

Thank you for giving Home Theater Direct the chance to win your business! We are confident you will find that HTD offers an outstanding combination of performance and value in everything we make. To ensure you get the most out of your new speakers, please take a moment to read this manual before you get started. Should you lose this manual, you can always download or print a copy from www.htd.com.

HTD In-Wall / In-Ceiling Speakers are designed to accurately reproduce soundtracks from both music and video sources, including today's demanding digital signals. Mounted flush to the wall or ceiling, in-wall / in-ceiling speakers are ideal for many applications where traditional speakers would be impractical or impossible. They are especially suited for distributing sound throughout a home and can also be used to enhance surround sound systems.

Please read the following tips before installing your in-wall / in-ceiling speakers:

- All of the speakers in our High Definition line can be mounted in a wall or ceiling.
- All in-wall / in-ceiling speakers will sound tinny until positioned inside the wall or ceiling. Adding damping material or insulation behind the speaker will definitely improve performance and is highly recommended. If you use insulation make sure it is the "rolled-in" or bat type. Do not use "blown-in" insulation as it can interfere with the movement of the mid-range speaker driver negatively impacting performance, and can eventually cause permanent damage.
- Your in-wall / in-ceiling speakers have come packaged with the grille already attached. To remove the grille prior to installation, press the 'dog ears' (or screws) from the back of the speaker into the grille. You may need to work your way around each swing arm in order to work the grille free.
- The grilles are designed for a very tight press fit. A tight fit will ensure that the speaker grille does not vibrate or fall out during operation. Make sure the swivel tweeter is aimed appropriately, and the +/- tweeter switch is in the position you like before installing the grille. If you do need to remove the grille after installation, use an awl to grab the grille near the grille's edge, and slowly work the grille out.
- If you decide to paint your in-wall / in-ceiling speakers, be careful not to apply paint to the rim of the grille and the inside rim of the speaker frame. Too much paint can make installing the grille, which is already designed for a tight fit, very difficult. The best results are achieved by spraying on the paint. Rolling or brushing paint onto the grille often fills in the holes, negatively impacting performance. A spray gun can be purchased at your local paint store for around \$10. Guidelines for thinning the paint are included with the spray gun, although we have found that thinning the paint a little more than recommended actually works best. For latex paint (the most common), we recommend mixing one part water with one part paint. Two thin coats produce better results than one thick coat.
- Allow at least 1" of clearance between the cut-out and any studs or joists for the mounting hardware to work properly. A mounting depth of 3 1/2" measured from the surface of the wall is also required. The speaker location and associated mounting hardware should not conflict with any existing wires or pipes. Check for obstructions before you cut the hole. Drill a small hole in the center of the area you plan to mount the speaker. Cut a piece of coat hanger wire and bend it with a 90-degree angle. Insert the wire into the small hole and fish around to make sure that no pipes, studs, or other objects will get in the way. If you do find something, you can easily patch the small hole you drilled. Otherwise, cut the big hole with confidence!

Quick Steps: Installing In-Wall / In-Ceiling Speakers

You will need the following tools:



Pencil

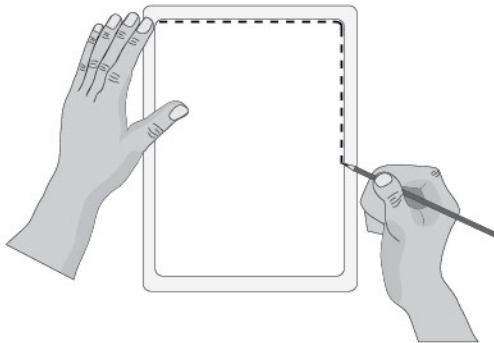


Phillips Head
Screwdriver



Drywall Saw

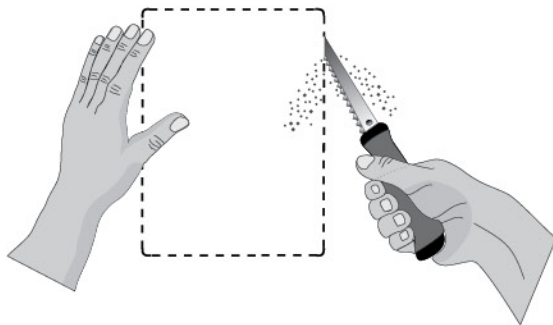
Step 1



After checking for stud locations and confirming there are no obstructions hidden behind the wall, position the cardboard template and trace along the inside edge.

