Bose® Virtually Invisible® 791 series II and 591 in-ceiling speakers
Important Safety Instructions

Please read this owner’s guide carefully and save it for future reference.

WARNINGS:
• Do not place naked flame sources, such as lighted candles, on or near the product.
• All Bose® products must be used in accordance with local, state, federal and industry regulations. It is the installer’s responsibility to ensure installation of the loudspeakers and mounting system is performed in accordance with applicable building codes, including local building codes and regulations.
• Unsafe mounting or overhead suspension of any heavy load can result in serious injury and equipment damage. It is the responsibility of the installer to evaluate the reliability of any mounting method used for application.

CAUTIONS:
• These speakers are not designed or recommended for installation in walls, in ceilings of masonry, or in drop ceilings.
• This product is not intended for use in Air-Handling Plenum Spaces.
• See product enclosures for safety-related markings.
• Make no modifications to the speakers or accessories. Unauthorized alterations may compromise safety, regulatory compliance, and system performance.
• Be sure to keep all insulation away from speakers in accordance with the installation instructions in this guide.

WARNING: Contains small parts which may be a choking hazard. Not suitable for children under age 3.

WARNING: This product contains magnetic material. Contact your physician if you have questions on whether this might affect the operation of your implantable medical device.

NOTE: This product must be used indoors. It is neither designed nor tested for use outdoors, in recreational vehicles, or on boats.

Important safety instructions
1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Install in accordance with the manufacturer’s instructions.
7. Do not install near any heat sources, such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
8. Only use attachments/accessories specified by the manufacturer.

Names and Contents of Toxic or Hazardous Substances or Elements

<table>
<thead>
<tr>
<th>Part Name</th>
<th>Toxic or Hazardous Substances and Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCBs</td>
<td>X O O O O O O</td>
</tr>
<tr>
<td>Metal parts</td>
<td>X O O O O O</td>
</tr>
<tr>
<td>Plastic parts</td>
<td>O O O O O</td>
</tr>
<tr>
<td>Speakers</td>
<td>X O O O O O</td>
</tr>
<tr>
<td>Cables</td>
<td>X O O O O</td>
</tr>
</tbody>
</table>

This table is prepared in accordance with the provisions of SJ/T 11364. O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of GB/T 26572. X: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB/T 26572.

This symbol means the product must not be discarded as household waste, and should be delivered to an appropriate collection facility for recycling. Proper disposal and recycling helps protect natural resources, human health and the environment. For more information on disposal and recycling of this product, contact your local municipality, disposal service, or the shop where you bought this product.

Bose Corporation hereby declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC and all other applicable EU directive requirements. The complete declaration of conformity can be found at: www.Bose.com/compliance

China Importer: Bose Electronics (Shanghai) Company Limited, Part C, Plan 9, No. 353 North Rijing Road, China (Shanghai) Pilot Free Trade Zone
EU Importer: Bose Products B.V., Gorslaan 60, 1441 RG Purmerend, The Netherlands
Taiwan Importer: Bose Taiwan Branch, Room 905, 9F, Worldwide House, 131 Min Sheng East Rd, Section 3, Taipei, Taiwan, 105

Please complete and retain for your records:
Model number: _______________________
Serial number: _______________________
Purchase date: _______________________

We suggest you keep your receipt with this owner’s guide.

Date of manufacture:
The first bolded digit in the serial number indicates the year of manufacture; “5” is 2005 or 2015.
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About your Virtually Invisible® 791 series II or 591 in-ceiling speakers

The Bose® Virtually Invisible® 791 series II or 591 in-ceiling speakers provide superior performance for built-in stereo music listening and home theater enjoyment.

Unpacking

Carefully unpack the carton and confirm that the following parts are included:

<table>
<thead>
<tr>
<th>Virtually Invisible® 791 series II speakers</th>
<th>Virtually Invisible® 591 speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two speakers</td>
<td>Two speakers</td>
</tr>
<tr>
<td>Two speaker grilles</td>
<td>Two speaker grilles</td>
</tr>
<tr>
<td>Template</td>
<td>Template</td>
</tr>
</tbody>
</table>

Note: If part of the system is damaged, do not use it. Contact your authorized Bose® dealer or Bose customer service. Refer to the contact sheet in the carton.

Recommended tools

You may need the following tools to complete installation:

- Phillips-head screwdriver
- Cutting tool
- Power drill
- Safety goggles

Speaker wire requirements

<table>
<thead>
<tr>
<th>Gauge</th>
<th>Maximum Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 AWG (0.82 mm²)</td>
<td>20 ft. (6 m)</td>
</tr>
<tr>
<td>16 AWG (1.3 mm²)</td>
<td>30 ft. (9 m)</td>
</tr>
<tr>
<td>14 AWG (2.1 mm²)</td>
<td>50 ft. (15 m)</td>
</tr>
<tr>
<td>12 AWG (3.3 mm²)</td>
<td>90 ft. (27 m)</td>
</tr>
</tbody>
</table>

- Allow enough wire from the ceiling to wire the speakers before installing.
- Strip ½ in. (13 mm) of insulation at each end of both wires.
- Please check your local building codes and use only the correct type of wire required for in-ceiling installation.
- For information on installing speaker wire, consult a professional electrician or audio/video installer.

Placement guidelines

For optimal stereo performance, install the speakers in positions similar to the diagram below at a minimum of the suggested distances:

Notes:

- Use a stud finder to ensure the speaker hole is at least 4¾ in. (12 cm) away from a joist.
- Mount these speakers in wood frame or similar construction only. Bose recommends installing these speakers only in wood frame or similar construction with adequately spaced studs, as found in 2 x 6 construction.

