



Ocean Alert Newsletter

Installation Special

<http://ssas.satamatics.com>

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Introduction

This is a special edition of the Ocean Alert Newsletter focusing on successful installation of the system.

Ocean Alert has been designed such that a qualified ship's electrician can easily install it. However, this assumes that the installer has carefully followed the instructions contained in the Ocean Alert Installation Manual. Unfortunately, this may not always be the case, particularly if English is not the installer's first language.

The following topics highlight the important aspects of the installation that must be completed correctly to ensure trouble free operation. The Installation Manual will be amended to reflect these recommendations.

Cables

One of the most critical aspects of the installation is ensuring that the correct cable types are used and that the maximum lengths are not exceeded:

1. The Alert Switch Cable should be of the appropriate type for the environment (we supply Type XAI (C), 1x Twisted Pair, 0.75 sq.mm, Foil Screen, Braid Armour, IEC 60332-3 Cat A Cable). The cable must not exceed 30m in length for each switch.
2. The RF cable must be RG214 for lengths up to 15m and LMR400 for 20m. The maximum length of the RF cable must not exceed 20m.

Essential Documentation

All installation engineers should ensure that they have a copy of this newsletter and the following manuals before they attempt to install Ocean Alert:

1. Ocean Alert Installation Manual
2. Ocean Alert Maintenance & Support Manual

The latest version of all manuals can be found on the Ocean Alert website Help page.

Antenna Installation

It may be obvious to all but the antenna must have a clear line of sight for it to "see" both the Inmarsat Satellite and the GPS constellations.

Another factor to consider is location. It may be better to fit the antenna directly to a horizontal surface rather than use the antenna mounting bracket – certainly more discreet. This should only be done if a clear line of sight is possible.

Always avoid placing the antenna within the emission field of any radar installations on the vessel. An ideal location is well away from all other communications antennae - not just to avoid interference but also to ensure that the installation is truly covert.

If the antenna bracket is used then it is advisable to electrically isolate it from the

Terminal Registration

A factor often forgotten is that of terminal registration. Before the engineer installs Ocean Alert, the terminal must have a valid airtime package and be activated on the website. If this is forgotten then the engineer will be unable to test the system.

guardrail, stanchion etc to ensure that there is no route to earth.

Antenna Cable Protection

It is essential that the antenna cable is correctly connected and then *sealed* against water/salt penetration. This should ideally involve a barrier spray then IP66 rated tape bound around the SMA to N-Type connector. The minimum protection should be with silicon based high vacuum grease. Failure to do this will result in damage to the connectors and **will** invalidate the warranty.

Always secure the main antenna cable along the length of its run to ensure that it does not place undue strain on the connector in rough weather.

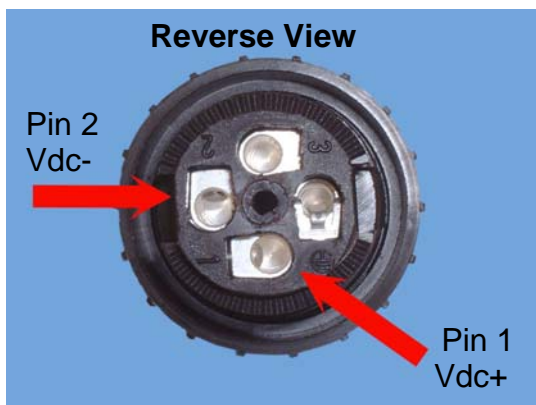
Main Module Installation

Always follow the sequence in the Installation Manual.

The battery should be installed *before* applying the power. ***Ensure that the battery is correctly secured otherwise this may cause the unit to function abnormally. If the battery does not slide into place easily then loosen the PCB retaining screws, fully secure the battery and retighten the PCB screws.***

The Main Module should not be fitted to a surface that has a route to earth. If this is unavoidable then an insulating material should be used between the unit and the bulkhead.

Power Requirement



Ocean Alert requires a power source between 9.6 and 30 Vdc. ***Do not attempt to connect to AC power.***

Always ensure that the switch is wired correctly then check the power output at the connector before applying power to the Main Module.



System Test

Once the system has been installed but before the cables are secured, it is essential that the system be tested:

1. Turn the keyswitch from the Off position to the test position.
2. Depress the primary Alert Switch.
3. Confirm with your operations centre that they have received the test alert message.
4. Depress the secondary Alert Switch.
5. Confirm with your operations centre that they have received the test alert message indicating both switches are active.
6. Depress the primary and secondary Alert Switches again to clear the alert.
7. Confirm that your operations centre has received the "Alert Cleared awaiting Reset" message.
8. Ask your operations centre to "reset" the alert state from the website.
9. Secure all cables, turn the keyswitch to the On position and hand the key to the Captain for safekeeping.

Fault Finding

Please refer to the Maintenance & Support manual for help in identifying any problem encountered. If the problem cannot be resolved, check the website for further information or contact your dealer.