

# GARMIN

## GXM™ 53

### Installation Instructions

#### Important Safety Information

##### ⚠ WARNING

The weather information provided through this product is subject to service interruptions and may contain errors, inaccuracies, or outdated information, and consequently should not be relied upon exclusively. Always use common sense while navigating, and check alternate weather information sources prior to making safety-related decisions. You acknowledge and agree that you shall be solely responsible for use of the weather information and all decisions taken with respect to navigating in weather. Garmin® will not be responsible for any consequences of using SiriusXM® weather information.

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 voids the product warranty.

##### ⚠ CAUTION

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.

#### Registering Your Device

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

- Go to [my.garmin.com](http://my.garmin.com).
- Keep the original sales receipt, or a photocopy, in a safe place.

#### Contacting Garmin Product Support

- Go to [support.garmin.com](http://support.garmin.com) for in-country support information.
- In the USA, call 913-397-8200 or 1-800-800-1020.
- In the UK, call 0808 238 0000.
- In Europe, call +44 (0) 870 850 1241.

#### Software Update

You should update the software on all of your Garmin devices when you install this device.

The software update requires either a Garmin memory card reader accessory or a Garmin chartplotter connected over the Garmin Marine Network (sold separately).

Garmin devices support up to a 32 GB memory card, formatted to FAT32.

#### Updating the Device Software

Before you can update the software, you must obtain a software-update memory card or load the latest software onto a memory card.

- 1 Turn on the chartplotter.
- 2 After the home screen appears, insert the memory card into the card slot.

**NOTE:** In order for the software update instructions to appear, the device must be fully booted before the card is inserted.

- 3 Follow the on-screen instructions.

- 4 Wait several minutes while the software update process completes.
- 5 When prompted, leave the memory card in place and restart the chartplotter manually.
- 6 Remove the memory card.  
**NOTE:** If the memory card is removed before the device restarts fully, the software update is not complete.

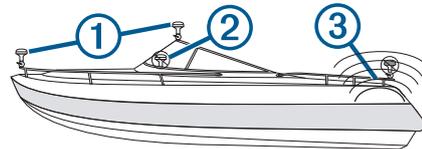
#### Loading the New Software on a Memory Card

- 1 Insert a memory card into the card slot on the computer.
- 2 Go to [www.garmin.com/support/software/marine.html](http://www.garmin.com/support/software/marine.html).
- 3 Select **Download** next to **GPSMAP Series with SD Card**.
- 4 Read and agree to the terms.
- 5 Select **Download**.
- 6 Select **Run**.
- 7 Select the drive associated with the memory card, and select **Next > Finish**.

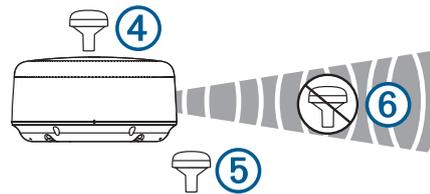
#### Antenna Mounting Considerations

You can mount the antenna on a flat surface or attach it to a standard 1 in. OD, 14 threads per inch, pipe-threaded pole (not included). You can route the cable outside of the pole or through the pole. For best performance, consider these guidelines when selecting the antenna mounting location.

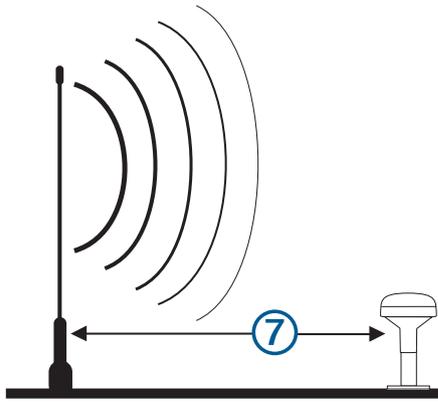
- To ensure the best reception, the antenna should be mounted in a location that has a clear, unobstructed view of the sky in all directions ①.



- The antenna should not be mounted where it is shaded by the superstructure of the boat ②, a radome antenna, or the mast.
- The antenna should not be mounted near the engine or other sources of Electromagnetic Interference (EMI) ③.
- If a radar is present, the antenna should be mounted above the path of the radar ④. If necessary, the antenna may be mounted below the path of the radar ⑤.



- The antenna should not be mounted directly in the path of the radar ⑥.
- The antenna should be mounted at least 1 m (3 ft.) away from (preferably above) the path of a radar beam or a VHF radio antenna ⑦.



### Testing the Mounting Location

- 1 Temporarily secure the antenna in the preferred mounting location and test it for correct operation.
- 2 If you experience interference with other electronics, move the antenna to a different location, and test it again.
- 3 Repeat steps 1–2 until you observe full or acceptable signal strength.
- 4 Permanently mount the antenna.

