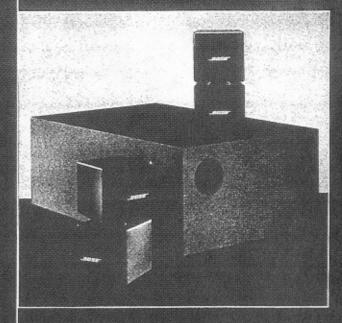
The Bose AM-5 AM-5 ACOUSTIMASS Speaker
System

Owner's Guide



BUSE

## Before you begin...

We would like to thank you for purchasing the Bose® AM-5™ Acoustimass™ speaker system. We are confident that the advanced technology and quality construction of the AM-5 system will provide you with a lifetime of musical listening pleasure.

The operating principles and wiring configuration of the AM-5 system are significantly different from those of conventional speakers. This not only allows the AM-5 system to provide you with great sound, but also offers placement flexibility not available from conventional speakers. For best results, and an easy installation, please take the time to read this owner's guide.

## Unpacking the AM-5 System

After opening the carton, remove all packaging material and carefully lift out the components of the AM-5 system. Save all the cartons and packing material in case the system needs to be transported at a later time. If any of the components appear damaged, do not attempt to use the system. Instead, repack the system in its original carton and notify your authorized Bose dealer immediately.

## Setting Up the System

The AM-5 system offers many advantages not available from a conventional speaker system. For one, the system adjusts to deliver the combination of reflected and direct sound optimal for any listening environment. For another, the system delivers this lifelike combination of reflected and direct sound while using very little of your living space.

Before you can install and adjust the system's components, take a minute to familiarize yourself with them. Your system should include:

- 2 Cube speaker arrays
- 1 Acoustimass™ module (the larger black cabinet)
- 4 Wires
- A. Select the location where you intend to place the left and right cube speaker arrays. Note that wires from the arrays connect to the Acoustimass module, so you should locate the cube speaker arrays so that the wires will reach the location you chose for the module.

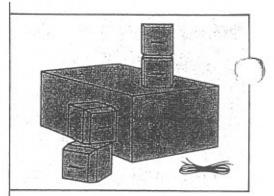
**Note:** While the wires provided are adequate for most installations, you may increase the distance between the cube speaker arrays and the Acoustimass module by splicing in additional wire. If you do so, use similar gauge or thicker wire, and make sure you maintain the correct phase ("+" to "+" and "-" to "-"), and properly connect the wires.

B. One of the real benefits of your AM-5 system is its flexibility. By positioning the bottom cube and rotating the top cube of each cube speaker array, you can adjust the spatial balance of your system to match your room or musical taste.

Though there is no "correct" position for the cube speaker arrays or the angle between them, the most lifelike sound will be achieved by providing a balance of direct and reflected sound. Figure 1 shows some typical installations, and suggested positions.

C. In average-sized listening rooms, the best stereophonic effects result when the left and right cube speaker arrays are spaced 6 to 12 feet apart (approximately 1.8-3.6 m). However, you can still achieve excellent results with separation as little as 3 feet (approximately 1 m) or as great as 15 feet (approximately 4.5 m). Note that when you are using a balance of reflected and direct sound, the switch on the back of the lower cube of each array should be set to the "Reflected" position.

Note: For video applications, separation can be less than 3 feet. While this may slightly reduce performance, it will allow the cube speaker arrays to be located on each side of a TV or



The Bose AM-5 Acoustimass system.

monitor. For more information on video applications, see Part F of this section.

- D. You can also use the cube speaker arrays in direct mode (with both cubes facing forward). While this eliminates the benefits of combining direct and reflected sound, it may be appropriate for very small listening areas (like desks or cubicles). When used in this mode, the switch on the back of each array should be set to the "Direct" position.
- E. The Acoustimass™ module can be located virtually anywhere in your listening room (Figure 2) in either a vertical or horizontal position. Its unique Acoustimass™ speaker technology delivers room-filling bass from almost anywhere. Feel free to hide the Acoustimass module under a bed or table, or even behind a sofa. Just remember not to block the two round openings in the end of the unit. You should allow at least 2 inches (approximately 5 cm) of open space between these openings and the wall or other surface.

