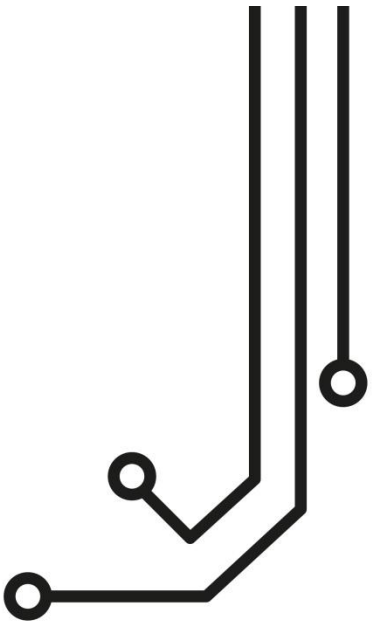
DIGITAL YACHT



MOBAlert
NMEA 2000 Man Overboard Switch

Installation and instruction Manual

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1. Introduction

Congratulations on the purchase of your MOBAlert Man Overboard Switch system. This product is designed to provide a Man Overboard Switch that can be located in the cockpit of a racing or cruising yacht. When activated, NMEA 2000 messages are sent to any compatible Multi-Function Displays (MFDs), triggering them to sound and display an alarm.

The MOBAlert system consists of:

- A MOBAlert NMEA 2000 Interface (black enclosure)
- A MOBAlert Switch Plate

The cockpit of a sailing yacht, can be a very inhospitable environment for marine electronics. Please ensure that any connections between the MOBAlert interface and switch plate are suitably waterproof and that the MOB switch is regularly tested, before any race or cruise.

2. Before you start

To install and test your MOBAlert Alarm system you will need:

- M3 or M4 screws or other fixings appropriate to the mounting location
- A spare NMEA 2000 network connection (T-Piece) to allow the MOBAlert to connect to the NMEA 2000 network*
- An NMEA 2000 compatible MFD that will respond to the NMEA 2000 PGNs that MOBAlert transmits

* NOTE – if you require any additional NMEA 2000 networking components or cables please click on the link below..

https://digitalyacht.co.uk/product-category/nmea-2000/nmea-2000-cables/

3. Installation

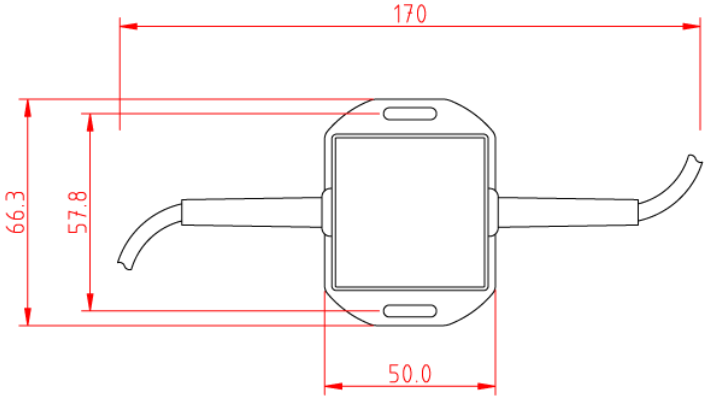
Before starting installation select a suitable location for the MOBAlert switch plate and MOBAlert NMEA 2000 Interface. The switch plate should be installed on deck, in a location where the helmsman or crew can quickly and easily access and operate it, but where it cannot be inadvertently leaned or pushed against causing a false alarm to be generated. It should be mounted on a vertical bulkhead, that is as flat as possible.

