

LRS+ Instruction Manual

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Quick Set-up

1. Remove panels and feet from the carton. KEEP ALL PACKAGING! If you should ever return the speakers to Magnepan, they must be returned in their original carton. There will be a charge if it is necessary to replace packaging.
2. Install the feet on the back of the speakers and tighten the screws. If the little flippers on the ends of the feet do not fall loosely by their own weight, spread their ends apart until the friction is eliminated.
3. The LRS+ uses a unique high-current connector which accepts banana plugs or bare wire (See Figure 1). Strip approximately 1/4-inch of insulation from the speaker cable end and insert banana plug or wire into the connector and tighten the set screw with the Allen wrench provided. Special spade lug adapters are available from Magnepan--call the service department at 651-262-1934 to order. Magnepan encourages the use of large gauge speaker wire (preferably 16 gauge or larger, but 12-10 gauge is more ideal).
TO INSURE PROPER PHASING OF THE SPEAKERS, MAKE SURE THE AMP PLUS (+) IS CONNECTED TO THE SPEAKER PLUS (AND MINUS (-) TO MINUS)
4. Your speakers come in matched pairs and are mirror-imaged. The serial number for each speaker in the pair is the same except a "1" or "2" follows each serial number. To start place speaker "1" on the left and "2" on the right. This places the tweeters to the outside. Whether the tweeter is on the inside or outside, the tweeter should not be closer to the listener than the bass section. Measuring from your seated position, if the bass panel is 10 feet, 6 inches, the tweeter should be at least 10 feet, 7 inches (think in distance, not angles).
5. Locate the speakers 2 feet or more in front of a wall.
6. The distance between the speakers should be approximately 60% of the distance you will be from the speakers when you listen to them, for example: if you will be 10 feet from the speakers, position them about 6 feet apart.
7. Tweeter attenuation-- The tweeter attenuator jumper provides maximum tweeter volume for heavily-damped rooms. Your room may require tweeter level reduction by inserting a resistor in place of the jumper. For more information regarding attenuation see Section 4. and Figure 2 on page 4.
8. Mismatched tie-downs!?! If you've just set your speakers up you might have noticed that there are three tie-downs on the "-1" speaker, and only one on the "-2" speaker. This is intentional design and not a mistake. Sometimes referred to as "tuning disks" or "buttons," the asymmetrical tie-down design creates an effect greater than the sum of it's parts. Each panel is optimized for smooth frequency response.

CAUTION – CAUTION – CAUTION

1. **FUSING:** The speaker terminal plate indicates a maximum fuse value of 2.5 amps – Type 3AG (“normal” or “fast blow”). As a precaution, your speakers have been shipped with 2.5 amp fuses installed. Never bypass, increase the value beyond 3 amps, or use “slow blow” fuses in these speakers. Our destruct tests indicate it is virtually impossible to burn out the tweeters if the above precautions are met.
2. **CAT OWNERS:** Cats will sometimes use Maggies for scratching posts or climbing. Should you have this problem we suggest cat repellent from your local pet shop.

Fine Tuning

1. **BASS RESPONSE:** If you do not have access to test equipment play a record or CD with a repetitive bass line. Try the speakers in several positions. Begin experimenting with the speakers approximately 3 feet from the wall. While listening to the repetitive bass, move the speaker forward and backward in increments of about 6 inches. You should notice positions where the bass is stronger or weaker.
While trying different speaker placements, move around the listening area. You will notice the bass is stronger in some locations than others. This is due to standing waves in the room. You should locate your listening position and the speakers where the sound seems the most natural.
2. **TILT FEATURE:** When sitting in a low chair or when seated more than 10 feet away from the speakers, you may want to place them in a more upright position. To tilt the speakers forward, pull the top of the speaker toward you to allow the “flippers” (or clips) on the ends of the feet to drop down. To disengage the clips simply pull the speaker forward or reach down and rotate the flipper over the top of the foot.
3. **STEREO IMAGING AND DEPTH:** Once you have determined the best bass position, separate the LRS+'s by 60% of the distance between your listening chair and the speakers (typically approximately six feet). Then continue moving them apart in increments of 1 to 2 inches, listening carefully at each position. At some point you will start to hear two separate speakers instead of a unified “stage effect.” If you hear the “hole-in-the-middle” effect, your speakers are too far apart. Begin moving them back together in small increments until you achieve one cohesive “sound stage.” Orchestral music works well for this.
4. **SUBJECTIVITY:** Audio is incredibly subjective and there is no real substitute for try it and find out. You might follow all of the instructions and tips in this manual but there might be a different setup that you prefer and that is perfectly okay!

