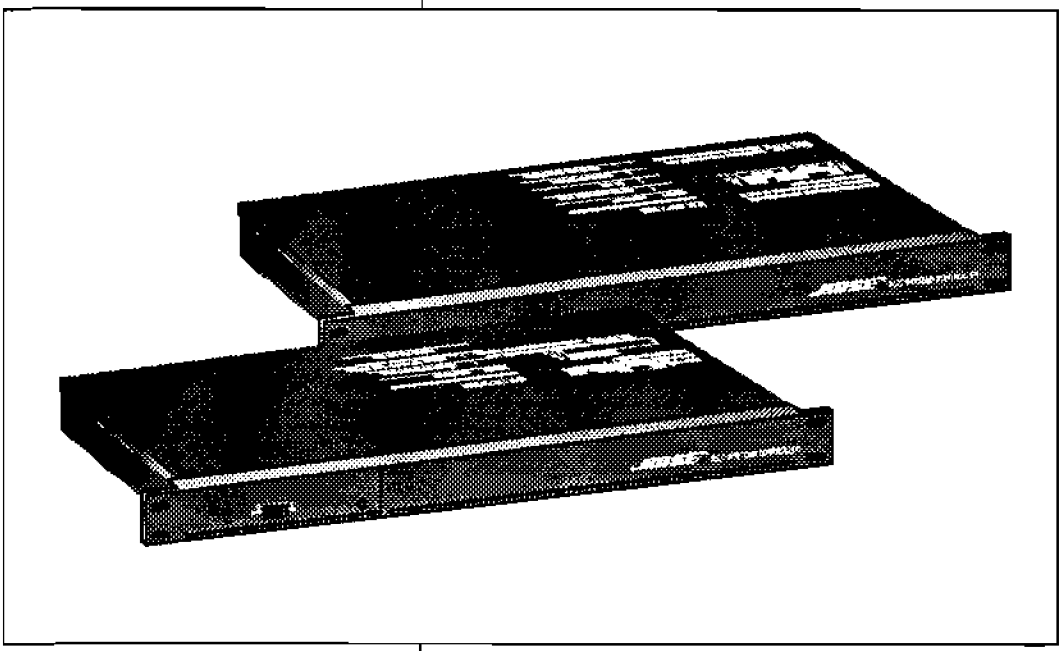
BOSE®

402™C/802®C II

SYSTEMS

CONTROLLERS



OWNER'S GUIDE

BOSE

WARNING

To reduce the risk of fire or electrical shock, do not expose this system to rain or moisture.

CAUTION

To reduce the risk of electrical shock, do not remove the cover of the 402™C or 802®C II systems controllers. There are no user-serviceable parts inside Refer servicing to qualified service personnel. The caution markings described here are located on the top cover of the 402C and 802C II systems controllers.

The lightning flash, with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the system enclosure that may be of sufficient magnitude to constitute a risk of electrical shock.

The exclamation point within an equilateral triangle, as marked on the system, is intended to alert the user to the presence of important operating and maintenance instructions in this Owner's Guide.

WARNING

The Bose® 402C and 802C II systems controllers are electrical appliances. There are no user-serviceable parts inside. As with all electrical appliances, dangerous electrical shock may result if repair is attempted by unqualified personnel Service and the installation of any optional electronics should always be performed by Bose-authorized personnel.

CAUTION

RISK OF ELECTRICAL SHOCK—DO NOT OPEN.

TO PREVENT ELECTRICAL SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE

Contents

Appendices

1.0 Before You Begin

Thank you for purchasing the Bose® 402™C or 802®C II systems controller.

In this Owner's Guide, sections two and three list safety, general descriptions, and main features for both controllers. Section four shows examples of complete systems in some typical applications. The remaining section describes basic controller hook-up. It also gives general electrical and operating instructions.

See Appendix A for how to install the Acoustic Wave® Cannon™ System II speaker option card (OC-1). It is important that the OC-1 be installed by authorized Bose personnel. Appendix B gives the electrical and mechanical specifications of the 402C and 802C II systems controllers. Appendix C gives warranty and service information.

2.0 Safety Information

Please read this safety information before you install, connect, or operate the Bose 402C or 802C II systems controllers.

2.1 Read the instructions. Read and then keep all safety and operating instructions for future reference

2.2 Follow cautions. For your safety, follow all cautions and warnings in the Owner's Guide and on the controller.

2.3 Avoid moisture. Never expose the controller to water or excessive humidity. Do not install near swimming pools, spas, or in other very humid environments.

2.4 Avoid heat. Do not use the controller near excessive heat sources. These include radiators, heat registers, flood lamps, spotlights, stoves, and other appliances

2.5 Protect cables. Always route cables to keep them from being pinched or cut by heavy or sharp objects.

2.6 Connect the ground wire. Make sure you properly connect the ground pin (if included) on the power cord of the controller. It connects to the ground of the power mains

2.7 Vent the system. Properly vent the controller if you mount it in a rack with other electronic equipment. Vent the rear of the rack to prevent excessive heat build-up.

2.8 If damage occurs. Refer servicing to qualified service personnel under the following conditions:

A. If liquid spills into the unit

B. If the unit is exposed to rain or water

C. If the unit does not operate normally, even though you have followed the instructions in this manual

D. If the unit exhibits a distinct change in performance

2.9 Check for safety. Following service or repairs, ask the service technician to perform safety checks. This includes proper connection of the ground wire from the controller to the power mains

3.0 Introducing The Controllers

Bose® 402™C and 802®C II systems controllers (Figure 1) provide the equalization and crossover electronics necessary to complete any sound reinforcement system that includes the Bose 402, 402W, 802, or 802W loudspeakers. Each controller has a Mode Switch to accommodate various full-range or bi-amplified sound system configurations

The 1U 19" rack-mount chassis of each controller contains dual-channel signal processing electronics with 18 dB/octave crossover and active equalization circuitry. These work with the 402 and 802 loudspeakers as well as in bi-amplified systems with the Panaray™ 502™B Acoustimass® bass enclosure or the 502BP portable Acoustimass bass enclosure

Both controllers have -10/+4 dB input sensitivity switches, and balanced XLR inputs and outputs They also have -18/+3 dB bass level control, plus bass Mono Sum and Mode switches.

Authorized Bose personnel can install the separate OC-1 option card in the 402C, 802C II, or 502C (Panaray) systems controllers. The OC-1 option card allows a system to be configured with the Acoustic Wave® Cannon™ System II loudspeaker as the bass rather than the 502B or 502BP enclosures

4.0 Sound System Configurations

4.1 Basic Configurations

The 402C and 802C II systems controllers offer a flexible building-block approach to sound system design Please review the sample system configurations shown in Figures 2 through 8. They can help you get started with your system design.

Note: *For bi-amplified systems using a 502B, 502BP, or Acoustic Wave® Cannon™ System II loudspeaker for bass reinforcement, you will need a channel of amplification in addition to that supplying power to the 402 or 802 loudspeakers. This can be: (A) a single mono amplifier, (B) one side of a dual-channel amplifier, or (C) a dual-channel amplifier in bridged mono mode (if the amplifier has this). Always consult the amplifier manufacturer's specifications to ensure that the output power matches that of the recommended range for the loudspeakers in the system — see Appendix B*

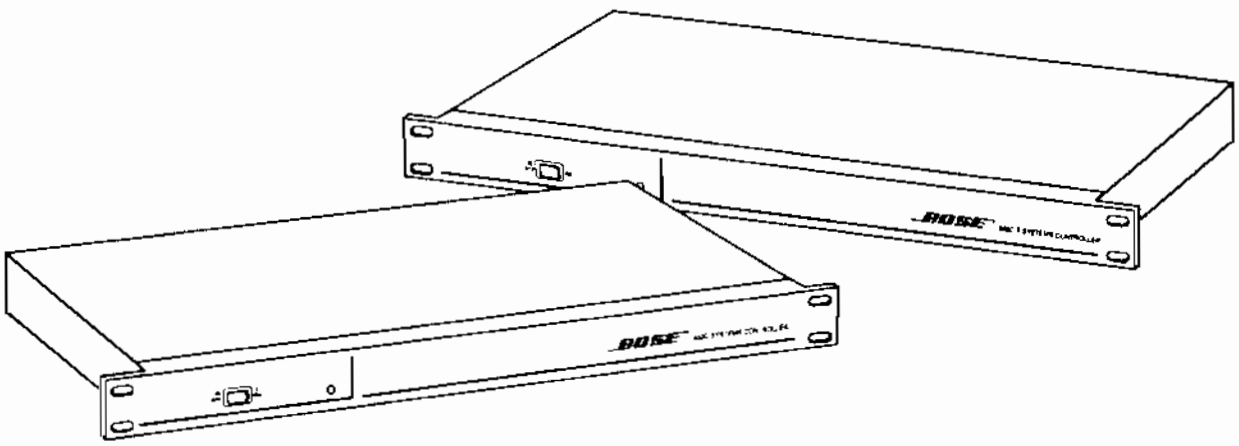


Figure 1

The 402C systems controller (left) and the 802C II systems controller

4.2 Configurations Including The Acoustic Wave® Cannon™ System II Loudspeaker

Follow these steps when you install a bi-amplified system that includes the AWCS II loudspeaker for bass.

