The Bose® 201™ Series II Direct/Reflecting® Loudspeaker System

Introduction
Thank you for purchasing the Bose® 201™ Series II Direct/Reflecting™ Loudspeaker System. Its advanced design and quality construction will give you many years of listening pleasure.

Since you probably want to hear music from your 201 system as fast as possible, this guide is divided into two parts. To properly unpack and connect your system, read Part 1. After you have connected your 201 system, and are enjoying some music, read Part 2. It explains how to double-check your connections, and gives you details on wire sizes, speaker phasing, fusing, and room acoustics. To obtain the best possible performance from your 201 system, please read this entire guide thoroughly.

PART 1

1. Unpacking
The shipping carton contains two 201 Series II speakers. Unpack each speaker carefully, saving the carton and all packing materials for possible use later.

If either speaker appears to be damaged when unpacking, do not attempt to connect or operate your speakers. Repack both speakers in their original carton and notify your authorized Bose dealer immediately.

2. Connection
1. Turn off your amplifier or receiver, and unplug it from its outlet (see power mains) before attempting to connect your speakers.

2. Slightly separate the conductors at the end of each length of speaker wire (use 18 gauge or larger wire). For more details, see Part 2, Section 4. Strip approximately 1/2 inch (12 mm) of insulation off each conductor.

3. Connect one wire conductor to the black terminal (marked “−”) on the left speaker (see FIGURE 1). Connect the other end of the same conductor to the output terminal marked COM, GND, NEUT, or “−−” on the left channel of your receiver or amplifier (see FIGURE 2).

4. Similarly, connect the red terminal marked “+” on the left speaker to the output terminal marked POS or “+” on the left channel of your amplifier or receiver. If your amplifier offers a choice of output impedances, use the terminal marked 8 or 8 OHMS.

5. Repeat Steps 3 and 4 above, connecting the right speaker to the right output channel of your amplifier or receiver.

6. Check very carefully to be certain that no loose strands of wire are “bridged” from one terminal to the other on either one of your speakers or on any of the amplifier outputs. Bridged wires create short circuits which can damage your amplifier or receiver. Repair any loose strands before plugging in your amplifier or receiver.

7. Plug in your amplifier or receiver, turn it on, and enjoy!

PART 2

3. Speaker Placement
The unique design of your 201 Series II system provides excellent sound in a wide variety of listening environments. Any speaker system, however, is dependent upon its placement. Your 201 speakers can be set on bookshelves and/or tables, or can be flush mounted directly to a wall.

To help your 201 system deliver optimum performance, and to help you decide between potential locations in your listening room, the following guidelines are suggested (see FIGURE 3).

A. Spacing

1. Place the left and right speakers on the left and right sides of the room respectively, spaced 3 to 12 feet (0.9 to 3.6 m) apart.

2. To hear the most accurate bass response, set the speakers directly against the wall behind them at least 18 inches (45 cm) from the floor or ceiling. If this is not possible in your room, you'll hear good performance with the speakers located up to 12 inches (30 cm) away from the rear wall. Do not, however, place the speakers halfway between the floor and ceiling, as this will impair bass response.

3. Place the speakers at least 12 inches (30 cm) from the side walls. Optimum distance is 11/2 to 3 feet.
B. Room Acoustics

1. Your Bose 201 Series II system performs best when sound energy is given room to develop.” The speakers, reflecting off nearby walls, will sound best when they are positioned to reflect off hard surfaces such as wood, brick, glass, plasterboard, and/or study paneling.

2. Your 201 Series II speakers are designed to provide optimum sound reproduction when placed in a room with an average amount of sound-absorbent furnishings (carpeting, wall hangings, and drapes). If your room contains few furnishings and has bare walls and floor, the music may sound unnatural, shrill, or bright. A slight decrease in treble (using the control on your amplifier or receiver) should improve the sound.

3. If your listening room contains more absorbing furnishings than normal (stuffed furniture, unusually heavy carpeting, or many drapes), the music may sound dull and lifeless. A slight increase in treble (again using the control on your amplifier or receiver) should improve the sound.

4. If your music seems to be lacking in bass, improvement can usually be heard by moving the speakers closer to the wall behind them and/or nearer to the corners of your listening room. Heavy “booming” bass can be turned by moving the speakers away from walls. If moving the speakers is not feasible, a slight increase or decrease in bass (using the control on your amplifier or receiver) should improve the sound. Adequate bass response can also be caused by improper speaker phasing. Section 5, Phasing Test, gives details on proper phasing.

