9. WARRANTY

9.1 Limited Warranty

Your Ocean Signal product is warranted against manufacturing defects in materials and workmanship for a period of two years from the date of purchase and in accordance with the following conditions:

Ocean Signal will at its discretion, repair or replace faulty product free of charge excluding the cost of shipping. Proof of purchase from the original purchaser shall be required in order for a warranty claim to be valid. All claims shall be made in writing to Ocean Signal Ltd. or an approved service dealer or distributor.

Ocean Signal shall not be liable to the buyer under the above warranty:

- for any repairs or modifications carried out on the product using parts that are not supplied or approved by the manufacturer Ocean Signal, including batteries and for work carried out other than by Ocean Signal or approved service dealers.
- for any part, material or accessory that is not manufactured by Ocean Signal, the consumer will be covered by the guarantee / warranty offered to Ocean Signal by the manufacturer or supplier of such a component.
- for product which has not been fully paid for.
- for any product supplied by Ocean Signal to a customer under an alternative warranty or commercial agreement.
- for the cost of shipping product to and from the customer.

The battery is only warranted until the date of expiry and provided that it is tested in accordance with the information provided within this user manual as noted by the electronic witness stored within the product.

The following specific item is excluded from this warranty:

- damage to the antenna.

This warranty does not affect your statutory rights.

9.2 Extended Warranty

By entering your product details online or via the Ocean Signal mobile app, you can add a further three years to the warranty period. Full details on extended warranty are available at **www.oceansignal.com**.

For further assistance please contact our Customer Service department: **help@oceansignal.com**

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help@oceansignal.com
www.oceansignal.com

912S-05694 Issue 01.03 17/04/2025

rescueME MOB2 Class M MSLD

AIS Man-Overboard Maritime Survivor Locating Device with DSC

GET THE MOBILE APP TO SEE YOUR MOB2'S TEST INFORMATION

Android iOS

GET IT ON Google Play | Download on the App Store

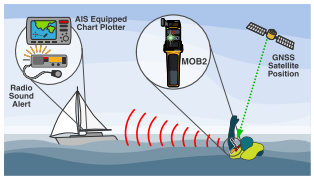
NFC Communication Enabled

DOWNLOAD THE FULL USER GUIDE
https://www.oceansignal.com/manuals

1. ABOUT YOUR MOB2

1.1 AIS

The AIS system operates on the VHF band. Transceivers are fitted to all commercial ships and an ever-growing number of recreational vessels globally. Shortly after activation an AIS location device, such as the MOB2, will activate a MOB target and message on all plotters in AIS equipped vessels within the VHF range alerting them to the fact that emergency assistance is required. Often it is a vessel in the close vicinity of an incident that is able to react and effect a rescue quicker than the emergency services. Emergency service craft are fitted with AIS receivers allowing them to pinpoint emergencies in the water more precisely than any other system.



Interface diagram showing typical usage

The method in which an AIS message is displayed will depend on the reception equipment being used. AIS enabled plotters will display a ship or Man Overboard target with the MOB2 preprogrammed AIS unique ID, that identifies it as a Man Overboard device.

1.2 DSC

Your MOB2 is supplied with open loop* DSC enabled. In the event of a man-overboard emergency situation, the MOB2 will continue to transmit the AIS distress messages as well as a DSC distress alert that is sent to all ships and stations within range that have a DSC VHF Radio. This distress alert will contain the current GNSS position of the victim in the water (once a GNSS fix is obtained) and is sent via VHF channel 70, maximising the chances of rescue from a nearby vessel in the event that your own vessel is unable to assist.

The originating MMSI displayed on the DSC receiving radio will be the unique self-identification number pre-programmed into the MOB2 which cannot be changed. This number will always start with '972' irrespective of the country it was purchased in and will allow the DSC receiver to immediately identify a man-overboard situation requiring immediate assistance.

If your own vessel has a DSC enabled VHF radio, it is strongly recommended to programme your vessel's MMSI number into your MOB2 for testing purposes only. This is achieved using NFC and the Ocean Signal Mobile App. Once the app is downloaded, follow the on-screen instructions to add your vessel MMSI to the MOB2.

