

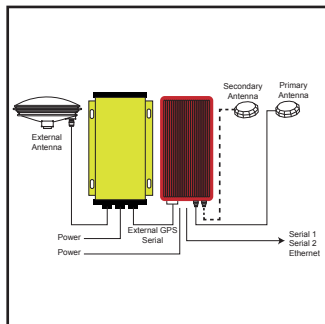
Inertial+ Quick Start Guide

STEP 1

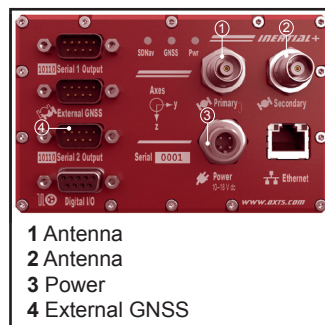
Install an Inertial+



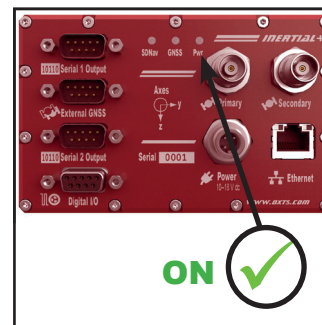
Use secure mounting solution e.g. RT-Strut, to secure Inertial+ rigidly to vehicle.



Connect external GNSS to the Inertial+ using a serial connection on the 'External GNSS' port.



Connect internal GNSS antennas (for time/heading) then connect the power connector.



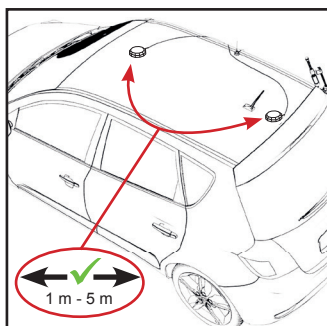
Apply power (10-28 V d.c.). Green power LED light will appear.

LED States

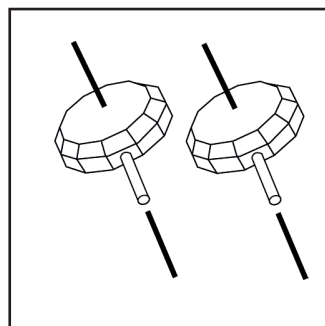
SDNav	<ul style="list-style-type: none"> Off- firmware has not updated. Firmware has been booted. Ready to initialise. Initialised but no real-time. Real-time output.
POS/Heading Single Antenna	<ul style="list-style-type: none"> No position lock. GNSS receiver is booting. SPS position. Differential position. RTK position.
Dual Antennas	<ul style="list-style-type: none"> GNSS fault. Unable to determine heading. Low quality heading lock. Medium quality heading lock. RTK calibrated heading lock.
GNSS	<ul style="list-style-type: none"> GNSS receiver active. <p>For other GNSS receiver fault contact OxTS</p>

STEP 2

Positioning the antennas



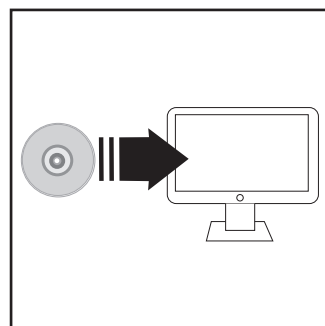
Antenna separation should be between 1 m and 5 m apart. Place the GNSS antennas on a metal parallel surface. Make sure the antennas have a ground plane to prevent GPS signal reflection.



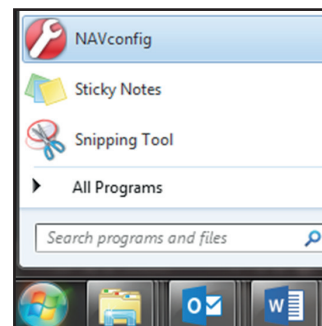
Ensure the orientation of the two antennas is the same.

STEP 3

Configuring a Inertial+



Install software from the CD provided. If you have trouble downloading, please contact our support team for more information.



Once installed go to; **Start > All Programs > OxTS > NAVconfig**
Allow permission for NAVconfig to use network. This can be changed in windows Firewall.

