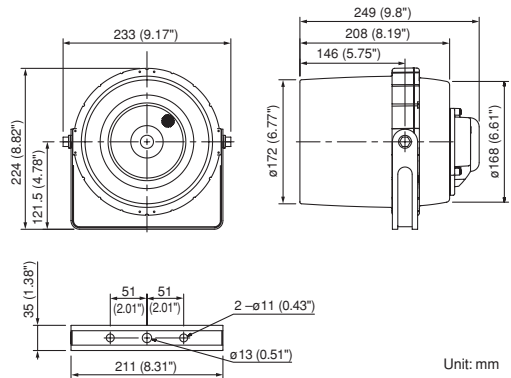


# CS-64BS

## Wide Range Speaker 6W EN/ISO/BS



### APPEARANCE AND DIMENSIONAL DIAGRAM



### 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 IP34 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\* and ISO 7240-24 certified, the CS-154BS is authorized for use in 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 systems.

### FEATURES

- Wide-range speaker for voice paging/alarm, background music and tone signalling.
- Exponential horn for uniform and clear sound dispersion.
- Polyurethane resin paint and stainless steel hardware offer excellent weatherproofing, and corrosion resistance.
- IP34c standard complied for splash-water proof rating
- 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 and ISO 7240-24 (Certificate No.: 0359-CPD-0107)
- In compliance with BS 5839-8: 2008 14.8
- Ideally suited for voice alarm system applications
- Input impedance selector with rotary switch

### SPECIFICATIONS

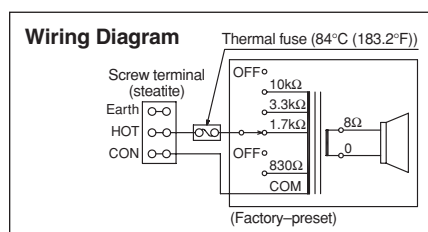
<b>Rated Noise Power:</b>	6 W (100 V line and 70 V line)
<b>Rated Impedance:</b>	100 V line: 1.7k Ω (6 W), 3.3k Ω (3 W), 10k Ω (1 W) 70 V line: 830 Ω (6 W), 1.7k Ω (3 W), 3.3k Ω (1.5 W), 10k Ω (0.5 W)
<b>Sensitivity:</b>	96 dB (1 W, 1 m) (330 – 3,300 Hz, pink noise) 93 dB (1 W, 1 m) (100 – 10,000 Hz, pink noise) 81 dB (1 W, 4 m) (100 – 10,000 Hz, pink noise)
<b>Maximum Sound Pressure Level:</b>	100 dB (6 W, 1 m) (100 – 10,000 Hz, pink noise) 88 dB (6 W, 4 m) (100 – 10,000 Hz, pink noise)
<b>Frequency Response:</b>	130 – 13,000 Hz
<b>Coverage Angle:</b>	Horizontal and Vertical: 360° (500 Hz), 210° (1,000 Hz), 85° (2,000 Hz), 45° (4,000 Hz)
<b>Environmental Type:</b>	B (outdoor applications)
<b>Speaker Component:</b>	12 cm (5") cone-type (treated for splash proof)
<b>Operating Temperature:</b>	-20° C to +55° C (-4° F to 131° F)
<b>Dust/Water Protection:</b>	IP34
<b>Speaker Mounting -Method:</b>	Wall-mount
<b>Cable Gland:</b>	Size: PG 13.5 One cable gland is factory-installed. For bridge connection, one cable gland can be added.*
<b>Applicable Cable Size:</b>	Outer diameter: ø 8 – 12.5 mm Conductor: Solid wire or 7-core wire No bridge connection: 0.8 – 10 mm <sup>2</sup> (AWG 18 – AWG 7) for solid wire, 0.8 – 8 mm <sup>2</sup> (AWG 18 – AWG 8) for 7-core wire Bridge connection: 0.8 – 2.5 mm <sup>2</sup> (AWG 18 – AWG 13) for solid wire, 0.8 – 1.5 mm <sup>2</sup> (AWG 18 – AWG 15) for 7-core wire
<b>Cable Connection:</b>	Screw terminal (steatite), can be bridge-connected
<b>Finish:</b>	Horn, Cover and Terminal Cover: ABS resin, off-white, paint Punched net: Surface treated steel plate, dark-gray, powder coating Bracket and Screw: Stainless steel
<b>Dimensions:</b>	233 (W) × 224 (H) × 249 (D) mm (9.17" × 8.82" × 9.8")
<b>Weight:</b>	1.7 kg (3.75 lb)
<b>Accessory:</b>	Terminal cover × 1

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

Note: Never connect the 830 Ω position ton the 100 V line.

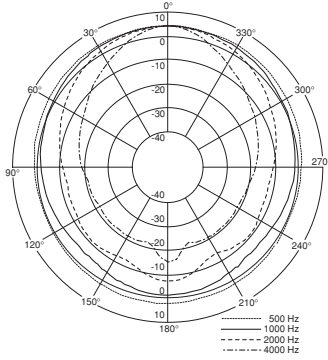
Do not install the speaker face-up from a horizontal plane nor in such a way that the paper cone is exposed to direct sunlight.

If water accumulates on the paper cone, or ultraviolet rays are radiated on it, this may cause the paper cone to deteriorate, leading to speaker malfunction.

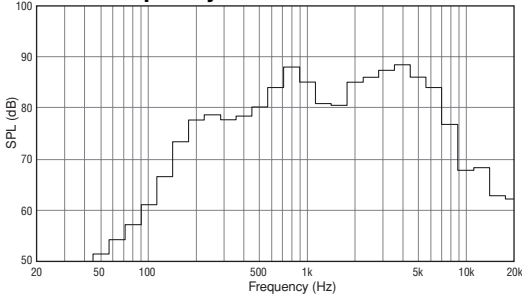


# CHARACTERISTIC DIAGRAMS based on EN 54-24 measurement conditions (Pink noise, 1 W, 4 m)

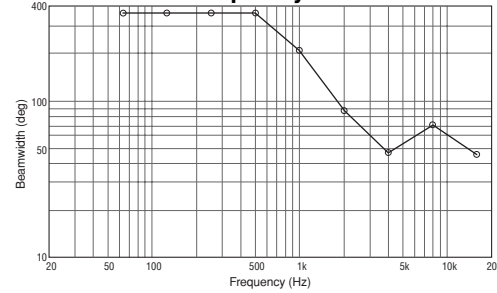
## Polar Response



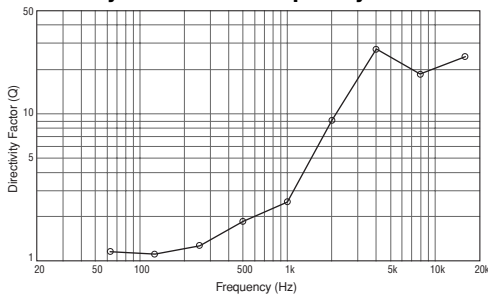
## SPL vs. Frequency



## Beamwidth vs. Frequency



## Directivity Factor vs. Frequency



## ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

The speaker shall 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 weather-resistance. The speaker shall have an IEC 60529 / EN 60529 splash proof rating of IP34. 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 – 13,000 Hz. Horizontal and vertical dispersion at -6 dB below the on-axis reference at 2,000 Hz shall be 85° (H) × 85° (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) × 224 (H) × 249 (D) mm (9.17" × 8.82" × 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 flame-resistant insulation. Fire Rated Cable can be directly connected to the speaker cabinet via PG13.5 (or 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.