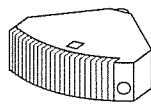# Thanks for choosing the SoundEffects **Power50** amplifier

for your home. SoundEffects products are designed to fit the way you live. Combine them any way you like to achieve the sound effects you envision. This guide will help you get started.

One Power50 amplifier

First.

Check the contents to see that everything that should be in the box is in the box.
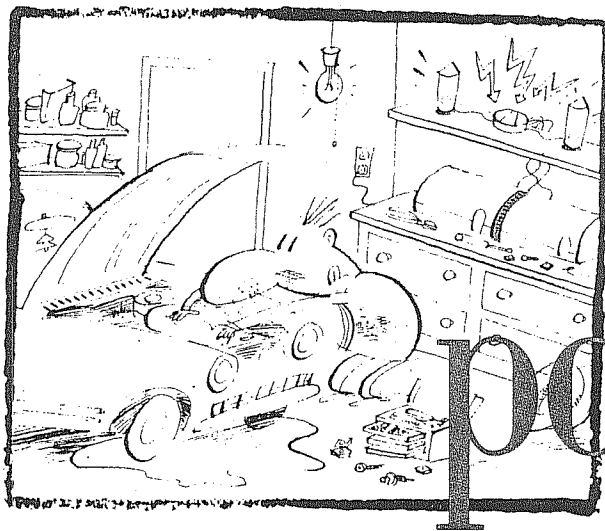
For specific questions not answered here, refer to guides accompanying related SoundEffects products, contact your JBL SoundEffects dealer or, in the USA call us at 800-336-4JBL.

One Power50 amplifier
with AC power cord

Four adhesive-backed rubber feet

Warranty Terms (USA only)

Next.

Select application.
Review connection path.
Determine placement.

The Power50 can be used in a variety of ways with other SoundEffects products. While you may already have a specific application in mind, it's good to know that this amplifier is capable of playing other roles as your system evolves. Here are some examples of possible Power50 applications.
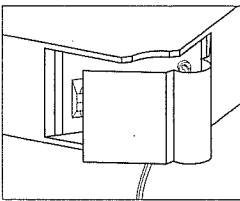
Placement options.

Refer to the guides accompanying your SoundEffects speaker products for specific placement suggestions for loudspeakers in music and movies applications. Where you position the speakers may determine where you place the Power50.
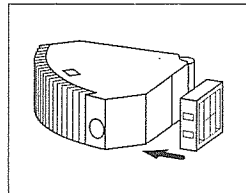
Control panel access.

A small door along the back of the Power50 provides access to all speaker and amplifier connections and conceals them once they are connected.

The fit on the door is intentionally snug to prevent vibration. To open it, slip the edge of a coin or a screwdriver in the seam nearest the volume control and lift it open.

For use with Music1 and Magic1 in a wireless satellite/subwoofer system.

The Power50 is matched to the power requirements of the SoundEffects Music1 system. Combined with the SoundEffects Magic Transmitter and Magic Receiver, sold separately as Take2 (the Magic Receiver is also sold alone as Take1), it offers a powerful wireless speaker solution.

Connection path:

• **From Magic Receiver to Power50.** Use a stereo RCA male-to-male cable (included with the Magic Receiver) to connect the "line output" terminals on the Magic Receiver to the "line input" terminals on the Power50 amplifier.

• **From Power50 to WireManager™.** Connect the attached "Amp or Receiver" wires from the Wire-Manager (included in the Music1 package) to the left and right "speaker output" terminals on the Power50. Set the amplifier to "stereo mode" (selector button "in"). Refer to your Music1 guide for specific instructions on connecting the WireManager.
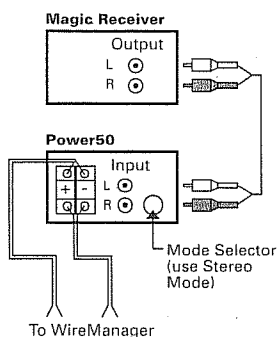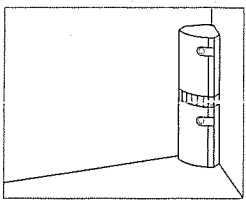
Double-sided tape is provided for you to position and attach the WireManager to the side of the Power50 once all connections have been made.