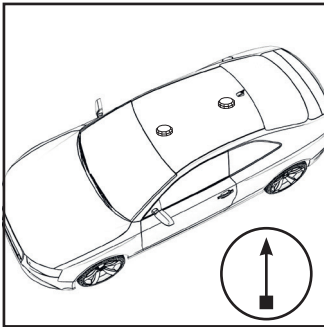
Follow steps in NAVconfig:

- Product Selection:** Select relevant Inertial+ model.
- Read Configurations:** Use default settings.
- GNSS Selection:** Choose your external GNSS receiver from the list.
- Orientation:** Set the **Y** and **Z** axis points to match your installation.
- Primary Antenna:** Measure from the Inertial+ measurement points to the primary antenna along the three vehicle axes and enter the measurements accurately.
- Secondary Antenna:** Select 'Enable Secondary Antenna' and enter the accurate measurements between the antennas. Measure as accurately as possible but below 5 cm. Static Initialisation can be enabled at this stage.
- Wheel Configuration:** Configure for land vehicles only.
- Options:** Use default settings.
- Commit:** Make sure Inertial+ is connected and turned on. Select the appropriate IP address and click commit.
- Save/Finish:** The data will be stored internally on the Inertial+ once committed but use the option to store locally if necessary.

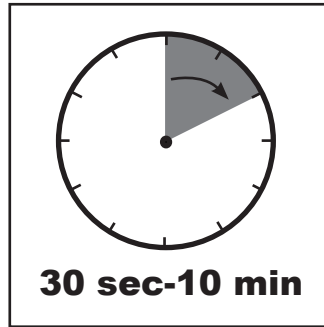
Inertial+ Quick Start Guide

STEP 4

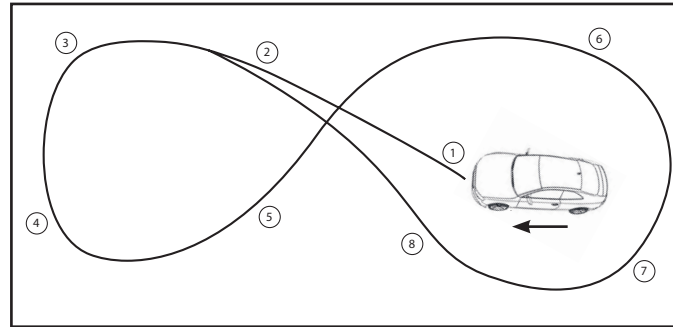
Initialisation and warming up



In a vehicle where single antenna initialisation is used, drive forward until system initialises.



Static initialisation will take approximately 30 sec-10 mins depending on dual antenna separation and measurement accuracy.



Land vehicles should drive in figures of eight with some acceleration and braking and with the addition. After 15-20 mins system will be ready for use. Monitor accuracy values in NAVdisplay's "warm-up" template.

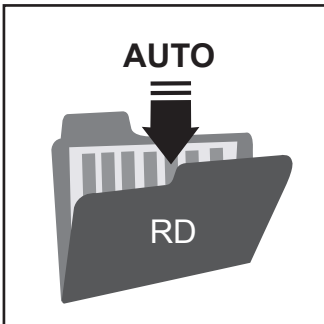


Once warmed up, system should be left on. Data can be viewed and recorded in NAVdisplay.

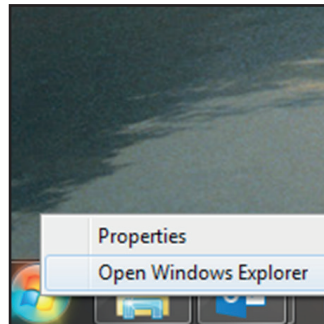
Note:
The Kalman Filter must warm up every time the system is turned on, so a short warm-up is essential.

STEP 5

Downloading and viewing data

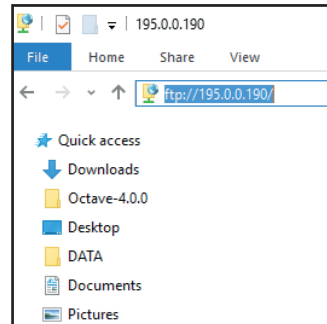


While the Inertial+ is operating, it saves all data internally to a file with suffix .RD.

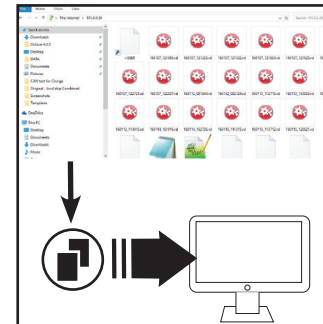


Open windows explorer.

RD files can be accessed via FTP either using an FTP client or the windows explorer file management tool.



In the address bar, type "ftp://195.0.0.nn" where nn are the last two digits of the serial number.



The files on the xNAV will then be listed and the RD files can be copied to your PC for processing.



Complete.

Support:
For further information, please check the Inertial+ manual.

If you encounter any issues during installation, please contact our OxTS support team via the website.