

Metal Column Loudspeaker

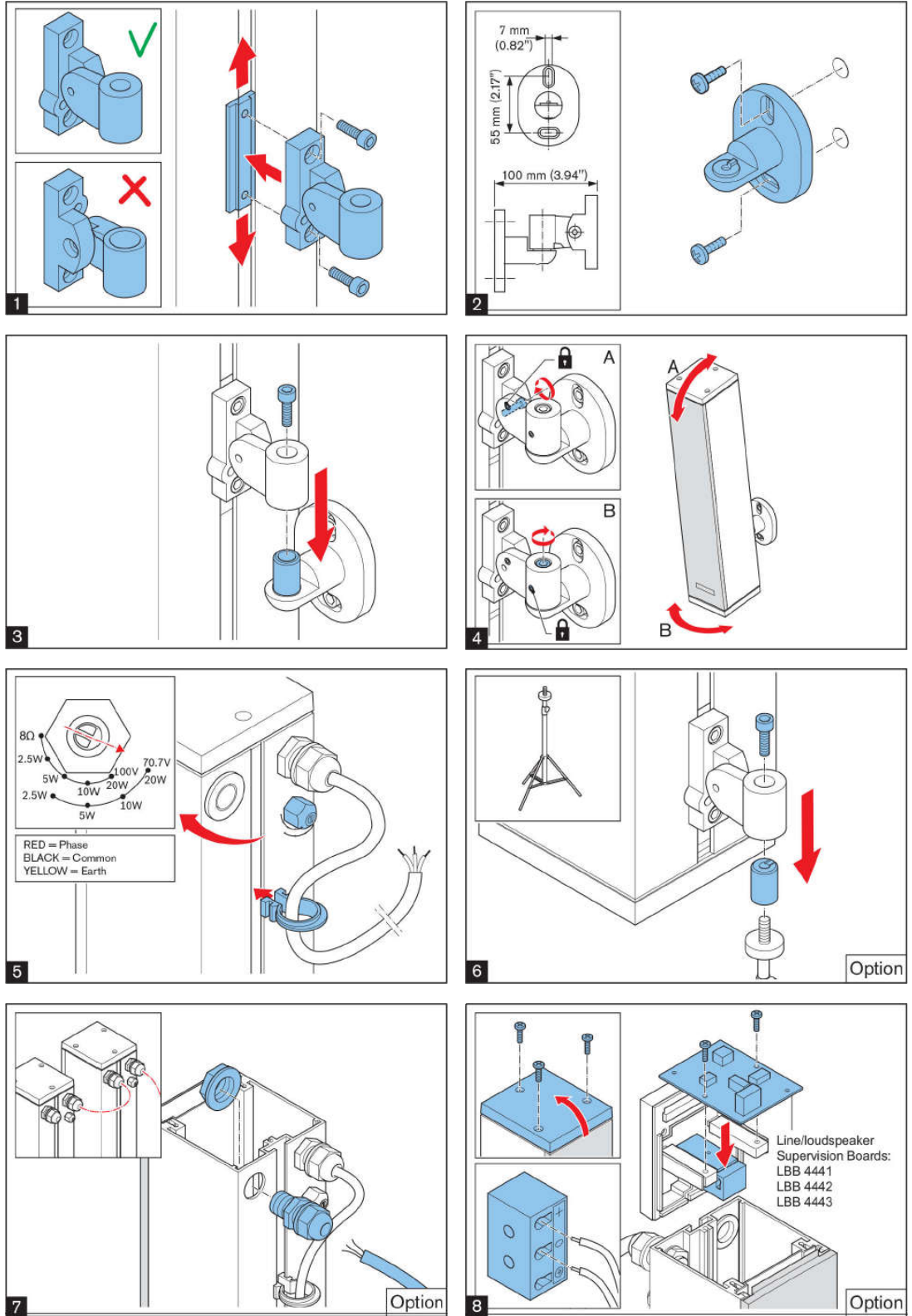
LA1-UM20E-1 | LA1-UM40E-1

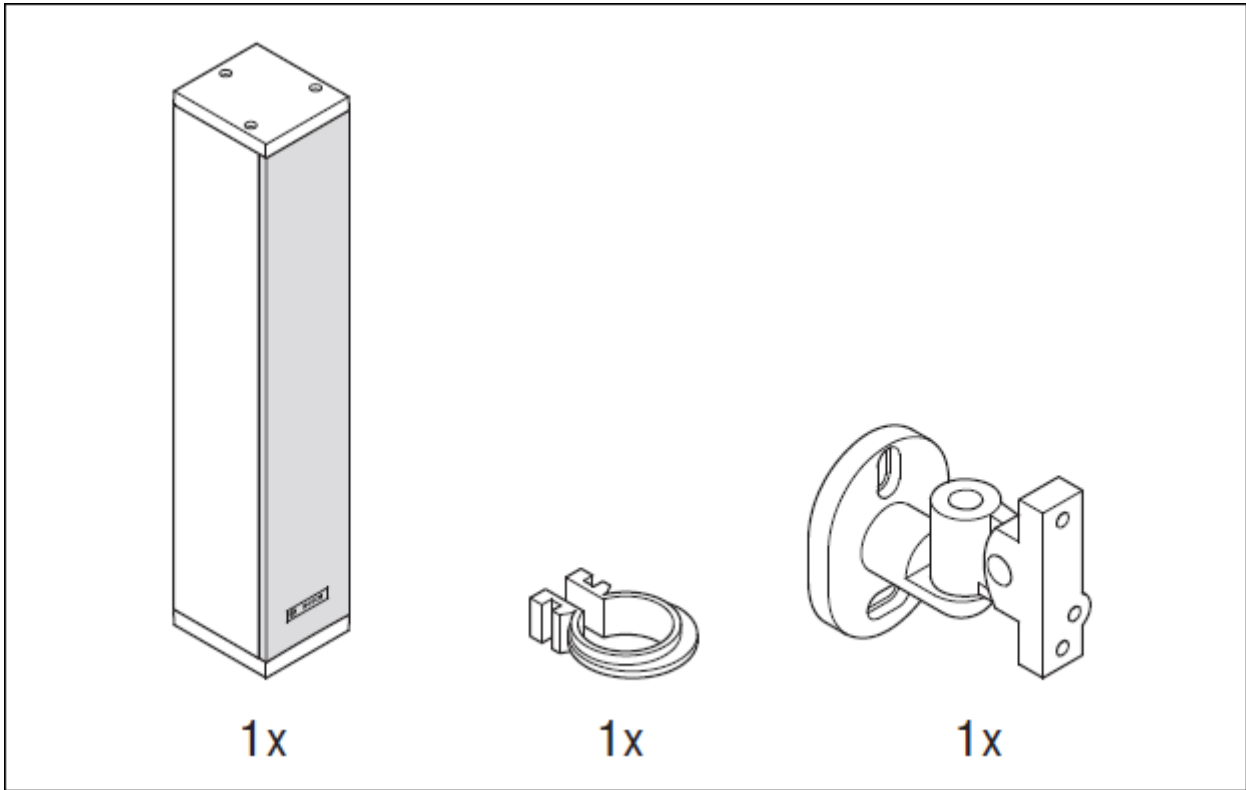


BOSCH

en Installation note

1 Installation





Components

2 Technical data

Electrical*

Description	LA1-UM20E-1	LA1-UM40E-1
Maximum power	30 W	60 W
Rated power (PHC)	20 W	40 W
Power tapping	20 / 10 / 5 / 2.5 W	40 / 20 / 10 / 5 W
Sound pressure level at rated power / 1 W (1 kHz, 1 m)	105 / 92 dB (SPL)	111 / 95 dB (SPL)
Sound pressure level at rated power / 1 W (4 kHz, 1 m)	108 / 95 dB (SPL)	114 / 98 dB (SPL)
Effective frequency range (-10 dB)	240 Hz to 16 kHz	250 Hz to 16 kHz
Horizontal opening angle at 1 kHz / 4 kHz (-6 dB)	210°/ 94°	210°/ 92°
Vertical opening angle at 1 kHz / 4 kHz (-6 dB)	80°/ 22°	40°/ 12°
Rated input voltage	12.65/70/100 V	17.89/70/100 V
Rated impedance	8/251/500 ohm	8/125/250 ohm

