



Premium Ceiling Speakers

LC20-PC60G6-6 and LC20-PC60G6-8



BOSCH

en Installation Note

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1 Safety

**Warning!**

Suspending any object is potentially dangerous and should only be attempted by individuals who have a thorough knowledge of the techniques and regulations of suspending objects overhead. Bosch strongly recommends all loudspeakers be suspended taking into account all current national, federal, state, and local laws and regulations. It is the responsibility of the installer to ensure all loudspeakers are safely installed in accordance with all such requirements. When loudspeakers are suspended, Bosch strongly recommends the system be inspected at least once per year or as laws and regulations require. If any sign of weakness or damage is detected, remedial action should be taken immediately. The user is responsible for making sure the wall, ceiling, or structure is capable of supporting all objects suspended overhead. Any hardware used to suspend a loudspeaker not associated with Bosch is the responsibility of others.

**Caution!**

The seismic tab (auxiliary support ring) is not intended for primary suspension of the loudspeaker. The seismic tab should only be used as a secondary safety point.

2 Welcome

Thank you for purchasing Premium Ceiling Speakers. Read through this manual to familiarize yourself with the features, applications, and precautions before you use these products. Premium Ceiling Speakers use innovative design and materials to provide high performance in a flush-mount ceiling format. Two (2) models comprise the Premium Ceiling Speaker family: LC20-PC60G6-6 and LC20-PC60G6-8.

2.1 Important features

LC20-PC60G6-6 – 6-inch Premium Ceiling Speaker

- High output true compression driver for wide dispersion and superior coverage control out to 10 kHz
- Long throw 6.5 inch (165 mm) woofer housed in a large vented steel enclosure for extended LF performance down to 50 Hz
- 200 watt power handling provides for 113 dB maximum SPL
- Front baffle transformer tap adjustment switch
- Includes tile rails and “C” mounting ring

LC20-PC60G6-8 – 8-inch Premium Ceiling Speaker

- High output true compression driver for wide dispersion and superior coverage control out to 10 kHz
- Long throw 8-inch (200 mm) woofer housed in a large vented 14 gauge steel enclosure for extended LF performance down to 40 Hz
- 200 watt power handling provides for 114 dB maximum SPL
- Front baffle transformer tap adjustment switch
- Includes tile rails and “C” mounting ring

3 System overview

3.1 Packing list

Item	Quantity	Description
A	2	Speaker system
B	4	Tile rails
C	2	C-ring support
D	2	Grille
E	1	Manual
F	4	Support ring screws
G	2	Terminal connector
H	1	Cutout template
I	2	Paint shield
J	2	Ceramic blocks

