

SAROS_PD4T/PD6T/PD8T/PDS8T

Saros® Pendant Speakers

Saros® speakers by Crestron® deliver professional grade performance and flexible installation in a range of popular sizes for demanding commercial applications. Solid construction 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 titanium dome tweeters, high-efficiency damped cone woofers, ported enclosures, and precisely tuned crossovers.

Saros Pendant speakers include a top cover that conceals the wiring connections and suspension hardware for a very clean, contoured appearance. The speakers are available in white or black and can be painted to blend with the surrounding architecture.



1 Installation

Paint the Speaker and Grille

Speaker and grille painting should be done prior to mounting.

1. 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.
2. Dry brush or lightly spray the surface to be painted. Use care to avoid clogging the holes in the grille.
3. Once the paint is dry, reinstall the material to the underside.
4. Remove the speaker top cover and paint the top cover and main speaker assembly separately, being careful to mask areas that should not be painted.

Install/Remove Grille

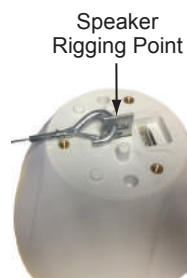
The zero-bezel frameless grille is held in place by powerful magnets. A safety tether is included to prevent any possibility of the grille falling from the ceiling. Attach the tether to the baffle using the supplied screw, cover the screw with the rubber boot provided, and place the grille in position on the speaker. To remove the grille, insert the supplied pick accessory in one of the side edge grille holes and pull the grille away from the speaker. To remove the grille completely, disconnect the monofilament tether from the speaker baffle.

Install Speaker Cable

Observe all local codes and install speaker cable from the audio source location to the closest ceiling truss location where a speaker will be suspended, allowing sufficient length to hang down slightly below the planned speaker height. If the speakers are to be connected in parallel, install a second cable at that location and route it to the next speaker location. Repeat this process at each speaker location.

Install Wire Rope

1. For each speaker to be installed, remove the top cover and route the free end of one of the 15 ft (~5m) wire ropes supplied in the SPKA-ST-15 Safety Tether/Tie Down Kit up through the top cover. Connect the attached hook assembly to secure the wire rope to the speaker rigging point.
2. Attach the free end of the wire rope to the ceiling truss, adjust the length so the speaker is at the desired height, and secure it using the supplied Gripple® wire rope grip. (Refer to the supplied instructions for proper use of the Gripple.)



Connect or Disconnect Speakers

1. Refer to the illustration to the right, with the top cover off to expose the supplied terminal block.
2. At each speaker location, route the speaker cable(s) hanging from the ceiling area through the top cover, and dress the cables to the wire rope using plastic cable ties.
3. If using a supplied weather boot, slide the speaker cables through the weather boot. Strip the ends of the cables approximately 1/8" to 3/16" (~3 mm to ~5 mm) and, if the wire is stranded, twist the strands.
4. Connect the wires from the amplifier (or the previous speaker) to the supplied terminal block, using the IN terminals; red to + and black to -. Use the THRU + and - terminals to connect the speaker wires to the next (parallel) speaker.
5. Speaker removal is accomplished by reversing steps 1 through 4 above.

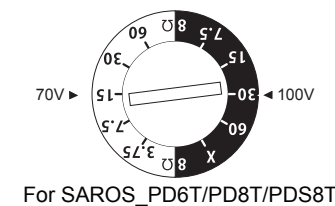
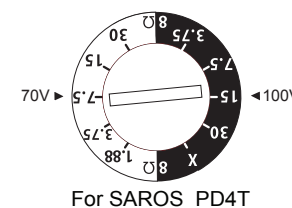
Set the Transformer Tap Selector Switches

NOTE: If the speakers are to be connected in parallel, the sum of the power settings for all speakers must be less than the power amplifier's power/channel rating.