* Technical performance data acc. to IEC 60268-5

Mechanical


	LA1-UM20E-1	LA1-UM40E-1
Dimensions (L x W x D)	478 x 84 x 96 mm (18.8 x 3.3 x 3.8 in)	778 x 84 x 96 mm (30.6 x 3.3 x 3.8 in)
Weight	2.9 kg (6.4 lb)	4.4 kg (9.7 lb)
Color	White (RAL 9010)	White (RAL 9010)
Material		
– enclosure	Aluminium	Aluminium
– front grille	Aluminium	Aluminium
– top and bottom	ABS	ABS
Connection	1 m (39.37 in) 3-wire cable	1 m (39.37 in) 3-wire cable
Connector (phase, common, earth)	3-pole screw block	3-pole screw block

Environmental

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

2.1 Certification and approvals

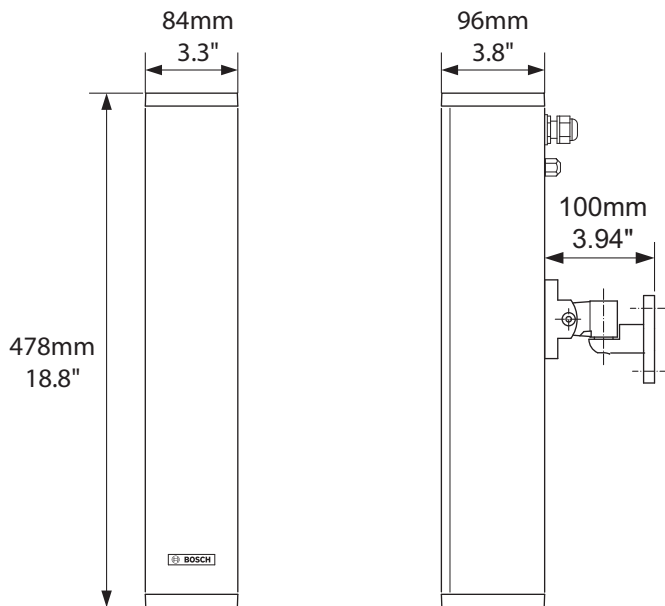
	LA1-UM20E-1	LA1-UM40E-1
Safety	acc. to EN 60065	acc. to EN 60065
Water and dust protected	acc. to EN 60529 IP 65	acc. to EN 60529 IP 65
EVAC compliant	acc. to BS5839 part 8 acc. to EN 60849	acc. to BS5839 part 8 acc. to EN 60849
Emergency	acc. to EN 54-24	acc. to EN 54-24

 1438
Bosch Security Systems BV Torenallee 49, 5617 BA Eindhoven, the Netherlands 11 1438-CPR-0203
EN 54-24:2008 Loudspeaker for voice alarm systems for fire detection and fire alarm systems for buildings Metal Column 20 W and 40 W LA1-UM20E-1 and LA1-UM40E-1 Type B

