BS-1015BSB / BS-1015BSW
Compact Speaker 15W BS/EN/ISO

DESCRIPTION

The BS-1015BSB/1015BSW is a 2-way universal speaker intended for indoor/outdoor use. It features Bass-reflex construction that incorporates a 12 cm (5") dynamic cone type speaker for low and midrange sound output, and a 2.5 cm (1") balanced dome tweeter for clear high-frequency sound reproduction. It is suitable for announcement and music use.

The BS-1015BSB/1015BSW has a smoothly curved exterior design that is tastefully designed to harmonize with building interiors, offering unobtrusively compact versatility. The speaker is ideal for announcement and music use. EN 54-24*: 2008 and ISO 7240-24: 2010 certified, it is authorized for a use in conjunction with fire detection systems. It is also in compliance with BS 5839-8: 2008 14.8.

The speaker can be wall- or ceiling-mounted in either a horizontal or vertical orientation using the accessory brackets. Black or white enclosure colors can be selected to match venue interiors.

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

FEATURES

- Stylish, compact and unobtrusive design
- Quick and easy installation
- Horizontal / vertical installation
- Ideally suited for BGM and announcements
- Steatite screw terminal block and thermal fuse
- Certified to EN 54-24: 2008 and ISO 7230-24: 2010 (Certificate No.:0359-CPD-0104)
- In compliance with BS 5839-8: 2008 14.8
- Ideally suited for voice alarm system application

SPECIFICATIONS

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Rated Noise Power:	15W (100V line), 7.5W (70V line)
Rated Impedance:	100V line: 670Ω (15W), 1kΩ (10W), 2kΩ (5W) 70V line: 670Ω (7.5W), 1kΩ (5W), 2kΩ (2.5W)
Sensitivity:	90dB (1W, 1m) (500Hz – 5kHz, pink noise) 87dB (1W, 1m) (100Hz – 10kHz, pink noise) 75dB (1W, 4m) (100Hz – 10kHz, pink noise)
Maximum Sound Pressure Level:	98dB (15W, 1m) (100Hz – 10kHz, pink noise) 86dB (15W, 4m) (100Hz – 10kHz, pink noise)
Frequency Response:	80Hz – 20kHz (peak –20dB)
Coverage Angle:	Horizontal: 220° (500Hz), 150° (1kHz), 120° (2kHz), 90° (4kHz) Vertical: 330° (500Hz), 160° (1kHz), 120° (2kHz), 70° (4kHz)
Environmental type:	A (indoor applications)
Speaker Component:	Low frequency: 12cm (5") cone-type High frequency: 2.5cm (1") balanced dome tweeter
Operating Temperature:	−10°C to +50°C (14°F to 122°F)
Speaker Mounting Method:	Wall-mount
Cable Gland:	Size: PG 13.5 One cable gland is factory-installed. For bridge connection, one supplied cable gland can be added*

Applicable Cable:	Outer diameter: ø6.5 – ø12.5mm
	Conductor: Solid wire or 7-core wire
	No bridge connection: 0.8 – 10mm² (AWG 18 – AWG 7) for solid wire
	  0.8 – 8mm² (AWG 18 – AWG 8) for 7-core wire
	Bridge connection: 0.8 – 2.5mm² (AWG 18 – AWG 13) for solid wire
	  0.8 – 1.5mm² (AWG 18 – AWG 15) for 7-core wire

Connection:	Screw connector (steatite terminal) can be prepared for bridge connection
Finish: BS-1015BSB:	Enclosure: ABS resin, black (RAL 9011 or equivalent color), paint Grille: Surface-treated steel plate net, black (RAL 9011 or equivalent color), powder coating Bracket: Steel plate, black (RAL 9011 or equivalent colour), powder coating
BS-1015BSW:	Enclosure: ABS resin, white (RAL 9010 or equivalent color), paint Grille: Surface-treated steel plate net, white (RAL 9010 or equivalent color), powder coating Bracket: Steel plate, white (RAL 9010 or equivalent color), powder coating
Dimensions:	196 (W) × 290 (H) × 186 (D) mm (without bracket) (7.72" × 11.42" × 7.32")
Weight:	2.4kg (5.29 lb) (without bracket)
Accessory:	Bracket × 1, Speaker mounting screw × 2, Rear cover × 1

