OSPREY® SP & MCA SP

Quick Start Guide & Safety Information

www.abriox.com

ABOUT THIS DOCUMENT

This document has been issued as a reference only; in all instances please refer to the full OSPREY Installation Instructions for further information. These can be obtained from the Support — Customer Portal page on our website www.abriox.com.

Note

To enter the Customer Portal you will need your Abriox-issued Username and Password, if you do not know these or require assistance, please contact our technical support team. Contact details can be found on our website www.abriox.com.

SAFETY INFORMATION

Please ensure you are familiar with the safety regulations of your company and observe them at all times.

General Safety Summary

This document contains information and warnings that must be observed to keep the unit in a safe condition and ensure safe operation. Please ensure you fully understand all instructions throughout this document and follow all site safety practices and procedures.

Safety Symbols

Below lists safety symbols that appear on the OSPREY SP and within this document.

⚠ Risk of danger. Important information. See warnings.

Maximum Pressure

The calibrated pressure for the OSPREY SP is model dependant, please refer to pressure limit detailed on the info label. The calibrated pressure for the MCA PL4 is dependant on model, please refer to pressure limit detailed on the label. Do not install on systems with higher pressures than those detailed.

Working Temperature

The OSPREY SP & MCA SP have been designed to work in temperatures between **–40ºC to +60ºC* (–40ºF to +140ºF*)**. The unit must not be installed in an environment which exceeds these temperatures.

⚠ **WARNING: DO NOT EXCEED THE MAXIMUM TEMPERATURE RANGE –40ºC to +70ºC.**

*below -30°C/-22°F data uploads may be less frequent to preserve the battery.
*Extreme low temperatures (below-40°F) may damage the battery if at a low state of charge.

Battery Replacement

⚠ **WARNING: DO NOT REPLACE BATTERY WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT.**

Communication Port

The maximum value of Um which may be applied to the communication port is **6.51V** and USB Port, Unspecified equipment, is **250VAC**. The communications port can only be used with a PressureLink unit. Contact Abriox for more information.

WEEE Directive

In the European Union (EU) this symbol indicates that this product is not to be disposed of with your household waste, according to the WEEE Directive (2002/96/EC) and your national law.

FC FCC

For US models, this device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

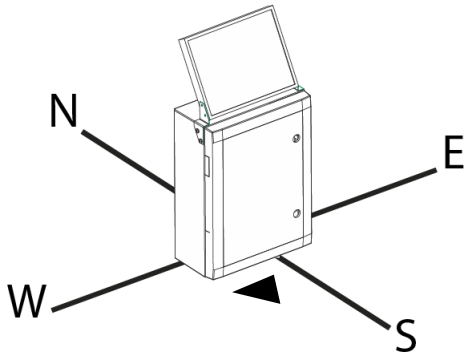
i) Reorient or relocate the receiving antenna
ii) Increase the separation between the equipment and receiver

Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

DISCLAIMER

If this equipment is used in a manner not specified by Abriox, the protection provided by the equipment may be impaired. Please ensure you have read and understand all safety and installation requirements before installing this equipment. Please refer to the full Osprey Installation Instructions for further information.

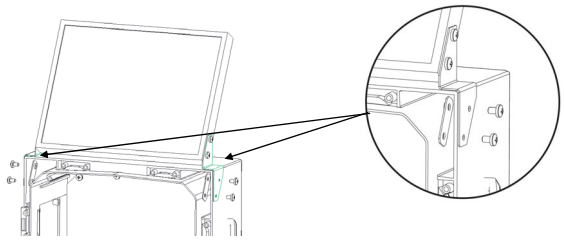
STEP 1 - POSITIONING THE UNIT



Unit Mounting
For optimum performance the unit must be located so that the antenna has an unobstructed view of the open sky. Obstacles such as metal mounting frames, metal panels and metal enclosures which obscure or block the view of the sky and/or horizon will cause poor performance.

