over-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Option] |
| KHS-7 | Single muff headset w/boom mic [Intrinsically Safe Option] |
| KHS-7A | Lt. Wt Single muff headset w/boom mic & in-line PTT [Intrinsically Safe Option] |
| KHS-8BL | Two-Wire palm mic w/earphone (black) [Intrinsically Safe Option] |
| KHS-9BL | Three-Wire lapel mic w/earphone (black) |
| KHS-22 | Behind-the-Head Headset with flexible boom mic and in-line PTT single ear receiver (low profile wire head band) [Intrinsically Safe Option] |
| KHS-26 | Clip Mic w/earphone [Intrinsically Safe Option] |
| KHS-27A | D-Ring Ear Hanger w/PTT & Mic |
| KHS-31C | C-Ring Ear Hanger w/PTT & Mic |

SERVICE RELATED ACCESSORIES

| | |
|-----------|--|
| KPG-170DK | Windows® Programming Software for NX-240V/340U (Compliant with FCC Part 90 Narrowbanding) |
| KPG-22UM | USB Programming interface cable |

TYPE-D TRUNKING ACTIVATION/TUNING

| | |
|------------|--|
| KWD-NXD40K | Type-D Trunking Option. Must order L-1800 or L-1801 . Note: Compatible with firmware version 3.00 or later. Only Hardware Version 2.0 can be available. |
| L-1800 | Factory Activation of Type-D Trunking Option. |

TYPE-D TRUNKING ACTIVATION/TUNING, CON'T

| | |
|--------|--|
| L-1801 | Type-D Trunking Option FIELD-UPGRADE. To place an order, please complete the NEXEDGE Type-D Field Upgrade Form available on Kenwood Tools under Forms. Required information includes the exact model #s and serial number for each radio to be updated. |
|--------|--|

INSTALLATION / TUNING CHARGES

| | |
|--------|---|
| L-1767 | NX-240V/340U Programming (with basic TX/RX check) |
|--------|---|



TK-D240V/340U

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VHF/UHF Digital & FM Analog Portable Radios



All 40 series DMR portables include:

- Li-ion Battery (KNB-45L)
- Fast Charger (KSC-35SK)
- Antenna [KRA-26M(VHF)/27M(UHF)]
- Belt Clip (KBH-10)
- 2-PIN Connector Cap
- Instruction Manual
- Standard Warranty: 2 Years**

** All Accessories / options: 1 Year

Because of spurious signal (birdie), the following frequencies (and ± 10 kHz ranges) are not allowed;

- 147.0000 • 422.4000 • 483.0000
- 153.6000 • 441.0000 • 499.2000
- 168.0000 • 441.6000 • 504.0000
- 172.8000 • 460.8000 • 518.4000
- 403.2000 • 462.0000
- 420.0000 • 480.0000

GENERAL FEATURES

- 5 W (136-174 MHz) VHF
- 4 W (450-520, 400-470 MHz) UHF
- Max. 16 CH per Zone
- 2 Conventional Zones
- Transmit / Busy / Call Alert / Scan / Warn LED
- On/Off Volume Knob
- 2 PF Keys
- 1.0 W Speaker Audio
- 16-Position Mechanical Selector
- Digital/Analog Mixed Mode
- Zone / CH# Voice Announcement
- VOX Ready
- Emergency Call Features
- Lone Worker Alert (per CH)
- Time Out Timer
- Busy Channel Lockout
- Low Battery Warning
- Battery Saver
- KPG-166DN Windows FPU
- Password Protected (Read/Write)
- MIL-STD-810 C/D/E/F/G
- IP54/55 Dust & Water Protection
- Intrinsically Safe Option for Gas environment Only

DIGITAL – CONVENTIONAL MODE

- Individual & Group Selective Call
- Conventional IP Networks

SCAN

- Single Zone Scan
- Single Priority Scan (Conventional)

ANALOG MODES – GENERAL

- 12.5 kHz Channels
- Conventional Zones
- DTMF
- QT/DQT, Two-Tone
- Voice Inversion Scrambler (16 Codes)

FleetSync®

- PTT ID ANI
- Selective / Group Call
- Paging Call
- Emergency Status

GENERAL FEATURES

- DMR Tier II Conventional
- AMBE+2™ VOCODER
- 12.5 kHz Channels
- Call Interrupt (Direct & Repeater Mode)
- Paging Call
- Emergency Call
- All Group Call
- Late Entry
- Status Messaging
- Remote Monitor

* Approved for Class I, Div. 1, Groups D and are also approved for non-Incentive use in Class I, Div. 2, Groups A, B, C, D hazardous locations.

RADIO

TK-D240VK 136-174 MHz VHF 5W, 16 Ch / 2 Zones

TK-D340UK 450-520 MHz UHF 4W, 16 Ch / 2 Zones

TK-D340UK2 400-470 MHz UHF 4W, 16 Ch / 2 Zones

CSA US APPROVED MODELS

All in one package with Radio, Antenna, Battery (KNB-82LCM Intrinsically Safe Battery) and Charger

TK-D240-ISCVK 136-174 MHz VHF 5W, 16 Ch / 2 Zones
Note: Can be used in Class I Gas Environment only

TK-D340-ISCUK 450-520 MHz UHF 5W, 16 Ch / 2 Zones
Note: Can be used in Class I Gas Environment only

TK-D340-ISCUK2 400-470 MHz UHF 5W, 16 Ch / 2 Zones
Note: Can be used in Class I Gas Environment only



TK-D240V/340U

VHF/UHF Digital & FM Analog Portable Radios

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ANTENNAS

| | |
|----------|---|
| KRA-26M | VHF helical antenna 146-162 MHz |
| KRA-26M2 | VHF helical antenna 162-174 MHz |
| KRA-26M3 | VHF helical antenna 136-150 MHz |
| KRA-27M | UHF whip antenna 440-490 MHz |
| KRA-27M2 | UHF whip antenna 470-520 MHz |
| KRA-27M3 | UHF whip antenna 403-430 MHz |
| KRA-41M | VHF stubby antenna 148-162 MHz |
| KRA-41M2 | VHF stubby antenna 162-174 MHz |
| KRA-41M3 | VHF stubby antenna 136-150 MHz |
| KRA-42M | UHF stubby antenna 440-490 MHz |
| KRA-42M2 | UHF stubby antenna 470-520 MHz |
| KRA-42M3 | UHF stubby antenna 403-430 MHz |
| KRA-22M | VHF low profile antenna 148-162 MHz |
| KRA-22M2 | VHF low profile antenna 162-174 MHz |
| KRA-22M3 | VHF Low-profile helical antenna 136-150 MHz |

ANTENNAS, CON'T

| | |
|----------|-------------------------------------|
| KRA-23M | UHF low profile antenna 450-490 MHz |
| KRA-23M2 | UHF low profile antenna 470-520 MHz |
| KRA-23M3 | UHF low profile antenna 403-430 MHz |

BATTERIES AND CHARGERS

| | |
|-----------|---|
| KMB-28AK | Six Unit Charger Adapter for the KSC-35SK chargers (chargers not included) Note: The six KSC-xx AC wall Adapters are NOT used in the KMB-28 installation. A supplied in-line AC-DC switching power supply with six DC plugs supply the six installed KSC-xx charger bases. This unit is lower profile and less weight than similar Kenwood six unit charger adapters. |
| KNB-45L | 2000 mAh, Li-ion battery - requires KSC-35K/SK charger |
| KNB-69L | 2550 mAh, Li-ion battery - requires KSC-35K/SK charger |
| KNB-82LCM | CSA US Intrinsically Safe Battery Li-ion 2000mAh, battery only [Intrinsically Safe Option] |
| KNB-29N | 1500 mAh, Ni-MH battery - requires KSC-43K charger |
| KSC-35SK | 110~220 volt Fast rate single unit charger for KNB-45L/69L |
| KSC-43K | 110~220 volt Fast rate single unit charger for KNB-29N/45L/69L |
| KVC-22 | 110~220 volt Fast rate DC vehicular charger adapter for KSC-35SK charger & KNB-45L Li-ion battery (charger not included) |

CARRYING ACCESSORIES

| | |
|---------|---|
| KBH-10 | Spring action belt clip |
| KBH-8DS | Leather swivel belt loop with portable D-Ring attachment |
| KLH-187 | Nylon case for TK-*200/*202/*300/*302/*400/*402, NX-x40, TK-Dx40 Series |



TK-D240V/340U

VHF/UHF Digital & FM Analog Portable Radios

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MICROPHONES & AUDIO ACCESSORIES

| | |
|------------|---|
| KMC-45D | MIL-SPEC, IP54/55 Speaker microphone (Built-in 2.5mm miniature earphone jack) Note: KMC-45 (Non D version) is not compatible with TDMA operation. [Intrinsically Safe Option] |
| KEP-2 | 2.5mm earphone kit for KMC-17/45 Speaker Mic [Intrinsically Safe Option] |
| KMC-21 | Compact speaker microphone [Intrinsically Safe Option] |
| KHS-10D-BH | Hvy-duty noise reduction behind-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Option] |
| KHS-10D-OH | Hvy-duty noise reduction over-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Option] |
| KHS-7 | Single muff headset w/boom mic [Intrinsically Safe Option] |
| KHS-7A | Lt. Wt Single muff headset w/boom mic & in-line PTT Note: Available for Analog only. NOT compatible with Digital (TDMA) operations. [Intrinsically Safe Option] |
| KHS-8BL | Two-Wire palm mic w/earphone (black) Note: Available for Analog only. NOT compatible with Digital (TDMA) operations. [Intrinsically Safe Option] |
| KHS-9BL | Three-Wire lapel mic w/earphone (black) Note: Available for Analog only. NOT compatible with Digital (TDMA) operations. |
| KHS-22 | Behind-the-Head Headset with flexible boom mic and in-line PTT single ear receiver (low profile wire head band) [Intrinsically Safe Option] |
| KHS-26 | Clip Mic w/earphone [Intrinsically Safe Option] |
| KHS-27A | D-Ring Ear Hanger w/PTT & Mic |
| KHS-31C | C-Ring Ear Hanger w/PTT & Mic |

SERVICE RELATED ACCESSORIES

| | |
|------------|---|
| KPG-166DNK | Windows® Programming Software for TK-D240V/340U/740HV/840HU |
| KPG-22UM | USB Programming interface cable |

INSTALLATION / TUNING CHARGES

| | |
|--------|--|
| L-1798 | TK-D240V/340U Programming (with basic TX/RX check) |
|--------|--|

TK-2170/3170

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Compact VHF/UHF FM Portable Radios



All 170 series portables include:

- Belt Clip (KBH-12)
- 2-PIN Connector Cap
- Instruction Manual
- Standard Warranty: 2 Years*

* All Accessories / options: 1 Year

Order packages to include Battery, Charger & Antenna, or purchase Battery, Charger and Antenna separately.

GENERAL FEATURES

- 5 W (136-174 MHz) Models
- 4 W (450-490, 400-430 MHz) Models
- Conventional Zones
- 128 Channels / 128 Zones
- Single Priority Scan
- Single & Multi-Zone Scan
- List Scan
- 8 Character Alphanumeric Aliases
- Backlit LCD
- Function / Status LCD Icons
- Transmit / Busy / Call Alert / Warn LED
- 4 Front Panel PF keys
- 3 Side PF Keys
- Orange Emergency / AUX Key
- 12-Key DTMF / PF Keypad Models
- 500 mW Audio Power
- Enhanced Kenwood Audio
- Companded Audio
- VOX Ready
- Voice Inversion Scrambler Built-in
- Encryption / ANI Board Control
- Easy Option Port (20-Pin)
- Emergency Call Features
- QT / DQT
- Two-Tone Decode
- Single / Two-Tone Encode
- Operator Selectable Tone
- DTMF Encode / Decode
- Special Alert Tone Pattern
- Call Key
- Time Out Timer
- Busy Channel Lockout
- LCD Battery Status Indicator
- Low Battery Alert
- Battery Saver
- Weather-sealed ACC Connector
- Speaker Mic Options
- Windows® Programming & Tuning
- Windows® Firmware Uploading
- Field Programming & Tuning
- Cloning
- MIL-STD-810 C/D/E/F/G
- MIL-STD "Driven-Rain"
- IP-54/55 Water & Dust Intrusion
- Intrinsically Safe Option*

FleetSync®

- PTT ID Digital ANI
- Selective Call & Group Call
- Status Messaging
- Emergency Status
- Caller ID Display
- Short Text Messages
- PC Serial Interface

--- Must Order **L-1000** for Intrinsically Safe Option ---

* Approved for Classes I, II & III, Div. 1, Groups C, D, E, F, G and are also approved for non-Incendive use in Class I, Div. 2, Groups A, B, C, D hazardous locations.

RADIO

| | |
|-----------|---|
| TK-2170K | 136-174 MHz 5W, 128 CH / 128 Zone Conventional; 8 Character LCD, 4-key |
| TK-2170K2 | 136-174 MHz 5W, 128 CH / 128 Zone Conventional; 8 Character LCD, 4 + 12-key |
| TK-3170K | 450-490 MHz 4W, 128 CH / 128 Zone Conventional; 8 Character LCD, 4-key |
| TK-3170K4 | 450-490 MHz 4W, 128 CH / 128 Zone Conventional; 8 Character LCD, 4 + 12-key |

PACKAGES

| | |
|--------------|---|
| TK-2170-SLKP | VHF Standard Slim Package (TK-2170K + KNB-55L + KSC-25SK + KRA-26M) |
| TK-2170LAKP | VHF Premium Package (TK-2170K + KNB-57LAM + KSC-25SK + KRA-26M) |
| TK-3170-SLKP | UHF Standard Slim Package (TK-3170K + KNB-55L + KSC-25SK + KRA-27M) |
| TK-3170LAKP | UHF Premium Package (TK-3170K + KNB-57LAM + KSC-25SK + KRA-27M) |

Li-ion VALUE PACKAGES

| | |
|--------------|---|
| TK-2170-SLKV | VHF Li-ion Value Pack (TK-2170K + KNB-55L + KSC-25LSK + KRA-26M) |
| TK-2170LAKVP | VHF Hi-Cap Li-ion Value Pack (TK-2170K + KNB-57LAM + KSC-25LSK + KRA-26M) |
| TK-3170-SLKV | UHF Li-ion Value Pack (TK-3170K + KNB-55L + KSC-25LSK + KRA-27M) |
| TK-3170LAKVP | UHF Hi-Cap Li-ion Value Pack (TK-3170K + KNB-57LAM + KSC-25LSK + KRA-27M) |

ANTENNAS

| | |
|----------|---|
| KRA-22M | VHF Low-profile helical antenna 148-162 MHz |
| KRA-22M2 | VHF Low-profile helical antenna 162-174 MHz |
| KRA-22M3 | VHF Low-profile helical antenna 136-150 MHz |
| KRA-23M | UHF Low-profile helical antenna 450-490 MHz |

TK-2170/3170

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Compact VHF/UHF FM Portable Radios

ANTENNAS, CON'T

| | |
|----------|---|
| KRA-23M2 | UHF Low-profile helical antenna 470-512 MHz |
| KRA-23M3 | UHF Low-profile helical antenna 403-430 MHz |
| KRA-26M | VHF helical antenna 146-162 MHz |
| KRA-26M2 | VHF helical antenna 162-174 MHz |
| KRA-26M3 | VHF helical antenna 136-150 MHz |
| KRA-27M | UHF whip antenna 440-490 MHz |
| KRA-27M2 | UHF whip antenna 470-520 MHz |
| KRA-27M3 | UHF whip antenna 400-450 MHz |

BATTERIES AND CHARGERS

| | |
|-----------|--|
| KBP-5 | AA Alkaline Refillable Battery Pack (6 AA; 9V) cells not included |
| KNB-55L | 1480 mAh, Li-ion battery - requires KSC-25SK/25LSK/256K charger |
| KNB-56N | 1400 mAh, Ni-MH battery |
| KNB-57LAM | 2000 mAh, Li-ion battery - requires KSC-25SK/25LSK/256K/256AK charger |
| KNB-68LC | 2000 mAh, Li-ion battery - requires KSC-25SK/25LSK/256K/256AK charger [Intrinsically Safe Option] |
| KSC-25LSK | 100~240 volt rapid rate single unit charger for KNB-40LC(V)/55L/57L/57LAM/68LC Li-ion Battery |
| KSC-25SK | 110 volt Rapid rate single unit charger for KNB-26N/40LC(V)/55L/56N/57L/57LAM/68LC |
| KSC-256AK | Rapid rate 6-Unit charger for KNB-26N/55L/56N/57L/57LAM/68LC/78LM/79LCM |
| KMB-16 | Six Unit Charger Adapter for the KSC-16/20/24/25/25L chargers (chargers not included) |
| KMB-23 | Six Unit Charger Adapter for the KSC-16/20/24/25/25L/32 chargers (chargers not included) |
| KVC-4 | Vehicular charger adapter for the KSC-16/18/20/24/25SK chargers (chargers not included) *KSC-25LSK is not compatible with KVC-4. |
| KVC-23 | Rapid rate DC vehicular charger for TK-5x10/5x20, NX-5x00/x00/x10/x20, TK-x180, TK-x170, & TK-x360 portables with Lithium Ion /Lithium Polymer/NiMH packs only |

CARRYING ACCESSORIES

| | |
|----------|--|
| KLH-138 | Heavy-Duty Leather Case w/Swivel Belt Loop for 160/170/173/360 (Non DTMF keypad) |
| KLH-139 | Heavy-Duty Leather Case w/Swivel Belt Loop for 170/173 (w/ DTMF keypad) |
| KBH-12 | Spring action belt clip |
| KBH-13DS | Leather swivel belt loop with portable D-Ring attachment |

