

# SC Series Horn Speaker









# SC-610/M, 615/M, 630/M

TOA's SC Series Horn Speakers provide intelligible voice paging especially for outdoor applications. The lineup includes six models rated at 10W (SC-610 and SC-610M), 15W (SC-615 and SC-615M) and 30W (SC-630 and SC-630M). The "M"-type models are designed for use in high-impedance (70V/100V lines) systems and standard models for low impedance  $(8\Omega)$  systems. This wide product lineup permits selection of the ideal speaker for most applications. SC Series speakers feature diaphragms employing special heat-resistant fibers impregnated with phenolic resin to prevent the diaphragm from absorbing moisture and changing shape. High speaker efficiency has also been realized by minimizing the gap produced when the diaphragm bobbin is installed in the magnetic circuitry slit. The aluminum foil bobbin also features excellent heat dissipation properties to resist high power inputs and ensure high speaker durability. All speakers feature TOA's unique oval shape, which enhances excellent speech clarity.

The mounting brackets and all external hardware (screws, bolts) are made of stainless steel. The horn itself is treated with 50-micron thick powder paint coating, which is about three times thicker than that of the conventional horns. 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**

- Very rugged speaker with durable construction ensures long term reliable operation
- High SPL
- Easy impedance selection through switch
- Shock-resistant aluminum oval horn
- IP65 standards compliant for dust and water-resistance
- Low impedance 8Ω or high impedance 100 V line



**Parking lots** 

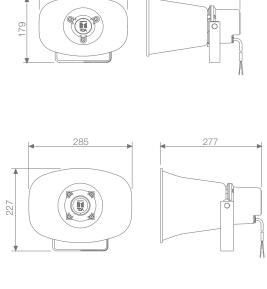


**Train Stations** 



**Theme Parks** 







### Specifications

	SC-610	SC-615	SC-630	
Rated Input	10W	15W	30W	
Rated Impedance	8Ω			
Sensitivity (1 W, 1 m)	110dB	112dB	113dB	
Frequency Response	315Hz – 12.5kHz	280 Hz - 12.5 kHz	250 Hz - 10 kHz	
Finish	Horn flare: Aluminum, off-white, powder coating / Reflector horn and rear cover: ABS resin, off-white/			
	Bracket, screws and bolts: Stainless steel			
Dimensions (W x H x D)	172 x 161 x 188 mm	222 x 179 x 234 mm	285 x 227 x 277 mm	
Weight	1 kg	1.1 kg	1.7g	

### Specifications

	SC-610M	SC-615M	SC-630M
Rated Input	10W	15W	30 W
Tappings	10 / 5 / 3 / 1 W (70 V) 10 / 5 / 2.5 / 1.5 / 0.5 W (100 V)	15 / 10 / 5 / 3W (70V) 15 / 7.5 / 5 / 2.5 / 1.5W (100V)	30 / 15 / 10 / 5W (70 V) 30 / 15 / 7.5 / 5 / 2.5W (100 V)
Sensitivity (1W, 1m)	110 dB	112dB	113dB
Frequency Response	315 Hz - 12.5 kHz	280 Hz - 12.5 kHz	250 Hz - 10 kHz
Finish	Horn flare: Aluminum, off-white, powder coating / Reflector horn and rear cover: ABS resin, off-white/ Bracket, screws and bolts: Stainless steel		
Dimensions (W x H x D)	172 x 161 x 188 mm	222 x 179 x 234 mm	285 x 227 x 277 mm
Weight	1.2kg	1.3kg	2kg

TOA's SC-651 Paging Horn Speaker, rated at 50W, is designed for the use in low impedance  $(16\Omega)$  systems. It provides intelligible voice paging and tone signaling especially for outdoor sound system applications. The SC-651 speaker features newly developed diaphragms employing special heatresistant 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**

