GARMIN

GPSMAP®
2006/2010
& GPS 17

installation instructions

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Safety Information

WARNING: This product, its packaging, and its components contain chemicals known to the State of California to cause cancer, birth defects, or reproductive harm. This Notice is being provided in accordance with California's Proposition 65. If you have any questions or would like additional information, please refer to our Web site at http://www.garmin.com/prop65.

Limited Warranty

This Garmin product is warranted to be free from defects in materials or workmanship for one year from the date of purchase. Within this period, Garmin will at its sole option repair or replace any components that fail in normal use. Such repairs or replacement will be made at no charge to the customer for parts or labor, provided that the customer shall be responsible for any transportation cost. This warranty does not cover failures due to installation errors, abuse, misuse, accident, or unauthorized alteration or repairs.

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Online Auction Purchases: Products sold through online auctions are not eligible for rebates or other special offers from Garmin. Online auction confirmations are not accepted for warranty verification. To obtain warranty service, an original or copy of the sales receipt from the original retailer is required. Garmin will not replace missing components from any package purchased through an online auction.

International Purchases: A separate warranty is provided by international distributors for units purchased outside the United States. This warranty is provided by the local in-country distributor and this distributor provides local service for your unit. Distributor warranties are only valid in the area of intended distribution. Units purchased in the United States or Canada must be returned to the Garmin service center in the United Kingdom, the United States, Canada, or Taiwan for service.

To obtain warranty service, contact your local Garmin authorized dealer or call Garmin Product Support for shipping instructions and an RMA tracking number. The product should be securely packed with the tracking number clearly written on the outside of the package. The product should then be sent, freight charges prepaid, to any Garmin warranty service station. A copy of the original sales receipt is required as the proof of purchase for warranty repairs.

INTRODUCTION

The GPSMAP 2006C/2010C Multi-Function Display (MFD) and GPS 17 must be properly installed according to the following instructions for the best possible performance. To complete the installation, you need the appropriate fasteners, tools, and mounts listed in each section. These items are available at most marine dealers. Always wear safety goggles, ear protection, and a dust mask when drilling, cutting, or sanding. When drilling or cutting, always check first to see what is on the opposite side of the surface. Mount the GPSMAP 2006C/2010C in a location that provides a clear, glare-free view of the display and easy operation of the controls. **If you experience difficulty installing the unit, contact Garmin Product Support or seek the assistance of a professional installer.**

Mounting Knob

Bail Mount

Mounting Holes

GPSMAP 2010C Shown

INSTALLATION INSTRUCTIONS
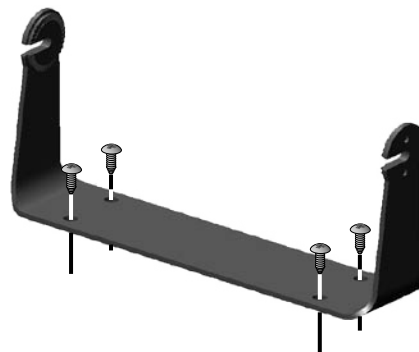
Surface Mount

Tools
- Drill and Drill Bit
- Screwdriver
- Pencil
- Mounting Hardware (not included)

⚠️ *NOTE: Mounting hardware (fasteners) not included. Mounting holes are 5/16" (7.9 mm) in diameter.*

To install the Bail Mount and unit:
1. Using the bail mount as a template, mark the location of the four mounting holes. Be sure to leave at least two inches of clearance behind the unit for the wiring.
2. Using an appropriate size drill bit, drill pilot holes for the fasteners.
3. Secure the bail mount to the surface with the fasteners.
4. Loosen the mounting knobs.
5. Slide the unit into the bail mount and tighten the mounting knobs.

