- When the USB interface is first plugged in, it will be seen by Windows as a USB to Serial adaptor
 and the "Found New Hardware Wizard" will be triggered. The drivers are included on the supplied
 CD-Rom so please ensure this is inserted in the PC before connecting the USB cable. Windows
 Vista and 7 will automatically find the correct driver on the CD, while Windows XP may need to be
 directed to the "USB Driver for AIS units" folder on the CD.
- Windows will create a "virtual" COM port for the AIS100PRO and you will need to go to the Windows Device Manager program and look in the "LPT&COM Ports" section to find out what COM port number has been allocated to the AIS100PRO. Make a note of this number as you will have to enter this COM port number in the PC Navigation software, so that it knows which port the AIS is connected to – consult the instruction manual supplied with your PC Software to understand how this is configured.

Installation Step 5 – NMEA 0183

 The AIS100PRO 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 6 wires of the PWR/DATA cable does is printed on the AIS100PRO Receiver and repeated below for your convenience;

AIS100 Receiver PWR/DATA cable

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

- The most common connection to a dedicated chart plotter is to take the NMEA Output (Orange+ and Brown –) from the AIS100PRO 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.
- If you wish to multiplex other NMEA 0183 GPS or Instrument data through the AIS100PRO, connect the NMEA 0183 (4800 baud) data to the NMEA In + and – connections. As long as the NMEA data has valid checksums the data will be output with the AIS data at 38,400 baud on the NMEA 0183 and USB outputs.
- Apply power to the AIS100PRO 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



The AIS100PRO is also compatible with Mac OS X and all LINUX Kernels since V2.4.20. For more information on using the AIS100PRO with non-Windows operating systems, please check the Digital Yacht website <u>www.digitalyacht.co.uk</u>

Installation & Quick Start Guide AIS100PRO AIS Receiver



QUICK START AIS100PRO V1.00

1. Introduction

Congratulations on the purchase of your AIS100PRO 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 AIS100PRO 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 port
- Suitable AIS compatible dedicated chart plotter that has a free NMEA 0183 input

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/data and antenna cables to the unit.
- Provision of sufficient space behind the unit for cable connections.
- Routing of USB data connections to PC.
- 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 from the AIS Receiver to the chart plotter and/or PC's USB port
- Do not make any connections yet



Do not plug in the USB lead of the AIS100PRO into a PC until you have inserted the supplied "Digital Yacht Software and Drivers CD" in the CD drive of your PC.

Installation Step 2

Fix the AIS 100PRO to a bulkhead or flat surface using suitable fixings (not supplied). Note that the
unit may be installed in any orientation. The drawing on the following page shows an AIS100 but the
drilling and fixing details are identical for an AIS100PRO.

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 - Power

- 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 – USB Connection

- The AIS100PRO Receiver can be connected to a PC via its USB lead.
- If you wish to extend the USB cable from the AIS100PRO to the PC, you can use an unpowered USB extension cable (maximum of one 3m extension) or a more expensive powered USB extension cable (maximum of one 5m extension) which are available from good electronics shops.