



Ceiling Loudspeakers

LC4-UC06E, LC4-UC12E and LC4-UC24E



BOSCH

en Installation Note

1 Installation

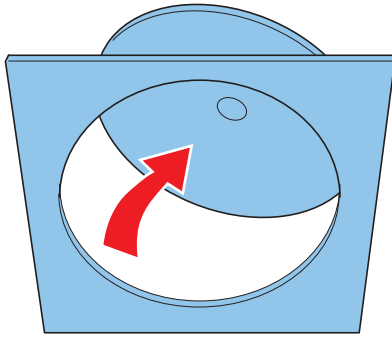


Fig. 1

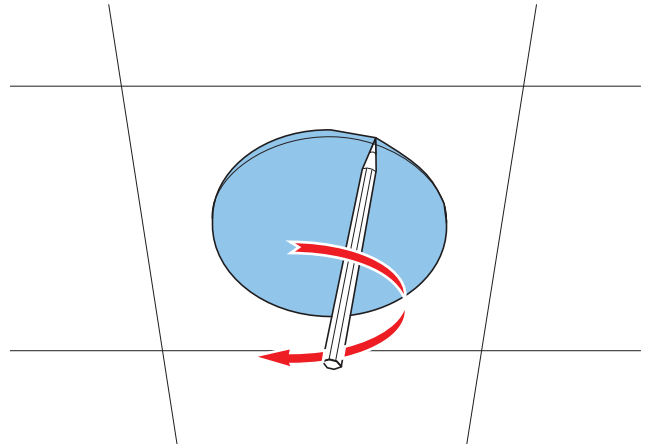


Fig. 2

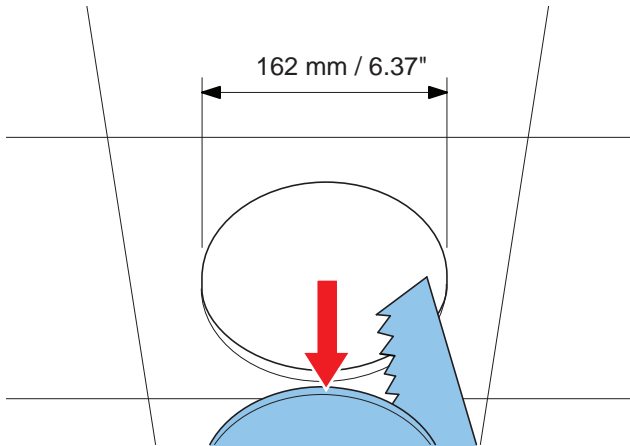


Fig. 3

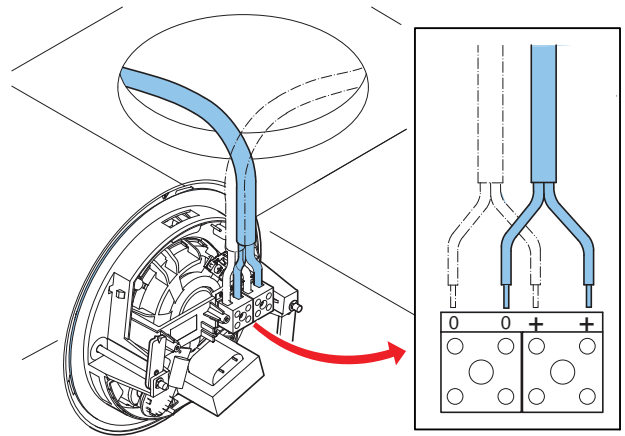


Fig. 4

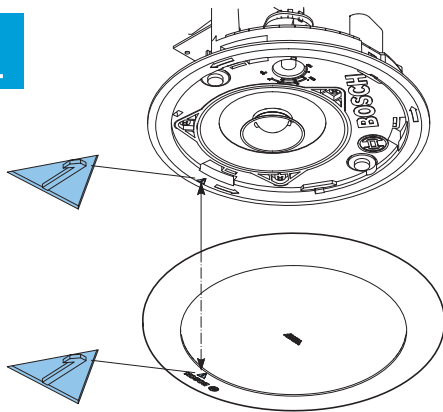


Fig. 5