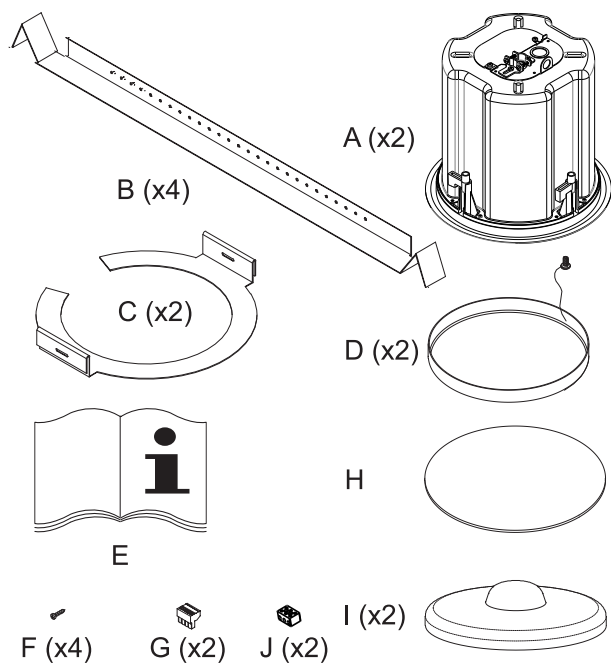


Figure 3.1: Components in kit

3.2 Product feature identification

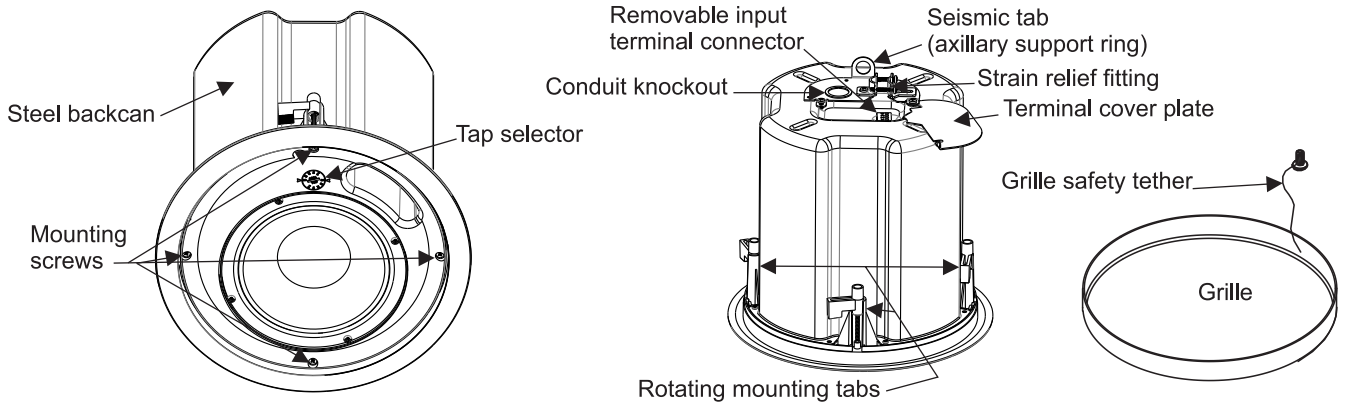
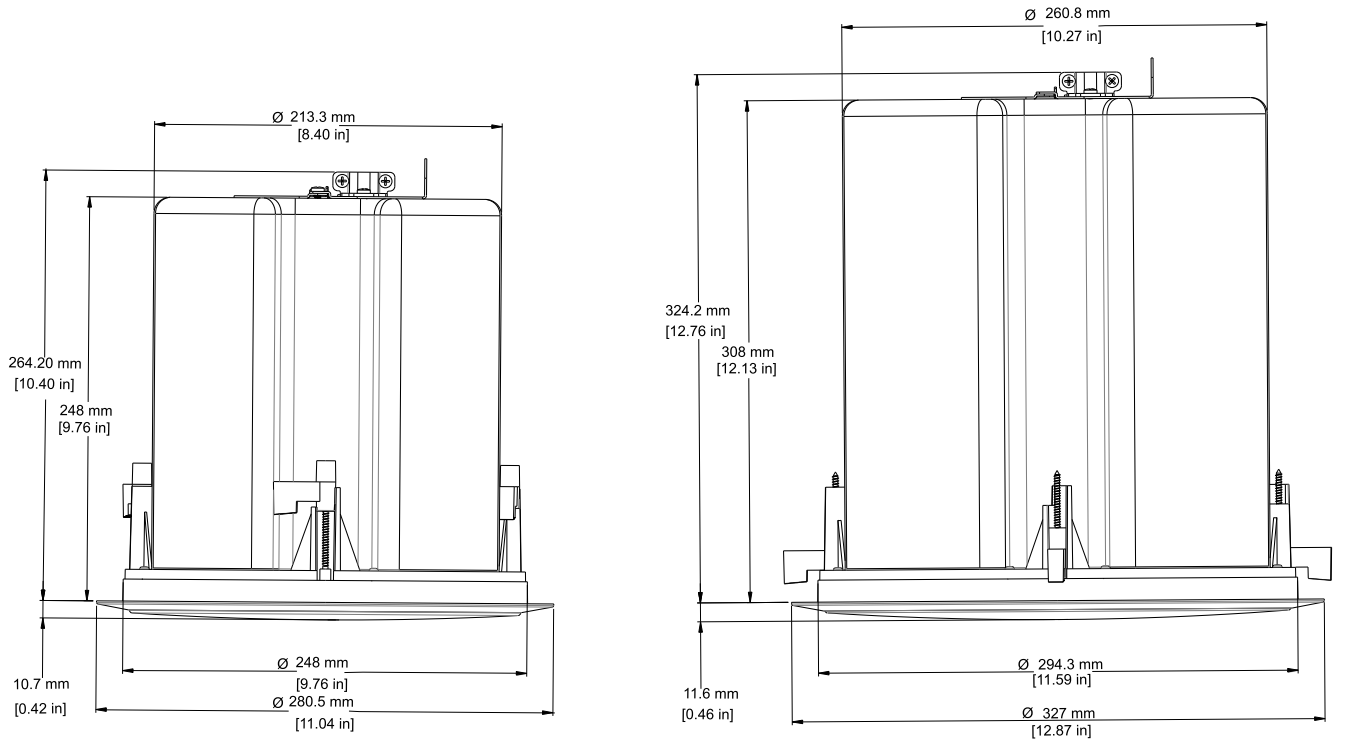


