

# Connecting the Antenna for a Satellite (Iridium) iPack

## Introduction

The Satellite iPack uses a modem that connects to the Internet via a satellite. The modem requires an external antenna. This application note provides details about connecting the antenna and mounting it to a tower.

## Connecting Antenna Cable

Connect the supplied antenna cable to the connector on the bottom or side of the iPack (earlier versions of the satellite iPack have the connector at the bottom of the enclosure, while newer iPacks have the connector on the side. Use the right angle end of the cable if it is supplied with one. Route the wire out of the shelter box in such a manner that the cable will not get chafed on any sharp sheet metal or other parts.

## Mounting Hardware

If you are using an NRG side mount boom, route the cable through the boom so that the straight connector exits out the threaded end of the boom as shown in Figure 1.

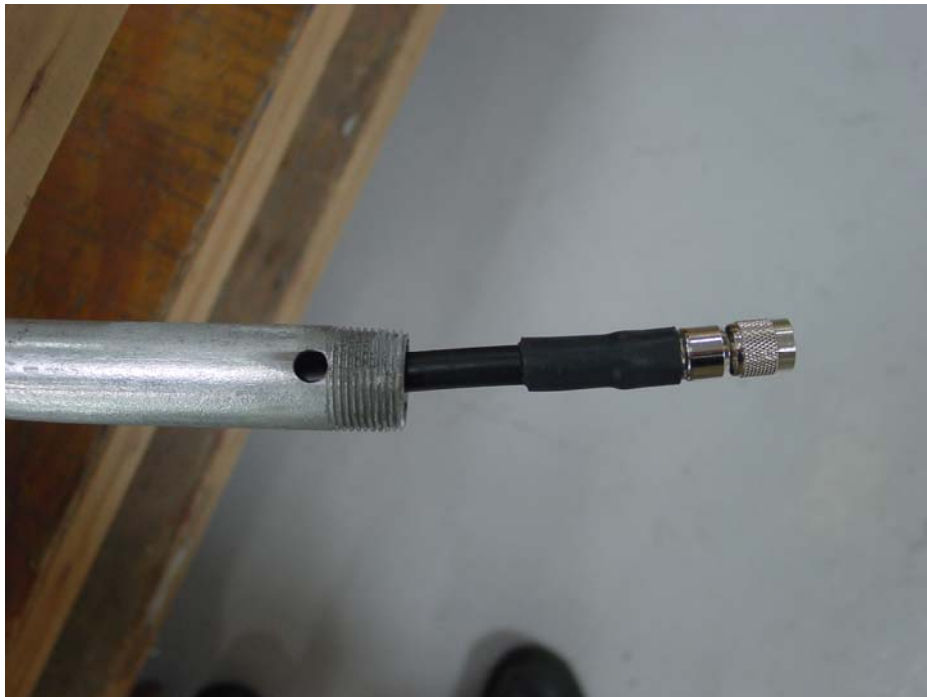


Figure 1

# APPLICATION NOTE

Next thread the base of the antenna onto the threaded end of the side mount boom as shown in Figure 2.



**Figure 2**

Connect the cable end to the connector on the top part of the antenna as shown in figure 3.



**Figure 3**

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# APPLICATION NOTE

Make sure both O-rings are in position.

