

RT-Base GPS Base Station



Quick Installation Guide

Step 1 – Choose a Suitable Site

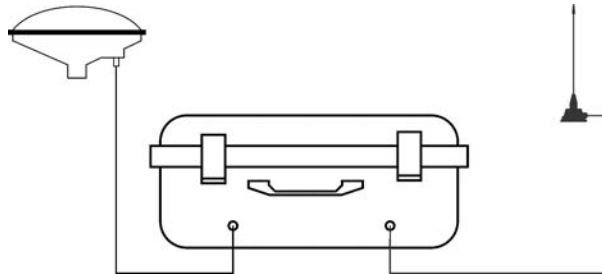
Find a site that is in open-sky, with no reflective objects like trees or buildings. Reflections degrade the quality of the corrections.



The RT-Base unit should not be left in direct sunlight or the battery may be damaged.

Step 2 – Connecting RT-Base System

Mount the GPS Antenna on the top of the tripod, or to a secure pole. The GPS Antenna should not be able to move even slightly.



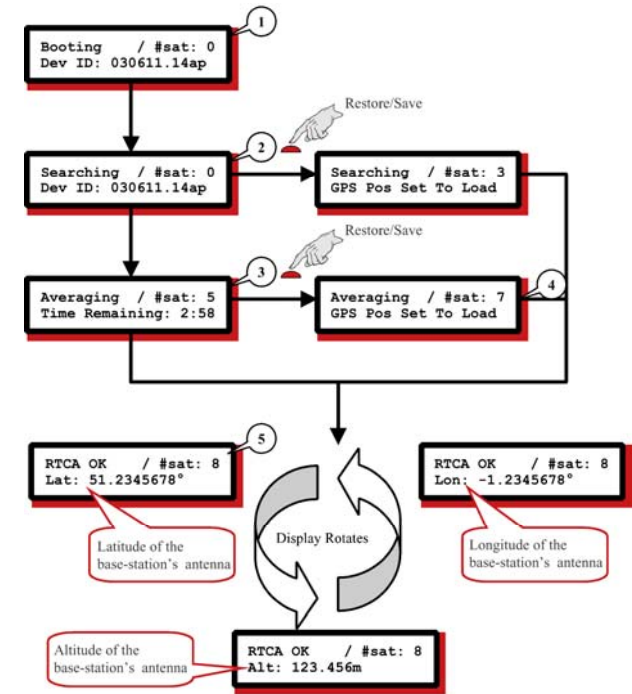
Connect the GPS Antenna to the RT-Base unit using the 15m TNC-TNC cable provided.

Connect the RT-Base unit to the Radio Modem Aerial and mount the aerial at least 2m away from the GPS Antenna.

Never connect the GPS Antenna to the Radio Aerial port on the RT-Base unit or it may be damaged.

Step 3 – Turning on the RT-Base

Turn on the RT-Base unit. The display will follow the sequence below.



If the GPS Antenna is in exactly the same location as the last saved position then press the Restore/Save button before the Averaging step is complete.

If the GPS Antenna is in a new location then simply leave the RT-Base unit to find satellites (2) and average its position (3).

Once the RT-Base unit is ready the display will show the Latitude, Longitude and Altitude of the RT-Base Antenna. To save this location (and use it again next time) press the Restore/Save button.

The RT-Base will now be transmitting corrections on its radio link.

Step 4 – Remote Radio Modem

Connect the Radio Modem Aerial to the Radio Modem. Connect the appropriate cable to the Radio Modem (for example the 14C0038A connector J3 for the RT3000).

To make sure that the Radio Modem is receiving corrections from the RT-Base look at the LEDs. The Table below gives a description for some of the LEDs on the radio modem.

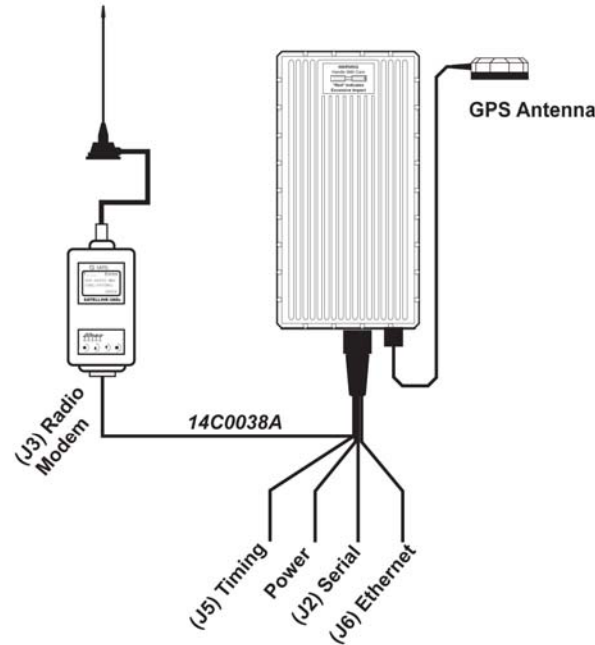
TD	RD	CD	Description
Off	Off	Off	Idle
Off	Off	Orange	Noise or other user on this radio frequency
Off	Green	Green	Receiving a packet

The Remote Radio Modem should receive a packet (RD and CD both green) once per second, with a slightly longer packet once every 10 seconds.

Step 5 – Charging

The battery in the RT-Base will last more than 10 hours when fully charged. To recharge the battery connect the RT-Base unit to a mains supply for at least 2 hours.

RT3000 Connection



The connection of the Radio Modem to the RT3000 is shown above. Most of the RT3000 User Cables have J3 as the Radio Modem connection; check in the RT3000 manual if you are unsure.



Notes