

MAN OVERBOARD LOCATE AND RESCUE SYSTEMS

SEA MARSHALL® AU9



Sea Marshall Maritime Survivor Locating Devices (MSLD) have been saving lives in the maritime industry for over 30 years and are the leading man overboard system in the North Sea.



MOBILARM®

ALWAYS ON WATCH

Actual size

First launched in 1979, Sea Marshall MSLDs have a long history of saving lives.

In the North Sea alone over 5,000 units are in use daily and industry professionals worldwide use the Sea Marshall system, including:

- Offshore windfarms, service providers and maintenance crews
- Offshore oil and gas producers, service vessels and helicopter transit operators
- Offshore exploration and construction companies
- Coast guard and rescue authorities
- Port and harbour authorities
- Commercial fishing fleets, fishfarms and aquaculture



HOW IT WORKS

1. Man falls overboard wearing Sea Marshall AU9 alerting unit
2. Alerting unit auto-activates and transmits continuous emergency homing signal on 121.5 MHz*
3. Mobilarm SARfinder base unit on board parent vessel detects emergency signal and raises alarm
4. Crew use SARfinder to track homing signal and locate man overboard*
5. Man overboard is rescued



* 121.5 MHz is the international Search and Rescue (SAR) homing frequency - enables you to request SAR assistance to locate the man overboard if needed.

TRANSMISSION RANGE

Approximate transmission range of 500mW alerting unit (Sea Marshall AU9-WF) derived from sea trial results. Actual range dependent on sea state, atmospheric conditions and height/altitude of receiving antenna.



BASE UNITS



Mobilarm SARfinder

- Continuously monitors 121.5 MHz frequency
- Immediately detects emergency signal from activated Sea Marshall alerting unit
- Automatic alarm and in-water tracking
- Compass-style LED display indicates direction and approximate range of man overboard to enable self-managed rescue
- Plots vessel's GPS position at time of incident*
- No limit to the number of alerting units that can be used with one SARfinder
- Portable model also available



Mobilarm Crewguard

- Continuously monitors 121.5 MHz frequency
- Immediately detects emergency signal from activated Sea Marshall alerting unit
- Automatic alarm and flashing LED man overboard warning
- Simple LED display indicates signal strength (near or far)
- Plots vessel's GPS position at time of incident*
- No limit to the number of alerting units that can be used with one Crewguard

* Requires NMEA GPS Interface – see Accessories



ALERTING UNITS



- Lightweight and easily fitted to lifejacket or PFD
- Water-activated or manually operated
- LED strobe on antenna for visual tracking and indicating operational status
- 24 hours emergency transmission
- 2 year battery service life

Long Range/Remote Location

Sea Marshall AU9-WF

- 500mW power output
- 2 second activation
- 40-second activation override from OFF



Offshore Oil & Gas

Sea Marshall AU9-X

- Zone 2 ATEX intrinsically safe approval
- 100mW power output
- 5 second activation
- 40-second activation override from OFF



Helicopter Transit

Sea Marshall AU9-HT

- CAA approved for in-flight use
- 100mW power output
- 5 second activation
- 40-second activation override from OFF



General Purpose

Sea Marshall AU9

- 100mW power output
- 5 second activation



WHY SEA MARSHALL?

1. Stand-alone and self-managed man overboard alert and rescue system
2. Safeguards crew from undetected falls overboard
3. Dedicated equipment for 24/7 crew safety monitoring and signal tracking
4. Homing signal can be tracked by parent vessel and international Search and Rescue
5. Lightweight and compact enhancement to existing safety equipment
6. Suitable for large or small crew numbers



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INTELLIGENT LIFEJACKETS

Mobilarm recommends you fit your Sea Marshall AU9 alerting unit to your lifejacket or PFD and has partnered with several lifejacket manufacturers to offer you a range of “intelligent lifejacket” options which are MSLD-ready.

Stowed securely in a dedicated internal pocket or external pouch, your Sea Marshall alerting unit is always with you.

All Sea Marshall AU9 models can be fitted to the following lifejackets:

Mullion ‘SOS’ Hi-Rise 275N (SOLAS)

- 275 Newtons buoyancy, SOLAS Chapter III 2010 approved
- Crutch strap and front D-ring to attach to safety line
- MSLD viewing window



ISP ‘SOS’ Challenger Interlock 275N (SOLAS)

- 300 Newtons buoyancy, SOLAS Chapter III 2010 approved
- Patented interlocking lobe design and Wave Barrier technology prevents water being channelled back into the wearer’s airways
- MSLD viewing window



Shark LAP

- 275 Newtons buoyancy, CAA Spec 5 approved
- With Air Pocket Plus patented re-breather system
- Reduces number of items that offshore personnel have to put on



Viking ‘SOS’ 275N (SOLAS)

- 275 Newtons buoyancy, SOLAS Chapter III 2010 approved
- Seat-belt style buckle, harness and front D-ring to attach to safety line
- MSLD viewing window



Other lifejackets may be modified with a Universal MSLD Lifejacket Fixing Kit - an external pouch that fits to the lifejacket waist-belt and self-adhesive antenna patches – speak to your Mobilarm representative for more information.

