„easyRESCUE"
Manual

easyRESCUE
AIS-SART
Product No.: A040
Rev. 1.7

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PLEASE READ THIS FIRST!

Safety Precautions

The easyRESCUE contains Lithium batteries. When the device is used at temperatures outside the limits of -20°C and +55°C, the useful battery capacity is reduced. Keep the device away from hot environments, because at temperatures of more than +70°C the batteries inside the easyRESCUE could explode or cause damage. Lithium batteries shall be given to the recycling process and should not be given to the home garbage. The easyRESCUE produces electromagnetic fields, which could interfere medical devices. For safety reasons store this device so that children cannot reach it. The manufacturer is not responsible for damages or failures that are caused by the easyRESCUE, damaged battery pack or misuse by the user. Use this device only together with certified equipment. Other equipment could damage the easyRESCUE. Clean this device with a clean, dry and soft blanket. Do not use aggressive or acid liquids and chemicals for cleaning. Do not open the device on your own. Unpermitted opening of the easyRESCUE could damage the device and the warranty is lost.

LICENSING
IMPORTANT:
In most countries the operation of an AIS unit is included under the vessels marine VHF license provisions. The vessel on to which the AIS unit is to be installed must therefore possess a current VHF radiotelephone license which lists the AIS system and the vessel Call Sign and MMSI number. Please contact the relevant authority in your country for more

information. In accordance with a policy of continual development and product improvement the easyRESCUE hardware and software may be upgraded from time to time and future versions of the easyRESCUE may therefore not correspond exactly with this manual. When necessary upgrades to the product will be accompanied by updates or addenda to this manual. Please take time to read this manual carefully and to understand its contents fully so that you can install and operate your AIS system correctly.

Information contained in this manual is liable to change without notice. Weatherdock AG, disclaims any liability for consequences arising from omissions or inaccuracies in this manual and any other documentation provided with this product.

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ATTENTION:

PLEASE USE THE EASYRESCUE CAREFULLY AND NOT UNINTENDED. THE EASYRESCUE IS NOT AN ALERTING DEVICE.

THAT MEANS SEARCH AND RESCUE DIVISIONS OR SERVICES (SAR) ARE NOT ALERTED AUTOMATICALLY BY THE EASYRESCUE (AIS-SART). THE EASYRESCUE IS A HOMING DEVICE, WHICH TRANSMITS THE POSITION INFORMATION TO VESSELS AROUND THOSE CARRY AIS RECEIVERS. SO THESE VESSELS AND ALSO THE SAR VESSELS AND HELICOPTERS CAN HOME ON THE EASYRESCUE.

ALSO THE EASYRESCUE WILL NOT OPERATE AUTOMATICALLY. IT MUST BE INITIALISED BY THE USER IN CASE OF EMERGENCY

DIRECTORY

Revision of the operation manual

Rev. 1.2 Author: Jürgen Zimmermann, 6. May 2010

Rev. 1.3 Author: Kotouczek, 10. May 2010

Rev. 1.4 Author: Jürgen Zimmermann, 29. July 2010

Rev. 1.5 Author: Jürgen Zimmermann, 13. Sept. 2010

Rev. 1.6 Author: Wolfgang Werner, 27. Oct. 2010

Rev. 1.7 Author: Jürgen Zimmermann, 23.Nov. 2010

Congratulations!

Thanks to purchase a unit from the Weatherdock AG. This testifies your high technical competence

1. SHORT DESCRIPTION

The easyRESCUE is a portable battery powered AIS transmitter with an integrated GPS-receiver.

The device is intended for the use in life rafts or life boats.

The easyRESCUE operates as an AIS-SART (AIS Search-And-Rescue-Transmitter) and it can be activated in case of distress on sea. All vessels around with AIS stations are able to receive the position of the easyRESCUE via VHF.