MICROPHONES & AUDIO ACCESSORIES

| | |
|------------|--|
| KMC-48GPS | GPS Speaker Microphone |
| KMC-45D | MIL-SPEC, IP54/55 Speaker microphone (Built-in 2.5mm miniature earphone jack) [Intrinsically Safe Approval Accessory] |
| KMC-21 | Compact speaker microphone [Intrinsically Safe Approval Accessory] |
| KEP-1 | 3.5mm earphone kit for KMC-48GPS Speaker Mics [Intrinsically Safe Approval Accessory] |
| KEP-2 | 2.5mm earphone kit for KMC-17/45 Speaker Mic [Intrinsically Safe Approved Accessory] |
| KHS-10D-BH | Hvy-duty noise reduction behind-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Approved Accessory] |
| KHS-10D-OH | Hvy-duty noise reduction over-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Approval Accessory] |
| KHS-7 | Single muff headset w/boom mic [Intrinsically Safe Approval Accessory] |
| KHS-7A | Lt. Wt Single muff headset w/boom mic & in-line PTT [Intrinsically Safe Approval Accessory] |
| KHS-8BL | Two-Wire palm mic w/earphone (black) |

TK-2170/3170

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Compact VHF/UHF FM Portable Radios

MICROPHONES & AUDIO ACCESSORIES, CON'T

| | |
|---------|---|
| KHS-9BL | Three-Wire lapel mic w/earphone (black) |
| KHS-22 | Behind-the-Head Headset with flexible boom mic and in-line PTT single ear receiver (low profile wire head band) |
| KHS-26 | Clip Mic w/earphone |
| KHS-27A | D-Ring Ear Hanger w/PTT & Mic |
| KHS-31C | C-Ring Ear Hanger w/PTT & Mic |

OPTION MODULES

| | |
|----------|---|
| KCT-57MS | Man-Down Internal Tilt Switch (Non-Mercury) [Intrinsically Safe Approved Accessory] - Must be Kenwood installed for I.S. Order L-1609 for FleetSync® operations |
|----------|---|

SERVICE RELATED ACCESSORIES

| | |
|------------|---|
| KPG-101DNK | Windows® Programming Software for TK-2170/3170/3173 (Compliant with FCC Part 90 Narrowbanding) Note: Self-programming function is not available. |
| KPG-22UM | USB Programming interface cable |

INSTALLATION / TUNING CHARGES

| | |
|--------|--|
| L-836 | Assemble KMB-16 with six KSC-25/25L |
| L-961 | Assemble KMB-23 with six KSC-24/25/25L/32 (Rapid Rate, 120 Volt versions only) |
| L-992 | TK-2170/3170 Programming (with basic TX/RX check) |
| L-1000 | Configure TK-2170/3170 for Intrinsically Safe Must Order an I.S. Battery |
| L-1609 | 170/173 Portable KCT-57MS Installation (for FleetSync®) |

TK-2360/3360

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Compact VHF/UHF FM Portable Radios



All 360 series portables include:

- Belt Clip (KBH-12)
- 2-PIN Connector Cap
- Instruction Manual
- Standard Warranty: 2 Years*

* All Accessories / options: 1 Year

Order packages to include Battery, Charger & Antenna, or purchase Battery, Charger and Antenna separately.

GENERAL FEATURES

- 5W (136-174 MHz)
- 5W (450-520, 400-470 MHz)
- 16 Conventional Channels
- Single Priority / Normal Scan
- Transmit / Busy / Call Alert / Scan / Warn LED
- 4-Color LED (Blue/Red/Green/Orange)
- 3 PF Keys (w/Hold Function)
- Orange Emergency / AUX Key
- 500 mW Audio Power
- Enhanced Kenwood Audio
- Companded Audio (per CH)
- Voice CH# Announcement
- VOX ready
- Voice Inversion Scrambler Built-in
- 16 Scrambler Codes (per CH)
- Emergency Call Features
- Emergency Man-Down Option
- Lone Worker Alert
- QT / DQT
- Two-Tone Decode
- Single / Two-Tone Encode
- DTMF Encode / Decode
- Special Alert Tone Pattern
- Time Out Timer
- Busy Channel Lockout
- Low Battery Warning
- Battery Saver
- Windows Programming & Tuning
- Password Protection
- MIL-STD-810 C/D/E/F/G
- IP-54/55 Water & Dust Intrusion
- Intrinsically Safe Option*

FleetSync®

- PTT ID Digital ANI
- Selective Call & Group Call
- Paging Call
- Status Messaging
- Emergency Status

MDC-1200

- PTT ID Digital ANI
- Emergency Status
- Radio Check
- Radio Inhibit

--- Must Order **L-1716** for Intrinsically Safe Option ---

* Approved for Classes I, II & III, Div. 1, Groups C, D, E, F, G and are also approved for non-Incentive use in Classes I, II & III, Div. 2, Groups A, B, C, D, F, G hazardous locations.

RADIO

| | |
|-----------|------------------------------------|
| TK-2360K | 136-174 MHz 5W, 16 CH Conventional |
| TK-3360K | 450-520 MHz 5W, 16 CH Conventional |
| TK-3360K2 | 400-470 MHz 5W, 16 CH Conventional |

Li-ion VALUE PACKAGES

| | | |
|---------------|------------------------------|--|
| TK-2360-SLKVP | VHF Li-ion Value Pack | (TK-2360K + KNB-55L + KSC-25LSK + KRA-26M) |
| TK-2360LAKVP | VHF Hi-Cap Li-ion Value Pack | (TK-2360K + KNB-57LAM + KSC-25LSK + KRA-26M) |
| TK-3360-SLKVP | UHF Li-ion Value Pack | (TK-3360K + KNB-55L + KSC-25LSK + KRA-27M) |
| TK-3360LAKVP | UHF Hi-Cap Li-ion Value Pack | (TK-3360K + KNB-57LAM + KSC-25LSK + KRA-27M) |

PACKAGES

| | | |
|--------------|---------------------------|---|
| TK-2360-SLKP | VHF Standard Slim Package | (TK-2360K + KNB-55L + KSC-25SK + KRA-26M) |
| TK-2360LAKP | VHF Premium Package | (TK-2360K + KNB-57LAM + KSC-25SK + KRA-26M) |
| TK-3360-SLKP | UHF Standard Slim Package | (TK-3360K + KNB-55L + KSC-25SK + KRA-27M) |
| TK-3360LAKP | UHF Premium Package | (TK-3360K + KNB-57LAM + KSC-25SK + KRA-27M) |

SGS US I.S. APPROVED MODELS

Must Order **L-1716** & an Intrinsically Safe Battery per radio

| | |
|--------------|------------------------------------|
| TK-2360-ISK | 136-174 MHz 5W, 16 CH Conventional |
| TK-3360-ISK | 450-520 MHz 5W, 16 CH Conventional |
| TK-3360-ISK2 | 400-470 MHz 5W, 16 CH Conventional |

TK-2360/3360

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Compact VHF/UHF FM Portable Radios

| ANTENNAS | | DEALER |
|---------------------------------|--|--------|
| KRA-22M | VHF Low-profile helical antenna 148-162 MHz | |
| KRA-22M2 | VHF Low -profile helical antenna 162-174 MHz | |
| KRA-22M3 | VHF Low-profile helical antenna 136-150 MHz | |
| KRA-23M | UHF Low-profile helical antenna 450-490 MHz | |
| KRA-23M2 | UHF Low-profile helical antenna 470-512 MHz | |
| KRA-23M3 | UHF Low-profile helical antenna 403-430 MHz | |
| KRA-26M | VHF helical antenna 146-162 MHz | |
| KRA-26M2 | VHF helical antenna 162-174 MHz | |
| KRA-26M3 | VHF helical antenna 136-150 MHz | |
| KRA-27M | UHF whip antenna 440-490 MHz | |
| KRA-27M2 | UHF whip antenna 470-520 MHz | |
| KRA-27M3 | UHF whip antenna 400-450 MHz | |
| BATTERIES AND CHARGERS | | |
| KBP-5 | AA Alkaline Refillable Battery Pack (6 AA; 9V) cells not included | |
| KNB-68LC | 2000 mAh, Li-ion battery - requires KSC-25SK/25LSK/256K/256AK charger [Intrinsically Safe Option] | |
| KNB-55L | 1480 mAh, Li-ion battery - requires KSC-25SK/25LSK/256K/256AK charger | |
| KNB-56N | 1400 mAh, Ni-MH battery | |
| KNB-57LAM | 2000 mAh, Li-ion battery - requires KSC-25SK/25LSK/256K/256AK charger | |
| KSC-25LSK | 100~240 volt rapid rate single unit charger for KNB-40LC(V)/55L/57L/57LAM/68LC Li-ion Battery | |
| KSC-25SK | 110 volt Rapid rate single unit charger for KNB-26N/40LC(V)/55L/56N/57L/57LAM/68LC | |
| KSC-256AK | Rapid rate 6-Unit charger for KNB-26N/55L/56N/57L/57LAM/68LC/78LM/79LCM | |
| KMB-16 | Six Unit Charger Adapter for the KSC-16/20/24/25/25L chargers (chargers not included) | |
| KMB-23 | Six Unit Charger Adapter for the KSC-16/20/24/25/25L/32 chargers (chargers not included) | |
| KVC-4 | Vehicular charger adapter for the KSC-16/18/20/24/25SK chargers (chargers not included) *KSC-25LSK is not compatible with KVC-4. | |
| KVC-23 | Rapid rate DC vehicular charger for TK-5x10/5x20, NX-5x00/x00/x10/x20, TK-x180, TK-x170, & TK-x360 portables with Lithium Ion /Lithium Polymer/NiMH packs only | |
| CARRYING ACCESSORIES | | |
| KLH-138 | Heavy-Duty Leather Case w/Swivel Belt Loop for 160/170/173/360 (Non DTMF keypad) | |
| KBH-12 | Spring action belt clip | |
| KBH-13DS | Leather swivel belt loop with portable D-Ring attachment | |
| MICROPHONES & AUDIO ACCESSORIES | | |
| KMC-48GPS | GPS Speaker Microphone [Intrinsically Safe Approval Accessory] | |
| KMC-45D | MIL-SPEC, IP54/55 Speaker microphone (Built-in 2.5mm miniature earphone jack) [Intrinsically Safe Approval Accessory] | |
| KMC-21 | Compact speaker microphone [Intrinsically Safe Approval Accessory] | |
| KEP-2 | 2.5mm earphone kit for KMC-17/45 Speaker Mic [Intrinsically Safe Approval Accessory] | |
| KHS-10D-BH | Hvy-duty noise reduction behind-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Approval Accessory] | |
| KHS-10D-OH | Hvy-duty noise reduction over-the-headset w/noise cancelling boom mic & in-line PTT [Intrinsically Safe Approval Accessory] | |
| KHS-7 | Single muff headset w/boom mic [Intrinsically Safe Approval Accessory] | |

TK-2360/3360

Table of Contents

Compact VHF/UHF FM Portable Radios

MICROPHONES & AUDIO ACCESSORIES, CON'T

| | |
|---------|---|
| KHS-7A | Lt. Wt Single muff headset w/boom mic & in-line PTT [Intrinsically Safe Approval Accessory] |
| KHS-8BL | Two-Wire palm mic w/earphone (black) |
| KHS-9BL | Three-Wire lapel mic w/earphone (black) |
| KHS-22 | Behind-the-Head Headset with flexible boom mic and in-line PTT single ear receiver (low profile wire head band) |
| KHS-26 | Clip Mic w/earphone |
| KHS-27A | D-Ring Ear Hanger w/PTT & Mic |
| KHS-31C | C-Ring Ear Hanger w/PTT & Mic |

OPTION MODULES

| | |
|----------|---|
| KCT-57MS | Man-Down Internal Tilt Switch (Non-Mercury) [Intrinsically Safe Approved Accessory] - Must be Kenwood installed for I.S. Order L-1679 for FleetSync® operations |
|----------|---|

SERVICE RELATED ACCESSORIES

| | |
|------------|--|
| KPG-128DNK | Windows® Programming Software for TK-2360/3360 (Compliant with FCC Part 90 Narrowbanding) |
| KPG-22UM | USB Programming interface cable |

INSTALLATION / TUNING CHARGES

| | |
|--------|--|
| L-836 | Assemble KMB-16 with six KSC-25/25L |
| L-961 | Assemble KMB-23 with six KSC-24/25/25L/32 (Rapid Rate, 120 Volt versions only) |
| L-1678 | TK-2360/3360 Programming (with basic TX/RX check) |
| L-1679 | TK-2360/3360 Portable KCT-57MS Installation (for FleetSync®/MDC) |
| L-1716 | Configure TK-2360/3360 for Intrinsically Safe Must Order an I.S. Battery |

TK-2312/3312

Table of Contents

VHF/UHF Conventional Portable Radios



All 312 series portables include:

- Li-ion Battery (KNB-45L)
- Fast Charger (KSC-35SK)
- Antenna [KRA-26M (VHF)/27M (UHF)]
- Belt Clip (KBH-10)
- 2-PIN Connector Cap
- Instruction Manual
- Standard Warranty: 2 Years*

* All Accessories / options: 1 Year

GENERAL FEATURES

- 5 W (136-174 MHz) Model
- 5 W (450-520, 400-470 MHz) Models
- Conventional Zones
- 128 Channels / 128 Zones
- Single Priority Scan
- Single & Multi-Zone Scan
- 8 Character Alphanumeric Aliases
- Backlit LCD
- Function / Status LCD Icons
- RSSI Indicator
- Transmit / Busy / Call Alert / Warn LED
- 4-Color LED (Blue/Red/Green/Orange)
- 7 Front Panel PF keys
- 2 Side PF Keys
- 500 mW Audio Power
- Enhanced Kenwood Audio
- Companded Audio (per CH)
- VOX Ready
- Voice Inversion Scrambler Built-in
- 16 Scrambler Codes (per CH)
- Emergency Call Features
- Lone Worker Alert
- QT / DQT
- Two-Tone Decode
- Single / Two-Tone Encode
- Operator Selectable Tone
- DTMF Encode / Decode
- FleetSync®/MDC-1200 (per Zone)

- Special Alert Tone Pattern
- Call Key
- Time Out Timer
- Busy Channel Lockout
- LCD Battery Status Indicator
- Low Battery Alert
- Battery Saver
- Windows® Programming & Tuning
- Wireless Cloning
- Password Protection
- MIL-STD-810 C/D/E/F/G
- IP-54/55 Water & Dust Intrusion

FleetSync®

- PTT ID Digital ANI
- Selective Call & Group Call
- Status Messaging
- Emergency Status
- Caller ID Display
- Short Text Messages
- Send GPS Data (KMC-48GPS)
- PTT ID & Emergency GPS Reporting
- Status Message Block GPS Reporting

MDC-1200

- PTT ID Digital ANI
- Caller ID Display
- Emergency Status
- Radio Check

RADIO

| | |
|-----------|---------------------------------|
| TK-2312K | 136-174 MHz VHF 5W, 128 Ch. [1] |
| TK-3312K | 450-520 MHz UHF 5W, 128 Ch. [2] |
| TK-3312K2 | 400-470 MHz UHF 5W, 128 Ch. [2] |

ANTENNAS

| | |
|----------|--|
| KRA-22M | VHF Low-profile helical antenna 148-162 MHz |
| KRA-22M2 | VHF Low -profile helical antenna 162-174 MHz |
| KRA-22M3 | VHF Low-profile helical antenna 136-150 MHz |
| KRA-23M | UHF Low-profile helical antenna 450-490 MHz |
| KRA-23M2 | UHF Low-profile helical antenna 470-512 MHz |
| KRA-23M3 | UHF Low-profile helical antenna 403-430 MHz |
| KRA-26M | VHF helical antenna 146-162 MHz |
| KRA-26M2 | VHF helical antenna 162-174 MHz |
| KRA-26M3 | VHF helical antenna 136-150 MHz |
| KRA-27M | UHF whip antenna 440-490 MHz |
| KRA-27M2 | UHF whip antenna 470-520 MHz |
| KRA-27M3 | UHF whip antenna 400-450 MHz |

BATTERIES AND CHARGERS

| | |
|---------|--|
| KNB-45L | 2000 mAh, Li-ion battery - requires KSC-35K/E/SK charger |
| KNB-69L | 2550 mAh, Li-ion battery - requires KSC-35K/SK charger |
| KNB-29N | 1500 mAh, NiMH battery - requires KSC-43K charger |

TK-2312/3312

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VHF/UHF Conventional Portable Radios

BATTERIES AND CHARGERS, CON'T

| | |
|----------|--|
| KSC-35SK | 110~220 volt Fast rate single unit charger for KNB-45L Li-ion battery |
| KSC-43K | 110~220 volt Fast rate single unit charger for KNB-29N/45L/69L |
| KMB-28AK | Six Unit Charger Adapter for the KSC-23BK/28/35SK chargers (chargers not included) Note: The six KSC-xx AC wall Adapters are NOT used in the KMB-28 installation A supplied in-line AC-DC switching power supply with six DC plugs supply the six installed KSC-xx charger bases. This unit is lower profile and less weight than similar Kenwood six unit charger adapters. |
| KVC-22 | 110~220 volt Fast rate DC vehicular charger adapter for KSC-35SK charger & KNB-45L Li-ion battery (charger not included) |

CARRYING ACCESSORIES

| | |
|---------|--|
| KBH-10 | Spring action belt clip |
| KBH-8DS | Leather swivel belt loop with portable D-Ring attachment |
| KLH-6SW | Leather swivel belt loop / detachable swivel D-Ring back |
| KLH-178 | Heavy duty leather carrying case for TK-2312/3312 |