Bail Mount

Mounting knobs

Bail mount

Flush Mount

Tools

- Flush Mount Template
- Jig saw
- Masking tape
- Scissors
- Drill
- Drill bits—1/8" (3 mm) and 3/8" (6 mm)
- 1/16" (2 mm) Allen (Hex) wrench
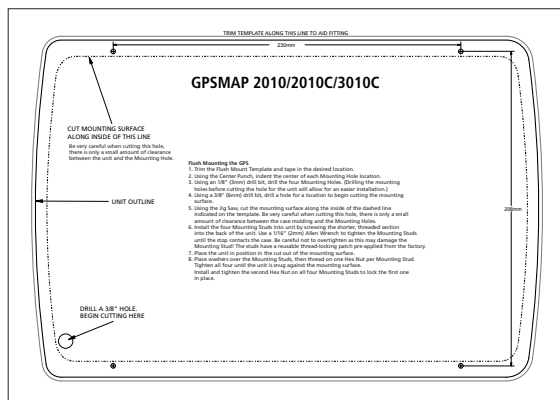- Sockets or wrenches
- Hammer
- Center punch

Flush Mount

To flush mount the GPSMAP 2006C/2010C:

1. Trim the Flush Mount Template and tape it in the location you want.

2. Using the center punch, indent the center of each mounting hole location.

3. Using an 1/8" (3 mm) drill bit, drill the four mounting holes.

4. Using a 3/8" (6 mm) drill bit, drill a hole for a location to begin cutting the mounting surface.

5. Using the Jig Saw, cut the mounting surface along the inside of the dashed line indicated on the template. Use a file and sandpaper to refine the size of the hole. **Be very careful when cutting this hole. There is only a small amount of clearance between the case molding and the mounting holes.**

6. Install the four mounting studs into unit by screwing the shorter, threaded section into the back of the unit. Use a 1/16" (2 mm) Allen wrench to tighten the mounting studs until the stop contacts the case. **Be careful not to overtighten as this may damage the mounting stud!** The studs have a reusable thread-locking patch pre-applied from the factory.

7. Place the unit in position in the cut-out of the mounting surface.

8. Place washers over the mounting studs, then thread on one hex nut per mounting stud. Tighten all four until the unit is snug against the mounting surface. Install and tighten the second hex nut set on all four mounting studs to lock the first set in place.

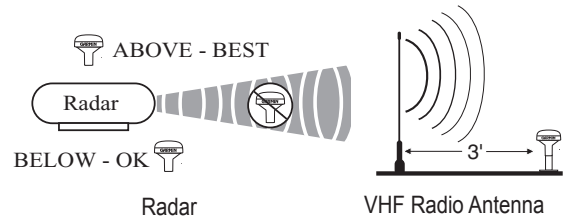**Flush Mount Template**

Stud   Washer   Hex nuts   Mounting surface
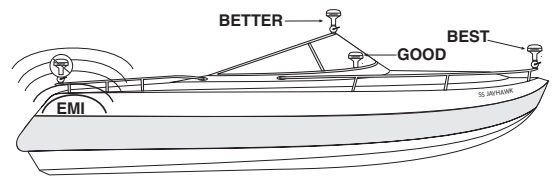
Installing the GPS 17

The GPS 17 can be flush mounted or installed on any standard 1" O.D. (Outer Dimension), 14 threads-per-inch marine mount. When mounting the GPS 17, the cable can be run externally or through the mounting panel or through the center of the marine mount.

The GPS 17 connects to the 18-pin Power/Data Cable on the GPSMAP 2006C/2010C and provides the GPS/WAAS signal for the unit. If two or more GPSMAP 2006C/2010C units are installed, only one GPS 17 needs to be installed.

To ensure the best reception, mount the GPS 17 in a location that has a clear, unobstructed view of the sky in all directions. Avoid mounting the GPS 17 where it is shaded by the boat's superstructure, a radome antenna, or mast. Sailboat users should avoid mounting the unit high on the mast to prevent inaccurate speed readings caused by excessive heeling. The unit provides more stable readings if it is located nearer to water level. **Mount the GPS 17 at least 3 ft away from (preferably above) the path of any radar beam or a VHF radio antenna.** Temporarily secure the unit in the desired mounting location and test for correct operation. With correct operation verified, permanently mount the unit. If interference with other electronics is experienced, try a different location.

> ⚠ *NOTE:* Never paint the GPS 17 or clean it with harsh solvents.