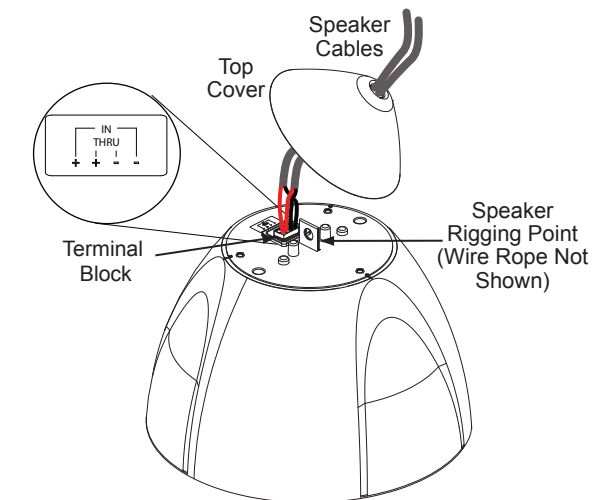
The speakers are equipped with a 70V/100V matching transformer for distributed audio systems. The transformer tap selector switch on the front panel is used to set the speaker power level. Use a flat-head screwdriver to adjust the switch.

- For SAROS_PD4T 70V systems, use the left-side settings and select from 1.88, 3.75, 7.5, 15, or 30 watts.
- For SAROS_PD4T 100V systems, use the right-side settings and select from 3.75, 7.5, 15, or 30 watts. The X position should not be used.
- For SAROS_PD6T, SAROS_PD8T and SAROS_PDS8T 70V systems, use the left-side settings and select from 3.75, 7.5, 15, 30, or 60 watts.
- For SAROS_PD6T, SAROS_PD8T and SAROS_PDS8T 100V systems, use the right-side settings and select from 7.5, 15, 30, or 60 watts. The X position should not be used.

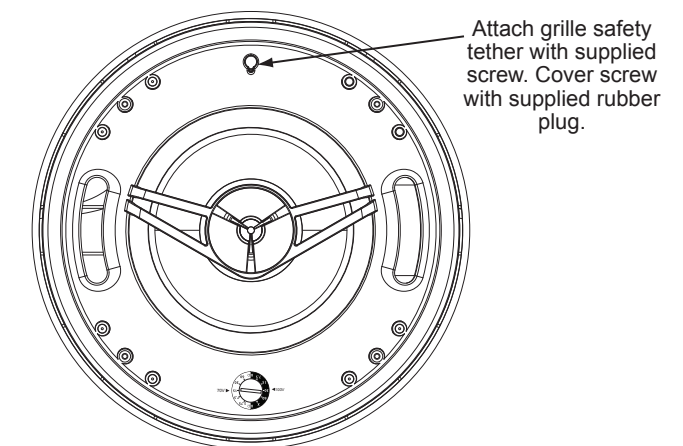
The switch may also be set to 8 Ω operation, bypassing the transformer completely. This setting should be used only for 8 Ω audio systems.



Connect Speaker Cables



Front View - Grille Removed

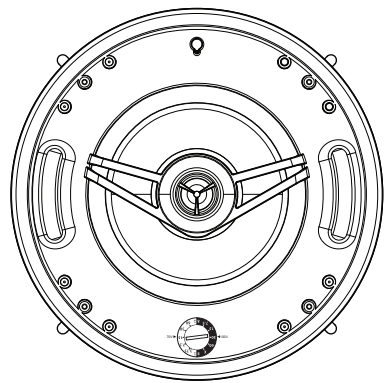


SAROS_PD4T/PD6T/PD8T/PDS8T

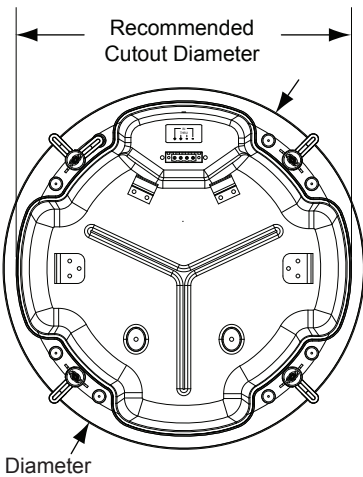
Saros® Pendant Speakers

2 Physical Views

Front View - Grille Removed (Typical)



