

# **SMRT** ALERT

The sMRT ALERT is an innovative man overboard (MOB) device that utilises AIS and VHF DSC to enhance localised MOB recovery. By incorporating app-based status checks along with audible and visual acknowledgements, it instils user confidence, while also harnessing the water-activated alerting capabilities of DSC (Digital Selective Calling).

With two-way signalling, automatic alerting, and real-time accurate location tracking, the sMRT ALERT is the trusted MOB solution.



## **VHF DSC**

All nearby vessels are automatically alerted of the man overboard situation via DSC



## **AIS**

The live location of the man overboard is regularly updated and displayed via AIS



## **Dual GNSS**

Combines both GPS & Galileo GNSS receivers for accelerated detection



## **Class-M**

Compliant to European regulation ECC/DEC/(22)02 relevant to the usage of MOB devices



## **Mobile App**

Mobile phone compatibility via NFC (Near Field Communication) and sMRT App

## ACCELERATED DETECTION

The sMRT ALERT features both manual and fully automatic activation methods. When activated the DSC distress signal will be automatically sent to alert nearby vessels of an MOB situation, while using AIS to pinpoint the location in real time. The sMRT ALERT has a convenient power tab and cancellation option to help prevent false activations.

## TARGETED SUPPORT

When your DSC distress call is picked up, a confirmation signal is sent to the device, which in turn deactivates the DSC alarm for all other vessels but continues to broadcast the multi GNSS location signal via AIS. This ensures a targeted response to your MOB situation, while minimising disruption.

## USER CONFIDENCE

The sMRT ALERT offers audio and powerful strobe indication on activation and acknowledgement of DSC signal, so those in distress know what is going on. Combined with the sMRT beacon management App, which allows users to check the status of their beacons and make journey plans before they get on the water, the sMRT ALERT offers total user confidence for crews and their families.

## MOBILE APP COMPATIBLE

The sMRT ALERT is compatible with the sMRT Beacon Management Mobile Application, allowing it to connect with any smart phone. Using Near Field Communications (NFC) technology, users can quickly tap their device to add it to their mobile phone, simplifying device management. Through the app, users will be able to perform a variety of functions, all aimed at ensuring that their device is ready for use.

These features include;

- ✓ Performing signal and fault checks
- ✓ Viewing test history logs
- ✓ Checking the current battery status
- ✓ Sending travel itineraries to others
- ✓ Registering products, and much more

The sMRT beacon management app is compatible with selected sMRT devices.

## TRUE WATER ACTIVATION

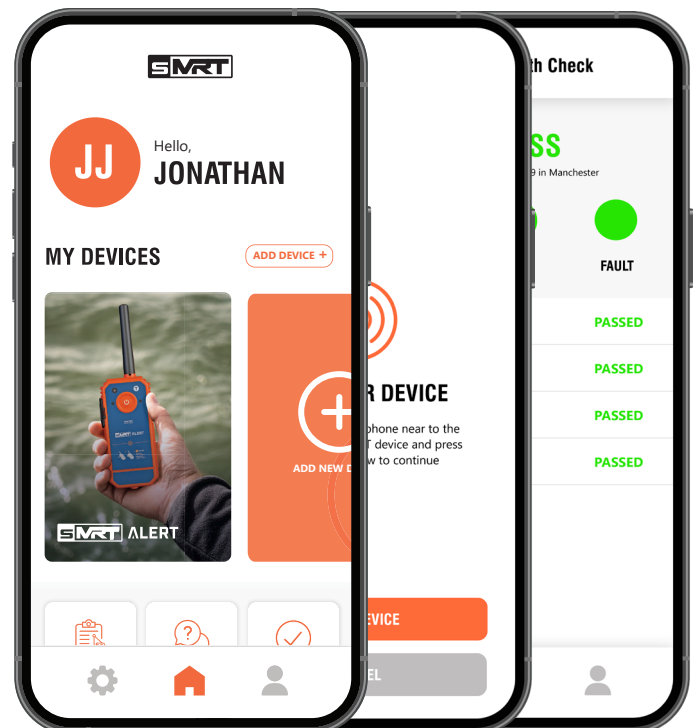
The sMRT ALERT is equipped with dual activation methods, manual and True Water Activation when immersed in water. This provides users with confidence that their beacon will still activate and send an alert if they are unable to or incapacitated.

