

# PAGING HORN SPEAKERS

SC-610/SC-610M



SC-615/SC-615M



SC-630/SC-630M



## DESCRIPTION

TOA's SC Series Paging Horn Speakers are designed for both indoor and 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 (8Ω) systems. This wide product lineup permits selection of the ideal speaker for most applications. SC Series speakers feature newly developed 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.

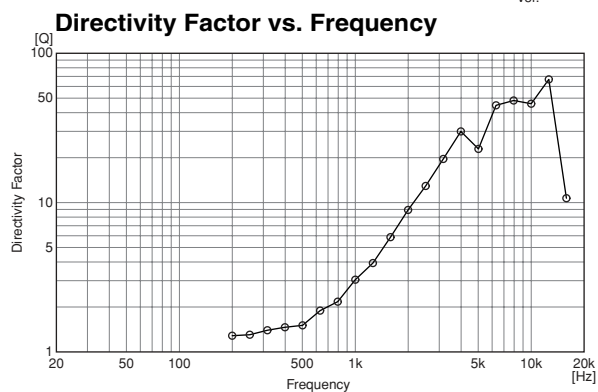
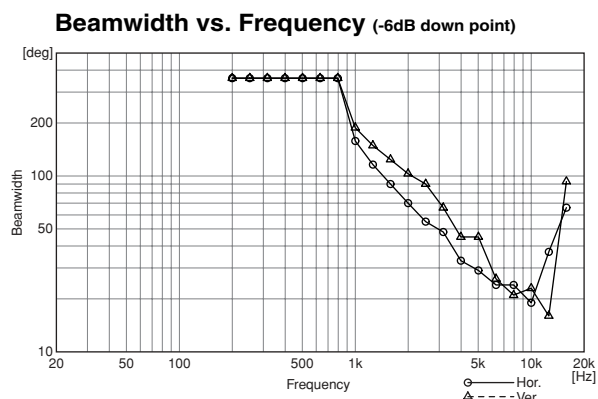
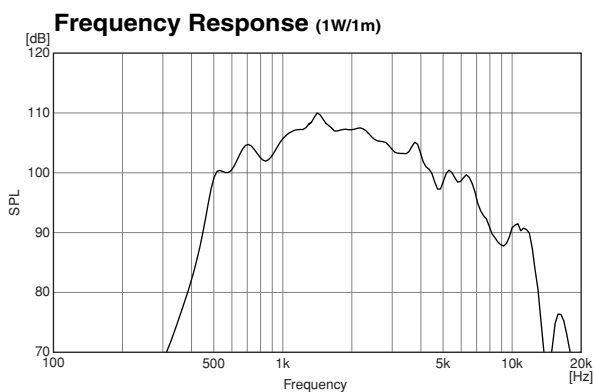
The mounting brackets and all external hardware (screws, bolts) are made of stainless steel. The horn itself is treated with 50-micron thick powder paint coating, which is about three times thicker than that of the conventional horns. All of these factors combine to ensure the speaker's excellent weatherproofing and corrosion resistance. In addition, the external horn flare is made of aluminum which is more shock-resistant than resin. High-impedance models are equipped with an input impedance selector switch (4 steps for 100V line, and 5 steps for 70V line) which facilitates impedance settings without requiring disassembly. The switch is also equipped with an OFF position to prevent speaker damage resulting from incorrect impedance setting.