TIP: Check for obstructions before you cut the hole. Drill a small hole in the center of the area you plan to mount the speaker. Cut a piece of coathanger wire and bend it with a 90 degree angle. Insert the wire into the small hole and fish around to make sure that no pipes, studs, or other objects will get in the way. If you do find something, you can easily patch the small hole you drilled. Otherwise, cut the big hole with confidence!

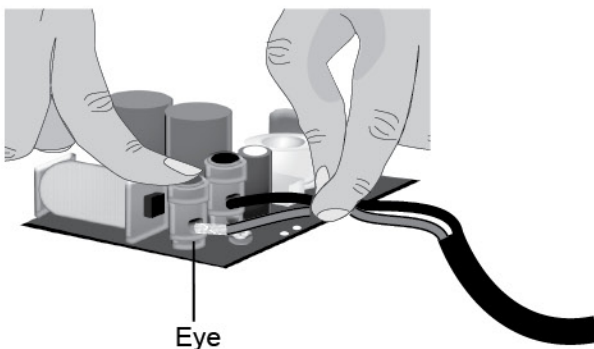
Step 2



Cut along the traced line using a drywall saw or rotary drill. A utility knife will also work but is more difficult to control for beginners.

TIP: Use a drywall saw to cut the hole. A utility knife will make the cleanest cuts in drywall, but a utility knife can be difficult to control by a non-expert. Electric rotary saws make cutting drywall physically easy, but they too can be difficult to control. A simple, inexpensive drywall saw (around \$10 at your local hardware store) is the best bet for beginners. The speaker's frame will cover up any rough edges.

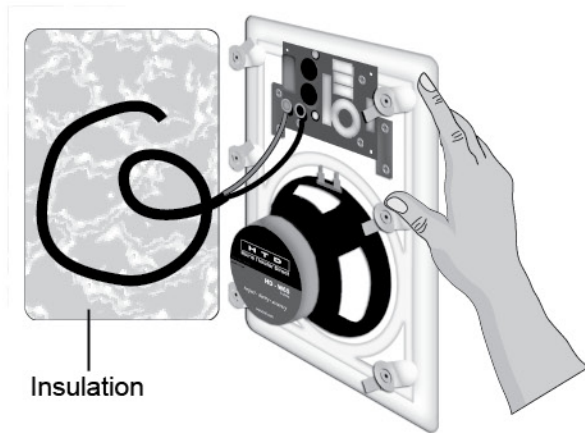
Step 3



Run the cable into place leaving an extra two feet to make connections to the speaker easy. Strip back approximately 1/2 inch of the speaker cable insulation and twist the copper wires tightly. Then, on the back of the speaker, press in the compression terminals (to reveal the "eye") and insert the speaker cables maintaining correct polarity (more detailed information on page 4).

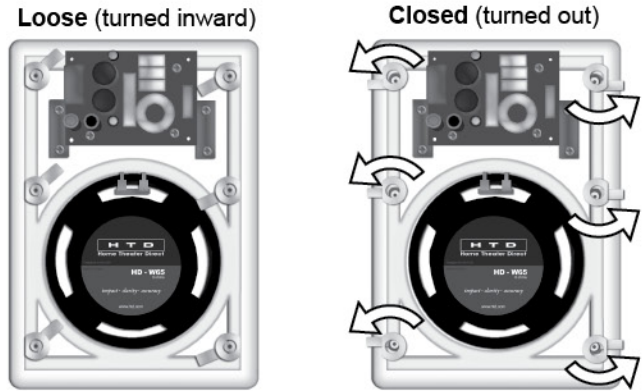
Further detail and information is included on page 1 and 4 of this manual.

