

4. Operation

When powered up, the AIS LIFEGUARD will emit a short beep and the Green and Red LEDs will quickly flash for about 1 second and then the Green LED will stay on. This is the normal state of the AIS LIFEGUARD and indicates that it is working correctly.

Every time that a valid !AIVDM message is received from the AIS system, the Green LED will briefly flash which indicates that correct NMEA 0183 data communication is taking place.

The AIS LIFEGUARD checks all MSG1 and MSG14 AIS Sentences to see if an AIS SART/MOB/EPIRB has been activated or tested. If it detects one of these conditions, then AIS LIFEGUARD alarms in the following way;

ALARM TYPE	RED LED	INT BUZZER	EXT BUZZER	MUTE ALARM
REAL	CONTINUOUS	CONTINUOUS	CONTINUOUS	MANUAL
TEST	FLASH x5	BEEP x5	SILENT	AUTOMATIC

A Real Alarm will cause all audible and visual alarm indications to occur and can only be "Muted" by someone pressing the Mute/Reset button. A short press of the Mute/Reset button will cause the Internal and External buzzers to silence but the Red Alarm LED will stay illuminated to show that an alarm condition has occurred and that the MMSI number of the SART that caused the alarm is stored in memory and will not cause another alarm.

The AIS LIFEGUARD will alarm again if it detects another alarm message from a SART with a different MMSI number. The AIS LIFEGUARD can store up to 20 different MMSI numbers of SARTs that have activated the Alarm. Each time a SART makes the AIS LIFEGUARD alarm, the Mute/Reset button must be pushed to silence that particular alarm.

After an emergency situation has finished and one or more alarms have occurred and been silenced by pressing the Mute/Reset switch, the AIS LIFEGUARD should be RESET to make it forget all of the previous MMSI numbers of SARTs that have triggered an alarm. To RESET the AIS LIFEGUARD, press and hold the Mute/Reset switch for 4 seconds until the Internal Buzzer beeps once and the RED Alarm LED goes out.

Most AIS SARTs have a test mode and the AIS LIFEGUARD allows you to easily test the AIS SARTs before commencing a voyage. When the AIS LIFEGUARD detects a SART in test mode, it Beeps the Internal Buzzer and flashes the RED Alarm LED five times. If you have multiple AIS SARTs to test, it is recommended that you test them one at a time. Activate the AIS SART test mode, and at the end of the test, the AIS LIFEGUARD will beep and flash to indicate the test has worked, before automatically returning to normal operation.

NOTE – the AIS LIFEGUARD has a Self-Test mode which is entered if you press and hold the Mute/Reset button whilst the AIS LIFEGUARD powers up. In Self-Test mode the two LEDs and the Internal and External buzzers are turned ON, which is useful for testing that everything is working correctly. To exit Self-Test Mode simply release the Mute/Reset switch.

Installation & Quick Start Guide

AIS LifeGuard MOB Alarm



1. Introduction

Congratulations on the purchase of your AIS LifeGuard MOB Alarm. It is recommended that your this product is installed by a professional installer.



Before operating the unit you should familiarise yourself with this Quick Start Guide and the user manuals for any equipment you wish to connect it to.

2. Before you start

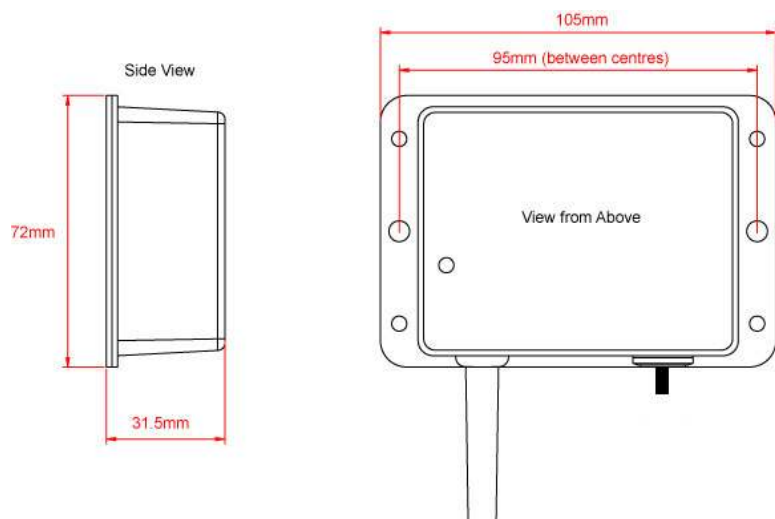
You will need the following items and tools to complete and test the installation:

- The AIS LIFEGUARD
- A working AIS Receiver or Transponder with an NMEA 0183 Output
- An AIS SART
- External Buzzer (optional)
- Access to 12V or 24V DC power supply where the unit is to be installed.
- M3 or M4 screws or other fixings appropriate to the mounting location.

