Affordable AIS Afloat

DIGITAL YACHT

AIS400 AIS RECEIVER

DUAL CHANNEL AIS-GPS RECEIVER WITH OPTIONAL UPGRADE TO CLASS B TRANSPONDER

- Ultra sensitive dual channel AIS receiver
- Integrated GPS device provides position information too
- USB, RS232 & NMEA outputs for easy interfacing with PC or plotter
- Low cost upgrade to full Class B transponder (AIT400) available

And Upgrade
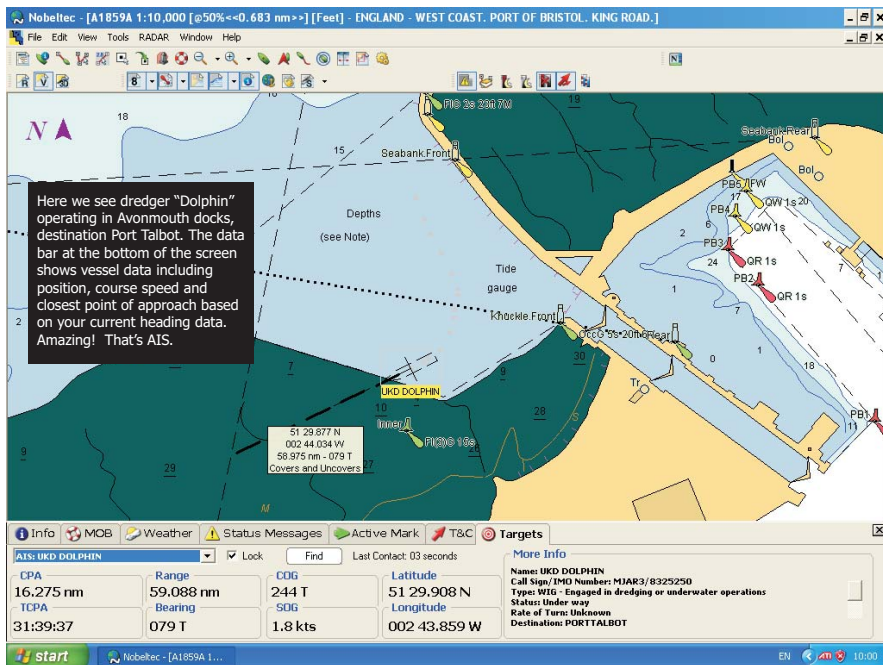
To A Class B Transponder

What is AIS?

The marine Automatic Identification System (AIS) is a location and vessel information reporting system. It allows vessels equipped with AIS to automatically and dynamically share and regularly update their position, speed, course and other information such as vessel identity with similarly equipped craft. Position is derived from a GPS and communication between vessels is by VHF digital transmissions (on channels specifically allocated within the normal marine VHF spectrum). A sophisticated and automatic method of time sharing the radio channel is used to ensure that even where a large number of vessels are in one location, blocking of individual transmissions is minimised with any degradation of the expected position reporting interval indicated to the user. Even if the unit suffers extreme channel overload conditions it will always recover to normal operation.

There are two classes of AIS unit fitted to vessels - Class A and Class B. In addition, AIS base stations may be employed by the Coastguard, port authorities and other authorised bodies. AIS units acting as aids to navigation (A to Ns) can also be fitted to fixed and floating navigation markers such as channel markers and buoys. Class A units are a mandatory fit under the safety of life at sea (SOLAS) convention to vessels above 300 gross tons or which carry more than 11 passengers in International waters. Many other commercial vessels and leisure craft also fit Class B units. Class B is a lower cost system designed for non mandatory fit

AIS400 Features

The AIS400 receives AIS transmissions from Class A and B systems and decodes the data for use with a compatible plotter or PC based navigation system. It features connections via NMEA and USB as well as a built in GPS receiver. The AIS400 can also be upgraded to a Class B transponder with an easy and low cost upgrade package available.

Connect to a plotter or PC to view AIS targets...

Here we see dredger "Dolphin" operating in Avonmouth docks, destination Port Talbot. The data bar at the bottom of the screen shows vessel data including position, course speed and closest point of approach based on your current heading data. Amazing! That's AIS.

Hook up the AIS400 to an onboard PC or plotter compatible with AIS data and you'll get a detailed overlay of all targets within range onto the display. See the vessels position, course, speed, heading, previous track, length, beam and identity (MMSI, callsign and name).

Class A systems may also show IMO number (if known), navigational status, rate of turn, draught, cargo type, destination and safety related messages. Many systems can then calculate CPA (closest point of approach) and TCPA (time to CPA) for a selected target. AIS systems offer ranges of up to 20-50 miles - typically similar to the maximum ranges expected from normal VHF voice communications. The AIS400 complements radar and plotter systems with positive target identification and greatly improve ship safety and security with reduced risk of collision. It really brings your plotter to life

GPS INCLUDED TOO

The AIS400 incorporates a 16 channel parallel GPS receiver which offers position information via the USB and NMEA outputs as well as providing AIS target data. This data is multiplexed into a single output. This makes the AIS400 an easy plug 'n play "total navigation" sensor for most systems. For instance, it will provide positioning data for Raymarine C/E/G series and Furuno & garmin systems too. It's supplied with an ultra compact, rugged GPS antenna and 7.5m interconnect cable

UPGRADE TO A TRANSPONDER

Once you've seen the benefits of AIS on a chart plotter or PC nav system, you'll want the security and benefits of having a transponder - sending your position and data as well as receiving. The AIS400 can be upgraded to a Class B type approved system by simply returning to us. We'll rework the product with a new front panel and internal circuitry to make the AIS400 transform into an AIT400 transponder - all at a value price.

PROAIS RX SOFTWARE

The AIS400 ships with proAIS RX software which provides a self test and diagnostic routine as well as a list of received targets (XP compatible). The USB interface makes installation and use with PC based nav systems a breeze.

AIS400 SPECIFICATIONS

- Top specification, true dual channel parallel receiver allows simultaneous reception ofboth AIS frequencies and decoding of Class A and Class B target data
- 12v DC operation (250mA current consumption)
- USB, RS232 and NMEA0183 data outputs for PC and plotter connections
- Built in GPS receiver - provide multiplexed data output of position and AIS data
- Waterproof construction and upgradeable to Class B transponder - simply return the unit for a low cost upgrade.
- 25 x 12.2 x 3.2 cm
- Supplied with 1m power/data cable and 1m USB cable

Supplied with low profile GPS antenna and 7.5m interconnect, power and USB cable. Requires VHF antenna (BNC termination) or optional VHF antenna splitter.

What will AIS bring to my navigation?

Anti Collision & Target Tracking

When the AIS400 is connected to a compatible plotter (and most are), you'll see an overlay of nearby targets equipped with an AIS transponder - that's every commercial vessel over 300GRT and many other non mandatory vessels. Quickly establish closest point of approach or time to closest point of approach
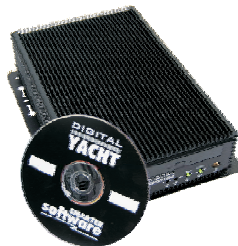

Identification

Click on a target and identify call sign, name and MMSI number. That's great information to quickly establish a voice or DSC radio call to advise or question the target's intentions.

See around headlands & ATONs

AIS uses VHF frequencies for data transfer so you can often see where radar can't -like around headlands. Increasingly. AIS Transponders are being added to important navaids to make positive identification even easier.