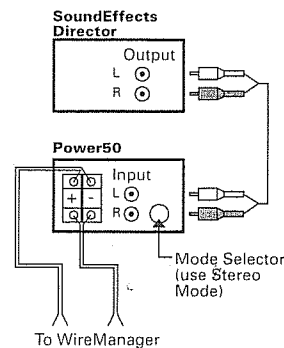**Placement recommendations:**

Between, on top of, or beneath the two subwoofers.

For use with SoundEffects Director as a stereo power source.

The SoundEffects Director Dolby® Pro Logic surround sound processor is equipped to power the center and surround speakers in a home theater system. Adding a Power50 to amplify the front left and front right speakers (the stereo channels) completes the amplification requirements for a home theater system.

Connection path:

• **From SoundEffects Director to Power50.** Use a stereo RCA male-to-male cable included with the SoundEffects Director) to connect the left and right "line output" terminals on the back of the SoundEffects Director to the corresponding left and right "line input" terminals on the Power50 amplifier.
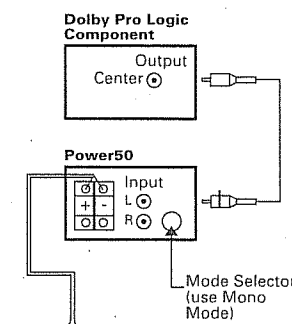
• **From Power50 to WireManager™.** Connect the attached "Amp or Receiver" wires from the WireManager (included in the Music1 and Music2 package) to the left and right "speaker output" terminals on the Power50. Set the amplifier to "stereo mode" (selector button "in"). Refer to your Music1 or Music2 guide for specific instructions on connecting the WireManager.

Double-sided tape is provided for you to position and attach the WireManager to the side of the Power50 once all connections have been made.

For powering a center channel speaker.

In some Pro Logic components the center channel signal is unpowered. In the mono mode, the Power50 can provide power to the center channel.
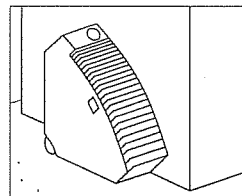
Connection path:

Use either channel to center speaker

• **From Dolby Pro Logic surround sound processor to Power50.** Use a mono RCA male-to-male cable (available from your dealer) to connect the "line output, center" terminal on the back of your Dolby Pro Logic component to either the left or right "line input" terminal on the Power50 amplifier.

• **From Power50 to the center channel speaker.** When the mono mode is selected, either or both channel inputs can be used, and the same mono signal will be present at both sets of speaker output terminals. You may use either the left or right channel outputs to drive a single mono application (such as a center channel speaker) or you may connect them both for dual mono applications.

Placement recommendations:

On top of or alongside other components. Do not cover amplifier metal ribs.
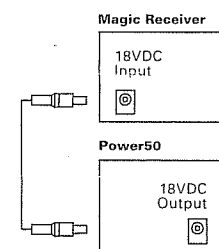
Special features.

The Power50 has several features referred to in this guide with which you should be familiar.
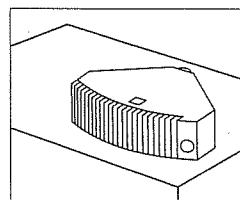
Auto-on/off.
The Power50 100 and 120 volt versions have no on/off switch. Once plugged into an active AC outlet, the amp will turn on automatically whenever it receives a signal. Its LED lights to indicate the presence of a signal and will remain illuminated for a few minutes after the signal ceases. 230 volt models include a functional power switch. To turn the unit off manually, rotate the volume control fully counter clockwise. For normal operation rotate the volume control clockwise. The bi-color LED glows red when switched off, and green during normal operation.

Stereo/mono operation. The Power50 can deliver 50 watts of power to both left and right speakers in either stereo or mono modes.

18VDC output. (North America and Japan only). The Power50 converts its AC voltage input to the DC voltage needed to power the Magic Receiver.

