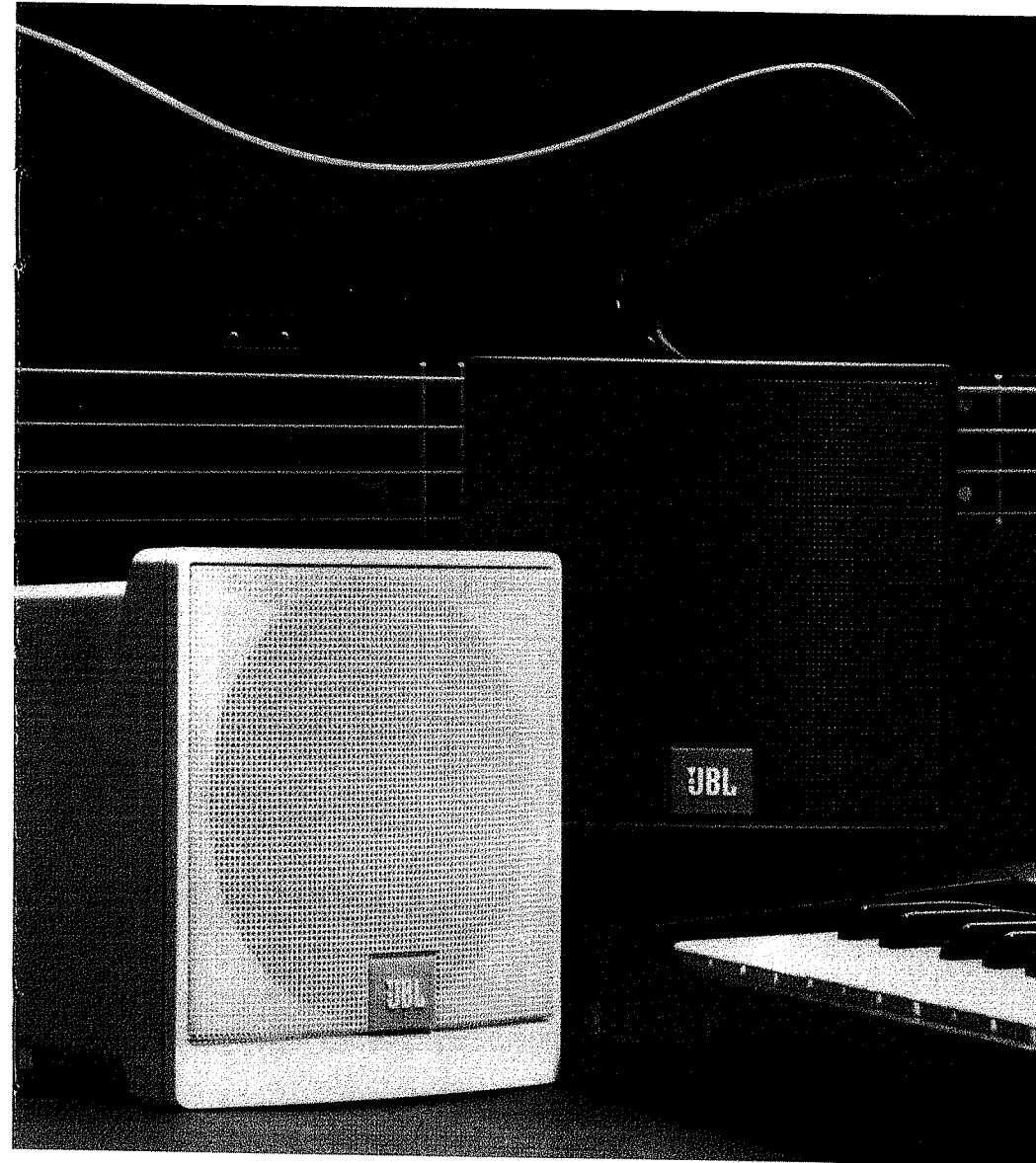


ProPerformers Plus Owner's Manual



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PROFORMERS PLUS

Thank you for purchasing the JBL ProPerformer Plus System. This combination of our popular ProPerformer Loudspeakers with a ported dual-chambered subwoofer will provide you with fuller sound in a wide variety of applications including home video and surround sound systems — or any place a compact, yet high fidelity sound source is preferred.

FIRST, THE PAPERWORK

Before proceeding, be sure to put your sales receipt in a safe place. It is necessary for proof of purchase, warranty repairs and insurance purposes. Also fill out the enclosed warranty card and mail it.

