

5 1/4" 2-WAY LCR SPEAKER

Congratulations! You have purchased a high quality stereo loudspeaker. When matched to comparable electronic equipment, expect years of quality high fidelity sound. We are constantly striving to provide the very best technology has to offer.

The following manual is designed to give you, the installer or owner, basic information as to the speaker's installation and operation. It is beyond the scope of this manual to go into all the details that must be taken into consideration in a sophisticated high fidelity system.

If you have any questions regarding this speaker which are not answered by this manual, please feel free to contact your local dealer.

GENERAL DESCRIPTION

This two-way LCR speaker has two magnetically shielded 5 1/4" woven Kevlar cone woofers with linear long throw sanoprene edge surrounds. A pivoting 1" Teton soft dome tweeter is utilized for excellent high frequency dispersion throughout your entire listening environment. A sophisticated crossover network separates the audio signal and directs the proper frequencies to the driver that will reproduce them best. This crossover is specifically designed for these speakers to ensure maximum high fidelity. High- and mid-frequency adjustment controls on the front of the speaker baffle allow the user to adjust the frequency response of each speaker to compensate for differences in environment and placement. The '+' setting boosts the frequency response in the given range, the '-' position decreases response, and the '0' setting produces no change.

SHIPPING DAMAGE

Each speaker is thoroughly tested before it leaves the factory. However, in shipment, accidents may

occur. Please inspect your speakers carefully when you receive them to make sure there is no damage. If there is, please notify your dealer, or supplier immediately for assistance. If you received your speakers by public transportation, report the damage at once to the shipping company.

AMPLIFIER OPERATION

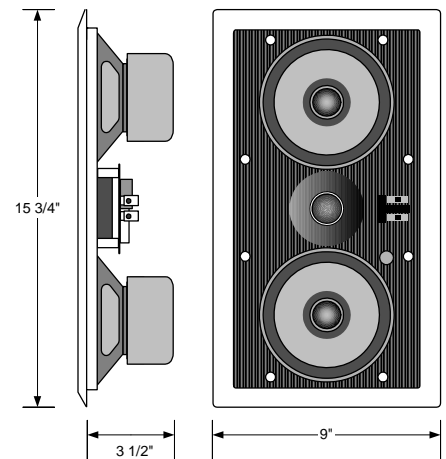
The 5 1/4" two-way LCR speaker is equipped with a special automatic polyswitch circuit which, when overdriven, will automatically restrict electrical current to the tweeter to prevent damage. The circuit will automatically re-engage once the volume is turned down or the problem is removed. This normally takes about thirty (30) seconds to occur.

The speaker will perform well with amplifiers from 15 to 125 Watts RMS. However, any speaker can be damaged or its protective circuitry engaged by any size amplifier that is being overdriven into clipping. "Amplifier clipping" is a phrase used to describe a condition when, because of the volume demand, an amplifier is being asked for more power than it can give. If you should find that your protective circuits on the tweeter are activated often, please consider reducing the volume at which you normally play the speaker or purchasing a larger amplifier with more reserve power. **DAMAGE DONE TO A SPEAKER BY CLIPPING IS NOT COVERED UNDER THE WARRANTY.**

SPEAKER PLACEMENT

Placement of the Wall Mounted Speakers in your room should be carefully considered. They should be located where they will provide you with the best possible sound and the greatest ease of installation.

It is beyond the scope of this publication to discuss all of the various



5 1/4" LCR

aspects of speaker placement. Please feel free to contact your dealer.

