

GARMIN®

GARMIN SIGNAL™ VHF

External Speaker

Installation Instructions

Important Safety Information

WARNING

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

Failure to install this device according to these instructions could result in personal injury, damage to the vessel or device, or poor product performance.

To avoid possible personal injury or damage to the device and vessel, disconnect the vessel's power supply before beginning to install the device.

When connecting the power cable to the power supply, you must install an inline fuse or circuit breaker (not included), as listed in the product specifications, to prevent the possibility of personal injury or product damage caused by fire or overheating. Connecting the power cable without adequate circuit protection voids the product warranty.

CAUTION

To avoid possible personal injury, always wear safety goggles, ear protection, and a dust mask when drilling, cutting, or sanding.

NOTICE

To avoid damage to your boat, this device should be installed by a qualified marine installer. Specific knowledge of marine electrical systems is required for proper installation.

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

If you are mounting the device in fiberglass, when drilling the pilot holes, 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.

Tools Needed

- Electric drill
- Drill bit (size varies based on surface material)
- Appropriate saw or utility knife to cut surface material
- Phillips screwdriver
- Wire strippers
- 16 AWG (1.3 through 1.5 mm²) marine-grade, fully-tinned copper speaker wire
 - You can purchase this wire from your Garmin® dealer:
 - 010-12899-00: 7.62 m (25 ft.)
 - 010-12899-10: 15.24 m (50 ft.)
 - 010-12899-20: 100m (328 ft.)
- 6.3 mm (¹/₄ in.) and 4.8 mm (³/₁₆ in.) female spade connectors (recommended)
- Crimping tool
- Marine sealant (optional)

NOTE: For customized installations, additional tools and materials may be needed.

Mounting Considerations

NOTICE

You must turn off the VHF radio before connecting the speaker. Connecting the speaker while the VHF radio is turned on may cause damage to the system.

You should protect all terminals and connections from grounding and from each other. Failure to do so could result in permanent damage to the system and void the product warranty.

This speaker is packaged with a fabric grille and a plastic grille. The fabric grille is suitable for installations that are protected from the elements, such as inside the cabin. For locations that are exposed to moisture or the weather, you should install the plastic grille.

When selecting a mounting location for the speakers, observe these considerations:

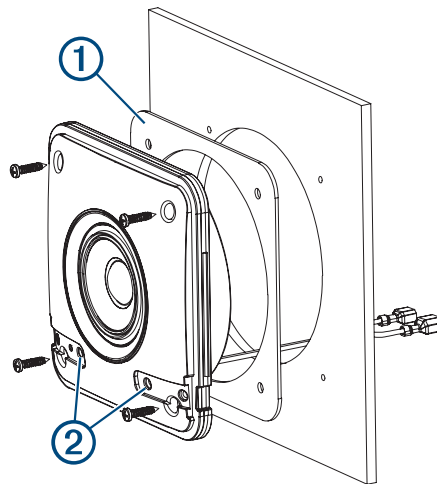
- You should mount the speaker on a flat surface, or use the included spacer, to ensure that the grille can securely attach to the speaker.
- You must select mounting locations that provide sufficient clearance for the mounting depth of the speakers as listed in the product specifications.
- You can purchase corner mounting adapters for the speaker if needed. Contact your Garmin® dealer or go to support.garmin.com for more information.
- You should protect the speaker wires from sharp objects and always use rubber grommets when wiring through panels.

Mounting the Speakers

NOTICE

Do not apply grease or lubricant to the screws when fastening the speakers to the mounting surface. Grease or other lubricants can cause damage to the speaker.

- 1 Use the included template with a rotary tool or jigsaw to cut the hole for the speaker.
- 2 Place the mounting gasket ① on the back of the speaker.
- 3 Connect the speaker wires while observing polarity ([Speaker Wiring, page 2](#)).
- 4 With the logo slots ② at the bottom, use the included screws to mount the speaker.



- 5 Connect the speaker to the radio and test the connection.
- 6 With the speaker mounted, align the logo on the grille with the logo slots on the speaker and push along the vertical edges of the grille to secure it.

NOTICE

After the grille is installed, it is difficult to remove it. You can use a plastic tool to pry up on a vertical edge. Using a screwdriver or metal tool may damage the grille and the mounting surface.