PROPER PLACEMENT LOCATIONS

How you set up your ProPerformer Plus System will have a great effect on how it sounds. Speakers work with, or are hindered by, the acoustics of a room. Their proximity to walls and corners and even how high or low they are placed on bookshelves all have marked effects on performance. One of the major advantages of using a subwoofer with a speaker system is that it allows optimum placement of the left and right speakers for proper stereo imaging. By using a properly placed subwoofer to reproduce deep bass, you have more flexibility in where you place the main speakers.

PLACEMENT FOR BEST STEREO IMAGING

In setting up your ProPerformer Plus System, you should first determine the best position for the JBL ProPerformer speakers. Try to place your ProPerformers at a 40-60 degree angle from your listening position (see Figure 1). The speakers and

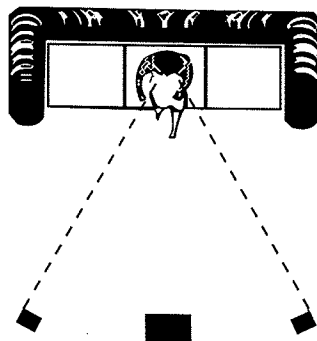


Figure 1. Optimum Listening Position.

your listening position should roughly form an equilateral triangle, with the speakers placed the same distance from each other as from your listening position. This means that if the speakers are close together your optimum listening point is relatively close, too. Conversely, if the speakers are farther away from you, they should also be farther apart from one another.

Finally, adjust the way the speakers face by aiming them toward an imaginary point slightly in front of your listening position (see Figure 2).

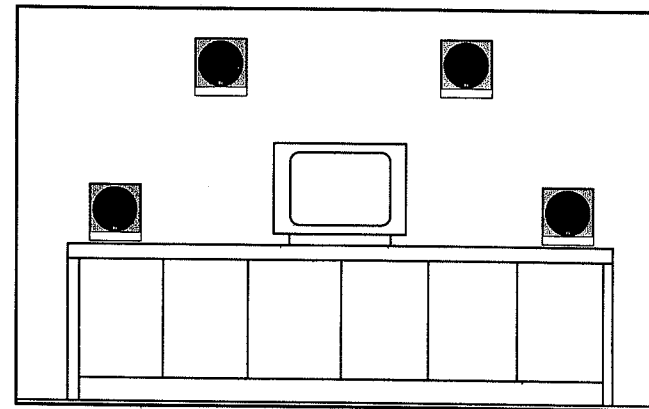


Figure 2. Possible Locations for your ProPerformer Plus System Components.

PLACEMENT FOR BEST TREBLE DISPERSION

Placing your JBL ProPerformers close to ear level will enhance treble performance. Mounting brackets are included so that you can attach the ProPerformers to a wall or vertical surface. See the paragraphs on Mounting Bracket Installation for instructions on proper wall mounting.

The subwoofer's ported, dual-chamber design allows you to vary the bass response, depending on where you place the subwoofer in a room. With the ports facing the middle of the room, you'll get a natural, open flat bass response at 88 dB. With the subwoofer approximately one foot away from the wall and the ports facing the wall, you'll get a stronger bass response (up approximately 3 dB at 50 to 200 Hz). And if the subwoofer is placed in a corner so that the ports are one foot away from the wall on each side, you'll get the strongest bass response (up approximately 6 dB at 50 to 200 Hz).

The key to getting the sound that you like is experimentation. The subwoofer's main advantage is its flexibility and versatility. You can "fine-tune" the system's sound by sliding the subwoofer toward or away from the wall and placing the ports either facing into the room or toward a wall. Take advantage of this to compensate for individual room acoustics.

Keep in mind that you'll always get a stronger bass response from any speaker or subwoofer placed close to a surface in the room such as a floor, ceiling or wall.

IMPORTANT: Do not place the subwoofer near or above any heat-producing source. Also do not set up the subwoofer in such a way that the ports are obstructed. Leave at least 3 inches of "breathing room" for the ports.

SPECIALIZED PLACEMENTS

The JBL ProPerformer Plus System makes an excellent video extension or surround sound system. In particular, your JBL subwoofer can dramatically enhance video soundtracks. The ProPerformer speakers may also be wall-mounted at the rear of a room for use as rear channel surround sound sources. The speakers' internal

shielding means you can place them near a video monitor or VCR without causing picture distortion or accidental tape erasure. However, do not place a TV, video monitor, video tapes or VCR on the subwoofer enclosure.

CONNECTIONS

CAUTION: Before attempting any speaker/amplifier connections, make sure that your receiver/amplifier is switched "off."

Also make certain that the total system's nominal impedance is no lower than that recommended by the manufacturer of your amplifier/receiver.