A DC-to-DC jumper cable included with the Magic Receiver connects to the Power50 through this terminal. Do not use this terminal for any other purpose.
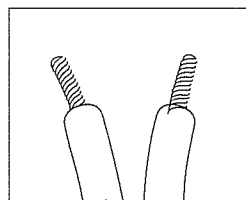

Then.

Connect your Power50 to the speakers you intend it to amplify.

Before attaching any wires always make sure that your receiver or amplifier is turned off.

Connection tips.

Speaker wire is available from your dealer or most audio, electronics or department stores.
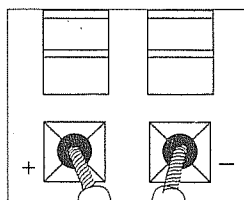
Carefully plan your wire paths. Be sure to allow plenty of extra wire to hide in corners, along baseboards, under carpet, within SoundEffects speaker stands, etc. Wait to conceal wires until after you test the system.

Cut speaker wire to length; then separate and strip the ends as shown.

Speakers and electronic terminals have corresponding (+) and (–) terminals. It is important to connect both speakers identically: (+) red speaker to (+) red amplifier and (–) black speaker to (–) black amplifier. Wiring "out of phase" results in thin sound, weak bass and poor stereo effect.
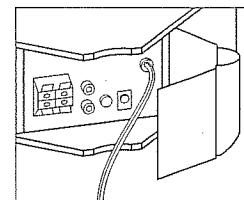
The two wires in any speaker cable are typically differentiated in one of the following ways: one wire is copper and the other silver, or one has a raised rib or a thin colored line on its insulated cover and the other doesn't. Either wire can attach to (+) or (–) as long as all components are connected identically.

Press down on the terminal button and insert one of the stripped wire ends; then release the button to secure the wire in place.
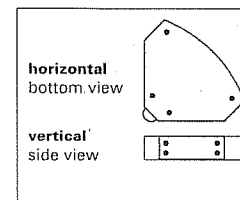
Assure that no strands from either wire cross between terminals and touch the opposite connection. The "short circuit" that results may damage components in your system.

Be careful not to insert the stripped end of the wire too far into the terminal, which may cause you to connect to insulation instead of wire.
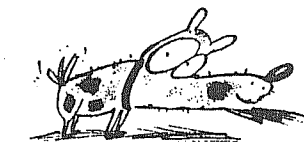

Close the small door along the back of the Power50 by pressing the door firmly along the edge of the seam.

Caution: To avoid cutting or otherwise damaging the AC power cord, be sure it is aligned with the opening provided before closing the door.
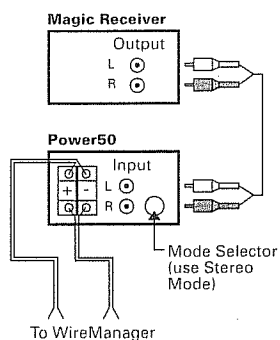
horizontal bottom view

vertical side view

Affix adhesive-backed rubber feet to the amplifier as shown when positioning the amplifier atop other components or on any hard surface.

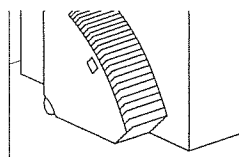*wireless speaker solution.*

Connection path:

Magic Receiver
Output
L ⊙
R ⊙

Power50
Input
L ⊙
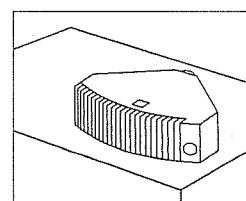R ⊙

Mode Selector
(use Stereo Mode)

To WireManager

terminals on the Power50. Set the amplifier to "stereo mode" (selector button "in"). Refer to your Music1 or Music2 guide for specific instructions on connecting the WireManager.

Double-sided tape is provided for you to position and attach the WireManager to the side of the Power50 once all connections have been made.

On top of or alongside other components. Do not cover amplifier metal ribs.
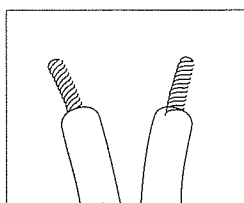
other purpose.