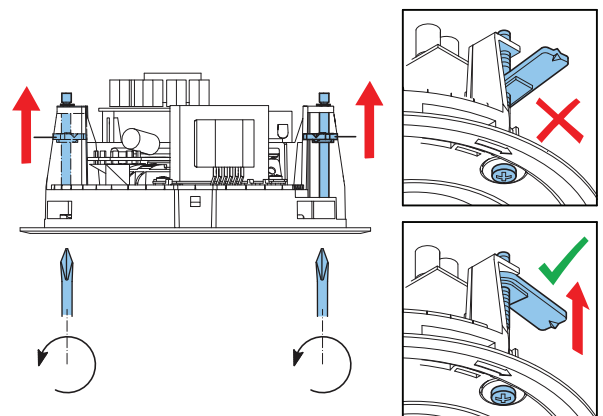


Fig. 6

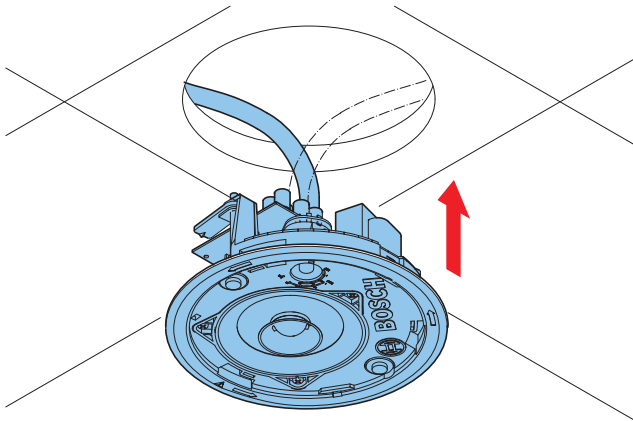


Fig. 7

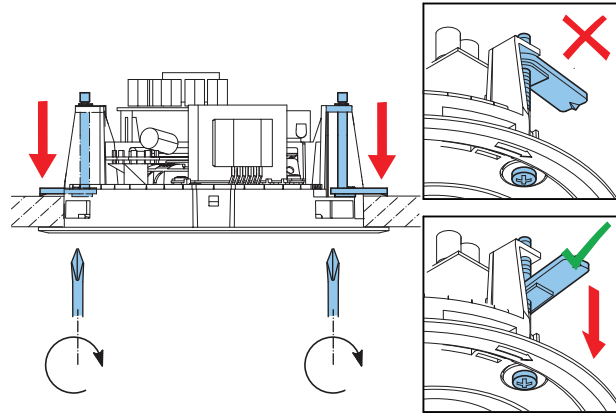


Fig. 8

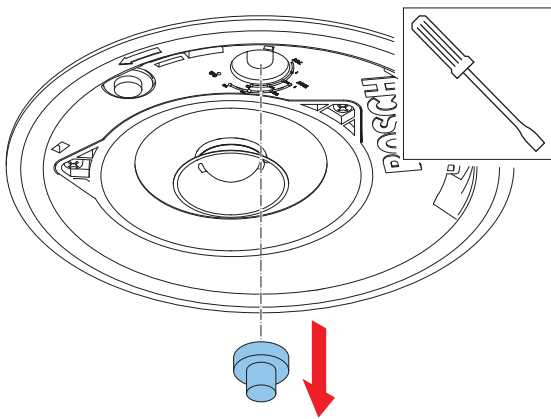


Fig. 9

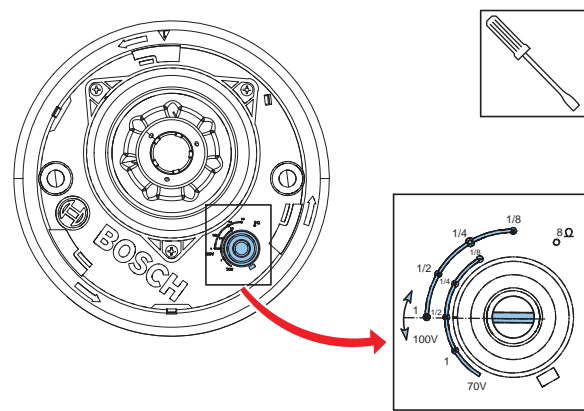


Fig. 10

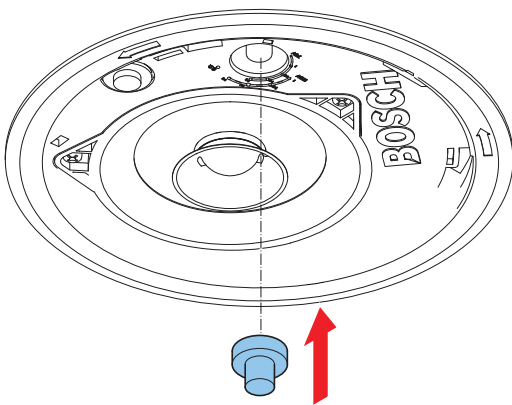


Fig. 11

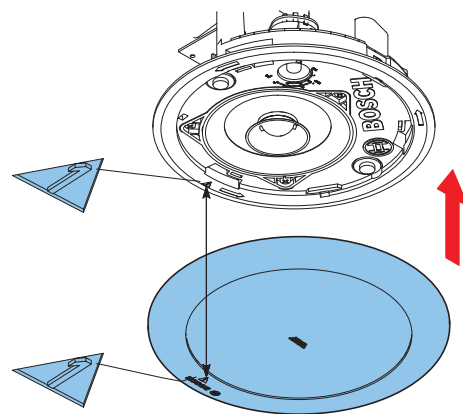


Fig. 12

