

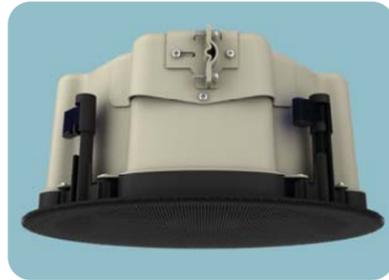
# SAROS\_IC6LPT/IC8LPT/ICE6LPT/ICE8LPT

## Saros® Low Profile & Saros Express Low Profile 2-Way In-Ceiling Speakers

Saros® speakers by Crestron® deliver professional grade performance and flexible installation in a range of popular sizes for demanding commercial applications. Solid construction, easy installation, and high end components are hallmarks of the complete Saros speaker line.

Ideal for use in background or foreground music, paging, and sound reinforcement systems, Saros speakers are engineered to achieve smooth, even coverage, high output, and clear, natural sound quality through the employment of horn loaded dome tweeters, high efficiency damped cone woofers, ported enclosures, and precisely tuned crossovers. Their low-profile enclosures allow for installation in constricted ceiling spaces as shallow as 5 1/8 inches (130 mm).

Saros 2-way in-ceiling speakers are available in white or black and may be painted to blend with the ceiling surface.



### 1 Installation

#### Prepare Mounting Hole

Before finalizing the speaker location, check to make sure there are no fixtures, pipes, air ducts, joists, or other possible obstructions. If applicable, use a good quality stud finder to locate joists. If there are no obstructions, use the supplied template to trace an outline of the mounting hole.

For drop tile ceilings, remove the ceiling tile and place on a flat surface to trace the mounting hole. For drywall or standard construction ceilings, use the template to trace the mounting hole directly on the ceiling.

#### Install Cable

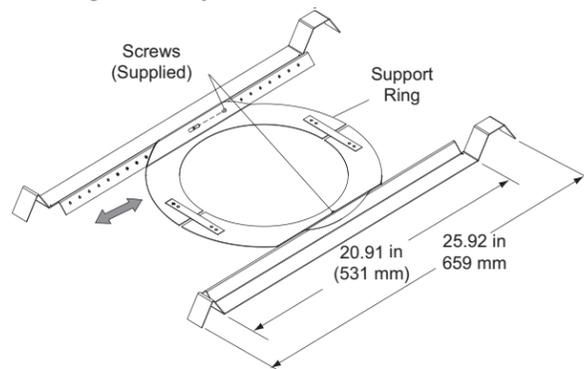
Run the cable from the audio source to the speaker location, observing all appropriate local codes. Strip the ends of the speaker cables approximately 1/8" to 3/16" (~3 mm to ~5 mm) and twist the strands.

#### Install Tile Bridge

The included tile bridge components provide proper support when the speaker is installed in a typical drop tile ceiling. Refer to the illustration below.

- Based on the location of the mounting hole determined in "Prepare Mounting Hole" above, use the two supplied screws to attach the support ring to the rails so that when installed, the ring is aligned with the mounting hole and the rails rest on the ceiling grid frame.
- The support ring position on the rails is adjustable to enable off-center speaker positioning. The tile bridge assembly can be folded to fit through the speaker cutout in blind-mount situations.

#### Tile Bridge Assembly



#### Install/Remove Grille

The zero-bezel frameless grille is held in place by powerful magnets. A safety tether is included to prevent any possibility of the grille falling from the ceiling. With the tether attached, place the grille in position on the speaker. To remove the grille, grip the edges and pull away from the speaker.

#### Paint the Speaker Grille

Speaker grille painting should be done prior to mounting.

- Carefully remove the material on the underside of the grille and set it 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.
- Dry brush or lightly spray the surface to be painted. Use care to avoid clogging the holes in the grille.
- Once the paint is dry, reinstall the material to the underside.

#### Mount/Remove Speaker

The in-ceiling speaker includes four toggle clamps that simplify the mounting process. If the grille is mounted on the speaker, remove it before proceeding. (Refer to "Install/Remove Grille" above.)

- Referring to the illustrations to the right, remove the screw securing the rear cover panel, and lift the cover panel off to expose the supplied terminal block.
- Route the speaker cable through the cover cable clamp and connect the wires to the terminal block, using the outer **IN** terminals: red to + and black to -. Use the inner + and - **THRU** terminals to connect a pass-through (parallel) speaker.
- Allow some slack in the speaker cable(s) and position the cover panel on the back, making certain it engages the mounting clips. Secure the cover panel using the screw removed in step 1 and tighten the cable clamp to secure the cable(s). Do not over tighten. Use a safety tether attached to the rear enclosure to prevent the speaker from accidentally falling.
- The toggle clamps offer two positions to accommodate both standard and extra thick surfaces up to 2.4 inches (61 mm). For extra thick tiles, reset the toggle clamps to the upper position.
  - With the toggle clamps turned inward, insert the speaker into the opening.
  - Hold the speaker against the ceiling and begin tightening the four screws on the front of the speaker. The toggle clamps first rotate into clamping position (as indicated in the front view illustration to the right) and then begin holding the speaker to the ceiling.
  - Tighten the screws until the speaker is secure. Do not over tighten.
- Speaker removal is accomplished by reversing steps 1 through 4 above.

