

„easyRESCUE“  
Manual

easyRESCUE  
AIS-SART  
Product No.: A040  
Rev. 1.5

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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  $-20^{\circ}\text{C}$  and  $+55^{\circ}\text{C}$ , the useful battery capacity is reduced. Keep the device away from hot environments, because at temperatures of more than  $+70^{\circ}\text{C}$  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.

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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

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# DIRECTORY

<b>1. SHORT DESCRIPTION.....</b>	<b>6</b>
<b>2. ACTIVATORS AND INDICATORS .....</b>	<b>8</b>
2.1. ACTIVATING ELEMENTS.....	8
2.1.1. <i>Slider</i> .....	8
2.1.2. <i>Button "TEST"</i> .....	9
2.1.3. <i>Button "ON"</i> .....	9
2.2. INDICATORS .....	9
2.2.1. <i>GPS LED</i> .....	9
2.2.2. <i>ON LED</i> .....	9
2.2.3. <i>TEST LED</i> .....	9
2.2.4. <i>Flash-LED</i> .....	9
<b>3. OPERATION INSTRUCTION .....</b>	<b>10</b>
3.1. ACTIVATION "ON" .....	10
3.2. TESTING THE EASYRESCUE.....	11
<b>4. INSTALLATION TIPS.....</b>	<b>14</b>
4.1. BELT.....	14
4.2. LIFE RAFT.....	15
<b>5. MAINTENANCE.....</b>	<b>16</b>
<b>6. BOX CONTAINS.....</b>	<b>18</b>
<b>7. AVAILABLE ACCESSORY .....</b>	<b>19</b>
<b>8. FAQ.....</b>	<b>19</b>
<b>9. SUPPORT .....</b>	<b>20</b>
<b>10. EASYRESCUE – DATABASE AND LOGIN .....</b>	<b>20</b>
<b>11. WARRANTY.....</b>	<b>21</b>

## **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. Sep. 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 vests.

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. 5-10 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 at the life vest (so directly above the sea level) the range is approx. 3-5 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.
- When the easyRESCUE is carried at a life vest, extend the antenna right up and take care, that the antenna is as high as possible over the sea level.
- 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“.

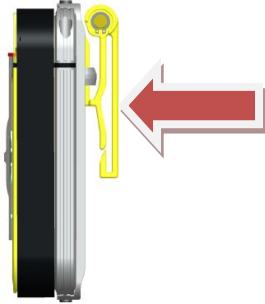
- The test mode can be interrupted earlier by pressing the button „TEST“ for more than 3 seconds. The LEDs stop flashing and the device turns off.
- Please think about, that other ships around you will also receive the test message. The test message will have "test" information instead of the real alert 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:

<b>LED display</b>	<b>Test result</b>
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.

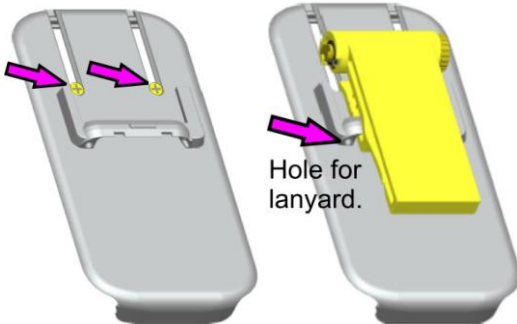
## 4. INSTALLATION TIPS

### 4.1. Belt

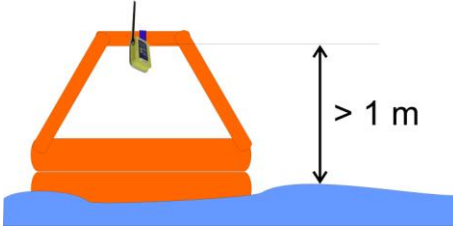


With the belt holder you can easily fix the easyRESCUE to your belt or life vest. A lanyard prevents the device from drifting away, when dismantled from the holder.

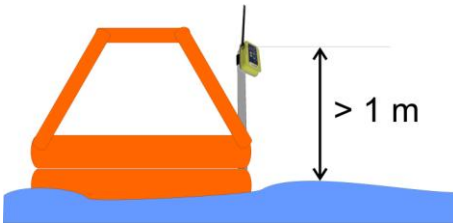
For using the belt holder part, you need to screw the mounting plate to the backside of the easyRESCUE. Just shift the mounting plate starting from the wide side of the easyRESCUE and fix it with the screws. Then you can snap in the belt holder. The both screws, the mounting plate and the belt holder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



## 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 year.

**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 ( min. 0.5 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	<ul style="list-style-type: none"><li>a) Holder for lifevest or belt with lanyard</li><li>b) Velcro tape and a 10 m lanyard for fixing to a life raft (available)</li><li>c) Bracket with 10 m lanyard for fixing the device to an extension pole (available)</li></ul>

Parameter	Value
Supported AIS messages	<p><u>Msg. 1:</u>                      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).</p> <p><u>Msg.14:</u>                      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.</p>
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
- Belt holder with lanyard
- Mounting plate with two screws
- Manual

## 7. AVAILABLE ACCESSORY

- Lanyard to carry the easyRESCUE in front of the chest
- 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	<p>The battery pack has a durability of for 5 years if you check the functionality once a month. Please check the expire date on the label.</p> <p>If expired, send the easyRESCUE to your distributor for battery exchange. Only distributors are allowed to that!</p>
Battery change		<p><b>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!)</b></p>

## 9. SUPPORT

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Contact your local dealer for WEATHERDOCK AIS support.

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

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D.90431 Nürnberg  
Tel:+49 911 376638 - 35  
or  
Tel:+49 911 376638 - 36

## 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 you and 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 personal 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. 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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## Index

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### **A**

Activation · 10  
Activator · 8  
AIS messages · 12, 18  
ALERTING DEVICE · 4  
Application · 11  
**ATTENTION** · 4

---

### **B**

**Battery change** · 19  
Belt · 14, 18

---

### **D**

DatABASE · 20  
deactivate · 11  
Dimension · 17

---

### **F**

FAQ · 19

---

### **G**

Green GPS-LED · 13

---

### **I**

ident number · 18  
Indicator · 8  
Indicators · 9  
Installation Tips · 14

---

### **L**

Life raft · 15

---

### **M**

MMSI · 2

---

### **O**

ON · 9  
Operation · 10

---

### **P**

password · 21

---

### **S**

**Safety Precautions** · 2  
SART TEST“. · 13  
Short description · 6  
Slider · 8

---

**T**

Technical Data · 17  
TEST · 9  
test mode · 9, 13, 18  
· 13

Testing · 11

---

**Y**

Yellow „TEST-LED · 13