3. Installation

Before starting installation select a suitable location for the AIS LIFE GUARD. Below is a dimensioned drawing showing the mounting holes and cable entry point. The unit is water resistant; however it should be installed below deck in a dry location. When locating the unit you should consider:

- Routing of power/data.
- Provision of sufficient space around the unit for cable connections.
- Easy access to the unit to Mute/Reset Alarms.
- That the internal alarm is audible at the intended location.
- Maintaining the compass safe distance of 0.5m.



Fixing location drawing

Installation Step 1

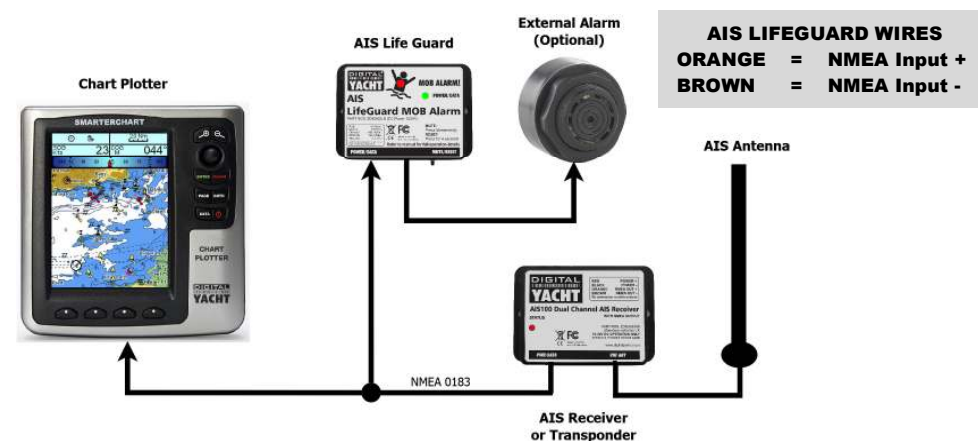
- Fix the AIS LIFE GUARD to a bulkhead or flat surface using suitable fixings (not supplied). Note that the unit may be installed in any orientation.

Installation Step 2 - Power

- Provide power connections to the unit. Power is connected to the four core PWR/DATA cable on the Red and Black wires. The Red wire is the positive (+) connection. The Black wire is the negative (-) connection.
- Connect the stripped wires to the nearest source of primary 12V or 24V DC power. It is recommended that the AIS LIFE GUARD is wired to the same circuit breaker/switch as the AIS system, so that the two systems are always on together. **Ensure that the supply to the AIS LIFE GUARD is correctly fused. A 1A fuse or circuit breaker is recommended.**

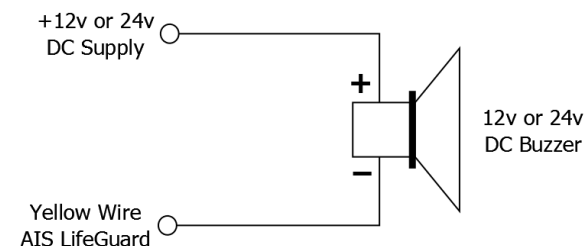
Installation Step 3 – Connection to AIS System

- The AIS LIFE GUARD's NMEA 0183 Input on the Power/Data cable, needs to be connected to the NMEA0183 output of an AIS Receiver or Transponder.
- If the AIS is already connected to a Chart Plotter, then you must wire the AIS LIFE GUARD in parallel so that the AIS system is sending the same NMEA 0183 to the AIS LIFE GUARD as it is sending to the Chart Plotter. NMEA 0183 outputs are designed to drive at least 2 or 3 NMEA 0183 inputs and connecting the AIS LIFE GUARD in parallel should have no detrimental effect on the installation.



Installation Step 4 – Connecting an External Buzzer (Alarm)

- The AIS LIFE GUARD has a 95dB internal buzzer which for many vessels will be loud enough. However on larger/noisier vessels, it is recommended to fit an External Buzzer (not supplied). The "Ext Buzzer –" Yellow wire on the power/data cable can drive an external DC powered Buzzer/Klaxon/Alarm which should be wired as follows;



Maximum Current = 500mA
(for larger currents use a relay)