## FEATURES

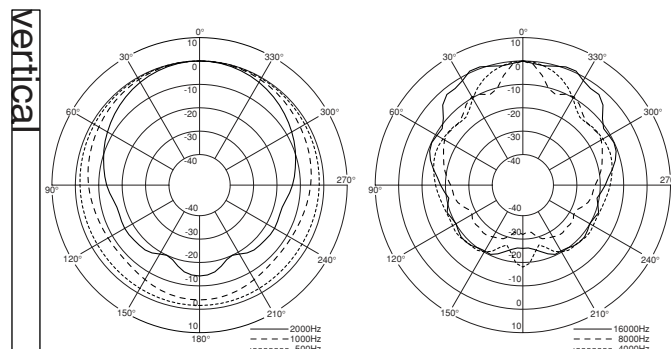
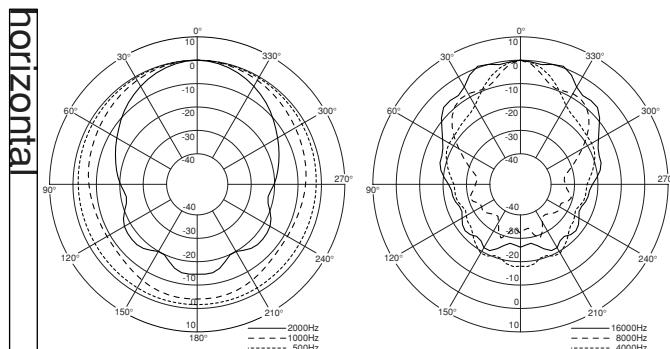
- Both high-impedance (70V/100V lines) models and low-impedance (8Ω) models available.
- Three power ratings: 10W, 15W and 30W.
- Stainless steel brackets and hardware (screws, bolts), and powder-coated horn ensure superb weatherproofing and corrosion-resistance.
- Shock-resistant aluminum oval horn.
- Panel-mounted input impedance selector on high-impedance models facilitates input impedance matching.
- Unobtrusive off-white color (corresponding to RAL 9010) helps speakers blend in with surroundings.
- Compliance with IP65.

# SC-610/SC-610M

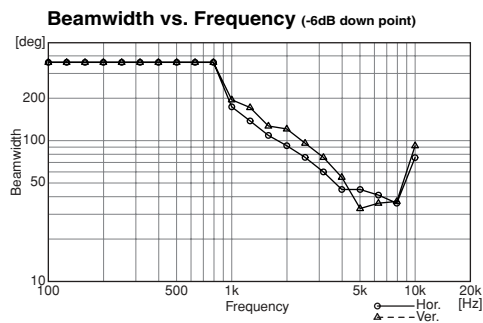
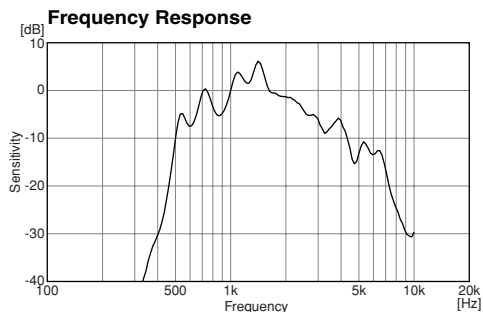
## CHARACTERISTIC DIAGRAMS



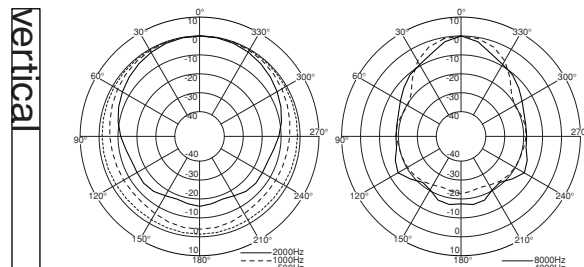
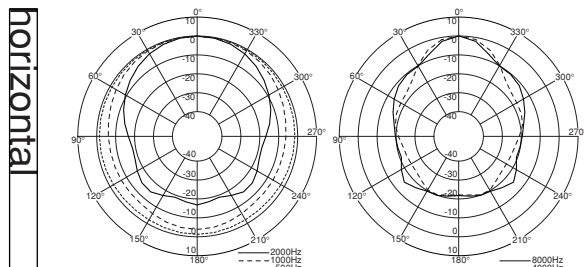
### Polar Response



