

IW5, IW6, IW8

Essence™ In-Wall Speakers

The product of expert Crestron® audio engineering, Essence™ speakers deliver the pinnacle of performance for demanding residential installations. Select esoteric materials, top shelf components and a refined, high-end 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 Essence line promises the ultimate in installed audio design, delivering simply stunning sound quality while minimizing any impact on your décor thanks to paintable zero-bezel grilles.



1 Installation

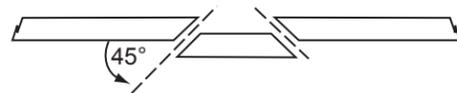
Determine Placement In Room

Speaker placement is largely a matter of personal preference. However, placing the speaker near a corner 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 behind the wall, and it is uncertain that there are no obstructions, carefully drill a small hole just through the wall 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 wall. Cut the final mounting holes at a 90° angle to the wall.



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 the grilles.
3. Once the paint is dry, reinstall the material to the underside.

Install Cables

Run the cables from the audio source to each 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

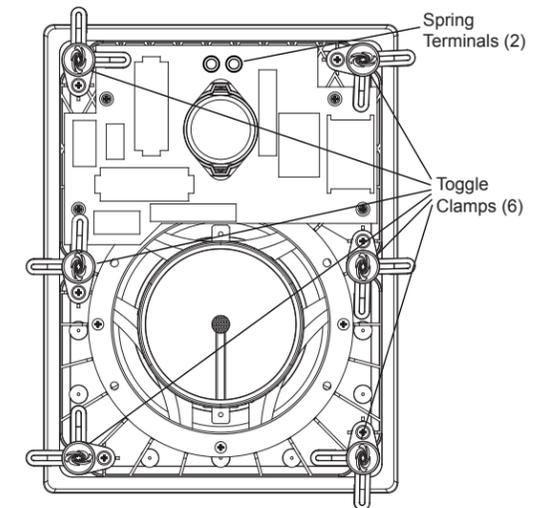
The in-wall speakers include six toggle clamps that simplify the mounting process. If the grilles are mounted on the speakers, remove them before proceeding. (Refer to “Install/Remove Grilles”, below.)

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 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 six 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 wall. 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.

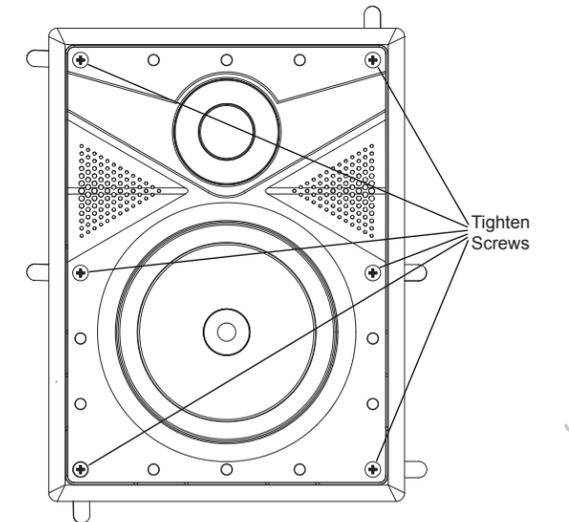
Install/Remove Grilles

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.

Rear View (Typical)



Front View (Typical)



IW5, IW6, IW8

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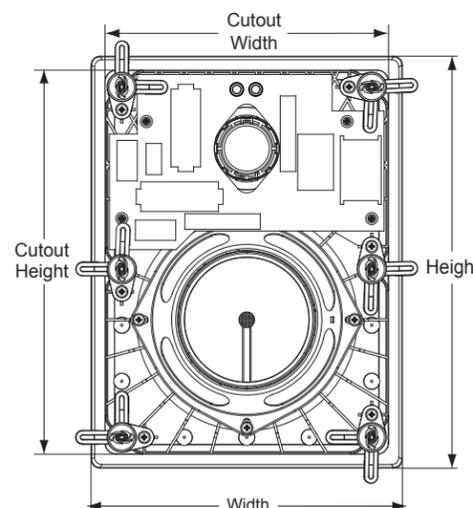
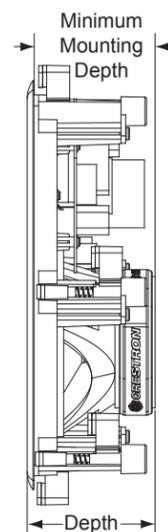
2 Specifications