It is also possible using the mobile app to restrict the DSC functionality of your MOB2 to closed loop* DSC. If restricted to closed loop DSC, the MOB2 will only transmit a DSC distress alert to your vessel's MMSI that has been programmed within the MOB2, for the first twelve minutes of activation. It will not immediately transmit to all ships and stations within range. However, if the DSC transmission from the MOB2 is not acknowledged by your vessel within these first twelve minutes, the MOB2 will then revert to open loop DSC and will begin to transmit to all ships within range.

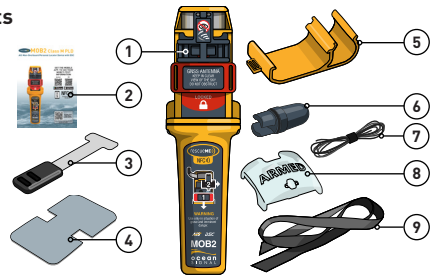
It is recommended not to switch to a closed loop function unless your personal circumstances dictates it to be necessary.

*** NOTE:** **DSC Closed Loop** refers to the transmission of an addressed message to a closed user group, specifically the vessel's MMSI that you have programmed into your MOB2 as described above. The distress alert from the MOB is sent only to your vessel's DSC VHF radio, also known as the mothership.

DSC Open Loop refers to an "all-ships" call that alerts all ships with a DSC VHF radio within range.

1.3 MOB2 Box Contents

1	MOB2
2	Quick Start Guide
3	Fixing Buckle
4	Adhesive Buckle Patch
5	Oral Tube Bracket
6	Antenna Winder
7	Cord
8	Protective 'ARMED' Cover
9	Activation Tape



⚠ IN CASE OF EMERGENCY ⚠

Use only in situations of grave or imminent danger

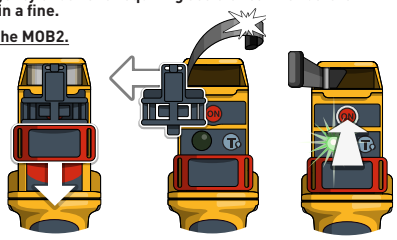
If the MOB2 is correctly fitted to the life jacket, it will automatically activate when the life jacket inflates. For life jacket fitting see full user manual, available at www.oceansignal.com.

⚠ **Only activate your MOB2 in emergency situations requiring assistance. Deliberate misuse of your MOB2 may result in a fine.**

This guide shows how to manually activate the MOB2.

1. Slide the red Arming Tab down.
2. Slide the grey Activation Slide sideways to remove it. This will release the antenna and activate the MOB2.
3. If the strobe light does not start flashing, manually activate the MOB2 on by pressing the ON Key

The strobe light will start flashing. The MOB2 will automatically start to transmit after approximately 15 seconds.



PUSH RED ARMING TAB DOWN | **REMOVE GREY ACTIVATION SLIDER** | **IF LED FAILS TO FLASH, PRESS 'ON' KEY**

Hold your device with the antenna standing vertically. Keep the area marked 'DO NOT OBSTRUCT' on the red Arming Tab free and clear whilst in use. Obstruction or covering of this area may interfere with GNSS reception.

Upon activation, the indicator LED will show eight double flashes during AIS transmission, with one long flash or four rapid flashes during DSC transmission. The following table details the flash sequence that can be seen during activation of the MOB2.

⚠ **Take great care to keep well clear of eyes and face as the antenna will be released very quickly. Keep at the least 30cm (12") clear to avoid possible injury.**

⚠ **When operating the MOB2, tether the device to your body or life jacket to avoid accidental loss.**

1.4 Deactivation

To deactivate your MOB2 after use or if it is accidentally activated, press and hold the TEST/OFF T Key until the red LED flashes twice, then release.

