



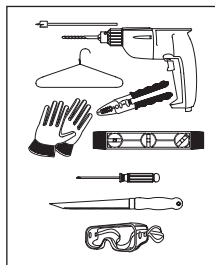
INTRODUCTION

Thank you for purchasing Moderno MLCR THX® in-wall home theater speakers. When properly installed, these THXSelect®-certified speakers will bring-out the best in all your entertainment, delivering film soundtracks as their creators intended them to sound and reproducing music with outstanding clarity and realism. This manual will teach you about your new speakers' features and will show you how to get the very best performance from them. Please read it thoroughly.

TOOLS NEEDED

You will need the following tools to install your Moderno speakers:

- Pencil
- Keyhole or drywall saw
- Philips screwdriver
- Small level
- Fish tape or coat hanger
- Wire strippers
- Gloves
- Safety goggles
- Drill with 1/4" - 1/2" bit (for test hole) and 1" Flat bit (if drilling through studs)



BOX CONTENTS

Your Moderno speaker box should contain the following items:

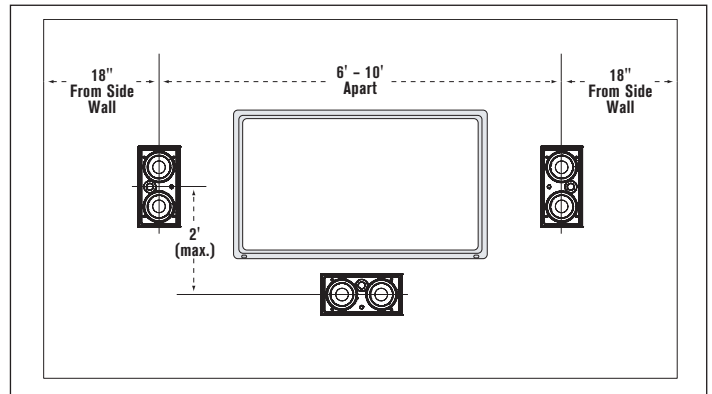
- (1) Moderno MLCR speaker
- (1) Paintable grille
- (1) Mounting cutout template (in packaging)

SPEAKER PLACEMENT

Home Theater Left/Center/Right Channels

- Place the left & right speakers on either side of the video screen, from 6 feet to 10 feet apart and 38 - 42 inches from the floor, oriented vertically with their tweeters away from the video screen.
- If possible, locate the left and right speakers at least 18 inches away from the side walls.
- If possible, locate the center speaker at the same height as the left & right channel speakers (38 - 42 inches from the floor), oriented horizontally with its tweeter on top.
- If you must place the center speaker above or below a video screen, we recommend placing it no more than 2 feet above or below the center of the left and right speakers.

Use the illustration at the top of the next column as a guide.



NOTE: MODERNO MLCR SPEAKERS ARE NOT VIDEO SHIELDED. DO NOT LOCATE THE SPEAKERS CLOSER THAN 20" TO A CONVENTIONAL (CRT) TELEVISION OR DAMAGE TO ITS PICTURE TUBE MAY OCCUR.

Stereo (2-Channel)

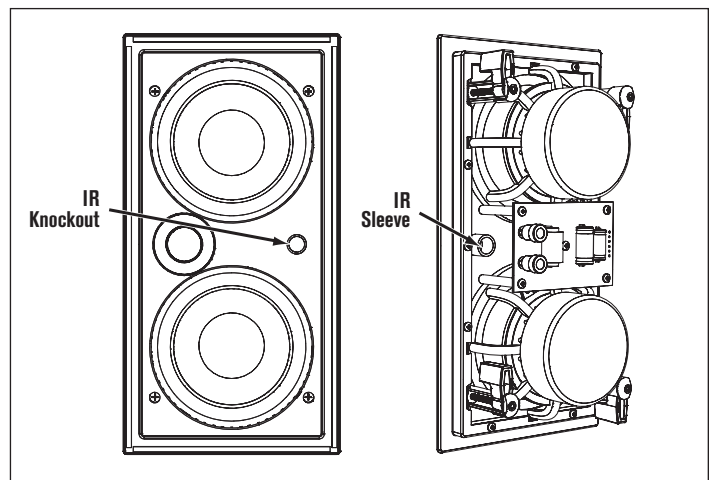
Follow the directions for Home Theater placement for the left and right speakers.

