

Iridium GO! exec Premium Dual Mode Antenna Kit Installation Guide

Home » iridium » Iridium GO! exec Premium Dual Mode Antenna Kit Installation Guide 🖺



Contents

- 1 Iridium GO! exec Premium Dual Mode Antenna Kit
- **2 Product Information**
- **3 Product Usage Instructions**
- **4 OVERVIEW**
- 5 Kit contents
- **6 Antenna and Cable Installation**
- 7 Permanent Iridium GO! exec Mounting-Bracket
- 8 Removable Iridium GO! exec Mounting Bracket Installation
- 9 Specifications
- 10 Documents / Resources
 - 10.1 References
- 11 Related Posts



Iridium GO! exec Premium Dual Mode Antenna Kit



Product Information

- The Iridium GO! exec Premium Dual Mode Antenna Kit is a product designed for use with the Iridium GO! exec device. This installation guide provides information on how to install and use the antenna kit. It is important to read and understand this guide, as well as the Iridium GO! exec User Manual, including the safety warnings and information, to ensure safe and proper usage of the product.
- Please note that this installation guide may be subject to revisions or withdrawal without prior notice as product development continues or new features are introduced. The latest version of the installation guide can be found on the official Iridium website.
- If you do not have the Iridium GO! exec User Manual, it can also be obtained from the official Iridium website or by contacting customer support at 1-866-947-4348 (or +1-480-752-5155 for outside U.S.) and requesting a copy to be sent to you.
- It is important to respect intellectual property rights and copyright laws when using the Iridium GO! exec Premium Dual Mode Antenna Kit. You are responsible for ensuring proper use of third-party copyrighted materials. Any violations may result in legal consequences, and you agree to defend, indemnify, and hold Iridium harmless in such cases.

Product Usage Instructions

Kit contents:

The Iridium GO! exec Premium Dual Mode Antenna Kit includes the following items:

- (A) 1 x Iridium Dual Mode Passive Omnidirectional Antenna Kit
- (B) 1 x 5m/16.404ft Passive Antenna Cable

Antenna and Cable Installation:

Refer to the Iridium GO! exec User Manual for detailed instructions on how to install the antenna and cable.

Ensure you have the necessary tools and follow the safety guidelines provided.

Permanent Iridium GO! exec Mounting-Bracket Installation:

 Refer to the Iridium GO! exec User Manual for detailed instructions on how to install the permanent mounting bracket for the Iridium GO! exec device. Follow the step-by-step instructions and ensure proper alignment and secure attachment.

Removable Iridium GO! exec Mounting Bracket Installation:

 Refer to the Iridium GO! exec User Manual for detailed instructions on how to install the removable mounting bracket for the Iridium GO! exec device. Follow the provided instructions to attach and detach the bracket as needed.

Specifications:

- The antenna kit includes various components with specific specifications. Refer to the Iridium GO! exec User Manual for detailed specifications of each component, including:
- 5m/17ft Passive SAT Antenna Cable
- 5.25m/17.22ft GNSS Antenna Cable
- Iridium GO! exec Cable Adapter

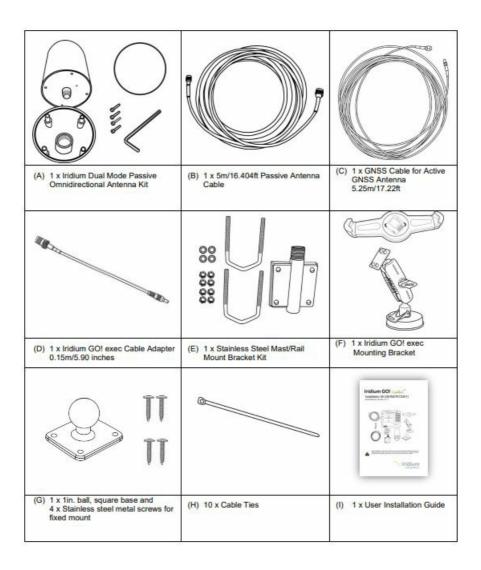
Ensure you understand the specifications of each component for proper installation and usage.

OVERVIEW 13.07 Note the first of the control of t

Prior to installing or using Iridium GO! exec, read and understand this Installation Guide, and the Iridium GO! exec User Manual including the safety warnings and information. Failure to do so could result in serious injury or death.

