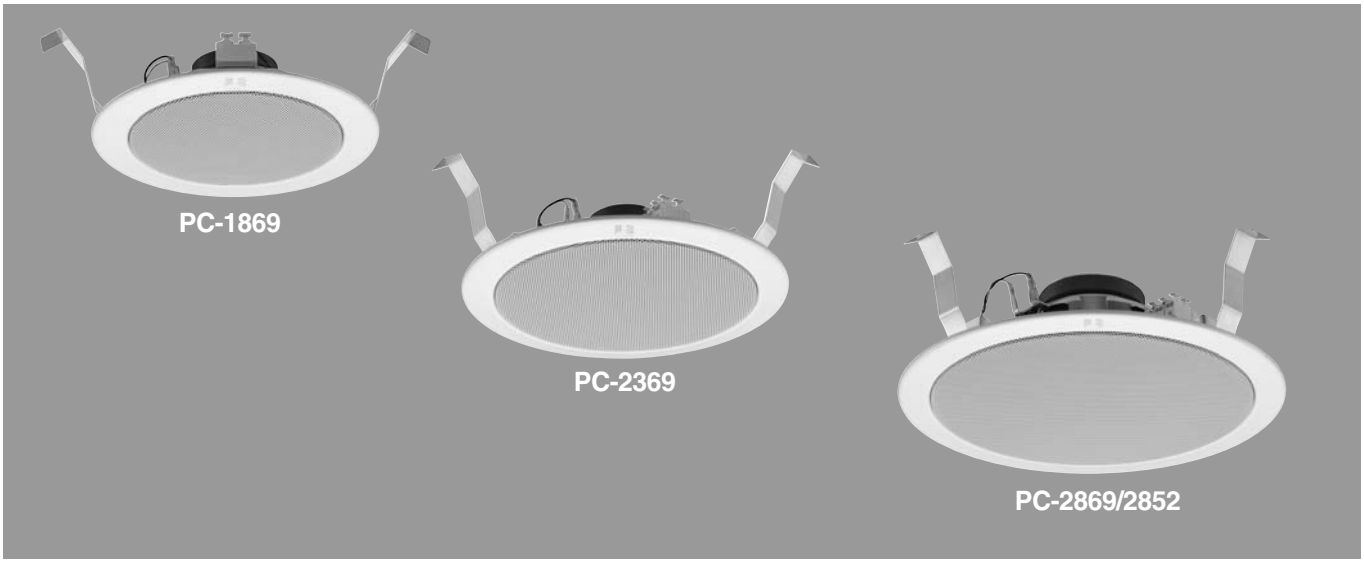
PC-1869/2369/2869/2852 Ceiling Mount Speakers



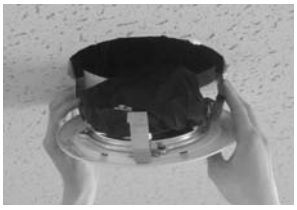
DESCRIPTION

The PC-1869/2369/2869/2852 are new thin-panel speaker designs that blend in unobtrusively with an application's architecture and interior décor. They are ceiling-mount cone-type all-metallic speakers that are ideal for use in a voice alarm system, when the speaker system is integrated with a panel. Mounting the speaker into the ceiling is quick and easy, thanks to a new SUS spring clamp installation method. A wide variety (5", 6" and 8" (12, 16 and 20cm)) of speaker diameters is available. A push-type input terminal allows easy cable connections and bridge wiring. Input impedance can easily be adjusted by changing the tap position of the transformer. The speakers are well-suited for BGM and announcement applications.

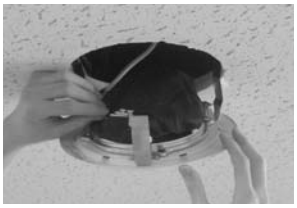
FEATURES

- New speaker designs that harmonize with the venue's architecture and decor
- Quick and easy installation thanks to new SUS spring clamp installation method
- Wide frequency response
- Greater variety of ceiling speaker diameters (5", 6", 8" (12, 16, 20cm))
- Thin panel does not clash with interior design

New SUS spring clamp installation method



Hook the speaker mounting spring(s) into the mounting hole.



Make wiring.