Speaker Wiring

- You must connect the speaker leads to the matching bare wires on the Garmin Signal™ VHF radio power cable, using 16 AWG (from 1.3 to 1.5 mm²) speaker wire, if necessary (not included).

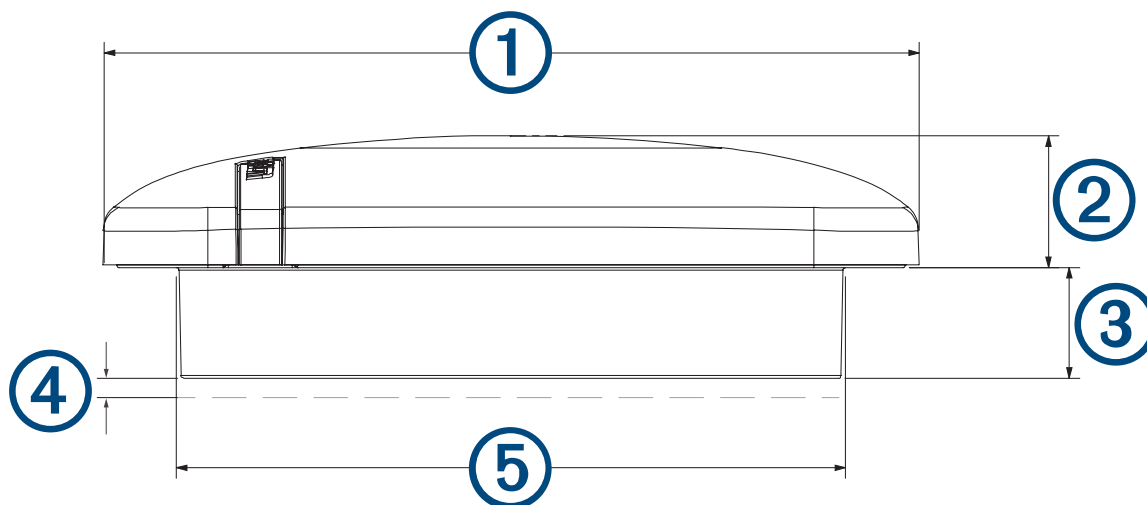
- You can purchase suitable speaker wire for this speaker from your Garmin® dealer or you can go to garmin.com.
 - 010-12899-00: 7.62 m (25 ft.)
 - 010-12899-10: 15.24 m (50 ft.)
 - 010-12899-20: 100m (328 ft.)
- The leads on the speakers are terminated using male spade connectors. You should use female spade connectors (not included) to connect the speaker wire to the speaker leads for the best connection.
- You can use this table to identify the polarity and spade-connector sizes of the leads on the speaker.

Wire color	Polarity	Spade connector size
White	Positive (+)	6.3 mm (¹ / ₄ in.)
White with a black stripe	Negative (-)	4.8 mm (³ / ₁₆ in.)

Specifications

Specification	Measurement
RMS power	15 W
Frequency response	150 Hz to 20 kHz
Nominal impedance	4 Ohms
Min. mounting depth (clearance)	24 mm (¹⁵ / ₁₆ in.)
Mounting diameter (clearance)	130 mm (5 ¹ / ₈ in.)
Operating temperature range	From 0 to 50°C (from 32 to 122°F)
Storage temperature range	From -20 to 70°C (from -4 to 158°F)
Compass-safe distance	From the rear: 245 cm (96.5 in.) From the front: 215 cm (84.6 in.) From the sides: 180 cm (70.9 in.)
Cone/surround material	Polypropylene cone, rubber surround
Water and dust rating	IEC 60529 IP65 ¹

Speaker Dimensions



Dimension	Measurement
①	155 mm (6 ¹ / ₈ in.)
②	25 mm (1 in.)

¹ Sealed against all dust ingress, and protected against jets of water.

Dimension	Measurement
③	21 mm ($1\frac{3}{16}$ in.)
④	Minimum clearance 3 mm ($\frac{1}{8}$ in.)
⑤	Ø 127 mm (5 in.)

© 2025 Garmin Ltd. or its subsidiaries

Garmin® and the Garmin logo are trademarks of Garmin Ltd. or its subsidiaries, registered in the USA and other countries. Garmin Signal™ is a trademark of Garmin Ltd. or its subsidiaries. These trademarks may not be used without the express permission of Garmin.