MICROPHONES & AUDIO ACCESSORIES

| | |
|------------|---|
| KMC-48GPS | GPS Speaker Microphone |
| KMC-45D | MIL-SPEC, IP54/55 Speaker microphone (Built-in 2.5mm miniature earphone jack) |
| KMC-21 | Compact speaker microphone |
| KEP-1 | 3.5mm earphone kit for KMC-48GPS Speaker Mics |
| KEP-2 | 2.5mm earphone kit for KMC-17/45 Speaker Mic |
| KHS-10D-BH | Hvy-duty noise reduction behind-the-headset w/noise cancelling boom mic & in-line PTT |
| KHS-10D-OH | Hvy-duty noise reduction over-the-headset w/noise cancelling boom mic & in-line PTT |
| KHS-7 | Single muff headset w/boom mic |
| KHS-7A | Lt. Wt Single muff headset w/boom mic & in-line PTT |
| KHS-8BL | Two-Wire palm mic w/earphone (black) |
| KHS-9BL | Three-Wire lapel mic w/earphone (black) |
| KHS-22 | Behind-the-Head Headset with flexible boom mic and in-line PTT single ear receiver (low profile wire head band) |
| KHS-26 | Clip Mic w/earphone |
| KHS-27A | D-Ring Ear Hanger w/PTT & Mic |
| KHS-31C | C-Ring Ear Hanger w/PTT & Mic |

SERVICE RELATED ACCESSORIES

| | |
|------------|--|
| KPG-22UM | USB Programming interface cable |
| KPG-134DNK | Windows® Programming Software for TK-2312/3312 (Compliant with FCC Part 90 Narrowbanding) Note: Self-programming function is not available. |

INSTALLATION / TUNING CHARGES

| | |
|--------|---|
| L-1688 | TK-2312/3312 Programming (with basic TX/RX check) |
|--------|---|

TK-2402V/3402U

Table of Contents

VHF/UHF Conventional Portable Radios



All 402 series portables include:

- Li-ion Battery (KNB-45L)
- Fast Charger (KSC-35SK)
- Antenna [KRA-26M(VHF)/27M(UHF)]
- Belt Clip (KBH-10)
- 2-PIN Connector Cap
- Channel Stopper
- Instruction Manual
- Standard Warranty: 2 Years*

GENERAL FEATURES

- 5 W (136-174 MHz) VHF
- 5 W (450-520 MHz) UHF
- 16 Channels
- Single Priority / Normal Scan
- Transmit / Busy / Call Alert Scan / Warn LED
- 4-Color LED (Blue/Red/Green/Orange)
- 2 PF Keys
- 1.0 W Speaker Audio
- Enhanced Kenwood Audio
- Companded Audio (per CH)
- Voice Annunciation
- VOX Ready
- Voice Inversion Scrambler Built-in
- 16 Scrambler Codes (per CH)
- Emergency Call Features
- Lone Worker Alert (per CH)
- QT / DQT
- Two-Tone Decode
- Single / Two-Tone Encode
- DTMF Encode / Decode

- Special Alert Tone Pattern
- Time Out Timer
- Busy Channel Lockout
- Low Battery Warning
- Battery Saver
- Windows® Programming & Tuning
- Wireless Cloning
- Password Protection
- MIL-STD-810 C/D/E/F/G
- IP-54/55 Water & Dust Intrusion

FleetSync®

- PTT ID Digital ANI
- Selective Call & Group Call
- Paging Call
- Emergency Status
- Send GPS Data (KMC-48GPS)

MDC-1200

- PTT ID Digital ANI
- Emergency Status
- Radio Check
- Radio Inhibit

* All Accessories / options: 1 Year

RADIO

| | |
|-----------|----------------------------|
| TK-2402VK | 136-174 MHz VHF 5W, 16 Ch. |
| TK-3402UK | 450-520 MHz UHF 5W, 16 Ch. |

ANTENNAS

| | |
|----------|---|
| KRA-41M | VHF stubby antenna 148-162 MHz |
| KRA-41M2 | VHF stubby antenna 162-174 MHz |
| KRA-41M3 | VHF stubby antenna 136-150 MHz |
| KRA-42M | UHF stubby antenna 440-490 MHz |
| KRA-42M2 | UHF stubby antenna 470-520 MHz |
| KRA-22M | VHF low profile antenna 148-162 MHz |
| KRA-22M2 | VHF low profile antenna 162-174 MHz |
| KRA-22M3 | VHF Low-profile helical antenna 136-150 MHz |
| KRA-23M | UHF low profile antenna 450-490 MHz |
| KRA-23M2 | UHF low profile antenna 470-520 MHz |
| KRA-26M | VHF helical antenna 146-162 MHz |
| KRA-26M2 | VHF helical antenna 162-174 MHz |
| KRA-26M3 | VHF helical antenna 136-150 MHz |
| KRA-27M | UHF whip antenna 440-490 MHz |
| KRA-27M2 | UHF whip antenna 470-520 MHz |

BATTERIES AND CHARGERS

| | |
|----------|--|
| KNB-45L | 2000 mAh, Li-ion battery - requires KSC-35K/SK charger |
| KNB-69L | 2550 mAh, Li-ion battery - requires KSC-35K/SK charger |
| KNB-29N | 1500 mAh, NiMH battery - requires KSC-43K charger |
| KSC-35SK | 110~220 volt Fast rate single unit charger for KNB-45L/69L |
| KSC-43K | 110~220 volt Fast rate single unit charger for KNB-29N/45L/69L |
| KMB-28AK | Six Unit Charger Adapter for the KSC-23BK/28/35SK chargers (chargers not included) Note: The six KSC-xx AC wall Adapters are NOT used in the KMB-28 installation A supplied in-line AC-DC switching power supply with six DC plugs supply the six installed KSC-xx charger bases. This unit is lower profile and less weight than similar Kenwood six unit charger adapters. |
| KVC-22 | 110~220 volt Fast rate DC vehicular charger adapter for KSC-35SK charger & KNB-45L Li-ion battery (charger not included) |

TK-2402V/3402U

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VHF/UHF Conventional Portable Radios

CARRYING ACCESSORIES

| | |
|---------|--|
| KBH-10 | Spring action belt clip |
| KBH-8DS | Leather swivel belt loop with portable D-Ring attachment |
| KLH-187 | Nylon case for TK-*200/*202/*300/*302/*400/*402 Series |

MICROPHONES & AUDIO ACCESSORIES

| | |
|------------|--|
| KMC-48GPS | GPS Speaker Microphone |
| KMC-45D | MIL-SPEC, IP54/55 Speaker microphone (Built-in 2.5mm miniature earphone jack) |
| KMC-21 | Compact speaker microphone |
| KEP-1 | 3.5mm earphone kit for KMC-48GPS Speaker Mics |
| KEP-2 | 2.5mm earphone kit for KMC-17/45 Speaker Mic |
| KHS-10D-BH | Hvy-duty noise reduction behind-the-headset w/noise cancel boom mic /in-line PTT |
| KHS-10D-OH | Hvy-duty noise reduction over-the-headset w/noise cancel boom mic /in-line PTT |
| KHS-7 | Single muff headset w/boom mic |
| KHS-7A | Lt. Wt Single muff headset w/boom mic & in-line PTT |
| KHS-8BL | Two-Wire palm mic w/earphone (black) |
| KHS-9BL | Three-Wire lapel mic w/earphone (black) |
| KHS-22 | Behind-the-Head Headset with flexible boom mic and in-line PTT single ear receiver |
| KHS-26 | Clip Mic w/earphone |
| KHS-27A | D-Ring Ear Hanger w/PTT & Mic |
| KHS-31C | C-Ring Ear Hanger w/PTT & Mic |

SERVICE RELATED ACCESSORIES

| | |
|------------|--|
| KPG-22UM | USB Programming interface cable |
| KPG-159DNK | Windows® Programming Software for TK-2402VK/3402UK (Compliant with FCC Part 90 Narrowbanding) |

INSTALLATION / TUNING CHARGES

| | |
|--------|---|
| L-1756 | TK-2402VK/3402UK Programming (with basic TX/RX check) |
|--------|---|

TK-2400/3400

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VHF/UHF Conventional Portable Radios



All 400 series portables include:

- Li-ion Battery (KNB-45L)
- Fast Charger (KSC-35SK)
- Antenna [KRA-26M(VHF)/27M(UHF)]
- Belt Clip (KBH-10)
- 2-PIN Connector Cap
- Instruction Manual
- Standard Warranty: 2 Years*

* All Accessories / options: 1 Year

GENERAL FEATURES

- 2 W (136-174 MHz) VHF
- 2 W (450-520 MHz) UHF
- 16 Channel Model
- Single Priority / Normal Scan
- Transmit / Busy / Call Alert Scan / Warn LED
- 4-Color LED (Blue/Red/Green/Orange)
- 2 PF Keys
- 1.0 W Speaker Audio
- Enhanced Kenwood Audio
- Companded Audio (per CH)
- Voice Annunciation
- VOX Ready
- Voice Inversion Scrambler Built-in
- 16 Scrambler Codes (per CH)
- Emergency Call Features
- Lone Worker Alert (per CH)
- QT / DQT
- Two-Tone Decode
- Single / Two-Tone Encode
- DTMF Encode / Decode

- Special Alert Tone Pattern
- Time Out Timer
- Busy Channel Lockout
- Low Battery Warning
- Battery Saver
- Windows® Programming & Tuning
- Wireless Cloning
- Password Protection
- MIL-STD-810 C/D/E/F/G
- IP-54/55 Water & Dust Intrusion

FleetSync®

- PTT ID Digital ANI
- Selective Call & Group Call
- Paging Call
- Emergency Status
- Send GPS Data (KMC-48GPS)

MDC-1200

- PTT ID Digital ANI
- Emergency Status
- Radio Check

RADIO

| | |
|-----------|----------------------------|
| TK-2400K2 | 136-174 MHz VHF 2W, 16 Ch. |
| TK-3400K2 | 450-520 MHz UHF 2W, 16 Ch. |

ANTENNAS

| | |
|----------|---|
| KRA-41M | VHF stubby antenna 148-162 MHz |
| KRA-41M2 | VHF stubby antenna 162-174 MHz |
| KRA-41M3 | VHF stubby antenna 136-150 MHz |
| KRA-42M | UHF stubby antenna 440-490 MHz |
| KRA-42M2 | UHF stubby antenna 470-520 MHz |
| KRA-22M | VHF low profile antenna 148-162 MHz |
| KRA-22M2 | VHF low profile antenna 162-174 MHz |
| KRA-22M3 | VHF Low-profile helical antenna 136-150 MHz |
| KRA-23M | UHF low profile antenna 450-490 MHz |
| KRA-23M2 | UHF low profile antenna 470-520 MHz |
| KRA-26M | VHF helical antenna 146-162 MHz |
| KRA-26M2 | VHF helical antenna 162-174 MHz |
| KRA-26M3 | VHF helical antenna 136-150 MHz |
| KRA-27M | UHF whip antenna 440-490 MHz |
| KRA-27M2 | UHF whip antenna 470-520 MHz |

BATTERIES AND CHARGERS

| | |
|----------|---|
| KNB-45L | 2000 mAh, Li-ion battery - requires KSC-35K/SK charger |
| KNB-69L | 2550 mAh, Li-ion battery - requires KSC-35K/SK charger |
| KNB-29N | 1500 mAh, NiMH battery - requires KSC-43K charger |
| KSC-35SK | 110~220 volt Fast rate single unit charger for KNB-45L/69L |
| KSC-43K | 110~220 volt Fast rate single unit charger for KNB-29N/45L/69L |
| KMB-28AK | Six Unit Charger Adapter for the KSC-23BK/28/35SK chargers (chargers not included) Note: The six KSC-xx AC wall Adapters are NOT used in the KMB-28 installation. A supplied in-line AC-DC switching power supply with six DC plugs supply the six installed KSC-xx charger bases. This unit is lower profile and less weight than similar Kenwood six unit charger adapters. |
| KVC-22 | 110~220 volt Fast rate DC vehicular charger adapter for KSC-35SK charger & KNB-45L Li-ion battery (charger not included) |

TK-2400/3400

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VHF/UHF Conventional Portable Radios

CARRYING ACCESSORIES

| | |
|---------|--|
| KBH-10 | Spring action belt clip |
| KBH-8DS | Leather swivel belt loop with portable D-Ring attachment |
| KLH-187 | Nylon case for TK-*200/*202/*300/*302/*400/*402 Series |

MICROPHONES & AUDIO ACCESSORIES

| | |
|------------|--|
| KMC-48GPS | GPS Speaker Microphone |
| KMC-45D | MIL-SPEC, IP54/55 Speaker microphone (Built-in 2.5mm miniature earphone jack) |
| KMC-21 | Compact speaker microphone |
| KEP-1 | 3.5mm earphone kit for KMC-48GPS Speaker Mics |
| KEP-2 | 2.5mm earphone kit for KMC-17/45 Speaker Mic |
| KHS-10D-BH | Hvy-duty noise reduction behind-the-headset w/noise cancel boom mic /in-line PTT |
| KHS-10D-OH | Hvy-duty noise reduction over-the-headset w/noise cancel boom mic /in-line PTT |
| KHS-7 | Single muff headset w/boom mic |
| KHS-7A | Lt. Wt Single muff headset w/boom mic & in-line PTT |
| KHS-8BL | Two-Wire palm mic w/earphone (black) |
| KHS-9BL | Three-Wire lapel mic w/earphone (black) |
| KHS-22 | Behind-the-Head Headset with flexible boom mic and in-line PTT single ear receiver |
| KHS-26 | Clip Mic w/earphone |
| KHS-27A | D-Ring Ear Hanger w/PTT & Mic |
| KHS-31C | C-Ring Ear Hanger w/PTT & Mic |

SERVICE RELATED ACCESSORIES

| | |
|-----------|--|
| KPG-22UM | USB Programming interface cable |
| KPG-160DK | Windows® Programming Software for TK-2400/3400 |

INSTALLATION / TUNING CHARGES

| | |
|--------|---|
| L-1757 | TK-2400/3400 Programming (with basic TX/RX check) |
|--------|---|

UHF BRS Digital & Analog Portable Radios

**Includes:**

- Belt Clip Holster
- Drop-in charger
- Fixed Antenna
- 2,200 mAh Li-ion Battery
- Instruction Manual
- Standard Warranty: 2 Years*

* All Accessories / options: 1 Year

GENERAL FEATURES

- Dual Mode NXDN Digital & FM Analog
- UHF 2 Watt Transmit Power
- Small (1.97" W x 3.70" H x 1.07" D) & Lightweight (5.6 oz)
- Li-Ion battery with over 15 Hours (w/Save On) Talk Time (5/5/90 duty cycle)
- 750 mW Loud Speaker
- High Brightness LCD Display
- 7-color LED Indicator
- IP67 Dust & Immersion / MIL-STD-810 C/D/E/F/G
- 6 Channel Operation (Factory pre-set)
- 99 User-Programmable Memory Bank Frequencies
- Digital/Analog Mixed Mode Operation
- Individual Call / Group Call *IDs can be used up to 100 range
- Second PTT
- Channel Scan
- NXDN Digital Scrambler
- Repeater Mode
- Wireless Cloning Mode
- Key Lock/Super Lock
- User Programmable QT (45) and DQT (174) Signaling
- Compander
- FleetSync
- LCD Battery Meter & Low Battery Alert
- VOX (Voice-activated transmit)
- Time Out Timer
- Free Programming Software (KPG-D5)

***Note:**

To maintain immersion specs (IP67), all warranty service must be done by one of the two National Kenwood Authorized Service Centers. IP67 Certification is valid under the 2 year Warranty. No re-certification is available.

