

# easyRESCUE-DIVE User Manual

## English



easyRESCUE-DIVE | AIS Distress Transmitter for Divers

Article No. A040-D | Version: 1.0

Weatherdock AG

Sigmundstrasse 180

D – 90431 Nürnberg

Tel.: +49 (0) 911 – 376637830

Fax: +49 (0) 911 – 37663840

[www.weatherdock.com](http://www.weatherdock.com)

[support@weatherdock.de](mailto:support@weatherdock.de)

## Contents

<b><u>1</u></b>	<b><u>Safety Information.....</u></b>	<b><u>3</u></b>
1.1	General Safety Information .....	3
1.2	Special Safety Instructions for the Device .....	3
<b><u>2</u></b>	<b><u>Product and Performance Description .....</u></b>	<b><u>4</u></b>
2.1	Normal Use.....	4
2.2	Revision Status of the User Manual .....	4
2.3	Declaration of Conformity .....	5
2.4	Important Product Information .....	5
2.5	Specifications .....	6
<b><u>3</u></b>	<b><u>Controls.....</u></b>	<b><u>7</u></b>
3.1	Cover .....	7
3.2	"ON" Button .....	8
3.3	"TEST" Button.....	8
3.4	Antenna .....	8
<b><u>4</u></b>	<b><u>Operation .....</u></b>	<b><u>8</u></b>
4.1	Commissioning.....	9
4.2	Deactivation (Switching off the device) .....	9
4.3	TEST function (manually) .....	10
<b><u>5</u></b>	<b><u>Troubleshooting .....</u></b>	<b><u>12</u></b>
<b><u>6</u></b>	<b><u>Maintenance and Service.....</u></b>	<b><u>12</u></b>
6.1	Maintenance / Service .....	12
6.2	Disposal and Recycling Information .....	12
6.3	Contact and Product Support .....	13

## 1 Safety Information

### 1.1 General Safety Information

#### **WARNING:**

- Please read all safety information and instructions carefully. Please retain the safety information and instructions for future reference!
- Keep this device out of reach of children!
- The internal, strong transmitter may possibly affect the functioning of medical devices such as pacemakers!

### 1.2 Special Safety Instructions for the Device

- The AIS S.A.R.T. easyRESCUE-DIVE does not trigger distress alerting at a distant rescue service (e.g. DGzRS / German Maritime Search and Rescue Service). It serves for the direct notification of emergency situations for your own ship and surrounding ships or coastal stations within transmission range with AIS receiving systems. These receivers will be informed of an existing distress situation and the current position.

- Please note:  
Wrongful triggering of an AIS S.A.R.T. SOS is not a minor offense!
- The capacity of the batteries decreases if the device is used at a temperature below  $-20^{\circ}\text{C}$  or above  $55^{\circ}\text{C}$ . Keep the device away from heat or hot environments. If you do not observe these safety instructions, the batteries may overheat, explode or ignite inside the easyRESCUE-DIVE and may cause permanent damage to the device!

## 2 Product and Performance Description

### 2.1 Normal Use

The easyRESCUE-DIVE is a portable, battery-operated AIS S.A.R.T transmitter with a built-in GPS receiver. The device can be carried in your vest pocket during a dive. The triggering of the distress signal is done manually at the water surface by pressing a button.

The AIS S.A.R.T. easyRESCUE-DIVE is not buoyant!

### 2.2 Revision Status of the User Manual

A040-D, Vers. 1.0, 03/2014 Knipp

## 2.3 Declaration of Conformity

**CE 0700** ⚠

We declare under our sole responsibility that the product described under "Specifications" complies with the following standards or normative documents:

- R&TTE Directive 99/05/EEC
- EN61097-14
- EN61108 Part 1,2 and 4
- EN60945, ITU-R M.1371 Certifications

## 2.4 Important Product Information

The equipment can be used worldwide, amongst others in the following European countries:

<b>BG</b>	<b>DK</b>	<b>DE</b>	<b>EE</b>	<b>FI</b>	<b>FR</b>	<b>GR</b>	<b>IE</b>	<b>IS</b>	<b>IT</b>
<b>LV</b>	<b>LT</b>	<b>BE</b>	<b>MT</b>	<b>NL</b>	<b>NO</b>	<b>AT</b>	<b>PL</b>	<b>PT</b>	<b>SI</b>
<b>ES</b>	<b>HU</b>	<b>GB</b>	<b>CY</b>	<b>SE</b>					

## 2.5 Specifications

Parameter	Value
Dimensions	130 * 75 * 35 mm
Weight	260 grams
Power source	Industry pack lithium cell 9V/12V
Battery operating time	45 hours
Life of battery	10 years
Frequency	161,975 MHz and 162,025 MHz
Transmitting power	2 watt
GPS receiver	with integrated antenna pursuant to IEC 61108-1
VHF antenna	foldout, wrapped around the device in sleep mode
Displays	3 LED („GPS status“, „Alarm“, „TEST“) 1 LED (additional signal light)
Controls	2 buttons („TEST“ and „ON“)
Supported AIS messages in transmission mode	<u>Msg.01</u> AIS position report Device identification number Course over ground Speed over ground  <u>Msg.14</u> Safety message Device identification number Text: „SART active“ in distress („ON“) Text: „SART TEST“ in test mode („TEST“)

## 3 Controls



### 3.1 Cover

The transparent plastic cover ⑧ prevents accidental activation by pressing the „ON“ button ⑥. The „TEST“ button ③ is exposed. In an emergency, please push the cover down and press the "ON" button.

