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GPSMAP® 620/640 Marine Mount Installation Instructions

Install the GPSMAP 620/640 marine mount on your boat according to the following instructions. You need the appropriate tools and fasteners listed. These items are available at most marine dealers. Wear safety goggles, ear protection, and a dust mask when drilling. When drilling, always check the opposite side of the surface.

If you experience difficulty installing the device, seek the assistance of a professional installer, or contact Garmin Product Support. In the USA, go to www.garmin.com/support, or contact Garmin USA by phone at (913) 397-8200 or (800) 800-1020. In the UK, contact Garmin (Europe) Ltd. by phone at 0808 2380000. In Europe, go to www.garmin.com/support and click **Contact Support** for in-country support information, or contact Garmin (Europe) Ltd. by phone at +44 (0) 870.8501241.

Before installing your GPSMAP 620/640 marine mount, confirm that the package contains the items listed on the box. If any parts are missing, contact your Garmin dealer immediately.

⚠ See the *Important Safety and Product Information* guide in the product box for product warnings and other important information.

These instructions detail the three primary steps for installing your GPSMAP 620/640 marine mount:
1. Selecting a location.
2. Installing the marine-mount base and connecting the marine-mount bracket to the marine-mount base.
3. Connecting the marine-mount bracket to power.

Although they are not necessary to use the GPSMAP 620/640, these instructions cover two additional installation options:
- Connecting the GPSMAP 620/640 marine-mount bracket to other NMEA 0183-compatible devices, such as a VHF radio with Digital Selective Calling (DSC).
- Connecting the marine-mount bracket to an external audio device.

Step 1: Select a Location for the GPSMAP 620/640 Marine Mount
Consider the following when you select an installation location:

- The location should provide optimal viewing as you operate your vessel and allow easy access to the touchscreen.

- The surface must be strong enough to support the weight of the GPSMAP 620/640 and protect it from excessive vibration or shock.

- The location must be at least 17 in. (43 cm) away from a magnetic compass to prevent electromagnetic interference, which can cause inaccurate compass readings.

- The location should not be exposed to extreme temperature conditions. The GPSMAP 620/640 is designed for operation from 5°F to 131°F (from -15°C to 55°C).

Step 2: Install the GPSMAP 620/640 Marine-Mount Base and the Marine-Mount Bracket
Install the marine mount on a console or overhead. Install the marine mount with the following tools and hardware (not included):

- Three number 8 (4 mm) pan-head machine bolts with matching nuts and washers, or three number 8 pan-head self-tapping screws. Do not use bolts or screws with a countersunk head.
- Phillips screwdriver
- Drill and drill bit

To install the marine-mount base:
1. Disconnect the swivel fixture ❶ from the bottom of the mount base ❷ by loosening the short knob ❸.
2. Using the swivel fixture as a template, mark the location of the three holes used to secure the swivel fixture to the mounting surface.
3. Drill holes in the marked locations.
   - If you are using number 8 (4 mm) pan-head machine bolts, drill three 3/16 in. (5 mm) holes.
   - If you are using number 8 (4 mm) pan-head self-tapping screws, drill three 1/8 in. (3.2 mm) pilot holes no deeper than half of the screw length.
4. Secure the swivel fixture with your mounting hardware. Do not overtighten.

5. Loosely connect the top of the mount base to the swivel fixture with the short knob.

To install the mount bracket on the mount base:

1. Align the slot on the back of the mount bracket ❹ with the long mounting knob ❺ on the mount base, and slide the bracket into place. If necessary, adjust the mounting knob to spread the mount-base arms apart.

2. Adjust the mount-bracket angle and tighten the long mounting knob until it is snug.

3. Twist the assembled marine mount left or right to rotate and adjust it, then tighten the short knob until snug.

Step 3: Connect the GPSMAP 620/640 Marine-Mount Bracket to Power

• Connect the cable attached to the GPSMAP 620/640 marine-mount bracket to the power source (from 11 to 32 Vdc) of your boat.

• If it is necessary to extend the power wires, use 20 AWG wire.