- If listeners will be standing instead of seated, locate the speakers with their centers approximately 5 feet from the floor.

BEFORE INSTALLATION: IR KNOCKOUT

The Moderno MLCR speaker has a knockout for installing an IR receiver into the speaker's front baffle. In systems where the electronics may be placed in an inconvenient location, this allows you to control your system's electronics by aiming remote controls at the front of the room instead of at the electronics.

To remove the knockout, drill it out from the rear using a drill with a 1/2" bit (there is a sleeve guide directly behind the knockout).



After inserting the IR receiver through the hole, seal it into the speaker using silicone caulk (make sure that there are no gaps around the receiver that could create air leaks) and dress the cable behind the speaker along with the speaker wire.

INSTALLING THE SPEAKERS

Step 1. Determine the location for the speaker (see *Speaker Placement* on page 1). Center the speaker between the wall studs. Tap the wall and listen for a "hollow" sound, or use a stud finder to locate studs.

Step 2. Position the included cutout template where the speaker is to be located and trace the outline on the wall with a pencil.

- Make sure the speakers are even with each other and level.

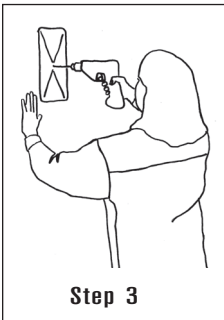
IMPORTANT: The edges of the cutout outline must be at least 3/4" away from any studs, to allow room for the RotoLock® clamps to operate.

NOTE: READ STEP 6 ABOUT RUNNING SPEAKER WIRE BEFORE DECIDING ON THE FINAL SPEAKER LOCATIONS.

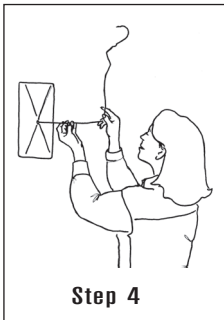
Step 3. Drill a small hole in the center of the outline you just traced.

Step 4. Insert a coat hanger wire into the hole to feel-around for possible obstructions. If there are obstructions, patch the hole and select another location for the speaker. Make sure that any studs will be at least 3/4" away from the edges of the cutout.

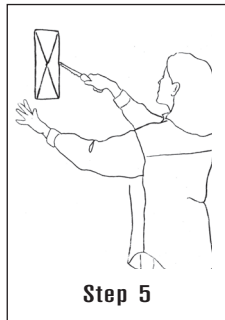
Step 5. Carefully cut the outline of the mounting hole using a keyhole or drywall saw. Remove the drywall from the cutout.



Step 3



Step 4



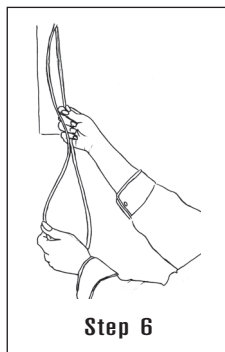
Step 5

IMPORTANT: Make sure your amplifier's power is turned off before performing Step 6.

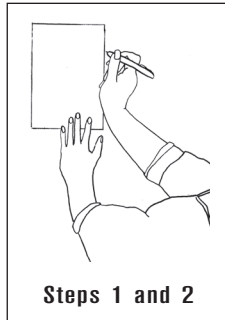
Step 6. Run the speaker cable from the speaker outputs of your amplifier to the speaker locations. Use high-quality cable such as HomeTech HTC100 16/4 cable. Pull the cables through the mounting holes you cut in the wall.

