

PE-154BS

Pendant Speaker 15W BS/EN/ISO



DESCRIPTION

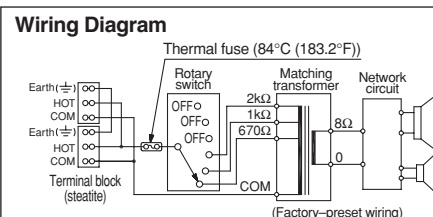
The PE-154BS is a 2-way speaker with an HIPS resin bass-reflex enclosure featuring a 12 cm (5") cone speaker and a balanced dome tweeter. Intended for ceiling suspension installation, it has an outstandingly stylish design that is inspired by the finest lighting fixtures, allowing it to harmoniously blend in with lighting equipment. It is ideally suited for such applications as BGM and announcements at high-ceiling venues such as airports, factories and shopping malls. The speaker is easy to repaint, extending the range of design needs it can meet. A directly attached sturdy suspension cable is extendable up to 3 meters.

The PE-154BS is driven on a high-impedance (100 V or 70 V) line. Input impedance is adjustable with a rotary switch on the upper side of the speaker. EN 54-24* and ISO 7240-24 certified, it is authorized for use in conjunction with fire detection systems. It is also in compliance with BS 5839-8: 2008 14.8.

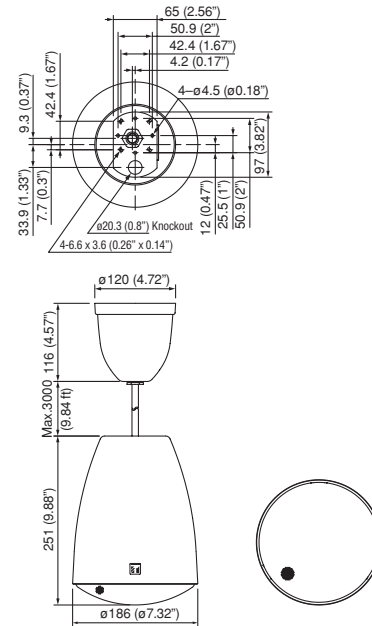
*EN 54-24: Loudspeaker for voice alarm systems for fire detection and fire alarm

FEATURES

- Stylish and outstanding design inspired by the finest lighting fixtures
- Sturdy cable extendable up to 3 meters
- Repaintable
- Input impedance easily changeable
- Certified to EN 54-24 and ISO 7240-24 (Certificate No.: 0359-CPD-0105)
- In compliance with BS 5839-8: 2008 14.8
- Ideally suited for voice alarm system application



APPEARANCE AND DIMENSIONAL DIAGRAM



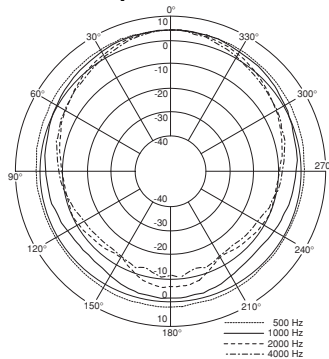
SPECIFICATIONS

Rated Noise Power:	15 W (100 V line), 7.5 W (70 V line)
Rated Impedance:	100 V line: 670 Ω (15 W), 1k Ω (10 W), 2k Ω (5 W) 70 V line: 670 Ω (7.5 W), 1k Ω (5 W), 2k Ω (2.5 W)
Sensitivity:	91 dB (1 W, 1 m) (500 – 5,000 Hz, pink noise) 87 dB (1 W, 1 m) (100 – 10,000 Hz, pink noise) 75 dB (1 W, 4 m) (100 – 10,000 Hz, pink noise)
Maximum Sound Pressure Level:	99 dB (15 W, 1 m) (100 – 10,000 Hz, pink noise) 87 dB (15 W, 4 m) (100 – 10,000 Hz, pink noise)
Frequency Response:	70 – 20,000 Hz
Coverage Angle:	Horizontal and Vertical: 360° (500 Hz), 170° (1,000 Hz), 90° (2,000 Hz), 70° (4,000 Hz)
Environmental Type:	A (indoor applications)
Speaker Component:	Low frequency: 12 cm (5") cone-type High frequency: 2.5 cm (1") balanced dome tweeter
Operating Temperature:	-10°C to +50°C (14°F to 122°F)
Speaker Mounting Method:	Ceiling suspension
Cable Gland:	Size: PG 13.5 One cable gland is factory-installed. For bridge connection, one cable gland can be added.*
Speaker Cable:	4-core fireproof cable 3 m (9.84 ft)
Applicable Cable Size:	Outer diameter: ø 6.5 – 12.5 mm Conductor: Solid wire or 7-core wire 0.8 – 7 mm² (AWG 18 – AWG 9) for solid wire 0.8 – 4 mm² (AWG 18 – AWG 11) for 7-core wire
Cable Connection:	Screw terminal (steatite) × 2
Finish:	Enclosure: HIPS resin, off-white (RAL 9010 or equivalent colour) Grille: Surface-treated steel plate net, off-white (RAL 9010 or equivalent colour), paint
Dimensions:	ø 186 × 251(H) mm (ø 7.32" × 9.88") (speaker only)
Weight:	2.33 kg (5.14 lb) (speaker only)
Accessory:	Ceiling bracket × 1, Mounting hanger × 1, Ceiling cover × 1, Ceiling bracket mounting screw (tapping screw 4 × 16) × 4