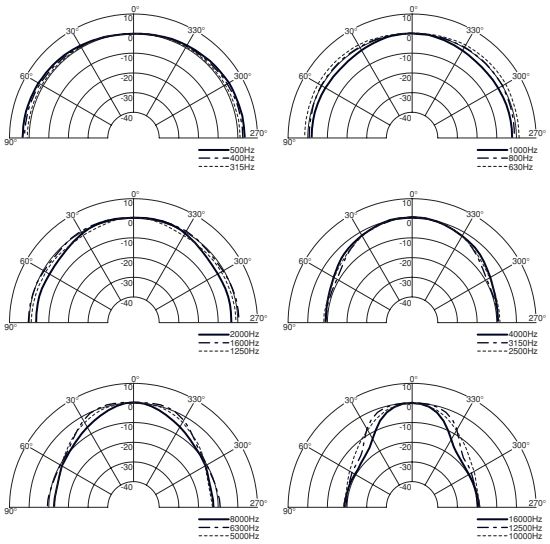
Hook the rest of spring(s).



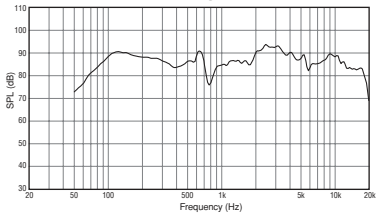
Push up the panel.