### Surface Mounting the Antenna

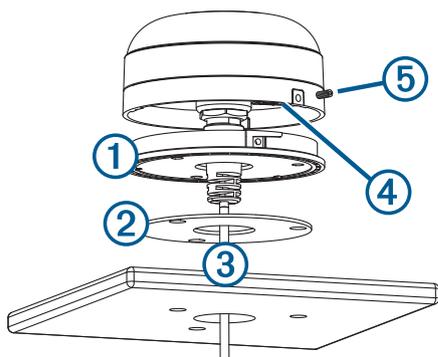
#### NOTICE

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 cracking in the gel-coat layer when the screws are tightened.

Stainless-steel screws may bind when screwed into fiberglass and overtightened. It is recommended to apply an anti-seize lubricant on the screws before installing them.

Before you permanently mount the antenna, you must test the mounting location for correct operation (*Antenna Mounting Considerations, page 1*).

- 1 Using the surface-mount bracket ① as your mounting template, mark the three pilot-hole locations and trace the cable-hole in the center of the bracket.



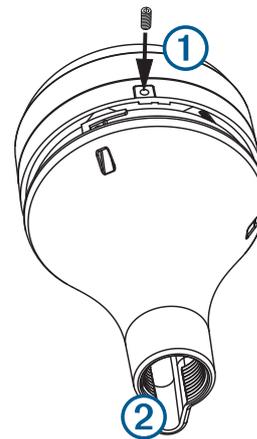
- 2 Set the surface-mount bracket aside.  
Do not drill through the bracket.
- 3 Drill the three 3.2 mm ( $1/8$  in.) pilot holes.
- 4 Drill the 19 mm ( $3/4$  in.) cable hole in the center.
- 5 Place the seal pad ② on the bottom of the surface-mount bracket, aligning the screw holes.
- 6 Use the included M4 screws to secure the surface-mount bracket to the mounting surface.
- 7 Route the cable ③ through the center hole and connect it to the antenna.

- 8 Verify the large gasket ④ is in place on the bottom of the antenna, place the antenna on the surface-mount bracket, and twist it clockwise to lock it in place.
- 9 Secure the antenna to the mounting bracket with the included M3 screw ⑤.
- 10 Route the cable away from sources of electronic interference.

### Mounting the Antenna with the Cable Routed Through the Pole

Before you permanently mount the antenna, you must test the mounting location for correct operation (*Antenna Mounting Considerations, page 1*).

- 1 Position a standard 1 in. OD, 14 threads per inch, pipe-threaded pole (not included) in the selected location, and mark the approximate center of the pole.
- 2 Drill a hole using a 19 mm ( $3/4$  in.) drill bit for the cable to pass through.
- 3 Fasten the pole to the boat.
- 4 Thread the pole-mount adapter onto the pole.  
Do not overtighten the adapter.
- 5 Route the cable through the pole and connect it to the antenna.
- 6 Place the antenna on the pole-mount adapter and twist it clockwise to lock it in place.
- 7 Secure the antenna to the adapter with the included M3 set screw ①.

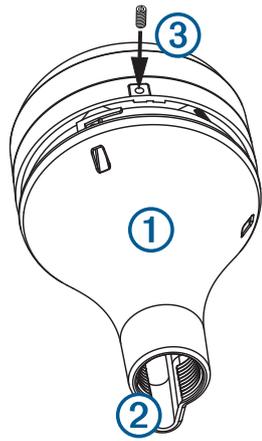


- 8 With the antenna installed on the pole mount, fill the vertical cable slot ② with a marine sealant (optional).
- 9 Route the cable away from sources of electronic interference.

### Mounting the Antenna with the Cable Routed Outside the Pole

Before you permanently mount the antenna, you must test the mounting location for correct operation (*Antenna Mounting Considerations, page 1*).

- 1 Route the cable through the pole-mount adapter ①, and place the cable in the vertical slot ② along the base of the pole-mount adapter.



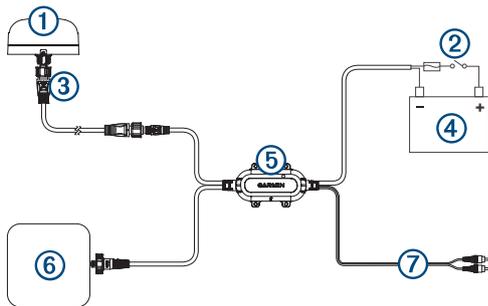
- 2 Screw the pole-mount adapter onto a standard 1 in. OD, 14 threads per inch, pipe-threaded pole (not included). Do not overtighten the adapter on the pole.
- 3 Connect the cable to the antenna.
- 4 Place the antenna on the pole-mount adapter and twist it clockwise to lock it in place.
- 5 Secure the antenna to the adapter with the included M3 set screw ③.
- 6 With the antenna installed on the pole mount, fill the remaining gap in the vertical cable slot with a marine sealant (optional).
- 7 Attach the pole to the boat if it is not already attached.
- 8 Route the cable away from sources of electronic interference.

## Connection Considerations

### NOTICE

If you are connecting the audio cable from the wiring harness, you must connect it to the line-in or auxiliary port on a stereo. Attempting to connect the audio cable directly to a speaker will result in poor performance, and it may cause the antenna to shut down, which might damage the antenna or the speaker.