Unlike conventional floorstanding or bookshelf speakers, you can fine-tune the bass response of your AM-5 system without compromising accurate stereo imaging. Just change the location of the Acoustimass™ module within your listening room. For typical listening environments, positioning the module along a wall 3 to 5 feet (approximately 1 to 1.5 meters) from a corner provides a normal balance of frequencies from your AM-5 system. Moving the module closer to the walls and/or corners of your room will increase bass response, while moving it towards the center of your room will decrease it. In most rooms, it should be reasonably easy to choose a location which is convenient, yet provides pleasing bass response.

F. The cube speaker arrays of your AM-5 system are magnetically shielded for use with video systems. This allows you to position the cube speaker arrays close to your TV or monitor without adversely affecting the picture quality (as happens with conventional, nonshielded speakers). In addition, angling the top half of each array in slightly will improve on-screen localization and optimize your system for video.

# Connecting the AM-5 System to Your Stereo

CAUTION: Before attempting to connect the AM-5 system, unplug your receiver or amplifier from the wall outlet.

Note: Many receivers state "use with 8-16 ohm speakers". While the AM-5 system is rated at 4 ohms by IEC standard, the speaker's impedance actually averages between 6 and 9 ohms, over most of its operation range. Therefore, the AM-5 should be compatible with any quality receiver or amplifier. This includes electronics that call out "use only 8-16 ohm speakers".

- A. Locate the wires which were packed with the system. You will find four identical sets. Two sets connect the cube speaker arrays to the Acoustimass module, while the other two sets connect the Acoustimass module to your receiver or amplifier.
- B. Examine the ends of the wires. For each set, one wire will have a red marker. For each connection you make, always connect the wire with the red marker to the "+" terminal.
- Locate the terminals on the rear of the left cube speaker array. Depress the red ("+") tab, insert the lead with the red marker (Figure 3), and release the tab. The lead should be held snugly in place by the terminal. Repeat the process for the black terminal and the other lead.
- D. Locate the terminals marked "OUTPUTS TO CUBE SPEAKERS" on the rear of the Acoustimass' module (Figure 4). Connect the other end of wires from the left

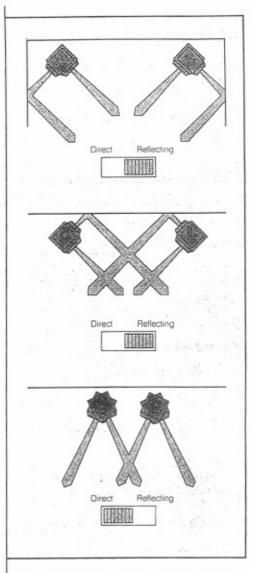


Figure 1 Adjusting the combination of reflected and direct sound (cube speaker arrays not to scale). Feel free to experiment with the setting which sounds best in your listening room. Don't forget to set the Direct/Reflecting ® switch on the rear of each bottom cube to the proper position.

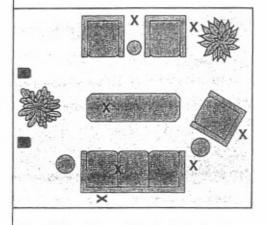


Figure 2 Some of the possible locations for the Acoustimass™ module.

- cube speaker array to the pair of terminals marked "L".

  Make sure that the lead with the red marker is connected to the "+", and the other lead to the "-" terminal.
- E. Repeat steps C and D for the right array.
- F. Locate the left channel terminals on the Acoustimass<sup>™</sup> module marked "INPUTS FROM AMP OR RECEIVER". Depress the red ("+") tab, insert the lead with the red marker, and release the tab. Repeat the process for the black terminal and the other lead.
- G. Locate the speaker outputs on your amplifier or receiver. Connect the other ends of the wire from the left channel of the Acoustimass™ module to the terminals marked "L" or "LEFT". Make sure that the lead with the red marker is connected to the "+" and the other lead is connected to the "-" terminal.
- H. Repeat Steps F and G for the right channel.
- Before you plug in your receiver or amplifier, make sure that no strands of wire from any terminal are brushing against any other terminal. Such "bridged" wires create short circuits which can damage your receiver or amplifier.
- J. Plug in your receiver, turn on your system, and enjoy your music!