1. Have authorized Bose® personnel install the OC-1 option card in the controller.

CAUTION: *Make sure that the installer carefully follows all instructions for the OC-1 option card. These instructions are included with both the OC-1 option card and in Appendix A of this Owner's Guide.*

2. Set the MODE switch on the controller's rear panel to OPT 4.
3. Connect the LOW FREQ OUTPUT(s) to each amplifier channel driving the AWCS II loudspeaker(s). Use only the Channel 1 (left-hand) LF output for systems with mono bass. In this configuration, the OUTPUT MODE switch should be set to SUM.
4. Each amplifier channel driving an AWCS II loudspeaker also requires a protection circuit (the protection circuit wiring harness is included with the OC-1 option card). Connect this circuit from the amplifier's loudspeaker terminals to the protection circuit input connector on the controller rear panel.

CAUTION: *Even with the protection circuit, you must make sure that the RMS power going to each AWCS II loudspeaker does not exceed its recommended amplifier range. If other amplifier channels will drive additional AWCS II loudspeakers, make sure the gain settings and loads on all amplifiers are the same.*

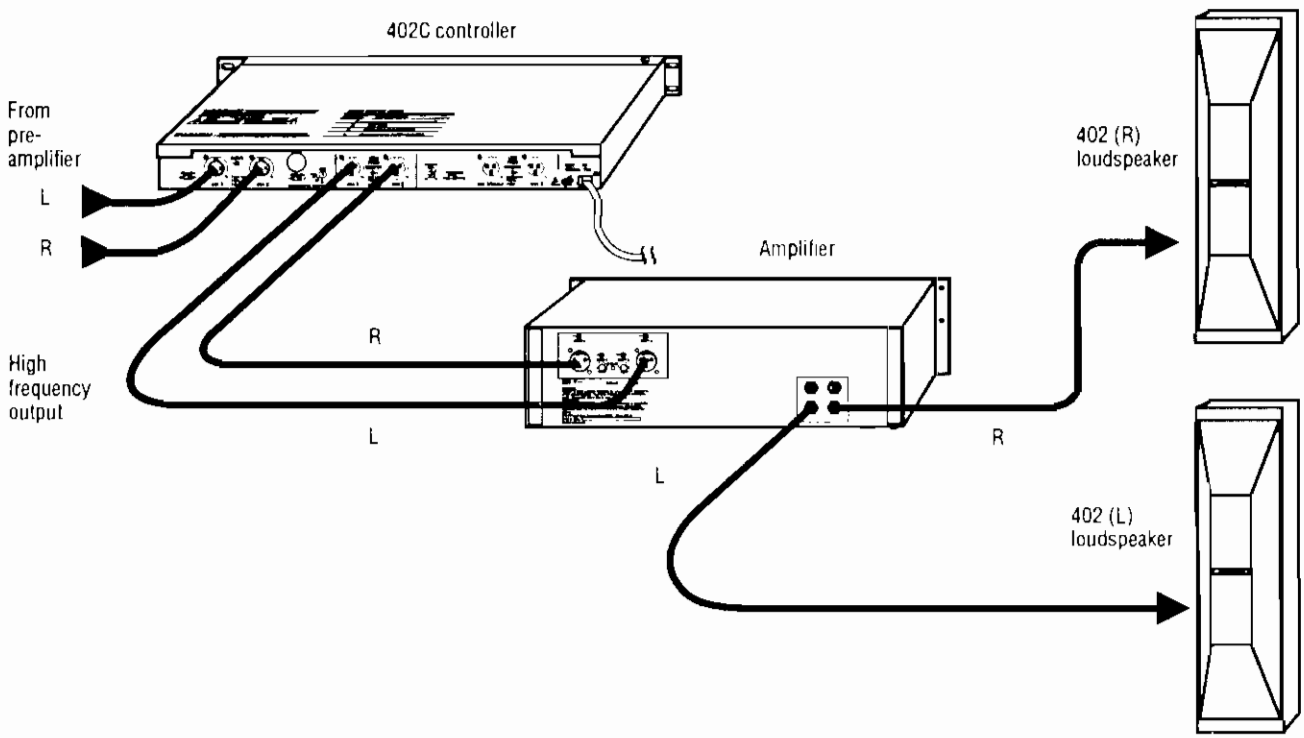


Figure 2

402™ (or 402W) full-range system.

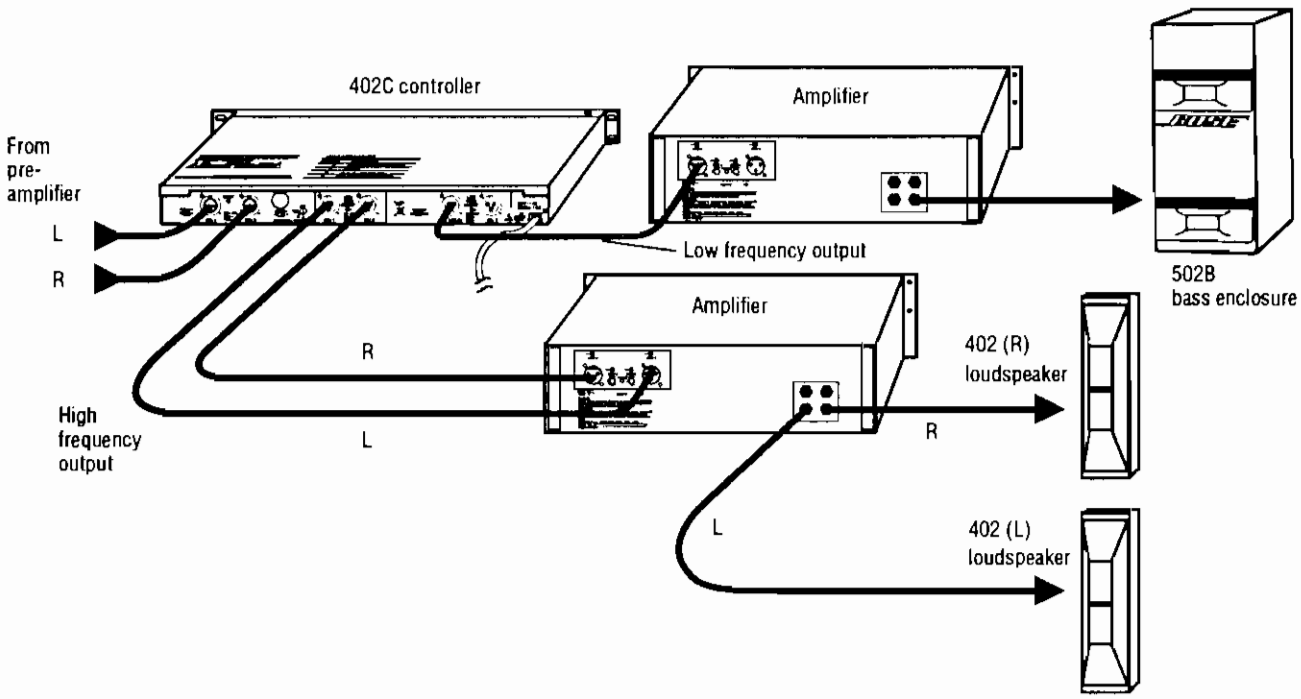


Figure 3

402™ (or 402W) bi-amplified system with 502™B (or 502BP) Acoustimass® bass enclosure.