Step 4

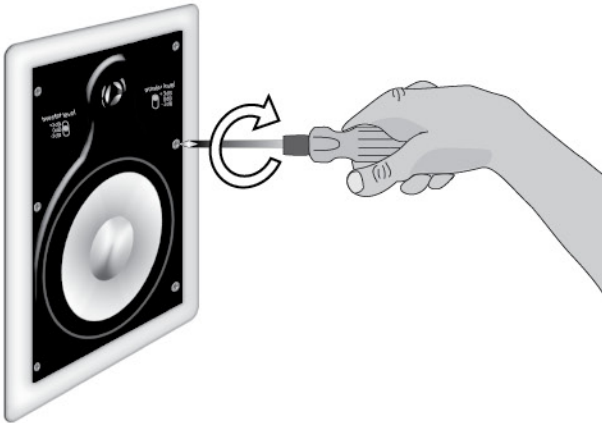


Position the speaker into the hole directly against the insulation. Rolled-in insulation acts like damping material to improve acoustics.

Make sure the dog-ear mounting brackets are loose and turned inward before placing the speaker in the wall.



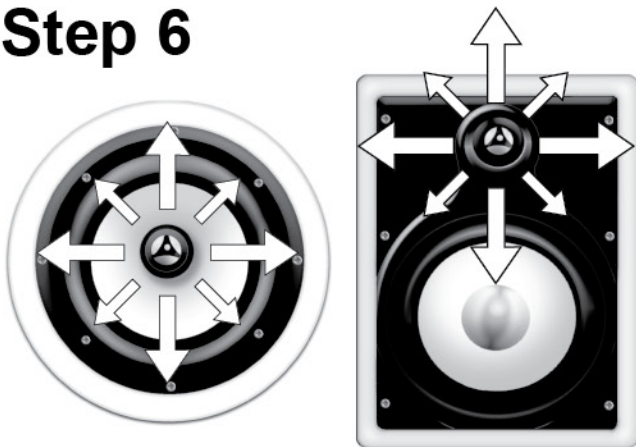
Step 5



Tighten the dog-ear brackets by simply turning the screws in the speaker's front baffle.

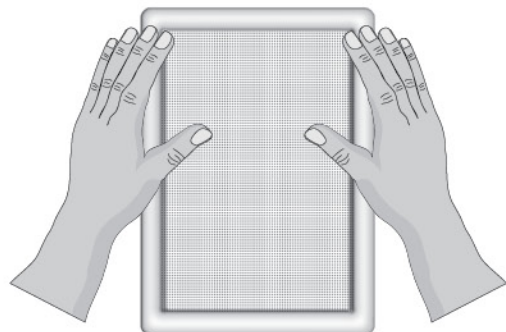
Use a Phillips head screwdriver to turn the screws slowly clockwise. The quick-turn mounting system and frame will "sandwich" or clamp around the wall to hold the speaker securely in place. Do not overtighten.

Step 6



Aim the swivel tweeter to the center of the listening area. Before replacing the grille, listen to the speaker with the +/- tweeter switch in each position to determine what sounds best to you.

Press in the grille. The frame and grille can also be painted to match your decor.



Further detail and information is included on page 1 and 4 of this manual.

Speaker Placement

Once installed, in-wall / in-ceiling speakers are not easily moved or repositioned. Take a little extra time to carefully consider a good speaker location before you begin. As a general rule, the speakers should be mounted close to, or above, ear level and at least one-third of the distance from the corner of the room to the center of the wall or ceiling in which you will mount them. For further assistance, see our web site for speaker placement guidelines in both surround sound and whole-house applications.

Unlike traditional speakers, in-wall / in-ceiling speakers mount flush, and most cannot be angled or aimed back into the listening area from the corner of a room. While most of the frequency range disperses quite quickly, high frequencies reproduced by the tweeter are somewhat directional. With a swivel tweeter, HTD High Definition In-Wall / In-Ceiling Speakers solve this problem by allowing you to aim these high frequencies directly at the primary listening area while maintaining a flush-mount appearance.

