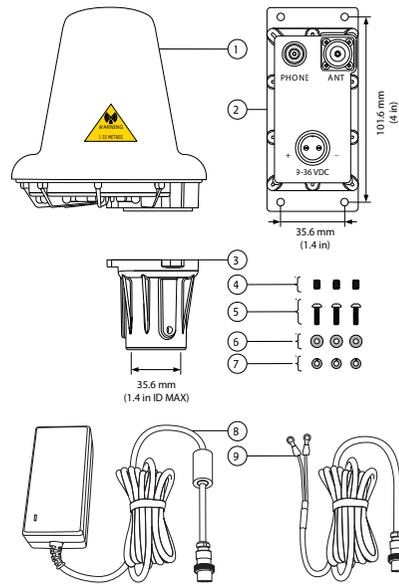


Introduction

The RST740 antenna is designed for Iridium applications where long RF cables are needed and a passive antenna cannot be used. The RST740 has an integrated power amplifier (for transmitting signals to the satellite) and low noise amplifier (for receiving signals from the satellite) incorporated into the antenna.

Iridium Active Antenna Kit Contents

1. Antenna
2. Bias box
3. Mounting bracket
4. 3 x Set screws
5. 3 x Mounting screws
6. 3 x Flat washers
7. 3 x Split washers
8. AC adapter
9. DC power cable



PART #: USRMAN007705

Specifications

Equipment type	Mobile or Fixed Base Station
Integrated operating environment	[x] Commercial [x] Light Industry & Heavy Industry
Power supply requirement	9 to 36V DC, 30W
RF Input power rating (US & Canada)	29 dBm or 0.8 Watt peak (conducted)
EIRP	12.31 dBW Max
Duty cycle	N/A
TX Operating frequency range	1616.0 - 1626.5 MHz
RX Operating frequency range	1616.0 - 1626.5 MHz
RF Input impedance	50 Ohms
Modulation	Q7W
Emission designation	96K1Q7W
Antenna type	Integral
Antenna connector type	TNC Female
Temperature rating	
Storage:	-40°C to +80°C
Operational:	-25°C to +55°C
Compliance	FCC Iridium Approved

Important Safety Information

WARNING
To satisfy FCC RF exposure requirements for mobile transmitting devices, the minimum safety distance is 55 cm (21.7 inches). This separation distance should be maintained between antenna and people during operation of the antenna. Changes or modifications not expressly approved by Beam Communications could void the users authority to operate the equipment or the warranty.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Cable Length Requirements

To meet Iridium performance requirements and comply with FCC regulations, care must be taken to use the appropriate total RF cable length. Your antenna distributor should provide the appropriate cable.



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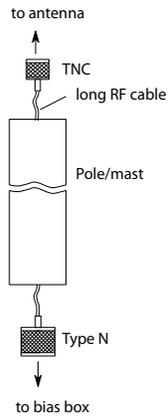
Iridium Active Antenna
RST740
Installation Manual



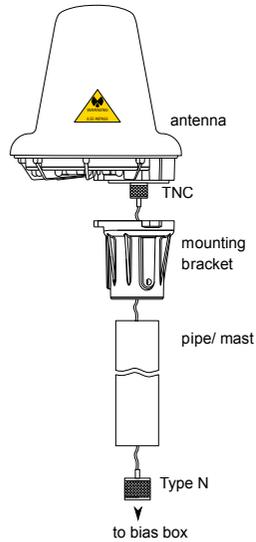
BEAM Communications Pty Ltd

Outside/Above Deck

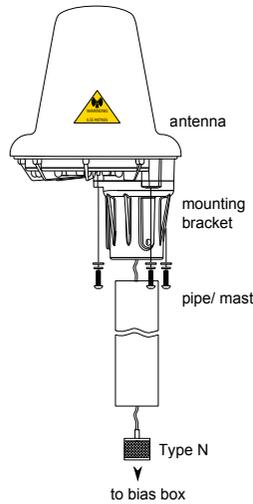
1. Bring the long RF cable to the top of the pole or mast.



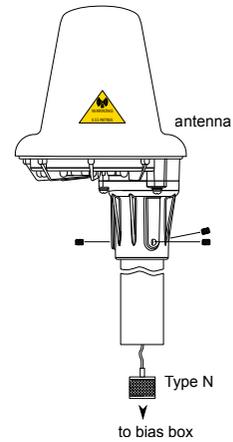
2. Feed the cable through the mounting bracket and attach the TNC connector to the antenna.