Then.

Connect your Power50 to the speakers you intend it to amplify.

Before attaching any wires always make sure that your receiver or amplifier is turned off.

Connection tips.

Speaker wire is available from your dealer or most audio, electronics or department stores.
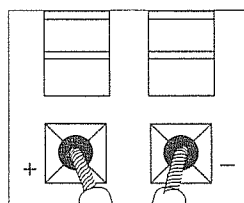
Carefully plan your wire paths. Be sure to allow plenty of extra wire to hide in corners, along baseboards, under carpet, within SoundEffects speaker stands, etc. Wait to conceal wires until after you test the system.

Cut speaker wire to length; then separate and strip the ends as shown.

Speakers and electronic terminals have corresponding (+) and (–) terminals. It is important to connect both speakers identically: (+) red speaker to (+) red amplifier and (–) black speaker to (-) black amplifier. Wiring "out of phase" results in thin sound, weak bass and poor stereo effect.
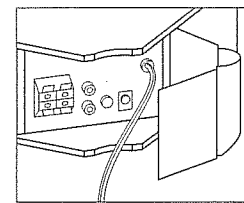
The two wires in any speaker cable are typically differentiated in one of the following ways: one wire is copper and the other silver, or one has a raised rib or a thin colored line on its insulated cover and the other doesn't. Either wire can attach to (+) or (–) as long as all components are connected identically.

Press down on the terminal button and insert one of the stripped wire ends; then release the button to secure the wire in place.
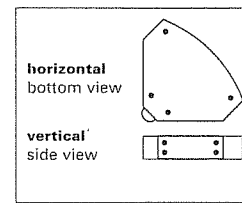
Assure that no strands from either wire cross between terminals and touch the opposite connection. The "short circuit" that results may damage components in your system.

Be careful not to insert the stripped end of the wire too far into the terminal, which may cause you to connect to insulation instead of wire.

Close the small door along the back of the Power50 by pressing the door firmly along the edge of the seam.

Caution: To avoid cutting or otherwise damaging the AC power cord, be sure it is aligned with the opening provided before closing the door.

horizontal
bottom view

vertical
side view

Affix adhesive-backed rubber feet to the amplifier as shown when positioning the amplifier atop other components or on any hard surface.

Finally.

For use in wireless music applications.

1 Connect the Power50 to the SoundEffects Magic Receiver according to the guide provided with the wireless system.

2 Confirm that you have selected "stereo mode" on the back of the Power50 (mode selector button "in").

3 Turn the Power50 volume all the way down, then plug it into a standard wall socket. If the outlet is controlled by a wall switch, make sure the switch is "on."

4 Turn on the power to the CD player (or any other stereo music source you've connected to the Magic Transmitter) and play a disc.

5 Look for the LED on the front of the Magic Receiver to light, indicating that it is receiving a signal. If you have an international model, turn on the main power switch on the back panel.

6 Look for the LED on the front of the Power50 to light as well, indicating that it has received the signal from the Magic Receiver.

7 Turn the volume up gently on the Power50 until you hear sound from the speakers.

For use with SoundEffects Director as a stereo power source.

1 Connect the Power50 to the SoundEffects Director and to a stereo speaker system as described above.

2 Confirm that you have selected "stereo mode" on the back of the Power50 (mode selector button "in").

Continue with Step 3 in the next column.

For use as a center channel power source in a home theater application.

1 Connect the Power50 to a Pro Logic component and to a center channel speaker as described above.

2 Confirm that you have selected "mono mode" on the back of the Power50 (mode selector button "out") and have wired the speaker accordingly.

3 Turn the Power50 volume all the way down, then plug it into a standard wall socket. If the outlet is controlled by a wall switch make sure the switch is "on."

4 Turn on your Dolby Pro Logic component. It will be equipped with a "test tone" mode you can use to balance the volume of all the speakers in your surround sound system. Refer to instructions accompanying your Pro Logic component for using the tone to balance speaker levels in your home theater. The Power50 will turn on automatically when it senses the test tone signal. Look for the green LED to light indicating that a signal is being received.

