

PERSONAL LOCATOR BEACON WITH AIS AND RETURN LINK SERVICE

# ResQLink™ AIS

With the introduction of Automatic Identification System (AIS) functionality, Return Link Service (RLS) technology, and Near Field Communication (NFC) capability in one 406 MHz beacon, the ResQLink AIS represents a critical advancement in the evolution of PLB technology. The combination of 406 MHz and AIS distress messaging pairs both global and local rescue into one beacon for the first time, extending access to the Coast Guard and Search and Rescue as well as commercial and recreational boats in the area. Addition of NFC allows for mobile app connectivity and interaction with the PLB that has never been possible before.



Mobile App Connectivity



AIS Locating Signal

406 121.5

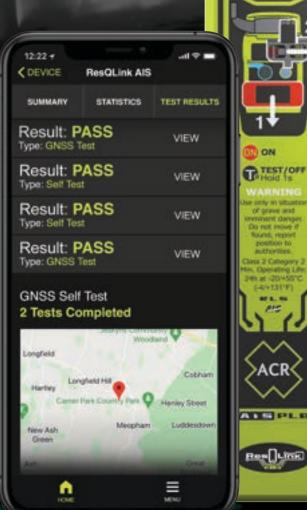
406 MHz & 121.5 MHz Signals



Built-in LED and IR Strobe
Array



This device has not yet been authorized as required by the Rules of the FCC or Cospas-Sarsat and does not comply with the requirements of RED (Radio Equipment Directive). This device is not, and may not be offered for sale or lease, or sold or leased until such authorization is obtained



# **RESQLINK AIS**

## PERSONAL LOCATOR BEACON WITH AIS AND RETURN LINK SERVICE

#### **Pairing Global and Local Rescue**

A world leader in rescue devices and other life-saving products relied on by both professional and recreational mariners, ACR is proud to offer the new ResQLink AIS.

This compact high-tech Personal Locator Beacon is the world's first PLB to include both AIS (Automatic Identification System) and NFC (Near Field Communication) in addition to standard satellite notification through the Cospas Sarsat rescue system. AIS means instant local notification for faster rescue times. NFC ensures the beacon is working properly when needed and provides easy access via smartphone to all functions and records. Accurate positioning through GNSS (GPS, Galileo, Glonass) and 406 MHz satellite connectivity means reliable service worldwide.

121.5 MHz homing transmissions combined with AIS and both visible and infrared strobe aid in beacon location and speed recovery times.

The innovative new ACR ResQLink AIS is the **FIRST** to combine all these features in a compact easy to use PLB Beacon making it the **FIRST** choice for serious mariners looking for a Personal Locator Beacon.



# Smartphone Connectivity utilizing Near Field Communication (NFC)

The integration of NFC technology provides users with the ability to conveniently access beacon data from their mobile phone.

The simple act of placing a phone near the beacon automatically opens the ACR Product App and provides access to a wealth of usage data including current battery life, number of self-tests completed, number of GNSS tests completed, and if applicable, the amount of time the beacon has been activated. Detailed information on each self-test and GNSS test performed by the beacon is also available if desired.

For each successful GNSS test, users can view a map showing exactly where the test was performed, the date and time of the test, the time it took the beacon to get a fix on your GNSS coordinates, the number of satellites the beacon used to obtain that fix, and the accuracy of the location.







### Pairing Global and Local Rescue

The Worldwide Cospas Sarsat satellite system includes 3 different constellations to ensure your 406 MHz distress signal immediately reaches the global network of Search and Rescue forces with your location accurate to within 100 meters. With multiple levels of integrated signaling technology including 406 MHz and GNSS (GPS, Galileo, Glonass) positioning, the PLB also transmits a 121.5 MHz homing signal which guides Search and Rescue services to the beacon's current location when they arrive on the scene, as the beacon may have drifted from the originally transmitted position.