Note: Lifejacket prices exclude Sea Marshall MSLD.

DESIGN YOUR MAN OVERBOARD SYSTEM

Choose your base unit



Self-manage rescue
Mobilarm SARfinder



Manually notify SAR
Mobilarm Crewguard



Transportable base unit
Mobilarm Portable SARfinder

Choose your alerting unit



Long-range alert
Sea Marshall AU9-WF



Intrinsically safe
Sea Marshall AU9-X



Flight-approved
Sea Marshall AU9-HT



General purpose
Sea Marshall AU9

	AU9-WF	AU9-X	AU9-HT	AU9
2 second water-activation from READY	✓			
5 second water-activation from READY		✓	✓	✓
40 second water-activation override from OFF	✓	✓	✓	
100mW power output		✓	✓	✓
500mW power output	✓			
Intrinsically safe (zone 2)		✓		
Flight-approved			✓	

Choose your lifejacket

Select from the options on the previous page or purchase the **Universal Sea Marshall MSLD Lifejacket Fixing Kit**



Choose your accessories

Crew training
Test Units

Plot vessel GPS position
NMEA GPS Interface

Extend Crewguard monitoring radius
External Antenna

Service and maintenance
Battery/Service Package

See Price List for full list of spares and accessories.

SPECIFICATIONS

Base Units	
Power	12V (24 to 12V DC converter available)
Frequency	121.5 MHz (Test units 121.65 MHz)
Environmental Resistance	IP66
Mounting Options	Flush or bracket-mounted
Cable Length	20m
Alerting Units	
Tx Frequency	121.5 MHz (Test Units: 121.65 MHz)
Bandwidth	25KHz (in alignment with ETSI)
Modulation	Continuous swept tone A3X
Alerting Radius	Surface-to-surface: 2 to 3 nautical miles (100mW); 3 to 7.5 nautical miles (500mW) depending on sea state, atmospheric conditions and altitude/height of receiving antenna
121.5 MHz Tx Power Output	100mW (AU9, AU9-X, AU9-HT); 500mW (AU9-WF)
Time to Auto-Activation from READY	2 seconds (AU9-WF); 5 seconds (AU9, AU9-X, AU9-HT)
Time to Water-Activation Override from OFF	40 seconds (AU9-X, AU9-HT, AU9-WF)
Battery Type	1 x CR-AAK (AU9-WF); 2 x CR-AA 3V (AU9, AU9-X, AU9-HT); user replaceable
Operating Time	24 hours emergency operation
Battery Service Life at 20°C	2 years
Operating Temperature	-20°C to 55°C
Storage Temperature	-55°C to +70°C
Dimensions	9 x 8 x 3.5cm
Antenna Length	54cm (AU9-HT); 106.5cm (AU9, AU9-X, AU9-WF)
Weight	250g including antenna
Internal Loudspeaker	80dB
Environmental Resistance	IP68; Eurocae ED-14F
Approvals and Certification	CE; FCC [ID: YFGAU9]; ATEX Zone 2 II 3G (AU9-X); CAA (AU9-HT)

Part Number	Product Description
MOA-20106	Mobilarm Crewguard Base Unit
MOA-24046	Crewguard External antenna
MOA-20300	Mobilarm SARfinder Base Unit
MOA-20303	Mobilarm Portable SARfinder Base Unit
MOA-24047	NMEA GPS Interface
MOA-20107	Sea Marshall AU9-WF Alerting Unit - Long Range*
MOA-20130	Sea Marshall AU9-X Alerting Unit - ATEX Approved
MOA-20110	Sea Marshall AU9-HT Alerting Unit - CAA Approved
MOA-20100	Sea Marshall AU9 Alerting Unit
MOA-22001	Mullion 'SOS' Hi-Rise 275N (SOLAS) Lifejacket with pocket/service window
MOA-22002	ISP 'SOS' Challenger Interlock 275N (SOLAS) Lifejacket with pocket/service window
MOA-22003	Shark LAP 275N (CAA) Lifejacket with external pocket
MOA-22004	Viking 'SOS' 275N (SOLAS) Lifejacket with pocket/service window
MOA-23004	Universal Sea Marshall MSLD Lifejacket Fixing Kit

* Output power of MSLDs in some countries may be restricted to 100mW – please check before purchase.

For full product details and information on all Mobilarm products, visit www.mobilarm.com and www.seamarshall.com

Sea Marshall Maritime Survivor Locating Systems should only be activated in an emergency. Misuse or false activation is unlawful and irresponsible, and could result in prosecution or penalty.

No device is 100% fail safe nor can it guarantee safe rescue in an emergency. When activated, the Sea Marshall alerting unit transmits a continuous homing signal on 121.5 MHz that can be detected by dedicated direction finding receivers in range, but requires subsequent human interaction to acknowledge and respond to the emergency signal. Signal strength and reception is dependent on correct use and installation, sea state and height of the receiving antenna at the time and location of the emergency. The actual time and success of rescue is therefore dependent on all these contributing factors and as such, is outside the control of Mobilarm.

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