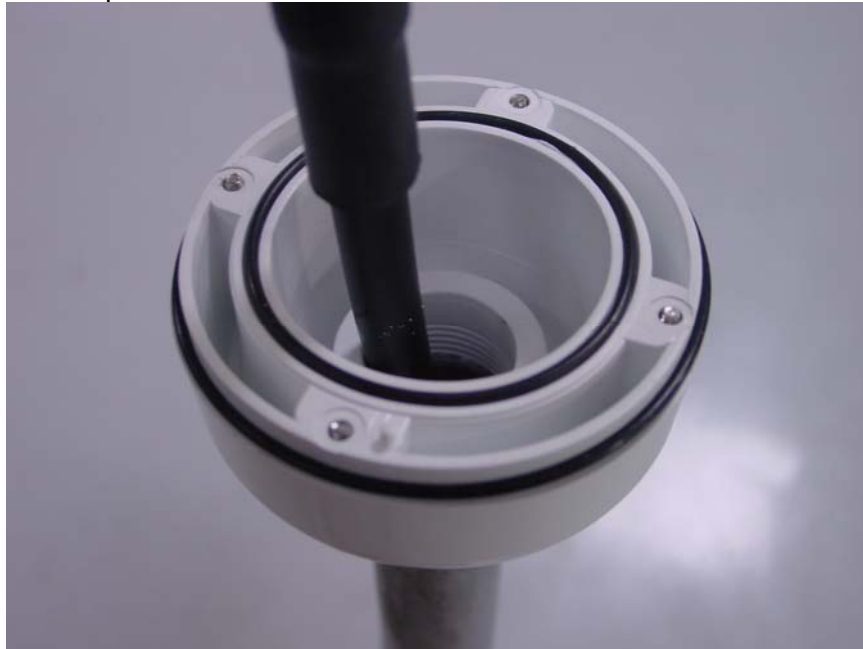


Figure 4

Secure the top and bottom pieces of the antenna together using the supplied screws. (**Note that there is an alignment pin that must line up with a corresponding alignment hole before screwing the 2 parts together!!!**)



Figure 5

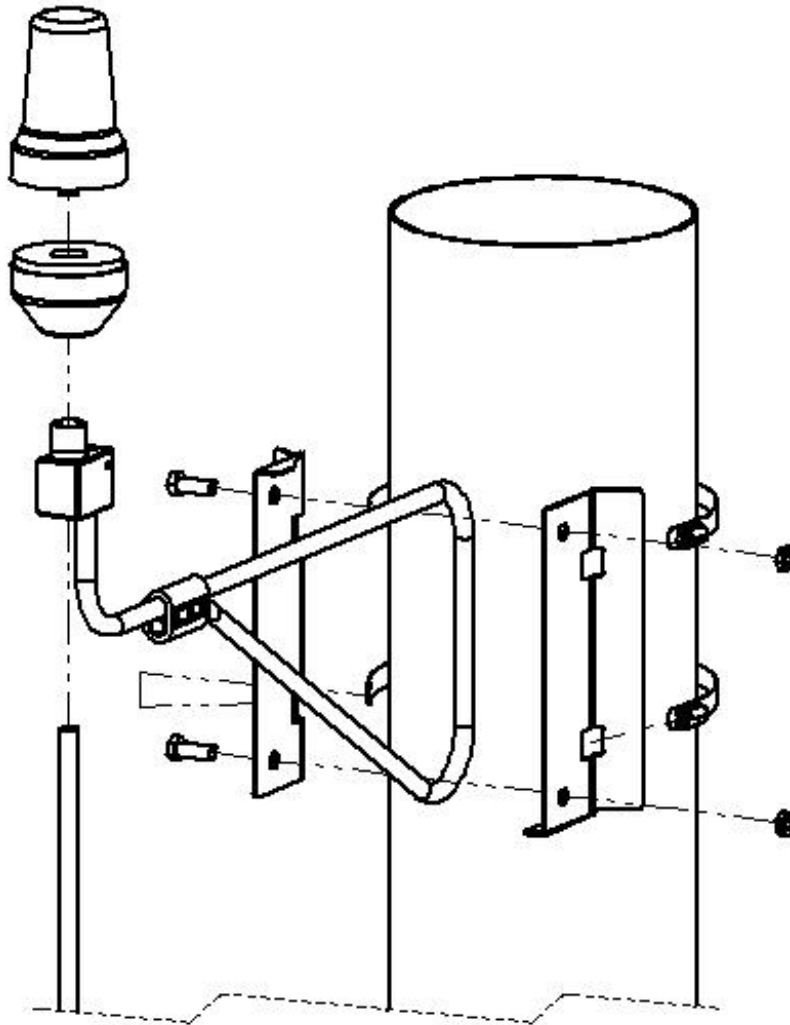
Attach the mounting boom to the tower as shown in the diagram below. **The mounting boom must be installed so that the antenna is pointed up.**

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# APPLICATION NOTE



The satellites fly in a South-to-North orbit; the antenna must be mounted such that no obstructions occur in this plane. We suggest orienting the antenna South in the northern hemisphere, and North in the southern hemisphere.

An antenna test should be performed on the satellite iPack once it is attached to the logger. Go to iPack Utilities from the SymphoniePLUS logger main menu to perform this function. Signal strength is reported from 0% to 100% and may fluctuate depending on site conditions. If a value other than 0% is returned, the user can try to establish a call. A value of 0% indicates that no direct connection has been established between the antenna and the satellite. Try mounting the antenna in a different location.

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