



Redwood Sail and Power Squadron

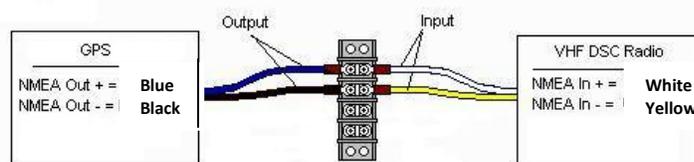
a unit of United States Power Squadrons®

Boating is fun..We'll show you how



Step by Step Process for Installing your VHF/DSC Radio.

1. Obtain an **MMSI number** from the **United States Power Squadron** or **BoatUS**.
 - a. <http://www.usps.org/php/mmsi/home.php>
 - b. <http://www.boatus.com/MMSI/default.asp>
2. Install a **Class "D" VHF radio** and a **GPS**, with **NMEA 0183 outputs**, on your boat.
3. Enter your **MMSI number** into your radio following the procedure given in your VHF Radio User Guide.
4. Find the NMEA 0183 connection information in your Radio and GPS user Guide.
5. Make the NMEA connections between the VHF and the GPS.
 - a. **GPS Receiver/Chart Plotter:** In the manual for this piece of equipment, turn to the section that describes the wiring aspects of the installation.
 - b. There will be a diagram which indicated the color of the wires in the wiring harness.
 - c. Two of the wires go you your battery or electrical distribution panel. Those will be "Red" for positive voltage and "Black" for the negative voltage wire.
 - d. You need to identify the wire colors for:
 - i. The "**NMEA Out +**" wire
 - ii. The "**NMEA Out -**" wire.
 - e. In our example, the "NMEA Out +" will be "Blue" and "NMEA Out -" will be "Black".
 - f. Using the Installation Guide for the VHF radio, identify the wire colors for:
 - i. The "**NMEA In +**" wire
 - ii. The "**NMEA In -**" wire
 - g. In our example, the "NMEA In +" will be "**White**" and "NMEA In -" will be "**Yellow**".
 - h. In the units are close enough together that the wires can be connected without adding an additional length of wire, they may be connected as shown below.



Typical GPS to VHF Radio Connection.

Note: The manufacturer of your unit may have chosen different wire colors for each function. Check your Owners Manual for specific information.

- i. Make the connection with a **Blue Seas System 2402 Terminal Strip**.
 - ii. A wiring guide is available from the Coast Guard Navigation Center at: http://www.navcen.uscg.gov/pdf/marcomms/dsc/DSC_VHF_GPS_Install_Final.pdf
This tells exactly which colored wires need to be connected to each other.
6. Turn on your **VHF** and your **GPS** and verify proper operation.
 - a. You should see your current **Latitude** and **Longitude** displayed on your VHF.
 - b. You may also see a **Satellite Symbol**, this indicates a connection to the GPS.

For detailed installation information, go to:
<http://www.usps.org/localusps/redwood/education/NMEA/dsc.htm>