Figure 3.2: Bottom and top of the ceiling speaker

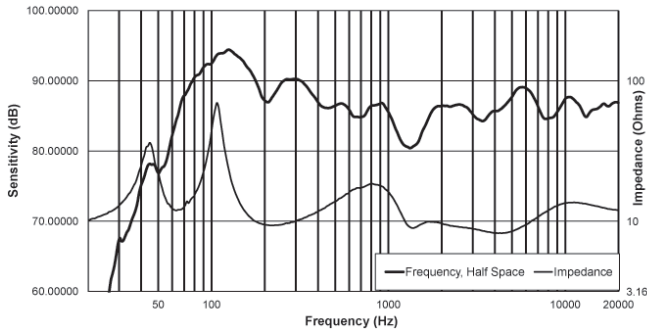
3.3 Dimensions



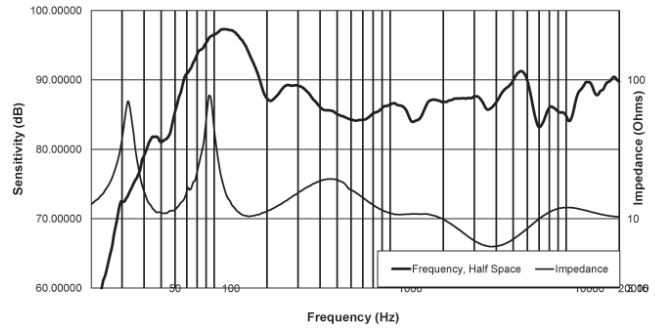
LC20-PC60G6-6 Dimensions

LC20-PC60G6-8 Dimensions

3.4 Frequency response and impedance

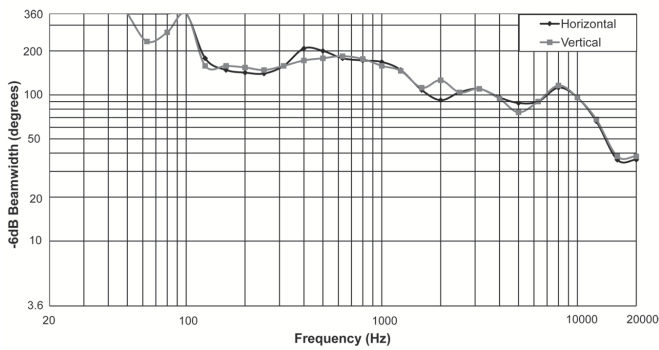