Kit contents

Items included in the kit:



Antenna and Cable Installation

Note: It is recommended that prior to installation, you pre-test the complete setup. This can be done on a bench or on the deck of the boat. Connect all components to test if everything works fine. Doing so will familiarize the user how the parts go together and guarantees it works fine prior to installation. Make sure the external antenna is located outside and the Iridium GO! exec receives good signal reception for at least 5 minutes during this test before you proceed with the installation. Maintain a separation of at least 20 cm (7.8 inches) from antenna during test.

WARNING	
WARNING	Persons with Pacemakers: • Should ALWAYS keep Iridium GO! exec and the antenna more than eight inches or twenty centimeters from their pacemaker when the device is turned ON. • Should turn Iridium GO! exec OFF immediately if there is any reason to suspect that interference is taking place. • Failure to heed this warning could result in serious injury or death.
WARNING	The Iridium GO! exec device utilizes a negative ground system. When usi ng a DC power source, such as a car or boat, the power system must be a negative ground system. Do not use the device with positive ground systems. Failure to properly ground the GO! exec could cause fire or could cause the device to fail so that it is unavailable in an emergency situation, preventing or delaying an emergency response. These hazards could cause serious injury or death.
WARNING	Use the Iridium GO! exec device ONLY with Iridium supplied power acces sories. Use of non-Iridium supplied power accessories could result in exp osing the device to excessive voltage, which could cause fire or could cause the device to fail so that it is unavailable in an emergency situation, preventing or delaying an emergency response. These hazards could cause serious injury or death.

Step 1)

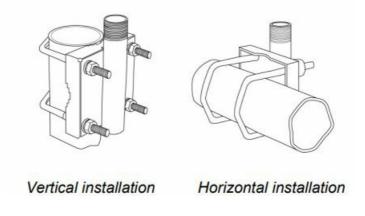
• Find a dry location for Iridium GO! exec inside the vessel. Ensure that it is installed near a power source. See the Iridium GO! exec Mounting Bracket Installation on how to secure the Iridium GO! exec device in the vessel. (Section 3 and 4)

Step 2)

• Carefully consider the cable path to allow the cable length for the exterior antenna to reach the Iridium GO! exec device.

Step 3)

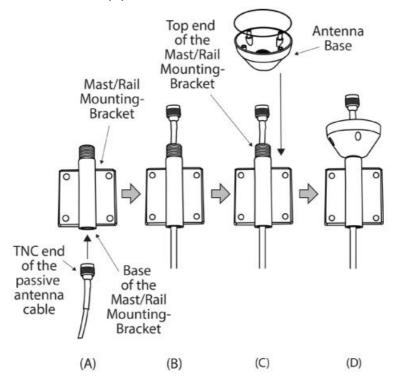
• Bracket mounting: Install the Mast/Rail mounting bracket within the 5 meter/16 feet proximity to a pole or rail.



- Antenna mounting: the antenna must not be mounted at a location such that during radio transmission, any person or persons can come closer than the indicated minimum safe distance to the antenna: 20 cm (7.8 inches). See Iridium GO! exec User Manual for a discussion of exposure to radio frequency (RF) energy.
- Note: U-Bolts can fit pole and rail with diameter 30-60mm.

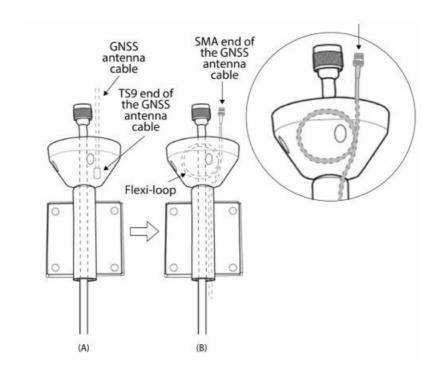
Step 4)

- Once the antenna mount bracket is securely in place:
- 1. Feed one end of the passive antenna cable throughthe base of the bracket (A and B) then, feed the cablethrough the Antenna base plate (C).
- 2. Screw the antenna base to the bracket (D).



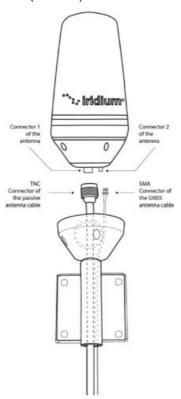
Step 5)

- · Once the satellite cable is in place
- 1. Feed the TS9 end of the GNSS antenna cable through the bracket tube from the top (A), and all the way to SMA end.
- 2. Make the single flexi-loop on the GNSS cable as shown in (B) to avoid kinking the GNSS cable when it is connected to the antenna.