RADIO

| | |
|----------|--|
| NX-P500K | 450-470 MHz UHF 2W Digital Transceiver |
|----------|--|

BATTERY AND CHARGER

| | |
|----------|--|
| KNB-81L | Li-ion battery (Same as supplied with NX-P500K) |
| KSC-50K | Li-ion Rapid rate charger (Same as supplied with NX-P500K) |
| KSC-506K | Rapid rate 6-Unit Charger for KNB-81L |

CARRYING ACCESSORY

| | |
|---------|--|
| KBH-22W | Belt Clip Holster (Same as supplied with NX-P500K) |
| KBH-21W | Belt Clip |

HEADSETS, MICROPHONE AND SPEAKERS

| | |
|---------|--|
| EMC-13W | Clip Microphone with Earphone |
| EMC-14W | C-Ring Ear Hanger with PTT & Mic |
| KHS-37W | C-Ring Ear Hanger with Flexible Boom Mic |
| KMC-55W | IP67 Speaker Microphone |

UHF BRS Digital & Analog Portable Radios

PROGRAMMING SOFTWARE/LICENSE/CABLE

| | |
|------------|---|
| KPG-D5 | Free Programming Software Downloadable from " http://www.kenwood.com/usa/com/osbr/nx-p500/kpg-d5.html " |
| | BRS Advanced Programming License for KPG-D5 Note: <ul style="list-style-type: none">- Available to change in the BRS frequencies only. Do not allow to apply LMR frequencies and functions.- For programming advanced features and functions not available in the base free version.- A license is required for upgrading KPG-D5 free programming software by authentication via KPT-300LMC. |
| KWD-D5-B1K | |
| | LMR Frequency Programming License for KPG-D5 Note: <ul style="list-style-type: none">- Ability to custom program any frequency between 450 MHz and 470 MHz.- Ability to program advanced features and functions not available in the base free version. |
| KWD-D5-L1K | |
| | Must order L-1867 for each NX-P500 radio to convert unit from BRS to LMR operation |
| KPG-186UW | Programming Cable |

SERVICE RELATED

| | |
|--------|--|
| L-1858 | Change channel to other frequencies or program NX-P500K |
| L-1867 | Convert from BRS mode to LMR Mode to be programmed by KPG-D5-L1K |

**All 400P series portables include:**

- Li-ion Battery (KNB-45L)
- Fast Charger (KSC-35SK)
- Antenna [KRA-26M(VHF)/27M(UHF)]
- Belt Clip (KBH-10)
- 2-PIN Connector Cap
- Instruction Manual
- Standard Warranty: 2 Years*

* All Accessories / options: 1 Year

GENERAL FEATURES

- 2 W (151-159 MHz) VHF
- 2 W (451-470 MHz) UHF
- 16 Channel Models
- 90 UHF & 27 VHF
- Pre-programmed Banked Frequencies
- Normal Scan
- Transmit / Busy / Call Alert / Scan / Warn LED
- 2 PF Keys
- Super Lock (Manager Key Lock)
- 1.0 W Speaker Audio
- Enhanced Kenwood Audio
- Companded Audio
- Voice Announcement
- Channel Confirmation Mode
- VOX Ready
- Voice Inversion Scrambler Built-in
- QT / DQT
- 10 Call Alerting Tones

- Time Out Timer
- Low Battery Warning
- Battery Saver
- Windows® Programming & Tuning
- Wireless Cloning
- Password Protection
- MIL-STD-810 C/D/E/F/G
- IP-54/55 Water & Dust Intrusion

RADIO

| | |
|-------------|----------------------------|
| TK-2400V16P | 151-159 MHz VHF 2W, 16 Ch. |
| TK-3400U16P | 451-470 MHz UHF 2W, 16 Ch. |

ANTENNAS

| | |
|---------|-------------------------------------|
| KRA-41M | VHF stubby antenna 148-162 MHz |
| KRA-42M | UHF stubby antenna 440-490 MHz |
| KRA-22M | VHF low profile antenna 148-162 MHz |
| KRA-23M | UHF low profile antenna 450-490 MHz |
| KRA-26M | VHF helical antenna 146-162 MHz |
| KRA-27M | UHF whip antenna 440-490 MHz |

BATTERIES AND CHARGERS

| | |
|----------|--|
| KNB-45L | 2000 mAh, Li-ion battery - requires KSC-35K/SK charger |
| KNB-69L | 2550 mAh, Li-ion battery - requires KSC-35K/SK charger |
| KNB-29N | 1500 mAh, NiMH battery - requires KSC-43K charger |
| KSC-35SK | 110~220 volt Fast rate single unit charger for KNB-45L/69L |
| KSC-43K | 110~220 volt Fast rate single unit charger for KNB-29N/45L/69L |
| KMB-28AK | Six Unit Charger Adapter for the KSC-23BK/28/35SK chargers (chargers not included) Note: The six KSC-xx AC wall Adapters are NOT used in the KMB-28 installation A supplied in-line AC-DC switching power supply with six DC plugs supply the six installed KSC-xx charger bases. This unit is lower profile and less weight than similar Kenwood six unit charger adapters. |
| KVC-22 | 110~220 volt Fast rate DC vehicular charger adapter for KSC-35SK charger & KNB-45L Li-ion battery (charger not included) |

CARRYING ACCESSORIES

| | |
|---------|--|
| KBH-10 | Spring action belt clip |
| KBH-8DS | Leather swivel belt loop with portable D-Ring attachment |
| KLH-187 | Nylon case for TK-*200/*202/*300/*302/*400/*402 Series |

MICROPHONES & AUDIO ACCESSORIES

| | |
|------------|--|
| KEP-2 | 2.5mm earphone kit for KMC-17/45 Speaker Mic |
| KHS-10D-BH | Hvy-duty noise reduction behind-the-headset w/noise cancel boom mic /in-line PTT |
| KHS-10D-OH | Hvy-duty noise reduction over-the-headset w/noise cancel boom mic /in-line PTT |
| KHS-22 | Behind-the-Head Headset with flexible boom mic and in-line PTT single ear |
| KHS-26 | Clip Mic w/earphone |
| KHS-27A | D-Ring Ear Hanger w/PTT & Mic |
| KHS-31C | C-Ring Ear Hanger w/PTT & Mic |
| KHS-7 | Single muff headset w/boom mic |
| KHS-7A | Lt. Wt Single muff headset w/boom mic & in-line PTT |
| KHS-8BL | Two-Wire palm mic w/earphone (black) |
| KHS-9BL | Three-Wire lapel mic w/earphone (black) |
| KMC-21 | Compact speaker microphone |
| KMC-45D | MIL-SPEC, IP54/55 Speaker microphone (Built-in 2.5mm miniature earphone jack) |

SERVICE RELATED ACCESSORIES

| | |
|-----------|--|
| KPG-22UM | USB Programming interface cable |
| KPG-160DK | Windows® Programming Software for TK-2400/3400 |

UHF BRS Portable Radios

**XLS series portable includes:**

- Spring action belt clip
- Rapid Rate Drop-in charger
- Fixed Antenna
- 2000 mAh Li-ion Battery
- Instruction Manual
- Standard Warranty: 2 Years*

* All Accessories / options: 1 Year

GENERAL FEATURES

- UHF 1.5 Watt or 500 mW Transmit Power
- Extra Durable Polycarbonate Housing
- Small (2.07" W x 4.07" H x 1.17" D) & Lightweight (5.5 oz)
- Li-Ion battery with over 14 Hours Talk Time (5/5/90 duty cycle)
- Over 18 Hours Talk Time (with Battery Save On) 5/5/90 duty cycle
- 6 Channel Operation (factory pre-set)
- 99 User-Programmable Memory Bank Frequencies
- Channel Scan
- Wireless Cloning Mode
- Key Lock/Super Lock
- User Programmable QT (39) and DQT (168) Signaling
- Selectable Power On Tone
- 10 Call Alert Tones
- Voice Scrambler
- Speaker Mute Function
- Compander
- SelCall (for Caller ID)
- LCD Battery Meter & Low Battery Alert
- VOX (Voice-activated transmit) w/3 Sensitivity Levels
- Time Out Timer
- 2 Color Transmit / Busy LED/ Backlit LCD Display
- 3 Function Keys: Menu, Call, Monitor
- Audio Accessory Jack
- Antenna (fixed non-removable)
- Passes 8 Rugged Mil-Spec 810 C, D, E, F & G Standards

RADIO

| | |
|------------|--|
| TK-3230DXK | 450-470 MHz UHF 1.5W or 500 mW, 6 Ch. Portable Transceiver |
|------------|--|

BATTERIES AND CHARGERS

| | |
|---------|---|
| KNB-46L | Li-Ion battery (Same as supplied with TK-3230DXK) |
| KSC-37S | Li-Ion Rapid rate charger (Same as supplied with TK-3230DXK) |
| KMB-27 | Six Unit Charger Adapter for the KSC-28/37/37S chargers (chargers not included) Note: The six KSC-xx AC wall Adapters are NOT used in the KMB-27 installation A supplied in-line AC-DC switching power supply with six DC plugs supply the six installed KSC-xx charger bases. This unit is lower profile and less weight than similar Kenwood six unit charger adapters. |

CARRYING ACCESSORIES

| | |
|---------|--|
| KBH-14M | Spring action belt clip (Same as supplied with TK-3230DXK) |
| KLH-150 | Nylon case for TK-3230/TK-3230DX (Black) |

MICROPHONES & AUDIO ACCESSORIES

| | |
|------------|---|
| KEP-2 | 2.5mm earphone kit for KMC-17/45D Speaker Mic [KEP-2 & KMC-21 are not plug-compatible] |
| KHS-10D-BH | Hvy-duty behind-the-headset w/noise cancelling boom mic & in-line PTT |
| KHS-10D-OH | Hvy-duty over-the-headset w/noise cancelling boom mic & in-line PTT |
| KHS-7 | Single muff headset w/boom mic |
| KHS-7A | Lt. Wt Single muff headset w/boom mic & in-line PTT |
| KHS-8BL | Two-Wire palm mic w/earphone (black) |
| KHS-9BL | Three-Wire lapel mic w/earphone (black) |
| KHS-22 | Behind-the-Head Headset with flexible boom mic and in-line PTT single ear receiver (low profile wire head band) |
| KHS-26 | Clip Mic w/earphone |
| KHS-27A | D-Ring Ear Hanger w/PTT & Mic |
| KHS-31C | C-Ring Ear Hanger w/PTT & Mic |
| KMC-45D | MIL-SPEC, IP54/55 Speaker microphone (Built-in 2.5mm miniature earphone jack) |
| KMC-21 | Compact speaker microphone |

INSTALLATION / TUNING CHARGES

| | |
|---------------|--|
| L-1077 | Change Channel to other frequencies or program TK-3230DX |
|---------------|--|

UHF BRS Portable Radios

**LT series portable includes:**

- Spring action belt clip
- Drop-in charger
- Fixed Antenna
- 1430 mAh Li-ion Battery
- Instruction Manual
- Standard Warranty: 2 Years*

* All Accessories / options: 1 Year

GENERAL FEATURES

- UHF 1.5 Watt or 500 mW Transmit Power
- Extra Durable Polycarbonate Housing
- Small (1.8" W x 0.8" D x 3.3 H) & Lightweight (3.9 oz)
- Li-Ion battery with over 11 Hours Talk Time (5/5/90 duty cycle)
- Over 15 Hours Talk Time (with Battery Save On) 5/5/90 duty cycle
- 4 Channel Operation (factory pre-set)
- 99 User-Programmable Memory Bank Frequencies
- Channel Scan
- Wireless Cloning Mode
- Key Lock/Super Lock
- User Programmable QT (39) and DQT (168) Signaling
- Bell Tone Alert
- Speaker Mute Function
- VOX (Voice-activated transmit) w/5 Sensitivity Levels
- Voice Announcement
- Time Out Timer
- LED Battery Status Indicator
- 2 Function Keys
- 1-PIN Audio Accessory Jack
- Micro USB Port
- Antenna (fixed non-removable)
- Passes IP54 & 11 Rugged Mil-Spec 810 C, D, E, F & G Standards

RADIO

PKT-23K 451-470 MHz UHF 1.5W or 500 mW, 4 Ch. Ultra Compact Portable

BATTERIES AND CHARGERS

KNB-71L Li-Ion battery (Same as supplied with PKT-23K)

KSC-44K Li-Ion Fast rate charger/AC Power Supply (Same as supplied with PKT-23K)

KMB-44K Six Unit Charging Cup and Multi-AC Adapter (Charging Cups not included)

CARRYING ACCESSORIES

KBH-20M Belt Clip (Same as supplied with PKT-23K & bulk PKT-23BKP)

MICROPHONES & AUDIO ACCESSORIES

KHS-33 Clip Mic w/earphone single pin (only compatible with PKT-23)

KHS-34 C-Ring Ear Hanger w/PTT & Mic single pin (only compatible with PKT-23)

INSTALLATION / TUNING CHARGES

L-1773 Change channel to other frequencies or program PKT-23

TK-690

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Low Band FM Mobile Radios



All 90 BK series mobiles include:

- RF Deck Only
(Configuration Set & Assembly Labor Code must be order for a Complete Mobile.)
- Standard Warranty: 2 Years*

* All Accessories / options: 1 Year

GENERAL FEATURES

- 110W (29.7-37.0, 35.0-43.0, 39.0-50.0 MHz)
- 160 Channels
- Dual Priority Scan
- Single / Multi Group Scan
- QT / DQT
- Operator Selectable Tone
- Two-Tone Decode1
- DTMF Encode/ Decode / Stun
- Encryption / ANI Board Control
- Emergency Call Features
- Companded Audio
- Intercom
- Public Address
- Time Out Timer
- Busy Channel Lockout
- Ignition Sense
- Timed Power Off
- DB-25 Accessory Connector
- 7 Programmable AUX Inputs
- 6 Programmable AUX Outputs
- Windows® Programming & Tuning
- Windows® Firmware Uploading
- Panel Tuning
- Cloning
- MIL-STD-810 C/D/E/F/G
- MIL-Spec Noise-Cancel Mic (included)
- MIL-Spec 12-Key DTMF Mic Option

FleetSync®

- PTT ID Digital ANI
- Emergency Status

MOUNTING CONFIGURATIONS

- Dash Mount
- Single Head Remote Mount
- Dual Head Remote Mount
- Dual Band Remote Mount
- Dual Head / Dual Band Remote Mount

FRONT PANELS / CONTROL HEADS

- Backlit Dot Matrix LCD
- 3-Digit Sub-Display
- Function/Status LCD Icons
- Transmit LED
- Busy, Call Alert, Warn LED
- LCD Dimmer Control
- Power On/Off Switch
- Rotary Volume Knob
- Rotary Selector Knob
- Backlit Keys
- PF Key Label Inserts
- Microphone Jack
- MILSTD 810 512.X Driven Rain

KCH-10 FRONT PANEL

- 8-Character Alphanumeric Aliases
- 5 PF Keys
- UP/DOWN Keys
- Built-in Front Speaker

KCH-11 FRONT PANEL

- 14-Character Alphanumeric Aliases
- 13 PF Keys
- UP/DOWN Keys
- External Speaker Required

RADIO

TK-690HBK3 39.0-50.0 MHz, 110W, 160 Channels (R.F. DECK ONLY)

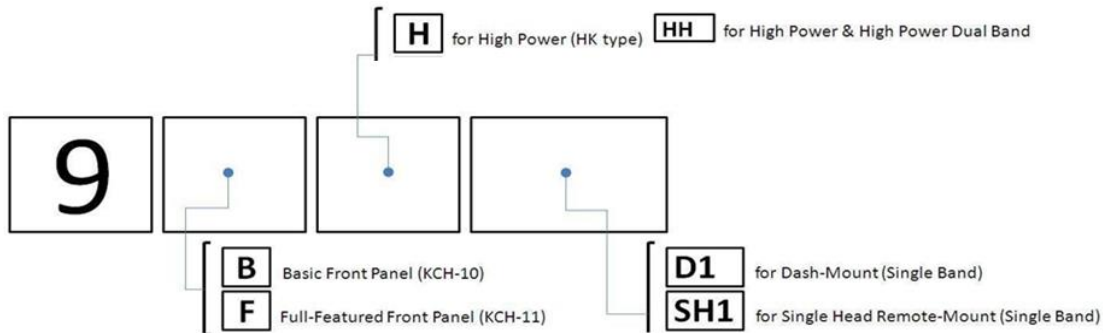
TK-690

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Low Band FM Mobile Radios

ACCESSORY CONFIGURATION SETS

CONFIGURATION SET DEFINITIONS



Note: All KCH-10 / Basic Control Head configurations are shipped with the control heads 4W internal speaker enabled. Order L-891 to enable the 13W external speaker output for KES-5 speaker use. This will disconnect the control heads internal 4W speaker !

Note: Order an Labor code for each model if factory packaging is required:

L-846 Package Dash/Single Head Remote

L-848 Package Dual Band Remote

Single Band Dash Mount

9BHD1 KCH-10, KCT-23M2, KMB-9, KMC-27

9FHD1 KCH-11, KCT-23M2, KMB-9, KMC-27, KES-5

Single Band Single Head Remote Mount

9BHSH1 KCH-10, KRK-5, KCT-22M2, KCT-23M4, KMB-9, KMC-27

9FHSH1 KCH-11, KRK-5, KCT-22M2, KCT-23M4, KMB-9, KMC-27, KES-5

FRONT PANELS & REMOTE KITS (Order Configuration Sets for full install accessories)

KCH-10 Basic Control Panel

KCH-11 Full Featured Control Panel

KRK-5 Single Control Head Remote Mount Kit

CABLES

KCT-18 Ignition sense cable

KCT-22M Control cable - 8 Feet

KCT-22M2 Control cable - 17 Feet (Standard accessory config. set cable)

KCT-22M3 Control cable (25 Feet)

KCT-23M2 DC Cable (75/110W Dash mount)

KCT-23M4 DC Cable (75/110W Remote mount)

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Low Band FM Mobile Radios

CABLES, CONT

KCT-22A50

KCT-22A Extended Control Head Cable (up to 50 ft. max.)

Note: Please specify exact length at 1ft. increments when ordering.

Caution: Extended control head cables exhibit a loss in speaker audio power to the control heads. For either type control head (KCH-10/11), it is recommended that the 13W audio output modification be implemented to drive extended cable runs and a KES-5 external speaker be used. Refer to the service manual pg. 15-17 for 13W modifications. Installing new radio firmware (hex files) via the KPG-44D software nor checking the firmware "checksum" is not possible through an extended control head cable. A standard KCT-22 cable of 25 ft. or less should be used when this has to be done. Normal KPG-44D radio parameter programming is possible at extended lengths.

KCT-22A100

KCT-22A Extended Control Head Cable (up to 100 ft. max.)

Note: Please specify exact length at 1ft. increments when ordering.

Caution: Extended control head cables exhibit a loss in speaker audio power to the control heads. For either type control head (KCH-10/11), it is recommended that the 13W audio output modification be implemented to drive extended cable runs and a KES-5 external speaker be used. Refer to the service manual pg. 15-17 for 13W modifications. Installing new radio firmware (hex files) via the KPG-44D software nor checking the firmware "checksum" is not possible through an extended control head cable. A standard KCT-22 cable of 25 ft. or less should be used when this has to be done. Normal KPG-44D radio parameter programming is possible at extended lengths.

