



SONAR SERVER WIRELESS NMEA INTERFACE

Installation and instruction Manual



1. Introduction

Congratulations on the purchase of your SONAR SERVER Wireless NMEA Interface.

It is recommended that your product is installed by a professional installer, particularly when it comes to interfacing with other equipment.



Before installing and operating this unit you should consult the user manual of the navigation equipment that you are connecting this unit to.

2. Before you start

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

- The SONAR SERVER (supplied)
- A 12V or 24V DC power connection where the unit will be installed
- M3 or M4 screws or other fixings appropriate to the mounting location (not supplied).

To receive/display wireless data from the SONAR SERVER you will need:

- Navionics Boating App V7.4 or higher running on an Apple iOS or Android Device.
- A device with a suitable NMEA 0183 data output that is transmitting Depth and GPS data



3. Installation

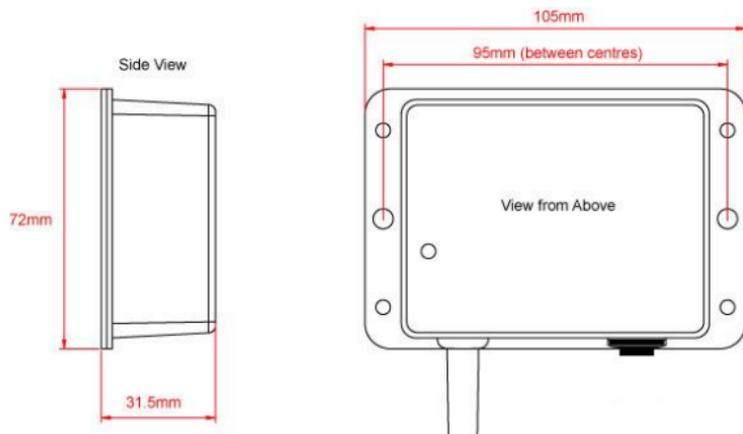
Before starting installation select a suitable location for the SONAR SERVER device. The unit is water resistant; however it should be installed below deck in a dry location. When locating the unit you should consider:

- Routing of power and NMEA0183 interfacing cables to the unit.
- Provision of sufficient space below the unit for cable connections and access to reset switch.
- Best location for Wifi reception i.e. central location within the vessel, not inside a metal enclosure, etc.

Installation Step 1 - Cabling

- Run 12v or 24v power connections to the SONAR SERVER
- Run the NMEA 0183 interfacing cables to the SONAR SERVER
- Do not make any connections yet

Installation Step 2 – Mounting the SONAR SERVER

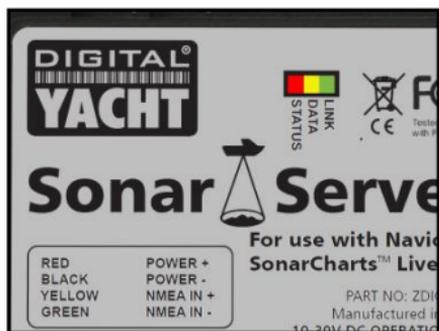


Use suitable fixings (not supplied) to fix the SONAR SERVER to a flat surface. Note that the unit may be installed in any orientation.



Installation Step 3 – Powering the SONAR SERVER

- Provide power connections to the unit. Power is connected to the four core PWR/DATA cable on the Red and Black wires. Red wire is the positive (+) connection, 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 a 1A fuse (not supplied) or suitable circuit breaker. The fuse should be fitted in the positive power connection to the unit if necessary.
- Apply power to the SONAR SERVER and you should see the three LEDs start to illuminate or flash. The following table shows what each LED indicates;



Condition	Red LED	Yellow LED	Green LED
Fast Blink	No wireless connection	Data	
Slow Blink		Data	UDP Connection
OFF	Wireless device connected	No Data	No Power