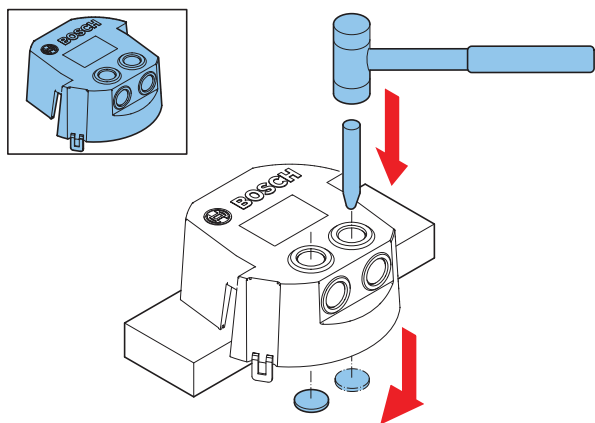


Fig. 13
LC4-CBB

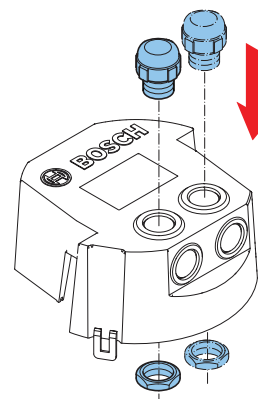


Fig. 14

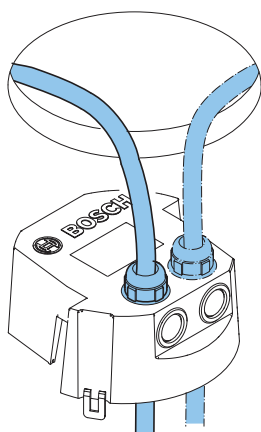


Fig. 15

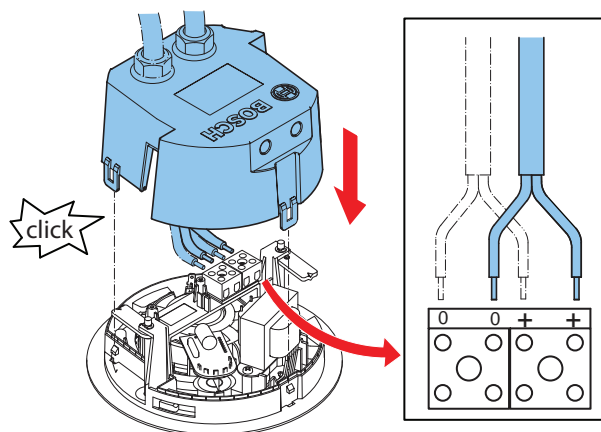


Fig. 16
Next steps: fig 5-12

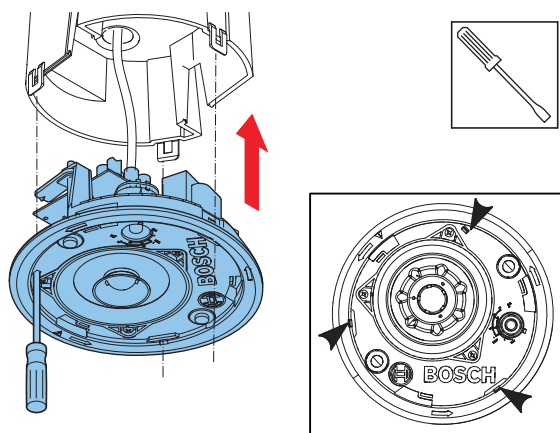


Fig. 17

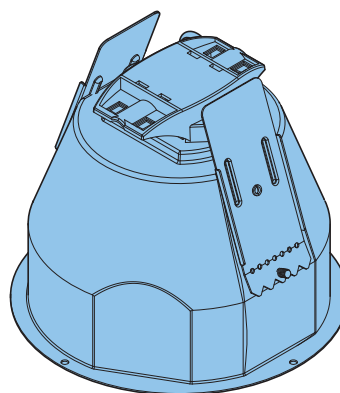


Fig. 18
LC4-MFB

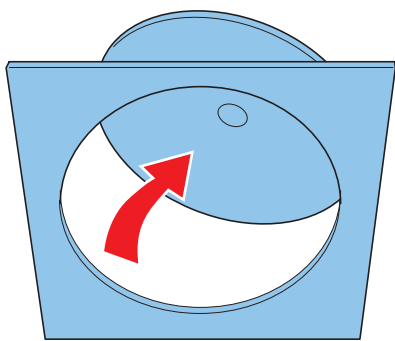


