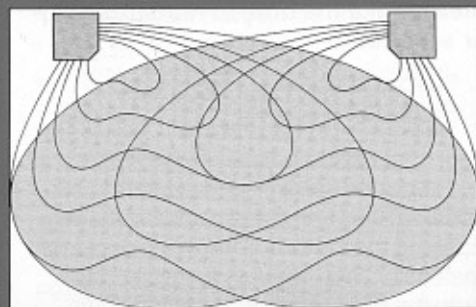


The Bose® 10.2™ Series II Direct/Reflecting® System with Acoustimass® Speaker Technology



BOSE
Better sound through research.

The Bose® 10.2™ Series II Direct/Reflecting® System

Before you begin . . .

We would like to thank you for purchasing Bose speakers. We are confident that our advanced technology and quality construction will provide you with a lifetime of musical listening pleasure.

The operating principles of the Bose 10.2 Series II speaker system are **significantly** different from those of conventional speakers. To obtain the best results, **please take the time to read this owner's manual.**

I. Unpacking the Bose 10.2 Series II System

Your 10.2 Series II system is packed in two separate cartons marked Part 1 (left speaker) and Part 2 (right speaker). After opening the cartons, remove all packing materials. Then *carefully* turn the carton (with the speaker still in it) upside down and lift the carton off of the speaker. Save the cartons and all packing materials, as they are ideal shipping containers should the speakers ever need to be transported.

If either speaker appears to be damaged when unpacking, **do not attempt to use it.** Instead, repack the speaker in the original carton and notify your authorized Bose dealer immediately.

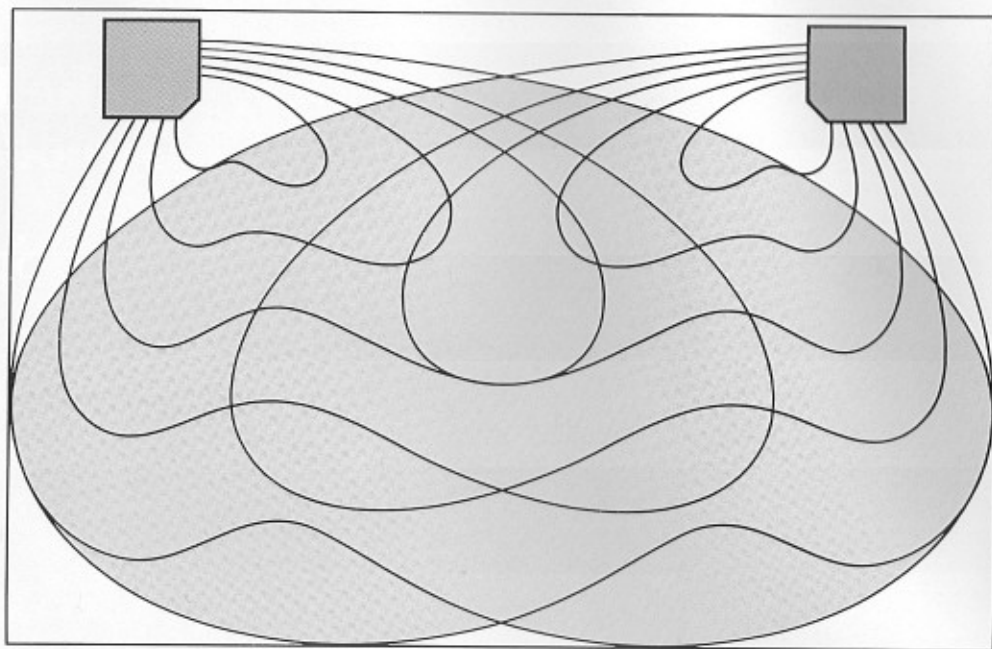


Figure 1A. Stereo listening area produced by the Bose 10.2 Series II speaker system.

II. Setting Up the Bose 10.2 Series II Speaker System

Unlike conventional speakers, the Bose 10.2 Series II system uses Direct/Reflecting® speaker technology designed to re-create

an exceptionally realistic stereo image (refer to Figures 1A and 1B). It is important to note that there are distinct left and right 10.2 speakers. Use the following guidelines to obtain maximum performance.