5 Turn up the volume control about halfway on the Power50 until you hear the test tone from your speaker(s) and adjust the volume as indicated in your Dolby Pro Logic component guide.
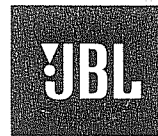
Troubleshooting.

The LED on the Power50 does not light.

• The Power50 may not be receiving power. If it is plugged into an AC outlet controlled by a wall switch, make sure that switch is "on."

• The Power50 may not be receiving a line level signal from the audio source (Magic Receiver, Dolby Pro Logic component, etc.). Check all RCA cable connections between the Power50 and the audio source. Be sure your audio source is turned "on" and is operating properly.

• The Power50 may not be receiving a signal from the Magic Receiver. Check the guide accompanying your SoundEffects Take1 or Take2 system.

• If you have an international model, be sure the main power switch on the back of the Power50 is on.

The LED on the Power50 lights but there is no sound from the speaker(s) it is powering.

• The volume control on the Power50 may be turned all the way down. Check the setting.

• One of the speaker wire connections between the Power50 and the speaker(s) may have become disconnected. Check connections.

• The Power50 Mode Selector button may be in the wrong position for the application in which you are using it and/or your speaker wire connections on the Power50 may not match the mode you've specified. Check connections.

The LED on the Power50 lights but the speaker(s) shut off as volume is increased or their sound is intermittent or distorted.

• There may be a short circuit in one of the speaker wire connections from the Power50 or the speaker(s). Check connections.

The LED on the Power50 lights but there is no sound from the left speaker or no sound from the right speaker being powered by the Power50 (stereo applications only).

• The balance control on the amplifier/receiver may be turned all the way to the left or right. Check balance.

• One of the RCA connections between a stereo source and the Power50 is faulty or has become disconnected. Check connections.

• The Power50 mode selector button may be in the wrong position for the application in which you are using it and/or your speaker wire connections on the Power50 may not match the mode you've specified. Check connections.

The LED on the Power50 lights but bass is very weak or non-existent.

• The polarity (+ and –) of one speaker (its phasing) may be reversed. Check connections.

If you're still having problems, and are using the Power50 in conjunction with other SoundEffects products, be sure to refer to the guides they provide. If you're using the Power50 with products other than SoundEffects, check their guides for other things to explore.

SoundEffects products were made for each other. No matter what SoundEffects components you start with, it's easy to add on complementary products that will increase the performance and value of your home audio system. The **SoundEffects Director, Music1** and **Center** products can help you get even more value from your Power50 amplifier. For information about these and other SoundEffects products, visit your JBL SoundEffects dealer or, in the USA call 800-336-4JBL.

For more ideas about uses for these and other SoundEffects products in your home, see the SoundEffects brochure. Need an additional copy? Call JBL.

JBL

Arts AND Sciences

Specifications
Continuous power output
50 watts per channel, both
channels driven into 6 ohms
from 20 Hz to 20 kHz with
<0.1% THD
Intermodulation Distortion
<0.1%
Frequency Response
10 Hz - 30 kHz ±1dB
Signal to Noise Ratio 100 dBA
Input Sensitivity 0.15 V
Input Impedance >48
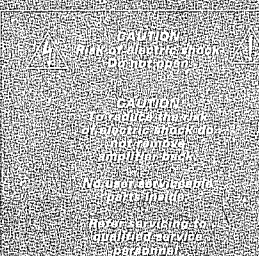kilo-ohms
Damping Factor 80 min.
Slew Rate 10 V/us

Dimensions
H x W x D
Inches 3 x 10.25 x 8.5
Millimeters 76 x 260 x 216
Weight 10 lbs. / 4.5 kg

Refinements may be made once in a while. Since our products are not necessarily subject to notice, they will always meet or exceed original specifications. Please check with your dealer.

Features
• 50W per channel through two channels
• Auto turn-on activates upon sensing input signal
• LED light confirms the power is on
• Corner shape identical to other products simplifies positioning and wiring