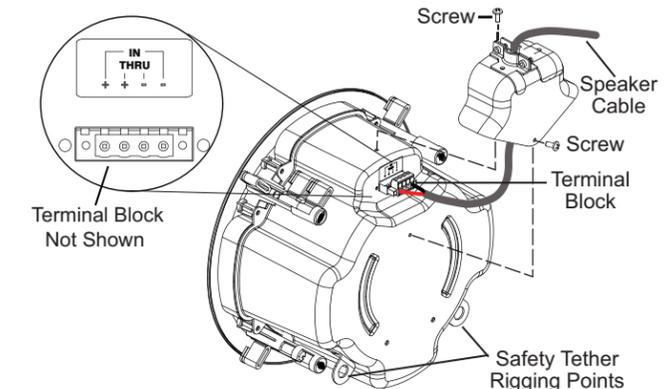
#### Set the Transformer Tap Selector Switch

The speakers are equipped with a 70/100 V matching transformer for distributed audio systems. The transformer tap selector switch on the front panel is used to set the speaker power level. Use a flat blade screwdriver to adjust the switch.

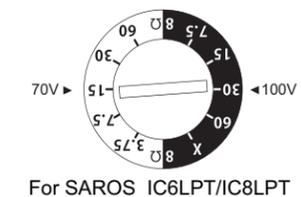
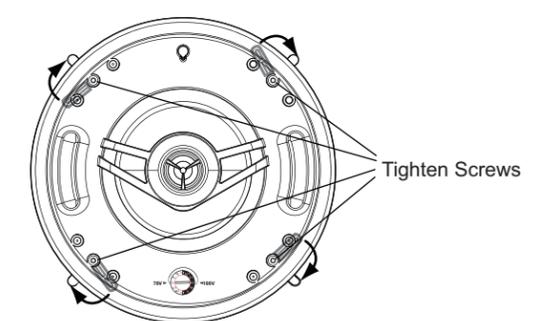
- For SAROS\_IC6LPT and SAROS\_IC8LPT 70 V systems, use the left side settings and select from 3.75, 7.5, 15, 30, or 60 watts.
- For SAROS\_IC6LPT and SAROS\_IC8LPT 100 V systems, use the right side settings and select from 7.5, 15, 30, or 60 watts. The X position should not be used.
- For SAROS\_ICE6LPT and SAROS\_ICE8LPT 70 V systems, use the left side settings and select from 3.75, 7.5, 15, or 30 watts.
- For SAROS\_ICE6LPT and SAROS\_ICE8LPT 100 V systems, use the right side settings and select from 7.5, 15, or 30 watts. The X position should not be used.

The switch may also be set to 8Ω operation, bypassing the transformer completely. This setting should be used only for 8 Ω audio systems.

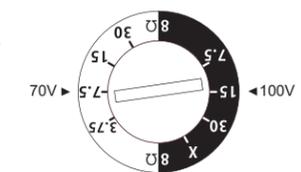
#### Speaker Cable Connections



#### Front View - Grille Removed



For SAROS\_IC6LPT/IC8LPT



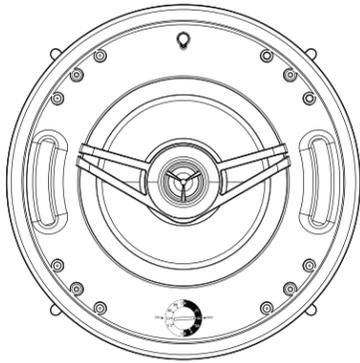
For SAROS\_ICE6LPT/ICE8LPT

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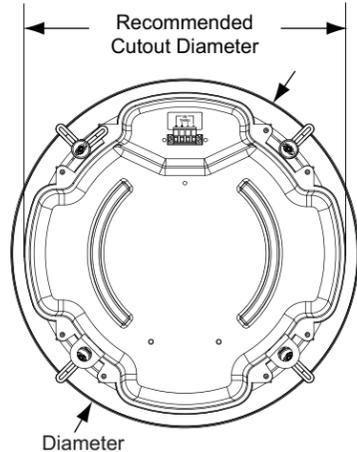
Saros® Low Profile & Saros Express Low Profile 2-Way In-Ceiling Speakers

## 2 Physical Views

Front View - Grille Removed (Typical)



Rear and Side View (Typical)