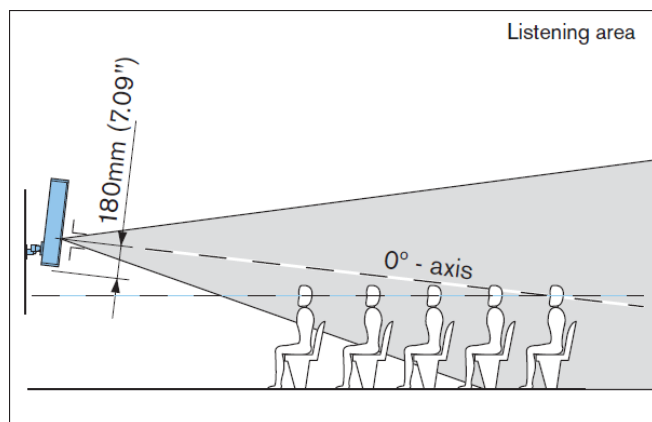
CE label

2.2 Additional technical data

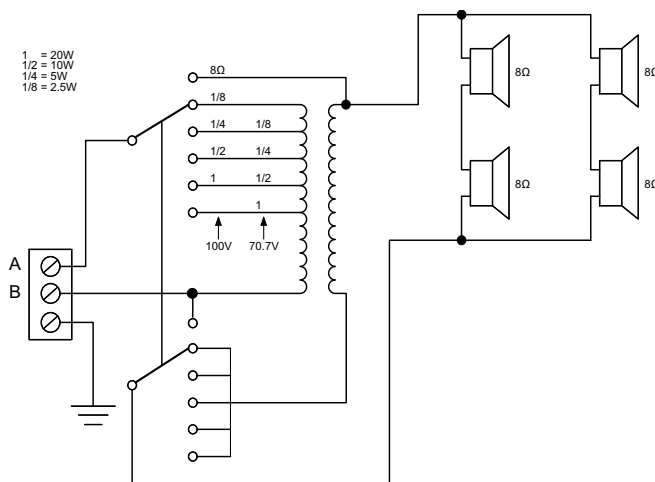
LA1-UM20E-1



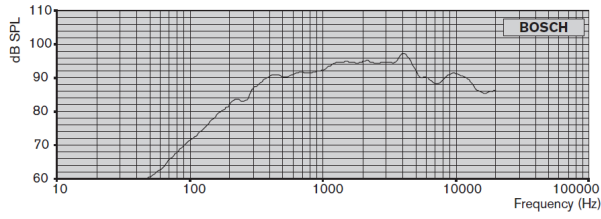
Dimensions



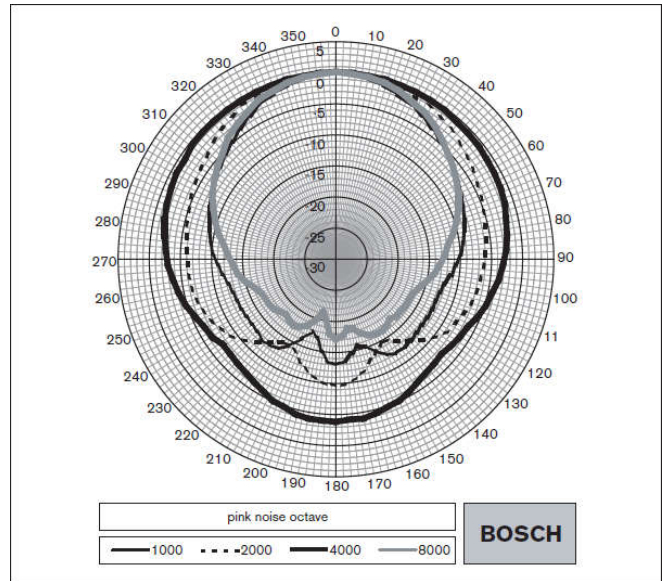
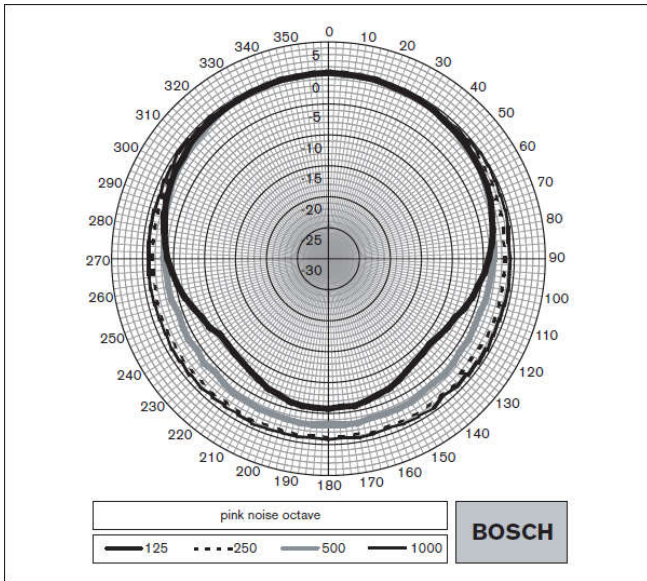
Listening area