Fig. 19

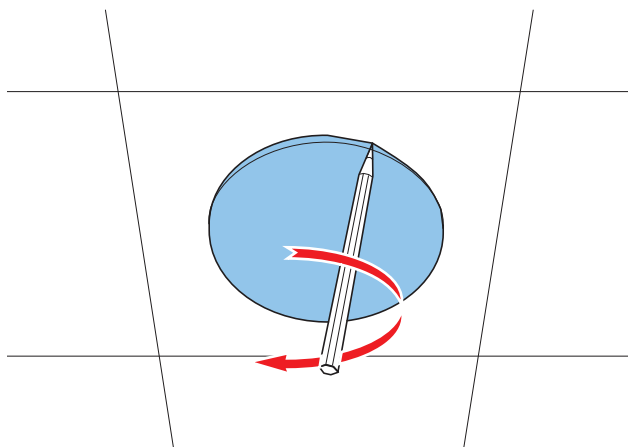


Fig. 20

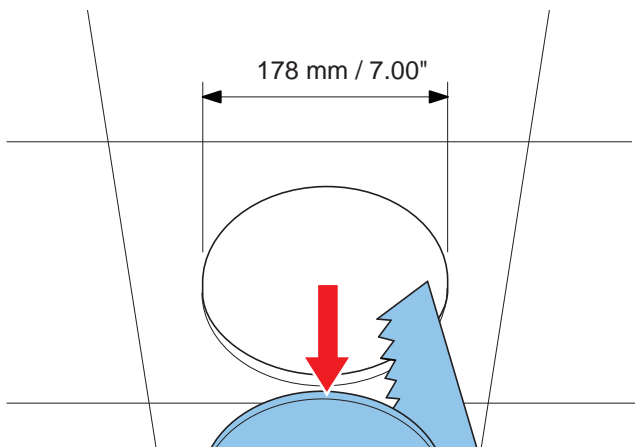


Fig. 21

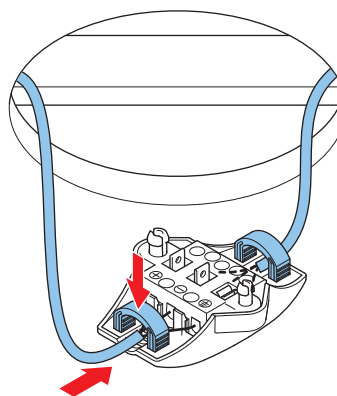


Fig. 22

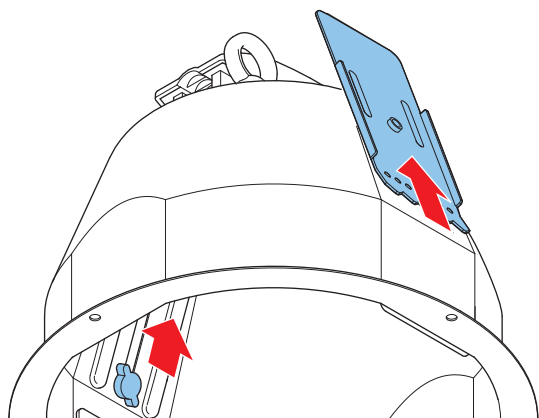


Fig. 23

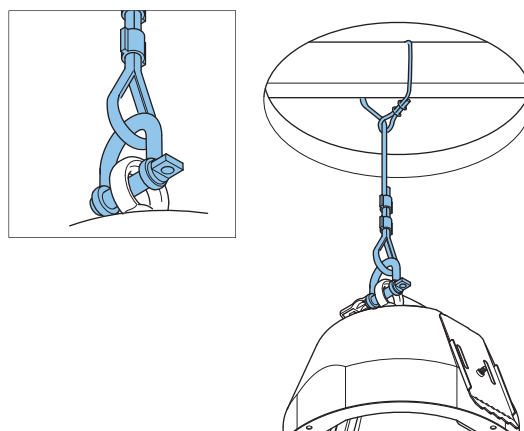


Fig. 24
Optional

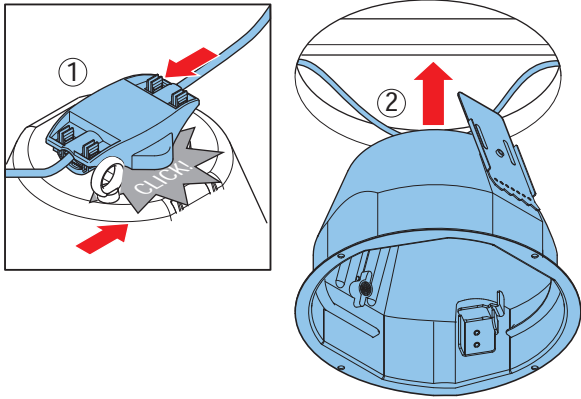


Fig. 25

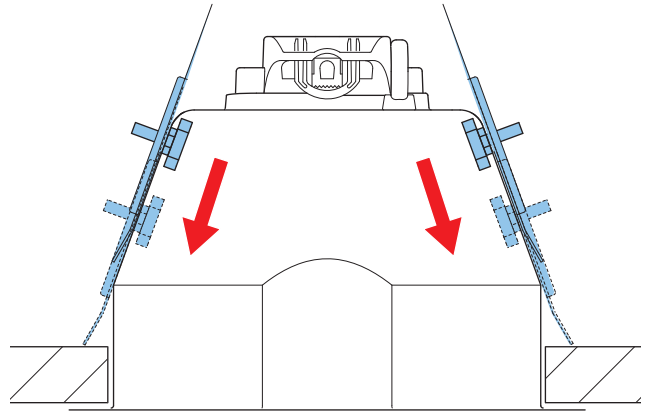