Placement can also impact the overall performance of a speaker. In general, the closer to a wall or corner that a speaker is placed, the more the lower frequencies are enhanced. Some listeners will prefer the added bass, others might classify the sound as too "muddy". HTD High Definition In-Wall / In-Ceiling speakers allow you to compensate for the impact of speaker placement. This is done by slightly increasing or decreasing the sound levels of the lower (woofer) and higher (tweeter) frequencies using a +/- 3dB woofer switch and a +/- 3dB tweeter switch. These are located on the front baffle of the speaker for easy access. Adjust these levels to suit your room and listening taste prior to installing the grille.

Hooking Up the Wires

The terminals will accommodate up to 14-gauge speaker wire, which should be used for longer connections (greater than 50 feet of wire). For shorter distances, 16 wire will suffice, although we still recommend 14-gauge for best performance. For behind-the-wall installations such as this, we recommend using UL Class 3 approved cable (marked "CL3") for compliance with local building codes. Consider using HTD cable for all of your home theater and whole-house audio installations. HTD cable offers the extra benefit of being shielded, exceptional performance, and of course, is priced significantly lower than retail.

Leave around two feet of extra wire at the speaker end to make installation and positioning of the speaker easier. Do not use staples, nails or other metal objects to secure the speaker wire. The resulting short could affect your system's performance, and could also damage components in your system, especially the amplifier. You will get the best sound quality and least amount of hum by keeping the speaker wires at least 18 inches away from other electrical wires and cables. Always cross speaker wires with other cable at a 90-degree angle.

When connecting a speaker, it is very important to maintain the correct polarity. To do this, be sure that the wire attached to the +, red, or positive terminal on the speaker connects to the +, red, or positive terminal on the other component. Similarly, the -, black, or negative terminal on the speaker must connect to the respective -, black, or negative terminal on the other component.

Mounting the Speaker (if you are unsure, consult a professional contractor)

Yes, you will be cutting a hole in the wall or ceiling. With the right tools and a little extra care and preparation, installing the in-wall / in-ceiling speakers can be both quick and easy. Carefully cut out the hole drawn on the cardboard template at the perforated edge marked as the mounting template. (Note that the inside ring on the template can be used to shield the woofer while you paint the frame.) Next, position the template, now a border, where you have chosen to mount the speaker and trace along the inside edge.

Make your cuts along this line. Use a drywall saw or rotary drill to cut the hole. A utility knife will also work but is more difficult to control for beginners. Try to keep the cuts neat; however the frame will overlap the hole to hide any rough edges. Run the speaker wires into position and leave about two feet of extra wire at the opening.

Remove the grille from the frame by pressing the quick-turn mounting screws from the back of the speaker into the grille. Attach the speaker wires to the speaker terminals. Turn all of the quick-turn mounting arms inward and with the grille removed, insert the speaker into the mounting hole directly against the insulation. Use a Phillips head screwdriver to turn the screws slowly clockwise. The quick-turn mounting system and frame will "sandwich" or clamp around the wall to hold the speaker securely in place. Do not overtighten.

Before replacing the grille:

1. Position the swivel tweeter so that it points toward the place in which you will most often be listening to the speaker.
2. Listen to the speaker with the +/- tweeter switch in each position to determine what sounds best to you. The "0" position will be best for most situations.

Installing the Grille

The powder coated aluminum grille, as well as the plastic frame, can be painted to match any decor. If you choose to paint them, do so before attaching the grille to the speaker. The grille is held in place by a friction fit and is difficult to remove once the speaker is installed.

Warranty

All HTD speakers carry a five-year parts and labor warranty. Warranty registration occurred automatically at the time your order was placed. There is no need to complete or mail in additional paperwork. Thank you for choosing HTD!

Additional information, including detailed specifications for each model, can be found on our website, www.htd.com. Thanks again for choosing Home Theater Direct!

If you have any questions, we can be reached at...
info@htd.com or toll free 1-866-HTD-AUDIO (483-2834)

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