- High SPL
- Paging horn speaker for voice paging and tone signaling distribution
- Polyimide diaphragm ensures better high range performance during 50W output.
- Weather-Resistant to withstand demanding environmental conditions (IP65 rated)
- Shock-resistant aluminum oval horn
- Wide temperature range: -20°C to 55°C
- Steel mounting brackets for easy installation and aiming in wall, pole or ceiling-mount applications
- Low impedance 16Ω



Warehouse

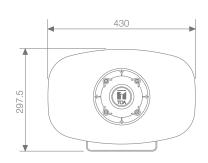


**Factories** 



**Parking lots** 









SC-651

#### Specifications

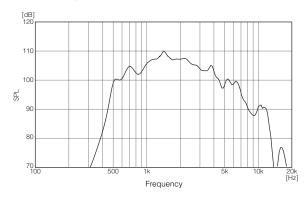
	SC-651
Rated Input	50 W
Rated Impedance	16Ω
Sensitivity (1W, 1m)	109 dB
Frequency Response	250 Hz - 6 kHz
Finish	Colour: ivory, dark brown painted steel bracket / Aluminium and
1 11 11511	ABS resin construction with special powder coating
Dimensions (W x H x D)	430 x 297.5 x 327 mm
Weight	3.4 kg

# **Characteristics Diagrams**

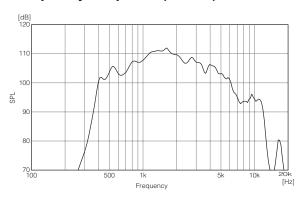
# •SC-610/M

# •SC-615/M

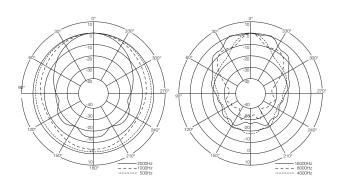
### Frequency Response (1W/1m)



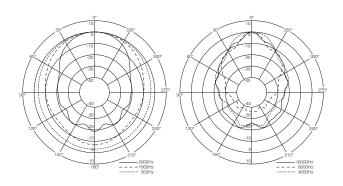
### Frequency Response (1W/1m)



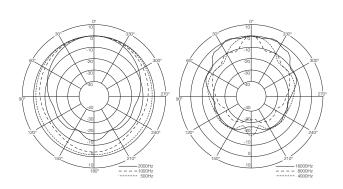
#### Polar Response - Horizontal -



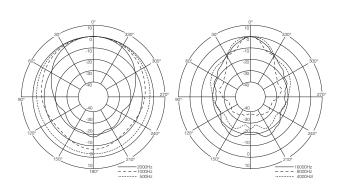
Polar Response - Horizontal -



#### Polar Response - Vertical -

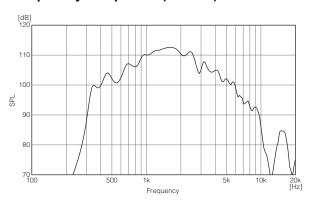


#### Polar Response - Vertical -

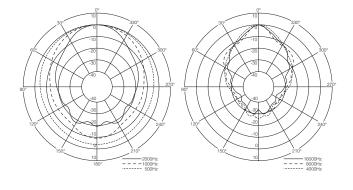


# •SC-630/M

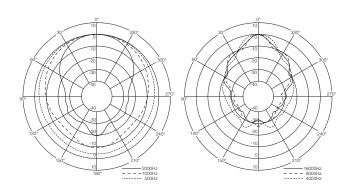
## Frequency Response (1W/1m)



#### Polar Response - Horizontal -

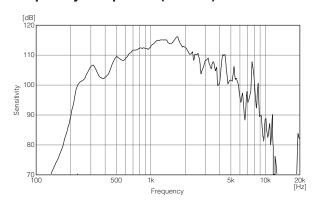


#### Polar Response - Vertical -

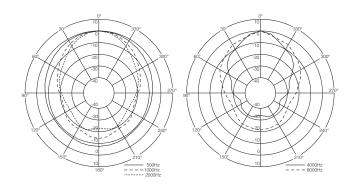


# •SC-651

## Frequency Response (1W/1m)



#### Polar Response - Horizontal -



### Polar Response - Vertical -