1.5 LED Indications on activation

TYPE		STATUS	WHEN
Visual Aid to Location	1x strobe & infra-red* flash	These flashes will aid Search and Rescue to pin-point your precise location when in range.	Once every 2.5 seconds >10% battery
Visual Aid & Low Battery Warning	1x amber, strobe and infra-red flash	An amber flash will precede the strobe and infra-red flash every 2.5s when the MOB2 has less than 10% battery life remaining.	Once every 2.5 seconds <10% battery
Receiver Status Indicator	3x amber flashes (receiver in standby mode)	Three amber flashes occur whilst DSC receiver is in standby mode. DSC transmission are being sent without GNSS fix.	Once every 5 seconds
	3x green flashes (receiver waiting for DSC ack.)	Three green flashes occur whilst DSC receiver is on and awaiting a DSC acknowledgement. DSC transmissions are being sent with GNSS fix.	
	3x blue flashes (DSC ack. has been received)	Three blue flashes occur when a DSC acknowledgement has been received. No further DSC transmissions will be sent. This will continue until the unit is deactivated.	
GNSS Search/Fix	1x cyan flash	A cyan flash will occur every 5 seconds whilst the MOB2 is searching for a GNSS location fix.	Once every 5 seconds
	3x cyan flashes	Three cyan flashes will occur when a new or updated GNSS location has been obtained.	Once at GNSS Fix
AIS Transmit	2x green flashes	Two green flashes will occur during each AIS transmission that includes a GNSS location fix	8 times every minute
	2x red flashes	Two red flashes will occur during each AIS transmission that does not include a GNSS location fix.	
DSC Transmit Open Loop	4x green flashes	Four green flashes will occur during a DSC open loop transmission (to all ships) that includes a GNSS location fix.	Once every 5 minutes for first 2 hours then once every 10 minutes**
	4x red flashes	Four red flashes will occur during a DSC open loop transmission (to all ships) that does not include a GNSS location fix.	
DSC Transmit Closed Loop	1x long green flash	One long green flash will occur during a DSC closed loop transmission (to own vessel only) that includes a GNSS location fix.	Once every 5 minutes for first 12 minutes then reverts to Open Loop***
	1x long red flash	One long red flash will occur during a DSC closed loop transmission (to own vessel only) that does not include a GNSS location fix.	

***Infra-red light is not visible by sight.**

****DSC transmission will continue until DSC acknowledgement received, the unit is deactivated or the battery depleted.**

*****Closed Loop DSC transmissions will automatically revert to Open Loop DSC transmissions after 12 minutes if no DSC acknowledgment is received from own vessel (the manually programmed MMSI number.

3. DSC SELF-CANCELLATION

Once activated, the MOB2 will continue to transmit DSC distress alerts until it receives an acknowledgment from a nearby vessel that the distress alert has been received. If the MOB2 is deactivated before an acknowledgement is received, the MOB2 will transmit a final self-cancellation message via DSC advising that the distress alert has been cancelled.

4. NFC

The MOB2 is capable of connection to devices using near field communication (NFC). NFC technology allows communication between two electronic devices over a distance of a few cm.

The benefit of using NFC in the MOB2 is that the power used for communication comes from the mobile device and not the MOB. The Ocean Signal mobile app allows a user to access the MOB2 for viewing the latest test results and battery health, as well as providing a means to configure the MOB2 with a vessel MMSI.

To use the app simply align your mobile device NFC antenna to the front of the MOB2 where you see "NFC". Once connected, details about your MOB2 will be displayed on your mobile device including the product name and serial number, the unique AIS ID and any previous test results that have been stored.

Android

iOS

The battery information is also available through the app, including the current battery expiry date and how long the battery has been in use so far.

5. BATTERIES

The MOB2 uses a lithium manganese dioxide battery pack to power the device. These batteries have a five year storage life before any significant reduction in capacity. Each MOB2 product is marked with a battery expiry date, located on the base of the unit.

The battery must be replaced either prior to the expiry date or after the MOB2 has been used, even if only activated for a short period of time. Battery replacement must be carried out at an Ocean Signal authorised battery replacement centre.

⚠ **The battery should be replaced before the expiry date has passed to ensure reliable operation and full capacity in emergency situations.**

⚠ **Always use an Ocean Signal authorised battery replacement centre when a battery change is required. Failure to do so will invalidate type approval and warranty and may also mean that the unit does not operate correctly in a distress situation.**

⚠ **Never dispose of the MOB2 or its batteries in a fire.**

⚠ **Never attempt to remove, puncture or dismantle the battery.**

⚠ **Never attempt to charge the battery.**

⚠ **Extreme temperature caused by failure to observe the above warnings may cause the battery to explode or catch fire, which can result in injury or damage to surrounding personnel or property.**

⚠ **Dispose of used products and its included batteries in a responsible manner, national and local regulations on battery disposal may apply including restricting the disposal of the batteries within this product in domestic refuse.**

6. LICENSING (US ONLY)

Under the rules of 47 C.F.R Part 95, licensing or registration of MSLD devices is not required. MSLDs are not authorised to be used on Land.