#### CHECKING THE SYSTEM

Once your have begun listening to your AM-5 system, the following test will help you make sure that the system is working properly:

- A. Turn the balance control on your receiver or amplifier completely to the left. If you have connected the cube speaker arrays properly, you will hear music from the left cube speaker array, but not the right one.
- Next turn the balance control completely to the right. If your system is connected properly, you will now hear music from the right cube speaker array, but not the left one.
- C. Return the balance control to the center position. Play a selection with good, deep bass, and listen to the music. Now turn the balance control all the way to the left and listen, and then turn the balance all the way to the right and listen. If the system is connected properly, the center position should exhibit the same or greater bass response than either the left-only or right-only position. If it exhibits less, then your speakers are wired out of phase. Check to make sure that your receiver or amp is properly connected to the module.
- D. Return the balance control to the center position.

If your system does not appear to be working properly, refer to the section entitled "In Case You Have a Problem."

#### Using The AM-5 System

Once your AM-5 system is set up and connected properly, it will require very little attention. However, observing the following guidelines will help you get the most from your investment.

- A. Fusing—Your Bose® AM-5 system incorporates automatic protection circuitry, which guards against most types of electrical stress. However, any speaker can be damaged if the amplifier driving it should fail. Fusing will provide additional protection from amplifier failure, and is recommended.
  - Insert a fuseholder "inline" between the "+" terminal
    of the left input on the Acoustimass™ module and the
    "+" terminal of the left output on your receiver or
    amplifier (Figure 5).
  - 2. Repeat Step 1 for the right channel.
  - Insert fuses into the fuseholders; the fusing protection system is complete. A 2-ampere, fast-blow AGC Series or Little Fuse AG series fuse is recommended.

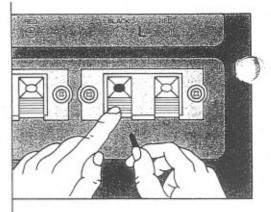


Figure 3 Properly connecting wires to a terminal.

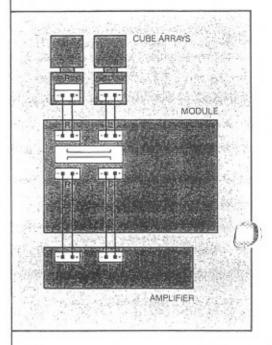


Figure 4 Connecting the components of the system to your amplifier or receiver.

Caution: Do not connect your amplifier or receiver directly to the cube array terminals. Cube array speakers must be connected directly to the Acoustimass module or damage will result. A fuse kit containing fuses and holders is available from Bose Customer Service Department, 78 Turnpike Rd., Westboro, MA 01581, for \$7.50. Ask for Part No. 108938-1 (USA only) or consult your distributor.

Room Acoustics—As with any speaker system, the acoustics (sound properties) of your listening room can affect the overall sound quality of your AM-5 system. The following tips will give you some control over the system's sound:

- Rooms with a lot of sound absorbing furnishings such as stuffed furniture, wall-to-wall carpet, or heavy drapes may reduce the treble sound (high frequencies) of your AM-5 system. The missing treble sound can be restored by slightly turning up the treble control on your amplifier or receiver. If convenient, you may instead remove some of the sound absorbing furnishings.
- Rooms with too 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.
- If your system seems to have too much or too little bass (low frequencies), you can adjust it using the bass control on your amplifier or receiver. As described previously, you may also move the Acoustimass™ module closer to a wall and/or corner to increase bass, or closer to the center of the room to decrease it.
- 4. In general, many problems with acoustics can be solved by the judicious use of your tone controls. Remember, though, that the use of these controls (especially when turned all the way up) may put greater power demands on your receiver or amplifier. Excessive tone control use can cause an amplifier or receiver to run out of power and distort, potentially damaging your system.
- External signal processors (such as graphic and parametric equalizers), while not recommended, can be used with your AM-5 system if a greater degree of acoustic control is desired. Consult your Bose dealer for advice.
- C. Maintenance—The cabinets of your AM-5 system can be easily cleaned with a damp cloth and, if necessary, a mild detergent such as dish soap. Do not allow liquids to spill through the grille assemblies of the cube speaker arrays, or in any way to enter the Acoustimass™ module. Do not attempt to clean your AM-5 system with any solvents or chemicals.