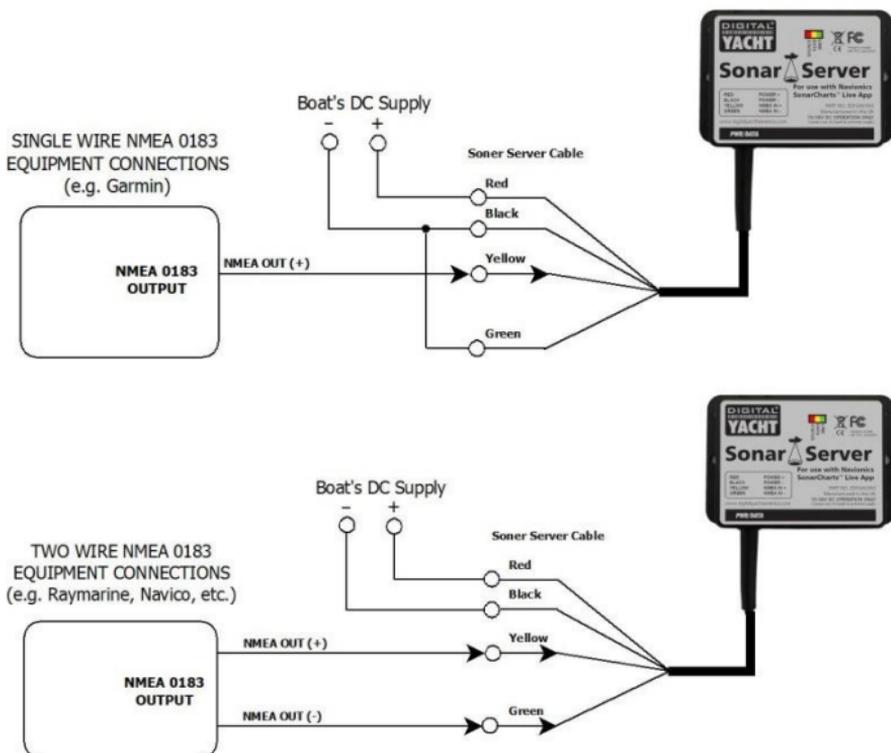
- Turn off the SONAR SERVER and continue with the NMEA interfacing.



Installation Step 4 – Interfacing (NMEA)

- The SONAR SERVER allows Depth and GPS data to be taken from a Fishfinder, Instrument system or Multi-Function Display (MFD) by connecting it to a suitable NMEA0183 output on the device.
- SONAR SERVER operates at 4800 baud, the standard data speed for NMEA0183 equipment. To operate at the higher 38400 baud speed you will need to change the baud rate settings by opening a browser on your mobile device and going to <http://192.168.1.1>

Below are typical connection diagrams for connecting the SONAR SERVER to single or two wire NMEA devices;



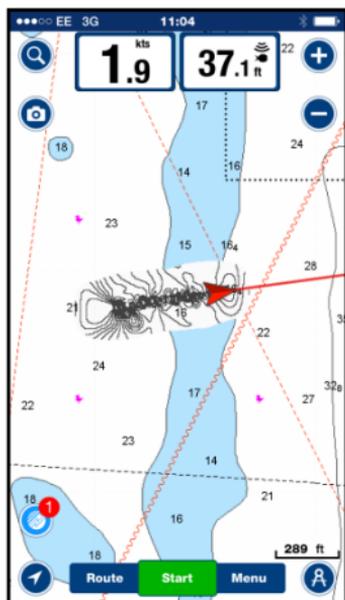


For more specific information on connecting SONAR SERVER to particular makes and models of Fish Finders, Instruments and MFDs, please search the “Knowledge Base” of our www.sonarserver.com website, where you will find connection diagrams for the most popular systems.

If you have correctly interfaced SONAR SERVER to your depth system, then the Yellow “Data” LED should flash each time depth or GPS data is received, usually once per second but this can be continuous on some networked systems.

Installation Step 5 – Wireless Interfacing

- SONAR SERVER has an integrated 802.11b+g wireless adaptor which creates a wireless hotspot on-board your boat. The SSID (name) of the wireless hotspot that SONAR SERVER creates will be “**DY-WiFi-xxxx**” where xxxx is a four digit code unique to your SONAR SERVER.
- To connect to SONAR SERVER, scan for wireless networks on your wireless device. This procedure will vary from device to device so please consult your device’s user manual.
- The default wireless password is “**PASS-xxxx**” where xxxx is the same unique number as in the SSID
- Once your mobile device is connected wirelessly to SONAR SERVER, all you have to do is run the Navionics Boating App and you should now see a new Depth data window appear.
- If you wish to see the “Live” changes to your SonarCharts, turn them on in the app’s Map Options menu.





Normal Operation

The SONAR SERVER consumes around 0.1 Amp and can be left on whenever the boat is sailing. Whenever NMEA data is received by the SONAR SERVER, the yellow data LED will flash. In some systems with lots of NMEA data, it is not unusual for the yellow LED to be constantly flickering.

Should you have a problem connecting wirelessly to SONAR SERVER, press and hold the Reset button for 1-2 seconds and try connecting again. In busy marinas where there is significant wireless activity, it may not be possible for a reliable connection to be made to SONAR SERVER, but once underway (at sea) a strong and reliable connection will be achieved.



**For more information on Sonar Server please visit
<http://www.sonarserver.com>**