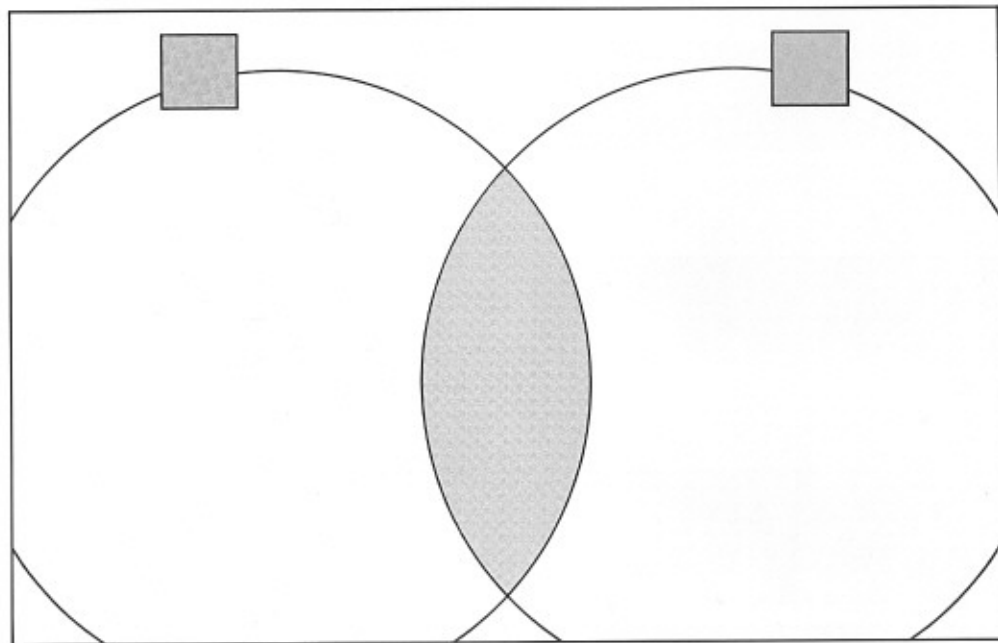


Figure 1B. Stereo listening area produced by conventional speaker systems.

A. Select the wall where you intend to place your speakers. Divide the length of the wall by four and place the speakers at the $\frac{1}{4}$ and $\frac{3}{4}$ divisions of the wall. In most listening rooms, separations as great as 12 feet (4 meters) or

as small as three feet (1 meter) can still give excellent results. Refer to Section IV-B (Room Acoustics) for more information on speaker placement.

B. Once you have selected your speaker locations, place the left speaker (Part

1) on the left and the right speaker (Part 2) on the right side. **Note:** Failure to follow this instruction will defeat the Direct/Reflecting® speaker technology.

C. The Bose® 10.2™ Series II system is not very sensitive to placement relative to room walls. However, this distance can affect any speaker's frequency response. Therefore, it is wise to experiment with various locations before determining final placement. A typical location would be at least 3 inches (8 cm) from the wall behind the speaker; this distance will give the best sound in most situations. Placing the 10.2 Series II speaker less than three inches from the wall may block the two round openings in the rear of the speaker, affecting its low-frequency response.

D. Please note that each Bose® 10.2 Series II speaker has a midrange driver located on the side of the speaker cabinet that faces the other speaker. Bose does *not* recommend the placing of large objects (such as a tall cabinet) within one foot (30 cm) of the inward facing side of either 10.2 Series II speaker, as the midrange driver may be obstructed.

The Bose 10.2 Series II Direct/Reflecting System

PLEASE NOTE: The Acoustimass speaker technology used in the 10.2 Series II system *significantly* reduces audible distortion. Because of this, you may be less likely to notice the distinctive distorted sounds produced when a speaker is driven beyond its limits. **Exercise caution when playing the 10.2 Series II system at high volume levels.**

III. Connecting the Bose 10.2 Series II Speaker System

We recommend using standard zipcord, the wire most commonly carried by audio dealers and electrical stores. The table below shows some typical wire run lengths for speaker installations and corresponding wire sizes (gauges) that should be used.

Recommended Wire Sizes*

| Maximum Length | Wire Gauge |
|----------------|---------------------------------|
| 30 feet (9 m) | AWG #18 (0.75 mm ²) |
| 45 feet (14 m) | AWG #16 (1.5 mm ²) |
| 70 feet (21 m) | AWG #14 (2.0 mm ²) |

*Based on a maximum frequency response deviation of ± 0.5 dB.