The grille assemblies on the cube speaker arrays may be carefully vacuumed if necessary. Please note that the drivers are located directly behind the grille cloth, and are easily damaged if reasonable care is not taken. Avoid applying any pressure with the vacuum nozzle.

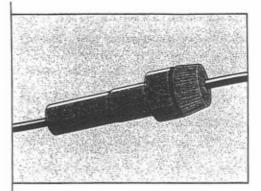


Figure 5 When fusing your speakers, insert the fuseholder between the "+" terminals of the Acoustimass™ module and the "+" speaker terminals of your amplifier or receiver.

# In Case You Have a Problem If you have a problem connecting and using your AM-5 " system, try the procedures listed below. The majority of problems usually occur in components other than the speakers. Problem: The left cube speaker array doesn't play or sounds distorted. The right cube speaker array doesn't play or sounds distorted. The whole AM-5 system does not play or sounds distorted. If trouble persists in your AM-5 system, 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. Technical Information Features Direct/Reflecting® speaker design Acoustimass™ speaker system Direct/Reflecting® frequency compensation switch Syncom®II computerized quality control

Solution:

connects the cube speaker array to the Acoustimass110 module, and the wiring which connects the module to the amplifier or receiver. If no visible problem is found, disconnect the wires at the back of the amplifier or receiver. Now connect the left wires to the right amplifier terminals. Turn the balance control on the receiver or amplifier completely to the right, and turn the power on. If the left cube speaker array now works properly, the left channel of your amplifier or receiver is probably defective.

Turn off the amplifier or receiver. Check the wiring which

CAUTION: Do not connect the other cube speaker array to the channel in question. If the amplifier or receiver channel is defective, damage to your AM-5 system might occur.

Use the same procedure as given for the left cube speaker array, but substitute the words "left" for "right" and "right" for "left"

Turn off the receiver or amplifier and disconnect the AM-5 system. Reconnect the AM-5 system to another receiver or

amplifier known to be working properly. If the AM-5 system now works properly, the problem is not in the AM-5 system. Note: If this is the case, you should check all user accessible fuses on your receiver or amplifier (see the appropriate owner's guide for help). If the fuses blow again, have the amplifier or receiver checked by qualified personnel.

Automatic protection circuitry

# Driver Complement

Two 6" (15.2cm) low-frequency drivers Four 2.5" (6.4cm) magnetically-shielded, wide-range drivers in cube speaker arrays

# Nominal Impedance

4 ohms Amplifier Power Requirements

#### (measured by IEC standard) Minimum: 15 watts

Maximum: 100 watts

# Finish

Cube speaker arrays: Black polymer finish

# Dimensions

Acoustimass<sup>™</sup> module: 79/16"H x 125/6"W x 203/16"D (19.2 x 32.1 x 51.3cm) Cube speaker array: 736"H x 356"W x 456"D (18.7 x 9.2 x 11.7cm)

Acoustimass™ module: Scratch-resistant black satin

33 lbs (15kg), in shipping carton

# 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

ects without charge for parts or labor, upon return of the unit ether 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
- 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:

- Call the Bose Customer Service Department at (508) 366-9896, and ask to be assigned a return authorization number.
- Pack the unit in the original carton for shipping. If you need a new carton, your dealer or Bose Corporation will provide a free replacement. 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.
- Address and ship, freight prepaid, to Bose Corporation, Customer Service Department, 78 Turnpike Rd., Westboro, MA 01581.
- 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 Bose to do so, you may elect to receive a refund or a replacement, Jonly 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 you.

### Please retain this Warranty Information.

Record your serial numbers and purchase information on this card and retain it in your records along with proof-of-purchase.

Speaker Model	
Date Purchased	
Serial Number (on Acoustimass Module)	
Dealer Name	
Dealer Address	

# Better sound through research.

Bose Corporation, The Mountain, Framingham, MA 01701-9166 USA European Headquarters—Bose DISTCO BV. Nijverheidstraat 8, 1135 GE Edam, Netherlands
Bose Australia, 11 Muriel Avenue, Rydalmere 2116 NSW Australia, Belgium, Canada, England, France, Germany, treland, Italy, Japan, Netherlands, Spain, Switzerland, United States

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