The addition of AIS (Automatic Identification System) transmissions means the ResQLink AIS simultaneously alerts all vessels equipped with AIS transponders within the VHF radio range of the PLB's distress position. This greatly increases both the likelihood and speed of rescue since nearby vessels receive the alerts. Immediately upon

RESQLINK AIS IS
ACTIVATED

RESCUE

RESCUE

RESCUE RESPONSE
IS SENT

ADDITIONAL
A RESPONSE
BY LOCA
J AIS EQUIPPED
S VESSELS

ASS MOB
SIGNAL

RETURNLINK (RLS)
FEEDBACK

AS MOB
SIGNAL

deployment of the beacon an AIS Safety Message or MOB Alarm with the beacon's MMSI and location is presented on any AIS screen within range. This makes it easy for nearby vessels to home in on the beacon since it is an active AIS target on their screens.

The ResQLink AIS will light the way as rescuer arrive on scene with both a white visible strobe and infrared strobe providing rescuers with the visual reference they need during nighttime or other low visibility rescue operations.



#### Return Link Service (RLS)

RLS functionality works by sending a signal back through the Galileo satellite network to confirm to the beacon user that their distress message has been received and their location has been detected by the Coast Guard. A confirmation message is distinctly indicated by a flashing blue light on the PLB. Like other ACR beacons that include the important RLS feature, the ResQLink AIS provides the comfort of knowing that a distress message has been successfully delivered. Understanding that rescuers are aware of the beacon transmission and location reduces the stress often associated with Man Overboard incidents.



## PFD Compatibility and Integration

The ResQLink AIS is designed to install within a life jacket and activate upon inflation of the jacket (semi-automatic). Installation is made simple using the included oral inflation tube clip to attach the PLB to the life jacket with a ribbon connected around the bladder of the life jacket. Once correctly installed, the action of the life jacket inflating triggers deployment of the antenna and activation of the beacon.

Users not wishing to install the PLB within a life jacket have the option to utilize the included webbing clip to attach the beacon to an appropriately sized belt or the webbing of an inherently buoyant life jacket.

# **RESQLINK AIS**

## PERSONAL LOCATOR BEACON WITH AIS AND RETURN LINK SERVICE

## **SPECIFICATIONS**

**Product Number: 2933** Model Number: PLB-450

#### Activation

Manual or Semi-Automatic when fitted to a compatible life jacket

#### Class

Class 2 Operation (@ -4°F / -20°C)

**Buoyant** No (optional flotation jacket available)

#### Size

7.87" (L) x 1.41" (W) x 1.81" (D) 20.0 cm (L) x 3.6 cm (W) x 3.0 cm (D)

- \* Where approved for use
- \*\* Patented

#### **Temperature Range**

Storage: -30°C to +70°C (-22°F to +158°F) Operating:  $-20^{\circ}$ C to  $+55^{\circ}$ C ( $-4^{\circ}$ F to  $+131^{\circ}$ F)

#### Waterproof

Yes

#### **Battery**

Non-rechargeable Lithium Batteries

#### **Battery Replacement**

Due 6 years from date of manufacture or 5 years after beacon is placed into service, whichever is first, or after emergency use.

#### Weight

0.42 lbs (190 g)

#### Warranty

5 Years

#### **Operational Life**

>24hours @ -20°C (-4°F)

#### Approvals (Pending)

Cospas-Sarsat, FCC, Canada, RED, AMSA

# **KEY FEATURES**



Simple Life jacket Integration



GPS, Galileo, and Glonass



Rugged Construction



24 Hours Operation



AIS Locating Signal



**Return Link** Service (RLS)



**MEOSAR** Compatible



OF SURVIVAL

5 Year **Battery Life** 

# THE SCIENCE

For further information please contact: **ACR Electronics, Inc.** 

5757 Ravenswood Road Fort Lauderdale, FL 33312

#### www.ACRARTEX.com

This document is the property of ACR Electronics, Inc. (ACR) and is distributed by ACR for the benefit of our customers. This document may not be disseminated, reproduced or altered in any way without the prior written approval of ACR Electronics, Inc.

Tel: (954) 981.3333 Fax: (954) 983.5087

Email: sales@acrartex.com