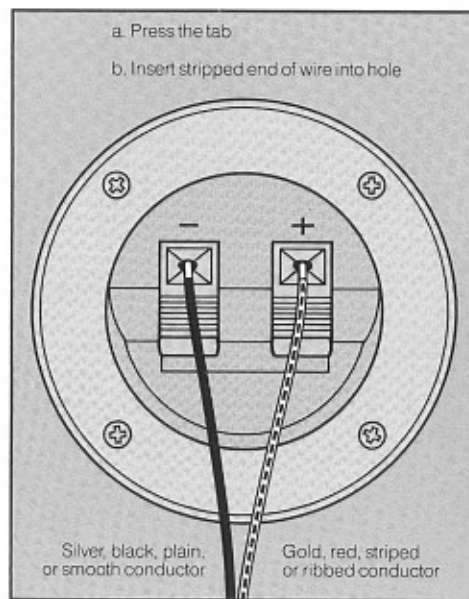


Figure 2. Connecting the speaker.

- Measure the amount of wire required for each speaker and cut it accordingly. If possible, try to maintain roughly the same amount of wire on both speakers.
- Slightly separate the conductors at the end of each wire. Strip off approximately $\frac{1}{2}$ inch (12 mm) of insulation from each conductor.
- Examine the wire ends carefully. There will be some visible difference between the two conductors. If the wire is clear, one side may be silver and the other copper. Or, if the wire is not color coded, then one side will be ribbed or striped. In any event, **consider the ribbed, striped, or copper side to be positive (+). The remaining side (plain, smooth, or silver) is negative (-).**
- Locate the speaker terminals on the back of the Part 1 (left) speaker. Connect the positive side of the wire to the (+) red terminal, and the negative side of the wire to the (-) black terminal. **Refer to Figure 2.**
- Next, make sure your receiver or amplifier is switched "off" and unplugged.** Connect the other end of the wire to the terminals marked "left"

on the rear of the receiver/amp, making sure to connect the positive side of the wire to the receiver/amp positive terminal (marked (+) or colored red) and the negative side of the wire to the negative terminal (marked (-) or colored black). **Refer to Figure 3.** The idea is to make sure that the speaker's positive terminal is connected to the receiver/amp's positive terminal, and the negatives are connected properly as well. Make sure all connections are secure.

- F. Repeat steps D and E for the Part 2 (right) speaker and right receiver/amp side. Make sure all connections are secure.
- G. Finally, *check carefully* to make sure that no loose strands of wire are brushing against the other terminal on either the speaker or receiver/amp. **Such "bridged" wires create short circuits which can damage your amplifier.** Repair any loose wire strands **before** plugging in your receiver/amp. If you have stapled the wiring to a floor or wall, make sure the staples have not penetrated the wire as this may cause a short circuit.

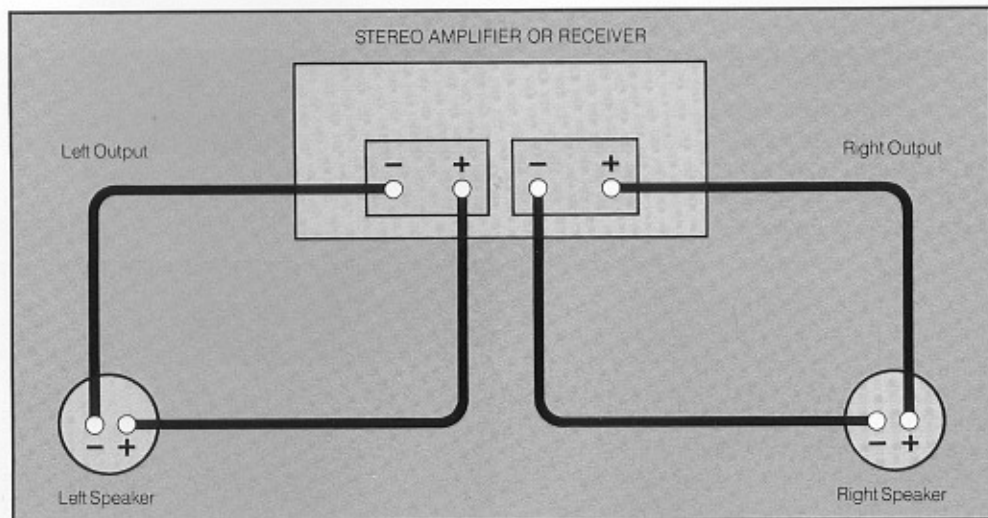


Figure 3. Connecting the speakers to the receiver/amplifier.