The range depends on the height of the transmitters' antenna over sea level. The range is approx. 10-20 nautical miles, if the height of easyRESCUE's antenna is 1 m above sea level (e.g. mounted at a life raft). If the easyRESCUE is directly above the sea level, the range is approx. 7-12 nautical miles assumed that the receiving antenna is at a height of 15 m (top of a mast). SAR helicopter can locate the transmitter even at distances of more than 40 nautical miles.

The easyRESCUE uses the standard AIS positions report, which is also used by AIS Class A stations. That means almost all AIS stations (commercial vessels (Class A) and pleasure boats (Class B)) can receive these messages and show the easyRESCUE on their display.

The battery pack provides a capacity that ensures an operation time of more than 96h, when activated (at normal conditions it lasts longer).

This device maintains water tightness, not unduly affected by seawater or oil and is resistant to sunlight. It withstands drops from a height of 20 m into water.

The storage time of an easyRESCUE with new batteries is 5 years.

The battery pack can be replaced only by an authorized distributor. The reasons are that only he has the industry

battery package and that he replaces some elements which provide the functionality (e.g. seal).

2. ACTIVATORS AND INDICATORS

2.1. Activating elements

2.1.1. Slider

The transparent slider protects the easyRESCUE against unintended activation. Push the cover to the bottom in order to give free the button "TEST". In case of distress push the slider to the top against the red bracket. The bracket breaks and enables the antenna to be extended.

2.1.2. Button "TEST"

Pressing the button „TEST" the easyRESCUE enters the test mode. If this button is pressed again for 3 seconds, the test mode will be terminated and the device is turned off.

2.1.3. Button "ON"

With the button „ON" the device can be activated in case of distress. The "active" mode can be terminated by pressing both buttons together for 3 seconds. The easyRESCUE stops AIS transmissions and turns off.

2.2. Indicators

2.2.1. GPS LED

The green LED with the marking „GPS" is blinking, when the device receives GPS signals and is able to get a position fix. If the GPS LED does not blink, there is not GPS reception possible.

2.2.2. ON LED

The green LED with the marking „ON" is blinking, when the easyRESCUE is activated in case of distress.

2.2.3. TEST LED

The yellow LED with the marking "TEST" is blinking, when the easyRESCUE is in test mode.

2.2.4. Flash-LED

The white LED is flashing, when the easyRESCUE is in "ON" or "TEST" state. It is used to support the search in darkness.

3. OPERATION INSTRUCTION

3.1. Activation "ON"

- **Activate the device in case of distress only!** Push the slider to the top so that the antenna extends. Caution: The antenna extends with force. So do not hold the device close to your head.

- Press the button „ON".

- The LED's start flashing in intervals of 2 seconds. Check that the GPS-LED should start flashing after 30-60 seconds after activation. If this LED does not start

flashing, double check if the easyRESCUE is not covered by metal parts. It should have line of sight to the sky.

Application:
- When you are in a life raft fix the device as high as possible with the lanyard and extend the antenna right up.

- To deactivate the easyRESCUE press both buttons together for more than 3 seconds. The LED's stop flashing. Otherwise the device operates as long the battery capacity allows to.

3.2. Testing the easyRESCUE

You should test the easyRESCUE regularly. It is sufficient to test it every year or every half year. More frequent tests reduce battery capacity. The battery is able to be full operational for 5 years with in total 20 test procedures.

- Push the slider to the bottom until the test button is free.

- Press the button "TEST" and take care that the easyRESCUE has got line of sight to the sky. This ensures best GPS reception conditions.

- The TEST-LED starts flashing every 2 seconds. As soon as a GPS position is available the GPS-LED start flashing too. The easyRESCUE starts transmitting of eight AIS messages and the device is turned off automatically. If there is no GPS positions fix available within 5 minutes, the device transmits AIS messages without position and it is turned off.

- With an AIS receiver (e.g. easyAIS) connected to a chart plotter or laptop with navigational software you can check the transmission of the easyRESCUE. Normally the chart plotter or navigational software shows a ship symbol or a circle on the display. The information of the unit ID (9 characters) starting with "970....." is shown together with the safety related text „SART TEST".