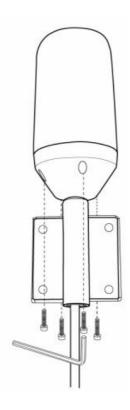
Step 6)

- 1. Connect the SAT antenna cable connector (TNC-M) to the antenna connector1 (TNC-F) and hand-tight.
- 2. Connect the GNSS antenna cable connector (SMA-M) to the antenna connector2 (SMA-F) and hand-tight.



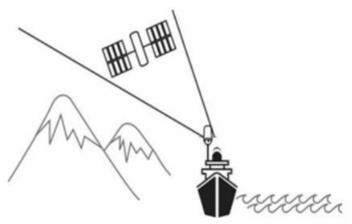
Step 7)

• Screw the antenna base to the antenna housing using screws and Allen key provided. Ensure that you attach the black rubber seal (see step 4C above) provided to the antenna base plate.



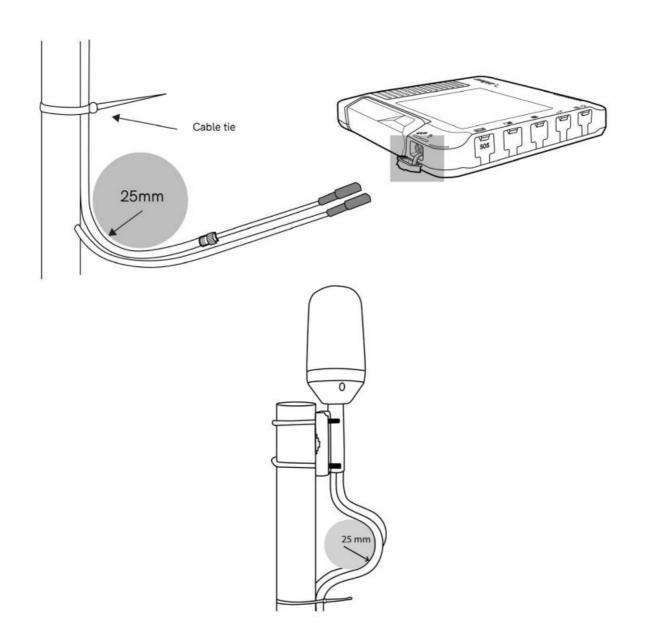
Note:

- 1. Use of an external antenna will provide connectivity for the Iridium network and GPS reception.
- 2. To ensure maximum performance of the antenna and to maximize availability and reliability of service, the position of the antenna must:
- a) Have a clear view of the sky
- **b**) Be clear and free of obstructions
- c) Be clear of metal objects
- d) Be located above and away from other transmitting devices
- e) Be securely affixed in location
- f) Not be located indoors
- g) Be installed in conjunction with a certified included cable.



Step 8)

• To minimize cables waving around, use the cable ties provided to fasten tight along the pole or rail path and at both the antenna end and the Iridium GO! exec end.



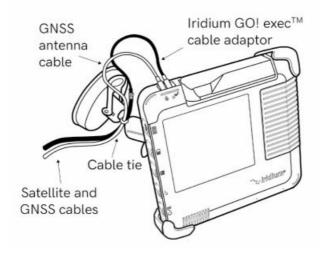
Note:

- 1. Do not put stress on the cable. Ensure that the bend radius of the cable doesn't go below 25mm slack (see 5.3 Passive Antenna Cable Physical Specifications).
- 2. When installing the antenna cables, follow these guidelines:
- a. Route and restrain cables to prevent them from vibrating or moving under normal conditions which could result in damage to the antenna or the coaxial cable connections.
- **b**. Wherever the cables contact structures, protect the cables from chafing or abrasion. If a cable needs to be bent or looped, avoid kinking it, and ensure that each bend radius follows the cable supplier limits.
- c. Use coaxial sealant, shrink-wrap tubing, electrical tape, or another suitable product to seal all cable connections appropriately to prevent moisture and corrosion damage from weather exposure. Mount all antennas vertically and clear of nearby metal obstructions. Minimize horizontal obstructions as much as possible because this can create areas of poor system coverage.

Step 9)

• To protect the 15cm Iridium GO! exec cable adapter from damage, cable ties shall be used at the Iridium GO!

