

# SMART RADIO 161 AIS RECEIVER

*"Now You Can See Who's Coming Over the Horizon"*

The Smart Radio 161 Automatic Information System (AIS) is a high quality very high frequency (VHF) frequency modulation (FM) marine radio receiver. The SR 161 makes it possible to receive important information from boats, ships, buoys, lighthouses, search and rescue (SAR) helicopters, Coast Guard vessels, pilot boats, weather stations, etc. that are equipped with AIS transponders.

This information can be plotted graphically on a digital chart plotter or with the most navigation software such as The CAPN, Nobeltec, MaxSea, Coastal Explorer, etc.

AIS is a requirement for all vessels over 300 gross tons according to the International Marine Organization (IMO) and under Safety Of Life At Sea (SOLAS) regulations. This means that a large number of vessels and other navigation aids (NAVAIDS) will be seen by your SR 161 and can significantly contribute to your vessel's safety.

AIS was primarily developed to make it possible to identify vessels and monitor their movements to improve safety and efficiency in navigation. AIS provides more information than radar and includes displays of the vessel's name, call sign, mobile maritime service identity (MMSI) number, position (POS), speed over ground (SOG), course over ground (COG) and additional information in a National Marine Electronics Association (NMEA) 0183 data format.

AIS operates primarily on two dedicated marine VHF FM frequencies: AIS 1 (161.975 MHz) channel 87B and AIS 2 (161.025 MHz) channel 88B. In areas where these two channels are not available, AIS can automatically change to other alternatively available frequencies. Marine VHF FM radio has a normal range of 20 nm.

The SR 161 can use a standard marine VHF antenna and cabling. An optional antenna splitter (\$119) allows the use of your existing VHF antenna (see other side). The SR 161 connects to a PC or chart plotter through a standard RS-232 (9-pin) serial port and can be adapted to a USB port with an optional adapter (\$49).



## Technical Data:

- Power supply - 9 to 15 VDC
- Power consumption - <1.5W Output
- Baud rate - 38400 default (software selectable)
- Format - ITU/ NMEA 0183
- Output message - VDM
- Receiver Frequency - AIS1 161.975 MHz  
AIS2 162.025 MHz default (software programmable to other frequencies), dual channel scan receiving
- Sensitivity - 116dBm
- Demodulation - GMSK
- Data Rate - 9600
- Antenna impedance - 50 ohms
- Physical Dimensions - 4.53 x 2.95 x 1.11 in. (115 x 75 x 28 mm)
- Weight - 14.1 oz. (400g)
- Connectors - Antenna BNC
- Output port - 9 pin D socket

## SMART RADIO

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