## 3.2 "ON" Button

The device can be activated manually by pressing the „ON“ button ⑥. An AIS distress signal is triggered and is received by all ships in the proximity which are equipped with an AIS receiver. This group of recipients will be informed about the current GPS position, the current course and speed over ground of the victim and the unique serial number of the device. In addition to that the text message "S.A.R.T. ACTIVE" is sent.

## 3.3 "TEST" Button

The device can be activated for an electrical function test by pressing the „TEST“ button ④. A single AIS distress signal is triggered and is received by all ships in the proximity which are equipped with an AIS receiver. Moreover, any recipient of this test signal will be informed by the additional test message "S.A.R.T. TEST" that this is really just a function test.

## 3.4 Antenna

The antenna ① is rolled up around the exterior of the transmitter. When triggering an alarm, pull the antenna out of the device by using the cord. The antenna now sticks out vertically at the upper left edge of the transmitter. ①



## 4 Operation

The AIS S.A.R.T. easyRESCUE-DIVE is simply put into the pocket of your diving vest. The device can be carried easily



during the dive as it can withstand water pressure up to 100 m depth.

## 4.1 Commissioning

During commissioning in an emergency, the antenna is unrolled by pulling the cord. Subsequently the transparent plastic cover ⑤ is pushed down. The "ON" button is now exposed and may be pressed in order to trigger the emergency signal.

When triggering, always keep the device away from your face!

In order to increase the transmission range, attach the transmitter to the inflatable emergency buoy with a rubber band. Such optical signal equipment has already become mandatory in many diving sites!

Once the device is activated, a distress signal is sent for a maximum of 45 hours until the situation is over and the device is switched off again. The transmitter would now be ready for a new emergency, within the scope of the maximum transmission duration.

## 4.2 Deactivation (Switching off the device)

In order to deactivate the device in alarm mode, press the "ON" button ⑥ and "TEST" button ④ simultaneously for at least 3 seconds. Following this, the antenna must be wrapped around the device again.

## 4.3 TEST function (manually)

Please test the easyRESCUE-DIVE for its transmission function at regular intervals. In general, an annual or semi-annual test is sufficient. Too frequent testing reduces the battery capacity. The battery is designed for 10 years and more than 30 test activations.

- Unfold the antenna by pulling the cord.
- Press the "TEST" button and make sure that the easyRESCUE-DIVE has a clear view to the sky to have good GPS reception conditions.
- The FLASH LED ② starts flashing at a two-second interval. Once a GPS position has been received, the GPS LED ⑦ starts flashing. The easyRESCUE-DIVE will then send eight AIS telegrams and will subsequently turn off. The TEST LED ④ is on for 5 seconds for confirmation.

If, for any reason, no GPS position can be received, the device will send eight AIS telegrams without position after five minutes and will turn off automatically.

- You can check the transmission of the easyRESCUE-DIVE by using commercially available AIS receivers (e.g. easyAIS) which must be connected to a chart plotter or laptop with AIS-suitable navigation software. The emergency transmitter easyRESCUE-DIVE appears as a circle symbol on the display/chart. For information purposes the 9-digit "Unit-ID" of the easyRESCUE-DIVE beginning with "970...." and a text message "SART TEST" is displayed.

# User Manual easyRESCUE-DIVE

- The test mode may be terminated early by pressing the "TEST" button (for more than 3 seconds). The LED stop flashing and the device turns off.

At the end of the self-test the LED show the test result, before the device turns off independently:

LED Display	Test Result
Yellow TEST LED is permanently on for 5 seconds	The test was completed successfully. The battery life is OK
Yellow TEST LED flashes	The easyONE found that the battery capacity is limited. This happens if the expiration date has passed or if the TEST button has been pressed more than 30 times. (The LED also flashes if the ON button has been pressed before.)
Green GPS LED is permanently on for 5 seconds	GPS reception was flawless. Position could not be determined.
Green GPS LED flashes	No GPS position could be determined within the five minutes test time.

## 5 Troubleshooting

- If the transparent plastic cover cannot be pushed down and thus makes alarm triggering impossible, please break the plastic out of the bracket from bottom to top with some force.
- If the antenna cannot be unrolled despite the cord, please break the plastic out of the bracket from bottom to top and release the antenna. It raises upwards into a vertical position.
- If the device cannot be turned on, please check if the antenna is in a vertical position at the upper left edge of the device.

## 6 Maintenance and Service

### 6.1 Maintenance / Service

In order to make the emergency transmitter resistant to high water pressure at 100 meters depth, the device has been sealed for life. Thus maintenance, service or battery replacement cannot be performed.

### 6.2 Disposal and Recycling Information



The AIS S.A.R.T. easyRESCUE-DIVE uses lithium batteries. They must be disposed of separately from household waste and must be given to the collection of recyclables.

## 6.3 Contact and Product Support

**Weatherdock AG**

Sigmundstraße 180

D-90431 Nürnberg.

Telephone: +49 (0)911-376638-30

Telefax: +49 (0)911-376638-40

Email: [info@weatherdock.de](mailto:info@weatherdock.de)

Internet:

[www.easyais.com](http://www.easyais.com)

[www.easyrescue.de/dive](http://www.easyrescue.de/dive)