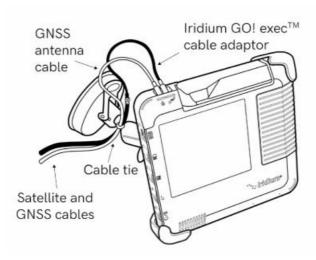
exec end to tighten the satellite cable and the GNSS cable to the double socket arm of the Plastic Mounting Bracket. See illustration to the right. It is important to make sure that the gap between the satellite antenna cable connector and the Iridium GO! exec satellite connector is close enough so that the Iridium GO! exec cable adapter is not stressed at any point when connected to the Iridium GO! exec.



Step 10)

- Connect the TNC end of the cable to Iridium GO! exec cable adapter, and then
- 1. Plug the GNSS antenna cable plug to the Iridium GO! exec GNSS connector.
- 2. Plug the Iridium GO! exec cable adapter plug to the Iridium GO! exec Satellite connector.

The connectors for satellite and GNSS on the device are located behind the cover found directly below the device antenna.



Note:

- 1. When an external antenna is connected, you may still raise the device internal antenna.
 - If the device's "Power ON/OFF based on antenna lift" is enabled, this action turns the unit on and allows
 for transmission over the Iridium network as well as acquiring location information using the connected
 external antenna, while lowering the device antenna with the external antenna connected will not switch
 the device off.
 - To switch the device off with the external antenna connected, you need to use the power button on the

- device or use the device's Settings menu. Alternatively, with the device powered on and the device antenna in lowered position, unplugging the external antenna will switch the device off.
- If the device's Setting "Automatically power on the device on charger connection" is enabled, unplugging
 the device power supply will also switch off the device, while plugging the device to a power supply will
 switch the device on.
- 2. Please use provided cable ties to secure the antenna cables to the mounting bracket.

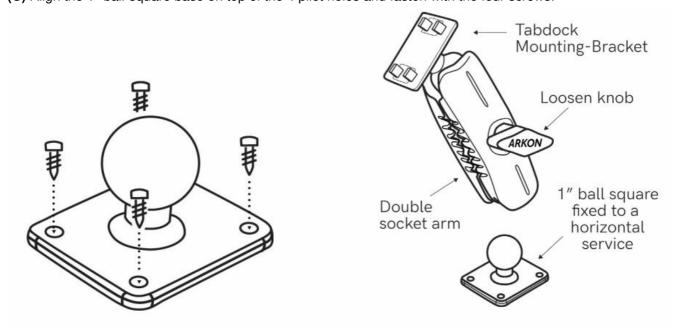
WARNING

Do not leave power and antenna ports uncovered. Open power cover only for as long as recharging is required, and open antenna cover only when actively using the external antenna. Leaving the covers open allows moisture and water vapor to enter the device which in turn could lead to corrosion and damage to the device. This could cause fire or could cause the device to fail so that it is unavailable in an emergency situation, preventing or delaying an emergency response. These hazards could cause serious injury or death.

Permanent Iridium GO! exec Mounting-Bracket Installation

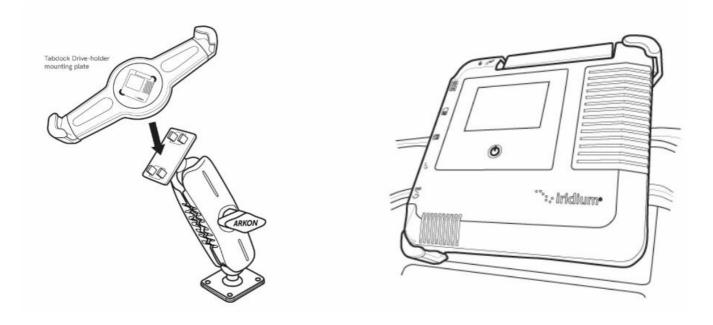
Step 1:

- (A) Choose the preferred location (on a boat) where you want to permanently mount the cradle for holding the Iridium GO! exec.
- Please make sure the selected location is within the range of the satellite cable and GNSS cable.
- **(B)** On the horizonal surface or vertical surface at the selected location, drill the 4 pilot holes which align with the four holes on the 1"-ball-square base.
- (C) Align the 1"-ball-square base on top of the 4 pilot holes and fasten with the four screws.



