TECHNICAL NOTES

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Article applies to - AIT2000

ISSUE: Using AIT2000 with Standard Horizon GX2000E

Our AIT2000 Class B AIS Transponder is most commonly installed with an AIS compatible Chart Plotter, so that the AIS targets can be displayed on the electronic chart. However, on sail boats it is often desirable to turn off the chart plotter on longer legs to reduce power consumption, but then you no longer have an AIS display.

The Standard Horizon GX2000E VHF is unique in that it has the capability to display AIS targets and also features closest point of approach (CPA and TCPA) alarms which constantly monitor for dangerous AIS targets and warn you when you are on a potential collision course with them.

The combination of our AIT2000 and the Standard Horizon GX2000E, makes for a very powerful AIS display system that consumes significantly less power (typically < 1A) than a colour chart plotter. Add to this the fact that you can quickly make a DSC call from the GX2000E to any of the targets in its AIS List and you find that this combination matches or out performs many integrated systems, costing much more.

This Tech Note explains how to connect the two systems together and how to make sure everything is working correctly.
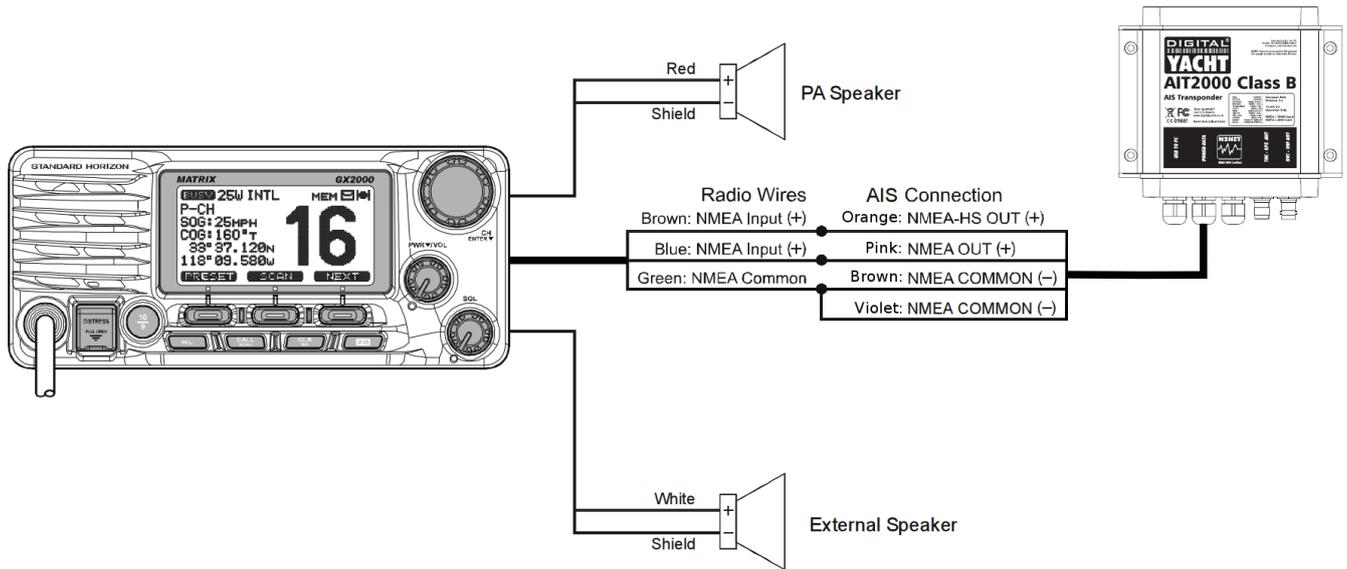
Connections and Operation

With both units powered off, connect the two NMEA0183 outputs of the AIT2000 (Power/Data cable) to the four core NMEA data cable of the GX2000E, as shown in Figure 1.

These connections provide GPS data at 4800 baud and AIS data at 38400 baud to the GX2000E. Even though the AIT2000 does transmit GPS data on its high speed 38400 baud output, the GX2000E does not accept GPS data on its 38400 baud input and so both sets of connections are necessary for correct operation.

The NMEA0183 inputs of the GX2000E are pre-configured to the correct baud rates so no additional menu settings are required and as soon as the two units are turned on the GX2000E should start to display GPS data and if you press the AIS button on the radio, AIS targets should also be displayed on the AIS radar type display.

The range of the AIS Radar display can be changed by pressing any of the three soft keys to display the key functions, then pressing the left hand "Range" soft key and then selecting the range (in NM) from the list that appears.

To display the AIS List of targets, press any of the three soft keys to display the key functions, then press the middle "List" soft key and the AIS target list will be displayed. Using the rotary Channel knob, select the target you wish to call and press the "Call" soft key to make a DSC call to the target.

For information on the Standard Horizon radios, go to http://www.standardhorizon.co.uk/contact_us.php of for any questions related to this Tech Note please email us at support@digitalyacht.co.uk