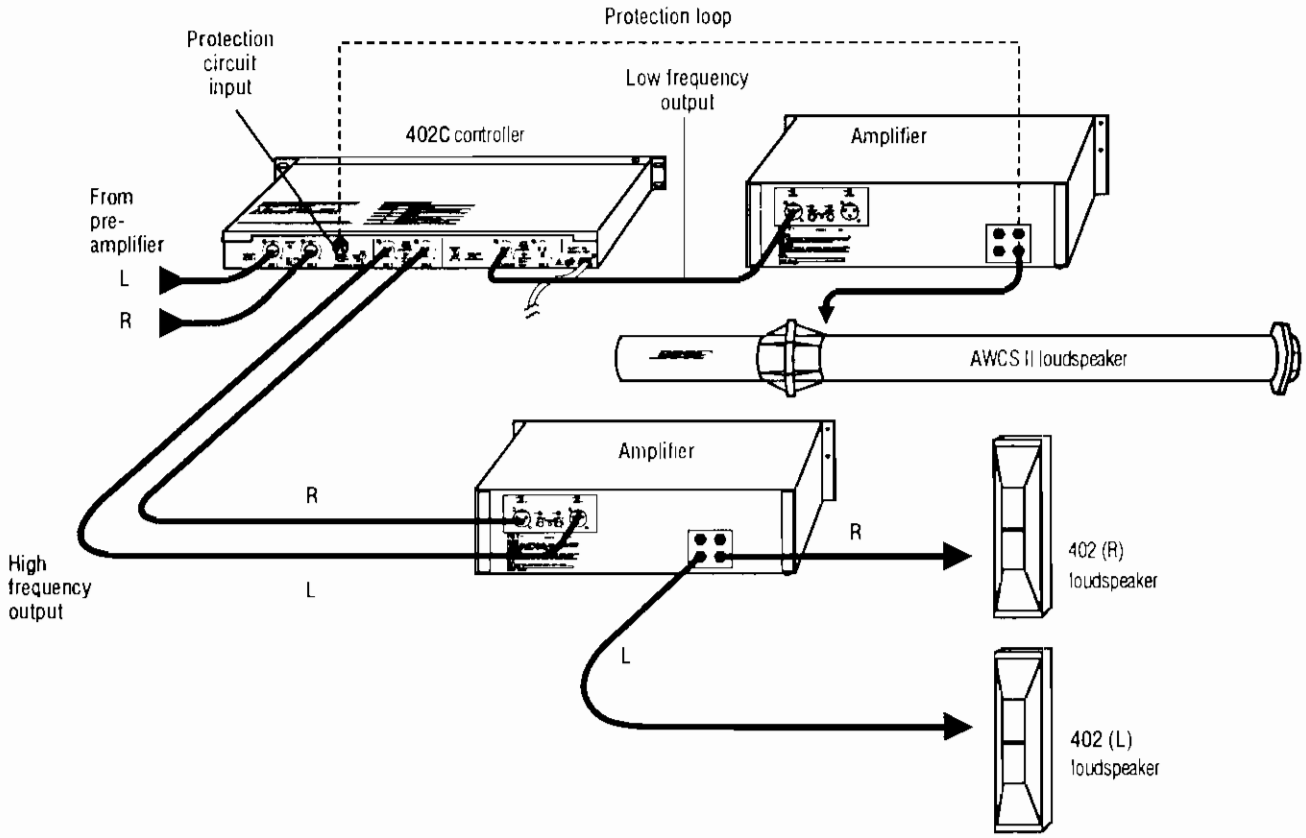


Figure 4

402 (or 402W) bi-amplified systems with Acoustic Wave® Cannon™ System II (AWCS II) loudspeaker.

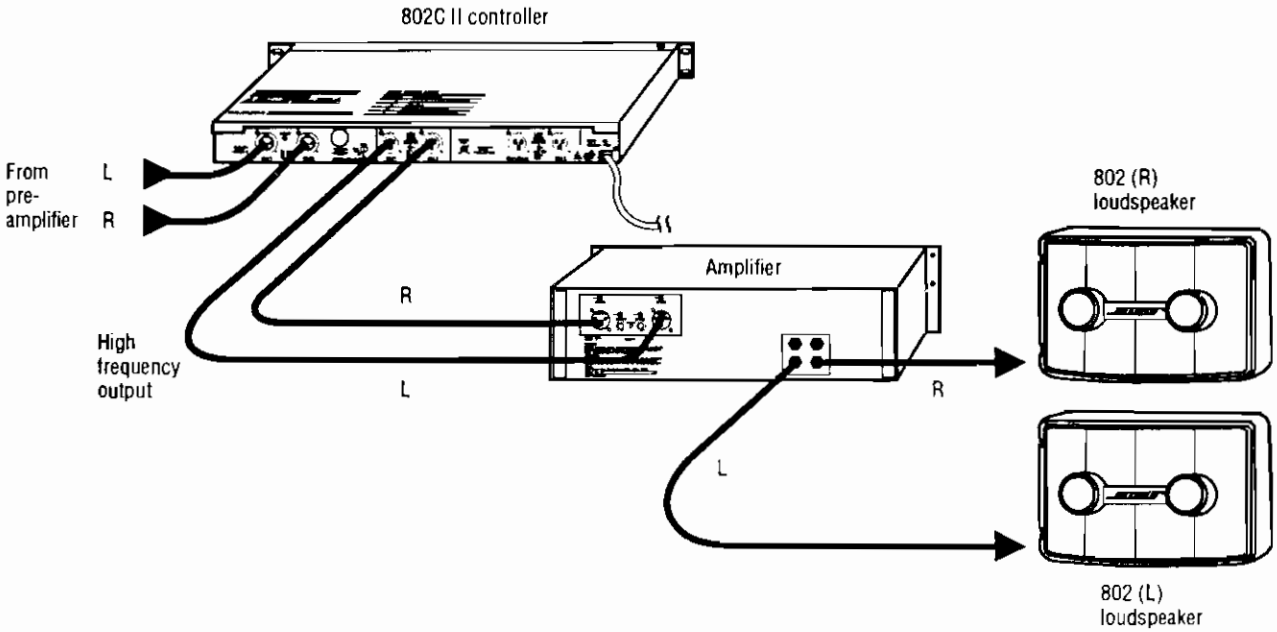


Figure 5

802® (or 802W) full-range system.

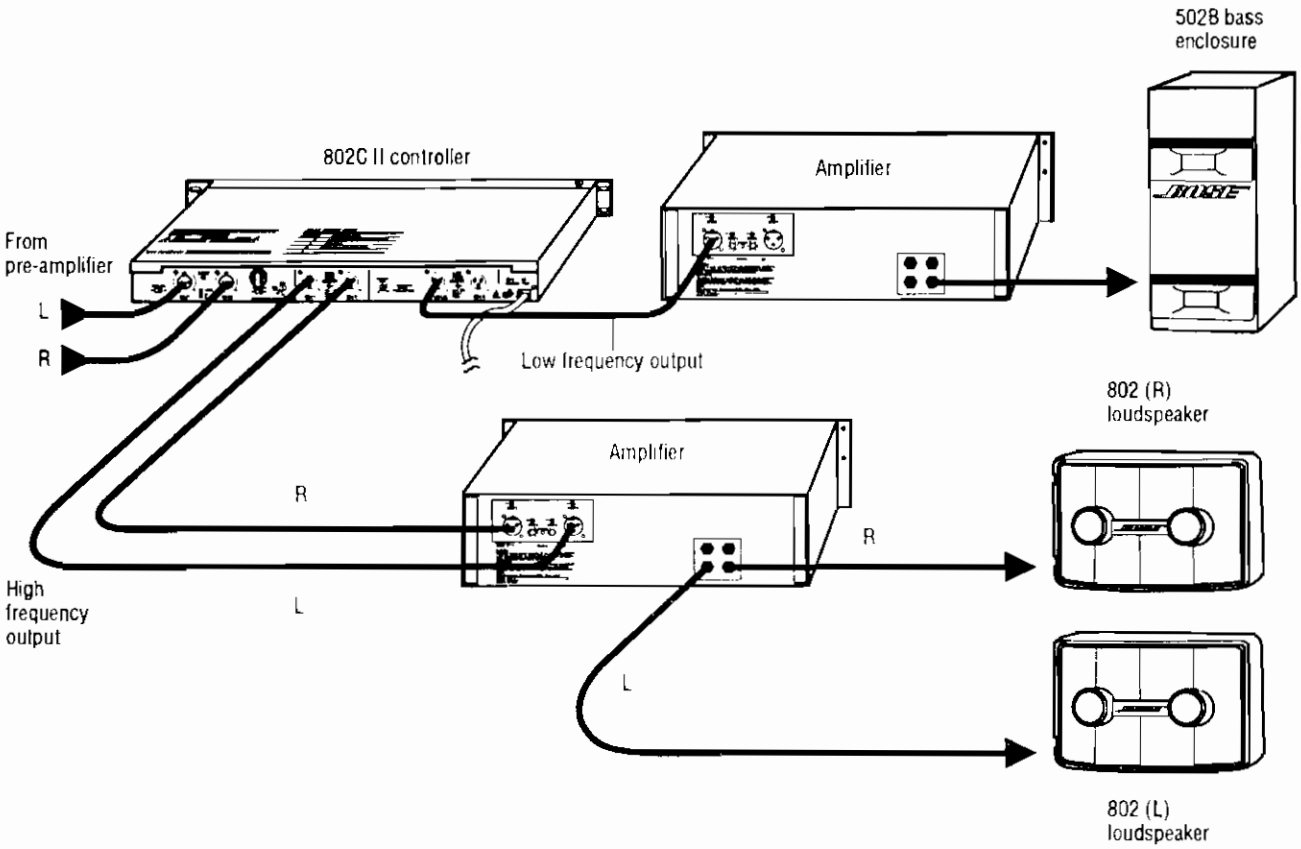


Figure 6

802 (or 802W) bi-amplified system with 502™B (or 502BP) Acoustimass® bass enclosure.

