GENERAL CARE

The grille is held in place by pins near the edges. To remove the grille, grasp it by both top and bottom edges and pull gently. To replace grille, re-position it carefully and press gently at the corners. Do not push on the center area of the grille.

The loudspeaker cabinet may be cleaned with a slightly damp cloth. To remove dust from the grille cloth, use a vacuum with a brush attachment. Spots may be removed with a commercial spot remover. Do not use any cleaners or solvents on the speaker drivers themselves.

SERVICE

Should your loudspeaker ever need service, return it to the JBL dealer from whom it was purchased. If for some reason this is impractical, in the United States, call 800-336-4JBL for your nearest warranty station. Military personnel who purchased from authorized military outlets should return them to a similar outlet or contact:

ALA Associates Enterprises 985 Ponce de Leon Avenue Atlanta, GA 30306 Phone: 800-875-4252 FAX: 404-873-3592

If purchased outside the United States, contact your local distributor to make arrangements for repair service. Do not return products to the JBL factory without prior authorization.

Specifications

High Frequency Dome Transducer Low Frequency (Polymer Laminate) Crossover Frequency Frequency Response (- 6 dB) Sensitivity(1 Watt/1 meter) Nominal Impedance Recommended Amplifier Power* External Dimensions (HxWxD) External Dimensions (millimeters) Weight (each) Shipping Weight

T88

12mm Polycarbonate 8" 3.5 kHz 60 Hz to 20 kHz 90 dB 8 ohms 10 to 80 Watts 20"x11-7/8"x10" 508x302x254 18 lbs (8.2 kg) 40 lbs (18.2 kg)

*Undistorted continuous power per channel.

JBL continually strives to improve its products. New materials, production methods and design refinements are introduced into existing models without notice as a routine expression of our design philosophy. For this reason, JBL loudspeakers may differ in some respect from their published specifications and descriptions, but will always equal or exceed the original specifications unless otherwise stated.

JBL Consumer Products, Inc. 240 Crossways Park West Woodbury, NY 11797

IJBL

8500 Balboa Blvd. Northridge, CA 91329

800 336 4JBL

H A Harman International Company Part No. 76450

IIRI. **T88 LOUDSPEAKER** SYSTEM OWNER'S MANUAL

INTRODUCTION

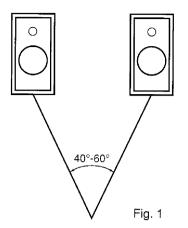
Congratulations on choosing JBL Loudspeakers. Their highly accurate, uncolored and balanced sound character will greatly increase your enjoyment of recorded music. JBL speakers are built with careful attention to detail, using only the highest quality materials. They will provide many years of excellent performance.

Your T88 Loudspeakers are very easy to set up. We recommend that you take a few minutes to read this owner's manual before you begin, and follow the instructions carefully.

PLACEMENT:

For the best stereo reproduction, the two loudspeaker systems should be an equal distance from your listening position and separated so that the angle between them, at the listening position, is between 40 and 60 degrees (see Fig. 1). For example, if your listening position is 8 to 12 feet (2.5 to 4 m) from each speaker, the two systems should be about 8 feet (2.5 m) apart. Placing the loudspeakers in corners or against a wall will result in the strongest (not necessarily the most accurate) bass. Since the T88 is ported on the back panel, do not place the speaker closer than 12 inches (305 mm) to the wall behind it if possible.

For the best stereo imaging, we recommend that the systems be placed so that the high frequency transducers are positioned approximately at ear level of a seated listener. Every room is different and there are different tastes. So don't hesitate to experiment on your own.



Thanks to their high efficiency, JBL loudspeakers will produce reasonable volume levels in a room of moderate size with very little amplifier power. However, using a small amplifier to obtain the desired volume listening levels may lead to overdriving the amplifier. This will generate high distortion and may cause damage to your loudspeaker. For the best performance, an amplifier should be selected with an output rating that is greater than the maximum power that will be used. This margin of reserve power will ensure that the amplifier will not attempt to deliver more power than its design allows. However, the power amplifier's power rating per channel must not exceed the maximum recommended amplifier power for that specific loudspeaker model. Please see the specifications section for details. Following these guidelines will provide distortion free sound reproduction and long loudspeaker life.