KCT-23AK2

KCT-23AK2 Two Conductor 75/110W High Power DC Cable

(2 Conductor: 1x23 ft. positive, 1x23 ft. negative; AWG #10)

Note: This cable substitutes for the ff: DC Cables:

--> KCT-23M2 75/110W Dash Mount DC Cable: 4 Conductor: 2x10 ft. positive, 2x10 ft. negative

--> KCT-23M4 75/110W Remote Mount DC Cable: 4 Conductor: 2x23 ft. positive, 2x23 ft. negative

MOBILE INSTALLATION ACCESSORIES

KLF-2

Line Filter (suppresses alternator whine, 25dB, 25A max)

KMB-36

Mounting Bracket for NX-5000H, TK-5x10H, TK-690H High Power RF Deck

MICROPHONES AND SPEAKERS

KES-5

External Speaker (40W max input)

KMC-27

Rugged standard microphone with noise canceling, MIL-STD and driven rain features

KMC-28

DTMF microphone (MIL-SPEC, Noise canceling)

KMC-9B

Desk top microphone

SERVICE RELATED ACCESSORIES

KPG-43UM

USB Programming interface cable

KPG-44DNK

Windows® Programming Software for TK-690/790/890

(Compliant with FCC Part 90 Narrowbanding)

Contact Kenwood Parts for Price and Availability 800-367-7514 on the following:

K29-5276-03

Key Inserts for 90-series mobile (AN, D/A, DIM, HA, HC, IC, MON, OPT, OST, PA)

K29-5277-03

Key Inserts for 90-series mobile (RCL, RPT, SCN, SP, SPM, SQ, TA, <up arrow>, <down arrow>)

K29-5305-03

Key Inserts for 90-series mobile (CH1, CH2, CH3, CH4, CH5, AUXA, AUXB, AUXC, EMG, ORG)

S76-0434-05

1 Amp Relay for 90-series mobile

TK-690

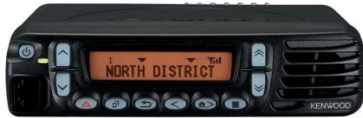
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Low Band FM Mobile Radios

INSTALLATION / TUNING CHARGES

| | |
|-------|--|
| L-846 | Package Dash/Single Head Remote for 90-series mobiles |
| L-854 | 90 Mobile Programming (with basic TX/RX check) |
| L-858 | Modify 90-series mobile Single Band (Single Head) Mobile for Pyramid Vehicular Repeater |
| L-859 | Modify 90-series mobile Single Band (Dual Head) Mobile for Pyramid Vehicular Repeater |
| L-861 | Install Horn Alert output relay for 90-series mobiles (1 amp max.) --- Part #S76-0407-05 Relay incl. |
| L-862 | Install Key Inserts for 90-series mobiles Note: For new radio tune orders only. Installs only the included KCH-10/11 key inserts. Must specify keys and placement (see Service Manuals for placement diagram, pg. 14). Also, see Service Manuals for technical details (pg. 14). Other Key Inserts are available from Parts Dept. See the "Service Related Accessories" section of the 90-series mobiles price pages for more information. |
| L-867 | Jumper foil for SB to pin 14 of accessory connector for 90-series mobile (Ref. 90-Series Mobile Service Manual, page 17/18) |
| L-870 | Simultaneous transpond and alert feature up-grade for 90-series mobiles |
| L-883 | Modify 90-series mobile for KCT-18 |
| L-891 | External speaker modification for 90-series mobile Control Head (13W) |
| L-903 | R640 mic input modification for 90-series mobile |
| L-910 | Install firmware 094F (90-series mobile * and # DTMF without PTT) Note: The firmware 094F gives the 90-series mobile the ability to generate a DTMF tone from the * and # keys without pushing the PTT button. |
| L-912 | 90-Series mobile low imp. mic. Input at RF deck |
| L-917 | EXT PTT / Local KMC-27 mic disable Purpose: Disables the KMC-27 mobile hand mic element when 90-series mobile external PTT is active. For use with data modems, GPS AVL data units, headset systems (motorcycles, ambulance, fire engines), vehicle intercom |

VHF/UHF Digital & FM Analog Mobile Radios

**All NX series mobiles include:**

- Standard Microphone (KMC-65M)
- Mounting Bracket
- DC Cable
- Blade Fuse
- Instruction Manual
- Premium Warranty: 3 Years*

* All Accessories / options: 1 Year

* TX Power is derated at 490-512 MHz

NX-800K: 450-489 MHz (30 W)
490-512 MHz (25 W)
NX-800HK: 450-489 MHz (45 W)
490-512 MHz (40 W)

GENERAL FEATURES

- 30W / 50W (136-174 MHz) Models
- 30W / 45W (400-470, 450-520 MHz) Models
- 512 CH-GID / 128 Zones
- Dash & Remote Mount
- 14 Character Alphanumeric Aliases
- Backlit Dot Matrix LCD
- Function/Status LCD Icons
- Multi-Language Display
- Date & 12/24 Hour Time Clock
- Transmit/Busy/Call Alert/Warn LED
- On/Off Power Control
- 4 Up/Down Selectors
- 6 Front PF Keys
- Emergency/AUX Key
- 4W Speaker Audio
- DB-25 Accessory Connector
- 9 Programmable AUX I/Os
- 2 Programmable AUX Outputs
- KPG-11D Windows® FPU
- Flash Firmware Upgrading
- MIL-STD-810 C/D/E/F/G
- IP-54/55 Water & Dust Intrusion
- PC Serial Interface
- SDM Manual Input
- Transparent Data Mode
- GPS Receiver Option

DIGITAL – GENERAL

- NXDN® Digital Air Interface
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill/Check
- Short & Long Data Messages
- GPS Location with Voice
- NXDN® Scrambler Included
- DES Encryption Module Option
- AES & DES Encryption Module Option
- AES/DES Software Key Loader Option

DIGITAL CONVENTIONAL MODE

- 64 Radio Access Numbers (RAN)
- Individual & Group Selective Call
- Mixed FM/Digital Operation
- Conventional IP Networks
- Site Roaming

DIGITAL TRUNKING MODE

- Individual Private Call
- Group Call & Broadcast Call
- Telephone Interconnect
- Transmission Trunked Mode
- Message Trunked Mode
- Call Queuing with Priority
- Late Entry (UID & GID)
- 4 Priority Monitor ID's
- Remote Group Add
- System Auto Select

DIGITAL - MULTI-SITE IP NETWORKSNEXEDGE Generation1 System

- 48site Trunked IP Network
- Auto Roaming Registration
- Group Registration

NEXEDGE Generation1 System Bridge

- 8 Trunked Networks per radio (each in a zone)
- UID Lists for each network

NEXEDGE Generation2 System (option)

- 1,152 sites Wide Area System
- Direct Frequency Assignment

SCAN

- Single Zone / Multi-Zone / List Scan
- Dual Priority Scan (Conventional)

ANALOG MODES - GENERAL

- 25 & 12.5 kHz Channels
- Conventional & LTR® Zones
- FleetSync®/II, MDC-1200, DTMF
- QT / DQT & Two-Tone (Conventional Zones Only)
- Voice Inversion Scrambler
- Analog Scrambler Board Capability

MPT ZONES (option)

- Single-Site Trunking
- Multi-Site Network Trunking
- 8 Network Capacity
- Network Roaming / Registration

FleetSync®/II (FM)

- PTT ID ANI / Caller ID
- Selective / Group Call
- Emergency, Status & Text Messages

MDC-1200

- PTT ID ANI / Caller ID
- Emergency, Radio Check & Inhibit

MODEL

| | |
|-----------|------------------------------------|
| NX-700K | 136-174 MHz 30W, 512 CH / 128 Zone |
| NX-700HK | 136-174 MHz 50W, 512 CH / 128 Zone |
| NX-800K | 450-520 MHz 30W, 512 CH / 128 Zone |
| NX-800K2 | 400-470 MHz 30W, 512 CH / 128 Zone |
| NX-800HK | 450-520 MHz 45W, 512 CH / 128 Zone |
| NX-800HK2 | 400-470 MHz 45W, 512 CH / 128 Zone |

MOBILE INSTALLATION ACCESSORIES

| | |
|--------|---|
| KAP-2 | Horn Alert/P.A. Relay Option |
| KCT-46 | Ignition sense cable (plugs directly into mobile chassis ignition sense line) |
| KLF-2 | Line Filter (suppresses alternator whine, 25dB, 25A max). |
| KMB-10 | Key lock adapter |
| KRK-10 | Remote Control Kit (a remote control cable (23 ft) is included) |

VHF/UHF Digital & FM Analog Mobile Radios

MOBILE INSTALLATION ACCESSORIES, CON'T

| | |
|----------|---|
| KCT-23M | DC Cable (35-50W Dash mount; pos/neg. 10 ft. leads) |
| KCT-23M3 | DC Cable (35-50W Remote mount; pos.23 ft.; neg. 3.3. ft. leads) |

CONTROL STATION INSTALLATION ACCESSORIES

| | |
|---------|--|
| KMC-9C | Control Station Desktop Microphone (8-pin mod. plug) |
| KMC-59C | Control Station Desktop Microphone (8-pin mod. plug) Note: Compatible with FDMA (analog / NXDN) and TDMA operations. |
| KMB-34 | Control Station Mounting Case for KPS-15 Power Supply and Mobiles (excludes TK-5x10/6110 series). (mobile mounting hardware included) |
| KPS-15 | DC Switching Power Supply (117/230 VAC; 23A max. continuous, 25A peak) |

MICROPHONES AND SPEAKERS

| | |
|---------|--|
| KMC-65M | MIL-SPEC Standard electret mobile microphone (8-pin mod. plug) |
| KMC-66M | MIL-SPEC Standard electret mobile microphone with 12 keypad (8-pin mod. plug) |
| KMC-9C | Control Station Desktop Microphone (8-pin mod. plug) |
| KMC-59C | Control Station Desktop Microphone (8-pin mod. plug) Note: Compatible with FDMA (analog / NXDN) and TDMA operations. |
| KES-5 | External speaker, 40W max input Note: requires KAP-2 (PA/HA unit) installed |

SOFTWARE & USB OPTIONS

| | |
|-------------|---|
| KPG-150AP | NEXEDGE OTAP Manager Windows Software. • License Includes 10 radios / 1 Serial Port* • To add more radios/serial ports, you must contact Kenwood Systems Division [1-800-TRUNKING] |
| KPG-AE1K | AES/DES Encryption Software Key Loader for KWD-AE31K Authentication by KPT-300LMC is required Note: KPG-AE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A). |
| KPG-DE1K | DES Encryption Software Key Loader for KWD-AE31K Authentication by KPT-300LMC is required Note: KPG-DE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D992A.1). |
| KWD-NX2G-10 | Gen2 Enhanced Option for NX-*00/*10/*11/*20 Portables & Mobiles Must order L-1812 for factory installation, or L-1813 for field-upgrade option Note: MPT Firmware and FPU do NOT compatible. MPTs will be available on 3Q FY2016 . |
| KWD-LIC-USB | USB Hardware Key for activating KWD-NX2G-10 options to NX-*00/*10/*11/*20 series without ESN. KWD-LIC-USB stores KWD-NX2G-10 options which are purchased separately and includes KPG-97USB software for activating radios. Note: - Must order L-1819. - Must purchase KWD-NX2G-10 separately. - KWD-LIC-USB Request Form that can be downloaded from Dealer Tools is required to order. - KWD-LIC-USB cannot be rechargeable. Must purchase it per every orders. - KWD-LIC-USB can store up to 50,000 KWD-NX2G-10 Gen2 Upgrade Options. - The licenses (KWD-NX2G-10) installed to the KWD-LIC-USB is NOT eligible for warranty compensation. |

OPTION MODULES

| | |
|-----------|--|
| KWD-AE30K | AES FIPS140-2 & DES Encryption Module (Multi-Key) Order a Labor Code L-1830 if installation is required. KWD-AE30K requires: a Motorola KVL3000 Plus/4000 key loader device. KWD-AE30K is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1). |
|-----------|--|

VHF/UHF Digital & FM Analog Mobile Radios

OPTION MODULES, CON'T

| | |
|-----------|--|
| KWD-AE31K | AES & DES Encryption Module (Multi-Key) Order a Labor Code L-1831 if installation is required. Note: Requires KPG-AE1/DE1 software key loader or Motorola KVL3000 Plus/4000 key loader device. KWD-AE31K is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1) |
|-----------|--|

FleetSync® & NEXEDGE® AVL & MESSAGING

| | |
|-----------|---|
| GA25MCX | Garmin On-dash Style Magnetic base GPS Antenna for GPS15XL-W Note: shipped loose only; Install GA25MCX antenna to GPS15XL-W before vehicle install; Refer to 180/NX-Series In-depth Technical Manuals for mobile installation. |
| GPS15XL-W | Garmin Internal GPS Receiver Board for FleetSync & NEXEDGE AVL Note: • Conventional & LTR operation • NEXEDGE® Conventional & Trunking operation • Requires GA25 MCX GPS antenna • Refer to 180/NX-Series & KAS-10 In-Depth Technical Manuals for installation, programming & KAS-10 software setup. Refer to www.garmin.com for GPS-15L-W technical specifications. • Option: Order L-1098 for Kenwood Long Beach installation |
| KAS-10 | FleetSync & NEXEDGE AVL & Messaging Software with NEXEDGE Trunking VoIP Dispatch Note: - Users can chose to operate Messaging, AVL or VoIP or all three if desired. Compatible with Windows® XP, VISTA & 7 and Microsoft®MapPoint®2006/2009/2010 (certain format bitmap images can be imported). Refer to KAS-10 product spec sheets and manuals for details. - NEXEDGE Gen2, Type-D Trunking and DMR System not supported. |

SERVICE RELATED ACCESSORIES

| | |
|------------|---|
| KPG-46XM | USB Programming interface cable |
| KPG-111DNK | Windows® Programming Software for NX-200/210/300/410/411/700/800/900/901 (Compliant with FCC Part 90 Narrowbanding) |

INSTALLATION / TUNING CHARGES

| | |
|--------|--|
| L-1085 | NX-700/800 Programming (with basic TX/RX check) |
| L-1094 | Install KAP-2 (Default) HR1/Internal Sp./PA |
| L-1098 | Install Garmin GPS15XL-W in NX-Series mobile for FleetSync® AVL |
| L-1099 | Assemble NX-700/800/900/901 with KRK-10 Remote Kit |
| L-1830 | Install KWD-AE30K in NX-700/800/900/901 series Mobile (Must purchase module separately) |
| L-1831 | Install KWD-AE31K in NX-700/800/900/901 series Mobile (Must purchase module separately) |

INSTALLATION / TUNING CHARGES, CON'T

| | |
|--------|--|
| L-1812 | Install Gen2 Enhanced Option in NX series radio (Must purchase KWD-NX2G-10 separately) |
| L-1813 | NX Series Radio Gen2 Enhanced Option FIELD-UPGRADE (Must purchase KWD-NX2G-10 separately) |
| L-1819 | Create KWD-LIC-USB and store KWD-NX2G-10 (Must purchase KWD-NX2G-10 separately) |

VHF/UHF Digital & FM Analog Mobile Radios

MPT FIRMWARE/ACCESSORIES/TUNING

| | |
|-------------|--|
| KPG-143DNK | Windows® Programming Software for NX series MPT (Compliant with FCC Part 90 Narrowbanding) (Dealer Level License ID included) Note: - Must order L-1727 for Network Level License ID & programming privileges. - Gen2 Enhanced Option (KWD-NX2G-10) for MPT will be available on 3Q FY2016. |
| KWD-NX10MPT | MPT Trunking Field Upgrade Kit for NX series radio Must order L-1729 Note: Not compatible with any other firmware options. Radio does not retain LTR trunking features once the MPT option is installed. |
| L-1726 | Install MPT option in NX series radio |
| L-1727 | Network Level License ID for KPG-143D(N) NX series Programmer |
| L-1728 | Retrofit Install of MPT option in NX series radio For previously purchased NX series radios. Order L-1728 through LMR order desk/rep. Ship radios to attn: Kenwood LMR Tuning, Long Beach for installation. Include Kenwood order number for L-1728 provided by order desk & copy of company P.O. or P.O. number. Note: see NX series MPT Introduction Sales Bulletin for details |
| L-1729 | NX Series Radio MPT Firmware FIELD-UPGRADE (Must purchase KWD-NX10MPT separately) |

-- IMPORTANT NOTES --

Encryption modules, key loaders and radios containing encryption are export controlled by the U.S. Department of Commerce Bureau of Industry & Security EAR regulations and may either require an Export License, are eligible for a License Exception (ENC) or are exportable with No License Required (NLR) depending on the country, the consignee and the intended use. High level encryption is a special commodity that may require an export license to most countries. See www.bis.gov for more information regarding export regulations. DO NOT SHIP encryption items outside the U.S. without proper DOC/BIS Export Licenses and/or compliances.

Kenwood may request the following information to be submitted at time of order (this information must meet Kenwood internal approvals prior to shipment even if being returned to Kenwood later:

a) Initial Destination: Initial delivery point if different from Ultimate Destination
(customer distribution center, headquarters, dealership, manufacturer's representative)

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

b) Ultimate Destination: Final delivery point(s); deployment/distribution

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

c) Intended Use of Radios: Law enforcement, security, operations, etc.

KWD-AE30 AES FIPS140-2 SCM , NIST Validation & Customer Shipping

A secure delivery method direct to the end user customer is required by the NIST AES FIPS 140-2 validation rules. For U.S. Federal Government entities the SCM must ship from JVCKENWOOD USA Corporation directly to the end user customer by a trusted carrier (FEDEX, UPS or a designated JVCKENWOOD USA Corporation employee); shipping/handling by a dealer or other entity is not acceptable. This may or may not be required by local/state government agencies or business/industrial users. Please check with the end use customer about their AES encryption handling requirements before ordering. Kenwood will not be responsible for shipments of KWD-AE30K modules to erroneous destinations specified on an order.