- H. If you are not sure the speakers are hooked up correctly or "in phase" (positive to positive, negative to negative), try this simple test:
1. Set your receiver/amp to MONO (monophonic or "L + R"). Be sure that the balance control is in the normal or centered position.
 2. Move the speakers until they are back to back, almost touching.
 3. Play some music with deep bass. If the speakers are hooked up correctly, they will have full, natural bass response.
 4. If you do not hear much deep bass, **shut the receiver/amp off.** Then reverse the + and - connections on one speaker only and repeat the test. **Use whichever connection produces the most bass.**

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IV. Using the Bose 10.2 Series II Speaker System

Once set up and connected properly, your speakers will require very little attention. However, observing the following guidelines will help you get the most out of your speaker investment:

A. Fusing

Under normal operating conditions, the Bose 10.2 Series II speaker system does not require auxiliary overload protection devices. Each 10.2 Series II speaker contains one internal overload protection circuit designed specifically to handle normal overload conditions. However, any speaker may be damaged if the amplifier driving it should fail.

Fusing will provide additional protection, and is recommended.

1. The fuse is inserted into the speaker circuitry by simply wiring a fuse holder to the + (red) terminal of the speaker. **Refer to Figure 4.** The speaker wire then connects to the holder, putting the fuse holder between the speaker's + (red) terminal and the receiver/amp's + terminal.
2. When the fuse is inserted into the fuse holder, the fusing protection system is

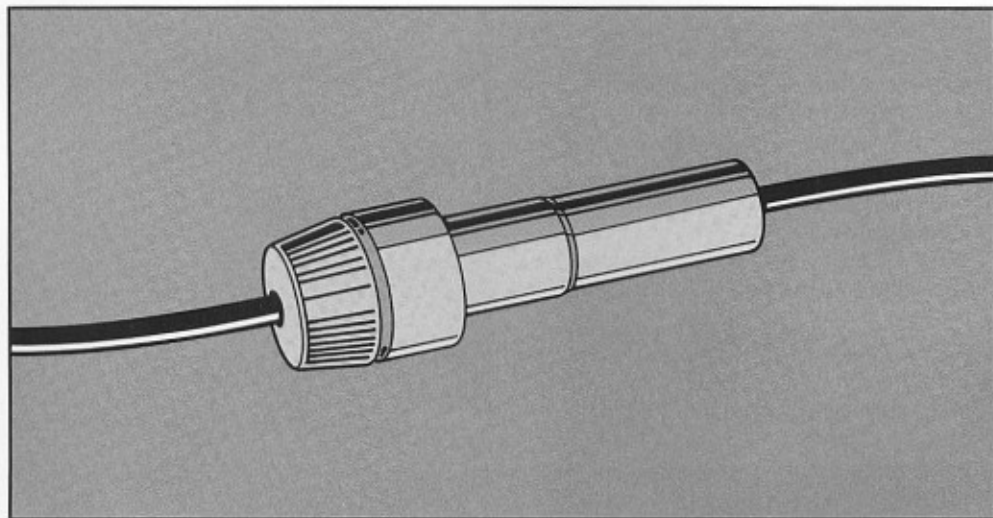


Figure 4. Fusing the speakers. Insert fuse holder between positive speaker wire end and positive speaker terminal.

complete. A 2-ampere, fast-blow AGC Series or Littelfuse AG series fuse is recommended.

A fuse kit containing fuses and holders is available from the Bose Customer Service Department for \$7.50. Call (508) 879-7330 and ask for Part No. 108938-2.

B. Room Acoustics

The acoustics of your listening room can affect the overall sound quality of your 10.2 Series II speakers. The following tips will give you some control over the system's sound:

1. Rooms with a lot of sound-absorbing furnishings (stuffed furniture, wall-to-wall carpets, heavy drapes, etc.) may

reduce the treble sound of your system, making it sound dull. The missing treble can be restored by slightly turning up the treble control on the receiver/amp.

2. Rooms with few sound-absorbing furnishings, especially those with bare floors and walls, may sound overly shrill or "bright" because of too much treble. Turning down the treble control or adding sound absorbers such as throw carpets or drapes will usually solve this problem.
3. If your system seems to lack bass, try moving the speakers a little closer to the room's corners. If your system has too much bass, move the speakers away from the corners. The rule of thumb is that the closer the speakers are to the intersection of room boundaries (such as the corner, where two walls intersect each other and the floor), the more bass they will produce. By keeping this rule in mind, you can tune your system for your room.
4. Many problems with acoustics can be solved by the judicious use of your tone controls. Remember, though, that the use of these controls may put greater power demands on your

receiver/amp. **Excessive tone control can cause an amplifier or receiver to run out of power and distort, potentially damaging your system.**

5. Outboard signal processors (such as graphic and parametric equalizers) can be used with the Bose® 10.2™ Series II speakers if a greater degree of acoustic control is desired. Consult your Bose dealer for advice and recommendations.