5. Wire Selection

If the wire used to connect your speakers to your amplifier or receiver is too small, audible detection of the sound and power loss can occur. The accompanying table specifies the minimum thickness of 2-conductor wire recommended for various speaker-to-amp distances.

Standard 2-conductor zocord (common lamp cord) can be used for speaker connection. This wire is often color-coded, or has a ribbed line or lines running along one conductor for easy identification of the positive and negative leads.

**NOTE ON WIRE SIZES:** As the gauge number of a wire gets smaller, the wire itself gets larger. For instance, when a minimum gauge of 18 is suggested, an acceptable substitute is 16 gauge, not 20 gauge.

**RECOMMENDED WIRE SIZES**

<table>
<thead>
<tr>
<th>Maximum Length</th>
<th>Wire Gauge</th>
</tr>
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<tbody>
<tr>
<td>30 feet (9 m)</td>
<td>18 (.75 mm²)</td>
</tr>
<tr>
<td>45 feet (14 m)</td>
<td>16 (1.5 mm²)</td>
</tr>
<tr>
<td>70 feet (21 m)</td>
<td>14 (2.0 mm²)</td>
</tr>
</tbody>
</table>

*Based on a maximum frequency response deviation of ± 1.5 dB

5. Phasing Test

If you are not certain that the speakers are connected to your amplifier in “phase,” i.e., positive to positive, negative to negative, perform the following test:

1. Set your sound system for MONO (monophonic) reproduction. Be sure the balance control is centered and set to normal.

2. Temporarily place the speakers so that they are facing each other closely.

3. Play music containing deep bass notes through the system. If the speakers are phased correctly, the sound will appear to come from a point between the speakers with full, natural bass response.

4. If the music seems to be lacking in deep bass, reverse the wire connections to one speaker and repeat the test. Use the connection that produces the most powerful bass.
6. Fusing
Any speaker can be damaged if the amplifier driving it should fail. Damage may also occur by playing the music so loudly that it sounds distorted. This can happen even with a low-powered amplifier or receiver.

Your Bose® Series II speakers incorporate Automatic System Protection circuitry which guards against certain types of electrical stress. Fusing will provide additional protection, and is recommended.

To properly install optional fuses (not provided), fuse-holders should be inserted into the + (POS) wire connecting each speaker to your amplifier or receiver (see FIGURE 2). Use 1.5-ampere, fast-blow Buss AGC Series or equivalent fuses.

A fuse kit containing fuses and holders is available from the Bose® Customer Service Department, 79 Turnpike Road, Westboro, MA 01581 for $7.50. Ask for Part Number 109285.

7. Maintenance
The wicker grill cloth of your 201 Series II speakers can be cleaned by wiping with a soft, damp cloth and a mild detergent. The grille panels require no special care, but may be carefully vacuumed if necessary.

8. In Case of Difficulty
If you suspect a problem with your Bose 201 Series II system, use the following checklist to determine if the difficulty is actually in the speaker system, or in some other component of your music system:

If one speaker sounds defective, do not switch the speaker cables as this could damage a speaker. Disconnect the defective speaker at the amplifier output terminals, and reconnect it to the amplifier channel that is operating correctly. If the speaker that sounded defective now plays properly, the problem is not in the speaker or the wiring.

If trouble appears in both speakers, connect them to another amplifier that is known to be working properly. If the speakers now operate correctly, the problem is not in the speakers.

If trouble persists in one or both speakers, contact your authorized Bose dealer. He will verify any defects and arrange for service by an authorized service agency or by the Bose factory. Bose Corporation will make every effort to remedy any problem within the terms of the warranty at minimum inconvenience to you.

9. Technical Information
Features
Direct/Reflecting® system
Free Field® tweeter
Dual Frequency™ crossover network
Automatic System Protection circuitry
Full five-year warranty
Specifications
Driver Complement
One (1) 6" (15.2 cm) forward-facing woofer
One (1) 3" (7.6 cm) Free Field tweeter
Nominal Impedance
8 ohms
Power Rating
5 watts minimum
60 watts RMS maximum
Cabinet
Wood-grain vinyl veneer. 14 1/2" W x 7 3/4" D x 9" H (36.8 x 19.7 x 22.9 cm)
Shipping Weight
20 lbs (9.1 kg)