800/900 MHz Digital & FM Analog Mobile Radios

**NX-900 mobile includes:**

- Standard Microphone (KMC-65M)
- Mounting Bracket
- DC Cable
- Blade Fuse
- Instruction Manual
- Premium Warranty: 3 Years*

* All Accessories / options: 1 Year

GENERAL FEATURES

- 15W (806-870 MHz) Model
- 15W (896-941 MHz) Model
- 512 CH-GID / 128 Zones
- Dash & Remote Mount
- 14 Character Alphanumeric Aliases
- Backlit Dot Matrix LCD
- Function/Status LCD Icons
- Multi-Language Display
- Date & 12/24 Hour Time Clock
- Transmit/Busy/Call Alert/Warn LED
- On/Off Power Control
- 4 Up/Down Selectors
- 6 Front PF Keys
- Emergency/AUX Key
- 4W Speaker Audio
- DB-25 Accessory Connector
- 9 Programmable AUX I/Os
- 2 Programmable AUX Outputs
- KPG-111D Windows® FPU
- Flash Firmware Upgrading
- MIL-STD-810 C/D/E/F/G
- IP54/55 Water & Dust Intrusion
- PC Serial Interface
- SDM Manual Input
- Transparent Data Mode
- GPS Receiver Option

DIGITAL – GENERAL

- NXDN® Digital Air Interface
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill
- Remote Check
- Short & Long Data Messages
- GPS Location with Voice
- NXDN® Scrambler Included
- DES Encryption Module Option
- AES & DES Encryption Module Option
- AES/DES Software Key Loader Option

DIGITAL CONVENTIONAL MODE

- 64 Radio Access Numbers (RAN)
- Individual & Group Selective Call
- Mixed FM/Digital Operation
- Conventional IP Networks
- Site Roaming

DIGITAL TRUNKING MODE

- Individual Private Call
- Group Call & Broadcast Call
- Telephone Interconnect
- Transmission Trunked Mode
- Message Trunked Mode
- Call Queuing with Priority
- Late Entry (UID & GID)
- 4 Priority Monitor ID's
- Remote Group Add
- System Auto Select

DIGITAL - MULTI-SITE IP NETWORKSNEXEDGE Generation1 System

- 48site Trunked IP Network
- Auto Roaming Registration
- Group Registration

NEXEDGE Generation1 System Bridge

- 8 Trunked Networks per radio (each in a zone)
- UID Lists for each network

NEXEDGE Generation2 System (option)

- 1,152 sites Wide Area System
- Direct Frequency Assignment

SCAN

- Single Zone / Multi-Zone / List Scan
- Dual Priority Scan (Conventional)

ANALOG MODES - GENERAL

- 25** & 12.5 kHz Channels
- NPSPAC Channels*
- Conventional & LTR® Zones
- FleetSync®/II, MDC-1200, DTMF
- QT / DQT (Conventional Zones Only)
- Voice Inversion Scrambler
- Analog Scrambler Board Capability

MPT ZONES (option)

- Single-Site Trunking
- Multi-Site Network Trunking
- 8 Network Capacity
- Network Roaming / Registration

FleetSync®/II (FM)

- PTT ID ANI / Caller ID
- Selective / Group Call
- Emergency, Status & Text Messages

MDC-1200

- PTT ID ANI / Caller ID
- Emergency, Radio Check & Inhibit

MODEL

| | |
|---------|------------------------------------|
| NX-900K | 806-870 MHz 15W, 512 CH / 128 Zone |
| NX-901K | 896-941 MHz 15W, 512 CH / 128 Zone |

MOBILE INSTALLATION ACCESSORIES

| | |
|----------|--|
| KAP-2 | Horn Alert/P.A. Relay Option |
| KCT-46 | Ignition sense cable (plugs directly into mobile chassis ignition sense line). |
| KLF-2 | Line Filter (suppresses alternator whine, 25dB, 25A max). |
| KMB-10 | Key lock adapter |
| KRK-10 | Remote Control Kit (a remote control cable (23 ft) is included) |
| KCT-23M | DC Cable (35-50W Dash mount; pos/neg. 10 ft. leads) |
| KCT-23M3 | DC Cable (35-50W Remote mount; pos.23 ft.; neg. 3.3. ft. leads) |

CONTROL STATION INSTALLATION ACCESSORIES

| | |
|--------|---|
| KMC-9C | Control Station Desktop Microphone (8-pin mod. plug) |
| KMB-34 | Control Station Mounting Case for KPS-15 Power Supplies (mobile mounting hardware included) |
| KPS-15 | DC Switching Power Supply (117/230 VAC; 23A max. continuous, 25A peak) |

800/900 MHz Digital & FM Analog Mobile Radios

MICROPHONES AND SPEAKERS

| | |
|---------|--|
| KMC-65M | MIL-SPEC Standard electret mobile microphone (8-pin mod. plug) |
| KMC-66M | MIL-SPEC Standard electret mobile microphone with 12 keypad (8-pin mod. plug) |
| KMC-9C | Control Station Desktop Microphone (8-pin mod. plug) |
| KMC-59C | Control Station Desktop Microphone (8-pin mod. plug) Note: Compatible with FDMA (analog / NXDN) and TDMA operations. |
| KES-5 | External speaker, 40W max input Note: requires KAP-2 (PA/HA unit) installed. |

SOFTWARE & USB OPTIONS

| | |
|-------------|---|
| KPG-150AP | NEXEDGE OTAP Manager Windows Software. • License Includes 10 radios / 1 Serial Port* • To add more radios/serial ports, you must contact Kenwood Systems Division [1-800-TRUNKING]. |
| KPG-AE1K | AES/DES Encryption Software Key Loader for KWD-AE31K Authentication by KPT-300LMC is required Note: KPG-AE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D002A). |
| KPG-DE1K | DES Encryption Software Key Loader for KWD-AE31K Authentication by KPT-300LMC is required Note: KPG-DE1 is a U.S. DOC/BIS Export Controlled Item (ECCN 5D992A.1). |
| KWD-NX2G-10 | Gen2 Enhanced Option for NX-*00/*10/*11/*20 Portables & Mobiles <u>Must order L-1812 for factory installation, or L-1813 for field-upgrade option</u> Note: <u>MPT</u> Firmware and FPU do NOT compatible. MPTs will be available on 3Q FY2016 . |
| KWD-LIC-USB | USB Hardware Key for activating KWD-NX2G-10 options to NX-*00/*10/*11/*20 series <u>without ESN</u> . KWD-LIC-USB stores KWD-NX2G-10 options which are purchased separately and includes KPG-97USB software for activating radios. Note: - Must order L-1819. - Must purchase KWD-NX2G-10 separately. - KWD-LIC-USB Request Form that can be downloaded from Dealer Tools is required to order. - KWD-LIC-USB cannot be rechargeable. Must purchase it per every orders. - KWD-LIC-USB can store up to 50,000 KWD-NX2G-10 Gen2 Upgrade Options. - The licenses (KWD-NX2G-10) installed to the KWD-LIC-USB is NOT eligible for warranty compensation. |

OPTION MODULES

| | |
|-----------|--|
| KWD-AE30K | AES FIPS140-2 & DES Encryption Module (Multi-Key) Order a Labor Code L-1830 if installation is required. KWD-AE30K requires: a Motorola KVL3000 Plus/4000 key loader device. KWD-AE30K is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1). |
| KWD-AE31K | AES & DES Encryption Module (Multi-Key) Order a Labor Code L-1831 if installation is required. Note: Requires KPG-AE1/DE1 software key loader or Motorola KVL3000 Plus/4000 key loader device. KWD-AE31K is an U.S. DOC/BIS Export Controlled Item (ECCN 5A002A.1) |

FleetSync® & NEXEDGE® AVL & MESSAGING

| | |
|---------|--|
| GA25MCX | Garmin On-dash Style Magnetic base GPS Antenna for GPS15XL-W Note: shipped loose only; Install GA25MCX antenna to GPS15XL-W before vehicle install; Refer to 180/NX-Series In-depth Technical Manuals for mobile installation. |
|---------|--|

800/900 MHz Digital & FM Analog Mobile Radios

FleetSync® & NEXEDGE® AVL & MESSAGING, CON'T

| | |
|-----------|--|
| GPS15XL-W | Garmin Internal GPS Receiver Board for FleetSync & NEXEDGE AVL Note: <ul style="list-style-type: none">• Conventional & LTR operation.• NEXEDGE® Conventional & Trunking operation.• Requires GA25 MCX GPS antenna.• Refer to 180/NX-Series & KAS-10 In-Depth Technical Manuals for installation, programming & KAS-10 software setup. Refer to www.garmin.com for GPS-15L-W technical specifications.• Option: Order L-1098 for Kenwood Long Beach installation. |
| KAS-10 | FleetSync & NEXEDGE AVL & Messaging Software with NEXEDGE Trunking VoIP Dispatch Note: <ul style="list-style-type: none">- Users can chose to operate Messaging, AVL or VoIP or all three if desired. Compatible with Windows® XP, VISTA & 7 and Microsoft® MapPoint® 2006/2009/2010 (certain format bitmap images can be imported). Refer to KAS-10 product spec sheets and manuals for details.- NEXEDGE Gen2, Type-D Trunking and DMR System not supported. |

SERVICE RELATED ACCESSORIES

| | |
|------------|--|
| KPG-111DNK | Windows® Programming Software for NX-200/210/300/410/411/700/800/900/901 (Compliant with FCC Part 90 Narrowbanding). |
| KPG-46XM | USB Programming interface cable |

INSTALLATION / TUNING CHARGES

| | |
|--------|--|
| L-1094 | Install KAP-2 (Default) HR1/Internal Sp./PA |
| L-1098 | Install Garmin GPS15XL-W in NX-Series mobile for FleetSync® AVL |
| L-1099 | Assemble NX-700/800/900/901 with KRK-10 Remote Kit |
| L-1687 | NX-700/800/900/901 Flow Control Modification |
| L-1692 | NX-900/901 Programming (with basic TX/RX check) |
| L-1812 | Install Gen2 Enhanced Option in NX series radio (Must purchase KWD-NX2G-10 separately) |
| L-1813 | NX Series Radio Gen2 Enhanced Option FIELD-UPGRADE (Must purchase KWD-NX2G-10 separately) |
| L-1819 | Create KWD-LIC-USB and store KWD-NX2G-10 (Must purchase KWD-NX2G-10 separately) |
| L-1830 | Install KWD-AE30K in NX-700/800/900/901 series Mobile (Must purchase module separately) |
| L-1831 | Install KWD-AE31K in NX-700/800/900/901 series Mobile (Must purchase module separately) |

MPT FIRMWARE/ACCESSORIES/TUNING

| | |
|-------------|---|
| KPG-143DNK | Windows® Programming Software for NX series MPT (Compliant with FCC Part 90 Narrowbanding) (Dealer Level License ID included) Note: <ul style="list-style-type: none">- Must order L-1727 for Network Level License ID & programming privileges.- Gen2 Enhanced Option (KWD-NX2G-10) for MPT will be available on 3Q FY2016. |
| KWD-NX10MPT | MPT Trunking Field Upgrade Kit for NX series radio Must order L-1729 Note: Not compatible with any other firmware options. Radio does not retain LTR trunking features once the MPT option is installed. |
| L-1726 | Install MPT option in NX series radio |
| L-1727 | Network Level License ID for KPG-143D(N) NX series Programmer |
| L-1728 | Retrofit Install of MPT option in NX series radio For previously purchased NX series radios. Order L-1728 through LMR order desk/rep. Ship radios to attn: Kenwood LMR Tuning, Long Beach for installation. Include Kenwood order number for L-1728 provided by order desk & copy of company P.O. or P.O. number. Note: see NX series MPT Introduction Sales Bulletin for details. |
| L-1729 | NX Series Radio MPT Firmware FIELD-UPGRADE (Must purchase KWD-NX10MPT separately) |

800/900 MHz Digital & FM Analog Mobile Radios

-- IMPORTANT NOTES --

Encryption modules, key loaders and radios containing encryption are export controlled by the U.S. Department of Commerce Bureau of Industry & Security EAR regulations and may either require an Export License, are eligible for a License Exception (ENC) or are exportable with No License Required (NLR) depending on the country, the consignee and the intended use. High level encryption is a special commodity that may require an export license to most countries. See www.bis.gov for more information regarding export regulations. DO NOT SHIP encryption items outside the U.S. without proper DOC/BIS Export Licenses and/or compliances.

Kenwood may request the following information to be submitted at time of order (this information must meet Kenwood internal approvals prior to shipment even if being returned to Kenwood later:

a) Initial Destination: Initial delivery point if different from Ultimate Destination

(customer distribution center, headquarters, dealership, manufacturer's representative)

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

b) Ultimate Destination: Final delivery point(s); deployment/distribution

* Business/Agency Name:

* Address:

* Contact Person Name:

* Contact Phone:

c) Intended Use of Radios: Law enforcement, security, operations, etc.

KWD-AE30 AES FIPS140-2 SCM , NIST Validation & Customer Shipping

A secure delivery method direct to the end user customer is required by the NIST AES FIPS 140-2 validation rules. For U.S. Federal Government entities the SCM must ship from JVCKENWOOD USA Corporation directly to the end user customer by a trusted carrier (FEDEX, UPS or a designated JVCKENWOOD USA Corporation employee); shipping/handling by a dealer or other entity is not acceptable. This may or may not be required by local/state government agencies or business/industrial users. Please check with the end use customer about their AES encryption handling requirements before ordering. Kenwood will not be responsible for shipments of KWD-AE30K modules to erroneous destinations specified on an order.

800 MHz Digital & FM Analog Mobile Radios

**All NX-x20 series mobiles include:**

- Standard Microphone (KMC-65M)
- Mounting Bracket
- DC Cable
- 15A Fuse
- Instruction Manual
- Premium Warranty: 3 Years*

* All Accessories / options: 1 Year

GENERAL FEATURES

- 15W (806-870 MHz) Model
- 260 CH-GID / 128 Zones
- 10 Character Alphanumeric Aliases
- Backlit LCD & Keys
- Function/Status LCD Icons
- Transmit/Busy/Call Alert/Warn LED
- Blue Function/Status LED
- On/Off Power Control
- 4 Up/Down Selectors
- 6 Front PF Keys
- Emergency/AUX Key
- 4W Speaker Audio
- Zone / CH Number Voice Announcement
- DB-15 Accessory Connector
- 6 Programmable AUX I/Os
- KPG-141D Windows® FPU
- Flash Firmware Upgrading
- MIL-STD-810 C/D/E/F/G
- IP-54 Water & Dust Intrusion
- PC Serial Interface
- SDM Manual Input
- Transparent Data Mode
- Built-in GPS Receiver

DIGITAL GENERAL

- NXDN® Digital Air Interface
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill
- Remote Check
- Short & Long Data Messages
- GPS Location with Voice
- NXDN® Scrambler Included

DIGITAL CONVENTIONAL MODE

- 64 Radio Access Numbers (RAN)
- Individual & Group Selective Call
- Mixed FM/Digital Operation
- Conventional IP Networks
- Site Roaming

DIGITAL TRUNKING MODE

- Individual Private Call
- Group Call & Broadcast Call
- Telephone Interconnect
- Transmission Trunked Mode
- Message Trunked Mode
- Call Queuing with Priority
- Late Entry (UID & GID)
- 4 Priority Monitor ID's
- Remote Group Add
- System Auto Select

DIGITAL - MULTI-SITE IP NETWORKSNEXEDGE Generation1 System

- 48site Trunked IP Network
- Auto Roaming Registration
- Group Registration

NEXEDGE Generation1 System Bridge

- 8 Trunked Networks per radio (each in a zone)
- UID Lists for each network

NEXEDGE Generation2 System (option)

- 1,152 sites Wide Area System
- Direct Frequency Assignment

SCAN

- Single Zone / Multi-Zone / List Scan
- Dual Priority Scan (Conventional)

FM MODES - GENERAL

- 25 & 12.5 kHz Channels
- NPSPAC Channels
- Conventional & LTR® or MPT Zones
- FleetSync®/II, MDC-1200, DTMF
- QT / DQT (Conventional Zones Only)
- Voice Inversion Scrambler (16 Codes)

MPT ZONES*

- Single-Site Trunking
- Multi-Site Network Trunking
- 8 Network Capacity
- Network Roaming / Registration

FleetSync®/II (FM)

- PTT ID ANI / Caller ID
- Selective / Group Call
- Emergency, Status & Text Messages

MDC-1200**MODEL**

NX-920GK 806-870 MHz 15W, 260 CH / 128 Zone

MOBILE INSTALLATION ACCESSORIES

| | |
|---------|---|
| KCT-18 | Ignition sense cable (requires KCT-60M Acc. Cable Option) |
| KCT-36 | Extension Cable for KCT-34/35/39/40M/60M; 117.6 inches (9.8 ft) |
| KCT-60M | DB15-to-15pin Molex Adapter Cable |
| KLF-2 | Line Filter (suppresses alternator whine, 25dB, 25A max). |
| KMB-10 | Key lock adapter |

CONTROL STATION INSTALLATION ACCESSORIES

| | |
|---------|---|
| KMC-9C | Control Station Desktop Microphone (8-pin mod. plug) |
| KMC-59C | Control Station Desktop Microphone (8-pin mod. plug) Note: Compatible with FDMA (analog / NXDN) and TDMA operations. |
| KMB-34 | Control Station Mounting Case for KPS-15 Power Supply and Mobiles (excludes TK-5x10/6110 series). (mobile mounting hardware included) |
| KPS-15 | DC Switching Power Supply (117/230 VAC; 23A max. continuous, 25A peak) |

800 MHz Digital & FM Analog Mobile Radios

MICROPHONES AND SPEAKERS

| | |
|---------|---|
| KMC-65M | MIL-SPEC Standard electret mobile microphone (8-pin mod. plug) |
| KMC-66M | MIL-SPEC Standard electret mobile microphone with 12 keypad (8-pin mod. plug) |
| KMC-9C | Control Station Desktop Microphone (8-pin mod. plug) |
| KES-5 | External speaker, 40W max input Note: requires KCT-60M installed. |