C. Maintenance

If the finish on the 10.2 Series II system is genuine hardwood veneer, only a high quality furniture polish should be used. If the cabinet finish is vinyl, it can be easily cleaned with a damp cloth, and, if necessary, a mild detergent such as dishwashing liquid.

The grilles may be *carefully* vacuumed if necessary. Please note that the tweeters are located directly behind the grille cloth, and are easily damaged. Avoid applying any pressure with the vacuum nozzle.

V. In Case You Have a Problem

If you experience any difficulty with your 10.2 Series II system, try the following simple test procedures first to determine if the speakers are at fault. The majority of problems actually occur in components other than speakers.

- A. **If one speaker sounds defective** (does not play or plays distorted sound), **shut the receiver/amplifier off.** Disconnect the defective speaker at the amplifier output terminals and reconnect it to the amplifier terminals that were connected to the non-defective speaker. If the speaker that initially sounded defective now sounds correct, the problem is not in the speaker. Under no circumstances connect the normal sounding speaker to a possibly defective receiver/amp channel or side.

- B. **If both speakers sound defective**, use the same wiring to connect them to another receiver/amp known to be working properly. If the speakers now operate correctly, the problem is not in the speakers or wiring.
- C. Check all user-accessible fuses. Replace any fuses that appear to be blown. If the fuses blow again, have the receiver/amp checked by qualified personnel.
- D. **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.

VI. Technical Information

Features

Direct/Reflecting® system design
Acoustimass® speaker technology
Stereo Targeting® array
Tweeter protection circuit
Syncom® computer quality assurance program

Driver Complement

Two (2) 2" magnetic fluid-cooled tweeters
One (1) 8" midrange driver
One (1) 8" high power woofer in an Acoustimass® enclosure

Cabinet

Acoustimass® speaker design,
genuine hardwood veneer or
laminate over particle board finish

Dimensions

38¾" H (98.4 cm) x 11¾" W
(30 cm) x 11¾" D (30 cm)

Weight

46 lb (21 kg)

Nominal Impedance

8 ohms (EIA standard)

Amplifier Power Requirements

Minimum: 10 watts per channel
Maximum: 180 watts per channel

The Bose® 10.2™ Series II Direct/Reflecting® System

Full 5-Year Warranty

Bose® Corporation warrants this unit to be free from defects in materials and workmanship for a period of five years from the original date of purchase. During that period, Bose will remedy all such defects without charge for parts or labor, upon return of the unit together with the original sales receipt, or other proof of purchase, to Bose, or to an authorized Bose Service Agency. This warranty does not extend to damage resulting from improper installation, misuse, neglect or abuse. This warranty is fully transferable.

In no event shall Bose be liable for incidental or consequential damages.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation may not apply to you.

Should this unit fail within the warranty period, contact your authorized Bose dealer. This dealer will tell you which one of the following procedures you should follow.

1. Return unit with proof of purchase to dealer, OR

2. Return unit with proof of purchase to the nearest authorized Bose Service Agency, OR
3. Return unit with proof of purchase directly to the Bose factory.

If procedure 3 above is taken, please follow the instructions below:

1. Call the Bose Customer Service Department at (508) 879-7330, and ask to be assigned a **return authorization number** and shipping instructions.
2. Pack the unit in the original carton for shipping. If you need a new carton, contact either your dealer or Bose Corporation. **Note:** Any damage in transit due to improper packing is not covered by the warranty and will not be recognized as an insurance claim by transportation companies.
3. Label and ship, freight prepaid, to the address provided by Customer Service.
4. Make sure your **return authorization number** appears **prominently** on the outside of the carton.

Your unit will be repaired and returned to you at Bose's expense. If the defects cannot be repaired after a reasonable

number of attempts by Bose to do so, you may elect to receive a refund or a replacement, but only if the unit is returned to Bose free and clear of all liens and other encumbrances.

The foregoing warranty applies only to products sold within the United States of America, its territories and possessions, and to sales at overseas military post exchanges. For information regarding warranty coverage in other areas consult the Bose subsidiary or authorized dealer nearest to you.

Please retain this Warranty Information.

Record your speaker serial numbers and purchase information below and retain it in your records along with proof of purchase.

Speaker Model

Date Purchased

Speaker Serial Numbers (list both)

Dealer Name

Dealer Address

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BOSE

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