PC-1869

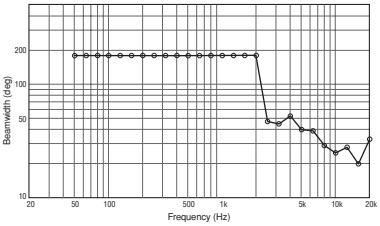
Polar Response



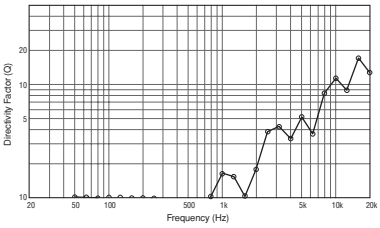
SPL vs. Frequency



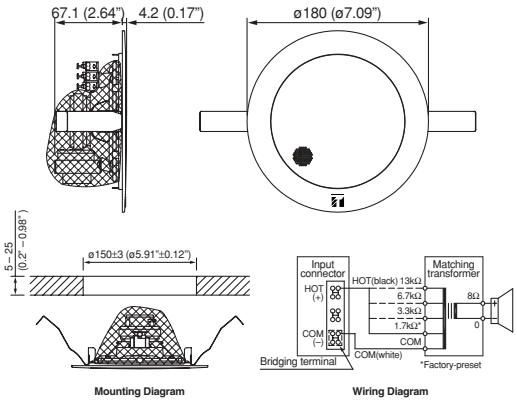
Beamwidth vs. Frequency



Directivity Factor vs. Frequency

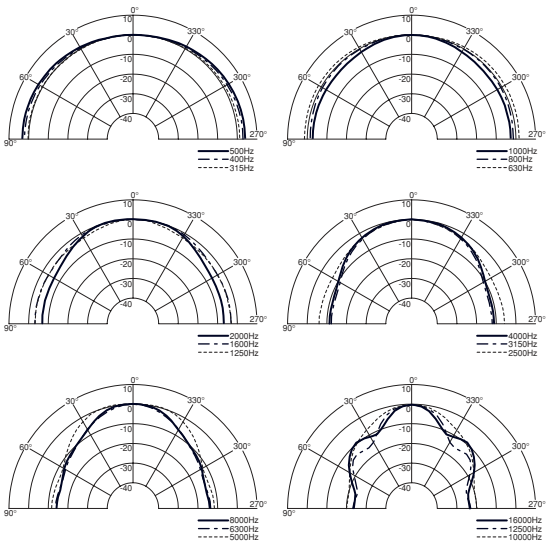


Appearance and Dimensional Diagram

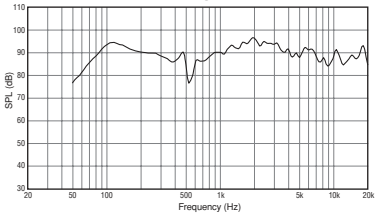


PC-2369

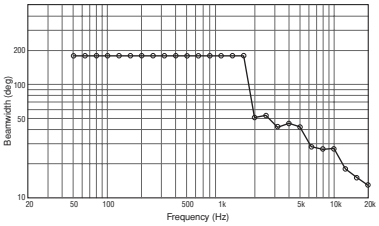
Polar Response



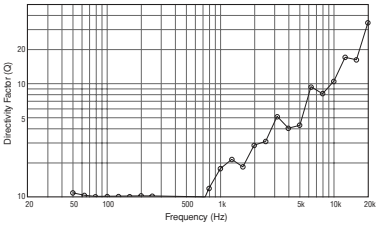
SPL vs. Frequency



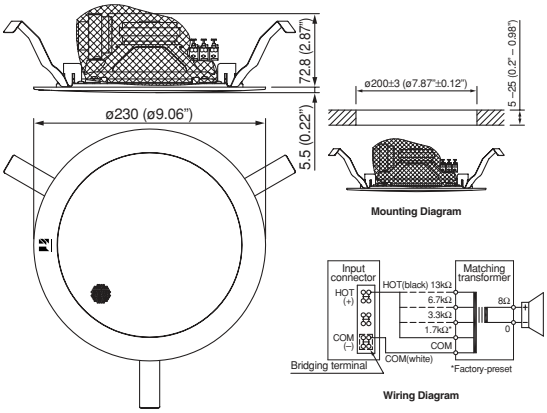
Beamwidth vs. Frequency



Directivity Factor vs. Frequency

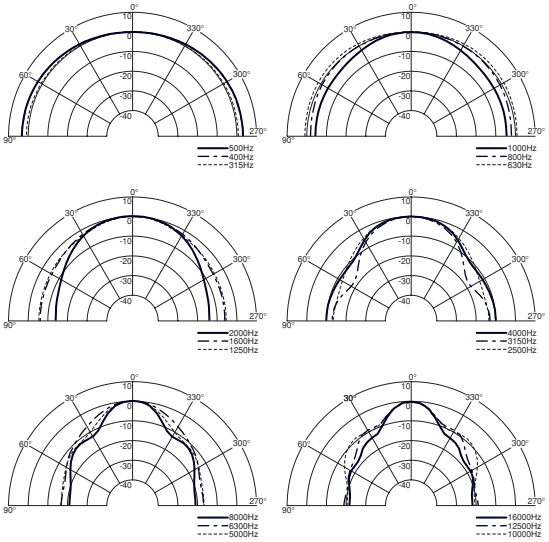


Appearance and Dimensional Diagram

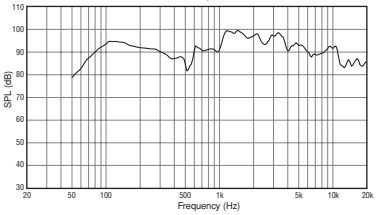


PC-2869

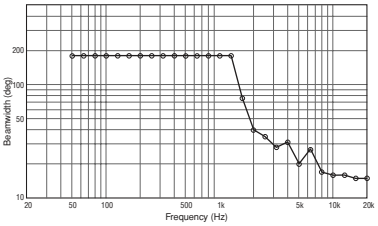
Polar Response



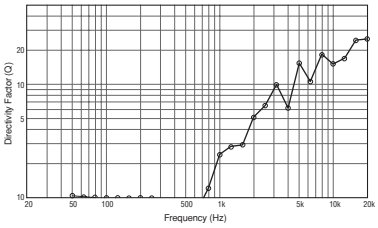
SPL vs. Frequency



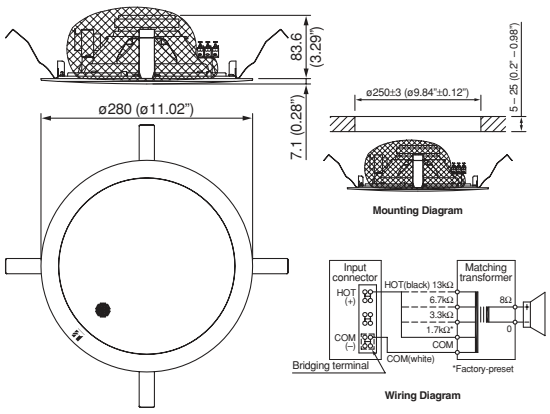
Beamwidth vs. Frequency



Directivity Factor vs. Frequency

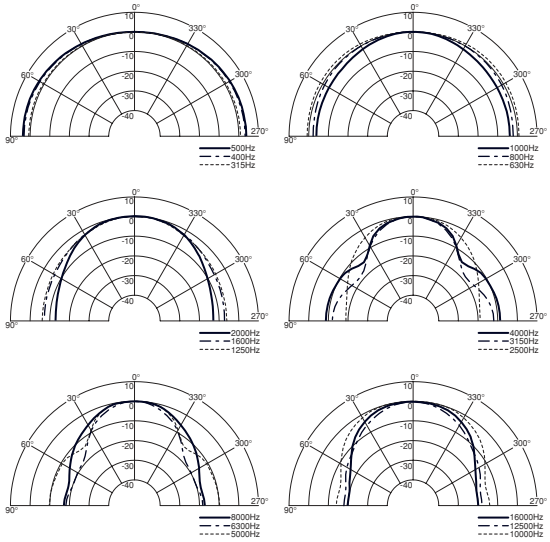


Appearance and Dimensional Diagram

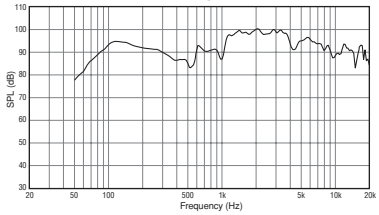


PC-2852

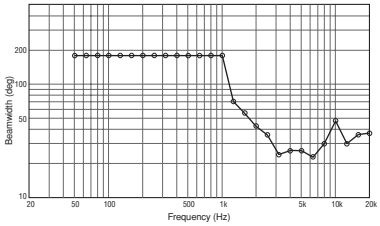
Polar Response



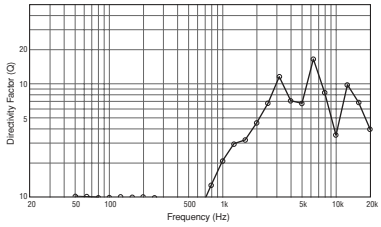
SPL vs. Frequency



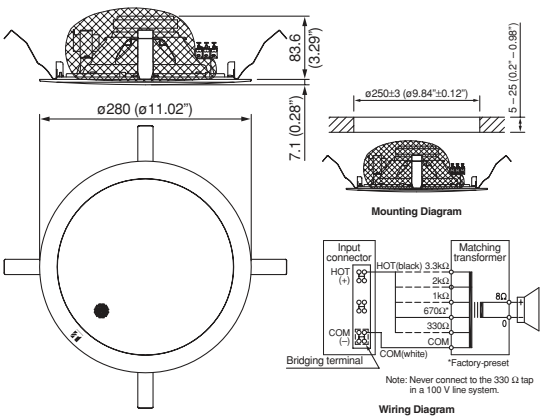
Beamwidth vs. Frequency



Directivity Factor vs. Frequency



Appearance and Dimensional Diagram



Specifications

Model No.	PC-1869	PC-2369	PC-2869	PC-2852
Rated Input	6W (100V line), 3W (70V line)			15W (100V line, 70V line)