4. OPTIONAL TWEETER ATTENUATION: There are several reasons for possibly needing to attenuate the tweeters in the LRS+:
 1. Recordings typically in the “pop” or “rock” vein often exhibit a pronounced rise in the treble region.
 2. The Magneplanar Quasi ribbon tweeter is very efficient in its total energy dispersion. If the surrounding walls are exceptionally reflective, the overall perceived acoustical balance can be tipped toward a “hot” high end.
 3. Put A and B together and it can be unbearable.
5. Attenuation is accomplished by placing a resistor in the attenuation position on the connection plate (see Figure 1 and 2 below). Provided with your speakers are 1 and 2 ohm resistors for this purpose. These resistors will provide 1 to 4 dB of attenuation.

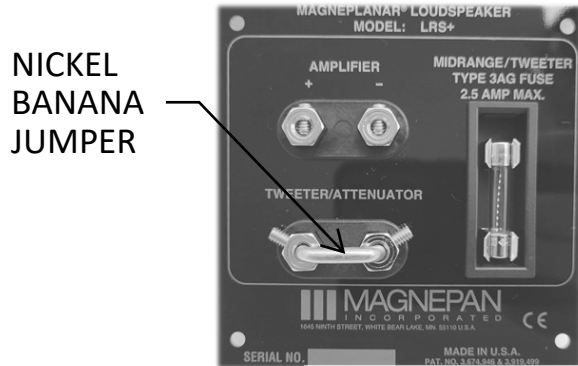


FIGURE 1

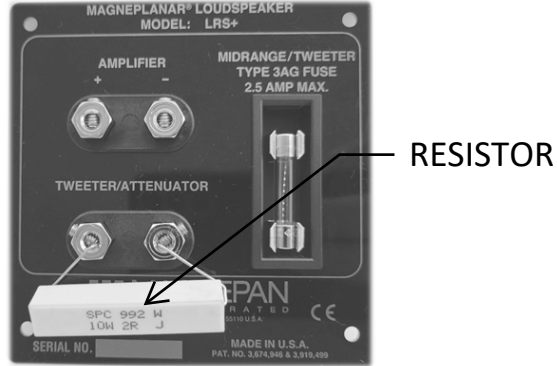


FIGURE 2

If you continue to have a brightness problem you might consider room treatment.

6. ROOM ACOUSTICS: A room that is overly “bright” or “alive” will usually give the sound a “blurred” or “confused” effect. It can also contribute to the brightness problem mentioned above. On the other hand an overly “dead” room usually robs the sound of the aliveness and inner detail that can make you “think you are there.”

You can determine which type of room you have by doing what acoustical engineers do when they are without their test equipment—they walk around a room while making an occasional loud clap with their hands. If you do this at different locations in your room and listen to the sound that bounces back at you from the room boundaries, you can get a pretty good idea of what your room is like. If you hear a tailing “zing” after the loud clap, you can be quite certain you have a “bright” room and you may need to consider some type of wall treatment.

For those about to rock

If you like to play your music loudly, if you like "rock" and "metal", if you want to hear your music and nothing else: this section is for you. During the course of playing your speakers at high volumes you may notice some irregularities with the foil on your LRS+'s. You may see rippling, edges form, or "tenting." This can happen when excessive current is passed through the foil causing the aluminum to heat and expand. Do not be alarmed, though, this is a cosmetic affectation and it will not effect the sound at all. Do not push the "tents" back down or attempt to flatten the foil in any way--this can seriously damage the foil and may result in you losing a section. You may avoid this phenomenon by turning your system down to a "normal" listening volume.

Specifications

Description	Two-way Foil
Frequency Response	50Hz to 22kHz
Sensitivity	86dB, 2.83 Volts, 500Hz @1 Meter
Impedance	4 Ohms
Dimensions	12-7/8" X 48" X 1"
Shipping Weight And Dimensions	45 lbs./pair 18" X 53" X 4"



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