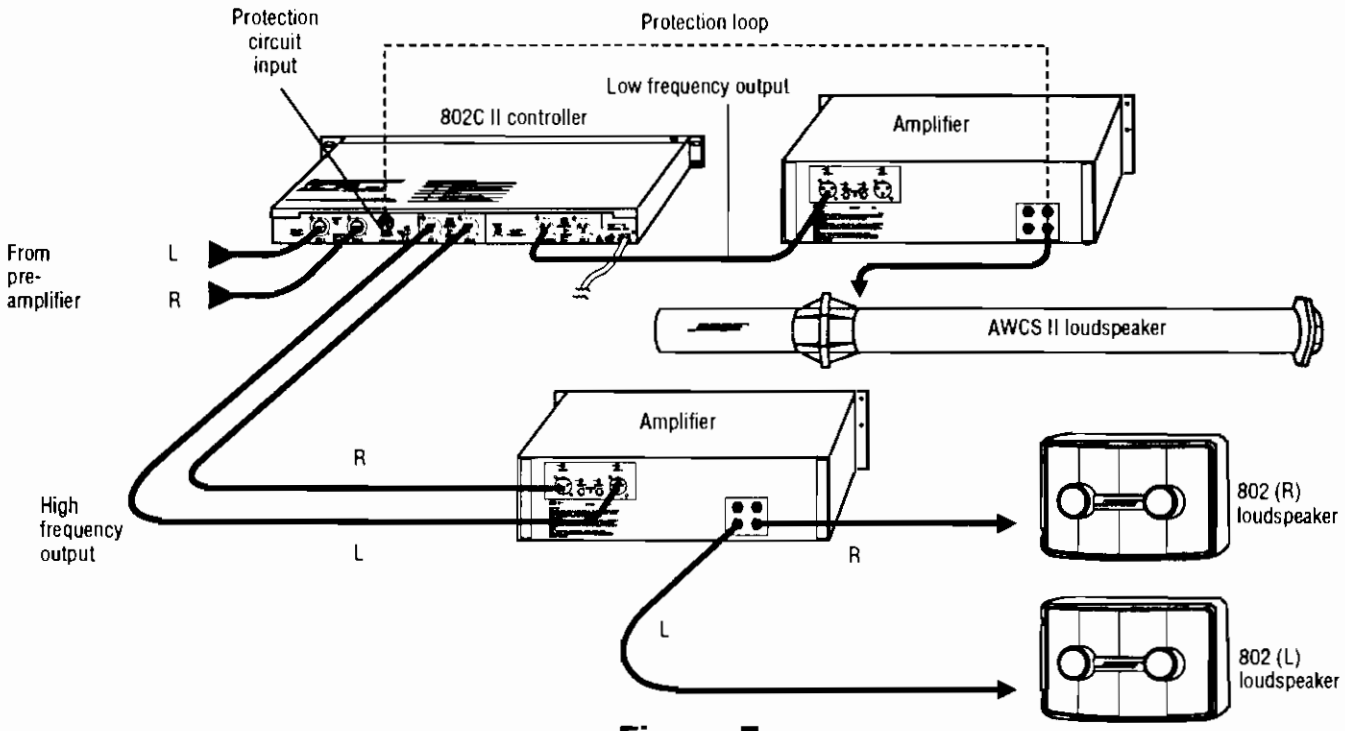


Figure 7

802® (or 802W) bi-amplified systems with the Acoustic Wave® Cannon™ System II loudspeaker.

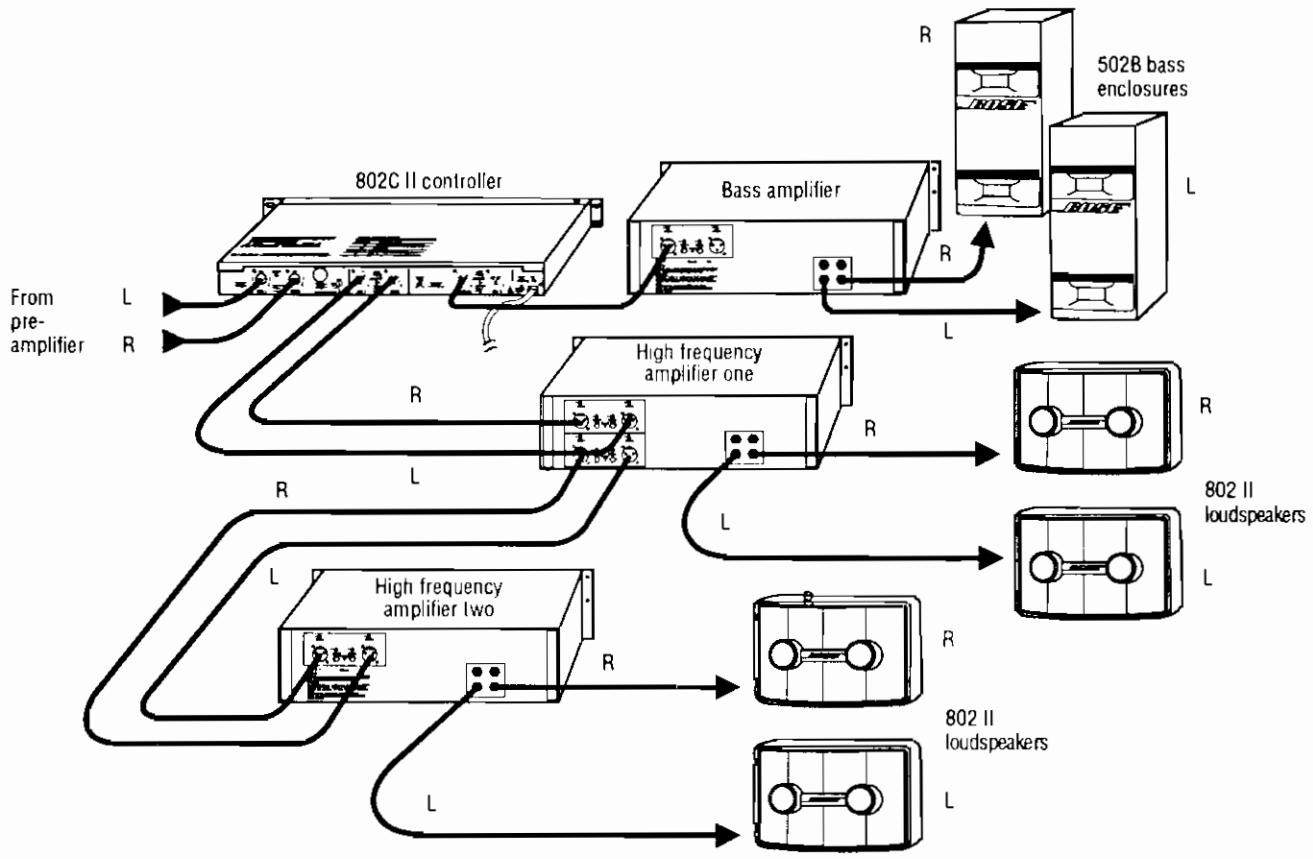


Figure 8

High-SPL bi-amplified system with four 802 (or 802W) speakers and two 502B (or 502BP) Acoustimass® bass enclosures.

5.0 General Operating Instructions

5.1 Unpacking

Unpack the systems controller carefully. Save all packing materials in case you ever want to ship the controller back to Bose® or an authorized Service Center. If any part looks damaged, do not use the controller. Repack it in its carton and notify Bose Service or your authorized Bose Professional Products dealer immediately.

5.2 Controller Parts

Figures 9 and 10 identify main parts of the 402°C and 802°C II systems controllers.

A. Front panel: 1U (1 ¾") standard height with two mounting holes on each end

B. Power switch: O/I (OFF/ON) mains switch. When it turns on, the signal mutes for one second before flowing from controller to amplifier. When it turns off, a relay circuit immediately mutes the signal for on/off pop protection.

C. Pilot LED: Lights to show power switch is on and power is supplied

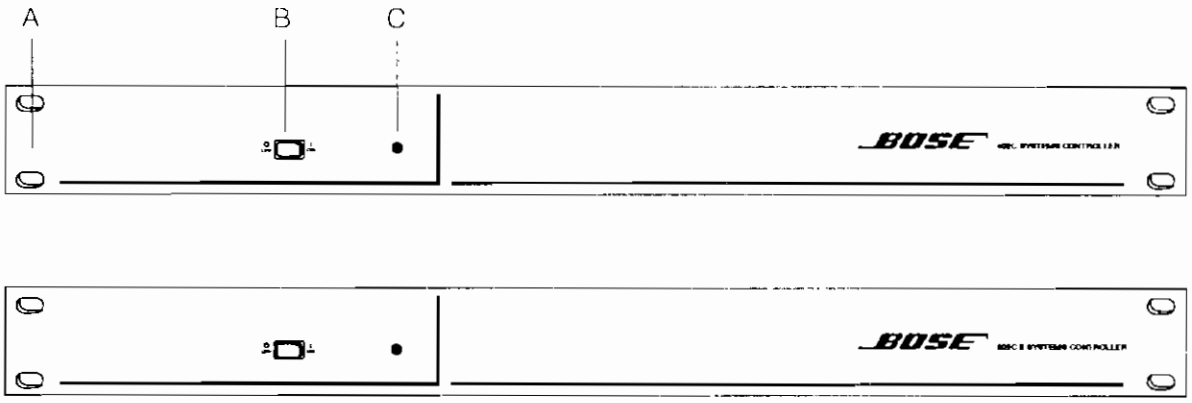


Figure 9

Front panels of the 402C and 802C II systems controllers

D. Two INPUT jacks: Two channels, balanced, 2 kΩ minimum input impedance.

E. Two INPUT LEVEL switches: One for each input channel. Switches between -10 dB and +4 dB sensitivity. (For specifications see Appendix B.)

