CS-64BS Wide Range Speaker 6W BS/EN/ISO



DESCRIPTION

The outdoor-use CS-64BS wide-range horn speaker is designed for background music or paging announcements with high-quality sound. The use of a horn in combination with a cone speaker increases acoustic conversion efficiency, producing high output, while exponential horn enables uniform and clear sound dispersion over a wide area. The CS-64BS has a resin enclosure that is lightweight, strong and resistant to impacts, as well as able to withstand outdoor installation weather conditions. Stainless-steel brackets and screws further protect against rust and corrosion. The speakers also comply with the IP65 Standard for dust- and waterproofing. Internal speaker parts feature a special weatherproofing treatment, while weatherproof polyurethane resin paint makes the enclosures extremely resistant to ultraviolet light. EN 54-24*: 2008 and ISO 7240-24: 2010 certified, the CS-154BS is authorized for use in fire detection systems. It is also in compliance with BS 5839-8: 2008 14.8. Speaker impedance can be externally changed during and after speaker installation with a rotary switch (6W/3W/1W (100V line) and 6W/3W/1.5W/0.5W (70V line)).

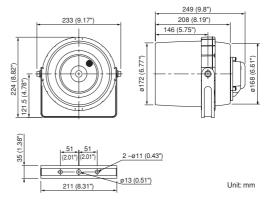
*EN 54-24: Loudspeaker for voice alarm systems for fire detection and fire alarm systems.

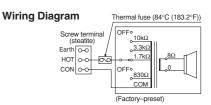
FEATURES

- Wide-range speaker for voice paging/alarm, background music and tone signaling.
- Exponential horn for uniform and clear sound dispersion.
- · Polyurethane resin paint and stainless steel hardware offer excellent weatherproofing, and corrosion resistance.
- IP65 standard compliant for dust- and water-proofing
- · Lightweight and strong ABS resin enclosure that is impact-resistant
- · Stainless steel mounting bracket for secure installation
- · Ideal for schools, parking facilities, boats, factories, parks, swimming pools, etc
- Certified to EN 54-24: 2008 and ISO 7240-24: 2010 (Certificate No.:0359-CPD-0107)
- In compliance with BS 5839-8: 2008 14.8
- Ideally suited for voice alarm system application



APPEARANCE AND **DIMENSIONAL DIAGRAM**





SPECIFICATIONS

Rated Noise Power: 6W (100V line and 70V line)

100V line: $1.7k\Omega$ (6W), $3.3k\Omega$ (3W), $10k\Omega$ (1W) Rated Impedance:

70V line: 830Ω (6W), 1.7kΩ (3W), 3.3kΩ (1.5W),

 $10k\Omega$ (0.5W)

Sensitivity: 96dB (1W, 1m) (330Hz - 3.3kHz, pink noise)

93dB (1W, 1m) (100Hz - 10kHz, pink noise) 81dB (1W, 4m) (100Hz - 10kHz, pink noise) 100dB (6W, 1m) (100Hz - 10kHz, pink noise)

Maximum Sound 88dB (6W, 4m) (100Hz - 10kHz, pink noise) Pressure Level:

Frequency Response: 130Hz - 13kHz

Horizontal and Vertical: 360° (500Hz), 210° (1kHz), Coverage Angle:

85° (2kHz), 45° (4kHz) B (outdoor applications) Operating Temperature: -20°C to +55°C (-4°F to 131°F)

Dust/Water Protection: IP34

Speaker Mounting

Environmental type:

Wall-mount Cable Gland: Size: PG 13.5

One cable gland is factory-installed.

For bridge connection, one cable gland can be added.*

Applicable Cable Size: Outer diameter: ø8 – 12.5mm

Conductor: Solid wire or 7-core wire

No bridge connection:

 $0.8 - 10 \text{mm}^2$ (AWG18 – AWG7) for solid wire, 0.8 - 8mm² (AWG18 - AWG8) for 7-core wire

Bridge connection:

0.8 - 2.5mm² (AWG18 - AWG13) for solid wire, 0.8 - 1.5mm2 (AWG18 - AWG15) for 7-core wire

Cable Connection: Screw terminal (steatite), can be bridge-connected Finish: Horn . Cover and Terminal Cover: ABS resin. off-white, paint

Surface treated steel plate, dark-gray, powder coating Punched net:

Bracket and Screw: Stainless steel

Dimensions: 233 (W) × 224 (H) × 249 (D) mm (9.17" × 8.82" × 9.8")

Weiaht: 1.7kg (3.75 lb) Accessory: Terminal cover x 1 Option: Swivel bracket: YS-151S

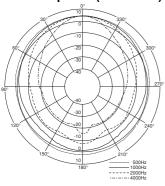
(Can be use instead of the supplied bracket.)

Note: Never connect the 330Ω position ton the 100V line

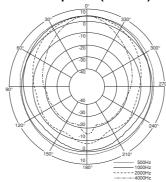
^{*} Suppliable cable gland's part cord and name: 525-52-011-70 Cable gland AVC

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

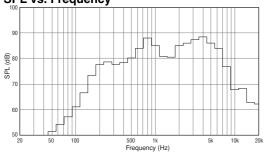
Polar Response (Horizontal)



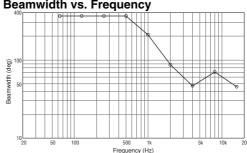
Polar Response (Vertical)



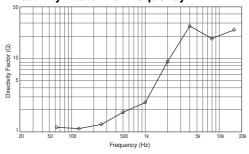
SPL vs. Frequency



Beamwidth vs. Frequency



Directivity Factor vs. Frequency



ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

The speaker shall be a wide-range weatherproof horn speaker suitable for paging, background music and voice evacuation for both indoor and outdoor applications. The speaker component shall be a 12 cm (4.72") cone-type speaker, treated for weatherresistance. The speaker shall have an IEC 60529 / EN 60529 splash proof rating of IP34c. Rated input shall be 6 W. Input impedance shall be easily adjustable with rotary switch on the rear side of the speaker.

The speaker shall include a transformer having multiple taps (1 W, 3 W, 6 W at 100 V and 0.5 W, 1.5 W, 3 W, 6 W at 70 V) adjustable. The sensitivity at a distance of 1m with a 1 W input level applied shall be 96 dB. The speaker shall have a frequency response of 130 – 13 kHz. Horizontal and vertical dispersion at -6 dB below the on-axis reference at 2 kHz shall be 85° (H) $\times\,85^{\circ}$ (V). The speaker enclosure shall be constructed of ABS resin coated with

polyurethane resin paint to resist long-term exposure to ultraviolet light. The grille shall be constructed of surface-treated steel plate net, dark-grey paint. The speaker shall be available in off-white colour. All mounting hardware, including screws and bolts, shall be stainless steel, which protects the speaker from corrosion. Dimensions shall be 233(W) \times 224(H) \times 249(D) mm (9.17" \times 8.82" \times 9.8"). Weight shall be 1.7 kg (3.75 lb.). A fire-resistant steatite screw terminal block with thermal fuse allows secure cable connections and bridge wiring. Internal cables shall be flameresistant insulation. Fire Rated Cable can be directly connected to the speaker cabinet via 20 mm cable gland.

The speaker shall be certified according to EN 54-24 with CPD Number 0359-CPD-0107, certified according to ISO 7240-24 and in compliance with the British Standard BS 5839-8.

The speaker shall be a TOA model CS-64BS.