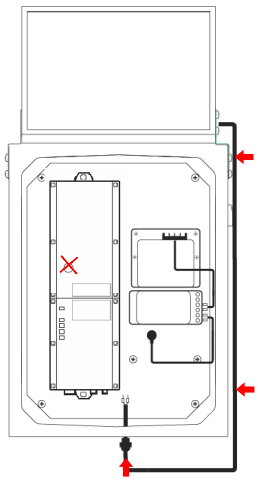
Panel Orientation
The solar panel must be turned towards the terrestrial equator (facing south in the northern hemisphere) so that during the day its orientation allows the panel to catch the greatest amount of solar radiation possible.

STEP 2 - ATTACH SOLAR PANEL



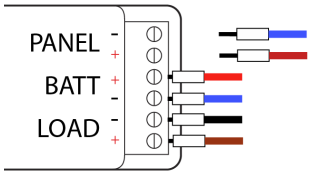
Attach the solar panel brackets to the enclosure using the pre drilled holes and brackets provided.

STEP 3 - ROUTE SOLAR PANEL CABLE



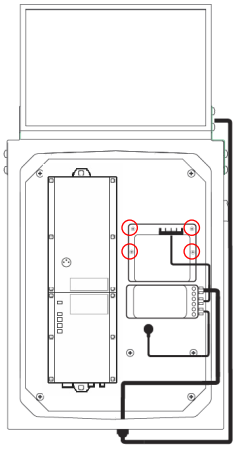
Ensure the OSPREY solar cable is not connected. Route the solar panel cable along the side of the enclosure as shown and secure the cable to the enclosure using the two cable clips. Unscrew and remove the cable gland nut located at the bottom of the enclosure, feed the solar panel cable and gland through the hole in the bottom and reattach the cable gland nut.

STEP 4 - CONNECT THE SOLAR PANEL CABLE

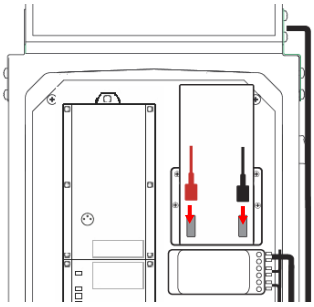


Insert the solar panel cables to the charge controller where indicated and tighten the screws to secure the connectors.
Note
The LED on the charge controller may flash red. This is normal operation.

STEP 5 - CONNECT THE BATTERY



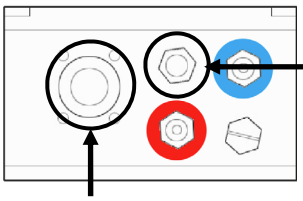
⚠ WARNING: ENSURE THE BATTERY FUSE IS NOT FITTED PRIOR TO CONNECTING THE BATTERY.



Note the orientation of the battery.

Remove the 4 screws securing the battery holder, lift the cover and insert the battery. Once fitted, reattach the cover to the battery holder and replace the 4 screws.

STEP 6 - CONNECT THE SENSOR



⚠ WARNING: ENSURE GAS SUPPLY IS ISOLATED PRIOR TO MAKING THE CONNECTION TO THE OSPREY.

MCA connection

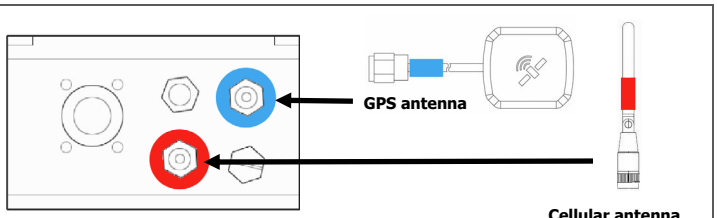
Sensor connector

Caution: To avoid damage to the OSPREY, when attaching a sensor adaptor use a spanner to hold the sensor connector to prevent it from rotating.

With the gas supply isolated connect the OSPREY SP and MCA SP sensors to the measurement points. The OSPREY SP and MCA SP have ¼"NPT or ¼" BSPT Female fitting.

Warning: Do not suspend unsupported pipework from the unit. It is highly recommended attaching the pipework to the unit with a flexible hose to minimise vibrations at the sensor. Further details can be found in the full OSPREY Installation Instructions.