LC20-PC60G6-6 Frequency Response and Impedance

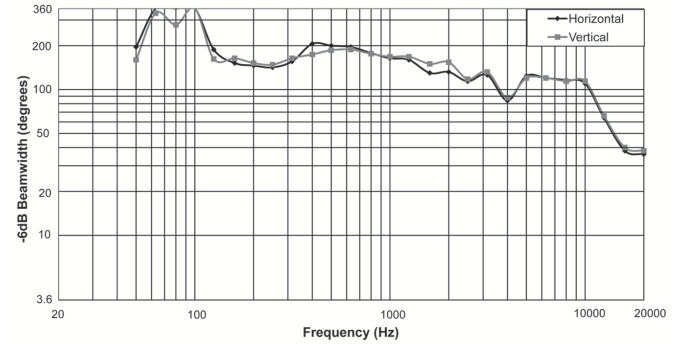


LC20-PC60G6-8 Frequency Response and Impedance

3.5 Beamwidth

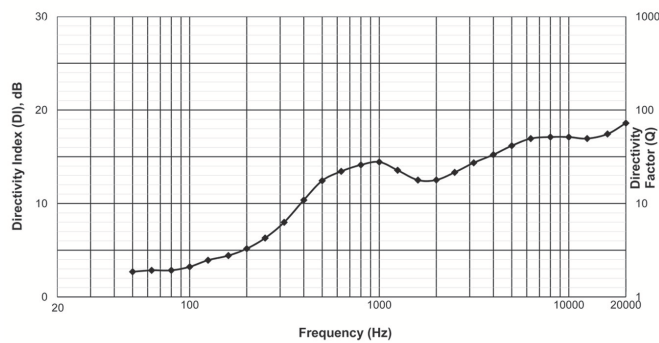


LC20-PC60G6-6 Beamwidth

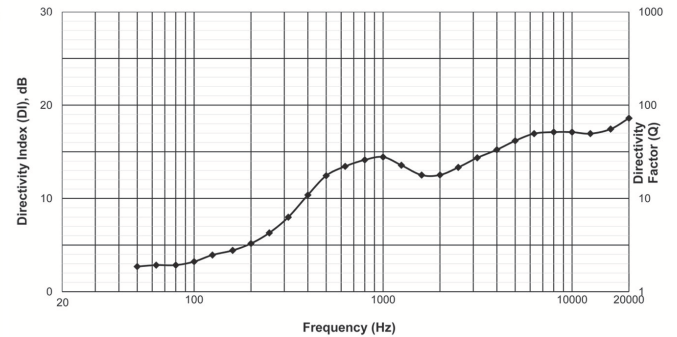


LC20-PC60G6-8 Beamwidth