Step 3:

- (A) Orient the Tabdock Mounting-Bracket so that the Iridium GO! exec image is in upright position.
- **(B)** Align the Tabdock Mounting-Bracket with the 4 hooks on the top of the Double Socket Arm and slide toward direction with "lock" label until it is locked.

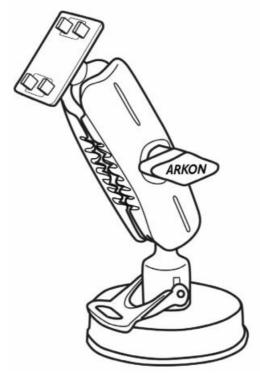


Step 4)

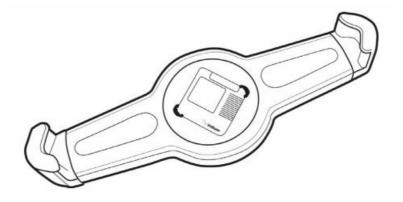
- (A) Mount the Device on the Tabdock spring-loaded Mounting-Bracket and make sure the 2 corners of the device are fully locked and secure.
- (B) Adjust position accordingly then tighten knob on double socket arm.
- **(C)** Connect the Satellite cable and GNSS cable to the antenna connectors, power supply to the USB power connector.

Removable Iridium GO! exec Mounting Bracket Installation

• To keep the Iridium GO! exec device securely in place, install the Mounting Bracket kit provided.



- A- Double Socket Arm on Suction Cup Twist Lock Base
- B- Tabdock spring-loaded Mounting Bracket



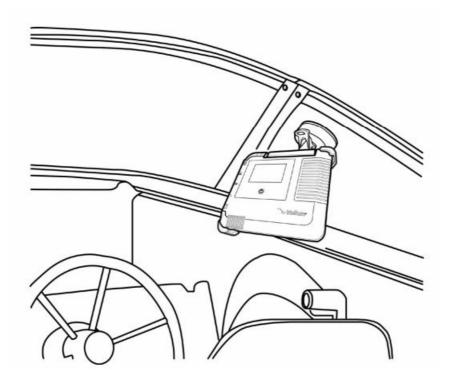
Step 1)

• Align the Tabdock Mounting bracket (B) with the 4 hooks on the top of the Double Socket Arm (A) and slide toward direction with "lock" label until it is locked.



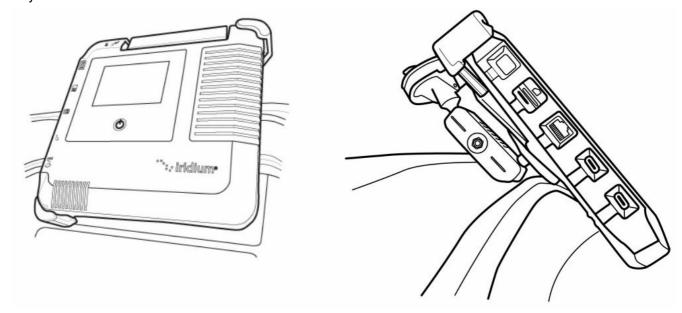
Step 2)

- Loosen knob on double socket arm (A) and mount the suction cup of the unit in step 1 on a flat surface (vertical or horizontal) such as on glass surface (boat windscreen), wall or on table as required.
- To mount the suction cup, ensure that the lever is in the up position, push the suction cup firmly against the flat surface then push the lever down until it locks.



Step 3)

• Mount the Device on the spring-loaded Mounting-Bracket. Please make sure the 2 corners of the device are fully locked and secure.



Step 4)

• Connect the satellite cable and GNSS cable to the antenna connectors, power supply to the USB power connector. Adjust position accordingly then tighten knob on double socket arm (A). Please make sure the double sockets arm is resting against a surface.

Specifications

Iridium Dual Mode Passive Omnidirectional Antenna

- Certified dual mode passive Iridium Antenna for use with the Iridium GO! exec
- Requires no pointing towards satellite
- Low loss radome

Electrical Specifications:	
Frequency	1616 – 1626.5 MHz (SAT) 1561.1 MHz, 1575.42 MHz, 1598.1 – 1605.4 MHz (BeiDou, GPS/Galileo & GL ONASS)
Impedance	50 ohms (SAT & GNSS)
VSWR	< 2.0 (SAT)
Satellite System	Iridium (SAT) BeiDou, GPS, Galileo & GLONASS (GNSS)
Polarisation	RHCP (SAT)
Axial Ratio	< 3.5 dB (SAT)
Gain	2 dBic (SAT)
LNA Gain	25 dB (GNSS)
Noise Figure	1.2 dB (GNSS)
Supply Voltage	3.0 – 5.5 V DC (GNSS)
Average Current Consumption	20 mA (GNSS)

