



WOLVERINE

by *Electro-Voice*



Wolverine enclosures are designed to produce the finest sound possible from Wolverine or other quality loudspeakers. To obtain the maximum performance inherent in your new enclosure, read these instructions thoroughly before you begin installation.

Each Wolverine enclosure is carefully inspected before leaving the factory, and must be equivalent to the laboratory standard in acoustical properties and appearance. Your Wolverine equipment installed properly and operated in accordance with the instructions given in this booklet will give you years of listening satisfaction.

GENERAL DESCRIPTION — The Wolverine Lindon is a direct radiator, shelf type enclosure for eight-inch speakers, and contains a pre-cut port for the addition of an HF1 Step-Up Kit. The Lindon is rigidly constructed of heavy, five-ply, vibration-free plywood. It can easily be placed in a bookshelf, on a table-top, or on the floor. Its small size makes it highly adaptable for two-speaker arrangements. The Lindon will improve and extend the bass response of any eight-inch loudspeaker, but it is particularly effective when used with Wolverine components.

The Wolverine LS8 eight-inch loudspeaker is designed to operate effectively both as full-range speaker and as a woofer in multiway systems. When used as a full range unit, it provides optimum sound reproduction at a minimum cost.

Wolverine Step-Up Kits provide a simple method for increasing performance of your loudspeaker system in stride with the budget, by building from a single loudspeaker to a deluxe 2-way system with properly matched components, and without obsoleting existing components.

The Model HF1 High-Frequency Step-Up Kit can be added to an LS8 loudspeaker. This step-up kit will give greater efficiency from 3500 cps to beyond the limits of audibility, plus greater dispersion of the high frequencies in the listening area for good stereo. The result is silky, precise definition of all string and woodwind instruments, together with an even spread of sound, giving "front row" performance throughout the room. The HF1 package consists of a matched VHF driver (Model TW35) and crossover network (Model CR35) with built-in level control. All wiring is supplied with Wolverine Step-Up Kits for a simple 5-minute installation.

SPECIFICATIONS

Size: 23½" wide x 11" high x 10" deep

Shipping Weight: 17 lbs.

INSTALLATION OF COMPONENTS

LS8 LOUDSPEAKER — Lay the enclosure face down. Remove the wood screws from the rear panel and lift off the panel (Figure 1). Remove the nuts and washers from the four bolts around the eight-inch speaker cutout and place the speaker over and down on the bolts, taking care to avoid tearing the cone by inadvertently misaligning the speaker (Figure 2). Replace the washers and tighten the nuts evenly. Tighten the nuts only enough to compress the speaker gasket—too much pressure can warp the speaker frame and cause the voice coil to rub.

HF1 STEP-UP KIT — To mount the TW35 VHF driver, remove the port cover and discard it. Next, connect all leads to the CR35 as shown in Figure 3; then bolt the TW35 in place.

The CR35 can be installed in either of two positions. One mounting hole is drilled in the rear panel of the Lindon, and another hole is found on the speaker mounting board covered by an easily removable snap button. If the Lindon is to be placed in a book-case, the hole in the speaker mounting board should be used to minimize the depth of the enclosure. To install the CR35 in the speaker mounting board, locate the snap button and slit the grill cloth directly over it. After removing the button through the grill cloth, install the CR35 as shown in Figure 5. The level control escutcheon will cover any ragged edges left in the grill cloth. Replace the rear panel and screw down tightly.