3.6 Directivity



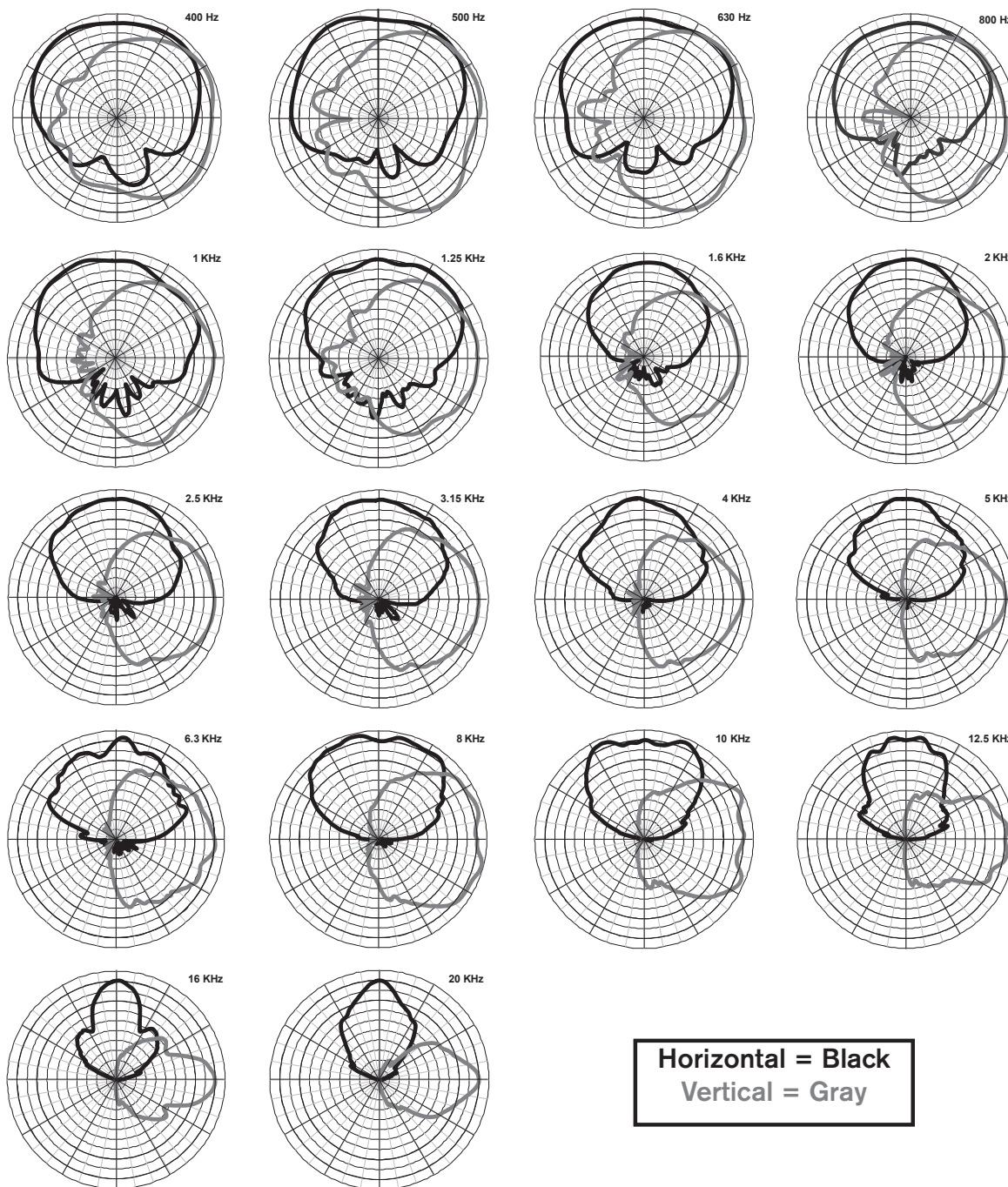
LC20-PC60G6-6 Directivity



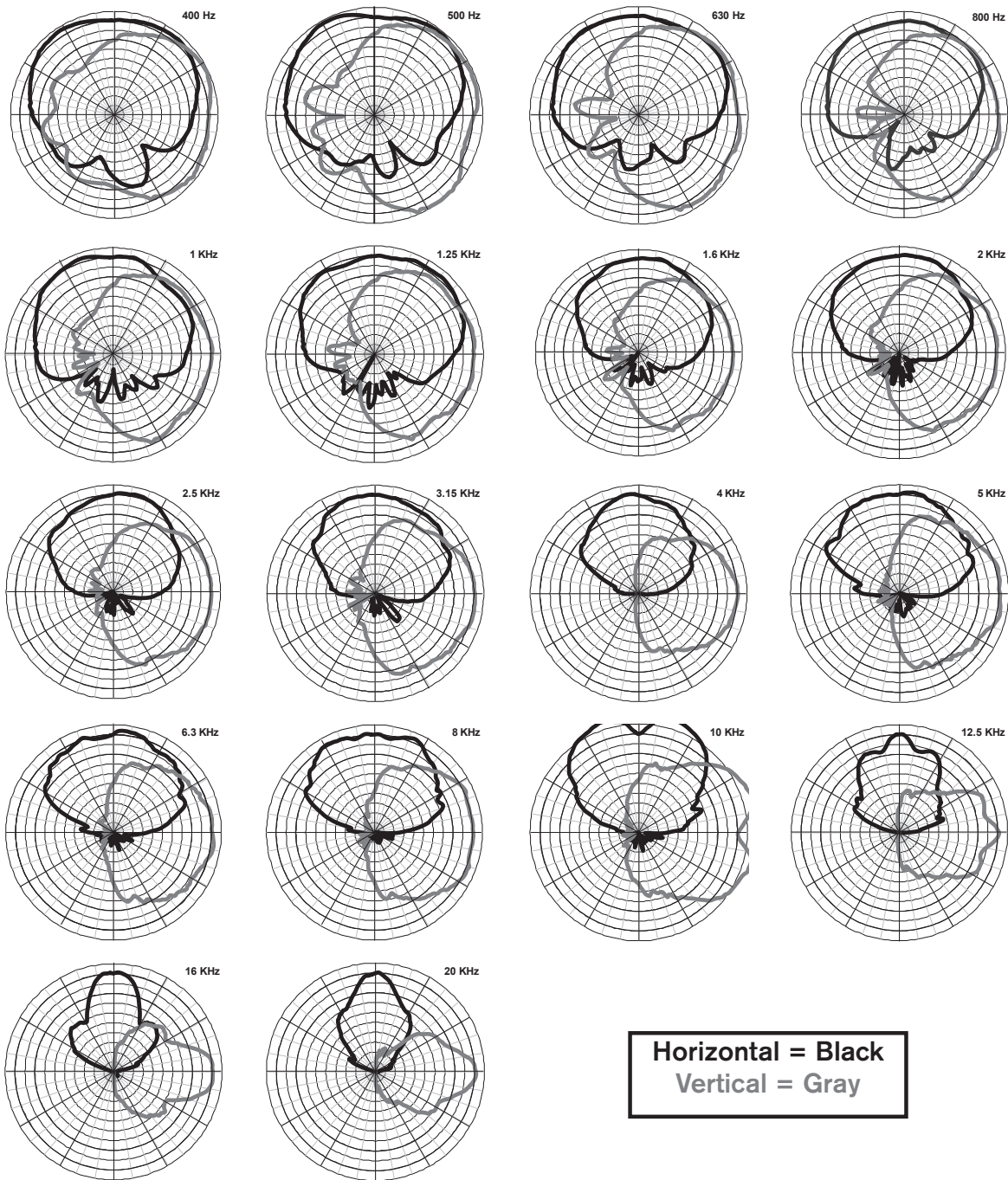
LC20-PC60G6-8 Directivity

3.7 Horizontal and vertical polar response

LC20-PC60G6-6 Polar Plots (1/3 Octave):



LC20-PC60G6-8 Polar Plots (1/3 Octave):