## CHARACTERISTIC DIAGRAMS FOR USE AS MICROPHONE

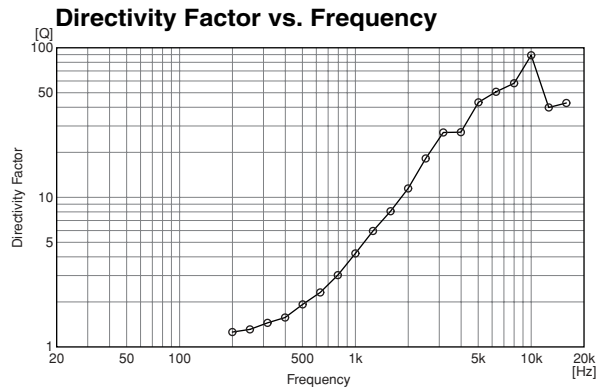
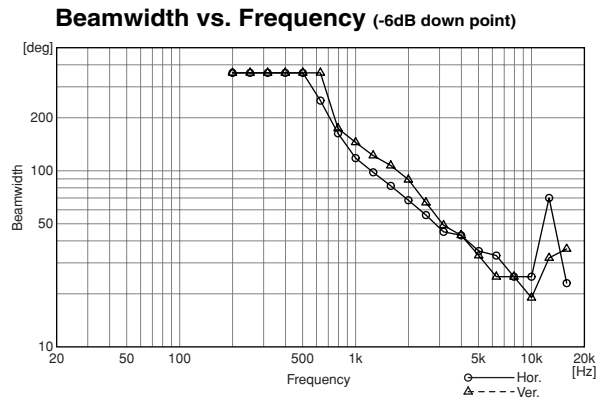
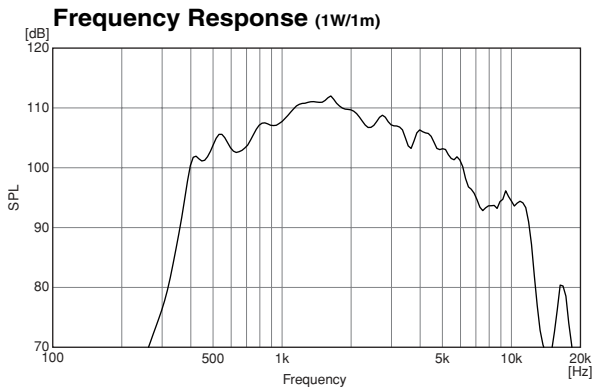


