SC-651 Paging Horn Speaker



DESCRIPTION

TOA's SC-651 Paging Horn Speaker, rated at 50W, is designed especially for outdoor applications. The SC-651 speaker features newly developed diaphragms employing special heat-resistant polyimide film to prevent the diaphragm from absorbing moisture and changing shape, as well as to improve the low frequency characteristics. High speaker efficiency has also been realized by minimizing the gap produced when the diaphragm bobbin is installed in the magnetic circuitry slit.

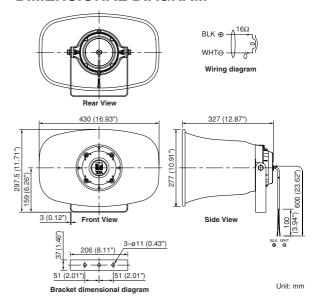
The SC-651 features TOA's unique oval shape, which enhances excellent speech clarity.

The mounting bracket, bracket holder and the horn flare are treated with 50-micron thick powder paint coating, which is about three times thicker than that of the conventional horns and external hardware (screws, bolts, nuts) are made of stainless steel. All of these factors combine to ensure the speaker's excellent weatherproofing and corrosion resistance. In addition, the external horn flare is made of aluminum which is more shock-resistant than resin.

FEATURES

- Newly developed polyimide diaphragm ensures durability during 50W output.
- Paging horn speaker for voice paging and tone signaling distribution
- Weather-Resistant to withstand demanding environmental conditions
- · Shock-resistant aluminum oval horn
- IP65 standards compliant for dust and water-resistance
- Wide temperature range: -20°C to 55°C (-4°F to 131°F)
- Steel mounting brackets for easy installation and aiming in wall, pole or ceiling-mount applications

APPEARANCE AND DIMENSIONAL DIAGRAM



SPECIFICATIONS

Rated Input: 50W (Mobil Mount use: 30W)

Rated Impedance: 16Ω

Sensitivity: 109dB (1W, 1m) **Frequency Response:** 250 – 6,000Hz

IP Code: IP65

Polarity: Hot: Black, Com: White

Operating Temperature: -20°C to +55°C (-4°F to 131°F)
(must be free from dew condesation)

inish: Horn flare: Aluminum, off-white, powder coating

Reflector horn: ABS resin, off-white

Bracket holder: Aluminum, gray, powder coating Bracket: Steel, gray, powder coating

Screws and bolts: Stainless steel
Speaker cable: Polyvinyl chloride insulated

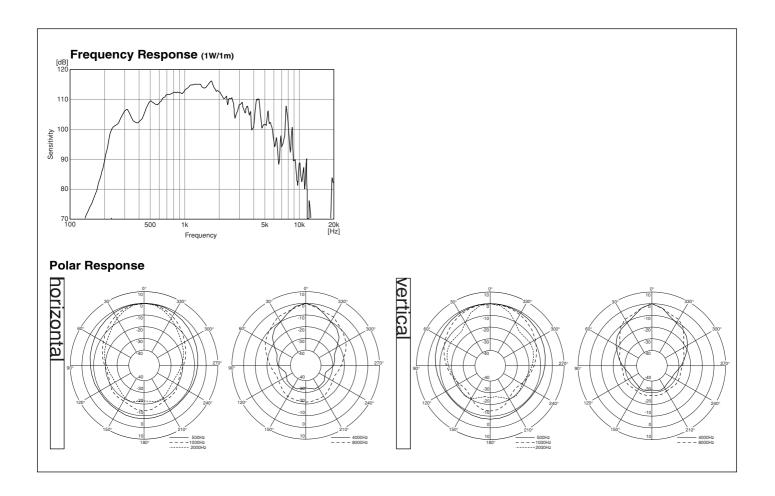
cabtyre cable (6 mm (0.24") in diameter, 600 mm (23.62") in length)

Dimensions: 430 (W) × 297.5 (H) × 327 (D) mm

 $(16.93" \times 11.71" \times 12.87")$

Weight: 3.4kg (7.50 lb)





ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

SC-651

The specified horn speaker shall be designed especially for outdoor applications. The paging horn speaker shall be a double re-entrant design suitable for paging and tone signaling distribution. The speaker component shall be a compression driver with a polyimide diaphragm to prevent deformation from heat and improve low frequency characteristics. Power handling shall be 50 W. Rated impedance shall be 16 ohms. The sensitivity measured at 1m with 1 W of power applied from 500 to 2,500 Hz shall be 109 dB. Frequency response shall be 250 to 6,000 Hz. Horizontal and vertical dispersion at -6 dB below the on-axis reference at 2k Hz shall be $55^{\circ}(H) \times 45^{\circ}(V)$. The paging horn shall comply with the IEC IP65 standard for dust and water resistance and operate within a temperature

range from -20°C to +55°C (-4°F to +131°F). The speaker shall feature shock-resistant aluminum oval horn. The mounting bracket, bracket holder and the horn flare shall be treated with 50-micron thick powder paint coating, and external hardware (screws, bolts, nuts) shall be made of stainless steel. The paging horn shall include an integral speaker cable, insulated polyvinyl chloride type, with strain-relief, 6 mm (0.24") diameter and 600 mm (23.62") length.

Dimensions shall be 430(W) \times 297.5(H) \times 327(D) mm (16.93" \times 11.71" \times 12.87").

Weight shall be 3.4 kg(7.50 lb)

The paging horn shall be TOA model SC-651.