F. MODE switch: Selects one of the three controller operating modes (position 3, marked "NC" is not used).

G. Two HIGH FREQ OUTPUT jacks: Two high frequency output channels, balanced, low impedance. These supply full bandwidth signals to the amplifier(s) when the controller is in Full Range mode.

H. Two LOW FREQ OUTPUT jacks: Two low frequency channels, balanced, low impedance. Signal is available at Channel 1 LF output *only* when in Bass Mono Sum.

I. OUTPUT MODE switch: Choose the SUM setting to combine the bass portion of the signals from the two INPUT jacks (which are usually stereo left and right). The controller sends that combined signal to the first channel CH 1/SUM jack of the LOW FREQ OUTPUTs.

J. LOW FREQ LEVEL control: Adjusts the level of the signal from the LOW FREQ OUTPUT jacks. You can choose any setting between -18 dB and +3 dB.

K. AC cord jack: Connects to mains power outlet.

L. Protection circuit punch out: Works only with an Acoustic Wave® Cannon™ System II loudspeaker. This plug comes out when installing the OC-1 option card for systems that use the AWCS II loudspeaker as the bass.

M. Chassis ground lug: Use for attaching a terminal lug to the ground(s) of other equipment in the system.

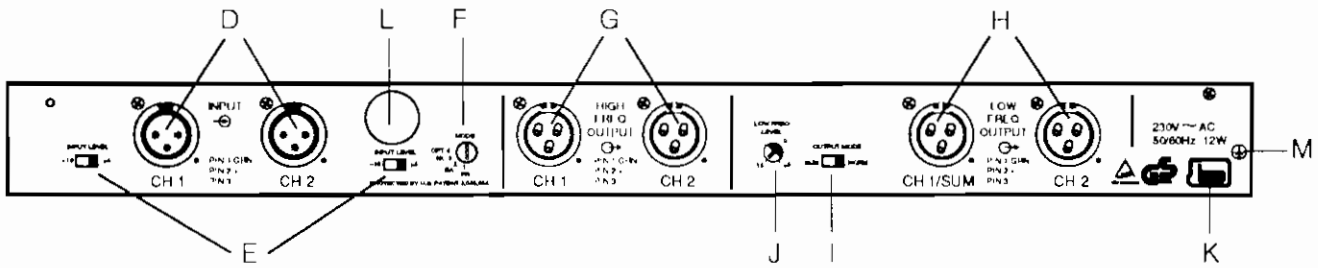


Figure 10

Rear panel of both the 402°C and 802°C II systems controllers.

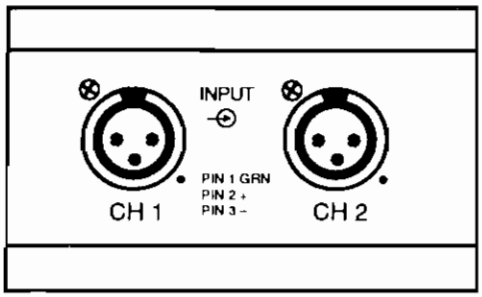


Figure 11
The two INPUT jacks.

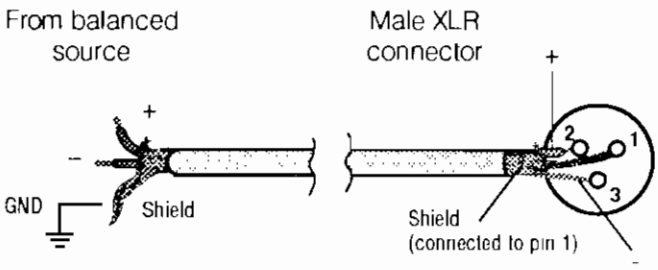


Figure 12
Connections from a balanced audio source to the systems controller.

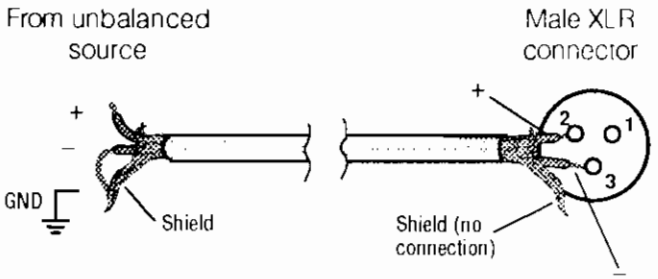


Figure 13
Connections from an unbalanced audio source to the systems controller.

5.3 Input Connections

An audio source (mixing console or signal processor) comes before the systems controller in the signal path. That audio source feeds the controller's two INPUT jacks (Figure 11).

NOTE: *The pin numbers are shown in small type on the controller's INPUT jacks.*

If the audio source has balanced outputs (see Figure 12):

1. Find the source's XLR high or plus output pins (usually pin 2). Connect them to the PIN 2 (+) terminals in the controller's INPUT jacks.
2. Find the source's XLR low or minus output pins (usually pin 3). Connect them to the PIN 3 (–) terminals on the controller's INPUT jacks.
3. Connect the source's cable shield to its ground and to PIN 1 on the controller. (Do not connect it at the controller input.)

If the audio source has unbalanced outputs (see Figure 13):

1. Connect the source's high or plus terminals to PIN 2 (+) on the controller's INPUT jacks.
2. Find the source's ground (–) output terminals (usually the sleeve on standard ¼" jacks). Connect them to the PIN 3 (–) terminals on the controller's INPUT jacks. Connect the minus cable, and *NOT* the shield, at the controller inputs.
3. Connect the source's cable shield to the ground (–) terminal at the source.

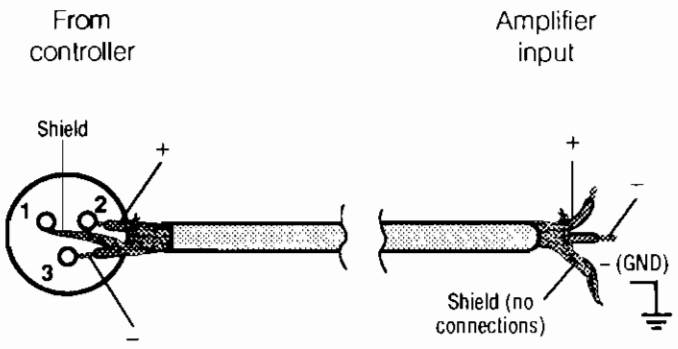


Figure 14

Connections from the systems controller to an amplifier with balanced inputs.

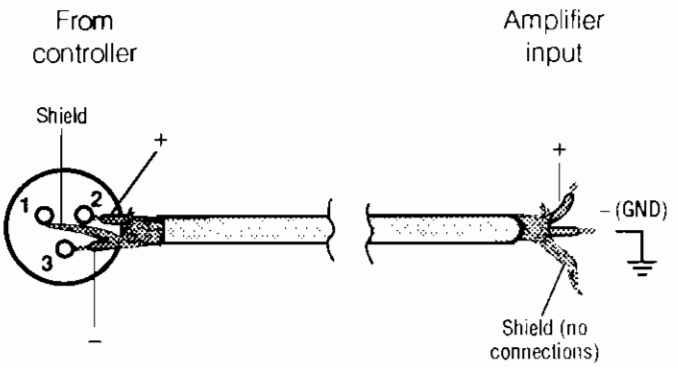


Figure 15

Connections from the systems controller to an amplifier with unbalanced inputs.

5.4 Output Connections

In a full-range system that includes only 402™ or 802® loudspeakers, use the controller's HIGH FREQ OUTPUT jacks to drive the amplifier(s) feeding the loudspeakers. Do not use the LOW FREQ OUTPUT jacks. The MODE switch should be set to Mode 1 (FR).

In a bi-amplified system, use the controller's HIGH FREQ OUTPUT jacks to drive the amplifier(s) feeding the high frequency loudspeakers (402 or 802 loudspeakers). Connect the LOW FREQ OUTPUT jacks to the amplifier(s) driving the bass. If the system has mono bass, use only the Channel 1 (left hand) LF output jack, and make sure that the OUTPUT MODE switch is set to SUM.

For best audio performance, install all mixing or signal processing equipment in front of the controller in the audio chain. The 402C or 802C II systems controller should be the last device in the audio chain before the amplifier(s).

Here is how to wire the HIGH FREQ OUTPUT and LOW FREQ OUTPUT jacks on the controller. When the OUTPUT MODE switch is set to SUM, use only the CH1/SUM (left-hand) LOW FREQ OUTPUT jack.

NOTE: *The pin numbers for each controller output are shown in small type inside the jacks.*

If the amplifier has balanced inputs (see Figure 14):

1. Connect the controller's PIN 2 (+) output terminals to the amplifier's hot, tip, or high terminals. (These are usually pin 2 on XLR-equipped amplifiers).
2. Connect the controller's PIN 3 (–) output terminals to the amplifier's low, ring, or minus terminals. (These are usually pin 3.)
3. Connect the controller's PIN 1 GND output terminals to the cable shield and to PIN 1 (XLR) or ground at the amplifier.