### Polar Response



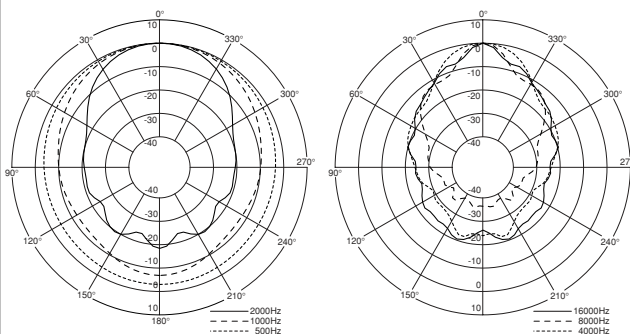
# SC-615/SC-615M

## CHARACTERISTIC DIAGRAMS

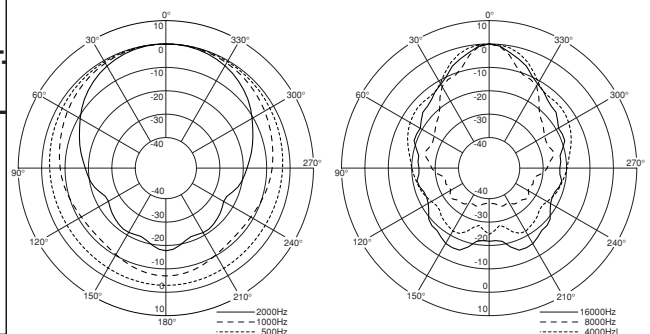


### Polar Response

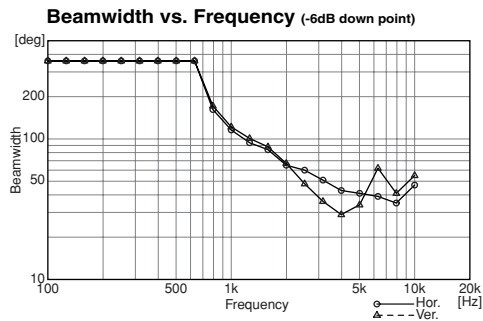
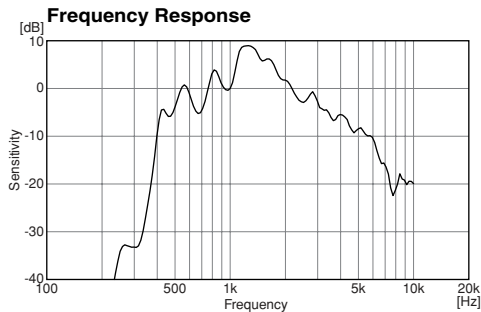
horizontal



vertical

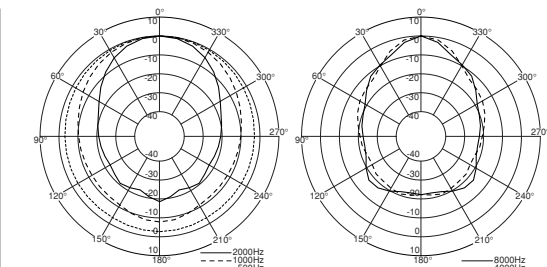


## CHARACTERISTIC DIAGRAMS FOR USE AS MICROPHONE

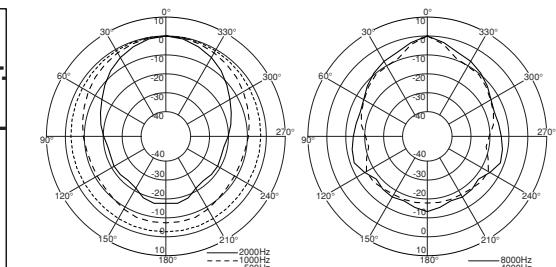


### Polar Response

horizontal



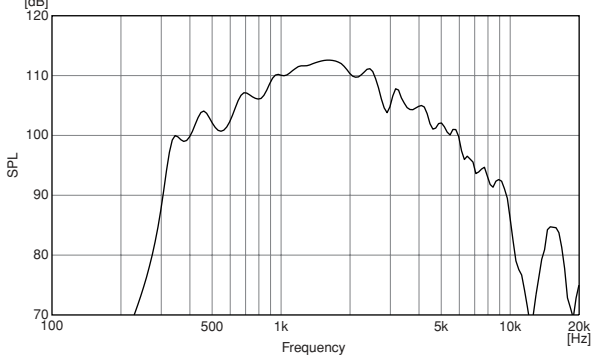
vertical



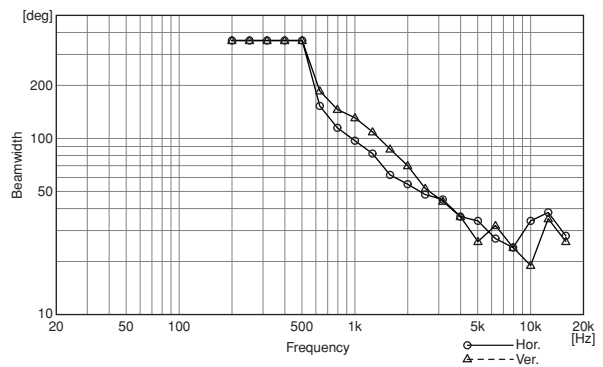
# SC-630/SC-630M

## CHARACTERISTIC DIAGRAMS

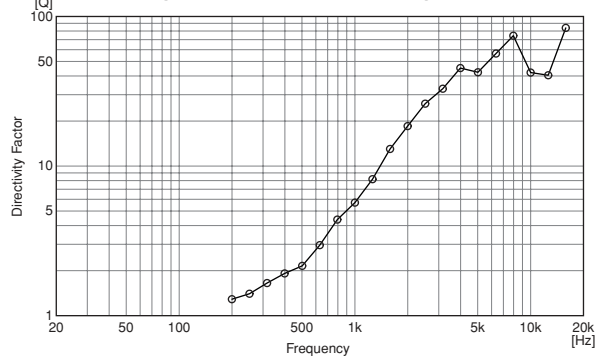
### Frequency Response (1W/1m)