2. TESTING

⚠ **In the event of test failure, contact Ocean Signal for advice at help@oceansignal.com.**

Routine testing of your MOB2 is recommended to ensure it is in good working order. Please follow the guidance on the frequency that tests should be carried out. Each test will reduce the battery capacity slightly and reduce the operation time of your MOB2 during an emergency.

2.1 Functional and DSC Test

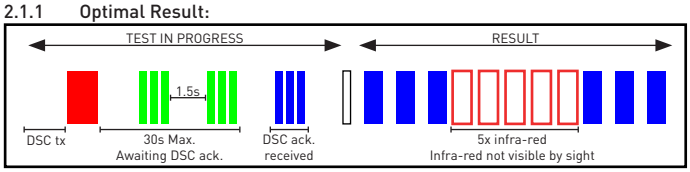
⚠ **This test should be carried out once a month throughout the life of an installed battery.**

To test your MOB2 is functioning correctly, press and hold the TEST/OFF Key. After one second the red LED will start to flash indicating that the Function and DSC Test Mode is activated. The key may now be released.

After the TEST/OFF key is released a DSC test transmission will be sent to the MMSI number programmed into your MOB2 - see section 1.2. This test DSC transmission will be indicated by a long red flash and then followed by a short red flash every two seconds until an auto acknowledgement is received.

At the end of the test, the strobe will flash and the indicator LED will produce a flash sequence. This flash sequence indicates the pass/fail result. The following image shows the desired LED response following commencement of the Functional and DSC test. If any alternative test result is witnessed refer to the MOB2 User Manual at www.oceansignal.com.

2.1.1 Optimal Result:



2.2 AIS and GNSS Test

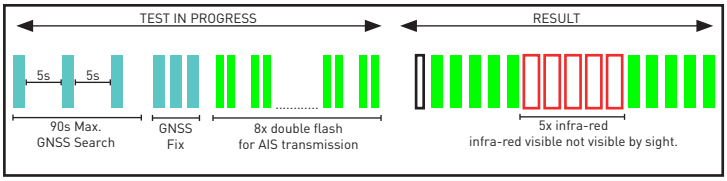
⚠ **This test should be carried out no more than once a year throughout the lifetime of an installed battery.**

To initiate an AIS transmission and GNSS test, press and hold the TEST/OFF Key. After one second the red LED will start to flash. After a short while (approx. 5 seconds), the red LED will remain on and steady, indicating that the AIS and GNSS Test Mode is activated. The key can now be released.

After the TEST/OFF key is released the LED will produce a cyan flash every five seconds whilst the MOB2 is searching for a GNSS location fix.

Once a GNSS location fix is obtained, the strobe will flash and the indicator LED will produce a flash sequence. This flash sequence indicates the pass/fail result. The following image shows the desired LED response following commencement of the AIS and GNSS test. If any alternative test result is witnessed refer to the MOB2 User Manual at www.oceansignal.com.

Optimal result:



7. APPROVALS

7.1 European Declaration of Conformity

Ocean Signal Ltd. declares equipment type MOB2 is in compliance with Dir. 2014/53/EU.
www.oceansignal.com/products/rescueME-mob2/RED-DofC

The MOB2 is compliant with regulation ECC/DEC/(22)02 regarding the use of Class M MOB devices.

⚠ **The following statement is for US customers only: This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained.**

8. SPECIFICATIONS

AIS Transmission

Transmit Power (EIRP)	1 Watt
Frequency	161.975/162.025MHz ±500Hz
Baud Rate	9600 Baud
Synchronisation	UTC
Messages	Message 1 (position) , Message 14 (MOB Status)
Repetition Interval	8 messages /minute
	Message 14 sent twice every 4 minutes

DSC Transmission

Transmit Power (EIRP)	0.5 Watt
Frequency	156.525MHz
Messages	Individual Distress Relay
	All Ships Distress Alert
Message Repetition	Once every five/ten minutes (Relay only)
Baud Rate	1200 Baud

Battery

Operating Lifetime	>24 hours at -20°C
Storage Life	5 Years

Environmental

Temperature Range (operational)	-20°C to +55°C
Temperature Range (storage)	-30°C to +70°C
Damp Heat (humidity)	40°C at 93%
Drop (hard surface)	1m: 6 sides
Designed to meet Drop (water)	20m
Waterproof	10m depth for 1 hour
Thermal Shock	45°C into 100mm of water > 1 hour

Physical

Weight	92 grams
Dimensions	134mm x 38mm x 27mm
	59mm over bracket