ABOVE - BEST
Radar
BELOW - OK
Radar   VHF Radio Antenna

> ⚠ *NOTE:* Mount the antenna at least 3 ft away from (preferably above) the path of any radar beam or a VHF radio antenna.

BETTER   BEST   GOOD   EMI

EMI (Electromagnetic Interference) from engine components
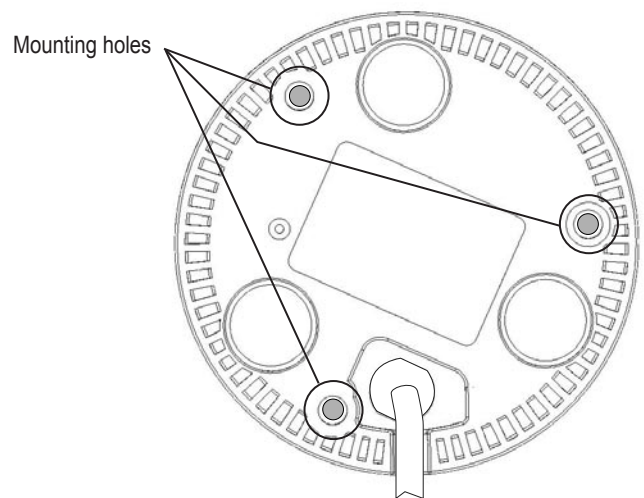
Signal Interference

To flush mount the GPS 17:

1. Cut out the Mounting Template provided on page 11, and tape it on the selected mounting location.
2. Mark the center of each mounting hole by tapping the end of a center punch or pointed object with a hammer. If the cable is going to be installed through the mounting panel, mark the center of the additional hole.
3. Drill the holes using the appropriate drill bit(s).
4. Align the GPS 17 over the mounting holes and fasten using M4 screws. The mounting threads in the GPS 17 are 8.10 mm deep. Do not use screws that thread into the GPS 17 deeper than 8 mm, or the case may be damaged.

The GPS 17 can be installed with the coax through the panel or on the outside of the unit. If the coax is run through the panel, seal the outside exit area with marine sealant.
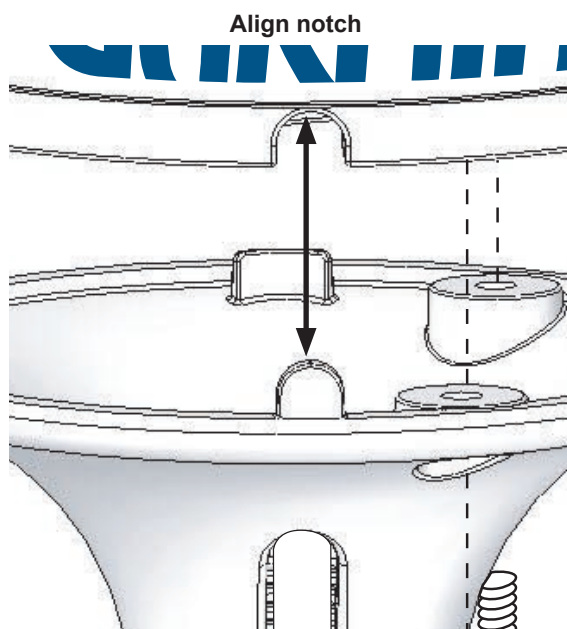
Bottom of GPS 17

Mounting holes

To attach the enclosed pole mount to the GPS 17:

