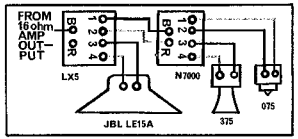
does not affect the crossover frequency nor does it restrict the upper frequency limit of the system. Under normal conditions it should be set at "MED". (2) The HF control of the N7000 network varies the power fed to the 075 only. It has no effect on the operation of the 375 driver. A detent catches the control scale at a setting of 4, which is recommended for most installations. (3) The tings can of course be changed if extended listening indicates that more natural results can be obtained by adjusting the controls. However, under most conditions the network controls should be left at the recommended positions and the amplifier tone controls used to compensate for differences in source material.




C. Balancing the two stereo channels

Balancing the intensity level of the two Paragon sections is just as important as when two individual speaker systems are used. The preamplifier balance control should be adjusted for various program sources to obtain the optimum stereo effect. The most satisfactory method of balancing the two channels is to rotate the balance control during a full orchestral passage. The point at which the third dimension - depth - suddenly comes into focus is usually easy to hear.

## SECTION 3: INSTALLATION AND REMOVAL OF COMPONENTS

Mounting positions of the speaker system components in the JBL-Ranger Paragon are shown in the section drawing inside this folder.

A. Terminal connections

JBL networks and transducers are equipped with spring-loaded binding posts. The colored buttons are depressed for insertion or removal of wire leads.

B. JBL LE-15A low frequency driver

(1) Remove the 16 Phillips-head screws which hold the rear cabinet panel in place. Carefully tilt the panel outward for access to the LE-15A. (2) Remove the wire leads from the loudspeaker. (3) Unscrew the four Phillips-head machine screws which hold the LE-15A to its baffle board. Hold the speaker while removing the screws so that it does not drop. If the speaker gasket sticks to the wood baffle, pry it loose gently and gradually. When replacing the LE-15A, tighten each screw a little at a time. Do not overtighten. The gasket provides a cushion seal and should not be compressed to the point where the speaker frame touches the baffle board.

C. JBL 375 driver with H5038 horn

(1) Remove the upper section of the sculptured front leg by pulling up. (2) Remove the two Phillips-head machine screws which hold the front edge of the horn mouth to the mounting bracket. (3) Remove the two Phillips-head machine screws which hold the back edge of the horn mouth to the rear mounting bracket. (4) Remove the four socket-head machine screws which fasten the 375 driver to the 5038 horn. A 1/8" Allen wrench is required. Carefully remove the 5038 horn. (5) Remove the wire leads from the 375 driver. These can be reached from the rear of the cabinet. (6) Loosen the two square 9/16" nuts on the clamp assembly which holds the 375 in place. (7) Remove the 375 driver by pulling it forward. When replacing the 375 in its mounting well, make sure the terminals face toward the rear of the cabinet before mounting the horn in place.

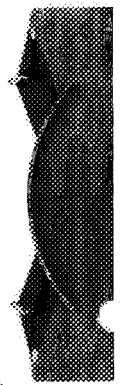
Do not clamp the 375 driver in its position until it has been screwed to the horn and the front horn flanges are assembled to their respective brackets.

D. JBL 075 Ring Radiator

(1) Remove the wire leads from the 075. (2) Unscrew the five Phillips-head wood screws which hold the metal clamp ring to the 075 baffle board. The driver can be removed from the clamp ring by loosening the tangential screw at the base of the horseshoe. When replacing the 075, the two larger wood screws are driven through the holes nearest the base of the clamp ring. The ring is positioned so that the base points toward the end of the cabinet.

E. JBL LX5 and N7000 networks

(1) Remove the lead wires from the network terminals. (2) Remove the four screws from the corners of the network mounting plate. (3) Lift out the network and free the lead wires by pulling them back through their holes in the mounting plate. Identify the wires so that they can be threaded through the proper holes when replacing the network. Use the wiring diagram to verify the correct connections.