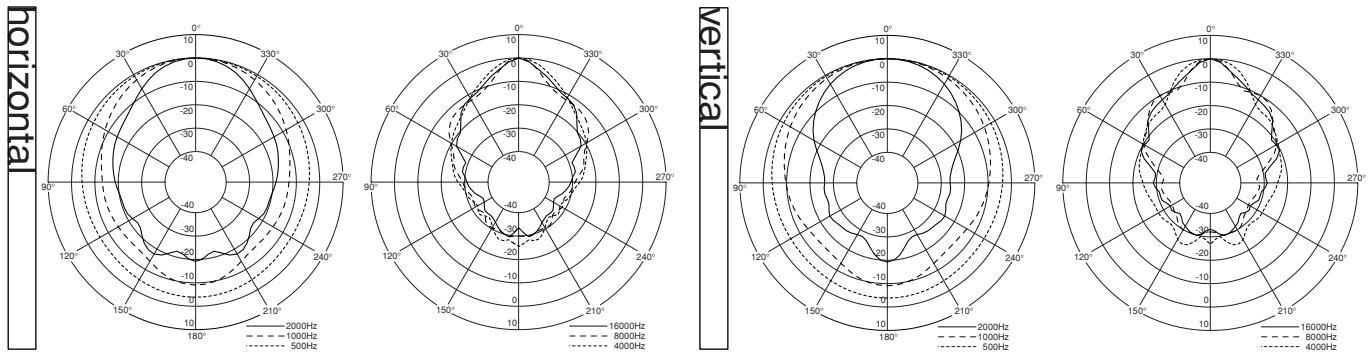
### Beamwidth vs. Frequency (-6dB down point)



