

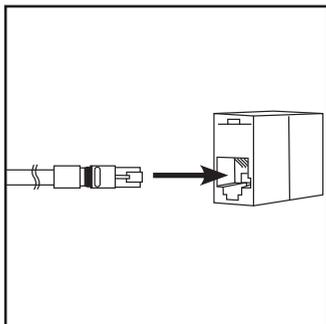
Survey+ Quick Start Guide

STEP 1

Install a Survey+



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



Connect Ethernet to the PC. Use the J6 Ethernet cross-coupler to extend the cable length if required.



Align the Deutsch connector on user cable and socket, then twist to connect.



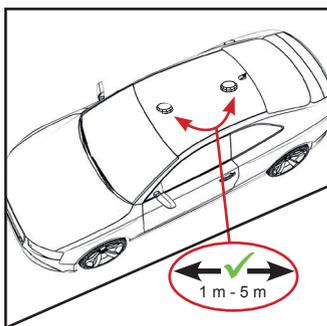
Apply power (10-28 V d.c.). Green power LED light will appear.

Orange indicates power is OK and a live Ethernet connection.

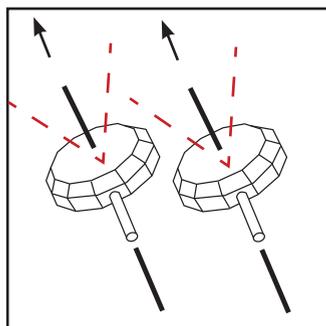
LED States	
SDNav	<ul style="list-style-type: none"> <input type="radio"/> Off- firmware has not updated. Firmware has been booted. Ready to initialise. Initialised but no real-time. Real-time output.
POS/Heading Single Antenna	<ul style="list-style-type: none"> <input type="radio"/> No position lock. GNSS receiver is booting. SPS position. Differential position. RTK position.
Dual Antennas	<ul style="list-style-type: none"> <input type="radio"/> 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



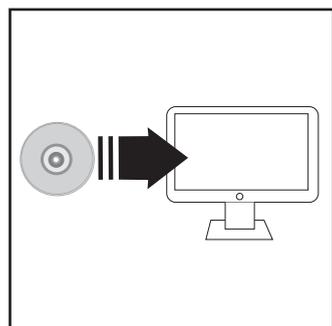
Antenna separation should be between 1 m and 5 m apart. Place the GNSS antennas on a parallel metal surface. Make sure the antennas have a ground plane to prevent GPS signal reflection.



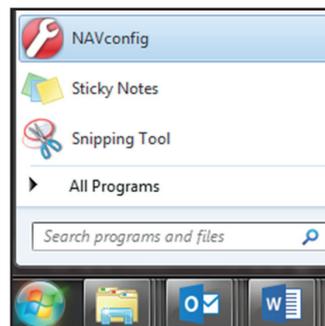
Ensure the orientations of the two antennas are the same, so that they share the same view of the sky.

STEP 3

Configuring an RT



Download and install software from link or 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.

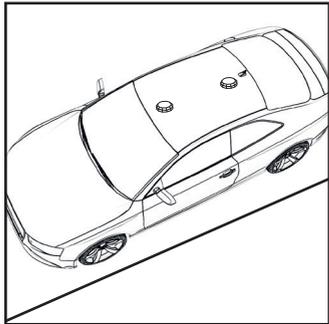
Follow steps in NAVconfig:

1. **Product Selection:** Select relevant Survey+ model.
2. **Read Configurations:** Use default settings.
3. **Orientation:** Set the Y and Z axis points to match your installation within the vehicle.
4. **Primary Antenna:** Measure from the Survey+ measurement point to the primary antenna along the three vehicle axes and enter the measurements accurately.
5. **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.
6. **Wheel Configuration:** Configure for vehicles with a non-steered axle.
7. **Options:** Use default settings. Enable base-station settings here.
8. **Commit:** Make sure Survey+ is connected and turned on. Select the appropriate IP address and click commit.
9. **Save/Finish:** The data will be stored internally on the Survey+ once committed but use the option to store locally if necessary.

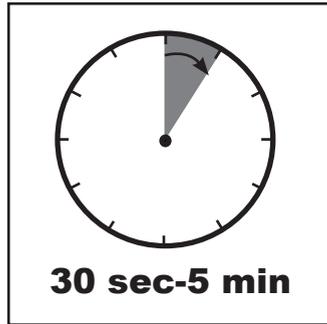
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STEP 4

Initialisation



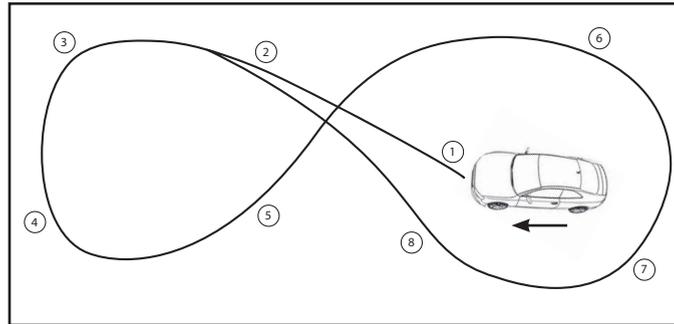
To output data, the system needs to initialise. To do this travel forward in a straight line until the initialisation speed (default 5 m/s) is exceeded.



Static initialisation will take approximately 30 sec-5 mins depending on antenna separation and measurement accuracy.

STEP 5

Warm-up



Land vehicles should drive in figures of eight with some acceleration and braking. After 15-20 mins system will be ready for use. Monitor accuracies of the Survey+ in NAVdisplay.

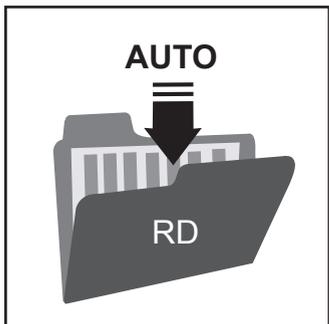


Once warmed up, system should be left on. Turning it off will require the warm up process to be repeated.

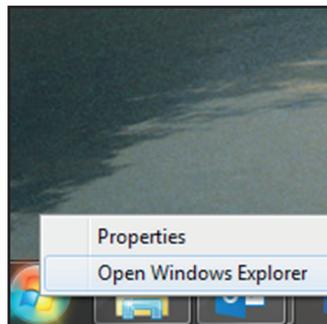
Note:
If the Survey+ is stationary for long periods, a short warm-up will be required for optimum performance. 30sec is sufficient.

STEP 6

Downloading and viewing data

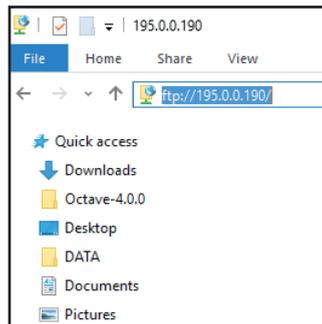


While the Survey+ is operating, it saves all data internally to a file with suffix .RD. (raw data)

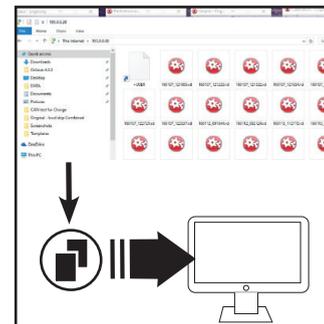


Open Windows Explorer.

RD files can be accessed via FTP either using an FTP client or the Windows Explorer file management tool. Note the PC IP must be 195.00.xx



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



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



Complete.

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

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