STEP 7 - CHECK/CONNECT THE ANTENNAS

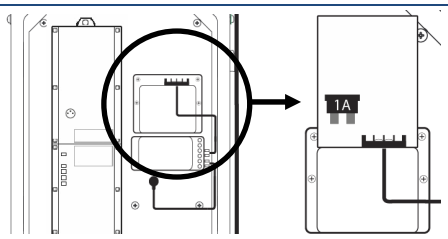


GPS antenna

Cellular antenna

Take care connecting the antennas; reference colour coding as per above drawing. Connect the cellular (RED) and GPS (BLUE) antennas to the OSPREY PL4 unit. To aid signal, mount the unit/antennas as high in the enclosure as possible or if using an external antenna, mount it outside with a clear view of as much sky as possible. The GPS antenna must have a view of the sky.

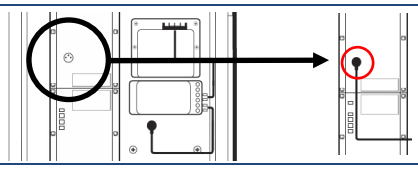
STEP 8 - INSTALL BATTERY FUSE



⚠ A SPARK MAY OCCUR WHEN FUSE IS INSERTED

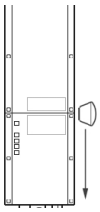
Insert the 1A battery fuse as indicated.

STEP 9 - CONNECT SOLAR LEAD



Connect the solar lead to the front of the Osprey SP as indicated.

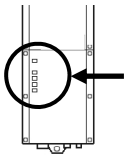
STEP 10 - ACTIVATION



The automated installation can take up to 25 minutes.

Activate the OSPREY SP by swiping a magnet once along the side of the unit where it is labelled 'RESET'; the LEDs on the unit will momentarily light up. The unit will now start its automated installation process.

STEP 11 - CHECK INSTALLATION STATUS



Status LEDs

LED Key
OK - Installation Complete
C - Communications (GPS/Cellular/Server)
S - SIM Card
B - Battery Low
F - FAULT - DO NOT USE UNIT

The installation process performs several self-checks and highlights any warnings via the **Status LEDs**; each LED may flash in turn (on a 6 second cycle) depending on any warnings/faults encountered.

If any of the following LEDs flash after activation/reset, installation will be compromised and/or unsuccessful:

- ○ - No Flash = Battery depleted. Remove from zone and change battery
- **S** - Single flash = SIM Card. Remove from zone and check SIM card
- **B** - Single flash = Battery Low. Remove from zone and change batteries
- **F** - Single flash = Fault. Do not use. Return to Abriox for diagnosis
- F - Double flash (PL4 only) = Fault. Stop operation immediately. Do not use. Return to Abriox

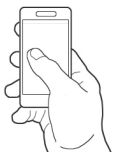
Assuming no warnings/faults are detected (as shown by the **S**, **B** or **F** LEDs), the unit will initially flash the 'C' LED 4 times every six seconds.

- **C -** Quadruple flash = Attempting to establish both cellular and GPS communications
- **C -** Triple flash = Has logged onto the cellular network but has not yet established GPS communications
- **C** - Double flash = Has established GPS communications but has not yet logged onto the cellular network
- **C** - Single flash = Has logged onto both cellular and GPS networks but has not yet established a connection to the data server

Once the green 'OK' LED flashes once every 6 seconds, installation is complete, you may reconnect the gas.

Note
It can take up to 25 minutes to establish full cellular and GPS communications. The LEDs are disabled after 60 minutes regardless of any warnings/faults encountered.

STEP 12 - CHECK THE STATUS BY SMS (OPTIONAL)



Note
A manual status check can only be made once the unit is awake and has logged onto the cellular network.

With the gas reconnected (and turned on), send the following text message to the cell number on the front of the unit **`status`**

The unit will reply back to your cell phone `UNIT:01400301 CH1=0.371psi CH2=43.54psi CH3=10.21psi BATT=80% INSTALLED: Yes`

Where **`01400301`** is the unit's serial number. The **`value`** given in **`PSI, bar or mbar`** is the current pressure being measured by the OSPREY SP & MCA SP.

STEP 13 - SECURE THE ENCLOSURE

With the green 'OK' LED flashing once every six seconds and the gas turned back on, you may secure the enclosure.