Recommended Cutout Diameter

Diameter

Minimum Mounting Depth

## 3 Specifications

SAROS\_IC6LPT/IC8LPT/ICE6LPT/ICE8LPT

SPECIFICATION	SAROS_IC6LPT	SAROS_IC8LPT	SAROS_ICE6LPT	SAROS_ICE8LPT
Woofers	6.5 in (165 mm) polypropylene with ring mode decoupled cloth surround and steel basket	8.0 in (203 mm) polypropylene with ring mode decoupled cloth surround and steel basket	6.5 in (165 mm) treated paper with ring mode decoupled cloth surround and steel basket	8.0 in (203 mm) treated paper with ring mode decoupled cloth surround and steel basket
Tweeter	0.98 in (25 mm) titanium dome, horn-loaded	0.98 in (25 mm) titanium dome, horn-loaded	0.98 in (25 mm) treated cloth dome, horn-loaded	0.98 in (25 mm) treated cloth dome, horn-loaded
Crossover Frequency	2.5 kHz	2.5 kHz	2.5 kHz	2.5 kHz
Impedance	8 Ω nominal with transformer set to 8Ω	8 Ω nominal with transformer set to 8Ω	8 Ω nominal with transformer set to 8Ω	8 Ω nominal with transformer set to 8Ω
Transformer Taps	3.75, 7.5, 15, 30, 60 watts at 70 V; 7.5, 15, 30, 60 watts at 100 V	3.75, 7.5, 15, 30, 60 watts at 70 V; 7.5, 15, 30, 60 watts at 100 V	3.75, 7.5, 15, 30 watts at 70 V; 7.5, 15, 30 watts at 100 V	3.75, 7.5, 15, 30 watts at 70 V; 7.5, 15, 30 watts at 100 V
Frequency Response	65 Hz to 20 kHz (±3 dB)	65 Hz to 20 kHz (±3 dB)	85 Hz to 20 kHz (±3 dB)	80 Hz to 20 kHz (±3 dB)
Frequency Range	55 Hz to 20 kHz (-10 dB)	55 Hz to 20 kHz (-10 dB)	70 Hz to 20 kHz (-10 dB)	65 Hz to 20 kHz (-10 dB)
Power Handling	50 watts program, (8 Ω)	50 watts program (8 Ω)	60 watts program (8 Ω)	60 watts program, (8 Ω)
Sensitivity	88 dB @ (W/m)	90 dB @ (W/m)	89 dB @ (W/m)	89 dB @ (W/m)
Coverage	95° conical (nominal)	95° conical (nominal)	95° conical (nominal)	95° conical (nominal)
Connections	(1) 4-pin 5 mm detachable terminal block with screw-down flanges; Speaker input with parallel pass-through; Maximum Wire Size: 12 AWG			
Input				
Controls	(1) Recessed 5-position screwdriver adjustable rotary switch on baffle; Used to select 70/100 V tap settings or 8Ω (bypass)			
Transformer Tap				
Environmental	-2° to 120° F (-19° to 49° C) 5% to 95% RH (non-condensing)			
Temperature				
Humidity				
Construction	Zinc-plated steel, plenum-rated, side-entry cable clamp ABS UL94V-0 plastic Steel with textured finish, paintable, magnetically-held zero-bezel frameless, safety tether Flush ceiling mount using 4 integral 2-step toggle clamps, 2.4 in (61 mm) maximum surface thickness, tile bridge included; (2) Rigging points for safety tether (SPKA-ST-15 sold separately).			
Enclosure				
Baffle				
Grille				
Mounting				
Dimensions	10.64 in (270 mm) not including toggles 5.30 in (135 mm) 9.70 in (246 mm) 5.12 in (130 mm) 8.2 lb (3.7 kg)			
Diameter				
Depth				
Recommended cutout diameter				
Minimum mounting depth				
Weight	12.13 in (308 mm) not including toggles 5.30 in (135 mm) 11.20 in (285 mm) 5.12 in (130 mm) 11.1 lb (5.0 kg)			
	10.64 in (270 mm) not including toggles 5.30 in (135 mm) 9.70 in (246 mm) 5.12 in (130 mm) 9.2 lb (4.2 kg)			
	12.13 in (308 mm) not including toggles 5.30 in (135 mm) 11.20 in (285 mm) 5.12 in (130 mm) 10.8 lb (4.9 kg)			

## 4 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 is coming from the speakers.	There is a cable connection error.	Verify the cable connections between the amplifier and speakers.
	The amplifier is not receiving an input signal or there is a malfunction.	Verify that the amplifier is functioning correctly, that it is receiving an input signal, and that the correct input source is selected.
Constant noise such as buzz, hum, or hiss is coming from the speakers.	There is a faulty device in the system.	Verify that all system devices are functioning properly.
	There is a system grounding fault.	Verify that system grounding is correct.
Low frequency output is poor.	There is an incorrect polarity connection at the speaker or amplifier.	Verify the speaker connection polarity (+ on amplifier to + on speaker).

### 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, for assistance within a particular geographic region, refer to the listing of Crestron worldwide offices at [www.crestron.com/offices](http://www.crestron.com/offices).

To post a question about Crestron products, log onto Crestron's Online Help at [www.crestron.com/onlinehelp](http://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 SAROS\_IC6LPT/IC8LPT/ICE6LPT/ICE8LPT, 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 website 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](http://patents.crestron.com).

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