- The test mode can be interrupted earlier by pressing the button „TEST" for more than 3 seconds. The LEDs stop flashing and the device turns off.

- Please think about, that other ships around you will also receive the test message. The test message will
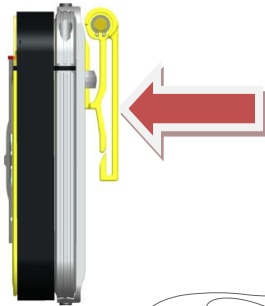
have "test" information instead of the real alert message in case of real activation. Anyway it could be disturbing for your neighbour ships.

At the end of the regular test before the device is turned off automatically, the device shows the test result:

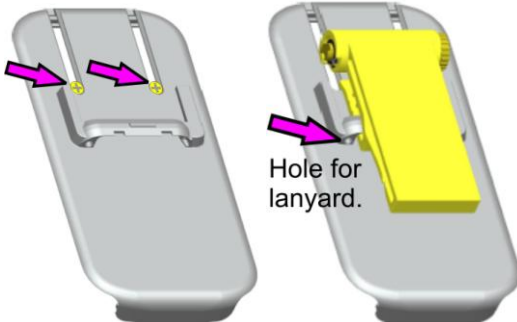| LED display	Test result
Yellow „TEST-LED" is continuously on for 5 sec	The test was conducted successfully. The batteries are O.K.
Yellow „TEST-LED" is blinking	The easyRESCUE has detected that the battery capacity is reduced to much. This happens when the expire date was reached or when more than 10 tests were conducted. (The LED is also blinking, if the easyRESCUE was activated by pressing the ON-button before.)
Green GPS-LED is continuously on for 5 sec	The easyRESCUE has got a position fix.
Green GPS-LED is blinking	The easyRESCUE could not get a positions fix within 5 minutes.

4. INSTALLATION TIPS

4.1. Bracket

With the bracket you can easily fix the easyRESCUE. A lanyard prevents the device from drifting away, when dismounted from the holder.
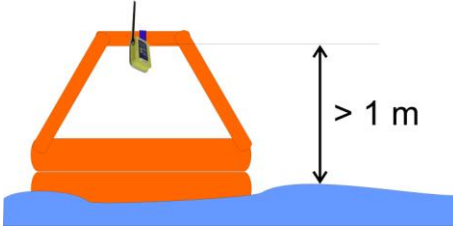
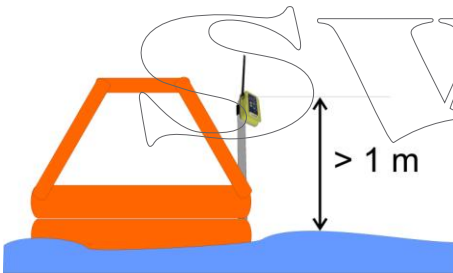For using the bracket part, you need to screw the mounting plate to the backside of the easyRESCUE. Just shift the mounting plate starting from the wide side of the easyRESCUE and fix it with the screws. Then you can snap in the bracket. The both screws, the mounting plate and the bracket are included in the package. Do not forget to connect the lanyard to the easyRESCUE! There is a little hole in the mounting plate.

Hole for lanyard.

4.2. Life raft

With the lanyard, which is included in the bracket, you can fix the easyRESCUE as high as possible at the life raft. Please ensure that the antenna height is more than 1 m above sea level.

It is also possible to mount the easyRESCUE on the top of a pole with a fixture or the lanyard.

This is the reference point of the antenna, from where you calculate the height over sea level.