Rated Impedance	100V line: 1.7 kΩ (6W), 3.3 kΩ (3W), 6.7 kΩ (1.5W), 13 kΩ (0.8W) 70V line: 1.7 kΩ (3W), 3.3kΩ (1.5W), 6.7 kΩ (0.8W), 13 kΩ (0.4W)			100V LINE: 670Ω (15W), 1kΩ (10W), 2kΩ (5W),3.3kΩ (3W) 70V LINE: 330Ω (15W), 670Ω (7.5W), 1kΩ (5W), 2kΩ (2.5W), 3.3kΩ (1.5W)
Sensitivity (1W, 1m)	90 dB (500 – 5,000Hz, pink noise)	93dB (500 – 5,000Hz, pink noise)	94dB (500 – 5,000Hz, pink noise)	96dB (500 – 5,000Hz, pink noise)
Frequency Response	55 – 18,000 Hz (peak -20dB)	45 – 20,000 Hz (peak -20dB)	40 – 20,000 Hz (peak -20dB)	45 – 20,000 Hz (peak -20dB)
Speaker Component	5"(12cm) cone-type	6"(16cm) double cone-type	8"(20cm) double cone-type	8"(20cm) coaxial cone-type
Dimensions for Fixing Hole	Mounting hole: ø150 ±3mm (ø5.91" ±0.12") Ceiling thickness: 5 – 25mm (0.2" – 0.98")	Mounting hole: ø200 ±3mm (ø7.87" ±0.12") Ceiling thickness: 5 – 25mm (0.2" – 0.98")	Mounting hole: ø250 ±3mm (ø9.84" ±0.12") Ceiling thickness: 5 – 25mm (0.2" – 0.98")	
Speaker Mounting Method	Spring clamp			
Applicable Cable	600V vinyl-insulated cable (IV wire or HIV wire) Solid copper wire: ø0.8 – ø1.6mm (equivalent to AWG 20 – 14) 7-core twisted copper wire: 0.75 – 1.25mm^2 (equivalent to AWG 18 – 16)			
Connection	Push-in connector (bridging terminal-2 branch type)			
Finish	Baffle: Steel plate, off-white (RAL 9010 or equivalent colour), paint/Grille: Surface-treated steel plate net, off-white (RAL 9010 or equivalent colour), paint			
Dimensions	ø180 × 72 (D)mm (ø7.09" × 2.83")	ø230 × 79 (D)mm (ø9.06" × 3.11")	ø280 × 92(D)mm (ø11.02" × 3.62")	
Weight	620g (1.37 lb)	760g (1.68 lb)	1.4kg (3.09 lb)	1.6kg (3.53 lb)
Accessory	paper pattern × 1			