1. Thread the cable though the pole mount.

2. Align the tab on the mount to the notch on the GPS 17.

3. Use the enclosed screws to secure the mount to the base.

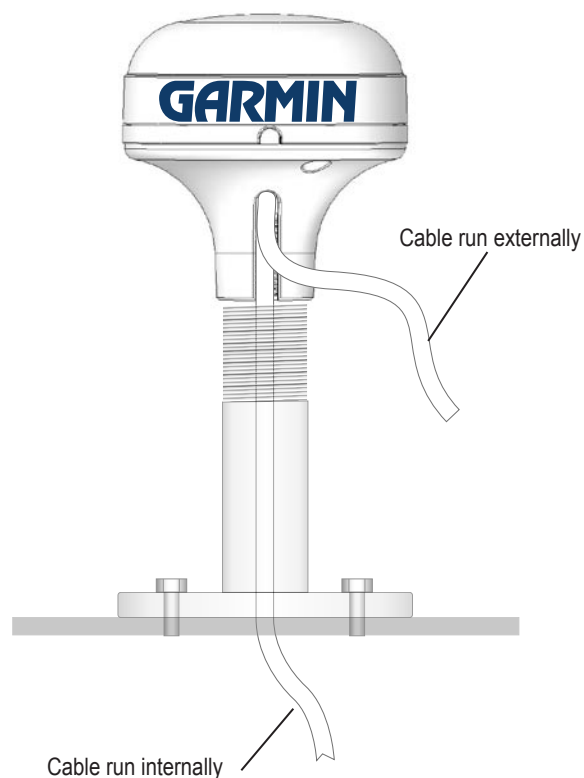**Attaching the Pole Mount to the GPS 17**

Align notch

To mount the GPS 17 with cable outside mount:

1. Place the cable in the vertical slot along the side of the base of the unit.

2. Screw the GPS 17 onto the mount. DO NOT overtighten the head. It is possible to over tighten the unit and cut the cable.

3. With the GPS 17 and mount installed, fill the remaining gap in the cable exit with a marine sealant.

4. Route the cable away from sources of electronic interference.

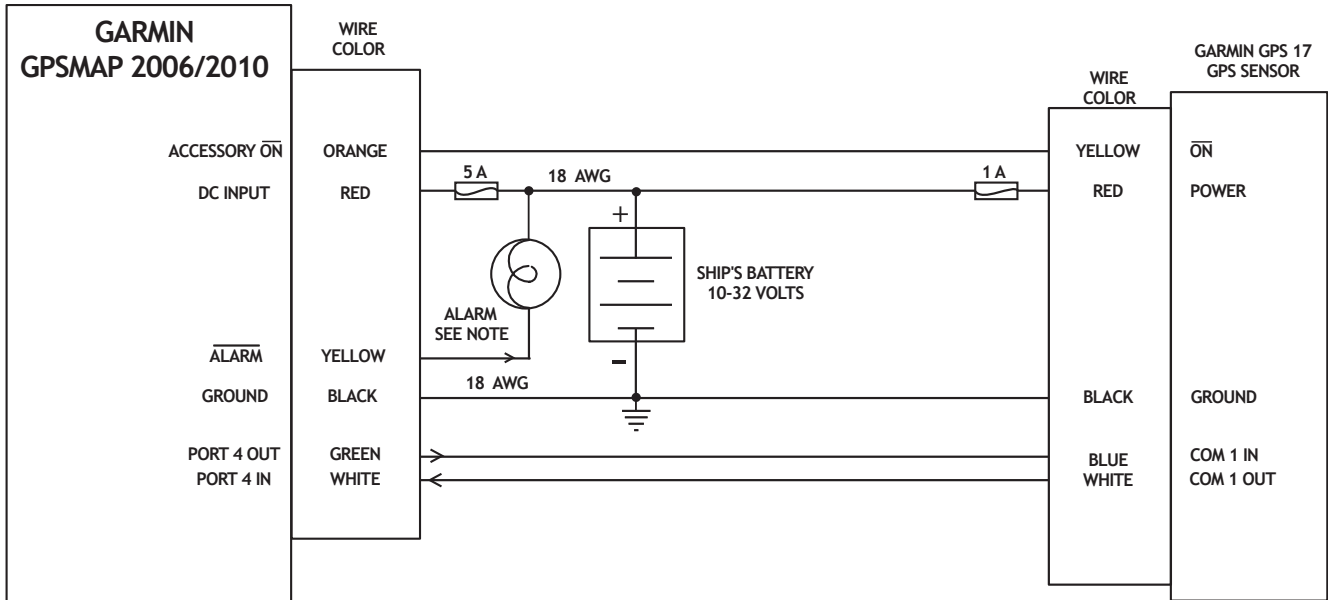**To mount the GPS 17 with cable through mount:**