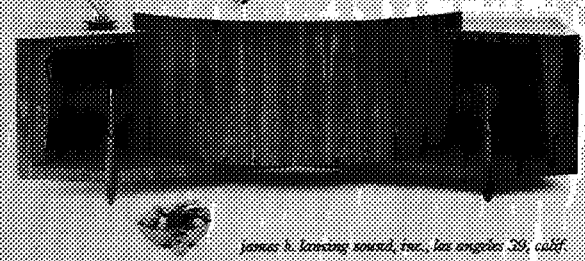
JBL MEANS JAMES B. LANSING SOUND, INC.

publication CA7-2

# JBL-RANGER PARAGON

STEREOPHONIC REPRODUCER

JBL MODEL 44030 (PAT.)

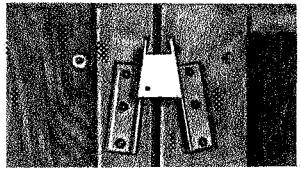


*james b. lansing sound, inc., los angeles 39, calif.*

ASSEMBLY, INSTALLATION AND OPERATION

## SECTION 1: HOW TO ASSEMBLE THE CABINET

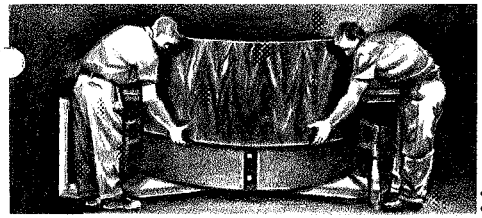
The D44000 is shipped in three parts: the two halves of the cabinet and the convex refractor panel. The four back legs of the cabinet have adjustable levelling pads. The two legs at the center have been adjusted and locked at the factory. The outside legs must be adjusted by the user at the position the system will occupy.



(1) Adjust the two outer legs to about the right height to level the cabinet halves on the floor surface where the system will be located. Then push the two halves together so that the dowel pins fit into their corresponding holes. Adjust the legs until the two halves fit snugly together. When the two sections of the assembly are properly mated, lock the legs in position.

(2) The two halves of the cabinet are locked together by six wedge brackets along the junction line - three at the back and three at the front of the structure. Fit the six wedge clips over these brackets (See illustration) and tap downward. Drive a single wood screw through each wedge clip to hold it in position.

(3) The curved refractor panel can now be dropped into place. Lower it carefully into position from the top, sliding the edges through the notches at the ends of the curved cabinet section and taking care to avoid scratching the gold surface of the metal horns. This is most conveniently done by two persons, one guiding each end. The refractor fits tightly into the locked position. When it is in place, the cornice at the upper edge of the panel butts snugly against the top of the cabinet.



curved refractor panel being dropped into position

## SECTION 2: PUTTING THE SYSTEM IN OPERATION

Ideally, a fine loudspeaker system and its audio power source should be designed together as an integrated component - an Energizer/Transducer. If your Paragon includes a JBL Solid State Energizer you will enjoy the "ultimate" performance which only such an instrument can provide. If the Paragon is not yet self-energized, it will nevertheless respond to the signal from a high quality stereo amplifier with a degree of realism which can be duplicated by no other loudspeaker system intended for home listening. The Paragon requires very little amplifier power to produce full concert intensity, yet there is no danger of overloading the system when playing musical program material through the most powerful high fidelity amplifiers presently available.

A. Connecting the Paragon

Connect input posts "R" of the LX5 network to the 16-ohm taps of the power amplifiers, and the posts labelled "B" to the common (GND) taps. If the amplifiers are not matched - or output taps are not marked - the leads to one of the amplifiers should be experimentally reversed. The proper connection is normally the one which produces the most bass response.

B. Adjusting the network controls

JBL dividing networks LX5 and N7000 both have high frequency level controls to compensate for the effects of various acoustic environments. (1) The 3-position switch on the LX5 controls power fed to the 375 and 075 high frequency drivers. This switch