4 Installation

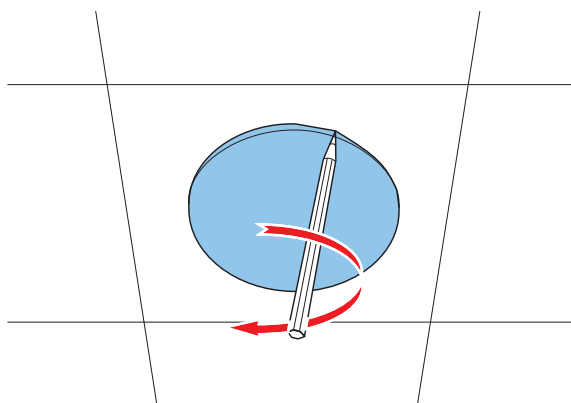


Figure 4.1: Trace cutout template

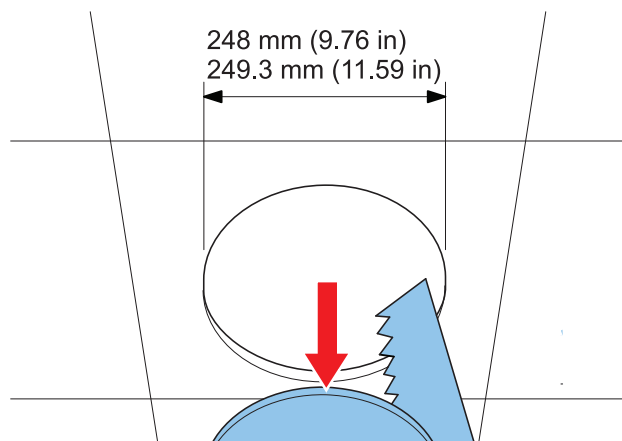


Figure 4.2: Cut hole

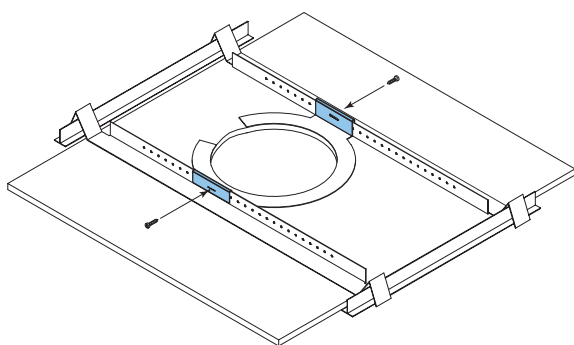


Figure 4.3: Secure rails to C-Ring

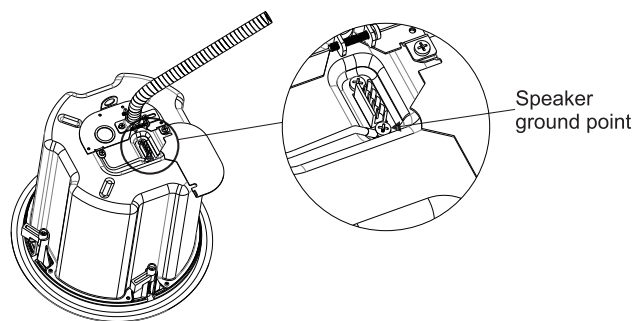


Figure 4.4: Wiring – ground point

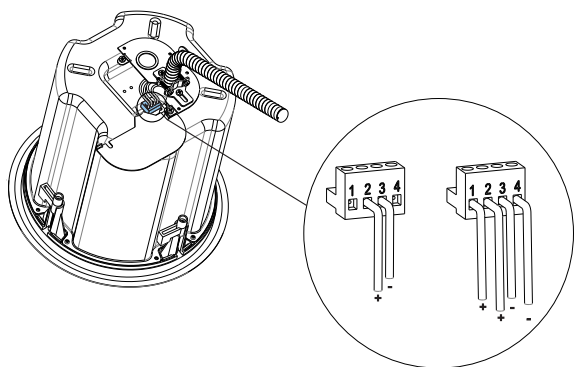


Figure 4.5: Wiring – flex conduit

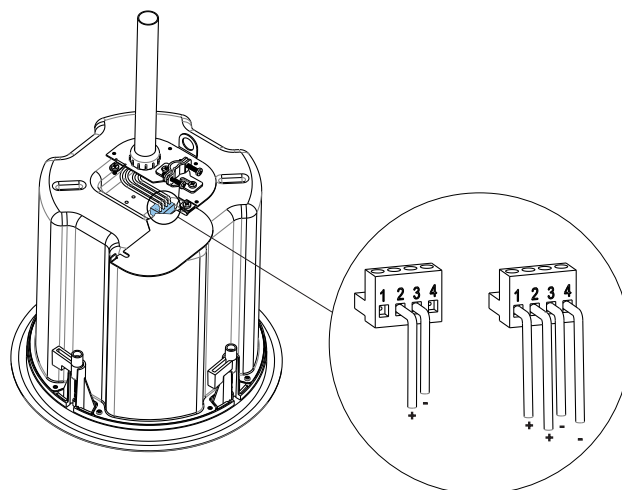


Figure 4.6: Wiring – solid conduit



Caution!

The seismic tab (auxiliary support ring) is not intended for primary suspension of the loudspeaker. The seismic tab should only be used as a secondary safety point.

