13. WARRANTY

The limited warranties in the global limited warranty are exclusive and in lieu of all other warranties express or implied or statutory, including any liability arising under any war-ranty of merchantability or fitness for a particular purpose, statutory or otherwise. This warranty gives the owner specific legal rights, which may vary from jurisdiction to juris-diction.

In no event shall Ocean Signal Ltd. or its affiliates be liable for any incidental, special, indirect or consequential damages, whether resulting from the use, misuse, inability to use, improper reliance on, or from any defects in the product. Some jurisdictions do not allow the exclusion on incidental or consequential damages, so the above limitation may not apply to you.

The Global Limited Warranty does not affect a customer's rights against a retailer arising from a sales/ purchase contract.

Product repaired or replaced under warranty will be warranted only for the remaining balance of the applicable original warranty period.

Subject to the terms, conditions, limitations and exclusions in the Global Limited Warranty, all Ocean Signal Products are warranted to be free from defects in material or workmanship for a period of two (2) years from the date the Product was purchased by the Original Customer (the "Standard Limited Warranty Period"). During this period and for the Original Customer only, Ocean Signal will, at its sole discretion, repair or re-place any components that fail in normal use, which, in the absence of any applicable law to the contrary, shall be the customer's sole and exclusive remedy for any breach of warranty.

If the Standard Limited Warranty applies to you, Ocean Signal will not charge you for parts or labour for warranty repairs or replacements. However, the cost of transporting your warranted product to Ocean Signal for repair or replacement is your responsibility and is not covered by Ocean Signal.

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912S-05223 Issue 01.00 25/09/202

S200 AIS SART

AIS Search and Rescue Transmitter (with NFC)

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

Android iOS

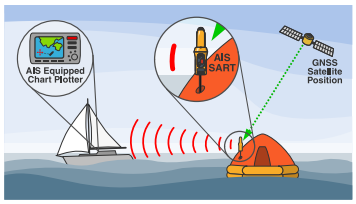
GET IT ON Google Play | Download on the App Store

NFC Communication Enabled

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

1. ABOUT YOUR AIS SART

The AIS system operates on the VHF radio band. Transceivers are fitted to all commercial ships and an ever-growing number of recreational vessels globally. Shortly after activation an AIS location device will activate a SART target and message on plotters in all AIS equipped vessels within the VHF range, alerting them 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.

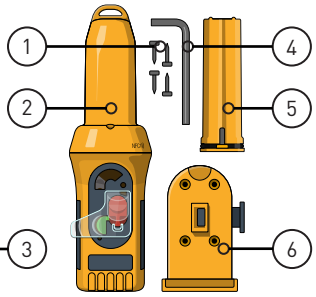


Interface diagram showing typical usage

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 SART target with the S200 AIS SART preprogrammed AIS unique ID, that identifies it as an AIS SART device.

2. S200 AIS SART CONTENTS

1	4x Screws (for bracket)
2	S200 AIS SART
3	Quick Start Guide
4	Hex Key (for battery)
5	LB3S SART Battery
6	Mounting Bracket

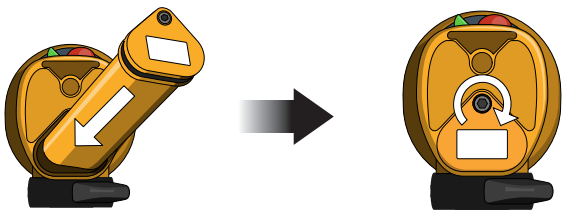


3. BATTERY INSTALLATION

The battery module is retained by a single hex head screw using the 3mm hex key provided.

Insert the battery module into the bottom of the S200 AIS SART, ensuring that the rubber seal is correctly in position.

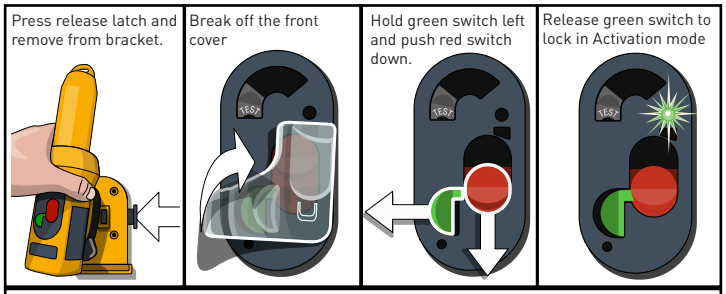
Tighten the screw until the battery is fully home within the SART body, torque not exceeding 0.5Nm.



IN CASE OF EMERGENCY

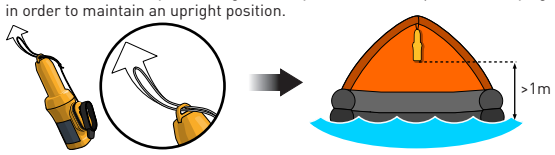
Use only in situations of grave an imminent danger

4. ACTIVATION



Use the lanyard to attach the S200 AIS SART to the roof of the liferaft.