To connect your ProPerformer system to your amplifier or receiver, you'll need four sections of two-conductor insulated wire. Your JBL dealer can recommend suitable cable. We recommend #16 AWG (16 gauge) wire as a minimum size. If your speakers are more than 30 feet from your receiver or amplifier, use larger diameter wire, #14 AWG or #12 AWG (the larger the wire diameter, the lower the gauge number).

Separate the two conductors at each end of each piece of wire, peeling them back about one inch. Strip off about 1/2 inch of insulation from each conductor. Gently twist the wire strands to assure a tight bundle in each conductor wire and make sure there are no loose strands.

Your amp or receiver has a + (red) and a - (black) speaker output terminal. The ProPerformer speakers and subwoofer each have corresponding + and - terminals on their back sides. It is important to hook both speakers and the subwoofer up in an identical manner, red-to-red and black-to-black, so that they are "in phase." (Hooking them up "out of phase" results in a thin sound.) Almost all double-stranded wire has a means of differentiating one strand from the other. This could be a different color conductor, a strand of yarn in one conductor, or ribs on one part of the insulation.

IT DOES NOT MAKE ANY DIFFERENCE WHICH OF THE TWO STRANDS OF WIRE GO TO (+) AND (-) ON THE SPEAKERS/SUBWOOFER AND AMPLIFIER AS LONG AS THEY ARE ALL DONE IDENTICALLY.

IMPORTANT: Make sure that the wire conductors do not touch or short out. It only takes one little fine piece of wire out of place to cause a short.

CONNECT THE SUBWOOFER TO THE SPEAKERS

To connect the subwoofer to the speakers, you must run one wire from each of the subwoofer's OUTPUT terminals to the INPUT terminals on each of the two speakers. Start with the LEFT OUTPUT terminals which are located on the right side of the subwoofer when viewed from the rear (see Figure 3). Press down on the red spring-loaded tab on the POSITIVE left terminal (+), and insert the positive (+) side of the wire into the hole. Release the tab and tug gently to ensure contact. Make sure that only bare, stripped wire is in the hole, that all wire strands are contained within the terminal hole, and that the wire is inserted up to the insulation. No loose strands of wire should protrude which could potentially cause a short circuit. Repeat the step for the black NEGATIVE (-) left terminal, using the negative (-) side of the wire. Repeat the process at the subwoofer's RIGHT OUTPUT terminals.

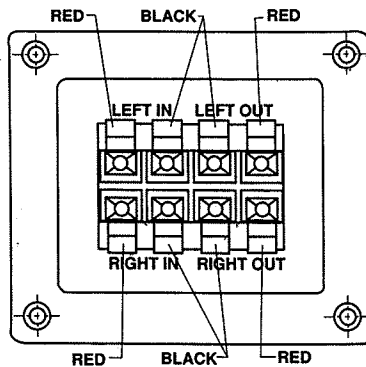


Figure 3. Subwoofer Input/Output Terminals.

CONNECT THE SUBWOOFER TO THE RECEIVER/AMPLIFIER

Attach the other ends of the wires from the subwoofer's OUTPUT terminals to the input of each ProPerformer speaker. Make sure that you attach the wire from the left output to the left speaker and the right output to the right speaker.

MAKE SURE THAT THE RECEIVER/AMPLIFIER IS SWITCHED OFF BEFORE CONNECTING THE SUBWOOFER AND SPEAKERS. Connect the two wires to the subwoofer's LEFT and RIGHT INPUT terminals by repeating the OUTPUT connection procedure just described. The INPUT terminals are located on the left side of the subwoofer when viewed from the rear (see Figure 3). Check for tight connections.

Connect the other end of the two INPUT wires to the receiver/amplifier. Connect the LEFT wire's POSITIVE and NEGATIVE sides to the corresponding terminals on the receiver/amplifier's LEFT SPEAKER OUTPUT terminals. Repeat the step at the receiver/amplifier's RIGHT SPEAKER OUTPUT terminals. Check all connections thoroughly for loose wire strands and shorts. The system is now ready for operation.

TEST THE SYSTEM

To make sure the system is connected properly, test for both speaker balance and phasing as follows:

A. Speaker Balance: Turn your receiver/amplifier's balance control to the extreme LEFT position. You should hear sound from the left speaker only. Next, turn the balance control to the extreme RIGHT position, and listen for sound from the right speaker only. If you hear the opposite effect during this test, the speakers may not be properly connected to the subwoofer or the subwoofer may not be properly connected to the receiver/amplifier. Inspect the subwoofer's OUTPUT connections and the wiring to the speakers, and make any necessary changes.