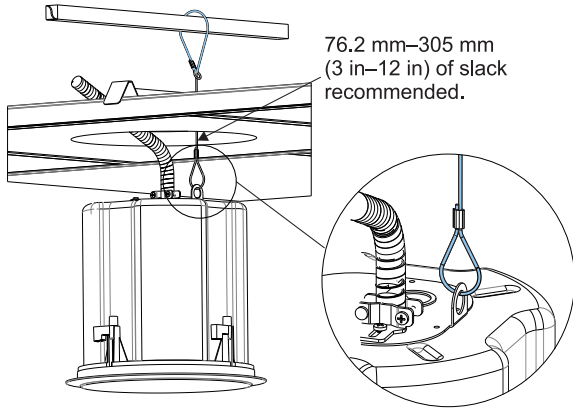


Figure 4.7: Attach auxiliary support line

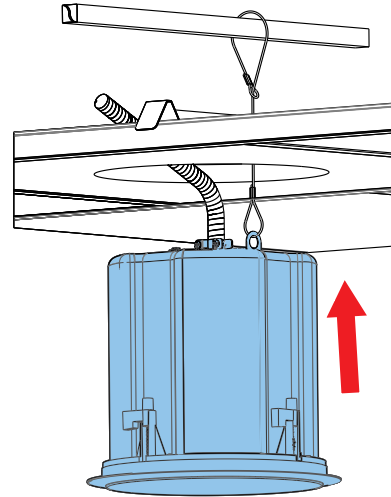


Figure 4.8: Install the speaker into the ceiling

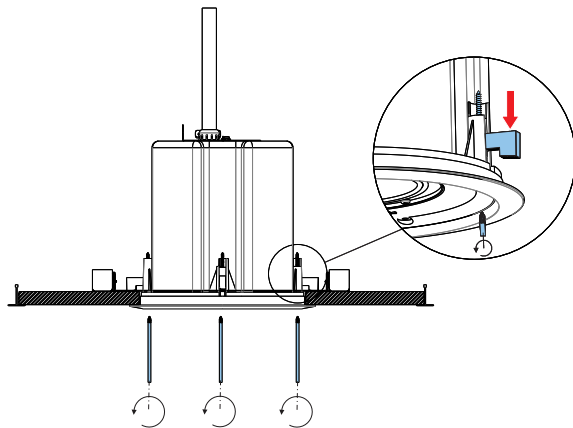


Figure 4.9: Tighten mounting tabs

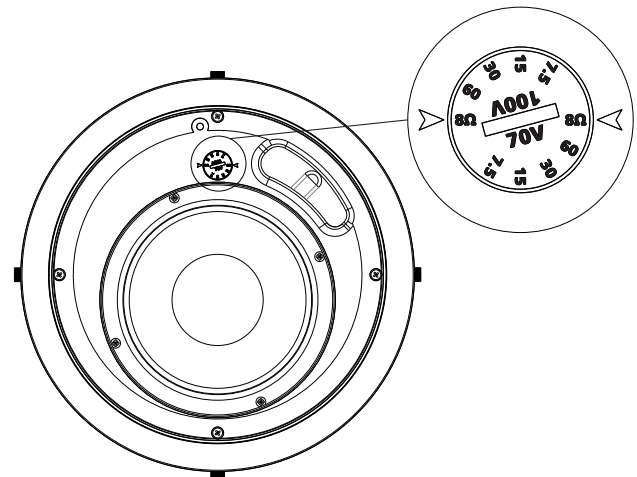


Figure 4.10: Tap selector

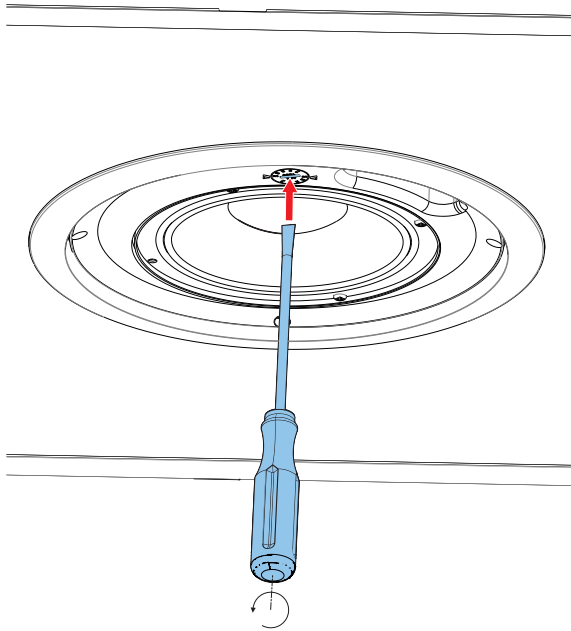


Figure 4.11: Adjust tap selector

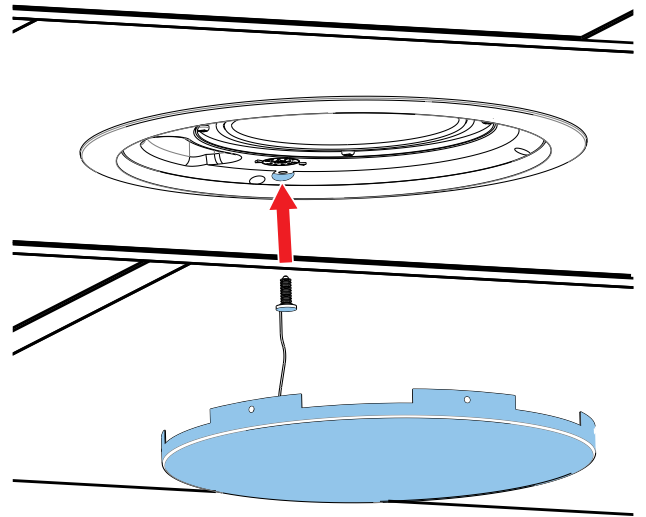


Figure 4.12: Insert grille tether

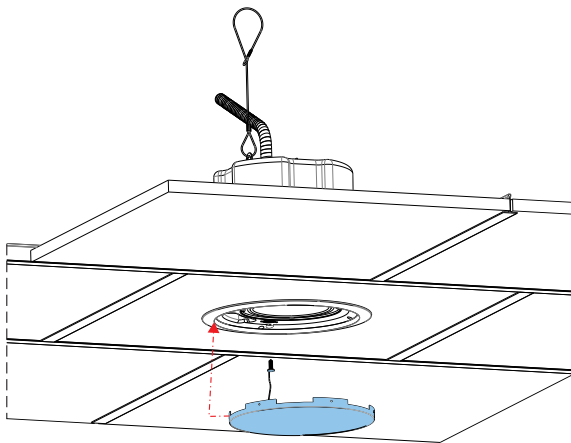


Figure 4.13: Attach the grille

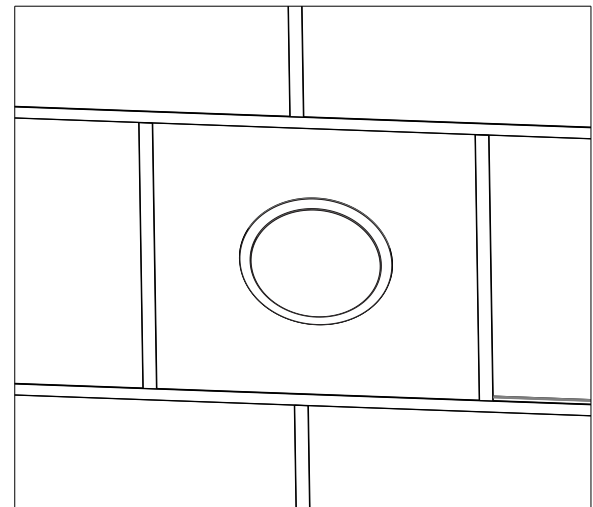


Figure 4.14: Installation complete

Wiring with the ceramic block

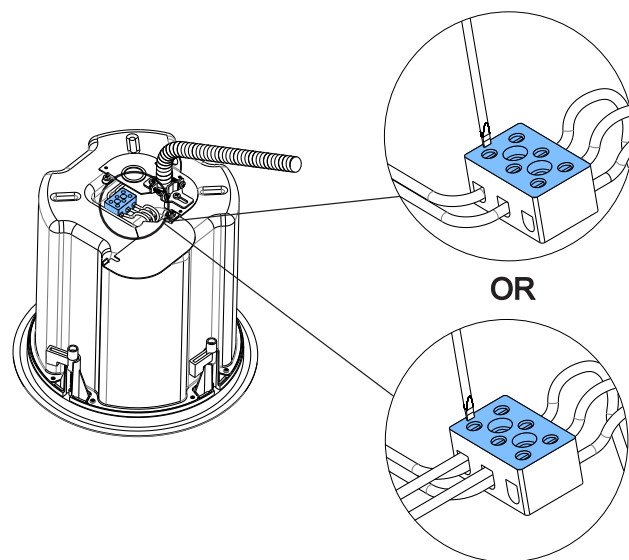
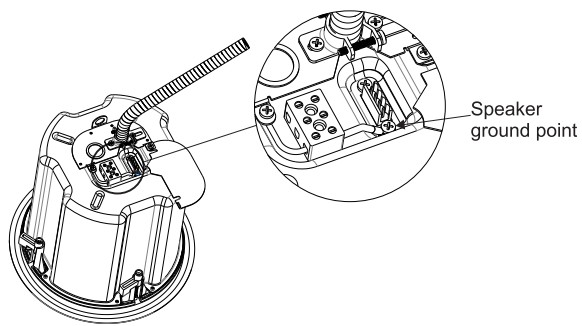


Figure 4.15: Wiring – ground point

Figure 4.16: Wiring – flex conduit

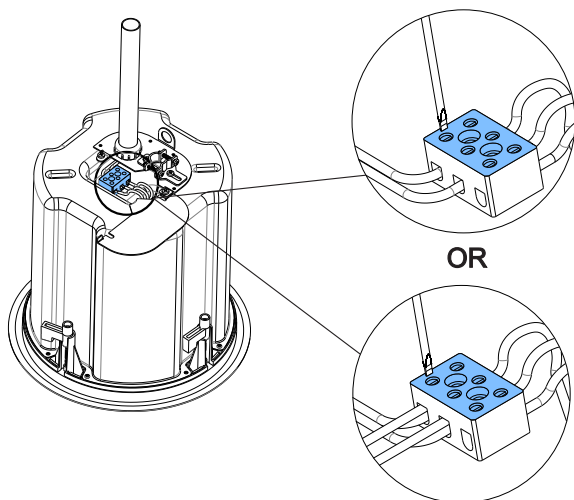


Figure 4.17: Wiring – solid conduit

5 Technical data

	LC20-PC60G6-6	LC20-PC60G6-8