• If your boat has an electrical system, you might be able to wire the mount bracket directly to an unused holder on your current fuse block. If you are using the fuse block, remove the supplied in-line fuse holder. You can also wire the mount bracket directly to the battery.

• Use an AGC/3AG 2.5 A fuse as a replacement, if needed.

> ⚠ **NOTE:** During a typical installation, use only the red and black wires. The other wires on the cable do not have to be connected for normal operation of the GPSMAP 620/640. For information on connecting to a NMEA 0183-compatible device, see below.

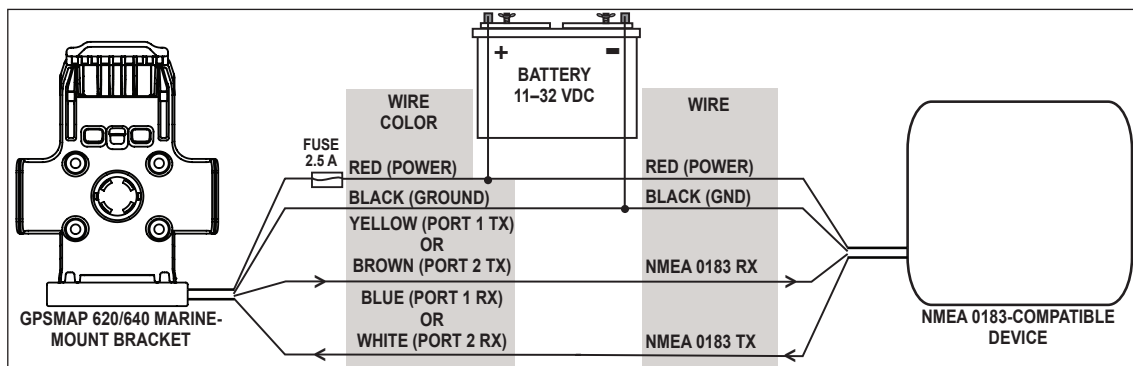**To connect the marine-mount bracket to power:**

1. Use a test light or voltmeter to determine the polarity of the voltage source.

2. Connect the red (+ or positive) wire to the positive voltage terminal. If you use the fuse block on the boat, route the positive connection through the fuse.

3. Connect the black (- or ground) wire to the negative voltage terminal.

4. Install or check the 2.5 A fuse on the fuse block or in the in-line fuse holder.

Optional: Connecting to a NMEA 0183 device

You can connect the GPSMAP 620/640 marine-mount bracket to NMEA 0183-compatible electronic equipment, such as a VHF radio. The GPSMAP 620/640 has two NMEA 0183 ports, and it can communicate with two NMEA 0183-compatible devices. Refer to the wiring diagram for connecting the marine-mount bracket to NMEA 0183-compatible devices.

Notes:

• When wiring NMEA 0183 devices for two-way communication, use the corresponding TX and RX wires for each port. For example, if you use the port 1 TX wire (yellow), you must also use the port 1 RX wire (blue). Likewise, if you use the port 2 TX wire (brown), you must also use the port 2 RX wire (white).

• If the NMEA 0183 device you are wiring only transmits or only receives (one-way communication), connect the appropriate RX or TX wire from the marine-mount bracket, and leave the other wire on the port unconnected.

• Refer to the manufacturer's instructions for your NMEA 0183 device for wire identification and configuration information.

• If it is necessary to extend NMEA 0183 wires, use 28 AWG wire.

Wiring the GPSMAP 620/640 Marine-Mount Bracket to a NMEA 0183-compatible Device

Optional: Connecting to an External Audio Device

Use the 1/8 in. (3.5 mm) stereo-audio jack on the GPSMAP 620/640 marine-mount bracket to connect an external audio device with a 1/8 in. (3.5 mm) stereo-audio plug.

Alternatively, connect an external audio device using the wires on the mount-bracket cable. Refer to the table for wire colors. If it is necessary to extend the audio-signal wires, use 28 AWG wire.

Wire Function	Color
Audio left	Violet
Audio right	Orange
Audio ground	Green

Audio Wire Connections