- AIS100 Receiver PWR/DATA cable

  - RED - Power + (12v)
  - BLACK - Power – (0v)
  - ORANGE - NMEA Out +
  - BROWN - NMEA Out –

- The most common connection to a dedicated chart plotter is to take the NMEA Output (Orange+ and Brown –) from the AIS100 Receiver and to connect it to a free NMEA Input on the plotter. You must then tell the chart plotter that AIS data is connected to this port and set the baud rate to 38,400 Baud – the standard speed for AIS data. Consult the instruction manual supplied with your Chart Plotter to understand how this is configured.

- Apply power to the AIS100 Receiver and verify that the Green “Status” LED lights.

- The “Status” LED will flicker every time that valid data from an AIS target is received. Depending upon the number of vessels, fitted with AIS transponders, sailing within VHF range of your vessel, the frequency of flickering maybe constant or as little as once every 30 seconds.

- Installation is now completed

Installation & Quick Start Guide

AIS100 AIS Receiver

1. Introduction

Congratulations on the purchase of your AIS100 AIS Receiver. It is recommended that your receiver is installed by a professional installer.

Before operating the unit you should familiarise yourself with this Quick Start Guide and the user manuals for any equipment you wish to connect it to.

2. Before you start

You will need the following items and tools to complete the installation:

- The AIS100 Receiver
- Dedicated AIS/VHF antenna or existing VHF antenna and splitter
- Access to 12V or 24V DC power supply where the unit is to be installed.
- M3 or M4 screws or other fixings appropriate to the mounting location.

To display the AIS targets and data you will need:

- Suitable PC Navigation software running on a PC with Microsoft Windows XP®/Windows 2000® or Windows Vista®/Windows 7® with a free USB of RS232 serial port
- Or a suitable dedicated chart plotter that can read and display AIS data via NMEA0183

3. Installation

Before starting installation select a suitable location for the AIS Receiver. The unit is water resistant; however it should be installed below deck in a dry location. When locating the unit you should consider:

- Routing of power and antenna cables to the unit.
- Provision of sufficient space behind the unit for cable connections.
- Routing of data connections to PC or chart plotter from the unit.
- Maintaining the compass safe distance of 0.5m.

Installation Step 1

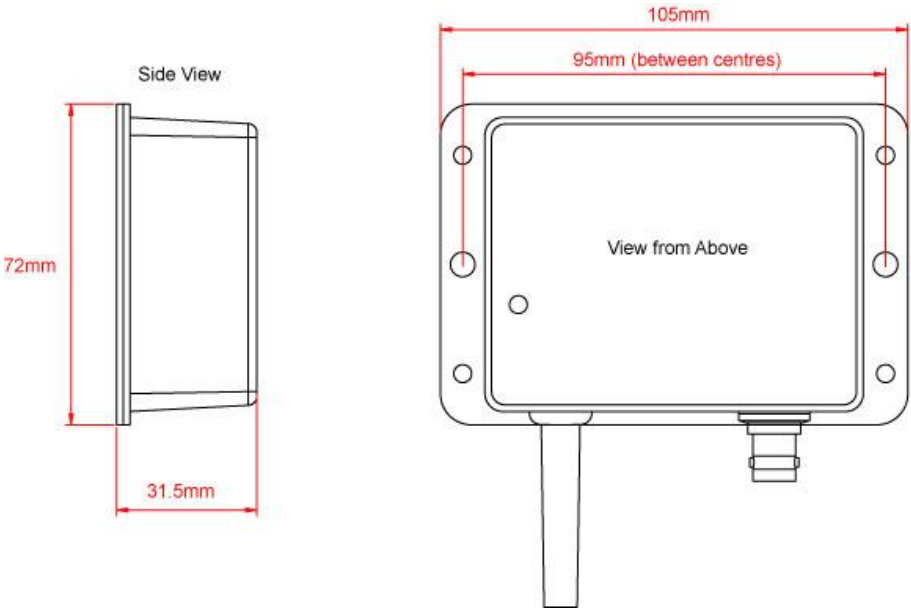
- Run the VHF co-axial cables to the AIS Receiver and terminate with the correct connectors:
- The VHF antenna cable should be terminated in a BNC connector (Bayonet)
- Run the interfacing cables to the AIS Receiver; NMEA0138 or Serial to USB adaptor
- Do not make any connections yet

If you wish to connect the AIS100 to a PC that only has USB connections and no serial COM ports, it will be necessary to use a suitable Serial to USB Adaptor. Digital Yacht can supply a suitable adaptor, please contact the dealer that you purchased the AIS100 from for details.

Installation Step 2

- Fix the AIS 100 to a bulkhead or flat surface using suitable fixings (not supplied). Note that the unit may be installed in any orientation.

Fixing location drawing



- Once the unit is secured, connect the AIS/VHF antenna. Ensure the connection is fully made; should feel a slight click as the BNC locks.

Installation Step 3

- Provide power connections to the unit. Power is connected to the four core PWR/DATA cable on the Red and Black wires. The Red wire is the positive (+) connection. The Black wire is the negative (-) connection.

- Connect the stripped wires to the nearest source of primary 12V or 24V DC power. **Ensure that the supply is connected via the supplied 1A fuse or suitable circuit breaker.** Add the fuse in the positive power connection to the unit if necessary.

Installation Step 4

- The AIS100 Receiver can be connected to other AIS compatible equipment via the NMEA0183 connections on the PWR/DATA cable.

- A table showing what each of the 4 wires of the PWR/DATA cable does is printed on the AIS100 Receiver and repeated below for your convenience;