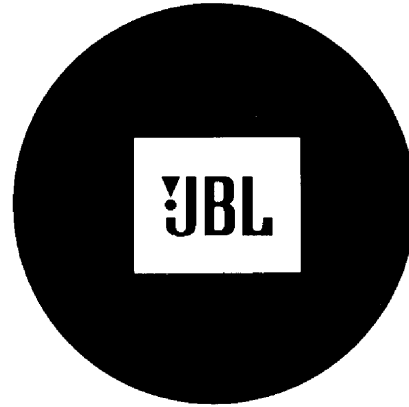


**JBL  
LOUDSPEAKER  
SERIES  
INSTRUCTION  
MANUAL**



**JBL62T  
JBL82T  
JBL630T  
JBL830T  
JBL940T**

## 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.

The JBL Series is the result of concentrated efforts to combine traditional JBL performance values with elegant contemporary appearance at affordable prices. Some of the engineering features of the JBL Series are:

1) High output levels. This means that modest amplifiers or receivers will be able to produce acoustical levels normally associated with amplifiers with substantially more rated power. The dual woofer array of the JBL630T, JBL830T and JBL940T results in high forward directivity, increased speed of low frequency transients and exhibits an impedance characteristic which takes advantage of the four-Ohm ratings of today's amplifiers.

2) Smooth, extended response. The use of high polymer laminated cones and a vapor deposited layer of titanium on the dome tweeter are the main ingredients here. Careful dividing network design and large baffle areas further contribute to smooth midrange response.

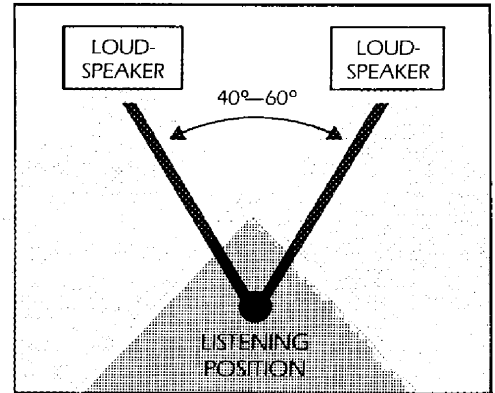
3) Accurate time/phase response. Speakers in the JBL Series exhibit the same precise "turn-on, turn-off" characteristics of JBL's larger home and studio loudspeaker systems. This means more accurate realization of the high-frequency detail in today's digital recordings.

4) Accurate stereo imaging. The in-line component arrays on the baffle ensure the best possible stereo imaging for listeners both on axis and off.

## PLACEMENT

For the best stereo reproduction, the two loudspeaker systems should be placed 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 illustration). For example, if your listening position is 8 to 12 feet (2.5 to 4.5m) from each speaker, the two systems should be about 8 feet (2.5m) apart.

Placing the JBL 62T or 82T loudspeakers in corners or against a wall will result in the strongest (but not necessarily the most accurate) bass. Compact systems will also benefit from placement on stands or shelves. The JBL 630T, 830T and 940T have rear-mounted ports and must be placed at least 4 inches from the wall. For optimum performance, place them 1 foot or more from the wall. For the best stereo imaging, we recommend that the systems be placed so that the high frequency transducers are as close as possible to the ear level of a seated listener. Every room is different—and there are different tastes. So don't hesitate to experiment on your own.



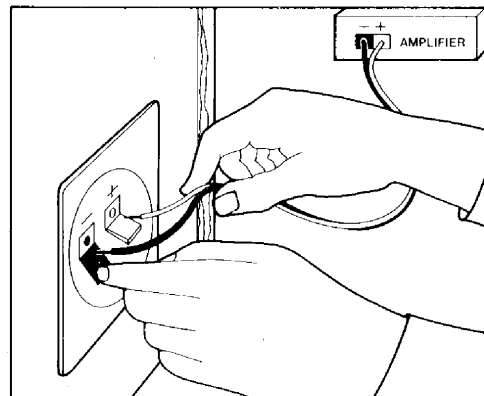
## CONNECTIONS

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 #18 AWG (1mm diameter) wire as a minimum size. If your speakers are more than 30 feet (10m) from your receiver or amplifier, use larger diameter wire.

Connections are made at the terminals located on the back of the loudspeaker system, near the bottom edge. The terminals accept bare wire or banana plugs, either of which will provide easy, secure connections. To prepare the wire, strip approximately 1/2-inch (13mm) of insulation. Each conductor is made up of fine strands of wire; twist the strands together. Push down on the button below the terminal and insert the wire through the hole (see illustration).

For each channel, the red terminal on the loudspeaker should be connected to the red or (+) loudspeaker connection terminal on the receiver or amplifier. The black terminal on the loudspeaker should be connected to the black or (-) loudspeaker connection terminal on the receiver or amplifier. 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. Most two-conductor wire is color coded, or has a ridge on one of its insulating jackets, so that you can easily identify which wire is connected to which terminal.