If the amplifier has unbalanced inputs (Figure 15):

1. Connect the controller's PIN 2 (+) output terminals to the amplifier's hot, tip, or high terminals.
2. Connect the controller's PIN 3 (–) output terminals to the amplifier's shield or ground terminals. Use one of the two cable conductors.
3. Connect the controller's PIN 1 GND output terminals to its cable shield. Do not connect at the amplifier end.

5.5 Mechanical Connections

The 402™C and 802®C II systems controllers are 1 ¾" high (1U). They fit a standard 19" rack. Use screws or bolts that fit the rack you are using. Note the maximum depth of the rack as shown in Figure 16.

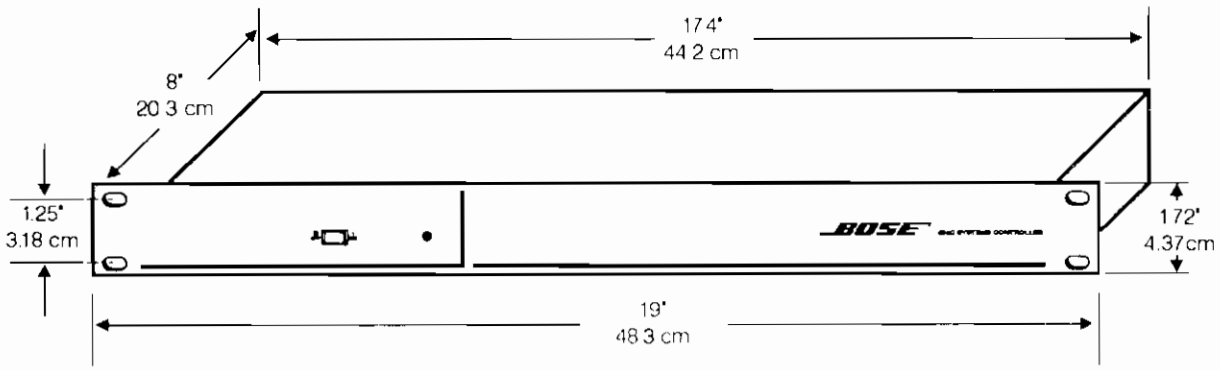


Figure 16

Make sure the rack will hold the controller.

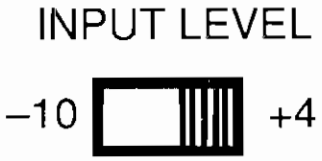


Figure 17

The INPUT LEVEL sensitivity switches.

5.6 Basic Operation

These controls are on the rear panel of the 402C or 802C II systems controllers

INPUT LEVEL

These switches for each input channel adjust the sensitivity between -10 dB and +4 dB (Figure 17). To find the nominal output level of the output device (mixer, signal processor), consult its owner's guide or call the manufacturer. Set the controller INPUT LEVEL switch to the closest number possible.

Do not to overload the inputs of the controller. Set the INPUT LEVEL switch, and adjust the output device's control(s). Keep the signal below the controller's maximum input level (+4 dBm or 1.23V RMS).

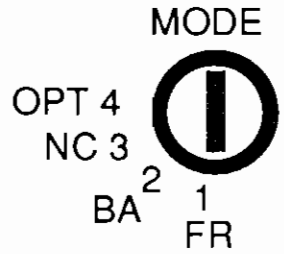


Figure 18

Input MODE switch in position 1: FR (full-range) mode.

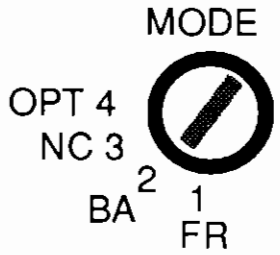


Figure 19

Input MODE switch in position 2: BA (bi-amp) mode.

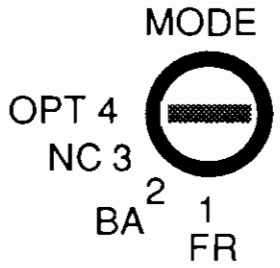


Figure 20

Input MODE switch in position 4: OPT (option) mode

Input MODE

This is a four-position switch. It selects one of three operating modes for the controller.

Position 1: Full-range (FR) mode. (See Figure 18.) Use for a full-range system with only 402™ or 802® loudspeakers. Connect only the controller's HIGH FREQ OUTPUT jacks. Do not connect any amplifiers or loudspeakers to the LOW FREQ OUTPUT jacks.

Position 2: Bi-amplified (BA) mode. (See Figure 19.) Use for a 402 or 802 system with 502™B or 502BP Acoustimass® bass enclosures. Connect the controller's HIGH FREQ OUTPUT jacks to the amplifier(s) driving the 402 or 802 loudspeakers. Connect the controller's LOW FREQ OUTPUT jacks to the amplifier(s) driving the bass enclosure.

Position 3: No connection (NC). Do not use. It is not connected in this version of the 402C or 802C II controller.

Position 4: Option (OPT) mode. (See Figure 20.) Use when the system includes an Acoustic Wave® Cannon™ System II loudspeaker. The corresponding AWCS OC-1 option card MUST be installed by authorized Bose® personnel in the controller to achieve correct performance of the system. Connect the controller's LOW FREQ OUTPUT jacks to the amplifier(s) driving the bass.

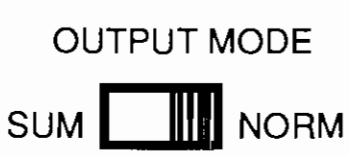


Figure 21
Low frequency OUTPUT MODE switch (for bass sum).

Figure 22
LOW FREQ LEVEL output control.

Low frequency OUTPUT MODE (bass sum)

This switch (Figure 21) is very useful in systems with only one bass loudspeaker or single-channel bass. You can use it to combine the Channel 1 and Channel 2 (or left and right) bass signals.

Even from 125 Hz to 140 Hz, some musical program material contains differences between the channels. With the OUTPUT MODE set on SUM, the signal sent to the bass amplifier is the "sum" of the signals received by the controller.

Simply set the OUTPUT MODE switch to SUM. Connect the left-hand LOW FREQ OUTPUT jack (CH 1/SUM) to the bass amplifier.

LOW FREQ LEVEL output

Set this control between 1 and 2 o'clock (marked "0" dB), to nominally balance a two-loudspeaker, one-bass system with amplifiers of identical gain on the speakers and bass. (See Figure 22.)

Since some amplifiers do not have input attenuator controls, the LOW FREQ LEVEL control adjusts the relative level between the bass and mid-high bands. Rotate the control counterclockwise to 8 o'clock to decrease the level of the signal at the LOW FREQ OUTPUT jacks by -18 dB. Rotate the control clockwise from 0 dB to 4 o'clock to increase the signal at the LOW FREQ OUTPUT jacks by +3 dB.

Set this control once for initial setup and adjustment of the system. Do not use it as a program-material-dependent gain control.

Appendix A: Installing The OC-1 Option Card

Note: *The OC-1 option card can be purchased and installed ONLY through an authorized Bose® Service Center or dealer. It is not user-installable.*

A.1 Installing The Internal Protection Circuit Harness

1. Unplug the systems controller. Disconnect all audio connections. Turn it so the rear panel faces you (Figure 23).
2. Remove the four Phillips head screws from the cover (Figure 23). Set them safely aside.
3. Slide the cover toward you. Then lift it off.
4. Find the plastic plug in the controller rear panel (Figure 24). Pinch the top lock tab and push the plug partially out (Figure 24b). Release the tab and pull the plug the rest of the way out.

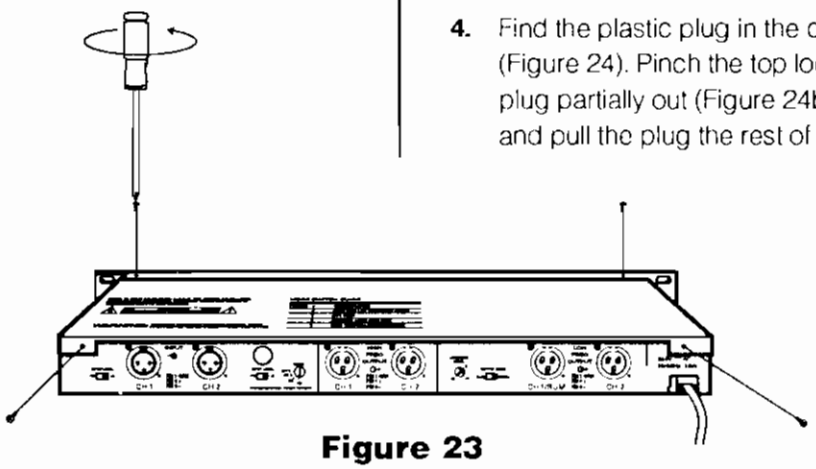


Figure 23

Remove the four Phillips head screws.