* Suppliable cable gland's partcord and partname "525-52-011-70: Cable gland AVC PGB13.5-12 (GRY)

Note: Install with the front facing downward. Not that the splash-proof capability will be last if installed face-up. The logo mark needs to be located in the lower section when the speaker is installed vertically, and on the right side of the speaker (as viewed from the front) when installed horizontally.
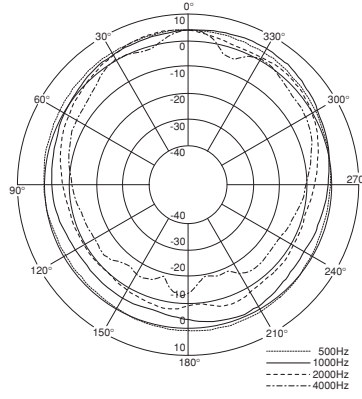
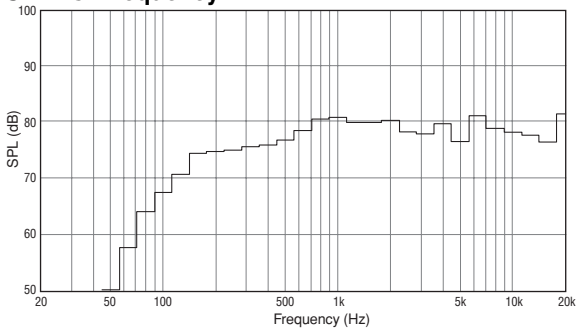# CHARACTERISTIC DIAGRAMS based on EN 54-24 measurement conditions (Pink noise, 1W, 4m)
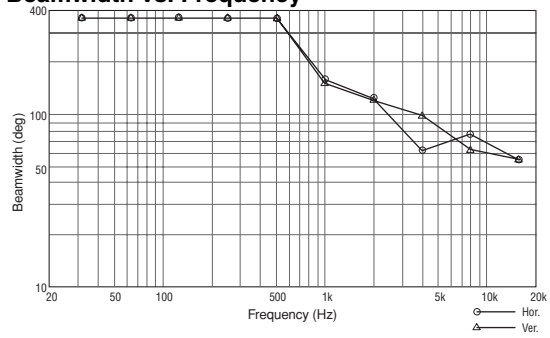
Polar Response (Horizontal)

500Hz
1000Hz
2000Hz
4000Hz
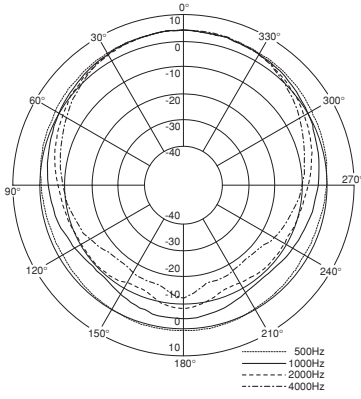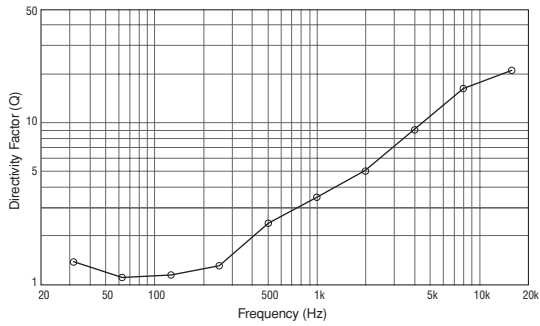
Polar Response (Vertical)

500Hz
1000Hz
2000Hz
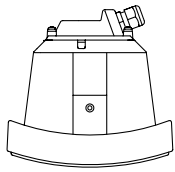4000Hz

SPL vs. Frequency
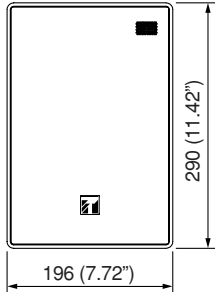

Beamwidth vs. Frequency

Hor.
Ver.