Mechanical Specifications:	
Color	White (non-glossy)
Height	150 mm (191.5 mm mounting base included)
Diameter	Ø 95 mm
Mounting	Supplied Mounting or any US-style Mounting Bracket with 1"-14NF thread.
Mounting place	On marine vessel or remote homes
Materials	ASA, copper, PCB, stainless steel and brass
Operating temperature	-40C to +70C
Connector 1	SAT: TNC-female
Connector 2	GNSS: SMA-female
IP rating	IP68
SAT Cable	See 5m/16.404ft passive SAT antenna cable specifications
GNSS Cable	See 5.25m/17.224ft GNSS antenna cable specifications

Mast/Rail Mount

Stainless Steel Mast/Rail Mounting Bracket

Mechanical Specifications:	
Color	Polished
Mounting	On pole or rail with supplied U-bolts
Mounting place	On vertical or horizontal pole or rail with diameter Ø 30-60 mm
Materials	Polished high grade AISI-316 stainless steel
For Antenna Types	Supplied Iridium Marine antenna
Dimensions	130 x 92.5 x 40 mm

Electrical Specifications:	
Impedance	50 Ω
Capacitance	78.41 pF/M (23.9 pF/ft)
Velocity of Propagation	84%
Voltage Withstand	2500 VDC
Max Operating Frequency	8 GHz

Physical Specifications:	
Bending Radius Static	25.4mm (1")
Bending Radius Repeated	103mm (4.0")
Weight	0.10 kg/m or 0.068 lb/ft
Connectors	TNC-M (Iridium GO! exec – cable adaptor)
	TNC-M (Iridium Antenna – connector1)
Cable diameter	0.405" or 10.287mm
Connector Diameter	See TNC connector specs

Environmental Specifications:	
Operating Temperature	-40°C to +85°C

5.25m/17.22ft GNSS Antenna Cable

Electrical Specifications:	
Impedance	50 Ω
Capacitance	96.45 pF/M (29.399 pF/ft)
Velocity of Propagation	69.5 %
Voltage Withstand	12000 Vrms
Max Operating Frequency	3 GHz

Physical Specifications:	
Bending Radius Static	13mm (0.512")
Bending Radius Repeated	30mm (1.181")
Weight	17gms/m
Connectors	TS9 (Iridium GO! exec GNSS antenna connector SMA (Iridium Antenna – conne ctor2)
Cable diameter	2.52.5mm (0.1")
Connector Diameter	See SMA and TS9 specs

Environmental Specifications:	
Operating Temperature	-55°C to +85°C

Iridium GO! exec Cable Adapter

Electrical Specifications:	
Impedance	50 Ω
Capacitance	96.45 pF/M (29.399 pF/ft)
Velocity of Propagation	69.5 %
Voltage Withstand	12000 Vrms
Max Operating Frequency	3 GHz

Physical Specifications:	
Bending Radius Static	13mm (0.512")
Bending Radius Repeated	30mm (1.181")
Weight	17gms/m
Connectors	Iridium GO! exec antenna connector Iridium SAT Antenna – cable
Cable Length	15cm / 5.905"
Cable diameter	2.52.5mm (0.1")
Connector Diameter	See connector specs

Environmental Specifications:	
Operating Temperature	-55°C to +85°C

Legal Notices

• This Installation Guide provides installation information for the Iridium GO! exec Premium Dual Mode Antenna Kit. Iridium expects there may be additions and or modifications to this document as product development continues, or as new features are developed, so Iridium reserves the right to revise this Installation Guide or withdraw it at any time without prior notice. You can find the current version of this Installation Guide for the Iridium GO! exec at www.iridium.com.

