Aspire™ In-Ceiling Speakers

The product of expert Crestron® audio engineering. Aspire[™] speakers deliver high-end performance for demanding residential installations. Select materials and a refined appearance underscore the meticulous design behind each model. The result is a complete line of in-wall and in-ceiling speakers worthy of a place in every room of the finest custom home.

The Aspire IC8DT model is a single in-ceiling loudspeaker featuring an 8 inch dual voice coil woofer and dual 1 inch dome tweeters. It is designed to produce stereo sound in the space of a single speaker, perfect for bathrooms and other small spaces.



Installation

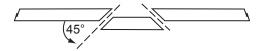
Determine Placement In Room

Speaker placement is largely a matter of personal preference. However, placing the speaker near a corner or wall will extend its low frequency response.

Prepare Mounting Holes

Before finalizing the speaker location, check to make sure there are no fixtures, pipes, air ducts, joists, or other possible obstructions. Use a good quality stud finder to locate joists. If there is no access to the area above the ceiling, and it is uncertain that there are no obstructions, carefully drill a small hole just through the ceiling near the middle of the proposed speaker location(s) and use one of the commercially available inspection devices designed for this purpose, or do one of the following:

- Use a piece of stiff wire, bent into an "L" shape, with one end long enough to explore an area equal to the size of the speaker with the toggle clamps extended. Insert the wire into the hole, make sure it rotates freely in a complete circle and that there is sufficient depth, or
- Use a drywall saw to cut a small hole at a 45° angle toward the inside of the hole. An angle cut simplifies repair since the removed piece can be reinserted to help plug the hole.



If there are no obstructions, use the supplied template to trace outlines of the mounting holes on the ceiling. Cut the final mounting holes at a 90° angle to the ceiling.



Paint the Speaker Grilles

Speaker grille painting should be done prior to mounting.

- 1. Carefully remove the material on the underside of the grilles and set them aside for reinstallation. It may be necessary to use a knife or other sharp instrument to free an edge of the material so it can be peeled away. Use care to avoid cutting or tearing the material.
- 2. Dry brush or lightly spray the surface to be painted. Use care to avoid clogging the holes in
- 3. Once the paint is dry, reinstall the material to the underside.

Install Cables

Run the cables from the audio source to the speaker location following all appropriate local codes. Strip the ends of the speaker cable wires 1/4" to 1/2" (6 mm to 12 mm) and twist the exposed strands.

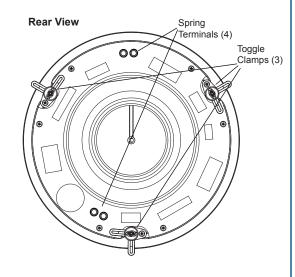
Mount/Remove Speakers

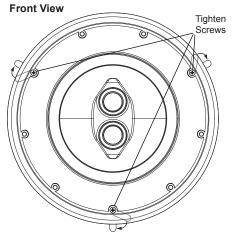
The in-ceiling speakers include three toggle clamps that simplify the mounting process. If the grilles are mounted on the speakers, remove them before proceeding. (Refer to "Install/Remove Grilles", below.)

- 1. Connect the speaker cable wires to the spring terminals by pressing the top of the terminals down and inserting the exposed strands into the hole. Make sure that left and right channels are connected to the left and right tweeter terminals, respectively, and that the + wires go to the + (red coded) terminals, and the - wires go to the - (black coded) terminals.
- 2. With the toggle clamps turned inward, insert the speaker into the opening. As the three screws on the front of the speaker are tightened, the toggle clamps first rotate into clamping position (refer to the figure to the right) and then begin holding the speaker to the ceiling. Tighten the screws until the speaker is secured; do not overtighten.
- 3. Speaker removal is accomplished by reversing the procedures given in steps 1 and 2 above.
 - a. Loosen the front screws to unclamp the speaker. Continue to loosen the screws until the toggle clamps rotate inward.
 - b. When the speaker is loose, carefully remove it from the opening.
 - c. Disconnect the wires from the terminals.

Install/Remove Grilles

The zero-bezel frameless grilles are held in place by powerful magnets. To remove the grilles, grip the edges and pull away from the speaker.