Circuit diagram

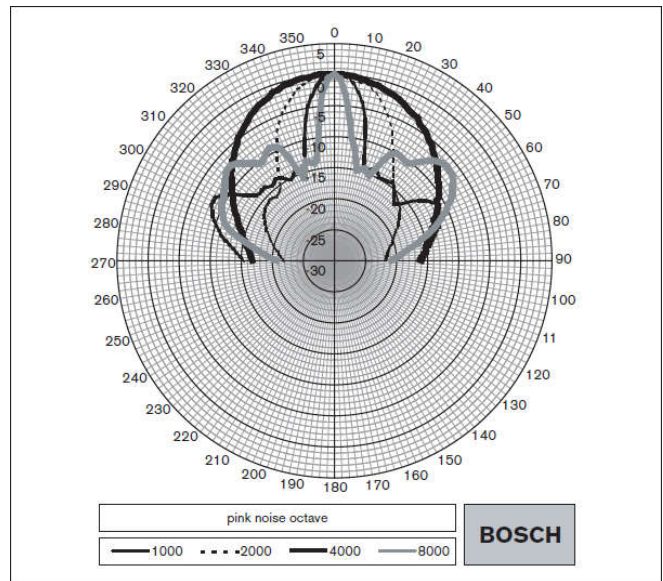
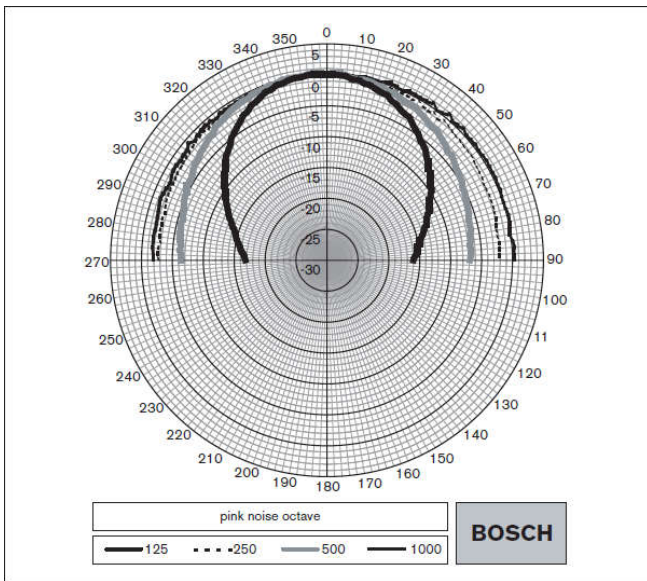


Frequency response



Horizontal polar diagram (measured with pink noise)

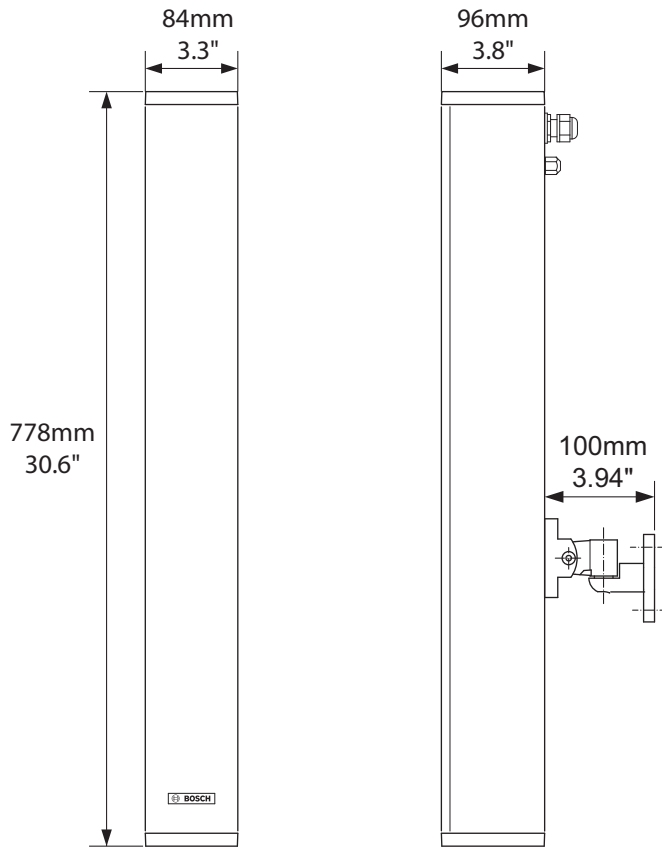
Horizontal polar diagram (measured with pink noise)