### Directivity Factor vs. Frequency

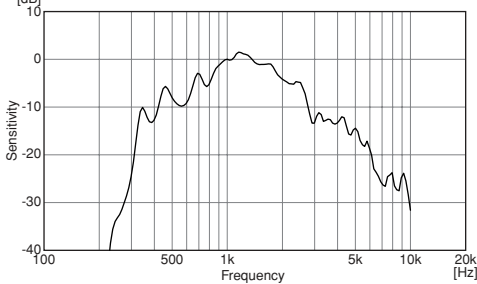


### Polar Response

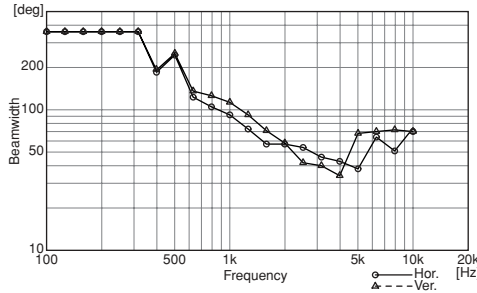


## CHARACTERISTIC DIAGRAMS FOR USE AS MICROPHONE

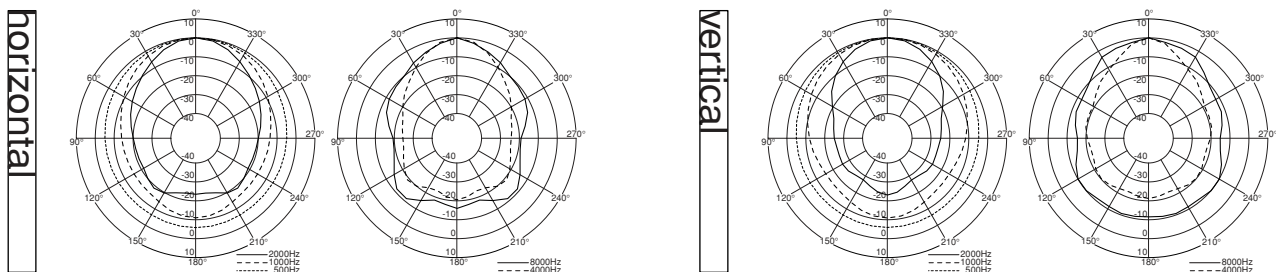
### Frequency Response



### Beamwidth vs. Frequency (-6dB down point)



### Polar Response



## SPECIFICATIONS

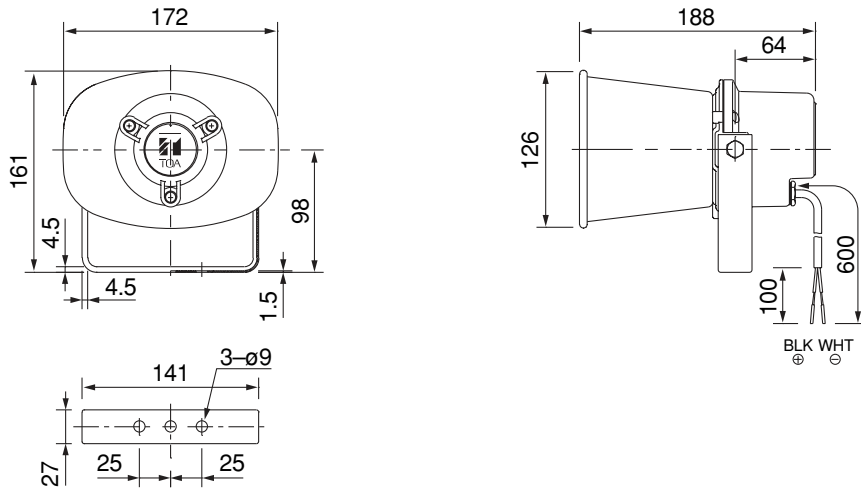
	SC-610	SC-610M
<b>Rated Input</b>	10 W (Mobile Mount use: 5W)	10 W
<b>Line Voltage</b>	—	100 V line or 70 V line
<b>Rated Impedance</b>	8 Ω	100 V line: 1 kΩ (10 W), 2 kΩ (5 W), 3.3 kΩ (3 W), 10 kΩ (1 W), 70 V line: 500 Ω (10 W), 1 kΩ (5 W), 2 kΩ (2.5 W), 3.3 kΩ (1.5 W), 10 kΩ (0.5 W)
<b>Sound Pressure Level</b>	110 dB (1 W, 1 m at 500 to 2,500 Hz peak level)	
<b>Frequency Response</b>	315 – 12,500 Hz	
<b>Sensitivity when used as Microphone</b> (0 dB = 1 mW/10 dynes/cm <sup>2</sup> )	-24 dB at 1 kHz	
<b>IP Code</b>	IP 65	
<b>Polarity</b>	Hot: Black, Com: White	
<b>Operating Temperature</b>	-20°C to +55°C (must be free from dew condensation)	
<b>Finish</b>	Horn flare: Aluminum, off-white, powder coating Reflector horn and rear cover: ABS resin, off-white Bracket, Screws and bolts: Stainless steel Speaker cable: Polyvinyl chloride insulated cabtyre cable (6 mm in diameter, 600 mm in length)	
<b>Dimensions</b>	172 (W) x 161 (H) x 188 (D) mm	
<b>Weight</b>	1 kg	1.2 kg
<b>Option</b>	Swivel bracket: YS-151S (Can be used instead of the supplied bracket.)	

	SC-615	SC-615M
<b>Rated Input</b>	15 W (Mobile Mount use: 10W)	15 W
<b>Line Voltage</b>	—	100 V line or 70 V line
<b>Rated Impedance</b>	8 Ω	100 V line: 670 Ω (15 W), 1 kΩ (10 W), 2 kΩ (5 W), 3.3 kΩ (3 W), 70 V line: 330 Ω (15 W), 670 Ω (7.5 W), 1 kΩ (5 W), 2 kΩ (2.5 W), 3.3 kΩ (1.5 W)
<b>Sound Pressure Level</b>	112 dB (1 W, 1 m at 500 to 2,500 Hz peak level)	
<b>Frequency Response</b>	280 – 12,500 Hz	
<b>Sensitivity when used as Microphone</b> (0 dB = 1 mW/10 dynes/cm <sup>2</sup> )	-22 dB at 1 kHz	
<b>IP Code</b>	IP 65	
<b>Polarity</b>	Hot: Black, Com: White	
<b>Operating Temperature</b>	-20°C to +55°C (must be free from dew condensation)	
<b>Finish</b>	Horn flare: Aluminum, off-white, powder coating Reflector horn and rear cover: ABS resin, off-white Bracket, Screws and bolts: Stainless steel Speaker cable: Polyvinyl chloride insulated cabtyre cable (6 mm in diameter, 600 mm in length)	
<b>Dimensions</b>	222 (W) x 179 (H) x 234 (D) mm	
<b>Weight</b>	1.1 kg	1.3 kg
<b>Option</b>	Swivel bracket: YS-151S (Can be used instead of the supplied bracket.)	