SOFTWARE OPTIONS

| | |
|-------------|--|
| KPG-150AP | NEXEDGE OTAP Manager Windows Software. • License Includes 10 radios / 1 Serial Port* • To add more radios/serial ports, you must contact Kenwood Systems Division [1-800-TRUNKING]. |
| KWD-NX2G-10 | Gen2 Enhanced Option for NX-*00/*10/*11/*20 Portables & Mobiles Must order L-1812 for factory installation, or L-1813 for field-upgrade option Note: MPT Firmware and FPU do NOT compatible. MPTs will be available on 3Q FY2016 . |
| KWD-LIC-USB | USB Hardware Key for activating KWD-NX2G-10 options to NX-*00/*10/*11/*20 series without ESN . KWD-LIC-USB stores KWD-NX2G-10 options which are purchased separately and includes KPG-97USB software for activating radios. Note: - Must order L-1819. - Must purchase KWD-NX2G-10 separately. - KWD-LIC-USB Request Form that can be downloaded from Dealer Tools is required to order. - KWD-LIC-USB cannot be rechargeable. Must purchase it per every orders. - KWD-LIC-USB can store up to 50,000 KWD-NX2G-10 Gen2 Upgrade Options. - The licenses (KWD-NX2G-10) installed to the KWD-LIC-USB is NOT eligible for warranty compensation. |

FleetSync® & NEXEDGE® AVL & MESSAGING

| | |
|----------|--|
| KAS-10 | FleetSync & NEXEDGE AVL & Messaging Software with NEXEDGE Trunking VoIP Dispatch Note: - Users can chose to operate Messaging, AVL or VoIP or all three if desired. Compatible with Windows® XP, VISTA & 7 and Microsoft®MapPoint®2006/2009/2010 (certain format bitmap images can be imported). Refer to KAS-10 product spec sheets and manuals for details. - NEXEDGE Gen2, Type-D Trunking and DMR System not supported. |
| KRA-40GM | GPS Antenna |

SERVICE RELATED ACCESSORIES

| | |
|------------|---|
| KPG-141DNK | Windows® Programming Software for NX-220/320/420/720/820/920 (Compliant with FCC Part 90 Narrowbanding). |
| KPG-46XM | USB Programming interface cable |

INSTALLATION / TUNING CHARGES

| | |
|--------|--|
| L-1727 | Network Level License ID for KPG-143D(N) NX series Programmer |
| L-1751 | NX-720HG/820HG/920G Programming (with basic TX/RX check) |
| L-1812 | Install Gen2 Enhanced Option in NX series radio (Must purchase KWD-NX2G-10 separately) |
| L-1813 | NX Series Radio Gen2 Enhanced Option FIELD-UPGRADE (Must purchase KWD-NX2G-10 separately) |
| L-1819 | Create KWD-LIC-USB and store KWD-NX2G-10 (Must purchase KWD-NX2G-10 separately) |

MPT FIRMWARE/ACCESSORIES/TUNING

| | |
|------------|--|
| KPG-143DNK | Windows® Programming Software for NX series MPT (Compliant with FCC Part 90 Narrowbanding) (Dealer Level License ID included) Note: - Must order L-1727 for Network Level License ID & programming privileges. - Gen2 Enhanced Option (KWD-NX2G-10) for MPT will be available on 3Q FY2016. |
|------------|--|

800 MHz Digital & FM Analog Mobile Radios

MPT FIRMWARE/ACCESSORIES/TUNING

| | |
|-------------|---|
| KWD-NX10MPT | MPT Trunking Field Upgrade Kit for NX series radio Must order <u>L-1729</u> Note: Refer to NX series MPT Price Pages. Not compatible with any other firmware options. Radio does not retain LTR trunking features once the MPT option is installed. |
| L-1726 | Install MPT option in NX series radio |
| L-1728 | Retrofit Install of MPT option in NX series radio For previously purchased NX series radios. Order L-1728 through LMR order desk/rep. Ship radios to attn: Kenwood LMR Tuning, Long Beach for installation. Include Kenwood order number for L-1728 provided by order desk & copy of company P.O. or P.O. number. Note: see NX series MPT Introduction Sales Bulletin for details. |
| L-1729 | NX Series Radio MPT Firmware FIELD-UPGRADE (Must purchase KWD-NX10MPT separately). |

VHF/UHF Digital & FM Analog Mobile Radios

**All NX-x40 series mobiles include:**

- Standard Microphone (KMC-65M)
- Mounting Bracket
- DC Cable
- 15A Fuse
- Instruction Manual
- Premium Warranty: 3 Years*

* All Accessories / options: 1 Year

GENERAL FEATURES

- 50 W (136-174 MHz) Model
- 45 W (450-520 MHz) Model
- Max. 16 CH per Zone
- 2 Conventional Zones
- 2-Digit LED Channel Display
- Function/Status LED Dots
- Backlit Keys
- Transmit / Busy / Call Alert LED
- Blue Function/Status LED
- 9 Programmable Function Keys
- Emergency / AUX Key
- 4W Speaker Audio
- Voice CH# Announcement
- DB15 Accessory Interface
- 8 Programmable I/O Ports
- KPG-175DN Windows® FPU
- MIL-STD-810 C/D/E/F
- IP-54 Water & Dust Intrusion
- PC Serial Interface
- GPS Receiver Option

DIGITAL COMMON

- NXDN® Digital Air Interface
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias (TX Only)
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging
- Remote Stun/Kill
- Remote Check
- GPS Location with Voice
- NXDN® Scrambler Included

DIGITAL CONVENTIONAL MODE

- 64 Radio Access Numbers (RAN)
- Individual & Group Selective Call
- Conventional IP Networks
- Site Roaming

DIGITAL – TYPE-D TRUNKING MODE *

- Individual Call
- Group Call & All Group Call
- Emergency Call
- Paging Call
- Transmission Trunked Mode
- Late Entry
- ESN Validation
- Status Messaging

* Available with Hardware Version 2.0

SCAN

- Single Zone Scan
- Single Priority Scan

ANALOG MODE - GENERAL

- 12.5 kHz Channels
- Conventional Zones
- FleetSync®, MDC-1200, DTMF
- QT/DQT/Two-Tone
- Voice Inversion Scrambler (16 Codes)

FleetSync®

- PTT ID ANI
- Selective / Group Call
- Emergency Status
- Send GPS Data

MDC-1200

- PTT ID ANI

MODEL

| | |
|------------|--------------------------------------|
| NX-740HV/K | 136-174 MHz VHF 50W, 16 Ch / 2 Zones |
| NX-840HUK | 450-520 MHz UHF 45W, 16 Ch / 2 Zones |

MOBILE INSTALLATION ACCESSORIES

| | |
|---------|---|
| KCT-60M | DB15-to-15pin Molex Adapter Cable |
| KCT-18 | Ignition sense cable (requires KCT-60M Acc. Cable Option) |
| KCT-36 | Extension Cable for KCT-34/35/39/40M/60M; 117.6 inches (9.8 ft) |
| KLF-2 | Line Filter (suppresses alternator whine, 25dB, 25A max). |
| KMB-10 | Key lock adapter |

CONTROL STATION INSTALLATION ACCESSORIES

| | |
|---------|--|
| KMC-9C | Control Station Desktop Microphone (8-pin mod. plug) |
| KMC-59C | Control Station Desktop Microphone (8-pin mod. plug) |

Note: Compatible with FDMA (analog / NXDN) and TDMA operations.

| | |
|--------|--|
| KMB-34 | Control Station Mounting Case for KPS-15 Power Supply and Mobiles (excludes TK-5x10/6110 series). (mobile mounting hardware included) |
| KPS-15 | DC Switching Power Supply (117/230 VAC; 23A max. continuous, 25A peak) |

MICROPHONES AND SPEAKERS

| | |
|---------|---|
| KMC-65M | MIL-SPEC Standard electret mobile microphone (8-pin mod. plug) |
| KMC-66M | MIL-SPEC Standard electret mobile microphone with 12 keypad (8-pin mod. plug) |
| KES-5 | External speaker, 40W max input Note: requires KCT-60M installed. |

VHF/UHF Digital & FM Analog Mobile Radios

FleetSync® & NEXEDGE® AVL & MESSAGING

| | |
|-----------|--|
| GPS15XL-W | Garmin Internal GPS Receiver Board for NEXEDGE/FleetSync AVL Note: • Conventional operation only. • Requires GA25 MCX GPS antenna. • Refer to www.garmin.com for GPS-15XL-W technical specifications. • Option: Order L-1779 for Kenwood Long Beach installation. |
| GA25MCX | Garmin On-dash Style Magnetic base GPS Antenna for GPS15XL-W Note: shipped loose only; Install GA25MCX antenna to GPS15XL-W before vehicle install. |

SERVICE RELATED ACCESSORIES

| | |
|------------|---|
| KPG-46XM | USB Programming interface cable |
| KPG-175DNK | Windows® Programming Software for NX-740HV840HU |

TYPE-D TRUNKING ACTIVATION/TUNING

| | |
|------------|--|
| KWD-NXD40K | Type-D Trunking Option. Must order L-1800 or L-1801 . Note: Compatible with firmware version 3.00 or later. Only Hardware Version 2.0 can be available. |
| L-1800 | Factory Activation of Type-D Trunking Option. |
| L-1801 | Type-D Trunking Option FIELD-UPGRADE. To place an order, please complete the NEXEDGE Type-D Field Upgrade Form available on Kenwood Tools under Forms. Required information includes the exact model #s and serial number for each radio to be updated. |

INSTALLATION / TUNING CHARGES

| | |
|--------|---|
| L-1778 | NX-740H/840H Programming (with basic TX/RX check) |
| L-1779 | Install Garmin GPS15XL-W in NX-x40 Series mobile Note: The KGS-3 & GPS15XL-W are not compatible with KGP-2A/2B AVL systems. |



TK-D740HV/840HU

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VHF/UHF Digital & FM Analog Mobile Radios



All 40 series DMR mobiles include:

- Standard Microphone (KMC-65M)
- Mounting Bracket
- DC Cable
- 15A Fuse
- Instruction Manual
- Standard Warranty: 2 Years**

** All Accessories / options: 1 Year

Because of spurious signal (birdie), the following frequencies (and ± 10 kHz ranges) are not allowed;

- 149.7000 • 422.4000 • 480.0000
- 172.8000 • 441.6000 • 499.2000
- 403.2000 • 460.8000 • 518.4000

GENERAL FEATURES

- 50 W (136-174 MHz) Model
- 45 W (450-520, 400-470 MHz) Model
- Max. 16 CH per Zone
- 2 Conventional Zones
- 2-Digit LED Channel Display
- Function/Status LED Dots
- Backlit Keys
- Transmit /Busy / Call Alert LED
- 9 Programmable Function Keys
- Emergency / AUX Key
- 4W Speaker Audio
- Digital/Analog Mixed Mode
- Voice CH# Announcement
- DB15 Accessory Interface
- 8pin Programmable I/O Ports
- KPG-166DN Windows® FPU
- MIL-STD-810 C/D/E/F/G
- IP54 Dust & Water Protection
- PC Serial Interface
- GPS Receiver Option

DIGITAL COMMON

- DMR Tier II Conventional
- AMBE+2™ VOCODER
- 12.5 kHz Channels
- Call Interrupt (Direct & Repeater Mode)
- Paging Call
- Emergency Call
- All Group Call
- Late Entry
- Status Messaging
- Remote Monitor

DIGITAL CONVENTIONAL MODE

- Individual & Group Selective Call
- Conventional IP Networks

SCAN

- Single/Multi Zone Scan
- Single Priority Scan (Conventional)

ANALOG MODE - GENERAL

- 12.5 kHz Channels
- Conventional Zones
- DTMF
- QT/DQT, Two-Tone
- Voice Inversion Scrambler (16 Codes)

FleetSync®

- PTT ID ANI
- Selective / Group Call
- Emergency Status
- Send GPS Data

*1 Status Message for FleetSync is **NOT** supported.

*2 Please see important notice in the GPS15XL-W.

MODEL

| | |
|-------------|--------------------------------------|
| TK-D740HV/K | 136-174 MHz VHF 50W, 16 Ch / 2 Zones |
| TK-D840HUK | 450-520 MHz UHF 45W, 16 Ch / 2 Zones |

MOBILE INSTALLATION ACCESSORIES

| | |
|---------|---|
| KCT-60M | DB15-to-15pin Molex Adapter Cable |
| KCT-18 | Ignition sense cable (requires KCT-60M Acc. Cable Option) |
| KCT-36 | Extension Cable for KCT-34/35/39/40M/60M; 117.6 inches (9.8 ft) |
| KLF-2 | Line Filter (suppresses alternator whine, 25dB, 25A max). |
| KMB-10 | Key lock adapter |

CONTROL STATION INSTALLATION ACCESSORIES

| | |
|---------|--|
| KMC-9C | Control Station Desktop Microphone (8-pin mod. plug) Note: Available for Analog only. NOT compatible with Digital (TDMA) operations. |
| KMC-59C | Control Station Desktop Microphone (8-pin mod. plug) Note: Compatible with FDMA (analog / NXDN) and TDMA (DMR) operations. |
| KMB-34 | Control Station Mounting Case for KPS-15 Power Supply and Mobiles (excludes TK-5x10/6110 series). |
| KPS-15 | DC Switching Power Supply (117/230 VAC; 23A max. continuous, 25A peak) |

MICROPHONES AND SPEAKERS

| | |
|---------|---|
| KMC-65M | MIL-SPEC Standard electret mobile microphone (8-pin mod. plug) |
| KMC-66M | MIL-SPEC Standard electret mobile microphone with 12 keypad (8-pin mod. plug) |
| KES-5 | External speaker, 40W max input Note: requires KCT-60M installed |



TK-D740HV/840HU

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VHF/UHF Digital & FM Analog Mobile Radios

FleetSync® & NEXEDGE® AVL & MESSAGING

| | |
|-----------|---|
| GPS15XL-W | <p>Garmin Internal GPS Receiver Board for DMR/FleetSync® AVL</p> <p>Important Notice:</p> <p>Firmware version 1.2 or later to use GPS functions require to be updated WITHOUT a GPS Receiver initially. Once firmware is updated 1.2 or later, it may be allowed any firmware version up with installed GPS Receiver. Please see Dealer Tools under support for the detail.</p> <p>Note:</p> <ul style="list-style-type: none">• Conventional operation only• Requires GA25 MCX GPS antenna• Refer to www.garmin.com for GPS-15XL-W technical specifications.• Option: Order L-1834 for Kenwood Long Beach installation |
|-----------|---|

| | |
|---------|--|
| GA25MCX | <p>Garmin On-dash Style Magnetic base GPS Antenna for GPS15XL-W</p> <p>Note: shipped loose only; Install GA25MCX antenna to GPS15XL-W before vehicle install.</p> |
|---------|--|

SERVICE RELATED ACCESSORIES

| | |
|------------|---|
| KPG-46XM | USB Programming interface cable |
| KPG-166DNK | Windows® Programming Software for TK-D240V/340U/740HV/840HU |

INSTALLATION / TUNING CHARGES

| | |
|---|--|
| L-1799 | TK-D740HV/840HU Programming (with basic TX/RX check) |
| L-1834 | Install Garmin GPS15XL-W in TK-Dx40 Series mobile |
| Note: The KGS-3 & GPS15XL-W are not compatible with KGP-2A/2B AVL systems. | |

TK-7180/8180

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VHF/UHF Trunking & Conventional Mobile Radios



All 180 series mobiles include:

- Standard Microphone (KMC-65M)
- Mounting Bracket
- DC Cable
- Blade Fuse
- Instruction Manual
- Premium Warranty: 3 Years*

* All Accessories / options: 1 Year

* TX Power is derated at 490-512 MHz

TK-8180K: 450-489 MHz (30 W)
490-512 MHz (25 W)
TK-8180HK: 450-489 MHz (45 W)
490-512 MHz (40 W)

GENERAL FEATURES

- 30/50 W (136-174 MHz)
- 30/45 W (450-520*, 400-470 MHz)
- Conventional & LTR® Zones
- MPT1327 Trunking Option
- Remote Control Head Option
- 12 Character Alphanumeric Aliases
- Backlit Dot Matrix LCD
- 3-Digit Sub-Display
- Function / Status LCD Icons
- RSSI Indicator
- Date & 12/24 Hour Time Clock
- Transmit / Busy / Call Alert / Warn LED
- 6 Backlit PF Keys
- Emergency / AUX Key
- Enhanced Kenwood Audio
- Front Panel Speaker
- Companded Audio
- Voice Inversion Scrambler Built-in
- Easy Option Port
- Encryption / ANI Board Control
- Emergency Call Features
- DTMF Encode / Decode
- Special Alert Tone Patterns
- Call Key
- Time Out Timer
- Busy Channel Lockout
- Timed Power Off
- DB-25 Accessory Connector
- 9 Programmable AUX I/Os
- 2 Programmable AUX Outputs
- Ignition Sense
- Public Address / Horn Alert Option
- MIL-Spec Standard Mic
- MIL-Spec 12-Key DTMF Mic Option
- Windows® Programming & Tuning
- Windows® Firmware Uploading
- Front Panel Test / Tune
- Cloning
- MIL-STD-810 C/D/E/F/G
- MIL-STD "Driven-Rain"
- IP-54/55 Water & Dust Intrusion

CONVENTIONAL ZONES

- 512 Channels / 128 Zones
- QT / DQT
- Two-Tone Decode
- Single / Two-Tone Encode
- Operator Selectable Tone
- Dual Priority Scan
- Single & Multi-Zone Scan
- List Scan

TRUNKED ZONES

- 512 GID / 128 Zones
- Kenwood LTR® Features

FleetSync®

- FleetSync® or FleetSync® II
- PTT ID Digital ANI
- Selective Call & Group Call
- Status Messaging
- Emergency Status
- Caller ID Display
- Short & Long Text Messages
- Power On/Off Status Messages
- Input / Output Status Messages
- FleetSync® GPS Ready
- Send GPS PF Key
- PTT ID & Emergency GPS Reporting
- Status Message Block GPS Reporting
- Ignition On/Off GPS Reporting
- VGS-1 GPS Data Storage
- PC Serial Interface