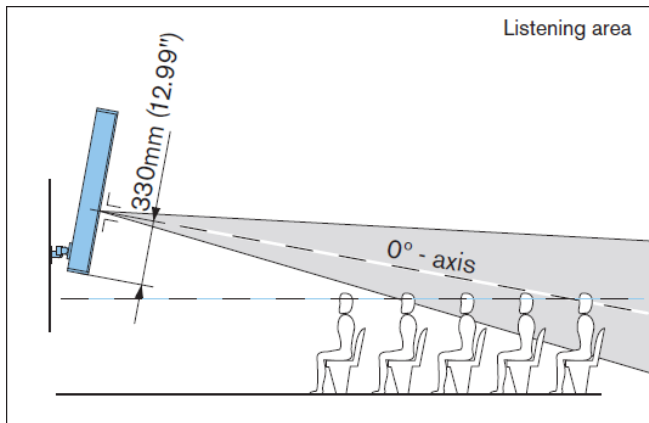
Vertical polar diagram (measured with pink noise)

Vertical polar diagram (measured with pink noise)

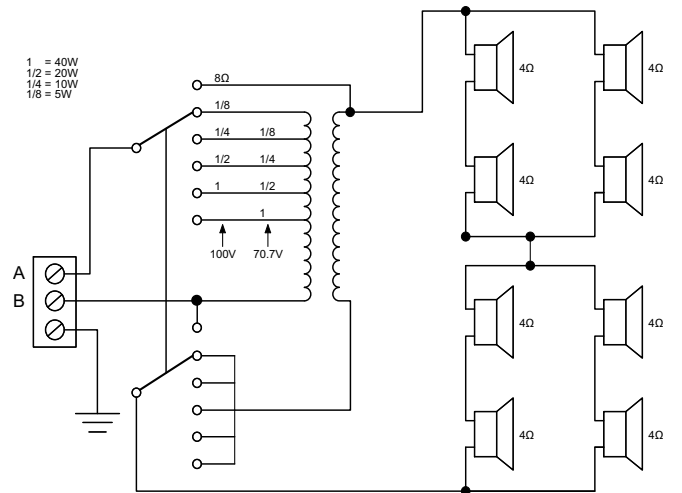
LA1-UM40E-1



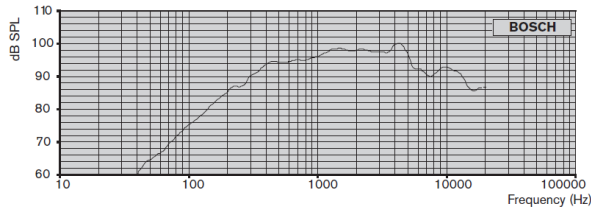
Dimensions



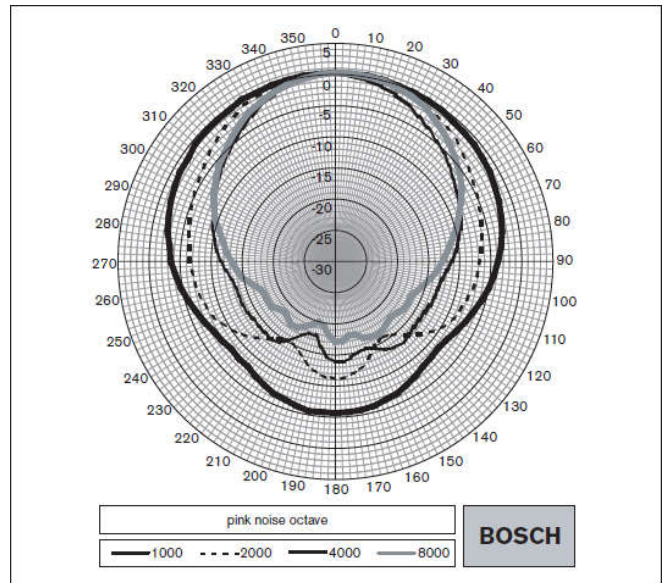
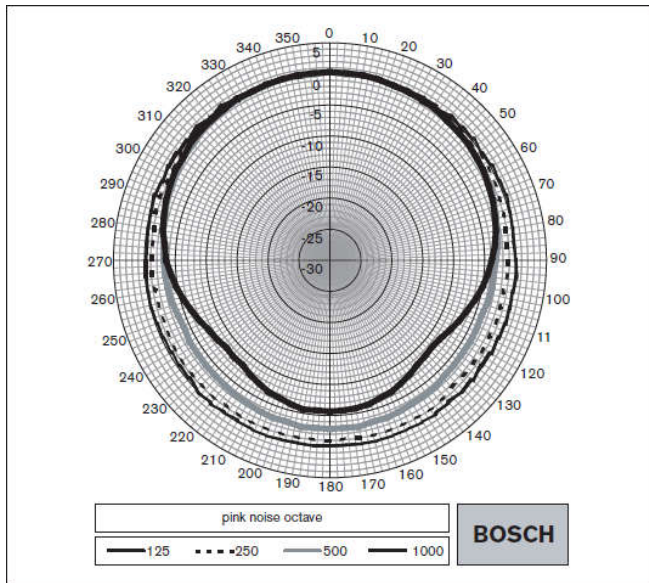
Listening area