IW5, IW6, IW8 Specifications

SPECIFICATION	IW5	IW6	IW8
Features & Performance			
Woofers ¹	5.25 in (134 mm)	6.50 in (165 mm)	8.00 in (203 mm)
Tweeters ²	1.10 in (28 mm)	1.10 in (28 mm)	1.10 in (28 mm)
Crossovers	4th order Linkwitz-Riley	4th order Linkwitz-Riley	4th order Linkwitz-Riley
Crossover Frequency	2 kHz	2 kHz	2 kHz
Impedance	8 Ω nominal	8 Ω nominal	8 Ω nominal
Frequency Response	55 Hz - 20 kHz (±3 dB)	45 Hz - 20 kHz (±3 dB)	38 Hz - 20 kHz (±3 dB)
Frequency Range	45 Hz to 20 kHz (-10 dB)	35 Hz to 20 kHz (-10 dB)	30 Hz to 20 kHz (-10 dB)
Power Handling	125 watts program	150 watts program	175 watts program
Sensitivity	88.5 dB @ (W/m)	89.0 dB @ (W/m)	91.5 dB @ (W/m)
Connections			
Input	(2) spring terminals		
Maximum Wire Size	10 AWG		
Environmental			
Temperature	41° to 104° F (5° to 40° C)		
Humidity	10% to 90% RH (non-condensing)		
	For indoor use only		
Construction			
Baffle	ABS plastic, black		
Grille	Steel with textured finish, paintable, magnetically-held "zero bezel" frameless		
Mounting	Flush wall mount using six integral spring-loaded toggle clamps, 1.35 in (34 mm) maximum surface thickness		
Dimensions³			
Height	10.42 in (265 mm)	11.86 in (301 mm)	13.91 in (354 mm)
Width	7.90 in (201 mm)	8.98 in (228 mm)	10.45 in (266 mm)
Depth	3.27 in (83 mm)	3.67 in (94 mm)	4.50 in (115 mm)
Minimum Mounting Depth	3.10 in (79 mm)	3.49 in (89 mm)	4.33 in (110 mm)
Recommended Cutout Size	9.80 in (249 mm) high, 7.30 in (186 mm) wide	11.20 in (285 mm) high, 8.30 in (211 mm) wide	13.30 in (338 mm) high, 9.80 in (249 mm) wide
Weight³	5.26 lb (2.4 kg)	5.74 lb (2.6 kg)	7.54 lb (3.4 kg)
Available Models	ESSENCE IW5-W-T Essence 5.25" 2-Way In-Wall Speaker, Pair, White Textured	ESSENCE IC6-W-T Essence 6.5" 2-Way In-Wall Speaker, Pair, White Textured	ESSENCE IC6-W-T Essence 8" 2-Way In-Wall Speakers, Pair, White Textured
Available Accessories	SPKA-NCTP-IW500 New-Construction Speaker Templates	SPKA-NCTP-IW600 New-Construction Speaker Templates	SPKA-NCTP-IW800 New-Construction Speaker Templates

1. Woven Kevlar® with rubber surround, vented pole piece and cast aluminum basket
 2. Advanced synthetic polymer dome, ferrofluid cooling, damped aperiodic rear chamber
 3. Dimensions shown are per speaker, positioned vertically

Side and Rear Views (Typical)



3 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
No sound or 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.
Constant noise such as buzz, hum, or hiss from speakers.	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 Essence IW5, IW6, and IW8, 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 at patents.crestron.com.

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