WIRING

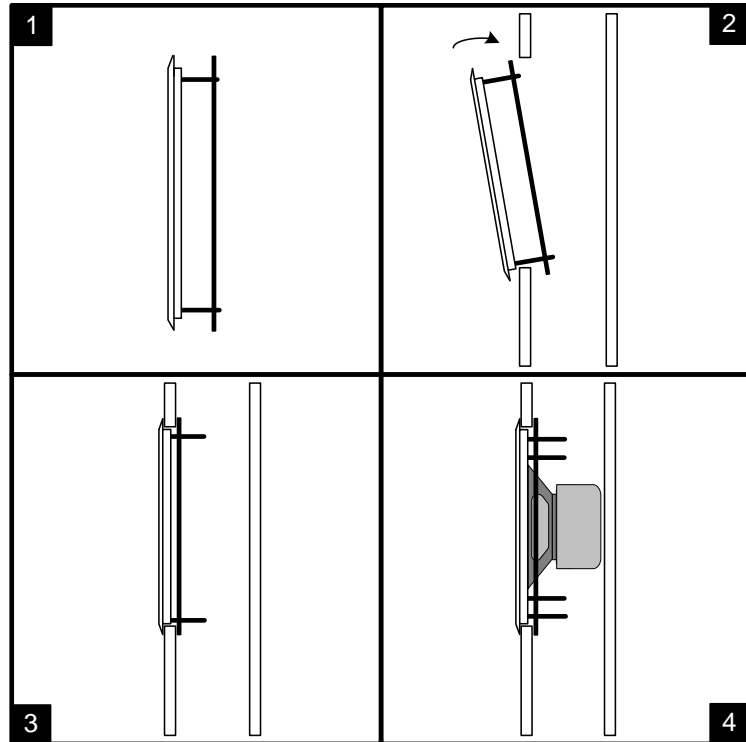
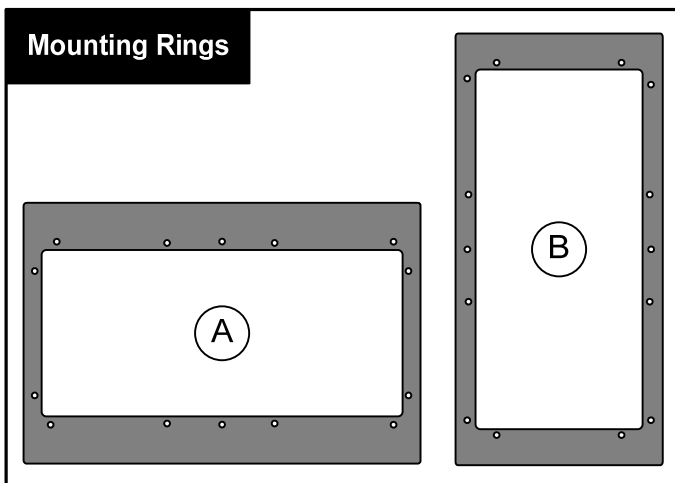
To achieve maximum performance from your new speakers, we strongly suggest the use of special low inductance stereo cable. There are many good brands presently on the market. The cable should be 16 gauge or larger. Speaker wire smaller than 16 gauge, which is sometimes clear coated, will significantly decrease your speaker's performance. The larger the wire is, the better. It is important when installing your speakers and/or running wire through your house that you consult any local codes and requirements to make sure that safety is being adhered to. We suggest that a professional be consulted in order to maximize your system's performance. The following, however, are just a few of the do's and don'ts:

1. Try to keep the wire length to a minimum. Runs of over 50 feet should have 16 gauge or heavier wire.
2. Avoid routing speaker cables near electrical cables. This will help reduce hum and RF interference.

3. In securing your wire, do not staple or nail it. By doing so, a short could occur in your wire and not only significantly reduce your system's performance, but damage your electronics, i.e. amplifier, as well.
4. Allow about 2 ½ feet of free wire at the cut-out to aid in the ease of installation of your speakers. This is also helpful if you should have to remove the speaker from the wall again for any reason.
5. In checking your speakers, make sure proper phasing is maintained. Simply put, this means being sure the same wire which is hooked to the positive terminal of the amplifier is hooked to the positive terminal of the speaker. It is important to check this on all speakers. If one speaker is hooked up incorrectly, or out of phase, the quality of your bass will be seriously impaired.

INSTALLATION

As the diagrams show, the speaker utilizes a metal mounting ring which, after tightening with the screws provided, acts as a clamp to hold the speaker in place. Two of these mounting rings are provided. In the diagram below, the ring labeled 'A' is pre-fastened to the white plastic speaker frame and the ring labeled 'B' is included separately. Ring A will be suitable in most cases, whether the speaker is oriented horizontally or vertically. The optional Ring B allows the



speaker to be placed as close as possible to a stud when oriented vertically.

To aid in speaker performance, a fibrous material, such as fiberglass or polyester fiber, may be placed behind the speaker to help eliminate unwanted sound from being transmitted into adjoining rooms.

Professional installers use quality equipment. The better the equipment, the better the installation. Once you determine where you wish the speakers to be placed, do the following:

Using the paper template provided and the proper equipment, cut the appropriate sized hole in the wall making sure that where you wish the speakers to be placed will

not be obstructed by a stud or other material hidden in the wall. On drywall, the cleanest cuts will be made with a utility knife. Otherwise, you may need to use a keyhole saw or other suitable equipment.

Install the frame and mounting ring assembly by passing the black

mounting ring through the cut-out as illustrated above in figures 1 and 2. Next, verify that the speaker frame fits into the cut-out. The white frame should fit snugly and smoothly in the cut-out hole. However, if the hole should have been cut a little too large, there is an overlapping frame on the speaker that will cover this.

Once the frame is in place, pull the mounting ring against the back side of the wall board so that the screws protrude out toward you. While holding the clamp ring against the wall, screw in the 6 screws until the clamp is snug. Be careful not to over tighten.

If it was done correctly, you should be able to reach the speaker wire through the hole. Pull the wire out of the wall and hook it up to the terminals on the back of the speaker assembly, observing polarity (+ & -). With at least 2 screws in-hand, place the speaker assembly into the frame assembly and start 2 of the 4 center screws by hand. Next, start the remaining 6 screws by hand. Now tighten the 4 center screws followed by the 4 screws at either small end.