B. Phasing: With the balance control in the CENTER position, play a musical passage with deep, rich bass and switch the balance control to the LEFT and then RIGHT position. If the system produces less bass with the balance control in the CENTER position than it does with the balance in the extreme LEFT or RIGHT position, the system is out of phase. This means that somewhere in the subwoofer's connections, a positive (+) wire or terminal has been incorrectly connected to a negative (-) wire or terminal. Inspect the subwoofer's INPUT connections and the wiring to the receiver/amplifier, and make any necessary changes.

MOUNTING BRACKET INSTALLATION

Locate the wall stud beneath the wall. Use the mounting bracket as a template to mark the holes with a pencil. Be sure the bracket is level. Secure using four # 8 x 1 1/4 panhead wood screws. Make sure screws are long enough to pass through wall material and penetrate wall stud.

Attach the loudspeaker to the wall bracket by sliding the insert located on the rear of the speaker into the wall bracket slot.

Attach speaker wire prior to installing on the wall bracket.

PROPERFORMER USE AND MAINTENANCE

The JBL ProPerformer Plus System is designed to handle up to 100 watts per channel. Using more power than this voids your warranty and can lead to potential damage.

If you intend to run extension speakers from your amplifier to another room in addition to the ProPerformers Plus System, connect them to the amplifier's second speaker output, not to the subwoofer, which would result in a loss of bass from those speakers.

To clean the speakers and subwoofer, dust with a clean, soft cloth. Never use cleaning solvents or

abrasives on the speakers or the subwoofer, and never place the nozzle of a vacuum cleaner anywhere near the subwoofer ports.

TROUBLE- SHOOTING

If you have a problem with your system, try the following procedures before taking your speakers or subwoofer in for service. Often, the problem will be in a component other than the subwoofer or speakers.

Problem: One speaker does not play, or it sounds distorted.

Procedure: Turn off the receiver/amplifier, and check all wiring. Look carefully for loose wire strands causing short circuits. If the wiring and connections seem fine, reverse the subwoofer's INPUT connections: Hook the left INPUT up to the receiver/amplifier's right SPEAKER OUTPUT, and the right INPUT to the receiver/amplifier's left SPEAKER OUTPUT. Turn the receiver/amplifier on, and play some music at a modest volume level. If the speaker that was not working properly now sounds fine, the problem is not in the speakers or subwoofer. Check the receiver/amplifier and source components.

Problem: Neither speaker plays, or both sound distorted.

Procedure: Turn off the receiver/amplifier and disconnect the subwoofer system. This will automatically disconnect the speakers as well. Next, connect the subwoofer system to another receiver/amplifier known to be operating properly. Play the system. If the problem fails to appear, it is the original receiver/amplifier that is at fault.

Problem: The sound goes off and on intermittently.

Procedure: Check for shorts in the subwoofer and speaker wiring that may be triggering the receiver/amplifier's protection circuitry. If no short is found, follow the procedure for the preceding problem.

Problem: A "howling" sound comes out of the speakers while you are playing records.

Procedure: Increase the distance between the subwoofer and turntable. In all likelihood, the problem is acoustic feedback.

**TO OBTAIN
WARRANTY
SERVICE**

Should any unit of your JBL ProPerformer Plus System need service, please return it to the dealer from whom it was purchased. Bring the sales receipt or invoice with you.

You can obtain warranty service from any of the authorized stations listed on the enclosed brochure. Call the authorized service center nearest you to notify them of your warranty service request and then take or ship your speakers or subwoofer postage prepaid to them. For your own protection, we suggest you insure your shipment as damages may occur and are not covered by this warranty.

SPECIFICATIONS

- Frequency Response: 40 Hz - 18 kHz
- Recommended Amplifier Power: 10 to 100 watts
- Nominal Impedance: 8 Ohms
- Sensitivity: 88 dB
- Left/Right Transducers: 4 1/2" fiber cone
- Transducer Dimensions (H x W x D):
6 1/4" x 6" x 5 1/2"
- Subwoofer Transducer: 8" dual voice-coil, polymer laminated cone
- Subwoofer Enclosure Type: Ported, dual-chamber
- Subwoofer Dimensions (H x W x D):
7 1/2" x 20" x 11 1/2"
- Crossover Frequency: 200 Hz

JBL continually engages in research related to product improvement. New materials, production methods and design refinements are introduced into existing products without notice as a routine expression of this philosophy. For this reason, any current JBL product may differ in some respect from its published description but will always equal or exceed the original design specifications unless otherwise stated.