## FUTURE PROOF

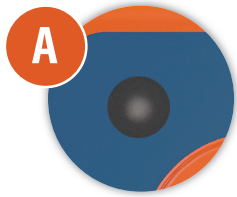
The sMRT ALERT is designed to meet the Class M 2024 ECC wide AMRD (autonomous maritime radio devices) regulation ECC Decision (22)02, which will restrict AIS only MOB devices use of core AIS Channels. By including an internal DSC receiver, the sMRT ALERT MOB is allowed to continue to use AIS channels 1 & 2 and offers the reassurance of signals back to the device on confirmation of DSC acknowledgement.

## OUT OF THE BOX READY

Designed for ease of use, the sMRT ALERT can be used straight from the box, without professional life jacket fitting, as it doesn't rely on cord attachment for deployment. It simply needs to be armed and it is ready for use.

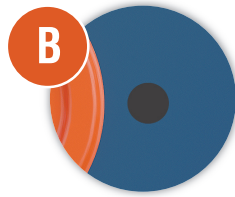


## PRODUCT FEATURES



### A STROBE LIGHT

High powered strobe light to aid visual identification



### B COLOURED LEDS

LEDs change colour dependent on status of beacon



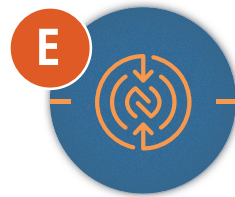
### C ARMING DOOR

Swing door to prevent false arming and activations



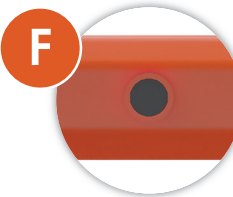
### D GNSS ZONE

Equipped with Dual GNSS for accurate location



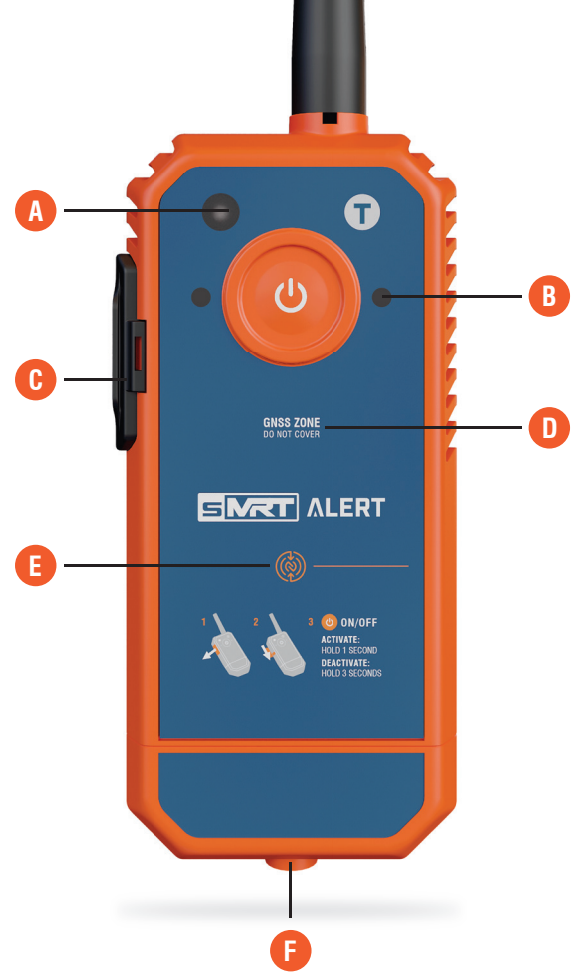
### E NFC COMPATIBILITY

NFC area to connect device with the sMRT APP



### F WATER ACTIVATION

Device will activate when immersed in water for 2 seconds



### Audible Alarm

Highlight activation to both aid location and raise awareness of false activation



### Belt Pouch

Neoprene belt pouch provides drop protection and flotation capability to help protect the device



### 5 Year Battery Life

Ample power for both frequencies with the confidence of UK manufacturer's warranty



### Test Functionality

Manual and app based device safety, providing a health check on power and functionality



### Dual Activation Methods

Device can be activated manually or after immersion in water meaning it will still work if user is incapacitated



### Environmentally Conscious

Packaged in 100% recyclable materials & batteries must be changed at an approved service centre to insure recycling



### Clipping System

Rugged clipping system allows easy attachment options for life jackets



### Dual GNSS Receivers

Dual GPS and Galileo GNSS receivers for accelerated location detection



### Water Proof

The device is designed to withstand submersion up to 10 meters, ensuring its protection against water damage

## PRODUCT OVERVIEW

The sMRT ALERT is designed to simplify the process of carrying MOB's (Man Overboard) devices by making it as easy as arming and clipping it on. This eliminates the need for professional fitting and alleviates any doubts users may have about fitting it incorrectly. With the sMRT ALERT's dual activation methods, it ensures that your crew are protected should the worst happen.