Aspire™ In-Ceiling Speakers

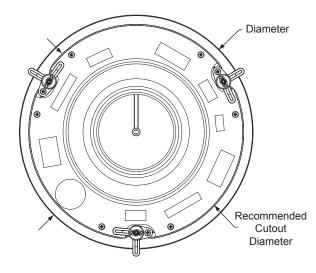
Specifications

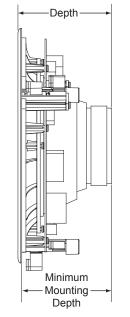
IC8DT Specifications

Features & Performance Woofer Dual voice coil 8 in (203 mm) woven poly-glass composite with rubber surround, vented pole piece and steel basket (2) 0.98 in (25 mm) advanced synthetic polymer dome, ferrofluid cooling, post mounted Crossovers Crossover Frequency Impedance Frequency Response Frequency Range Power Handling Sensitivity Connections Input Maximum Wire Size Environmental Temperature Humidity Dual voice coil 8 in (203 mm) woven poly-glass composite with rubber surround, vented pole piece and steel basket (2) 0.98 in (25 mm) advanced synthetic polymer dome, ferrofluid cooling, post mounted 4th order hybrid 2.5 kHz 8 Ω nominal per channel 48 Hz - 20 kHz (±3 dB) 40 Hz to 20 kHz (-10 dB) 100 watts program per channel 89.5 dB @ (W/m) per channel 40 W/m) per channel 41° to 104° F (5° to 40° C) 10% to 90% RH (non-condensing) For indoor use only	SPECIFICATION	DETAIL
Tweeter with rubber surround, vented pole piece and steel basket (2) 0.98 in (25 mm) advanced synthetic polymer dome, ferrofluid cooling, post mounted Crossovers 4th order hybrid Crossover Frequency 2.5 kHz Impedance 8 Ω nominal per channel Frequency Response 48 Hz - 20 kHz (±3 dB) Frequency Range 40 Hz to 20 kHz (-10 dB) Power Handling 100 watts program per channel Sensitivity 89.5 dB @ (W/m) per channel Connections (2 sets of 2) spring terminals Input (2 sets of 2) spring terminals Maximum Wire Size 10 AWG Environmental 41° to 104° F (5° to 40° C) Humidity 10% to 90% RH (non-condensing)	Features & Performance	
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1 , , , , , , , , , , , , , , , , , , ,	Temperature	41° to 104° F (5° to 40° C)
For indoor use only	Humidity	10% to 90% RH (non-condensing)
1		For indoor use only
Construction		400 1 11 11
Baffle ABS plastic, black	24	
Grille Steel with textured finish, paintable, magnetically held zero bezel frameless	Grille	Steel with textured finish, paintable, magnetically held zero
	Mounting	Flush ceiling mount using three integral spring-loaded toggle
clamps, 1.35 in (34 mm) maximum surface thickness	Widdining	
Dimensions*	Dimensions*	
Diameter 11.64 in (296 mm)	Diameter	11.64 in (296 mm)
Depth 4.66 in (119 mm)	Depth	
Minimum Mounting Depth 4.47 in (114 mm)	Minimum Mounting Depth	4.47 in (114 mm)
Recommended cutout 10.80 in (275 mm)		10.80 in (275 mm)
diameter		
Weight* 7.55 lb (3.4 kg)	•	7.55 lb (3.4 kg)
Available Models ASPIRE ICDT-W-T Aspire 8" 2-Way Single-Point Stereo In-Ceiling Speaker, White Textured		
Available Accessories	Available Accessories	
SPKA-NCTP-IC800 New-Construction Speaker Templates	SPKA-NCTP-IC800	New-Construction Speaker Templates

^{*} Dimensions shown are per speaker

Rear and Side Views





888.273.7876

201.767.3400

Problem Solving

Troubleshooting

The following table provides corrective action for possible trouble situations. If further assistance is required, please contact a Crestron customer service representative.

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
intermittent sound from speakers.	Cable connection error.	Verify cable connections between amplifier and speakers.
	Amplifier not receiving input signal or amplifier malfunction.	Verify amplifier is functioning correctly, that it is receiving an input signal and that correct input source is selected.
noise such as	Faulty device in system.	Verify all devices in system are functioning properly.
	System grounding fault.	Verify system grounding.
Poor low frequency output.	Incorrect polarity connection at speaker.	Verify speaker connection polarity (+ on speaker to + on amplifier).

Further Inquiries

To locate specific information or resolve questions after reviewing this guide, contact Crestron's True Blue Support at 1-888-CRESTRON [1-888-273-7876] or refer to the listing of Crestron worldwide offices on the Crestron Web site (www.crestron.com/offices) for assistance within a particular geographic region.

To post a question about Crestron products, log onto the Online Help section of the Crestron Web site (www.crestron.com/onlinehelp). First-time users must establish a user account to fully benefit from all available features.

Future Updates

As Crestron improves functions, adds new features and extends the capabilities of the Aspire IC8DT, additional information may be made available as manual updates. These updates are solely electronic and serve as intermediary supplements prior to the release of a complete technical documentation revision.

Check the Crestron Web site periodically for manual update availability and its relevance. Updates are identified as an "Addendum" in the Download column.

The specific patents that cover Crestron products are listed online at patents.crestron.com

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