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C.f., P.Iva e Reg. Imprese Ra no. 02276360399 - Capitale Sociale 10.000,00 €
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Some questions and answer about MSLD (MOB - Man Over Board) device

Are MOB devices EPIRBs (Emergency Position Indicator Radio Beacon) or PLBs (Personal Locator Beacon)?

No, they aren't. An EPIRB or a PLB operate through a satellite network which can detect a radio signal emitted at 406 MHz, effect a triangulation and determine (with quite good approximation) the position of the buoy. These devices operate at different frequencies according to the MOB model and they are able to alert the rescues in case of emergency.

Why should I buy a MSLD (MOB) instead of an EPIRB buoy?

The two products are different and have different functions. If you need to have an emergency device that is able to signal a serious damage of the vessel the EPIRB is the suitable device. If you need to have a security system on-board, for the vessel crew, that must activate in case of man over-board, the MSLDs (MOB) are the right choice.

How do they work?



The Wamblee devices of W4XX series start when they come into contact with water (fresh or salt) for a continuous and superior time of 5 seconds (or in alternative it can be operated manually by the frontal push-button). Once activated, the devices generate a different radio signal according to the MOB model:



W400 model

The W400 device emits a radio signal at 121.5 MHz with a power of 100mW in AM (Amplitude Modulation). For a correct reception of the signal, on board of the vessel it must be installed a VHF receiver capable of receiving the emergency signal.

The unit has a blinking flash for night-time localization.

	<p>W420 model</p> <p>The W420 device emits a radio signal on AIS 1 and AIS 2 (AIS) channels of the maritime VHF band, with a power of 1 W. This signal uses the AIS (Automatic Identification System) protocol and provides the transmission of the man's position at sea using a GPS module with 66 channels inside the device.</p> <p>The GPS module precision is about 10 meters, and the AIS system – contrary to the DSC system – forwards its position in degrees/minutes/seconds and fraction of seconds.</p> <p>With this protocol the position error is comparable to the error of the GPS module (< 10 meters).</p> <p>The unit has a blinking flash for night-time localization.</p>
	<p>W470 model</p> <p>The W470 device emits a radio signal on AIS 1 and AIS 2 (AIS) channels and a homing signal at 121.5 MHz, with a power of 1 W (in AIS mode, 0.1W in Homing). This signal uses both AIS (Automatic Identification System) protocol and homing signal for RDF (Radio Directional Finder) and provides the transmission of the man's position at sea using a GPS module with 66 channels inside the device.</p> <p>This device model combines the performance of two MOB models: W400 (Homing 121.5 Mhz) and W420 (AIS), and offers a greater flexibility.</p> <p>The unit has a blinking flash for night-time localization.</p>

Can the VHF receiver be used on board?

Yes, you can use your maritime VHF AIS radio on board with W420 and W470 devices.

The frequency 121.5 MHz is not receivable by the VHF receiver which is located on board the vessel, you need a special VHF receiver, such as for example an aeronautical radio system.

Has the frequency 121.5 MHz been removed from rescue monitoring system, hasn't it?

The frequency 121.5 MHz is no longer used since February 2009 as primary frequency of the EPIRB systems managed by Cospas-Sarsat; it is important to know that the 406 MHz frequency used by satellites for the triangulation, can report a position with an



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approximation of about 3/5mn. For this reason the EPIRBs are equipped with a second frequency (121.5 MHz, the same as W400 or W470 MSLD (MOB)) that can help SAR units to localize better the position of the accident. We choose the 121.5 MHz as the rescue frequency of the W400 or W470 devices so that it can also be received from the SAR units which work in the area. For example if it is not possible to determine the position of the man -overboard, the master of the ship can contact the SAR units and request an intervention by using the 121.5 MHz frequency as search frequency.

Which is the range covered by MSLD systems?

The range covered by MSLD (MOB) systems is indicative and depends on the technical characteristics of the emission of the signal; following is an indicative summary table:

Device	Range covered
W400 (121.5 MHz, 100mW)	Between shipwrecked person and vessel = ± 2 nm Between shipwrecked person and aircraft = ± 10 nm
W420 (AIS1 and AIS2)	Between shipwrecked person and vessel = ± 5 nm Between shipwrecked person and aircraft = ± 40 nm
W470 (AIS1 and AIS2) (121.5 MHz, 100mW)	As indicated above for each single frequency
Aircraft at a height of 3000 ft.	

Who can receive this emergency signal in addition to my vessel?

With the exception of the W400 device, for which you must have installed on board a specific receiver (or you should inform the SAR unit of the presence of a man overboard with MSLD device operating on the aeronautical band), for the other devices the reception of the MSLD signal is possible provided they are capable of receiving the AIS protocol.

Is it possible to try the device without having to activate a distress signal?

Yes, it is. You just have to leave the main knob on TEST position and press the activation button.

For the devices equipped with GPS module (W420 and W470), the test sequence has two modes: short and long.



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The short mode checks that the device is working properly and controls the level of the batteries.

The long mode checks that the GPS module is working properly and generates a test radio message containing the position acquired by the GPS module.

How much is the operation life?

The MSLD devices of the W4XX series guarantee a battery life of 5 years if not used, including test cycles established for each device.

In case of activation, the battery life changes depending on the model:

Device	Battery life in case of activation
W400	24 hours at -20 degrees
W420	24 hours at -20 degrees
W470	12 hours at -20 degrees



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Other devices in commerce offer the same functions but operate at different frequencies.

Some devices in commerce have similar functions but use different frequencies, particularly frequencies defined within CEPT regulation but these solutions have some important disadvantages:

- they work on frequencies that are not internationally recognized as rescue frequencies, and so they are not detectable by SAR services.
- Generally they are devices that transmit continuously and it is possible to take the "absence of signal" (proximity system). This solution limits the working area of the device (10/20 meters).
- It is not possible to trace out the position of the man overboard because the signal is too weak and requests a specific receiving device (see problem with SAR).
- Batteries must be replaced quite frequently.

How do you install this device?

This equipment has been designed to be used with self-inflating jackets and it is normally installed:

- By using the rear flange for passing one of the fabric tapes that connect the self-inflating jacket cover, or
- By using the appropriate bracket that allows you to fix the MSLD device to the inflating mouthpiece, or
- By using a jacket with a specific housing pocket.

Wamblee is able to offer IMO or SOLAS approved self-inflatable jackets specially crafted for MSLDs of the W4XX series.

Is it a CE device?

Yes the device is CE Compliant according to the RED regulation. The W400 and W420 are also FCC and IC approved

Can this device be used all over the world?

This device can be used in quite all European and Extra-European countries; further details can be found on the sticker of the packaging or on our website:

<http://www.wamblee.it/>