The sMRT ALERT leads the adoption of VHF DSC as the primary distress signal for MOB beacons. By harnessing VHF DSC's alarming and vessel alerting capabilities, while also utilising AIS functionality for location tracking, it offers a comprehensive localised solution for MOB incidents.

Unlike other VHF DSC beacons, the sMRT ALERT operates on an open loop to contact all nearby vessels' DSC radios, not just the one you were on. With water activation, it will automatically, alert all nearby vessels of an MOB incident, even if the user is unable to do so themselves.

It features a built-in DSC receiver, to indicate when your DSC call has been acknowledged through a change in the keypad's light. As well as audible and visual alerts to inform the user when the device is armed and activated.

The sMRT ALERT is the ultimate localised MOB solution.

## WHAT IS A Class-M MAN OVERBOARD DEVICE?

To protect AIS from overloads caused by irrelevant off-ship devices, a new regulation, ECC/DEC/(22)02, has been approved and is scheduled to be implemented from December 2024. Under this regulation, in countries that adopt the Class-M standard, AMRDs (autonomous maritime radio devices, such as AIS MOBs), will no longer be permitted to use AIS channels 1 and 2. Instead, they will be required to switch to channel 2006, which is not designated as an emergency channel.

Where ECC/DEC/(22)02 is adopted, non-compliant MOBs will be illegal to use/license.



## INTRODUCING sMRT

sMRT products are proudly manufactured in the UK, benefiting from 45 years of expertise in the development of electronic distress signals. The sMRT brand is a part of the Wescom Group, a specialist in survival solutions.



### GENERAL

Battery type	9.0V 1500mAh Lithium Manganese Dioxide (LiMnO2)
Battery life	Min of 12 hours at -20°C
Battery shelf life	5 years at +20°C
Operating temperature	-20° to +55°C (-4° to +131°F) as per IEC 60945
Storage temperature	-30° to +70°C (-22° to +158°F) as per IEC 60945
Dimensions	137mm H x 62mm W x 26mm D
Weight	180g
Environmental	IEC 60945, IP67 resistance
Strobe light	30 candela, 170 degree dispersion, ash rate 12/minute
Mounting options	Designed to integrate with a SOLAS approved life jacket
Self ID	ITU-R M.585 Compliant factory programmed freeform Maritime Identity with 972 prefix
Compass safe distance	0.5m (1.5ft)
Alerting radius	Up to 5NM (depending on height of antenna)*

### APPROVALS

European	EN 303 132 V2.1.1**
US	RTCM 11901.1**

### AIS/VHF TRANSMITTER PACKAGES

Antenna type	Vertically polarised
AIS TX power output	Nominal 1W EIRP
VHF transmission frequencies	VHF DSC Channel 70: 156.525 MHz, AIS Channel 1: 161.975 MHz, AIS Channel 2: 162.025 MHz
VHF DSC TX power output	Nominal radiated power 500mW
Signalling type	AIS and VHF-DSC

### CONTROLS AND OPERATION

Automatic water activation	After 2s water sensor immersion
Manual activation	Once armed, press activation button

### GPS RECEIVER

GNSS receiver type	GPS plus Galileo
TTF (time to first fix)	15 seconds (typical) with nominal GPS signal levels -130dBm
GNSS update rate	Every minute

### VHF DSC AND AIS ALERTS

AIS	Within 30s of GNSS position acquisition
Initial open loop DSC alert	Within 30s after activation
Subsequent open loop DSC alerts	Every 5 mins for the first 30 mins, every 10 minutes thereafter until VHF-DSC acknowledgement or the battery expires.
First DSC GPS data alert sent	Immediately after GNSS position acquired

\*Expected range derived from sea trials. Actual alerting range dependent on sea state, atmospheric conditions and height/altitude of receiving antenna.

\*\*Approval is pending