- Allow a few extra feet of cable, and leave enough cable slack so you can strip the insulation from the conductors when you're ready to connect to the speakers.

NOTE: IF SPEAKER CABLE IS TO BE RUN THROUGH WALLS OR CEILINGS, THE CABLE MUST BE UL- AND CL-RATED FOR YOUR SAFETY AND BUILDING CODE COMPLIANCE.



Step 6

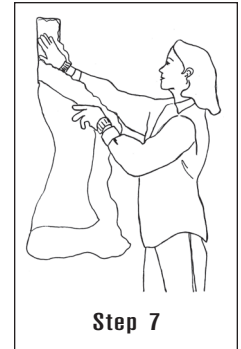


Steps 1 and 2

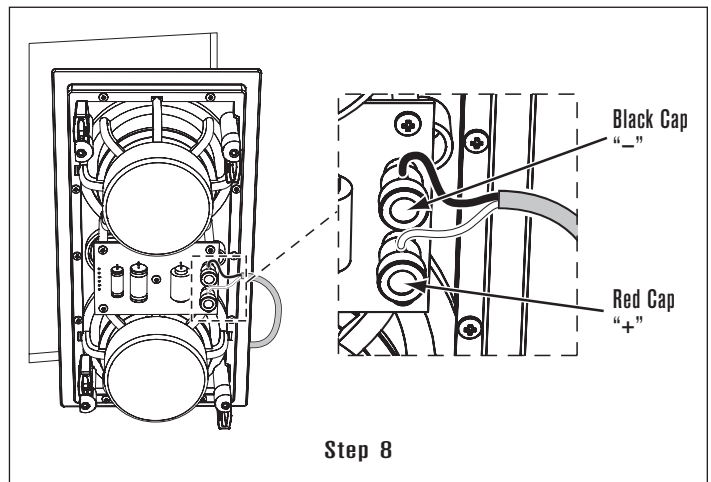
Step 7. Speaker performance can be enhanced by insulating the wall cavity with fiberglass insulation. When insulating speakers, it is best to use a sheet of unfaced fiberglass insulation behind and around the sides of the speaker.

Step 8. Connect the positive ("+") wire from the amplifier to the speaker's red terminal. Connect the negative ("-") wire from the amplifier to the speaker's black terminal.

- The speaker's connector posts are spring-loaded. Push the top of each connector post down to open the connector and insert the exposed wires into the holes in the posts.



Step 7



Step 8

IMPORTANT: Be sure not to let any stray '+' and '-' wires touch each other. Touching wires can cause a short-circuit that could damage your amplifier.

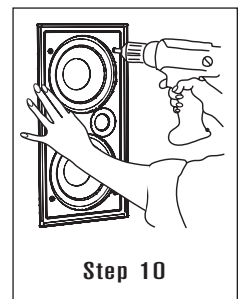
- Double-check that you connected amplifier "+" to speaker "+" and amplifier "-" to speaker "-".

Step 9. Make sure all the RotoLock clamps are in the full clockwise position so that they are tucked within the mounting hole's border. Insert the speaker into the mounting hole.

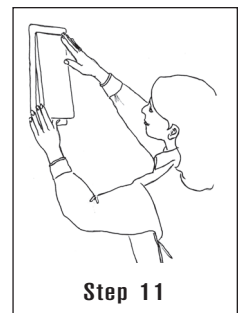
Step 10. Tighten the four screws on the front of the speaker baffle evenly until the speaker is seated snugly and evenly against the wall or ceiling.

IMPORTANT: If you are using a drill or electric screwdriver to tighten the screws be sure use the lowest torque setting.

Step 11. Install the grille by placing it into the speaker baffle. Powerful magnets on the grille and on the speaker baffle will hold the grille firmly on the speaker.



Step 10



Step 11

PAINTING THE GRILLES

Moderno grilles may be painted to color-match their surroundings.

