ICTS-6 LCR Ceiling Speaker

Installation Instructions

Thank you for purchasing Atlantic Technology speaker products. These high quality 2-way speakers solve a myriad of surround sound and distributed audio installation problems. We work very hard to ensure that all of our speakers consistently deliver exceptional performance and value.

We hope you enjoy them to their fullest. Please take a moment to read these instructions so you can get the most from your speakers.

Mounting Specifications

These speakers are intended for mounting in a ceiling, in material ranging from $\frac{1}{2}$ inches to 1 inch thick. They require at least 4 $\frac{7}{8}$ inches as measured from the front surface of the ceiling .The mounting opening for the ICTS-6 LCR is 9 $\frac{5}{8}$ inches in diameter (4 $\frac{13}{16}$ radius). These speakers will work equally as well in a wall as in a ceiling, however note that they require more mounting depth than is normally available in a 2x4 studded wall.

Locations

Generally, it's best to keep the speaker at least 24 inches away from any nearby wall boundaries (wall/corner), since placing any speaker in close proximity to other boundary surfaces will always "color" the sound that the speaker produces.

The ICTS-6 LCR's woofer is angled 15 degrees so that it may be aimed more directly at the listening area. The 1-inch dome tweeter is mounted in a pivoting housing, so it to can be directed precisely for best sound.

Unlike many ceiling speakers, the ICTS-6 LCR employs a special tweeter design called LRT[™] (Low Resonance Tweeter), which allows the tweeter to handle more of the sound spectrum than ordinary tweeters. Since small tweeters disperse the sound over a much wider angle than large woofers, having the tweeter handle more of the crucial midrange frequencies means that the ICTS-6 LCR will cover the listening area with sound much more uniformly and accurately than conventional ceiling speakers. This design feature greatly improves the ICTS-6 LCR's performance, without having to resort to complicated, expensive mechanical twisting designs or needing to use multiple expensive drivers.

Since the ICTS-6 LCR's tweeter handles most of the directional information, it's not crucial that you point the woofer directly at the listeners. As long as it's pointed in the general direction of the listening area, the tweeter will do the rest.

That's the advantage of Atlantic Technology's innovative engineering.



Model ICTS-6 LCR



New Construction and Retrofit Installations

Note: A new construction rough-in kit and back box kit are optionally available from Atlantic Technology. Please refer to the instructions included in those kits for their use. If the rough in kit has been used please go directly to Step 2 below.

Cut an appropriately sized opening in the ceiling material. Be sure that the ceiling material can support the weight of the speaker. Also be sure that the sides of the opening are at least 1 ½ inches away from any beams or joists within the cavity. If it is not, the rotating clamps will be restricted in their movement and may not clamp properly.



Be sure that all foreign material in the ceiling is kept out of the speaker assembly, particularly the back of the woofer cone. There is a cloth shield on the rear of the woofer, but please use care anyway.

Mount the white frame in the ceiling. Using the red arrows on the frame as a guide (see Figure 2), roughly orient the frame towards the listening area. This will assure that the woofer is aimed correctly at the listener. Remember: This is not critical. An approximate orientation is fine, since the 6 LCR's tweeter—which can be precisely adjusted—carries most of the directional information.

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Tighten the mounting screws one at a time. As you tighten the screws, the clamps on the back of the assembly will turn and lower, grabbing the back of the ceiling and sandwiching the ceiling between themselves and the frame's circular trim ring.



Snug all four mounting screws in this manner. *Be careful not to overtighten them.*

- You may now install the grille into the frame by gently pushing it into the recess and paint the ceiling and the grill/frame assemblies at the same time to assure a neat, uniform appearance.
- (If you have painted the grill/frame assembly, remove the grille from the frame with a pick or awl.) Attach the previously installed audio feed wires to the speaker terminals. Simply remove 1/2 inch of insulation from the end of each input wire. Push down on the terminal connector and a large opening will appear in the shaft of the connector that is capable of holding up to 10 gauge wire. Insert the bare wire into the opening and release the terminal. Be sure to observe correct polarity, connecting the positive (+) leads to the red terminals and the negative (-) leads to the black terminals. Also be sure that no stray strands of wire touch across any terminals.



Screw the black driver/crossover assembly into the white frame housing so the woofer points in the direction you selected. The screw bosses are "keyed" for easy attachment.



IMPORTANT: After aiming the tweeter at the listening location, use the high frequency level adjustment, located on the tweeter assembly, to increase (+)or decrease (-) the level of high frequency sound produced by the tweeter. See Figure 6.



Specifications

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	ICTS-6 LCR
Outer Diameter	10 %" (276mm)
Cutout Diameter	9 5⁄8" (245mm)
Mounting Depth	4 %" (124mm)
Frequency Response	54 – 20kHz, +/- 3dB
Woofer	6 ½" (165mm) GLH (Graphite Loaded Homopolymer)
Tweeter	1" (25mm) LRT™ silk dome
Nominal Impedance	6 Ω
Crossover Frequency	2.2kHz
Sensitivity (1 watt/1 meter)	89dB
Recommended Power	10 – 100 Watts RMS
Weight	5 lbs.
Optional) New Construction Kit	IC-NC-8
(Optional) Ceiling Back Box	IC-BOX-6/8 (requires IC-NC-8 kit)

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