Architect's and Engineer's Specifications

PC-1869

The speaker shall be a 5" (12cm) cone-type speaker suitable for ceiling mounting. Ease of installation shall be insured by a SUS spring-based installation clamp mechanism. Cable connection shall be by means of a push-in connector (bridging terminal).

The speaker shall include a transformer having multiple taps (0.8W, 1.5W, 3W, 6W at 100V and 0.4W, 0.8W, 1.5W, 3W at 70V) adjustable. The output sound pressure level at a distance of 1m with a 1W input level applied shall be 90 dB SPL. The speaker shall have a frequency response of 55 – 18,000Hz (-20dB).

The speaker baffle shall be constructed of steel plate. The grille shall be surface-treated steel plate. The speaker shall be available in off-white colour. The unit shall have dimensions of ø180 × 72 (D)mm (ø7.09" × 2.83"), and a weight of 620g (1.37 lb).

The speaker shall be a TOA model PC-1869.

PC-2369

The speaker shall be a 6" (16cm) double cone-type speaker suitable for ceiling mounting. Ease of installation shall be insured by a SUS spring-based installation clamp mechanism. Cable connection shall be by means of a push-in connector (bridging terminal).

The speaker shall include a transformer having multiple taps (0.8W, 1.5W, 3W, 6W at 100V and 0.4W, 0.8W, 1.5W, 3W at 70V) adjustable. The output sound pressure level at a distance of 1m with a 1W input level applied shall be 93 dB SPL. The speaker shall have a frequency response of 45 – 20,000Hz (-20dB).

The speaker baffle shall be constructed of steel plate. The grille shall be surface-treated steel plate. The speaker shall be available in off-white colour. The unit shall have dimensions of ø230 × 79 (D)mm (ø9.06" × 3.11"), and a weight of 760g (1.68 lb).

The speaker shall be a TOA model PC-2369.

PC-2869

The speaker shall be a 8" (20cm) double cone-type speaker suitable for ceiling mounting. Ease of installation shall be insured by a SUS spring-based installation clamp mechanism. Cable connection shall be by means of a push-in connector (bridging terminal).

The speaker shall include a transformer having multiple taps (0.8W, 1.5W, 3W, 6W at 100V and 0.4W, 0.8W, 1.5W, 3W at 70V) adjustable. The output sound pressure level at a distance of 1m with a 1W input level applied shall be 94 dB SPL. The speaker shall have a frequency response of 40 – 20,000Hz (-20dB).

The speaker baffle shall be constructed of steel plate. The grille shall be surface-treated steel plate. The speaker shall be available in off-white colour. The unit shall have dimensions of ø280 × 92 (D)mm (ø11.02" × 3.62"), and a weight of 1.4 kg (3.09 lb).

The speaker shall be a TOA model PC-2869.

PC-2852

The speaker shall be a 8" (20cm) coaxial cone-type speaker suitable for ceiling mounting. Ease of installation shall be insured by a SUS spring-based installation clamp mechanism. Cable connection shall be by means of a push-in connector (bridging terminal).

The speaker shall include a transformer having multiple taps (3W, 5W, 10W, 15W at 100V and 1.5W, 2.5W, 5W, 7.5W at 70V) adjustable. The output sound pressure level at a distance of 1m with a 1W input level applied shall be 96 dB SPL. The speaker shall have a frequency response of 45 – 20,000Hz (-20dB).

The speaker baffle shall be constructed of steel plate. The grille shall be surface-treated steel plate. The speaker shall be available in off-white colour. The unit shall have dimensions of ø280 × 92 (D)mm (ø11.02" × 3.62"), and a weight of 1.6 kg (3.53 lb).

The speaker shall be a TOA model PC-2852.

TOA Corporation

www.toa.jp

Specifications are subject to change without notice.
Printed in Japan (0708) 833-52-386-80 U