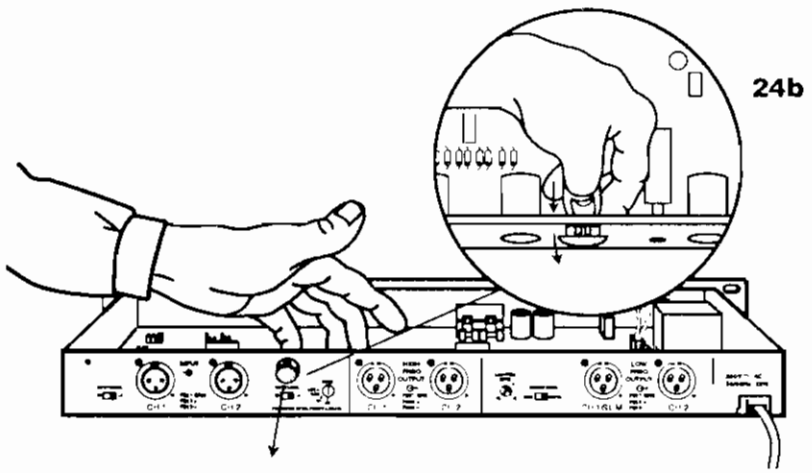


Figure 24

Remove the plastic plug covering the internal protection circuit harness opening.

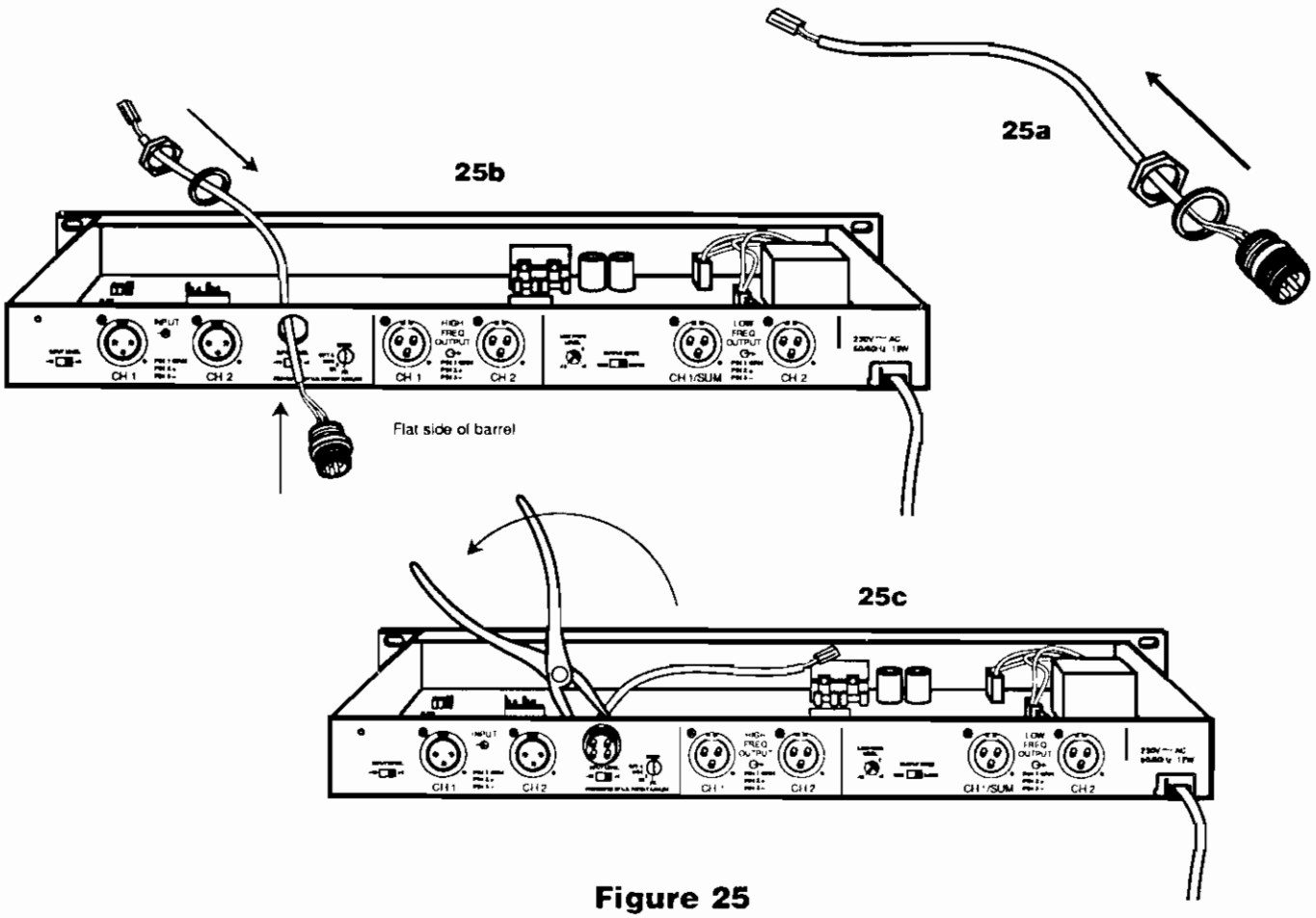


Figure 25

Positioning and securing the external harness.

5. Remove the lock nut and washer from the internal protection circuit harness (Figure 25a). Set them safely aside.
6. Thread the internal harness through the rear panel. Insert the small white connector first. The wire end of the harness should now be inside the controller.
7. Turn the barrel connector so the flat side matches the flat side of the hole on the controller. The connector should sit firmly against the outside of the rear panel (Figure 25b).
8. Replace the lock nut and washer on the internal harness INSIDE the rear panel. Tighten firmly with needle nose pliers (Figure 25c).

A.2 Connecting The OC-1 To The Systems Controller

The rear panel of the systems controller should face you. The internal harness should be inside.

1. Turn the OC-1 circuit board so the component side faces you.
2. Insert the small white connector on the internal harness into the J1 jack on the circuit board (Figure 26). Match the fin on top of the connector to the slot on top of the jack.
3. Insert the circuit board into the multipin receptacles inside the systems controller (Figure 27). The component side faces you. The J1 jack is on the left side. Press gently to seat both plugs firmly in the receptacles. Do not force.

Note: *If you install the OC-1 backwards it won't fit properly and the interior harness won't reach the jack.*

4. Replace the controller cover. Slide the lip on the front edge of the cover under the controller front panel.
5. Replace the four screws in the controller cover. Tighten firmly.

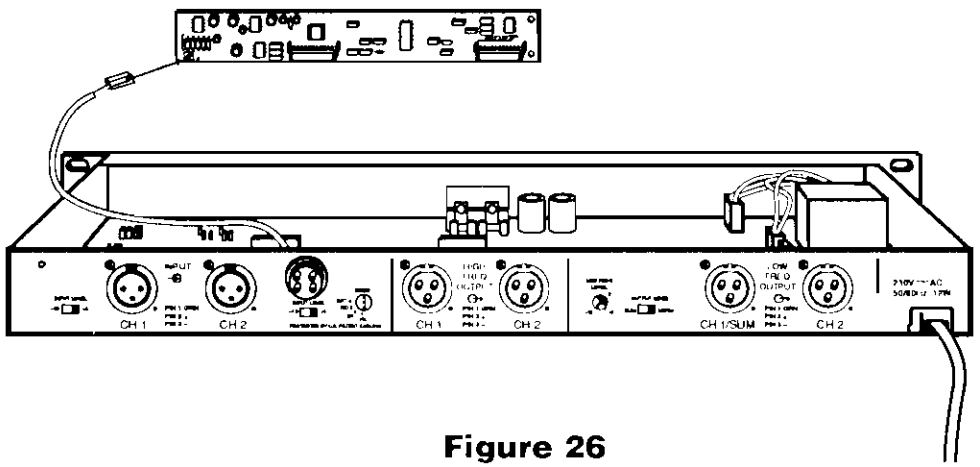


Figure 26

Connecting the OC-1 circuit board to the systems controller.

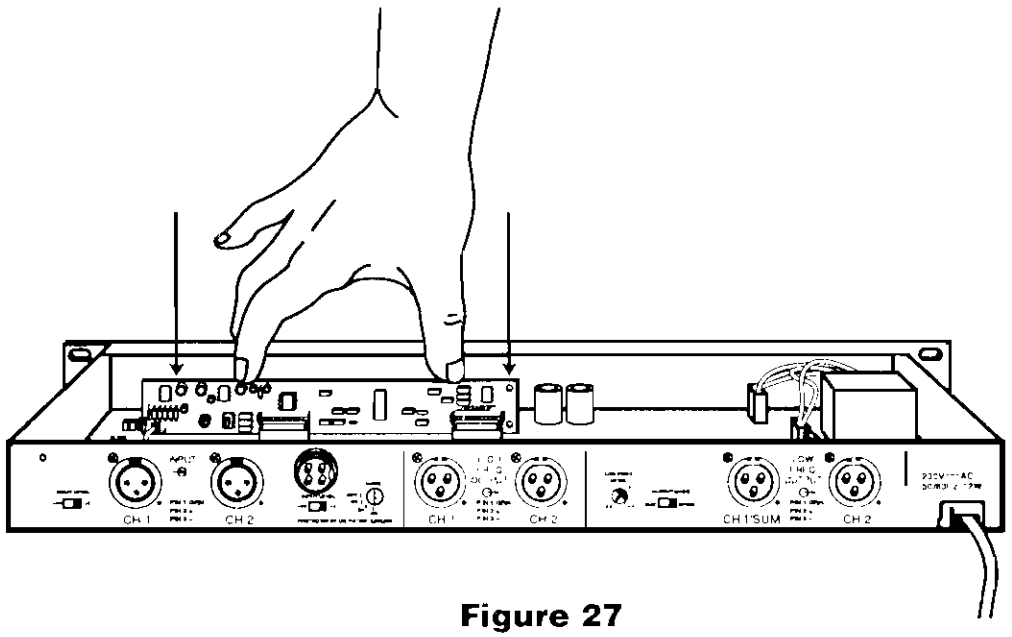


Figure 27

Seat the OC-1 plugs into the receptacles inside the systems controller.

