



# SM Series Speakers 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.

This device must be installed according to these instructions.

Disconnect the vessel's power supply before beginning to install this device.

### ⚠ CAUTION

Continuous exposure to sound pressure levels over 100 dBA may cause permanent hearing loss. The volume is typically too loud if you cannot hear people speaking around you. Limit the amount of time you listen at high volume. If you experience ringing in your ears or muffled speech, stop listening and have your hearing checked.

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.

It is strongly recommended that you have your audio system installed by a professional installer to ensure optimum performance.

You must read all installation instructions before beginning the installation. If you experience difficulty during the installation, go to [support.garmin.com](https://support.garmin.com) for product support.

After installing an audio system, you should run the connected speakers and subwoofers at low to medium volumes for the first few hours of use. This helps to improve the overall sound by gradually loosening up the moving components of new speakers and subwoofers, such as the cone, spider, and surround.

## 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 mm<sup>2</sup>) marine-grade, fully-tinned copper speaker wire  
You can purchase this wire from your FUSION® or Garmin® dealer:
  - 010-12899-00: 7.62 m (25 ft.)
  - 010-12899-10: 15.24 m (50 ft.)
  - 010-12899-20: 100m (328 ft.)
- Crimping tool
- Electrical tape
- Marine sealant (optional)

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

## Mounting Considerations

### NOTICE

This speaker comes with a fabric grille, and it is recommended for indoor installations only. If you plan to install the speaker outdoors, you should purchase a plastic grille instead. Go to [support.garmin.com](https://support.garmin.com) or contact your FUSION dealer for more information.

You must turn off the stereo before making any connections to the stereo or speakers. Failure to do so could result in permanent damage to the audio 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 audio system and void the product warranty.

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

- You should mount the speaker on a flat surface, or the grille may not 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 spacers or corner adapters for the speakers if needed. Go to [support.garmin.com](https://support.garmin.com) or contact your FUSION dealer for more information.
- You should protect the speaker wires from sharp objects and always use rubber grommets when wiring through panels.

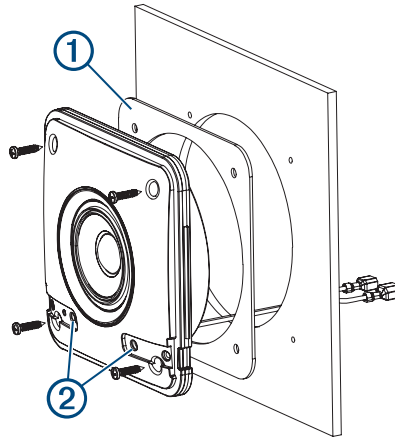
Selecting the correct mounting location optimizes the performance of each speaker. FUSION speakers are designed to perform in the widest possible range of mounting locations, but the more you plan the installation, the better the speakers will sound. For more information on speaker placement and specifications, go to [support.garmin.com](https://support.garmin.com).

## 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 3).
- 4 With the logo slots ② at the bottom, use the included screws to mount the speaker.



- 5 Connect the speaker to the stereo 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 spudger or other 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

When connecting the speakers to your stereo, observe these considerations.

### NOTICE

These speakers are designed to be connected directly to a FUSION stereo. Connecting these speakers to an external amplifier may result in damage.

- Speaker wire is not included with the speakers. You should use 16 AWG (1.3 through 1.5 mm<sup>2</sup>) speaker wire to connect the speakers to the stereo.
- 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.

Speaker wire color	Speaker wire polarity	Spade connector size
White	Positive (+)	6.3 mm
White with a black stripe	Negative (-)	4.8 mm

## Speaker Information

### Registering Your Speakers

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

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

### Cleaning the Speakers

**NOTE:** When mounted correctly, these speakers are rated IP65 for dust and water ingress protection under normal conditions. They are not designed to withstand high pressure water spray, which may occur when you wash down your vessel. Failure to carefully spray-clean the vessel may damage the product and void the warranty.

#### NOTICE

Do not use harsh or solvent-based cleaners on the speakers. Using such cleaners may damage the product and void the warranty.

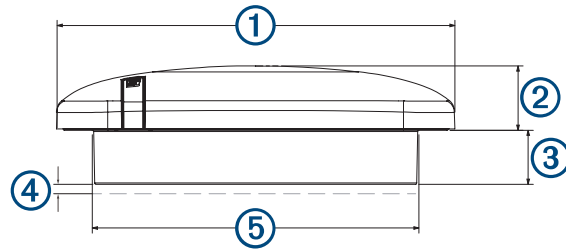
- 1 Clean all salt water and salt residue from the speaker with a damp cloth soaked in fresh water.
- 2 Use a mild detergent to remove a heavy buildup of salt or stains.

### Specifications

Specification	Measurement
Peak power (Watts)	100 W
Efficiency (1 W/1 m)	84 dB
Frequency response	150 Hz to 20 kHz
Nominal impedance	4 Ohms
Min. mounting depth (clearance)	24 mm ( <sup>15</sup> / <sub>16</sub> in.)
Mounting diameter (clearance)	130 mm (5 <sup>1</sup> / <sub>8</sub> 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 <sup>1</sup>

<sup>1</sup> Sealed against all dust ingress, and protected against jets of water.

## Speaker Dimensions



Dimension	Measurement
①	155 mm (6 1/8 in.)
②	25 mm (1 in.)
③	21 mm (13/16 in.)
④	Minimum clearance 3 mm (1/8 in.)
⑤	Ø 127 mm (5 in.)