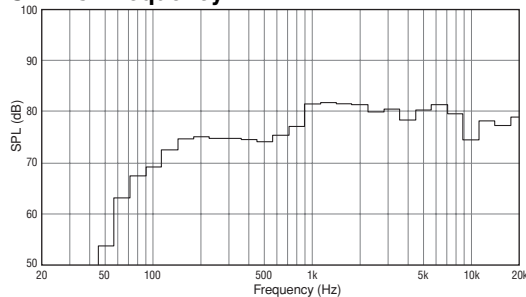
* Part code for Cable gland: 525-52-011-70 Cable gland AVC PGB13.5-12 (GRY)

CHARACTERISTIC DIAGRAMS based on EN 54-24 measurement conditions (Pink noise, 1 W, 4 m)

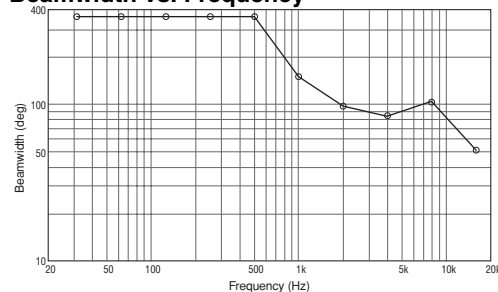
Polar Response



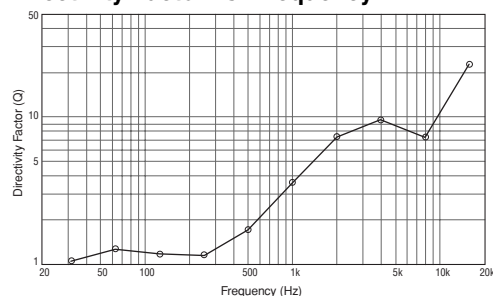
SPL vs. Frequency



Beamwidth vs. Frequency



Directivity Factor vs. Frequency



ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

The speaker shall combine a bass-reflex 12 cm (5") cone type, plus balanced dome tweeter, suitable for ceiling suspension mounting. It is also designed for use in voice evacuation systems. Input impedance shall be easily adjustable with rotary switch on the upper side of the speaker.

The speaker shall include a transformer having multiple taps (5 W, 10 W, 15 W at 100 V and 2.5 W, 5 W, 7.5 W at 70 V) adjustable. The output sound pressure level at a distance of 1 m with a 1 W input level applied shall be 91 dB SPL. The speaker shall have a frequency response of 70 – 20,000 Hz. The speaker shall have an ingress protection for indoor applications: IEC 60529 / EN 60529 drip-proof rating of IP21C. 2 × fire-resistant steatite screw terminal blocks allows secure cable connections and bridge wiring. Thermal

fuse with a blowing temperature of 84° C, 3 meters of shielded 4 core fire-resistant suspension cable avoid risk of failure of speaker line and provide secure mounting feature with internal flame-resistant insulated cables.

The speaker enclosure shall be constructed of HIPS resin. The grille shall be constructed of surface-treated steel plate net. The speaker shall be available in off-white colour. The unit shall have dimensions of ø 186 × 251 (H) mm (ø 7.32" × 9.88"), and a weight of 2.33 kg (5.14 lb).

The speaker shall be certified according to EN 54-24 with CPD Number 0359-CPD-0105, certified according to ISO 7240-24 and in compliance with the British Standard BS 5839-8.

The speaker shall be a TOA model PE-154BS