

GPS-Base GPS Base Station



Quick Installation Guide

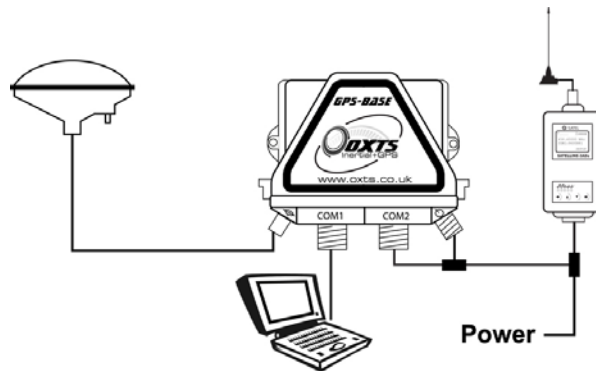
Step 1 – Choose a Suitable Site

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



Step 2 – Connecting GPS-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 GPS-Base unit using the 15m TNC-TNC cable provided.

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

Do not connect the GPS-Base to the computer until the software is installed.

Step 3 – Install Software



Insert the CD; double-click on the program:

gbsetup.exe

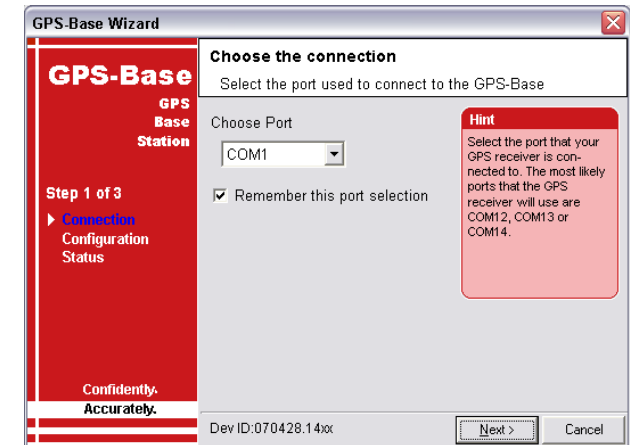
and follow the instructions given by the installer.



Step 4 – Run GB-Config software

Connect the GPS-Base to a PC USB port and turn on the power to the GPS-Base.

Run the GPS-Base software from the Start, Programs, OXTS folder. The following page will be shown.

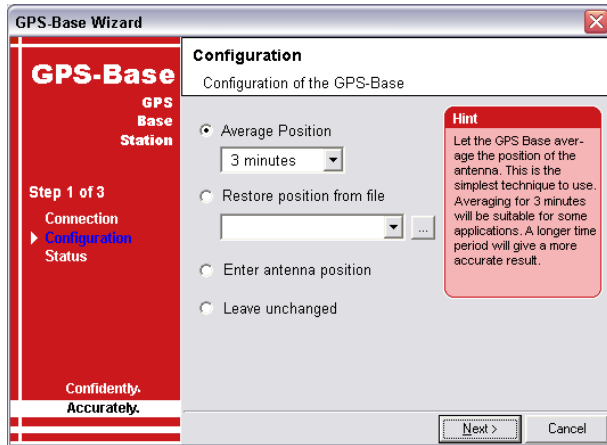


In most installations the GPS-Base will be installed on Port 12, select this port. In some circumstances Port 12 will be used already by another product. In this case it will be necessary to try each port until the GPS-Base is found.

Select Next to move to the next page.

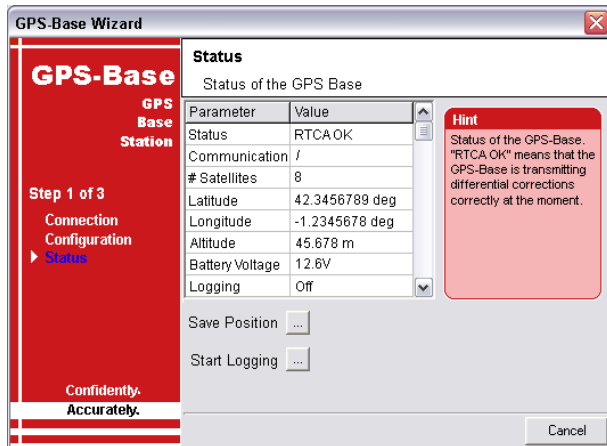
Step 5 – Average the position

On the next page choose to average the position for 3 minutes. If you have saved a location for the GPS-Base or if you know the exact location of the GPS Antenna then you can enter it on this page.



Click Next to move to the next step.

Step 6 – Monitor the Status



The Status page will show the progress of the averaging. After the average is complete the software will show "RTCA OK".

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

Step 7 – Remote Radio Modem

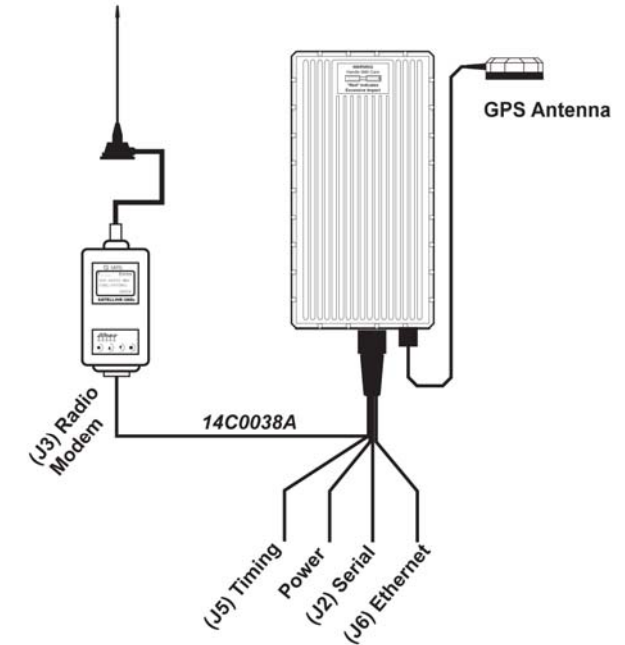
Connect the Radio Modem Aerial to the Radio Modem. Connect the appropriate cable to the Radio Modem (for example the 14C0038A connector J3 for the RT3000).

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

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.