The cable between the MOBAlert switch plate and the NMEA 2000 interface can be extended up to 20m, allowing the Sensor to be some distance from the NMEA 2000 network. When locating the units you should consider:

- Routing of the integral NMEA2000 cable from the MOBAlert NMEA 2000 Interface to the NMEA 2000 network.
- Routing of the cable between the MOBAlert switch plate and the NMEA 2000 interface.
- Provision of sufficient space around the units for comfortable cable routing.
- Maintaining the compass safe distance of 0.5m

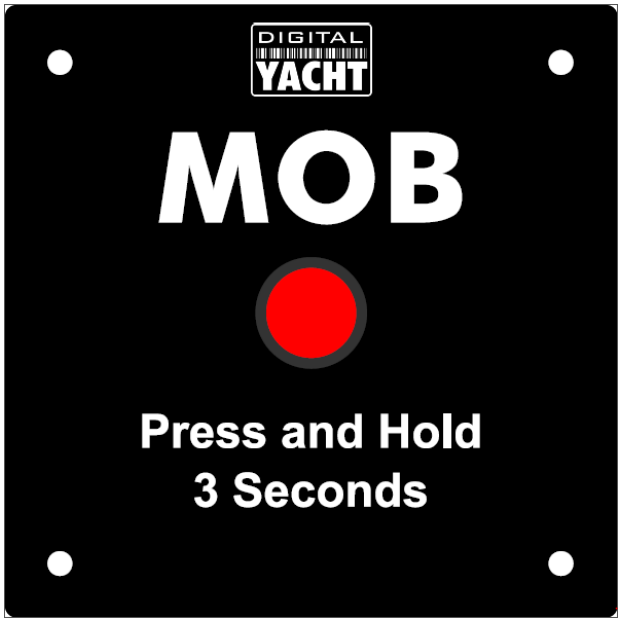
3.1 Mounting the NMEA 2000 Interface

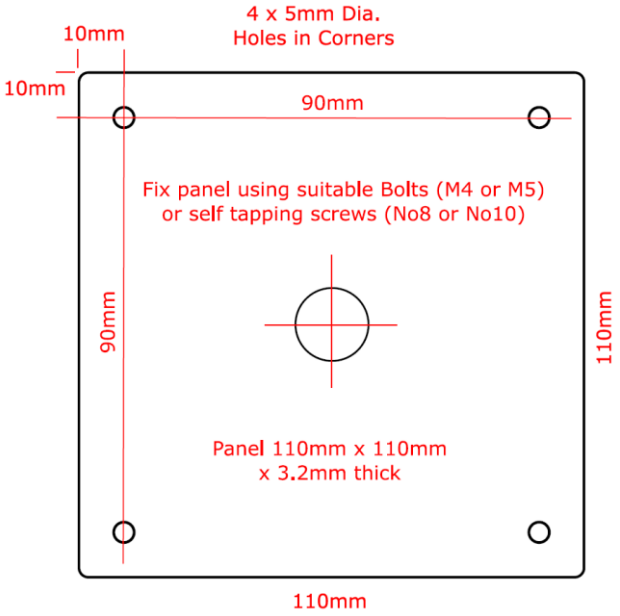
The MOBAlert NMEA 2000 interface has two slotted 4mm Diameter fixing holes. Use suitable fixings (not supplied) to fix the converter to a flat surface – using the dimensions and details shown in the drawing opposite. Note that the unit may be installed in any orientation.



3.2 Mounting the MOBAlert Switch Plate

The waterproof MOBAlert switch plate is designed to be installed in the cockpit of the yacht within easy reach of the helmsman or other crew members.





Secure the switch plate using suitable bolts of self tapping screws (not supplied).

DO NOT over tighten the bolts/screws.

The push switch is waterproof and has two wires that connect to the MOBAlert Interface – the wires can be connected either way round.

3.3 Connecting to NMEA2000 Network

- The MOBAlert, has an integral NMEA2000 cable terminated with a male connector, to connect to a standard NMEA2000 network via a spare “T-Piece”. If you are creating a new NMEA2000 network, you may wish to consider Digital Yacht’s NMEA2000 Starter Kit, that provides all of the cables, connectors and terminators required for a basic NMEA2000 network.