Circuit diagram

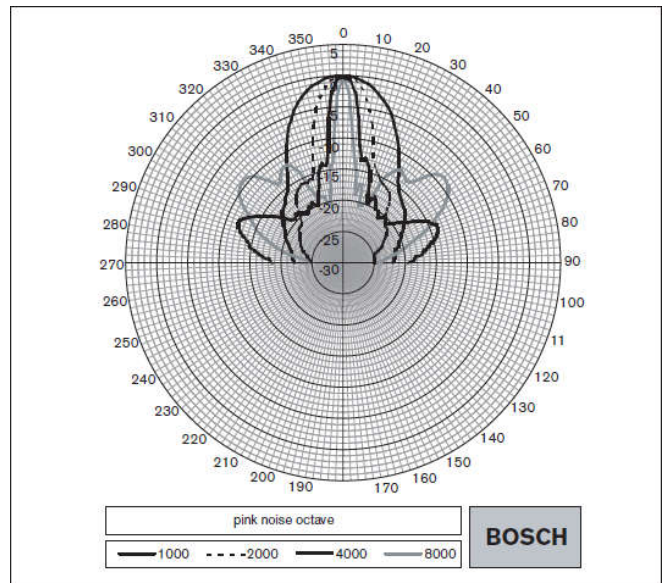
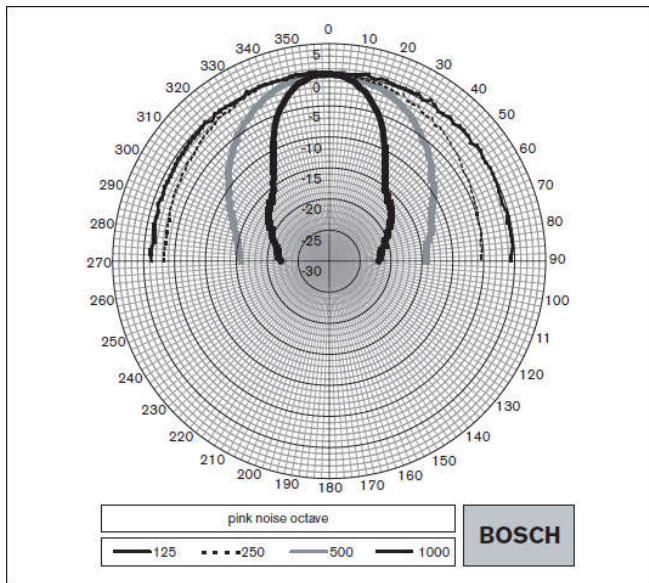


Frequency response



Horizontal polar diagram (measured with pink noise)

Horizontal polar diagram (measured with pink noise)



Vertical polar diagram (measured with pink noise)

Vertical polar diagram (measured with pink noise)

Bosch Security Systems B.V.

Torenallee 49

5617 BA Eindhoven

Netherlands

www.boschsecurity.com

© Bosch Security Systems B.V., 2016