Directivity Factor vs. Frequency

APPEARANCE AND DIMENSIONAL DIAGRAM

Top View

Front View — 196 (7.72"), 290 (11.42")

Side View — 186 (7.32")
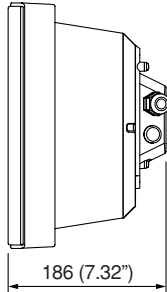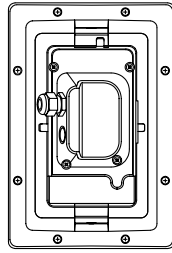
Rear View
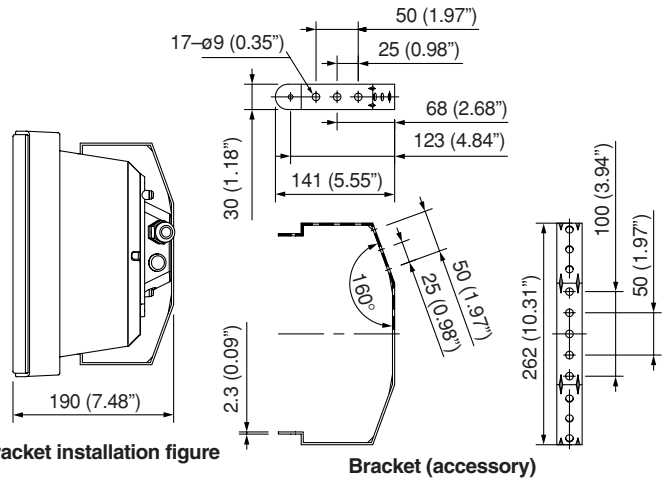
Bracket installation figure — 190 (7.48"), 160°, 2.3 (0.09"), 25 (0.98"), 50 (1.97")

Bracket (accessory) — 17–ø9 (0.35"), 50 (1.97"), 25 (0.98"), 68 (2.68"), 123 (4.84"), 141 (5.55"), 30 (1.18"), 262 (10.31"), 100 (3.94"), 50 (1.97")

Wiring diagram

Screw terminal (steatite) — Earth, HOT, COM — RSW — 2kΩ, 1kΩ, 670Ω, COM — MT — 8Ω, 0 — NETWORK — SP1, SP2 — Thermal fuse (84°C (183.28F))
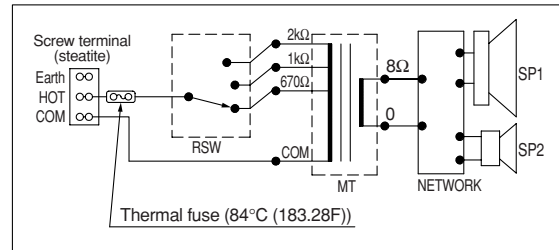
ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

The speaker shall be a High-quality 2-way bass type reflex fitted with a 12cm cone woofer and a 2.5cm dome tweeter speaker suitable for wall or ceiling mounting. Fire-resistant terminal block made of steatite, thermal fuse with blowing temperature of 84°C, internal cables with flame-resistant insulation. Fire Rated Cable can be directly connected to the speaker via 20mm cable glands. The speaker shall be certified according to EN 54-24: 2008 with CPD Number 0359-CPD-0105. Certified according to ISO 7240-24: 2010, Complies to BS-5839-8: 2008 14.8.

The speaker shall include a transformer having multiple taps (5W, 10W, 15W) at 100V adjustable via rotary switch. 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 80 – 20,000Hz (peak -20dB). Ingress Protection, IP33C.

The speaker Grill shall be constructed of surface treated steel plate and the cabinet shall be constructed of ABS resin. The speaker shall be available in white or black color. The unit shall have dimensions of 196 (W) × 290 (H) × 180 (D) mm, and a weight of 2.5 kg.

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