1. Position the mount in the desired location and mark the approximate center of the mount.

2. Drill a hole large enough for the cable to pass through.

3. Slide the cable through the mount and screw the GPS 17 onto the mount.

4. Fasten the mount to the boat.

5. Route the cable away from sources of electronic interference.

Attaching the GPS 17 to a Pole Mount

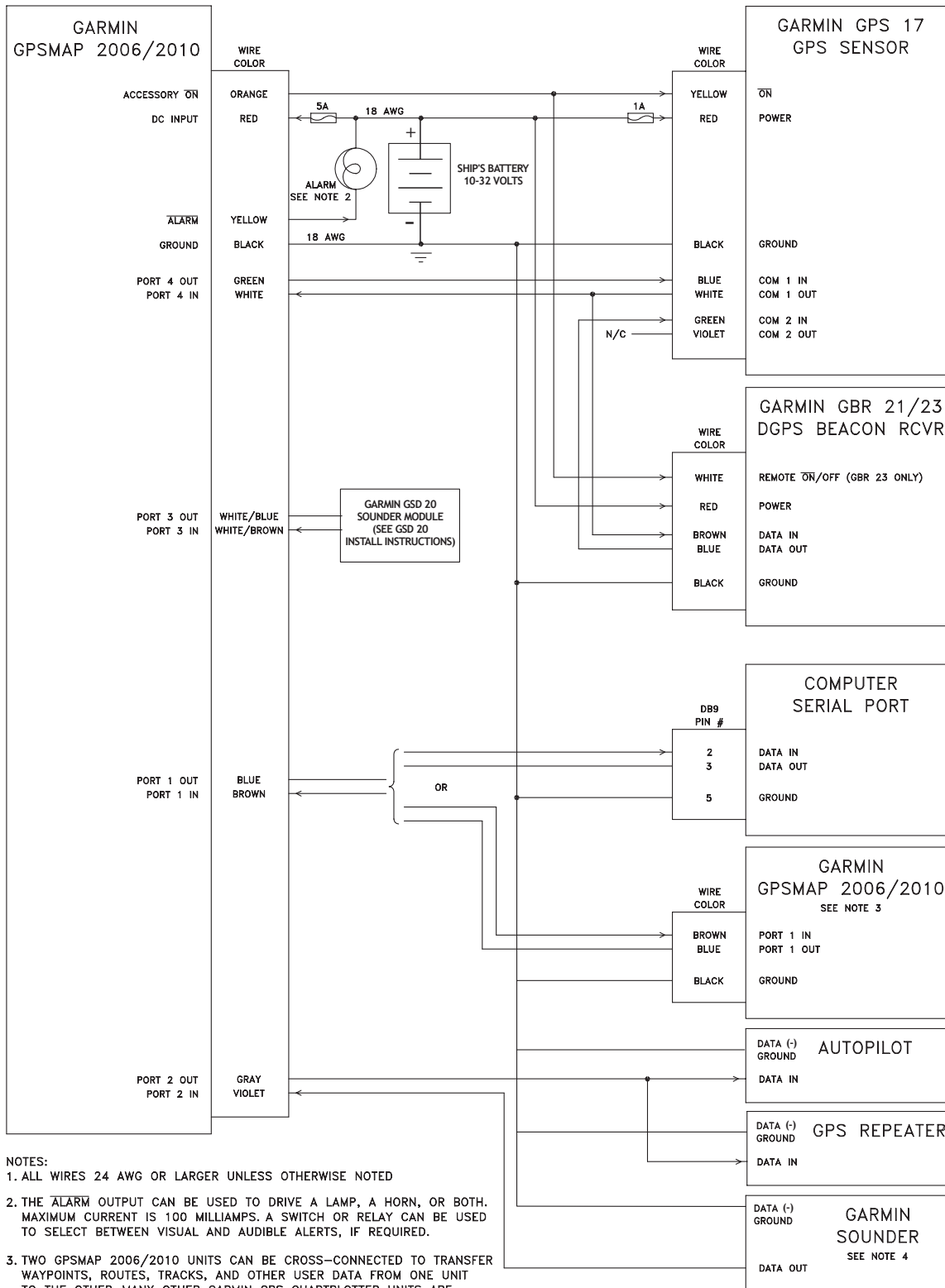Cable run externally

Cable run internally

Wiring

There are two wiring diagrams provided for you convenience. The first is a simple hook-up showing the GPSMAP 2006/2010 (using the 18-pin wiring harness), the GPS 17 and the alarm circuit. The Alarm does not have to be wired for the unit to function. The second is a complete wiring diagram showing the GPSMAP 2006/2010 (using the 18-pin wiring harness) interfacing with a variety of different equipment. The extra 5-pin wiring harness that came with the unit is intended for future interfacing features and does not require connection. Refer to the wiring diagram that will best suite your needs. Make sure that all connections are good. For extra lengths of wire, 24 AWG (unless otherwise noted on wiring diagram), shielded, twisted-pair wiring is recommended. We advise soldering all connections and sealing the connection with heat shrink tubing. If you experience difficulty wiring the unit, please contact an installation professional in your area.

GARMIN GPSMAP 2006/2010

	WIRE COLOR				WIRE COLOR	GARMIN GPS 17 GPS SENSOR
ACCESSORY ON	ORANGE				YELLOW	ON
DC INPUT	RED	5 A	18 AWG	1 A	RED	POWER

SHIP'S BATTERY 10-32 VOLTS

ALARM SEE NOTE

ALARM	YELLOW					
GROUND	BLACK	18 AWG			BLACK	GROUND
PORT 4 OUT	GREEN				BLUE	COM 1 IN
PORT 4 IN	WHITE				WHITE	COM 1 OUT

NOTE:
THE ALARM OUTPUT CAN BE USED TO DRIVE A LAMP, HORN, OR BOTH.
MAXIMUM CURRENT IS 100 MILLIAMPS. A SWITCH OR RELAY CAN BE USED
TO SELECT BETWEEN VISUAL AND AUDIBLE ALERTS, IF REQUIRED