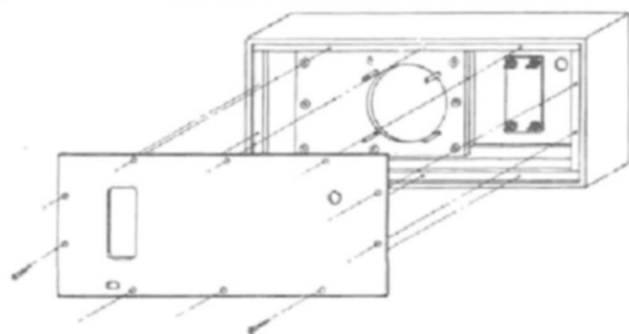


Figure 1 — Rear Panel Disassembly

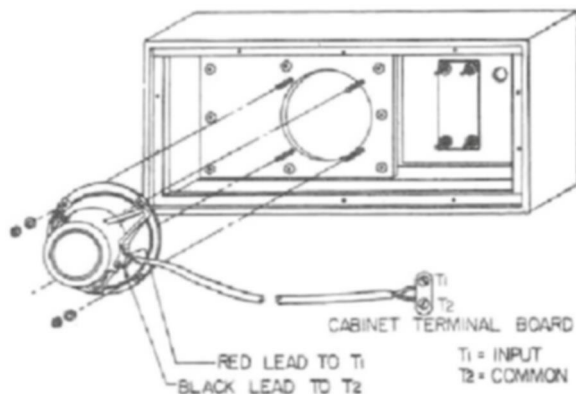


Figure 2 — Installation of Full-Range Speaker

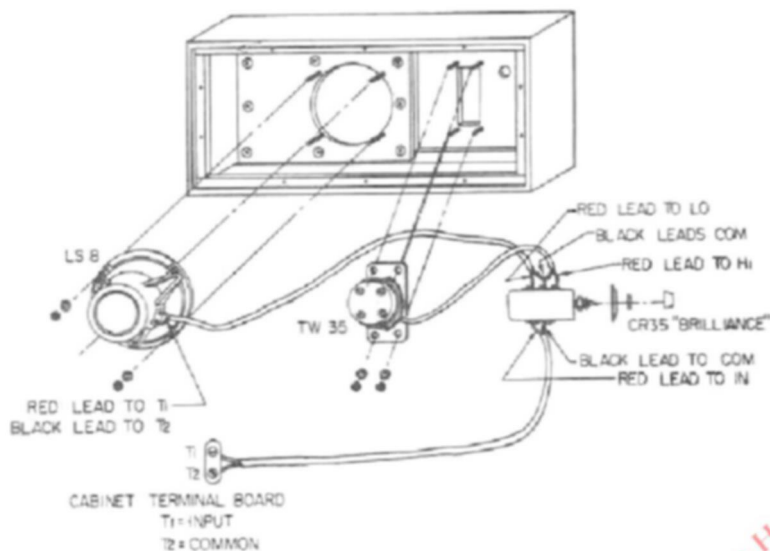


Figure 3 — Installation of HF1 Step-Up Kit

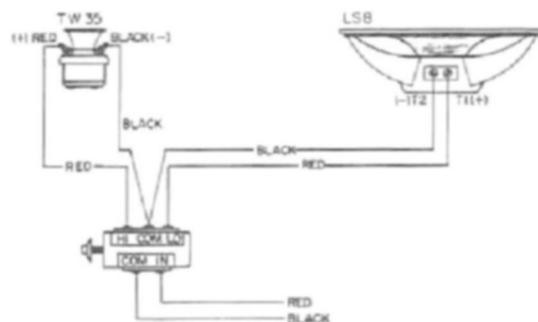


Figure 4 — Wiring Diagram, Two-Way System

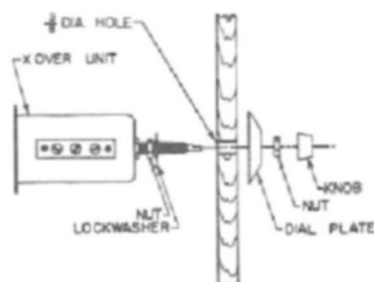


Figure 5 — CR35 Mounting Details

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Foremost in Electro-Acoustics — Microphones, Phono-Cartridges, High Fidelity Loudspeakers and Enclosures, Public Address Speakers, Marine Instruments, EVI Professional Electronic Instruments and Military Material

WIRING — All Wolverine speakers are color coded to indicate polarity. A red marking or the code "T1" indicates positive polarity (the cone or diaphragm will move away from the magnet when a positive voltage is applied), and black or "T2" coding indicates negative polarity.

Note that all leads coded black connect to terminals marked "Common". If these wiring diagrams are followed, all speakers will be properly phased. The lead wires to the amplifier should be No. 18 fixture wire (common lamp cord) for lengths up to 20 or 30 feet; for longer lead lengths, use No. 16 two-conductor cable. If the speaker is connected to a Williamson type amplifier, capacity between long leads may induce oscillation, resulting in instability and distortion from the amplifier. The remedy is to use television twin-lead.

The positive lead from the loudspeaker should be connected to the 8-ohm tap on the amplifier; the negative lead to the common tap.

ASSOCIATED COMPONENTS — The quality of sound from your Wolverine speaker system will be limited only by the performance of the other components in your high-fidelity system. For the most realistic reproduction from your favorite records, Electro-Voice compatible stereophonic-monoaural phonograph cartridges are recommended. These cartridges will not only give smooth, distortion-free reproduction from standard monoaural records, but will also equip you for the new stereophonic records.

A quality record changer or turntable should be used with your Wolverine components. The changer or turntable should have minimum rumble and be capable of constant speed to eliminate wow and flutter.

The amplifier used with Wolverine speakers should produce less than 1% harmonic and intermodulation distortion. If the amplifier has a variable damping factor control, it should be set at maximum, although no qualitative difference will be observed past a setting of 10. Because of the high efficiency of Wolverine speakers, no more than 15 watts of amplifier power is actually required, although four times this amount may be used.

OPERATION

PLACEMENT — The Lindon may be used on a table-top, placed in a bookcase or used on the floor against a wall. It may be placed on any one of its four finished sides without effecting performance. The Lindon should be placed at least 1/4" away from the wall so that the reflex port on the rear panel can function. This spacing can be adjusted for pleasing musical balance. Felt pads can be placed beneath the Lindon to prevent marring the finish.

OPERATION OF LEVEL CONTROL — The Wolverine HF1 level control governs the amount of energy radiated above 3500 cps. Generally, because of the increased efficiency of the TW35, the control should be adjusted to a setting of 4. Exact positioning will depend upon room acoustics and should be adjusted for most pleasing reproduction. Rooms furnished with heavy rugs, drapes, and overstuffed furniture will require a more advanced setting of the control than average.

GENERAL INFORMATION

SHIPPING DAMAGE — Wolverine components are packed in accordance with all shipping requirements of the Interstate Commerce Commission plus extra protection. If shipping damage occurs, contact the carrier directly, requesting inspection and instructions. Use the serial number of the speaker in your correspondence.

SERIAL NUMBER — The serial number is noted on the cover of this instruction sheet, and on your warranty registration card. The serial number indicates type, style and date of manufacture of the unit. Always use the serial number in your correspondence.

WARRANTY CARD — To register your Wolverine components, fill out the Warranty Registration Card and send it to the factory within ten days after your purchase. It is not necessary to fill in the Market Research Information on the card, but it will be of great help in supplying you with more and consistently improved high-fidelity products. The Warranty Card will also put you on the Electro-Voice mailing list for future technical publications.

TECHNICAL SERVICE — The distributor from whom you purchased your equipment knows thoroughly the application of Wolverine products and high-fidelity techniques. His advice on the installation of Wolverine components and on the selection of associated high-fidelity equipment will be invaluable. Technical problems which cannot be answered locally may be referred to:

Manager
Wolverine Division
Electro-Voice, Inc.
Buchanan, Michigan

When writing, please list the manufacturer and model number of all components used in your high-fidelity system.