NOTE: Thread the lanyard through the lanyard attachment point before tying to the liferaft canopy in order to maintain an upright position.



The SART should be mounted at least 1m (3.3ft) above sea level for maximum effectiveness during activation.

The SART should be tethered to the life raft using the lanyard to avoid being lost overboard.

4.1 Optical indications on activation

LED	COLOUR	WHEN	GNSS
(1x) single flash	Green	On activation	
(1x) single flash	Green	Every 5 seconds whilst active	
(3x) single flash	Green	Once	Fix acquired
(8x) double flash	Red	At AIS transmission	No GNSS fix
(8x) double flash	Green	At AIS transmission	With GNSS fix

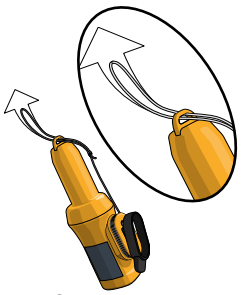
Ensure the S200 AIS SART is always fitted with an unused battery that is within the marked expiry date. Check the battery information by using NFC and the Ocean Signal app (See section 10).

A SART is not intended as a primary distress alerting device. At least one of the following should also be carried on-board your vessel to alert the authorities to your situation: an EPIRB; a DSC radio; an Inmarsat satellite terminal.

5. DEPLOYMENT

5.1 Standard Deployment

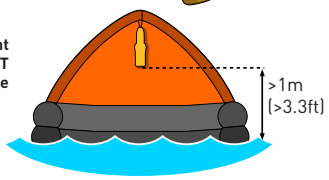
The lanyard should be unwound and tied securely to the life raft to ensure the S200 AIS SART is not lost overboard.



Once the S200 AIS SART is activated it will help guide the Search and Rescue authorities to your position. For the best performance, it is important that the S200 AIS SART is mounted as high as possible in the life raft.

Remove the rubber lanyard cover from the back of the S200 AIS SART to reveal the lanyard stowed underneath. Use this lanyard to attach the S200 AIS SART directly to the liferaft canopy or around the inflatable tube supporting the canopy.

NOTE: Thread the lanyard through the attachment point at the top of the S100 SART. This will allow the SART to remain in an upright position when attached to the canopy from above.

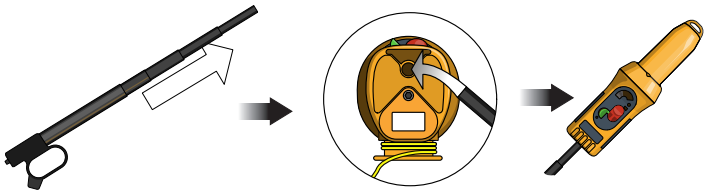


5.2 Deployment using optional pole

The S200 AIS SART can also be fitted with an optional telescopic pole which will keep the unit at a height of 1 meter (3.3ft) above sea level.

Remove the cap from the top of the pole and then pull out the sections until fully extended. Ensure the sections are locked tight by pulling on them.

Do not remove the rubber pole retainer from the bottom of the telescopic pole.



Fit the smallest section of the pole into the pole attachment point in the base of the S200 AIS SART as shown, ensuring it is pushed in tightly.

The lanyard should be unwound at this stage and tied securely to the life raft to ensure the S200 AIS SART is not lost overboard.

Raise the S200 AIS SART vertically and attach the pole to the life raft. Most life rafts are fitted with suitable attachments to accommodate the S200 AIS SART pole.

6. TESTING

When performing this test, the S200 AIS SART should be situated in an upright position with a clear and unobstructed view of the sky. This is required to allow the GNSS receiver to acquire a signal from a sufficient number of satellites to determine a position.

This test should be carried out once per year.

Activate the Test Mode by rotating the grey test switch clockwise and holding until the red LED begins to flash. Release the test switch.

During the test, the blue LED will flash once every five seconds whilst obtaining a GNSS fix. Once a fix is acquired the green LED will flash three times. The 3x green LED flash will then be repeated after a short pause. The S200 AIS SART will then automatically shut down, indicated by the red LED flashing two times.

If during this function test, the LED flashes amber three times, instead of green, it indicates that the battery has been significantly depleted and may not have sufficient energy to operate for the specified 96 hours if activated in an emergency. Immediate battery replacement is recommended.

The overall duration of the test will depend on the time taken for the S200 AIS SART to acquire a GNSS fix. The S200 AIS SART will shut down automatically once a fix is obtained and test message sent, or within approximately six minutes if a GNSS fix cannot be acquired during this time. In this instance, the test will fail and the red LED flash three times.

