

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 surround formats. Mounted flush to the wall or ceiling, in-wall / in-ceiling speakers are ideal for many applications where traditional cabinet-style speakers would be impractical or impossible. They are well suited for both distributing sound throughout a home as well as more performance-oriented surround sound systems.

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

- All of the speakers in our HDX line can be mounted in a wall or ceiling.
- All in-wall / in-ceiling speakers will sound thin or "tinny" until positioned inside the wall or ceiling. Adding damping material or insulation behind the speaker will usually 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 speaker driver, negatively impacting performance, and may eventually cause permanent damage.
- Your new in-wall / in-ceiling speakers come packaged with the press-fit grille already attached. To remove this grille prior to installation, press the "dog ears" (or swing arms) from the back of the speaker into the grille. You may need to gently work your way around each swing arm in order to work the grille free.
- The press-fit grille is designed for a very tight fit. A tight fit ensures that the speaker grille does not vibrate or fall out during operation. Make sure the swivel tweeter is aimed appropriately, and the +/- tweeter and +/- woofer switches are in the position you prefer before installing the grille. If you do need to remove the grille after installation, use a sharp pick or awl to grab the grille near the edge, then 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 or 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. Please be sure to remove the acoustically transparent cloth insert prior to painting. This insert uses a self-stick adhesive and can be re-attached after painting if preferred.

Painting options include using an airbrush, traditional spray paint (can), or a dedicated paint spray gun. 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. Regardless of the method used, multiple thin coats usually produce better results than one thick coat.

- Allow at least 1" of clearance between the cut-out edge and any studs or joists for the mounting hardware to work properly. A minimum mounting depth (varies by speaker model) measured from the front surface of the drywall is also required.

The speaker location and associated mounting hardware should not conflict with any existing wires, plumbing, or framing. Check for obstructions before you cut the hole. If necessary, 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!

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.

Additional information, including detailed specifications for each model, can be found on our website, www.htd.com. Thank you for choosing HTD!

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

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

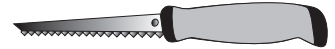
You will need the following tools:



Pencil

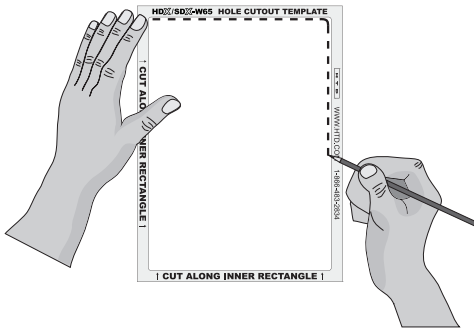


Phillips Head
Screwdriver



Drywall Saw

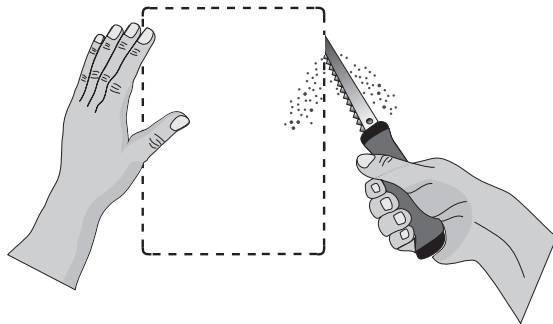
STEP 1



After checking for stud locations and confirming there are no obstructions hidden behind the wall, position the cardboard “Hole Cutout 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 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!

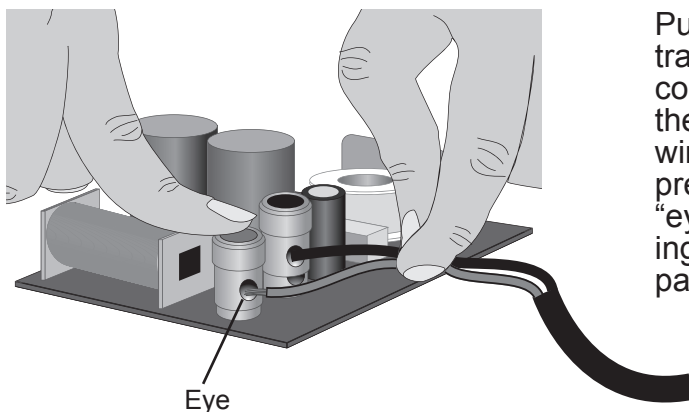
STEP 2



Cut along the traced line using a drywall saw.

TIP: Use a drywall saw to cut the hole. A rotary tool or utility knife will also work but may be more difficult to control for beginners. A simple, inexpensive drywall saw (around \$10 at your local hardware store) is usually the best bet for beginners. The speaker frame will overlap the hole slightly to help hide the rough edges.

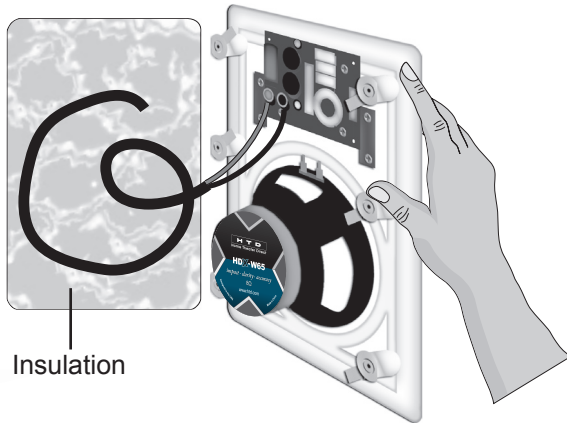
STEP 3



Pull the speaker cable into place leaving an extra two feet – this will make it easier to make the connections. 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.