5.   MAINTENANCE

The easyRESCUE requires the following maintenance:
At least every year (or even every six month), easyRESCUE should be activated into test mode (i.e. pressing the "TEST" button). The device should be located, where GPS signals can be received (normally outside). The flashing GPS indicator shows, that GPS position is available.
On a chart plotter nearby, which is able to display AIS targets and that is connected to an AIS receiver, the AIS-SART should be displayed with the safety text "SART TEST" at the right position.
Note that the self test uses the internal battery and will reduce the operational lifetime of the device - therefore the number of tests should be limited.

The battery unit must be replaced every 5 year, because batteries discharging themselves for a certain percentage. To ensure long and reliable operation the battery unit must be replaced every 5 years.
The batteries can only be changed by your distributor or your re-seller. This is due to the reason that the batteries are not available to the public and other elements have to be changed, too (e.g. seals!)

Technical Data

Parameter	Value
Dimension	128mm high x 32mm depth x 76mm width
Weight	350gr
Battery	Industry-Pack - Lithium-Cells 9/12V
Frequency	161,975 MHz and 162,025 MHz
Radiated power (e.i.r.p.)	> 1 Watt
GPS receiver with integr. Antenna	Approved to IEC 61108-1
VHF-Antenna	extended, vertical polarized
Operating time	min. 96 hours over full temperature range
Battery lifetime	5 years (since bat. manuf. date)
Operation temperature range	-20°C to +55°C
Storage temperature range	-30°C to +70°C
Display	3 LEDs and a "Flash"-LED
Activators	2 buttons
Brackets	a) Bracket with lanyard b) Velcro tape and a 10 m lanyard for fixing to a life raft (available) c) Bracket with 10 m lanyard for fixing the device to an extension pole (available)

Parameter	Value
Supported AIS messages	Msg. 1: AIS Positions Report (Dynamic data) transmitted: 6 / 8 times per minute. Unit-ID: 9 figures (unique) Ident-Number, Position (Lat and Lon), Speed over ground (SOG), and course over ground (COG). Msg.14: Safety related message transmitted: Twice every 5 minutes. Unit-ID: (same as in Msg. 1), Text : "SART ACTIVE" in distress ("ON"-state) or "SART TEST" in test mode.
Standards	IEC 61097-14, IEC 60945, ITU-R M.1371-3, IMO Res. MSC.246(83), IEC 61108-1
Unique ident number	Starts with 970XXXXXX, please see your product label on the unit

6.   BOX CONTAINS

- easyRESCUE, fully functional
- Bracket with lanyard
- Mounting plate with two screws
- Manual

7.   AVAILABLE ACCESSORY

- Additional lanyard
- Board mounting application

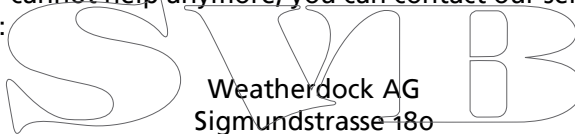Please contact specialized distributors.

8.   FAQ

Problem	Reason	Solution
The GPS-LED is blinking at the end of the test	No GPS reception	Repeat the test with line of sight to the sky.
Cannot activate the device.	Battery is empty	The battery pack has a durability of for 5 years if you check the functionality once a month. Please check the date of expiry on the label. If expired, send the easyRESCUE to your distributor for battery exchange. Only distributors are allowed to that!
Battery change		**The batteries can only be changed by your distributor or your re-seller. This is due to the reason that the batteries are not available to the public and other elements are to be changed, too (as seals!)**

9. SUPPORT

Although WEATHERDOCK strives for accuracy in all its publications; this material may contain errors or omissions, and is subject to change without prior notice. WEATHERDOCK shall not be made liable for any specific, indirect, incidental or consequential damages as a result of its use. WEATHERDOCK components may only be used in safety of life devices or systems, with the express written approval of WEATHERDOCK, as the failure of such components could cause the failure of the WEATHERDOCK device or system. If these fail, it is reasonable to assume that the safety of the user or other persons may be endangered.
Contact your local dealer for WEATHERDOCK AIS support.