CONNECTIONS

To connect the loudspeaker systems to the receiver or amplifier, use two-conductor insulated wire. Your JBL dealer can recommend suitable cables, or you can buy wire at most

hardware stores. We recommend #16 AWG wire as a minimum size. If your speakers are more than 30 feet (10 m) from your receiver or amplifier, use larger diameter wire. Connections are made at the terminals located on the back of the loudspeaker system. The terminals accept bare wire or dual banana plugs, either of which will provide easy, secure connections.

Preparing the hookup wire

- 1. First determine the wire length needed between the most distant speaker and the amplifier.
- 2. Now make the hookup wires for both speakers this length, even if one loud-speaker is much closer to your amplifier than the other. This will help maintain proper signal balance.
- **3.** Strip off 3/8" of insulation from both ends of each conductor.
- **4.** Twist each set of thin wires into a tightly-bunched spiral.
- 5. At this point you need to identify a visual difference between the two conductors of each molded pair of speaker wire. Differentiating marks can be a different color wire (copper or "silver"); a strand of yarn in one conductor; thin, raised ribs on one part of the outer insulation; or a printed "+" marking on one of the insulators. It does not make any difference which of the two strands of wire go to (+) and (-) on the speakers and amplifier, as long as both speakers are connected identically. Push down on the button below the terminal and insert the wire, or the banana plug, through the hole (see Fig. 2).

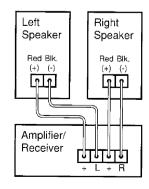


Fig. 2

For each channel, the red terminal on the loudspeaker should be connected to the red or (+) loudspeaker connection terminal on the receiver or amplifier, and the black to the black or (-). Connecting the loudspeakers in this manner ensures that they will be in phase; that is, work together rather than in opposition. Connecting the loudspeakers out of phase will not damage them, but will result in less bass and poor imaging.

Hooking up multiple sets of speakers

If your receiver has two complete sets of speaker terminals ("A" and "B"), it's possible to hook up an additional pair of speakers for *simultaneous* sound in another room. However, some speakers may not be usable as a second pair if you want to play two sets at once. Before hooking up another set of speakers besides your T88, check the following:

- 1. Your amplifier's minimum load impedance.
- 2. The nominal impedance of the second set of speakers. Both of these specifications are expressed in ohms and both can be found in the owner's manuals which came with your speakers and amp/receiver. The receiver's minimum load impedance is determined by whether or not power ratings are given for 4 ohms. This is because two sets of 8 ohm speakers will present a 4 ohm load to the receiver. The T88, when combined with an 8 ohm speaker, produces an impedance sufficiently close to 4 ohms. For example, the following entry in an amplifier owner's manual...

POWER:

A)100 watts RMS into 8 ohms, both channels driven, 20-20kHz with less than 0.02%THD

B) 160 watts RMS into 4 ohms, both channels driven, 20-20kHz with less than 0.02% THD.

Example B indicates that the amplifier can handle 4-ohm combined impedances created by two sets of speakers.

If only an 8-ohm rating is given, as in Example A the amp/receiver may or may not be designed to handle 4-ohm combined ratings. Consult the owner's manual of the amp/receiver or contact the manufacturer for clarification.

TROUBLESHOOTING

The vast majority of new speaker "malfunctions" end up being traced to connections or switch settings. To avoid packing up correctly functioning speakers and sending them off, only to find that they're not really at fault, check the following tips first, before requesting service.

No sound at all or very faint sound from both speakers

- Amp/receiver tape monitor button pushed in while using CD, FM or phono inputs.
- 2. Wrong speaker switch, "A" or "B" speaker output.
- 3. Sound source (CD,cassette deck, turntable) not turned on, not activated, not hooked up or not selected on amp/receiver front panel.

No sound from one speaker

- 1. Balance control turned all the way left or right.
- 2. Speaker wire has become disconnected.
- 3. One of the connections between sound source and amp/receiver is faulty or has become disconnected.

Both speakers play at low volumes but shut off as volume is increased OR sound turns on and off intermittently

A few strands of speaker wire may be shorting out. Recheck the connections. Recheck the impedance of the amp.

Bass is very weak AND/OR sound seems to come from, each speaker seperately, without creating a stable stereo image between the speakers.

- 1. The polarity (+&-) of one speaker has been reversed relative to the other. Double check connections.
- 2. Speakers are too far away from back and side walls or too far apart. Experiment again with the speaker placement. If you are still encountering problems, consult your JBL dealer.