Fig. 26

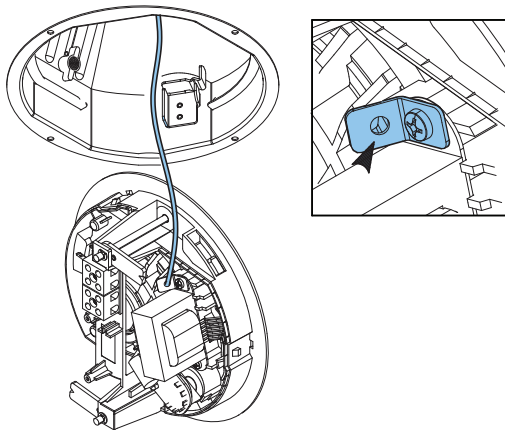


Fig. 27

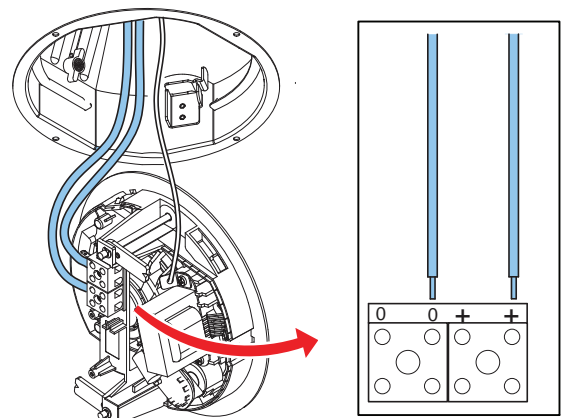


Fig. 28

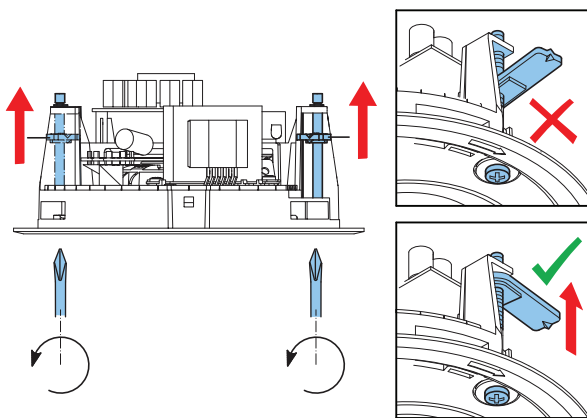


Fig. 29

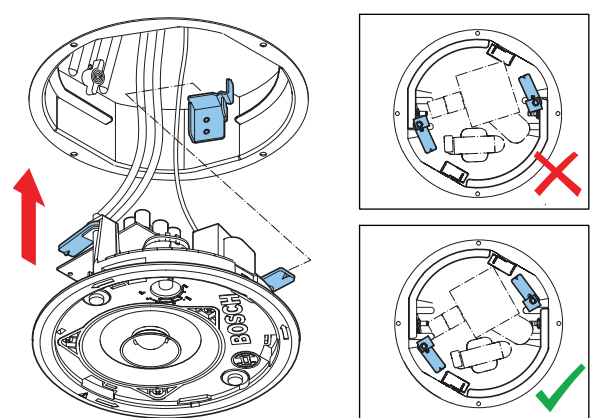


Fig. 30

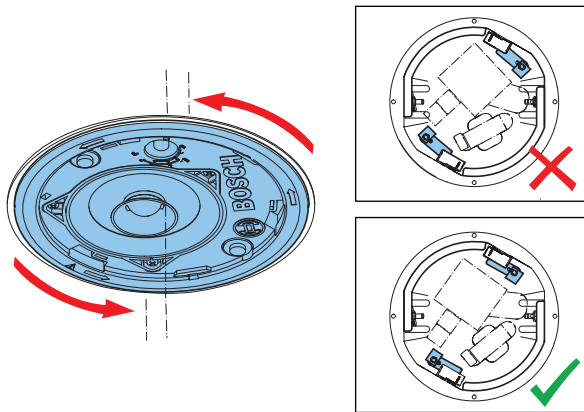


Fig. 31

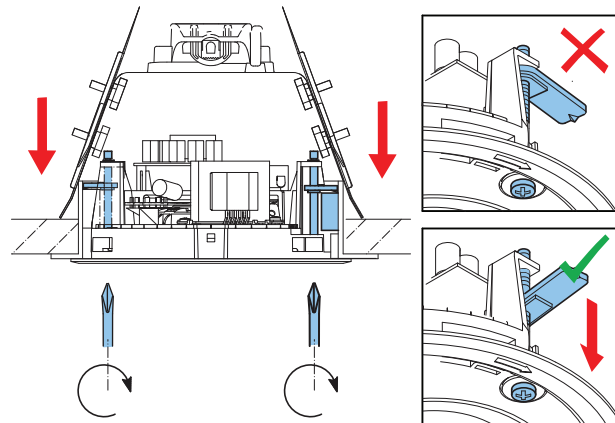
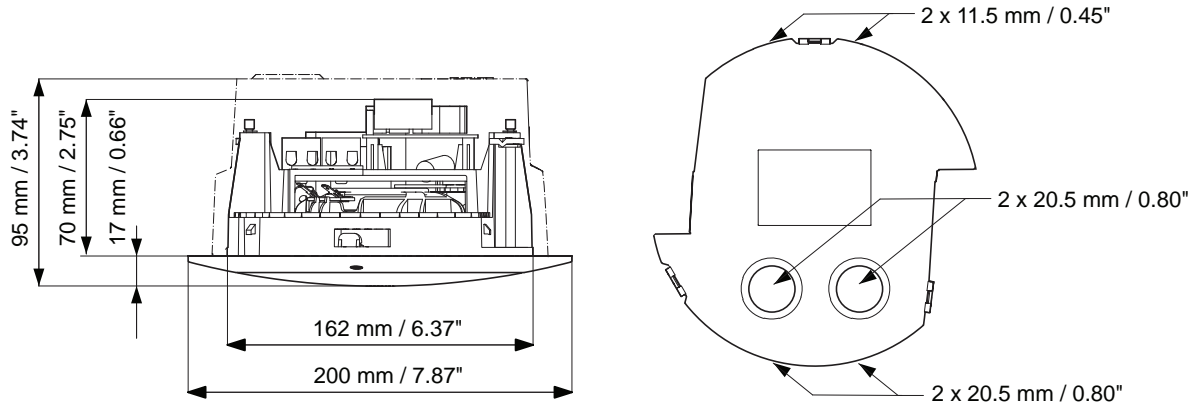
