



## GCV™ 10 Installation Instructions

To obtain the best performance and to avoid damage to your boat, install the Garmin® GCV 10 device according to these instructions.

Read all installation instructions before proceeding with the installation. If you experience difficulty during the installation, contact Garmin Product Support.

### Registering Your Device

Help us better support you by completing our online registration today.

- Go to <http://my.garmin.com>.
- Keep the original sales receipt, or a photocopy, in a safe place.

### Contacting Garmin Product Support

- Go to [www.garmin.com/support](http://www.garmin.com/support) and click **Contact Support** for in-country support information.
- In the USA, call (913) 397.8200 or (800) 800.1020.
- In the UK, call 0808 2380000.
- In Europe, call +44 (0) 870.8501241.

### Important Safety Information

#### **WARNING**

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

You are responsible for the safe and prudent operation of your vessel. Sonar is a tool that will enhance your awareness of the water beneath your boat. It does not relieve you of the responsibility of observing the water around your boat as you navigate.

#### **CAUTION**

Failure to install and maintain this equipment in accordance with these instructions could result in damage or injury.

Always wear safety goggles, ear protection, and a dust mask when drilling, cutting, or sanding.

#### **NOTICE**

When drilling or cutting, always check what is on the opposite side of the surface.

### Installation Preparation

#### **NOTICE**

This device must be installed according to these instructions to get the best possible performance. If you experience difficulty with the installation, contact Garmin Product Support.

Because every boat is different, you must carefully plan the GCV 10 sounder installation.

- 1 Select a mounting location.
- 2 Mount the sounder.
- 3 Connect the sounder to the Garmin Marine Network and to power.
- 4 Connect the sounder to the transducer.

### Tools Needed

- Drill and drill bits

- #2 Phillips screwdriver
- Cable ties (optional)
- Marine sealant (optional)

### Mounting the Sounder

#### Mounting Location Considerations

- The sounder must be mounted in a location where it cannot be submerged.
- The sounder must be mounted in a location with adequate ventilation where it will not be exposed to extreme temperatures.
- The sounder should be mounted so that the LEDs are visible.
- The sounder should be mounted so that the power and network cables can be easily connected.
- The sounder should be mounted so that the transducer cable can be connected. If required, transducer extension cables are available through your Garmin dealer.

#### Mounting the Device

##### **NOTICE**

If you are mounting the bracket on fiberglass with screws, it is recommended to use a countersink bit to drill a clearance counterbore through only the top gel-coat layer. This will help to avoid any cracking in the gel-coat layer when the screws are tightened.

Stainless-steel screws may bind when screwed into fiberglass and overtightened. Garmin recommends applying an anti-seize lubricant to the screws before installing them.

Before you mount the device, you must select a mounting location and determine the mounting hardware needed for the surface.

**NOTE:** Mounting hardware is included with the device, but it may not be suitable for the mounting surface.

- 1 Place the device in the mounting location and mark the location of the pilot holes.
- 2 Drill the appropriate pilot hole for one corner of the device.
- 3 Loosely fasten the device to the mounting surface with one corner and examine the other three pilot-hole marks.
- 4 Mark new pilot-hole locations if necessary, and remove the device from the mounting surface.
- 5 Drill the appropriate pilot holes for the other three marks.
- 6 Secure the device to the mounting location.

### Connecting the Sounder

#### **WARNING**

When connecting the power cable, do not remove the in-line fuse holder. To prevent the possibility of injury or product damage caused by fire or overheating, the appropriate fuse must be in place as indicated in the product specifications. In addition, connecting the power cable without the appropriate fuse in place will void the product warranty.

#### **NOTICE**

Do not force a cable into its port. Forcing the cable can damage the pins. If the cable is properly aligned, the cable should connect easily.

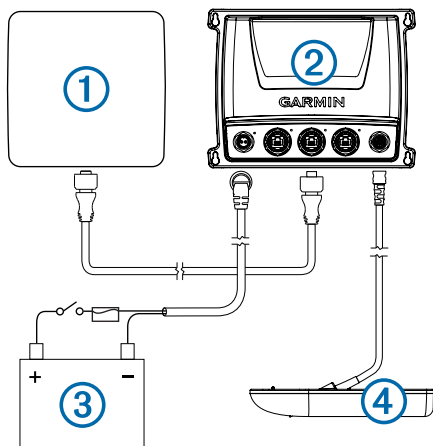
Before you connect the sounder to the network, power, and the transducer, you must mount the sounder.

- 1 Route the cables using the appropriate tie wraps, fasteners, and sealant to secure the cables along the route and through any bulkheads or the deck ([page 2](#)).

- 2 Connect the bare-wire end of the power cable to a 12 Vdc power source and to ground.
- 3 Align the notch on the end of the power cable with the power port on the device, and press the cable into place.
- 4 Tighten the locking ring.
- 5 Repeat steps 3 and 4 for the network and transducer cables.

## Installation Diagram

You can use this diagram to identify the connection points from your sounder to the network, power, and transducer.



Item	Description
①	Chartplotter
②	GCV 10
③	Power Source
④	Transducer

## Cable Routing Grommets

### NOTICE

Cable routing grommets do not create a waterproof seal. To create a waterproof seal, apply a marine sealant around the grommet and cable after installation. Be sure to test the system before sealing the grommets.

When routing cables through your boat, it may be necessary to drill holes to route the connector ends of the cables. A rubber grommet is provided to cover the cable hole for a finished look. You can purchase additional grommets from your Garmin dealer or directly from Garmin at [www.garmin.com](http://www.garmin.com).

### Installing the Cable Grommet

- 1 Mark the location where you want to route the cable.
- 2 Using a 32 mm (1¼ in.) paddle drill bit or hole saw, drill the installation hole.
- 3 Route the cable through the hole to the sounder.
- 4 Spread the grommet apart at the split, and place it around the cable.
- 5 Firmly push the grommet into the installation hole until it is seated.
- 6 Apply marine sealant, as needed, to weatherproof the installation hole.

## Blink Codes

After the sounder is installed, it turns on when the chartplotter is turned on. The two-color (green and red) LED on the sounder indicates its operational status.

LED Color	State	Status
Green	Slow blink	The sounder is connected to a chartplotter and is operating properly. You should see sonar data on the chartplotter.
Red	Slow blink	The sounder is turned on, but is not connected to a chartplotter, or is waiting to connect to a chartplotter. If the sounder is connected to the chartplotter and this code persists, check the wiring connections.
Red/ Green	Slow blink	The sounder is in test mode.
Red	Rapid blink sequence	System error. The chartplotter displays a message indicating the type of failure. When the error condition is fixed, the sounder must be completely disconnected from and reconnected to its power source to clear the error.

## Specifications

Specification	Measurement
Size (H×W×D)	251 x 192 x 66 mm (9.9 x 7.6 x 2.6 in.)
Weight	845 g (1.86 lb.)
Case Material	Fully gasketed, polycarbonate plastic, water resistant to IEC 60529-IPX7
Temperature Range	From -15° to 70°C (from 5° to 158°F)
Power Input	From 10 to 35 Vdc
Power usage	10.5 W maximum
Fuse	4.0 A, mini 42 Vdc, fast-acting, blade-type
Compass Safe Distance	260 mm (10.2 in. )
Transmit Power (RMS)*	500 W per element (1,500 W combined) *dependent upon transducer rating and depth
Frequency	455/800 kHz
Depth**	229 m (750 ft) down; 153 m (500 ft) side **maximum depth, dependent upon transducer, water salinity, bottom type, and other water conditions
Data Output	Garmin Marine Network



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