## POWER HANDLING

For distortion-free sound reproduction and virtually unlimited loudspeaker life, follow these guidelines:

1) Purchase an amplifier that will provide more power than you will need. A loudspeaker can require up to ten times the average power level for those instantaneous bursts of sonic power known as transients. If the amplifier has enough reserve power, transients will be clear and crisp. If not, the transients will be muddy or dull. When an amplifier runs out of undistorted power, it is forced to exceed its design capabilities, producing dangerous power levels rich in high frequency distortion.

2) Do not drive the amplifier into clipping. Clipping sounds something like a stylus mistracking, and generally occurs on loud passages when the system is played at loud levels. If clipping occurs regularly, turn down the volume level or install a larger amplifier that can deliver the required power without distortion.

3) Do not make or break connections to the amplifier while it is operating. Unplugging or inserting connectors into an amplifier, preamplifier or receiver while it is operating can produce momentary loud buzzes. Often, these buzzes occur at high power and can destroy loudspeaker voice coils very quickly.

4) Practice audio precaution. If your tape deck does not have tape lifters, it can produce squeals when in the fast-wind mode (either forward or backward) that can destroy high frequency drivers. Turning the volume down while fast winding is a simple remedy. Turning down the volume whenever handling the phonograph tone arm is also wise. If a phonograph pickup is accidentally dropped on a record when the volume is turned up, the resulting thump could destroy the loudspeaker. Do not play the system loudly with excessive bass boost, which can easily cause the amplifier to be overdriven. A 3dB increase in volume is just noticeable to the ear, but requires double the amplifier power, and many tone controls are capable of providing boost of 15dB.

## **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 the grille, reposition it carefully and press gently at the corners. Do not push on the center area of the grille.

The loudspeaker systems are finished on sides and back with veneer, and may be cleaned with a slightly damp cloth. The grille may be gently vacuumed, and stains can be removed with an aerosol cleaner, following the manufacturer's instructions. Never use any solvents to clean any part of the system.

Should your loudspeaker ever need service, return it to the JBL dealer from whom it was purchased. If for some reason this is impractical, write directly to the JBL Customer Service Department, describing the problem as fully as possible. Do not return products to the JBL factory without prior authorization.

## SPECIFICATIONS

### JBL62T

|                         |                |
|-------------------------|----------------|
| Frequency Response:     | 75Hz-23kHz     |
| Impedance:              | 8 Ohms         |
| Sensitivity:            | 89dB           |
| Crossover:              | 3kHz           |
| Recommended Amplifier   |                |
| Power Range:            | 10-100 Watts*  |
| Weight:                 | 16 lbs. each   |
| Dimensions (H x D x W): | 16" x 7" x 10" |

### JBL82T

|                         |                |
|-------------------------|----------------|
| Frequency Response:     | 60Hz-23kHz     |
| Impedance:              | 8 Ohms         |
| Sensitivity:            | 90dB           |
| Crossover:              | 3kHz           |
| Recommended Amplifier   |                |
| Power Range:            | 10-125 Watts*  |
| Weight:                 | 30 lbs. each   |
| Dimensions (H x D x W): | 22" x 8" x 14" |

### JBL630T

|                         |  |
|-------------------------|--|
| Frequency Response:     | 58Hz-23kHz   |
| Impedance:              | 4 Ohms   |
| Sensitivity:            | 92dB   |
| Crossover:              | 200Hz<br>2500Hz  |
| Recommended Amplifier   |  |
| Power Range:            | 10-150 Watts*  |
| Weight:                 | 40 lbs. each   |
| Dimensions (H x D x W): | 36 <sup>3</sup> / <sub>4</sub> " x 8 <sup>1</sup> / <sub>4</sub> " x 15" |

### JBL830T

|                     |                 |
|---------------------|-----------------|
| Frequency Response: | 55Hz-23kHz      |
| Impedance:          | 4 Ohms          |
| Sensitivity:        | 93dB            |
| Crossover:          | 200Hz<br>2500Hz |

|                         |   |
|-------------------------|---|
| Recommended Amplifier   |   |
| Power Range:            | 10-200 Watts*   |
| Weight:                 | 53 lbs. each  |
| Dimensions (H x D x W): | 39 <sup>3</sup> / <sub>4</sub> " x 8 <sup>3</sup> / <sub>4</sub> " x 16 <sup>3</sup> / <sub>4</sub> " |

### JBL940T

|                     |                        |
|---------------------|------------------------|
| Frequency Response: | 50Hz-23kHz             |
| Impedance:          | 4 Ohms                 |
| Sensitivity:        | 94dB                   |
| Crossover:          | 200Hz<br>800Hz<br>4kHz |

|                         |  |
|-------------------------|--|
| Recommended Amplifier   |  |
| Power Range:            | 10-300 Watts*  |
| Weight:                 | 65 lbs. each   |
| Dimensions (H x D x W): | 43 <sup>3</sup> / <sub>4</sub> " x 10 <sup>1</sup> / <sub>4</sub> " x 18 <sup>1</sup> / <sub>2</sub> " |

\*Undistorted Music Signal