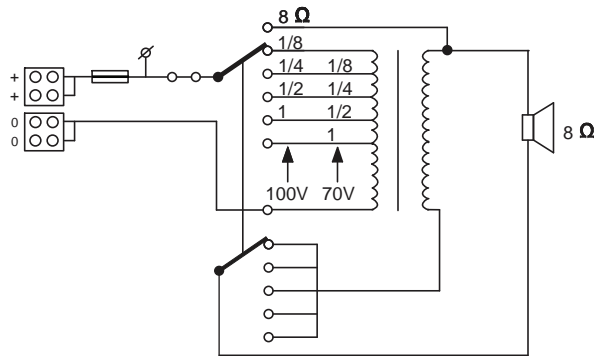


Fig. 32

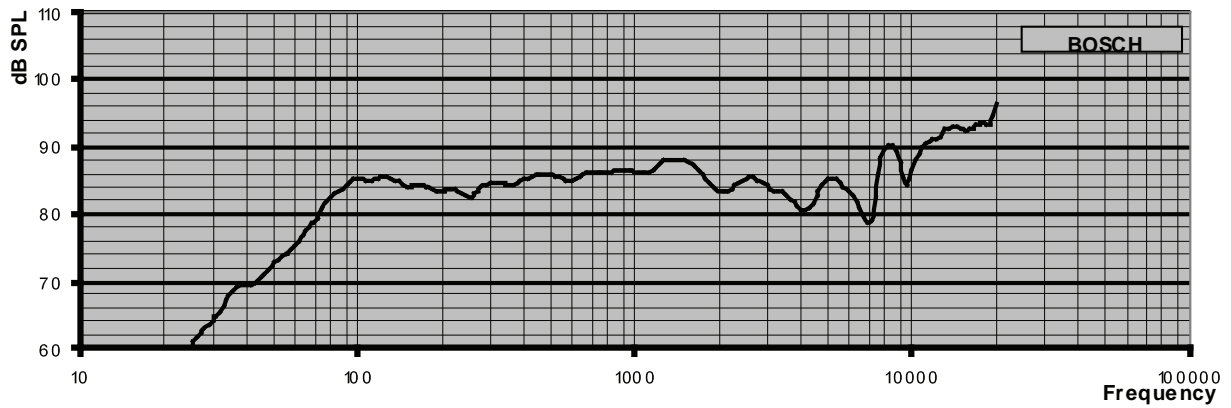
Next steps: fig. 9-12



Dimensions



Circuit diagram



Frequency response

2 Technical specifications

Electrical *

	LC4-UC06E	LC4-UC12E
Description	Ceiling loudspeaker	
Maximum power	9 W	18 W
Rated power	6 W (6/3/1.5/0.75W)	12 W (12/6/3/1.5W)
Sound pressure level at 6 W power / 1 W (1 kHz, 1 m)	95 dB / 87 dB (SPL)	98 dB / 87 dB (SPL)
Opening angle at 1 kHz / 4kHz (-6 dB)	180° / 180°	180° / 180°
Effective frequency range (-10 dB)	65 Hz to 20 kHz	65 Hz to 20 kHz
Rated voltage	6.93 / 70 / 100 V	9.8 / 70 / 100 V
Rated impedance	8 / 835 / 1667 Ohm	8 / 418 / 833 Ohm
Electrical connection	4-way screw terminal block	
Acceptable wire gauge	0.5 – 3 mm ²	