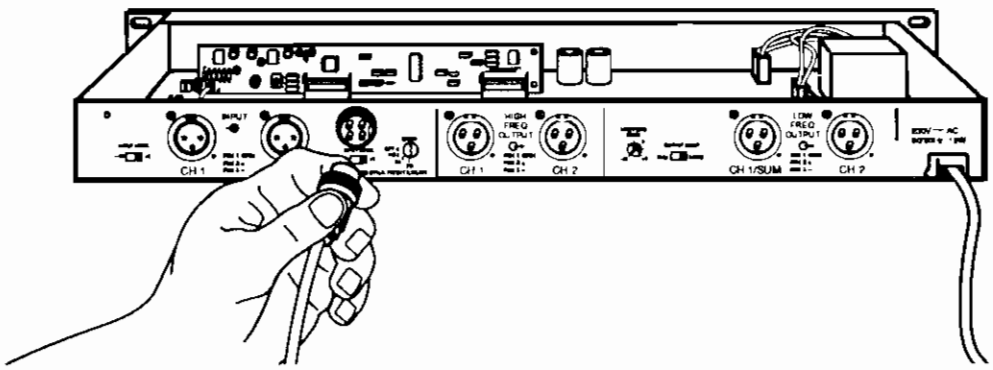
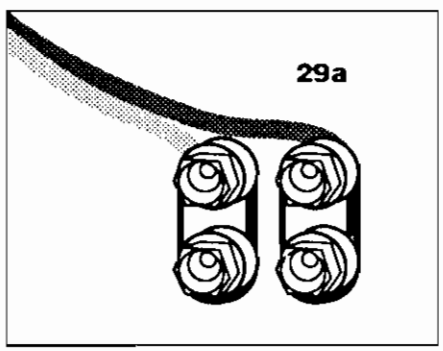


Figure 28

Attach the external harness to the internal harness connector on rear of controller.



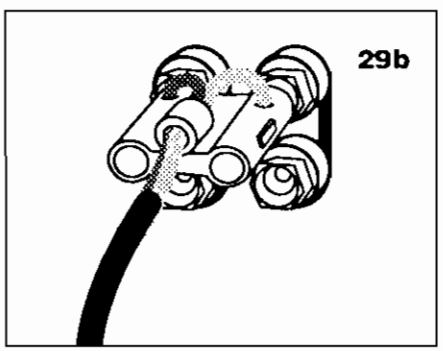


Figure 29

Connection of the external harness to speaker terminals (amplifier in bridged mono mode).

A.3 Installing The Systems Controller And External Protection Circuit Harness

1. Install the systems controller in its rack. Refer to Section 5 for AC and audio connections.
2. Make sure power to the entire system is off.
3. Check the length of the external protection circuit harness. It should reach from the systems controller to the speaker terminals on the amplifier powering the AWCS II loudspeaker. Allow at least 6" slack. If necessary, trim the cable to length. If the cable is too short, connect additional cable. Use well-insulated in-line crimp on cable splices.

   Note: *Bose® recommends attaching the external harness to a banana plug, if possible. Or, strip and twist the wires for insertion into the speaker terminal lug holes.*
4. Attach the external harness to the internal harness connector on the rear of the controller (Figure 28). Turn the notch on the harness to the right to attach it to the connector.
5. Hand tighten the lock nut on the external harness.
6. Connect the other end of the harness to the speaker terminals with screw lugs (Figure 29a) or a banana plug (Figure 29b). Connect the red wire to the positive terminal. Connect the black wire to the negative terminal. (Note that these illustrations show typical amplifier speaker terminals for bridged mono mode.)

Appendix B: Specifications

B.1 Electrical Specifications And Controls

- Number of audio channels: two
- Front panel controls: on/off, pilot LED
- Operating modes for 802®C II controller: full-range, bi-amped, option (with OC-1 option card)
- Operating modes for 402™C controller: full-range, bi-amped, option (with OC-1 option card)
- Rear panel connectors:
  - Balanced input x 2 (terminal strip or XLR)
  - Balanced high frequency output x 2 (terminal strip or XLR)
  - Balanced low frequency output x 2 (terminal strip or XLR)
- Rear panel controls:
  - Mode switch (four positions, three used)
  - Input Sensitivity switch x 2 (-10 dB, +4 dB positions, +4 dB = 1.23V = 0 VU)
  - Bass Level control (range -18 dB to + 3 dB)
  - Bass Mode switch (norm/sum)
- Crossover frequency: 140 Hz in bi-amp mode (with 502™B or 502BP bass enclosures); 125 Hz (with AWCS II loudspeaker OC-1 option card installed); rolloff slope: 18 dB/octave
- Channel-to-channel separation: > 60 dB @ 1 kHz
- Input impedance: 2.0 kΩ nominal (+4 dB input), 10 kΩ nominal (-10 dB input)
- Output impedance: 100Ω nominal
- Output capability: 7.0 v RMS maximum into 10 kΩ
- Noise: <40 µV, A-weighted
- THD: < 0.05% maximum
- Power requirements:

  100 VAC, 50/60Hz, 12 Watts (Japan)

  120 VAC, 50/60Hz, 12 Watts (USA/Canada)

  230 VAC, 50/60Hz, 12 Watts (Europe)

  240 VAC, 50/60Hz, 12 Watts (UK/Australia)

B.2 Mechanical Specifications

- Dimensions: 1.72" (H) x 19" (W) x 8" (D); 4.37 cm (H) x 48.3 cm (W) x 20.3 cm (D)
- Weight: 5.5 lb; 2.5 kg

B.3 Controller Accessories

- OC-1 option card for the Acoustic Wave® Cannon™ System II loudspeaker

Appendix C: Warranty And Service

C.1 Warranty Period

The Bose® 402™C and 802®C II systems controllers are covered by a transferable two-year limited warranty. Read the warranty card for more information.

C.2 Service

If you have problems with your 402C or 802C II controller, contact your authorized Bose Professional Products dealer. The dealer will verify any defects and arrange for service.

An owner's registration card is provided with this manual. Please return it to Bose Corporation within ten days of your purchase.

C.3 Contacting Bose Corporation

To obtain information or service directly from Bose:

USA
1-800-444-BOSE (1-800-444-2673) 8:30 a.m. to 9 p.m. ET

Canada
1-800-444-BOSE (1-800-444-2673) 9 a.m. to 5 p.m. ET

European Office
Bose B.V., Nijverheidstraat 8,
1135 GE Edam, The Netherlands
TEL 02993-71055 FAX 02993-68163

Australia
Bose Australia, Inc.,11 Muriel Avenue,
Rydalmere, N.S.W. 2116
TEL 02 684-1022 FAX 02 684-1665

Belgium
Bose N.V., Essenestraat 15,1740 Ternat
TEL 02-5826200 FAX 02-5823717

Denmark
Bose A/S, Industrivej 7, 2605 Brøndby
TEL 43437777 FAX 43437818

France
Bose S/A, 6, rue Saint Vincent,
78100 Saint Germain en Laye
TEL 01-30610461 FAX 01-30614105

Germany
Bose GmbH, Max-Planck-Straße 36,
Postfach 1125, 61381 Friedrichsdorf
TEL 06172-71040 FAX 06172-710419

Holland
Bose B.V., Nijverheidstraat 8,1135 GE Edam
TEL 02993-66661 FAX 02993-68166

Ireland
Bose Ltd., Castleblayney Road,
Carrickmacross, Co Monaghan
TEL 042-61988 FAX 042-61998

Italy
Bose S.p.A., Via Luigi Capucci 12, 00147 Rome
TEL 06-5127641/2 FAX 06-5115438

Norway
Bose A/S, Sundkroken 9H, 2008 Fjerdingby
TEL 63-838703 FAX 63-838704

Spain
Bose Products B.V., Avda. Aragón 334, 28022 Madrid
TEL 91-3290210 FAX 91-7472080

Switzerland
Bose A.G., Rünenbergerstrasse 13A,
4460 Gelterkinden
TEL 061-995544 FAX 061-995502

Sweden
Bose A/S, Blandsädsgatan 2D, 43146 Mölndal
TEL 031-878850 FAX 031-274891

United Kingdom
Bose U.K. Ltd., Trinity Trading Estate,
Sittingbourne, Kent ME10 2PD
TEL 0795-475341/5 FAX 0795-427227

Other Locations
Bose Service, Otis Street Park, Building 3, PO Box
5045, Westborough, MA 01581-5045 USA
TEL (508) 366-9896 FAX (508) 366-8443

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The Mountain, Framingham, MA 01701-9168 USA

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