MPT ZONES (option)

- Single-Site Trunking
- Multi-Site Network Trunking
- 8 Network Capacity
- Network Roaming / Registration

MDC-1200

- PTT ID Digital ANI
- Caller ID Display
- Emergency Status
- Radio Check
- Radio Inhibit

MODEL

| | |
|------------|---|
| TK-7180K | 136-174 MHz 30W, 512 CH / 128 Zone CONV-& LTR |
| TK-7180HK | 136-174 MHz 50W, 512 CH / 128 Zone CONV-& LTR |
| TK-8180K | 450-520 MHz 30W, 512 CH / 128 Zone CONV-& LTR |
| TK-8180HK | 450-520 MHz 45W, 512 CH / 128 Zone CONV-& LTR |
| TK-8180K2 | 400-470 MHz 30W, 512 CH / 128 Zone CONV-& LTR |
| TK-8180HK2 | 400-470 MHz 45W, 512 CH / 128 Zone CONV-& LTR |

MOBILE INSTALLATION ACCESSORIES

| | |
|--------|---|
| KAP-2 | Horn Alert/P.A. Relay Option Note: For MPT, HA operates in Trunked Mode only. |
| KCT-46 | Ignition sense cable (plugs directly into mobile chassis ignition sense line). |
| KLF-2 | Line Filter (suppresses alternator whine, 25dB, 25A max). |
| KMB-10 | Key lock adapter. |
| KRK-10 | Remote Control Kit (a remote control cable (23 ft) is included). |

CONTROL STATION INSTALLATION ACCESSORIES

| | |
|---------|--|
| KMC-9C | Control Station Desktop Microphone (8-pin mod. plug). |
| KMC-59C | Control Station Desktop Microphone (8-pin mod. plug) Note: Compatible with FDMA (analog / NXDN) and TDMA operations. |
| KMB-34 | Control Station Mounting Case for KPS-15 Power Supply and Mobiles (excludes TK-5x10/6110 series). (mobile mounting hardware included) |
| KPS-15 | DC Switching Power Supply (117/230 VAC; 23A max. continuous, 25A peak). |

TK-7180/8180

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VHF/UHF Trunking & Conventional Mobile Radios

MICROPHONES AND SPEAKERS

| | |
|---------|--|
| KMC-65M | MIL-SPEC Standard electret mobile microphone (8-pin mod. plug) |
| KMC-66M | MIL-SPEC Standard electret mobile microphone with 12 keypad (8-pin mod. plug) |
| KMC-9C | Control Station Desktop Microphone (8-pin mod. plug) |
| KES-5 | External speaker, 40W max input Note: requires KAP-2 (PA/HA unit) installed. |

FleetSync® MOBILE DATA TERMINAL

| | |
|----------|---|
| KPG-71DK | Windows® Programming Software for KDS-100 |
| KCT-40M | Radio Interface Cable for KGP-2A/2B & KDS-100 |
| KCT-36 | Extension Cable for KCT-34/35/39/40M; 117.6 inches (9.8 ft) |

FleetSync® MESSAGING

| | |
|----------|--|
| KAS-2FSD | FleetDispatchPRO: FleetSync® messaging dispatch software for PC Note: <ul style="list-style-type: none"> TK-7180/8180 base mobile requires a DB-25 PC serial cable to connect to the base computer (purchase aftermarket separately). Supports FleetSync® PTT ID, Emergency, Status/Text Messaging for all FleetSync compatible portables & mobiles. KDS-100 fleet units are compatible with the KAS-2FSD FleetSync calling & messaging features. Refer to KAS-2FSD spec sheet for detailed features & requirements |
|----------|--|

FleetSync® AVL & MESSAGING

| | |
|-----------|---|
| KAS-10 | FleetSync & NEXEDGE AVL & Messaging Software with NEXEDGE Trunking VoIP Dispatch Note: Users can chose to operate Messaging, AVL or VoIP or all three if desired. Compatible with Windows® XP, VISTA & 7 and Microsoft® MapPoint® 2006/2009/2010 (certain format bitmap images can be imported). Refer to KAS-10 product spec sheets and manuals for details. |
| GPS15XL-W | Garmin Internal GPS Receiver Board for FleetSync® AVL Note: <ul style="list-style-type: none"> Conventional & LTR operation only Requires GA25 MCX GPS antenna Option: Order L-1033 for Kenwood Long Beach installation |
| GA25MCX | Garmin On-dash Style Magnetic base GPS Antenna for GPS15XL-W Note: shipped loose only; Install GA25MCX antenna to GPS15XL-W before vehicle install; Refer to 180/NX-Series In-Depth Technical Manuals for mobile installation. |

FIRMWARE OPTIONS

| | |
|------------|---|
| KWD-180MPT | MPT Trunking Field Upgrade Kit for 180-Series Must order L-1620 Note: Refer to 180-Series MPT Price Pages and 180-Series MPT In-Depth Technical Manuals for feature details (available from technical support). Not compatible with any other firmware options Radio does not retain all normal 180-Series conventional or LTR trunking features once the MPT option is installed. |
| KWD-180TFS | TFS-- Tactical Feature Set-- Field Upgrade Kit for 180-Series Must order L-1625 Note: Refer to 180-Series "Tactical Feature Set" In-Depth Technical Manual for feature details (available from technical support). Not compatible with any other firmware options. |

SERVICE RELATED ACCESSORIES

| | |
|-----------|--|
| KPG-46XM | USB Programming interface cable |
| KPG-89DNK | Windows® Programming Software for TK-2180/3180/7180/8180 (Compliant with FCC Part 90 Narrowbanding) Note: Self-programming & Tactical Feature Set* functions are not available. * KPG-89DK is required for Tactical Feature Set. KPG-89DK is no longer supported or distributed by Kenwood. |

Contact Kenwood Parts for Price and Availability 800-367-7514 on the following:

| | |
|-------------|--|
| E30-3382-05 | Clone cable |
| J29-0662-03 | Mounting bracket for TK-7180/8180/7160/8160--same as supplied w/ radio (order N99-2039-05 for mounting screw set). |

TK-7180/8180

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VHF/UHF Trunking & Conventional Mobile Radios

INSTALLATION / TUNING CHARGES

| | |
|--------|--|
| L-965 | TK-7180/8180 Programming (with basic TX/RX check) |
| L-966 | Install KAP-2 (Default) HR1/Internal Sp./PA |
| L-968 | Assemble TK-7180/8180 with KRK-10 Remote Kit |
| L-1010 | Install KAP-2 (External Sp.) HR1/External Sp./PA |
| L-1033 | Install Garmin GPS15XL-W in 180-Series mobile for FleetSync® AVL Note: The KGS-3 & GPS15XL-W are not compatible with KGP-2A/2B AVL systems. |
| L-1052 | TK-7180/8180 TFS INSTALLATION Note: KPG-89DK is required to program the TFS (Tactical Feature Set). KPG-89DK is no longer supported or distributed by Kenwood. TFS will not work with KPG-89DNK. |
| L-1620 | 180 Portable KWD-180MPT FIELD-UPGRADE (Must purchase KWD-180MPT separately) |
| L-1625 | 180 Portable KWD-180TFS FIELD-UPGRADE (Must purchase KWD-180TFS separately) |

MPT FIRMWARE/ACCESSORIES/TUNING

| | |
|-----------|---|
| KMC-32 | Standard mobile microphone with 16-key DTMF (8-pin mod. plug) |
| KPG-96DNK | Windows® Programming Software for 180-Series MPT (Compliant with FCC Part 90 Narrowbanding) (Dealer Level License ID included) Note: Must order L-1013 for Network Level License ID & programming privileges. |
| L-1012 | Install MPT option in 180-Series radio |
| L-1013 | Network Level License ID for KPG-96D(N) 180-Series Programmer |
| L-1014 | Retrofit Install of MPT option in 180-Series radio (for previously purchased 180-Series radios.) Order L-1014 through LMR order desk/rep. Ship radios to attn: Kenwood LMR Tuning, Long Beach for installation. Include Kenwood order number for L-1014 provided by order desk & copy of company P.O. or P.O. number. Note: Only certain Serial Number Lots produced in late 2004 and later can be retrofitted - see 180-Series MPT Introduction Sales Bulletin for details. |

TK-7360HV/8360HU v2.0

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VHF/UHF Trunking & Conventional Mobile Radios



All 360 series mobiles include:

- Standard Microphone (KMC-65M)
- Mounting Bracket
- DC Cable
- 15A Fuse
- Instruction Manual
- Standard Warranty: 2 Years*

* All Accessories / options: 1 Year

GENERAL FEATURES

- 50 W (136-174 MHz) Model
- 45 W (450-520 MHz) Model
- Conventional & LTR® Zones
- 10-Character Alphanumeric Aliases
- Backlit LCD & Keys
- Function/Status LCD Icons
- Blue Function / Status LED
- Transmit /Busy / Call Alert LED
- 10 Programmable Function Keys
- Emergency / AUX Key
- Front Panel Speaker
- Companded Audio
- Voice Inversion Scrambler Built-in
- 16 Scrambler Codes (per CH)
- Encryption / Board Control
- Emergency Call Features
- Lone Worker Alert
- DTMF Encode / Decode
- Special Alert Tone Patterns
- Busy Channel Lockout
- Time Out Timer
- Timed Power Off
- DB15 Accessory Interface
- 8 Programmable I/O Ports
- Ignition Sense
- Public Address / Horn Alert Output
- MIL-Spec Standard Mic
- MIL-Spec 12-Key DTMF Mic Option
- Windows® Programming & Tuning
- Easy Option Ports (26-pin)
- Cloning
- MIL-STD-810 C/D/E/F/G
- IP54 Water & Dust Intrusion

CONVENTIONAL ZONES

- 128 Channels / 128 Zones
- QT / DQT
- Two-Tone Decode
- Single & Two-Tone Encode
- Operator Selectable Tone
- Single Priority Scan
- Single / Multi-Zone Scan

TRUNKED ZONES

- 128 GID / 128 Zones
- Kenwood LTR® Feature

FleetSync® /II (FM)

- PTT ID Digital ANI
- Selective Call & Group Call
- Paging Call
- Status Messaging
- Emergency Status
- Caller ID Display
- Input / Output Status Messages
- FleetSync® GPS Ready
- Send GPS PF Key
- PTT ID & Emergency GPS Reporting
- GPS Auto Reporting

MDC-1200

- PTT ID Digital ANI
- Caller ID Display
- Emergency Status
- Radio Check
- Radio Inhibit

MODEL

| | |
|-------------|---|
| TK-7360HV/K | 136-174 MHz 50W, 128 CH / 128 Zone CONV-& LTR |
| TK-8360HUK | 450-520 MHz 45W, 128 CH / 128 Zone CONV-& LTR |

MOBILE INSTALLATION ACCESSORIES

| | |
|---------|---|
| KCT-60M | DB15-to-15pin Molex Adapter Cable |
| KCT-18 | Ignition sense cable (requires KCT-60M Acc. Cable Option) |
| KCT-36 | Extension Cable for KCT-34/35/39/40M/60M; 117.6 inches (9.8 ft) |
| KLF-2 | Line Filter (suppresses alternator whine, 25dB, 25A max). |
| KMB-10 | Key lock adapter |

CONTROL STATION INSTALLATION ACCESSORIES

| | |
|--------|---|
| KMC-9C | Control Station Desktop Microphone (8-pin mod. plug) |
| KMB-34 | Control Station Mounting Case for KPS-15 Power Supply and Mobiles (excludes TK-5x10/6110 series). (mobile mounting hardware included) |
| KPS-15 | DC Switching Power Supply (117/230 VAC; 23A max. continuous, 25A peak) |

MICROPHONES AND SPEAKERS

| | |
|---------|---|
| KMC-65M | MIL-SPEC Standard electret mobile microphone (8-pin mod. plug) |
| KMC-66M | MIL-SPEC Standard electret mobile microphone with 12 keypad (8-pin mod. plug) |
| KMC-9C | Control Station Desktop Microphone (8-pin mod. plug) |
| KMC-59C | Control Station Desktop Microphone (8-pin mod. plug) |
| | Note: Compatible with FDMA (analog) and TDMA operations. |
| KES-5 | External speaker, 40W max input |
| | Note: requires KCT-60M installed. |

TK-7360HV/8360HU v2.0

VHF/UHF Trunking & Conventional Mobile Radios

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FleetSync® AVL

GPS15XL-W Garmin Internal GPS Receiver Board for FleetSync® AVL

Note:

- Conventional operation only
- Requires GA25 MCX GPS antenna
- Refer to www.garmin.com for GPS-15L-W technical specifications.
- Option: Order **L-1690** for Kenwood Long Beach installation

GA25MCX Garmin On-dash Style Magnetic base GPS Antenna for GPS15XL-W

Note: shipped loose only; Install GA25MCX antenna to GPS15XL-W before vehicle install.

SERVICE RELATED ACCESSORIES

KPG-135DNK Windows® Programming Software for TK-7360/8360

KPG-46XM USB Programming interface cable

Contact Kenwood Parts for Price and Availability 800-367-7514 on the following:

E30-3382-05 Clone cable

J29-0662-03 Mounting bracket - same as supplied w/ radio
(order N99-2039-05 for mounting screw set)

INSTALLATION / TUNING CHARGES

L-1689 TK-7360/8360 Programming (with basic TX/RX check)

L-1690 Install Garmin GPS15XL-W in 360-Series mobile for FleetSync® AVL

L-1693 Install VGS-1 Voice Guide & Storage Unit

Note: VGS-1 installation precludes any ANI or encryption board installation.

TK-7302HV/8302HU

VHF/UHF Conventional Mobile Radios

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All 302 series mobiles include:

- Standard Microphone (KMC-65M)
- Mounting Bracket
- DC Cable
- 15A Fuse
- Instruction Manual
- Standard Warranty: 2 Years*

* All Accessories / options: 1 Year

GENERAL FEATURES

- 50 W (136-174 MHz) Model
- 45 W (450-520 MHz) Model
- Conventional Zones
- 16 Channels / 2 Zones
- Single Priority Scan
- Single / Multi-Zone Scan
- 2-Digit LED Channel Display
- Function/Status LED Dots
- Blue Function/Status LED
- Transmit/Busy / Call Alert LED
- Backlit Keys
- 9 Programmable Function Keys
- Emergency / AUX Key
- Front Panel Speaker
- Companded Audio
- Voice CH# Announcement (8 Languages)
- Voice Inversion Scrambler Built-in
- 16 Scrambler Codes (per CH)
- Encryption Board Control
- Emergency Call Features
- Lone Worker Alert
- QT / DQT
- Operator Selectable Tone
- Two-Tone Decode
- Single & Two-Tone Encode
- DTMF Encode / Decode
- Special Alert Tone Patterns
- Busy Channel Lockout
- Time Out Timer

- DB15 Accessory Interface
- 8 Programmable I/O Ports
- Ignition Sense
- Public Address / Horn Alert Output
- MIL-Spec Standard Mic
- MIL-Spec 12-Key DTMF Mic Option
- Windows® Programming & Tuning
- Cloning
- MIL-STD-810 C/D/E/F/G
- IP-54 Water & Dust Intrusion

FleetSync® /I (FM)

- PTT ID Digital ANI
- Selective Call & Group Call
- Paging Call
- Status Messaging
- Emergency Status
- Input / Output Status Messages
- FleetSync® GPS Ready
- Send GPS PF Key
- PTT ID & Emergency GPS Reporting
- Ignition On/Off GPS Reporting

MDC-1200

- PTT ID Digital ANI
- Emergency Status
- Radio Check
- Radio Inhibit

MODEL

| | |
|-----------|--|
| TK-7302HV | 136-174 MHz 50W, 16 CH / 2 Zone Conventional |
| TK-8302HU | 450-520 MHz 45W, 16 CH / 2 Zone Conventional |

MOBILE INSTALLATION ACCESSORIES

| | |
|---------|---|
| KCT-60M | DB15-to-15pin Molex Adapter Cable |
| KCT-18 | Ignition sense cable (requires KCT-60M Acc. Cable Option) |
| KCT-36 | Extension Cable for KCT-34/35/39/40M/60M; 117.6 inches (9.8 ft) |
| KLF-2 | Line Filter (suppresses alternator whine, 25dB, 25A max). |
| KMB-10 | Key lock adapter |

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| | |
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| KES-5 | External speaker, 40W max input Note: requires KCT-60M installed. |

TK-7302HV/8302HU

VHF/UHF Conventional Mobile Radios

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FleetSync® AVL

GPS15XL-W Garmin Internal GPS Receiver Board for FleetSync® AVL

Note:

- Conventional operation only.
- Requires GA25 MCX GPS antenna.
- Refer to www.garmin.com for GPS-15L-W technical specifications.
- Option: Order **L-1643** for Kenwood Long Beach installation.

GA25MCX Garmin On-dash Style Magnetic base GPS Antenna for GPS15XL-W
Note: shipped loose only; Install GA25MCX antenna to GPS15XL-W before vehicle install.

SERVICE RELATED ACCESSORIES

KPG-46XM USB Programming interface cable

KPG-124DNK Windows® Programming Software for TK-7302/8302
(Compliant with FCC Part 90 Narrowbanding).

Contact Kenwood Parts for Price and Availability 800-367-7514 on the following:

E30-3382-05 Clone cable

J29-0662-03 Mounting bracket - same as supplied w/ radio
(order N99-2039-05 for mounting screw set).

INSTALLATION / TUNING CHARGES

L-1642 TK-7302/8302 Programming (with basic TX/RX check)

L-1643 Install Garmin GPS15XL-W in 302-Series mobile for FleetSync® AVL

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<http://www.ameradio.com>