	LC4-UC24E
Description	Ceiling loudspeaker
Maximum power	36 W
Rated power	24 W (24/12/6/3 W)
Sound pressure level at 6 W power / 1 W (1 kHz, 1 m)	101 dB / 87 dB (SPL)
Opening angle at 1 kHz / 4kHz (-6 dB)	180° / 180°
Effective frequency range (-10 dB)	65 Hz to 20 kHz
Rated voltage	13.9 / 70 / 100 V
Rated impedance	8 / 208 / 417 Ohm
Electrical connection	4-way screw terminal block
Acceptable wire gauge	0.5 – 3 mm ²

* Technical performance according to IEC 60268-5

Mechanical

	LC4-UC06E	LC4-UC12E	LC4-UC24E
Description	Ceiling Loudspeaker		
Diameter	200 mm (7.87 in)		
Mounting cut-out	162 mm (6.38 in)		
Min./Max. ceiling thickness	5 to 50 mm (0.19 to 1.97 in)		
Maximum depth	70 mm (2.75 in)		
Material (Loudspeaker unit)	ABS (V 0)		
Material (front grille)	Steel mesh with ABS (V 0) rim		
Weight	800 g (1.77 lb)	840 g (1.86 lb)	990 g (2.18 lb)
Color (loudspeaker unit)	Black (RAL 9011)		
Color (front grille)	White (RAL 9003)		

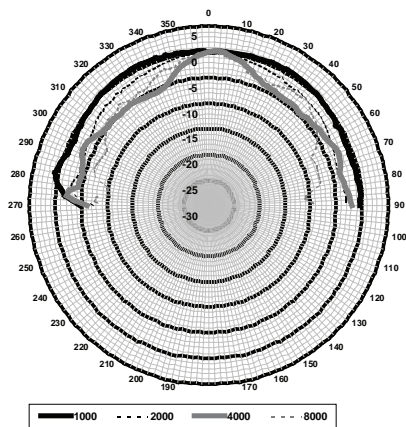
	LC4-CBB	LC4-MFD
Description	Back-Box	Metal Fire-dome
Diameter	160 mm (6.29 in)	197 / 175 mm (7.75 / 6.88 in)
Maximum depth	78 mm (3.07 in)	156 mm (6.14 in)
Mounting cut-out	n.a.	178 mm (7.00 in)
Min./Max. ceiling thickness	n.a.	5 to 50 mm (0.19 to 1.97 in)
Material	ABS (V 0)	Steel
Weight	160 g (0.35 lb)	998 g (2.20 lb)
Color	Black (RAL 9011)	Flame red (RAL 3000)

Environmental

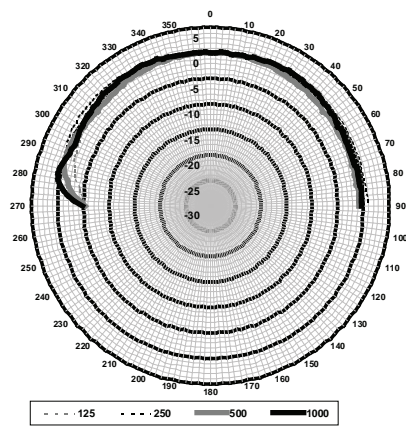
Operating temperature	-25 °C to +55 °C (-13 °F to +131 °F)
Storage temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Relative humidity	<95%

Certification and Approvals


Safety	According to EN 60065
Water and dust protected*	According to EN 60529 IP 21
Emergency*	Compliant to BS 5839 part 8
	According to EN 54-24
* With LC4-CBB Back-box or LC4-MFD Fire-dome	



Horizontal/Vertical polar diagram.
Normalized at 0-degrees axis.



Horizontal/Vertical polar diagram.
Normalized at 0-degrees axis.


Bosch Security Systems BV Torenallee 49, 5617BA Eindhoven, The Netherlands 10 1438-CPD-0321
EN 54-24:2008 Loudspeaker for voice alarm systems for fire detection and fire alarm systems for buildings Ceiling loudspeaker 6 W, 12 W, 24 W and accessories LC4-UC06E, LC4-UC12E, LC4-UC24E, LC4-CBB, LC4-MFD Type A

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