Frequency Range (-10 dB):	50 Hz - 20 kHz	40 Hz - 20 kHz
Coverage (Conical):	100°	120°
Power Handling:	200 W Program, 100 W Pink Noise	
Sensitivity (SPL 1 W/1 m):	87 dB	88 dB
Max Calculated SPL:	107 dB Avg, 113 dB Peak	108 dB Avg, 114 dB Peak
Impedance:	10 ohms	
LF Transducer:	165 mm (6.5 in)	200 mm (8 in)
HF Transducer:	35 mm Compression Driver	
Transformer Taps:	70V: 60W, 30W, 15W, 7.5W, 8 ohm 100V: 60W, 30W, 15W, 8 ohm	
Connectors:	Removable locking 4-Pin (Phoenix) 2.5 mm (12 AWG) max wire size	
Enclosure:	ABS Plastic (UL94V-0) Baffle, steel back can	
Grille:	Color matched steel grille with fabric	
Dimensions (H x Dia):	260 mm x 280 mm (10.4 in x 11.0 in)	324 mm x 327 mm (10.4 in x 11.0 in)
Cutout Size:	248 mm (9.76 in)	294.3 mm (11.59 in)
Net Weight: (each)	7.0 kg (15.4 lb)	8.0 kg (17.6 lb)
Shipping Weight: (pair)	16.83 kg (37.1 lb)	20.23 kg (44.6 lb)
Support Hardware:	C Ring, Tile Bridge	
Approvals:	UL1480, 2043; CE	

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