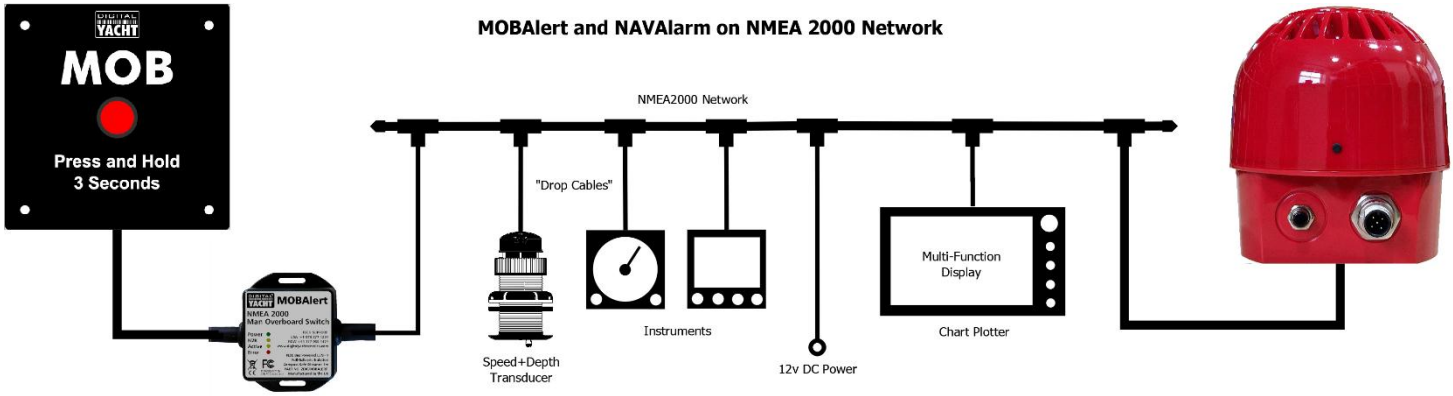
- If you are connecting MOBAlert to a non-standard NMEA2000 network, then a suitable adaptor cable will need to be sourced from the relevant manufacturer;

    - SeaTalkNG (Raymarine P/No A06045)

    - Simnet (Simrad P/No 24006199)

3.4 MOBAlert Wiring Diagram

The MOBAlert interface connects directly to the NMEA 2000 network as shown in the diagram below. When the MOB switch is activated, any compatible MFD or one of our NAVAlarms will then sound an alarm and display the position of where the MOB event happened – not the updated actual position of the MOB.



4.0 Operation

Once the MOBAlert has been installed, it will automatically operate with no additional interaction. At power up, all of the LEDs will flash briefly on the MOBAlert NMEA 2000 Interface. Once the MOBAlert has initialised and claimed an NMEA 2000 address, the N2K LED will continuously flash/flicker depending on the amount of data being received.

4.1 LED and Alarm Behaviour

MOBAlert NMEA 2000 Interface has four LEDs, which behave as follows;

State	POWER LED (Green)	N2K LED (Yellow)	ACTIVE LED (Yellow)	ERROR LED (Red)
OFF	OFF	OFF	OFF	OFF
All OK	ON	Flashing	OFF	OFF
No N2K Data	ON	OFF	OFF	OFF
MOB Active	ON	Flashing	ON	OFF
MOBAlert Interface Error	ON	Flashing	OFF	ON

4.1 NMEA 2000 Behaviour

With the exception of the mandatory Heart Beat PGN and other general NMEA 2000 bus management PGNs, MOBAlert only transmits PGNs when the MOB Switch is activated.

In the event of a MOB situation, a crew member needs to press and hold the Red MOB switch for at least 3 seconds. The MOBAlert will now output the AIS MOB and standard MOB PGNs with the position of the MOB event – not the real time updated position of the MOB.

A table showing the NMEA2000 PGNs (messages) that MOBAlert transmits is shown below…

PGN No.	PGN Title
127233	Man Over Board (MOB)
129038	AIS Class A Position Report
129802	AIS Safety Related Broadcast Message

To Reset the MOBAlert, which will stop the PGN transmissions, press and hold the MOB Switch for 10 seconds.

Please note that you will need to also silence/reset any MFD alarms and our NAVAlarm (if fitted).

4.2 Further Information

For MOBAlert technical support please email support@digitalyacht.co.uk .