Rear and Side View (Typical)



3 Specifications

SAROS_PD4T, PD6T, PD8T, PDS8T

SPECIFICATION	SAROS_PD4T	SAROS_PD6T	SAROS_PD8T	SAROS_PDS8T
Woofer	4.0 in (102 mm) polypropylene with ring mode decoupled cloth surround and steel basket	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	8.0 in (203 mm) polypropylene with rubber surround steel basket and phase plug
Tweeter	0.79 in (20 mm) titanium dome, horn-loaded	0.98 in (25 mm) titanium dome, horn-loaded	0.98 in (25 mm) titanium dome, horn-loaded	N/A
Crossover Frequency	2.0 kHz	2.5 kHz	2.5 kHz	N/A
Impedance	8 Ω nominal with transformer set to 8 Ω	8 Ω nominal with transformer set to 8 Ω	8 Ω nominal with transformer set to 8 Ω	8 Ω nominal with transformer set to 8 Ω
Transformer Taps	1.875, 3.75, 7.5, 15, 30 watts at 70 V; 3.75, 7.5, 15, 30 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, 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
Frequency Response	60 Hz to 20 kHz (± 3 dB)	55 Hz to 20 kHz (± 3 dB)	50 Hz to 20 kHz (± 3 dB)	45 Hz to 125 Hz (± 3 dB)
Frequency Range	45 Hz to 20 kHz (-10 dB)	45 Hz to 20 kHz (-10 dB)	40 Hz to 20 kHz (-10 dB)	35 Hz to 125 Hz (-10 dB)
Power Handling	50 watts program, (8 Ω)	50 watts program (8 Ω)	50 watts program, (8 Ω)	100 watts program, (8 Ω)
Sensitivity	85.0 dB @ (1W/1m)	88 dB @ (1W/1m)	90 dB @ (1W/1m)	90 dB @ (1W/1m)
Coverage	90° conical (nominal)	90° conical (nominal)	95° conical (nominal)	N/A
Connections Input	4-pin 5 mm detachable terminal block with screw-down flanges; Speaker input with parallel pass-through; Maximum wire size: 12 AWG			
Controls Transformer Tap	Recessed 5-position screwdriver-adjustable rotary switch on baffle; Used to select 70/100V tap settings or 8 Ω (bypass)			
Environmental Temperature Humidity Splash Resistance	-2° to 120° F (-19° to 49° C) 5% to 95% RH (non-condensing) IPx4 rated per IEC 60529			
Construction Enclosure Baffle Grille Mounting	Glass fiber reinforced ABS plastic, textured finish, paintable, removable top cover Glass fiber reinforced ABS plastic Steel with textured finish, paintable, magnetically held, zero-bezel frameless, safety tether Single rigging point beneath top cover for suspension; Gripple 15 ft (4.57 m) wire rope (aka, aircraft cable) with attached snap hook and self-locking wire rope grip included			
Dimensions Height Diameter	8.33 in (212 mm) 9.02 in (223 mm)	10.49 in (267 mm) 11.07 in (282 mm)	10.58 in (269 mm) 12.57 in (320 mm)	10.58 in (269 mm) 12.57 in (320 mm)
Weight	7.0 lb (3.2 kg)	9.8 lb (4.5 kg)	11.1 lb (5.1 kg)	13.1 lb (6.0 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 devices in system are functioning properly.
	There is a system grounding fault.	Verify system grounding.
Poor low frequency output.	There is an incorrect polarity connection at the speaker or amplifier.	Verify 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.

To post a question about Crestron products, log onto Crestron's Online Help at 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_PD4T/PD6T/PD8T/PDS8T, 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.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

Crestron, the Crestron logo, and Saros are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. Gripple is either a trademark or registered trademark of Gripple Limited in the United States and/or other countries. Other trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography.

This document was written by the Technical Publications department at Crestron.
©2015 Crestron Electronics, Inc.