3. Insert the Mounting Screws to fasten the mounting bracket to the antenna.



4. Place the mounting bracket over the pole and tighten the set screws.



WARNING

Galvanic Corrosion Protection

This antenna has a base and pipe adapter is constructed out of aluminum. When the antenna is mounted to a steel mast or metallic bracket, a galvanic reaction can occur resulting in aluminum corrosion. To minimize corrosion the following steps can be taken:

- apply self-fusing silicone tape to all connectors
- use a UV-resistant, non metallic mast when possible
- apply silicone grease or joint compound to all metallic surfaces that make contact with the antenna or mounting adapter
- if possible use an insulating plastic or rubber sleeve between a steel mast and the aluminum adapter.

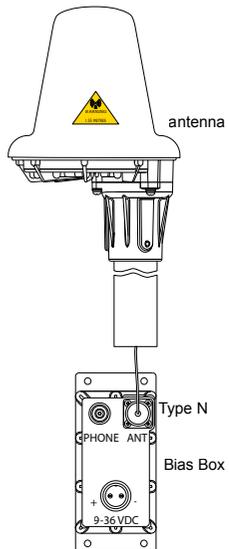


WARNING:

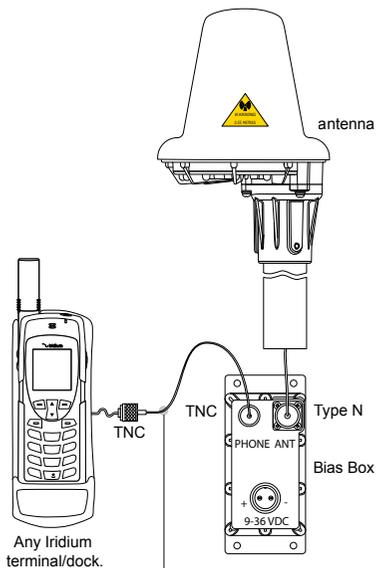
Do not place the antenna anywhere there is a source of heat or fumes such as the ship's exhaust.

Inside/Below Deck

1. Attach the Type N connector from the long RF cable to the bias box.

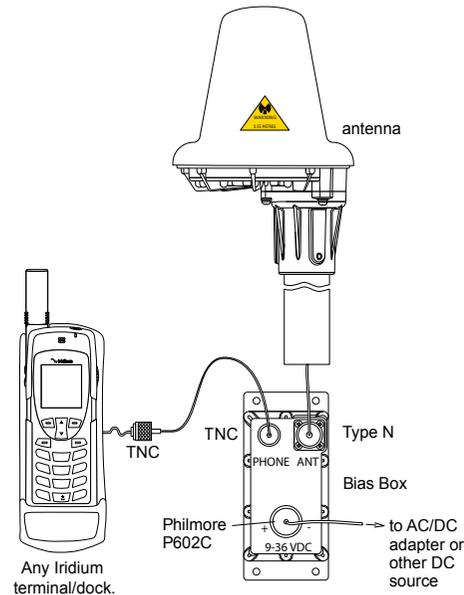


2. Attach the short RF cable to the bias box and the docking station



NOTE: This cable is not part of the antenna kit.

3. Connect DC power (9 to 36 VDC, 30W) to bias box.



Antenna installation is critical for optimum performance of your Iridium service.

Installation Guidelines

To ensure maximum performance of the antenna system and to maximise availability and reliability of service the antenna must;

- have a clear line of site to the sky
- be clear and free of obstructions
- be clear of metal objects
- be located away from other transmitting devices
- be securely affixed in location
- not be located indoors
- be installed in conjunction with a certified cable

Installing Antenna Cables

When installing antenna cables, follow these guidelines:

- 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.
- Wherever the cables contact structures, protect the cables from chafing or abrasion. If a cable needs to be bent, avoid kinking it, and ensure that each bend radius follows the cable supplier limits.
- 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 they can create areas of poor system coverage.

Installation Options

The antenna system is suitable for marine and fixed applications and is designed to meet Iridium System performance requirements when installed according to the instructions in this guide.