1. Remove the grille from the speaker.
2. Remove the scrim cloth that is attached to the back of the grille. (The adhesive that holds the cloth in place is reusable.)
3. Paint the grille with very thin paint (5 parts thinner to 1 part paint), being careful not to plug the holes.
4. When the paint has fully dried, re-attach the scrim cloth to the back of the grille.
5. Re-install the grille on the speaker.

SPECIFICATIONS

MLCR

Tweeter:	1" (25mm) Silk dome
Woofer:	Two 5¼" (133mm) Woven glass fiber cones, rubber surround
Frequency Response:	75Hz – 20kHz ±3dB
Impedance:	6 Ohms nominal
Power Handling:	100 Watts maximum
Sensitivity:	92dB SPL (2.83V 1 meter)
Grille Material:	Perforated metal
Dimensions (W x H x D):	6 ⁷ / ₈ " x 13 ³ / ₈ " x 3½" (175mm x 340mm x 89mm)
Cutout Dim. (W x H):	6" x 12½" (152mm x 318mm)
Shipping Weight:	7 lbs. (3.2kg) Each

TECHNICAL ASSISTANCE

For answers to installation questions or an installation walk-through, please call our Technical Assistance Department on any business day at: (800) 582-7777, from 7am to 5pm, Pacific Time.

OBTAINING SERVICE

If this product should need repair or service, contact your Authorized Moderno Dealer for help, or use the following procedure:

1. Prior to calling, note the product's model number, serial number, purchase date, and the name and address of the dealer where you purchased the product.
2. Contact our Technical Assistance Department at the above number and describe the problem the unit is experiencing. If applicable, they will issue a Return Authorization Number.

IMPORTANT: Do not return the unit to Moderno without first obtaining a Return Authorization Number!

3. If you're directed to return the unit to Moderno for repair, pack the unit in its original shipping carton. If needed, you can obtain replacement packaging from us for a small charge. Note: it is best if you place the box into an additional outer "overcarton" before shipment to minimize a chance of theft in shipment. Please include a copy of the original bill of sale inside the package.
4. Contact a package delivery service such as United Parcel Service or Federal Express to arrange prepaid (not collect) shipping. *Do not use the U.S. Postal Service.*

IMPORTANT: Freight collect shipments will be refused.

5. **Write the Return Authorization Number on the outside of the shipping carton.** For warranty work, please include a copy of the original bill of sale inside the package.
6. Ship the packaged unit to:

**Returns Department
Moderno
212 Avenida Fabricante
San Clemente, CA 92672-7531**

WARRANTY COVERAGE (USA ONLY)

If within five (5) years from the date shown on the bill of sale the product fails due to a defect in workmanship or material, Dana Innovations will, at its option and at no charge, repair or replace the components of the product which prove to be defective.

For this warranty to be effective, the bill of sale must show that the product was purchased from an "Authorized Moderno Dealer". This warranty shall apply exclusively to the original purchaser and shall not apply to products purchased for industrial or commercial use.

Furthermore, this warranty shall not apply if:

1. Damage to the unit was caused by accident, abuse or misuse;
2. The unit was opened, modified, or repaired by unauthorized personnel; or
3. The unit was not used as outlined in the instruction manual.

EXCLUSIONS AND LIMITATIONS

The warranty set forth above is in lieu of all other warranties, express or implied, of merchantability, fitness for a particular purpose, or otherwise. The warranty is limited to Dana Innovations products registered herein and specifically excludes any damage to loudspeakers and other allied or associated equipment which may result for any reason from use with this product.

Dana Innovations shall, in no event, be liable for incidental or consequential damages arising from any breach of this warranty or otherwise. This warranty gives you specific legal rights, and you may have rights which vary from state to state.



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Due to continuous product improvement, all features and specifications are subject to change without notice.

For the latest Moderno product specification information visit our website: www.modernoaudio.com

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www.modernoaudio.com