

Smart Radio SR161, SR162 & SR162G AIS Receivers

The Smart Radio SR161, SR162 and SR162G AIS Receivers are compact, easy to install, stand alone marine receivers that monitor the channels assigned to the Automatic Identification System or AIS. These radio receivers are specially built for marine environments for the intended use of deciphering Automatic Identification System data. Most commercial vessels are required to have an AIS transponder that transmits information about the vessel and its movements. The system is designed to assist vessels with identifying the traffic around them and to help with marine safety and collision avoidance. The SR162G includes an integrated 12-channel GPS receiver.

Information output by each ship equipped with an AIS transponder includes the name of the ship, size of the vessel, the speed and direction of travel as well as other vessel and voyage related information. When attached to a standard marine VHF antenna, the AIS Receiver can receive these information broadcasts from each vessel and output the data as a NMEA serial data stream. This information can be used by computer-based navigation systems that support AIS and by some marine navigation hardware devices.

The information gathered by the Smart Radio AIS Receiver is more detailed than what is available with radar. Now you can not only track multiple commercial vessels in your area but you can also see the same ship information that is gathered by commercial vessels and the Vessel Traffic Service.



Product Features

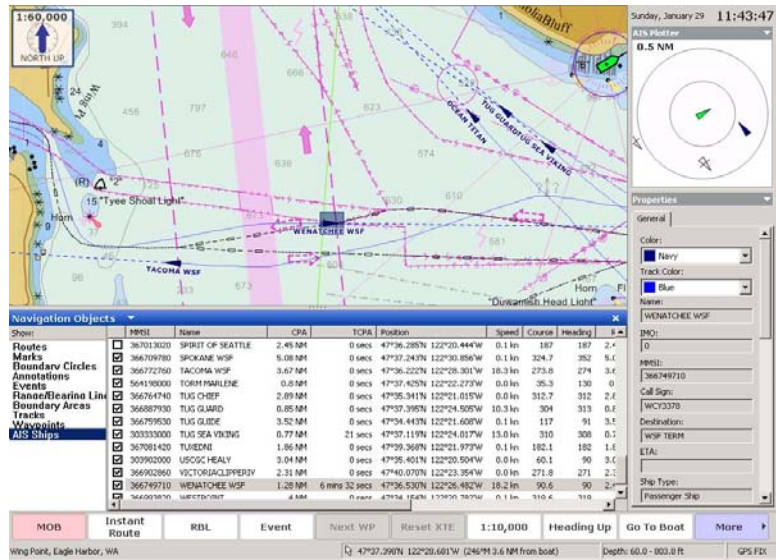
The Smart Radio SR161, SR162 and SR162G AIS Receivers provide:

- High-sensitivity AIS data reception
- Line of sight reception similar to marine VHF reception distances
- Low power consumption
- Receives AIS Class A & B vessel reports
- Sends information to a PC or chart-plotter via a serial interface
- Dual AIS channel support
- When interference is detected on one receiving channel, the SR161 automatically switches to the alternate AIS channel (SR161)
- The SR162 and SR162G units are full time dual channel AIS receivers and can receive AIS information on both AIS channels simultaneously (SR162 & SR162G)
- The SR162G includes an integrated 12 channel GPS receiver and remote antenna
- Ability to track and display information on multiple targets
- Easy installation: connect a VHF antenna (not included), 12 volt DC power and a serial cable to your PC or chartplotter
- Can be used with your existing VHF marine radio antenna with the Smart Radio VHF Antenna Splitter

The SR161 and SR162 can be used with many popular computer-based marine navigation packages. The following packages have been tested and are known to work with both receivers:

- ◆ Rose Point Coastal Explorer 1.1
- ◆ Nobeltec Visual Navigation Suite 8.0
- ◆ Nobeltec Admiral
- ◆ Memory Map Navigator Pro
- ◆ Seaclear
- ◆ ICAN Regulus
- ◆ Xanatos Titan
- ◆ EuroNav seaPro
- ◆ Y-tronic Yacht-AIS
- ◆ Navicon AIS Navigator
- ◆ COAA Ship Plotter

Any navigation package that can process NMEA VDM data from a serial port should work with an AIS receiver.



Example of the SR161 interfacing with Rose Point Coastal Explorer 1.1. Note the multiple targets and detailed information for the selected vessel.

Technical Specifications

Electrical

Power supply range: 9 - 15 volts DC

Power consumption : 1.5 watt

Output

Format: NMEA 0183 version 3

Baud rate: 38,400 baud

Output message: VDM, GPRMC (SR162G)

LEDs: 2 LEDs for receiver & data transfer

Receiver

Frequency: AIS1 on 161.975 MHz, AIS2

on 162.025 MHz

Dual channel scan receiving (SR161)

Continuous dual channel receiving (SR162

& SR162G)

Channel spacing: 25 KHz

Sensitivity: -112dBm

Demodulation: GMSK

Antenna impedance: 50 ohms

Physical

Dimensions: 115 x 75 x 28 mm

Weight: 400g

Connectors: antenna BNC, 12 volt wiring, serial port, GPS antenna port (SR162G)

Output port: 9 pin D socket RS-232 serial

Antenna: 16 foot cable and magnet

mounted GPS antenna (SR162G)

Data received by the SR161 and relayed to your computer-based navigation system

Ship information	Voyage information
Ship name	Current latitude
Type of vessel	Current longitude
Call sign	Speed over ground
MMSI number	Course over ground
IMO number	Heading
Registration	Rate of turn
Length	Navigational status
Beam	Destination
Draft	ETA

For more information:

Smart Radio AIS Receivers are available from Milltech Marine.

Contact Milltech Marine at:

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Note: Smart Radio AIS receivers are designed to assist with safe navigation however they must be used with other established methods for safe operation of a vessel. Not all vessels are equipped with an operating AIS transponder, therefore a visual lookout must be maintained at all times. Functionality and the effectiveness of the receiver can be greatly affected by radio reception, installation quality, antenna position and other factors.

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