If the dealer cannot help anymore, you can contact our service department:

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or
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10. EASYRESCUE – DATABASE AND LOGIN

To improve the functionality of the easyRESCUE Weatherdock provides a database on their web site. On this web site you can enter more information together with your easyRESCUEs unit ID, which could be useful for any SAR service.

On a voluntary basis, you can store information concerning your boat which are relevant from you as an owner of an easyRESCUE. With your

data you create an information platform which helps the emergency organization to do the right things.

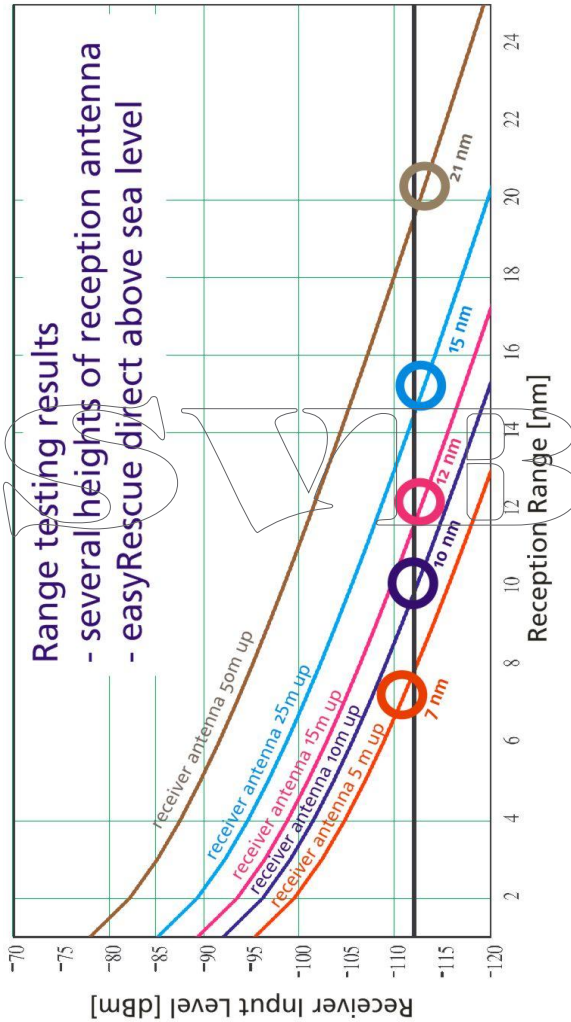For example in cases of diabetes or pharmaceutical intolerance.

Beside you only official authorities like „DGzRS" or „UK Coast Guard" will have access to your data. This is because of live saving reasons and happens only when your easyRESCUE will be activated.

To enter your data, please use the ident number of the unit itself as well as the password, which is also printed on the product label.

For more information about that service please look on our web site.

11.   APPENDIX RANGE TESTING RESULTS

Range testing results
- several heights of reception antenna
- easyRescue direct above sea level

12. WARRANTY

This Weatherdock product is warranted to be free from defects in materials or workmanship for 24month from the date of purchase. Within this period, Weatherdock will at its sole option repair or replace any components that fail in normal use Such repairs or replacement will be made at no charge to the customer for parts or labor, provided that the customer shall be responsible for any transportation cost. This warranty does not cover failures due to abuse, misuse, accident or unauthorized alteration or repairs.

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Weatherdock retains the exclusive right to repair or replace the unit or software or offer a full refund of the purchase price at its sole discretion. Such remedy shall be your sole and exclusive remedy for any breach of warranty.

If you choose to use the EasyTRX2 and/or/or easySPLIT or both in a boat, it is the sole responsibility of the owner/operator of the EasyTRX2 to secure the easyTRX2 so that it will not cause damage or personal injury in the event of an accident. It is the sole responsibility of the operator of the boat to operate the boat in a safe manner, maintain full surveillance of all boating conditions at all times, and never become distracted by the EasyTRX2 to the exclusion of safe operating practices.

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