- Your Iridium GO! exec Premium Dual Mode Antenna Kit contains Iridium® Accessories subject to the 1-year Limited Warranty including Exclusions, Disclaimers, Limitations of Liability and Conditions of Use that is in the Legal Information Booklet that came with your Iridium GO! exec, and that is also available online at www.lridium.com. Installation of the Iridium GO! exec Premium Dual Mode Antenna Kit does nothing to change or extend the original Limited Warranty on your Iridium GO! exec device itself. You are permitted to use Iridium GO! exec Premium Dual Mode Antenna Kit only as described and specified in this Installation Guide, the Iridium GO! exec User Manual, and the Limited Warranty. By using the Iridium GO! exec Premium Dual Mode Antenna Kit, you are indicating that you agree to comply with the terms set forth in this Installation Guide as well as the User Manual, including without limitation the Limited Warranty, including the section describing permitted use of Iridium GO! exec (the
- "Conditions of Use"). If you fail to comply with the Limited Warranty and the Conditions of Use, Iridium may void certain protections offered under the Limited Warranty, and Iridium reserves the right to terminate your right to use the Iridium GO! exec on the Iridium system. If you do not accept the terms of the Limited Warranty and Conditions of Use, do not use the Iridium GO! exec Premium Dual Mode Antenna Kit.
- If you do not have the Iridium GO! exec User Manual, it can be found at www.iridium.com or call 1-866-947-4348 (or +1-480-752-5155 for outside U.S.) and request that a User Manual be sent to you.

Third Party Information

- This Installation Guide might refer to third party sources of information, hardware or software, products or services and/or third-party web sites ("third party information"). Iridium does not control, and is not responsible for, any third-party information, including without limitation the content, accuracy, copyright compliance, compatibility, performance, trustworthiness, legality, decency, links, or any other aspect of third party information. The inclusion of such third-party information does not imply endorsement by Iridium of the third-party information.
- ANY THIRD PARTY INFORMATION THAT IS PROVIDED WITH IRIDIUM'S FACILITIES, SERVICES,
 PRODUCTS OR USER INFORMATION IS PROVIDED "AS IS". IRIDIUM MAKES NO REPRESENTATIONS,
 GUARANTEES OR WARRANTIES IN RELATION TO THIRD PARTY INFORMATION AND IRIDIUM SHALL
 NOT BE LIABLE FOR ANY LOSSES, DAMAGES, LIABILITIES, JUDGMENTS, AND FINES, AMOUNTS PAID
 IN SETTLEMENT, EXPENSES OR COSTS OF DEFENSE SUSTAINED IN RELATION TO ANY SUCH THIRD
 PARTY INFORMATION.
- Intellectual Property, Trade Secret, Proprietary or Copyrighted Information
- To protect Iridium proprietary and confidential information and/or trade secrets, this Installation Guide may describe some aspects of Iridium technology in generalized terms. Iridium products may include copyrighted Iridium and third-party software. Any such copyrighted software contained in Iridium products may not be modified, reverse engineered, distributed or reproduced in any manner to the extent provided by law. The purchase of any Iridium products shall not be deemed to grant either directly or by implication or otherwise, any license under copyrights, patents, or patent applications of Iridium or any third-party software provider, except for the normal, nonexclusive, royalty-free license to use that arises by operation of law in the sale of a product.

Content Copyright

- You are exclusively responsible for the use of Iridium GO! exec Premium Dual Mode Antenna Kit, including
 proper use of third party copyrighted materials. If you violate these terms, you agree to defend, indemnify and
 hold Iridium harmless with respect to any claims or actions by third parties related to your improper use of
 copyrighted material and to pay all costs, damages, fines and other amounts incurred by Iridium, or on its
 behalf, in the defense of any such claims or actions.
- Iridium GO! exec Premium Dual Mode Antenna Kit (with GNSS)
- For Customer Support, please contact:

Web: <u>www.iridium.com</u>
 Email: <u>info@iridium.com</u>
 Toll free: +1.866.947.4348
 Phone: +1.480.752.5155

Address: Iridium Satellite LLC 1800 S.Price Road Chandler, AZ 85286, USA

- ©Copyright 2023 Iridium Satellite LLC and its affiliates. All rights reserved.
- Iridium®, the Iridium Logo and Iridium GO! exec are registered trademarks of Iridium Satellite LLC and its affiliates ("Iridium"). All other trademarks, service marks and logos are the property of their respective holders, which have not been endorsed, sponsored or otherwise affiliated with Iridium or Iridium GO! exec.

Documents / Resources



Iridium GO! exec Premium Dual Mode Antenna Kit [pdf] Installation Guide GO exec Premium Dual Mode Antenna Kit, GO exec, Premium Dual Mode Antenna Kit, Mode Antenna Kit, Antenna Kit

References

• * Iridium Satellite Communications | Your World. Our Network.

Manuals+,