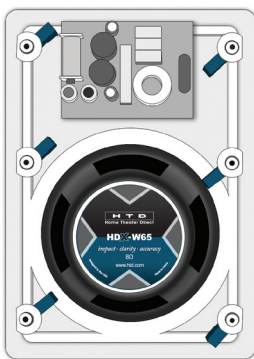
STEP 4



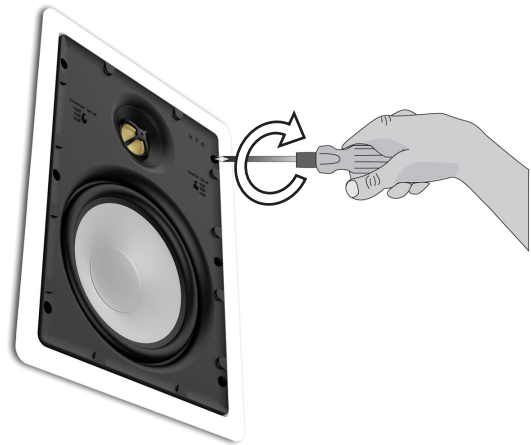
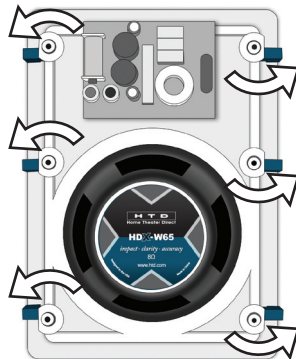
Make sure the dog-ears (swing arms) are loose and turned inward before placing the speaker in the wall, then position the speaker into the hole directly against the insulation.

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 over-tighten.**

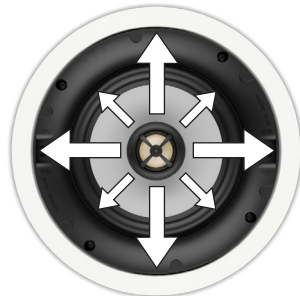
Loose (turned inward)



Closed (turned out)

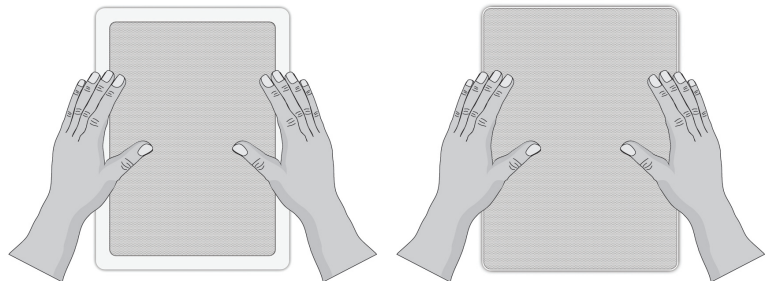


STEP 5



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

Install the grille. The press-fit aluminum grille is recommended for any speakers that will be installed in an exterior application due to its oxidation resistance. The magnetic steel grille is installed by simply placing over the speaker frame.



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 diffuses evenly, high frequencies reproduced by the tweeter are slightly more directional. Because they feature a pivoting tweeter, our HTD HDX In-Wall / In-Ceiling Speakers address this issue by allowing you to aim these high frequencies directly toward the primary listening area while still maintaining a flush-mount appearance.

Placement can also impact the overall performance of a speaker. In general, the closer to a wall or corner you place a speaker, the more the lower frequencies are enhanced. Some listeners will prefer the added bass, others might classify the sound as too "boomy". HTD HDX In-Wall / In-Ceiling speakers allow you to compensate for the impact of speaker placement. This is done by slightly increasing or decreasing the output 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 either of the included grille options.

Connecting the Speaker Cable

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

HTD recommends leaving at least 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 potentially damage other components in your system, especially the amplifier. You will get the best sound quality and help to reduce hum by keeping the speaker wires at least 18 inches away from other electrical wires and cables. When possible, always cross speaker wires with other cable at a 90-degree angle, and avoid running speaker cable in parallel with any electrical wiring.

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 (+/positive) terminal on the speaker connects to the red (+/positive) terminal on the other component (usually the amplifier). Similarly, the black (-/negative) terminal on the speaker must connect to the respective black (-/negative) terminal on the other component (usually the amplifier).

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

Carefully detach the "Paint Shield" section from the cardboard "Hole Cutout Template" at the perforated edge. Next, position the Hole Cutout Template where you have chosen to mount the speaker and trace along the inside edge.

Make your cut along this line. HTD recommends using a drywall saw to cut the hole. A rotary tool or utility knife will also work but may be more difficult to control for beginners. Try to keep the cuts neat and follow the template closely; however the frame will overlap the hole slightly to help hide the rough edges. Pull the speaker wires into position and leave at least two feet of extra wire at the opening.

Remove the grille from the frame by pressing the dog-ear (swing arm) mounting screws from the back of the speaker into the grille. Attach the speaker wires to the speaker terminals. Turn all of the dog-ears (swing 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 clamp around the drywall/mounting surface to hold the speaker securely in place. **Be careful not to over-tighten, as this may damage the speaker.**

Before replacing the grille:

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

Painting/Installing the Grille

Both the press-fit aluminum grille and magnetic steel grille, as well as the polymer frame, can be painted to match any decor. If you choose to paint them, do so before attaching the grille to the speaker. Please be sure to remove the acoustically transparent cloth insert prior to painting.

A paint shield has been included (attached to the "Hole Cutout Template") to assist with the painting process. Simply detach it from the included template, then place a staple at all locations indicated. These staples will align with the magnets embedded in the frame, and hold the paint shield in place during painting. The paint shield should be centered on the speaker, covering the internal area while leaving the bezel of the speaker uncovered.