You must connect this antenna to power and to the Garmin Marine Network to provide weather information to connected, compatible Garmin devices.



Item	Description	Notes
①	Antenna	
②	Ignition or in-line switch (not included)	You should connect the power and audio module to the battery through the ignition switch or through an additional in-line switch (not included). Connecting the harness directly to the battery may drain the battery.
③	Antenna cable	This cable connects the antenna to the wiring harness, and is 6 m (20 ft.) long. Additional lengths are available from Garmin.
④	9 to 32 Vdc power source	

Item	Description	Notes
⑤	Power and audio module	You should install the module in a location with access to power, the installed antenna, and a Garmin Marine Network device. You can secure the module to existing cabling or a structure using zip ties (not included), or you can secure it to a bulkhead using the included screws.
⑥	Garmin Marine network device	If additional network ports are not available on the nearby Garmin Marine Network device, you may need to use a GMS™ 10 to share weather data between multiple chartplotters.
⑦	Audio out cable	Connects to the line-in or auxiliary port on a stereo to listen to SiriusXM stations. You can extend this cable using a standard RCA cable if necessary. Extension-cable connections should be made in a protected area that is not exposed to water.

## Activating a SiriusXM Subscription

SiriusXM offers several subscription options. Go to <http://www.siriusxm.com/sxmmarine> to determine which subscription package is best for your needs.

Before you can activate your SiriusXM subscription, you must have the radio ID of your antenna. The radio ID is available in the product box, and on the System Information page of a connected device. See the owner's manual provided with your device for more information.

- 1 Contact SiriusXM by phone at (866) 528-7474 or go to <http://care.siriusxm.com> to subscribe.
- 2 Provide the necessary information to the SiriusXM representative or on the web site to activate your antenna.
- 3 Verify the functionality of the activated services:
  - For SiriusXM weather, on a connected device, view the Weather Subscription option from the System Information page, and confirm that your subscribed services are listed.
  - For SiriusXM radio, on a connected device, go to the Media page and confirm that radio channels are available.
- 4 If the service is not activated within the hour, go to <http://care.siriusxm.com/refresh> or contact SiriusXM by phone at 1-855-MYREFRESH (697-3373).

**NOTE:** For the antenna to receive the SiriusXM signal, it must be powered on, facing skyward, and tuned to channel 1.

## Appendix

### Specifications

Measurement	Specification
Dimensions (diameter x height)	3.61 × 1.95 in. (91.6 × 49.5 mm)
Weight	7.1 oz (201 g)
Temperature range	From -22° to 158°F (from -30° to 70°C)
Case material	Fully gasketed, high-impact plastic alloy
Water rating	IEC 60529 IPX7*
Power input source	From 9 to 32 Vdc
Input current	300 mA at 12 Vdc
Fuse	32 V, 2 A, mini-blade type, fast-acting
Antenna cable length	6 m (20 ft)
Power cable length	2 m (6.5 ft.)
Garmin Marine Network cable length	2 m (6.5 ft.)
Audio cable length	2 m (6.5 ft.)

\*\*The device withstands incidental exposure to water of up to 1 m for up to 30 min. For more information, go to [www.garmin.com/waterrating](http://www.garmin.com/waterrating).

### **Acknowledgment**

Garmin SHALL HAVE NO LIABILITY IF CHANGES IN THE SERVICE PROVIDER'S SUBSCRIPTION OFFERING NEGATIVELY IMPACTS OR RENDERS IMPOSSIBLE THE USE OF PURCHASED Garmin HARDWARE EQUIPMENT WITH THE SERVICE PROVIDER'S OFFERING IN THE FUTURE.

THE USER AGREES THAT THE SiriusXM WEATHER SERVICE OFFERING IS PROVIDED "AS IS", THAT YOUR Garmin HARDWARE EQUIPMENT ONLY ALLOWS THE DISPLAY OF SUCH SERVICE OFFERING, AND THAT ANY CHANGES BY THE SERVICE PROVIDER MAY INTERFERE WITH THE ABILITY OF YOUR Garmin HARDWARE EQUIPMENT TO RECEIVE OR DISPLAY SUCH SERVICE OFFERING. FURTHER, SUCH SERVICE OFFERING CONTAINS INFORMATION FURNISHED BY OTHERS WHO ARE NOT UNDER THE CONTROL OF Garmin, AND THEREFORE THE SERVICE OFFERING IS ACCORDINGLY FURNISHED WITHOUT ANY WARRANTY OF Garmin, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

### **FCC Compliance**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and may cause harmful interference to radio communications if not installed and used in accordance with the instructions. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet that is on a different circuit from the GPS device.
- Consult the dealer or an experienced radio/TV technician for help.

This product does not contain any user-serviceable parts. Repairs should only be made by an authorized Garmin service center. Unauthorized repairs or modifications could result in permanent damage to the equipment, and void your warranty and your authority to operate this device under Part 15 regulations.

### **Limited Warranty**

The Garmin standard limited warranty applies to this accessory. For more information, go to [www.garmin.com/support/warranty.html](http://www.garmin.com/support/warranty.html).

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