Placement in unfinished construction

If you are planning installation in unfinished construction, purchase the Bose rough in kit. See “Accessories” on page 7.
Cutting the speaker hole

1. Trace the template in the speaker location.

**WARNING:** Do not cut into surfaces that have hazards concealed behind them such as electrical wiring or plumbing. If you are unsure of your ability to mount this speaker, contact a professional installer.

2. Drill a hole inside the template area large enough for your cutting tool.

3. Cut along the line you traced.

4. Remove the cutout section.

5. Clear away any torn or rough material from around the hole.

Connecting the speaker wire

1. Pull out at least 14 in. (36 cm) of the speaker wire. Allow enough wire to connect the speaker from where you are standing.

2. Connect the positive wire to the red marked terminal on the speaker.
   **Note:** The terminal marking is located on the top of the terminal.

3. Connect the negative wire to the black marked terminal on the speaker.
Installing the Speakers

Installing the speaker

1. Holding the outside edges, insert the speaker into the hole.
   
   **Note:** Do not press on the two small drivers on the face of the speaker. This may damage the speaker.

   **CAUTION:** Certain forms of insulation (such as horse hair plaster, newspaper, cellulose, or blown-in materials) may pose a risk of ignition. Be sure to keep all insulation away from the speakers.

2. Tighten all the clamp screws with a Phillips head screwdriver.
   
   **Note:** If using a power drill, choose the lowest torque setting.

Attaching the grille

The grille magnetically attaches to the rim of the speaker.

Place the grille on speaker.

Painting the grille

You can paint the speaker grilles before you attach them to the speaker. Bose® is not responsible for the quality of adhesion or finish of non-factory-applied paints.

- Latex or oil-based architectural paint requires thinning for use with a siphon-feed spray gun. Refer to the owner’s guide provided with your spray gun for guidelines.
- Be careful when using a sharp implement in the grille perforations to remove a paint clog, which can damage the grille.
Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>What to do</th>
</tr>
</thead>
</table>
| No sound from speakers | • Ensure the speaker wires did not disconnect from the speakers or the receiver/amplifier.  
• Check the settings on your receiver/amplifier. Refer to the receiver/amplifier owner's guide for instructions on settings.  
• If other stereo speakers are connected to a second set of audio outputs on your receiver/amplifier, select the proper A or B speaker setting to match the A or B outputs connected to your speakers. |
| Sound from one speaker only | • Center the balance control on your receiver/amplifier.  
• Ensure no wires from the positive and negative terminals on the receiver/amplifier are touching.  
• Disconnect the speaker wire from the receiver/amplifier channel and reconnect it to a different channel.  
• Check that no wires from the positive and negative terminals are touching where the speaker wire connects to the speaker.  
• Disconnect the speaker wire from the speaker and reconnect it to another speaker. If this speaker works, your speaker needs to be serviced. Refer to the contact sheet in the carton.  
• Replace and re-install the speaker wire if these troubleshooting steps do not solve the problem. |
| Bass/treble is weak | • Adjust the tonal balance setting on your receiver/amplifier.  
• Ensure there are no gaps between the speaker frame and the wall surface.  
• Switch the wires connected to the positive and negative terminals on the receiver/amplifier.  
• Disconnect the speaker wire from the receiver/amplifier channel and reconnect it to a different channel. |
| Static/noise from speaker | • Ensure the wires are in good condition, are firmly connected to the speaker and receiver/amplifier and are not touching across terminals.  
• Connect the music source to the receiver/amplifier properly.  
• See “Sound from one speaker only”. |

Accessories

For unfinished construction, use the Bose® rough-in kit. The kit contains parts for two speakers and is designed for installation after the joists are in place and before wallboard is added. When installed, the kit reserves a place for each speaker and indicates where to make the speaker hole in the wallboard.

For more information or to order accessories, contact Bose customer service. Refer to the contact sheet in the carton.

Customer service

For additional help using the system:
• Visit owners.Bose.com
• Contact Bose Customer Service. Refer to the contact sheet in the carton.

Limited warranty

Your system is covered by a limited warranty. Details of the limited warranty are provided on the product registration card that is in the carton. Please refer to the card for instructions on how to register. Failure to register will not affect your limited warranty rights.


Technical information

Compatibility

Compatible with amplifiers or receivers rated 10-100W per channel/rated 4 to 8 ohms

Virtually Invisible® 791 series II: 50W IEC continuous power handling; rated 6 ohms

Virtually Invisible® 591: 50W IEC continuous power handling; rated 8 ohms

Virtually Invisible® 791 series II driver complement:
Two 1" (25.4 mm) dome tweeters configured in an array
One 7" (178 mm) high-excursion woofer

Virtually Invisible® 591 driver complement:
Two ¾" (19 mm) dome tweeters configured in an array
One 5" (127 mm) high-excursion woofer

Virtually Invisible® 791 series II dimensions:
Diameter: 8.4" (214 mm)
Depth into ceiling: 4.14" (105.2 mm)
Grille diameter: 10" (254 mm)
Ceiling hole diameter: 8½" (219 mm)

Virtually Invisible® 591 dimensions:
Diameter: 6.5" (166 mm)
Depth into ceiling: 3.8" (96.7 mm)
Grille diameter: 8.11" (206 mm)
Ceiling hole diameter required: 6.7" (170 mm) diameter

Weight

Virtually Invisible® 791 series II: 4.8 lb. (2.18 kg) each
Virtually Invisible® 591: 3.19 lb. (1.45 kg) each