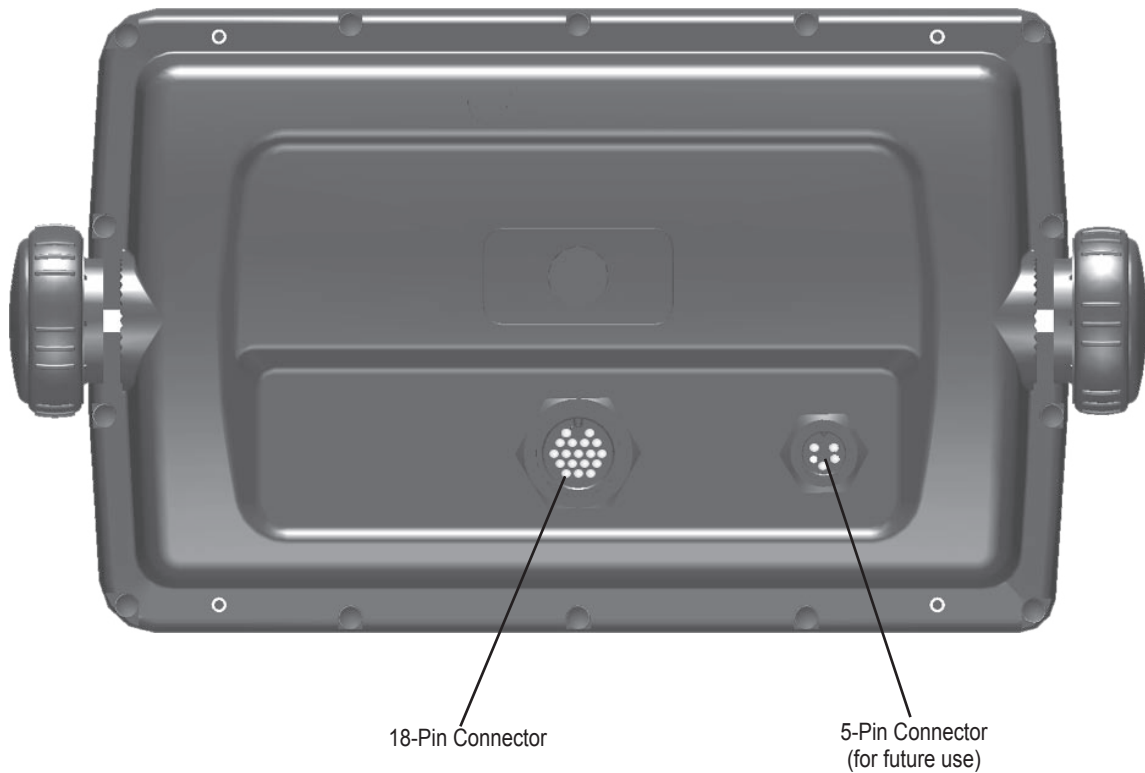**Diagram 1 - Basic Hook-up**

Diagram 2 - Complete Interface

NOTES:
1. ALL WIRES 24 AWG OR LARGER UNLESS OTHERWISE NOTED

2. THE ALARM OUTPUT CAN BE USED TO DRIVE A LAMP, A HORN, OR BOTH. MAXIMUM CURRENT IS 100 MILLIAMPS. A SWITCH OR RELAY CAN BE USED TO SELECT BETWEEN VISUAL AND AUDIBLE ALERTS, IF REQUIRED.

3. TWO GPSMAP 2006/2010 UNITS CAN BE CROSS—CONNECTED TO TRANSFER WAYPOINTS, ROUTES, TRACKS, AND OTHER USER DATA FROM ONE UNIT TO THE OTHER. MANY OTHER GARMIN GPS CHARTPLOTTER UNITS ARE COMPATIBLE WITH THIS INTERFACE AS WELL.

4. A GARMIN SOUNDER UNIT (OTHER THAN GSD 20) CAN PROVIDE WATER DEPTH, WATER TEMPATURE, AND SPEED VIA NMEA DATA FOR DISPLAY ON THE GPSMAP 2006/2010.
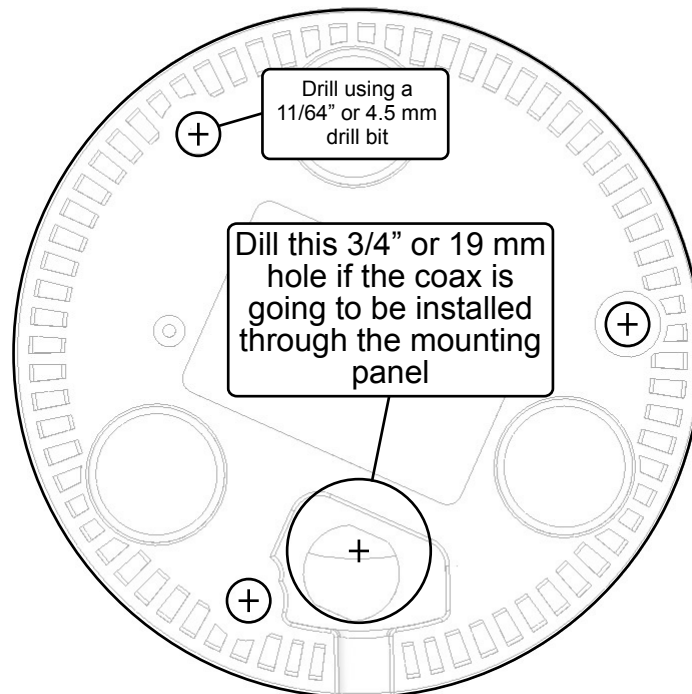
Final Wiring Connection

Once all the wiring is complete, plug the 18-pin harness into the center connector on the backside of the GPSMAP 2006/2010. The 5-pin port on the right side is intended for future interfacing features and does not require connection at this time.

With power applied to the circuit, you may test the installation by pressing the **POWER** ⏻ key on the front of the unit. See the Owner's Manual for steps on initializing the receiver.

18-Pin Connector

5-Pin Connector
(for future use)

FLUSH MOUNT DRILLING TEMPLATE

Drill using a 11/64" or 4.5 mm drill bit

Dill this 3/4" or 19 mm hole if the coax is going to be installed through the mounting panel

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