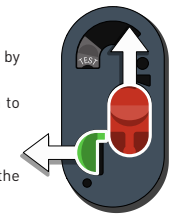
The 3x red LED flash will then be repeated after a short pause. The S200 AIS SART will then automatically shut down, indicated by the red LED flashing two times.

A single AIS transmission will occur during a successful Functional Test indicating "SART TEST" on AIS receivers within range.

6.1 Functional Test LED Indicator

LED	COLOUR	WHEN	STATUS
(1x) flash	Blue	Every 5 seconds	Searching for GNSS fix.
(3x) flash (Repeated)	Green	Once at end of GNSS search. Repeated after short pause	GNSS fix acquired. Test Passed.
(3x) flash (Repeated)	Amber	Once at end of GNSS search. Repeated after short pause	GNSS fix acquired. Test Passed. Battery change required.
(3x) flash (Repeated)	Red	Once at end of GNSS search. Repeated after short pause	GNSS fix not acquired. Test Failed.
(2x) flash	Red	Once at end of test	Test over & SART shutdown.

7. DEACTIVATION



If the S200 SART has been inadvertently activated, it can be turned off by reversing the activation process.

Slide the green switch to the left and push the red switch upwards to return to the off position.

Release the green switch.

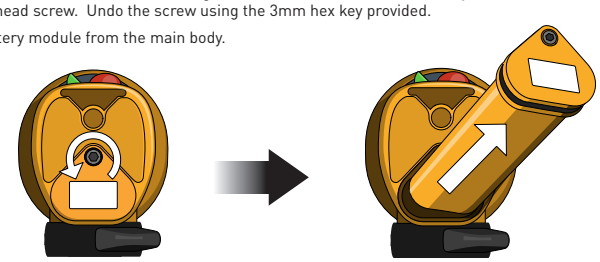
It is not possible for the user to replace the clear protective cover. Return the S200 AIS SART to an Ocean Signal authorised service centre for replacement.

8. BATTERY REPLACEMENT

The battery may be changed by the user, although commercial vessels may be subject to local regulations relating to Shore Based Maintenance that prevent this.

Remove the S200 AIS SART from its mounting bracket and turn it over. The battery module is retained by a single hex head screw. Undo the screw using the 3mm hex key provided.

Remove the battery module from the main body.



Insert new battery module (see Section 3: Battery Installation). Ensure that any maintenance records on-board are updated with the new battery expiry date.

Follow instructions provided with the replacement battery in order to update the S200 AIS SART with new battery and counter information.

9. ACCESSORIES

LB3S SART Replacement Battery	Part Number: 711S-00609
SART Optional Mounting Pole	Part Number: 711S-01802
SART Replacement Wall Bracket	Part Number: 701S-00759

10. NEAR FIELD COMMUNICATION

The S200 AIS SART 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 centimetres.

Android iOS

The benefit of using NFC in the S200 AIS SART is that the power used for communication comes from the mobile device and not the SART. The Ocean Signal mobile app allows a user to access the S200 AIS SART for viewing the latest test results and battery health.

To use the app simply align your mobile device NFC antenna to the front of the S200 AIS SART where you see "NFC". Once connected, details about your S200 AIS SART 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.

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.

11. SPECIFICATIONS

AIS Transmission

Frequency	161.975/162.025MHz
Transmit Power (EIRP)	1Watt ±3dBm
Baud Rate	9600baud
Synchronization	UTC
Messages	Message 1 (Position), Message 14 (Status)
Repetition Interval	8 Messages/Minute
	Message 14 sent twice every 4 minutes

GNSS Receiver

Satellite Channels	72 Acquisition
Sensitivity	-167 dBm
Cold Start Re-acquisition	-148 dBm
GNSS Antenna	Microstrip Patch

Battery

Type	Lithium Iron Disulfide ($LiFeS_2$)
Operating life	96 hours at -20°C
Lithium Metal Weight (for air transport)	<2g per battery
Replacement interval	5 years

NFC

Frequency	13.56 MHz

Test Standards

Standards	IEC61097-14, IEC60945

Environmental

Temperature Range (operating)	-20°C to +55°C
Temperature Range (storage)	-30°C to +70C
Waterproof	10 meters
Drop proof (on water)	20 meters
Compass safe distance	1 meter

General

Equipment Class	Portable
Weight (with battery)	315g
Weight (without battery)	227g
Height	227mm
Body Diameter (max)	65mm (82mm)

12. APPROVALS

Hereby, Ocean Signal Ltd declares that the S200 AIS SART search and rescue locating device, is in compliance with EU Marine Equipment Directive, under MED/4.55 of the current implementing regulation. The full text of the EU Declaration of Conformity is available at the following internet address: https://oceansignal.com/products/s200/

The S200 AIS SART is approved under the UK Marine Equipment Regulations, MSN 1874 as amended.