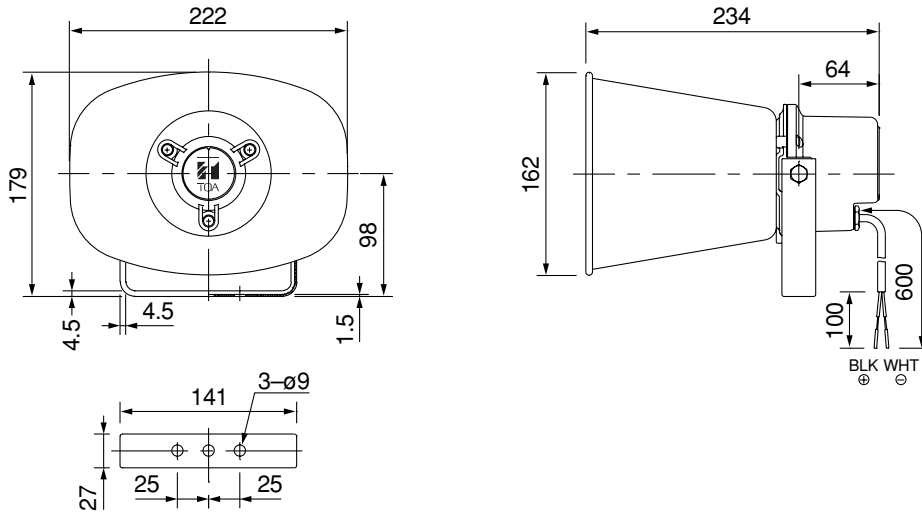
	SC-630	SC-630M
<b>Rated Input</b>	30 W (Mobile Mount use: 15W)	30 W
<b>Line Voltage</b>	—	100 V line or 70 V line
<b>Rated Impedance</b>	8 Ω	100 V line: 330 Ω (30 W), 670 Ω (15 W), 1 kΩ (10 W), 2 kΩ (5 W), 70 V line: 170 Ω (30 W), 330 Ω (15 W), 670 Ω (7.5 W), 1 kΩ (5 W), 2 kΩ (2.5 W)
<b>Sound Pressure Level</b>	113 dB (1 W, 1 m at 500 to 2,500 Hz peak level)	
<b>Frequency Response</b>	250 – 10,000 Hz	
<b>Sensitivity when used as Microphone</b> (0 dB = 1 mW/10 dynes/cm <sup>2</sup> )	-20 dB at 1 kHz	
<b>IP Code</b>	IP 65	
<b>Polarity</b>	Hot: Black, Com: White	
<b>Operating Temperature</b>	-20°C to +55°C (must be free from dew condensation)	
<b>Finish</b>	Horn flare: Aluminum, off-white, powder coating Reflector horn and rear cover: ABS resin, off-white Bracket, Screws and bolts: Stainless steel Speaker cable: Polyvinyl chloride insulated cabtyre cable (6 mm in diameter, 600 mm in length)	
<b>Dimensions</b>	285 (W) x 227 (H) x 277 (D) mm	
<b>Weight</b>	1.7 kg	2 kg
<b>Option</b>	Swivel bracket: YS-151S (Can be used instead of the supplied bracket.)	

# APPEARANCE AND DIMENSIONAL DIAGRAMS

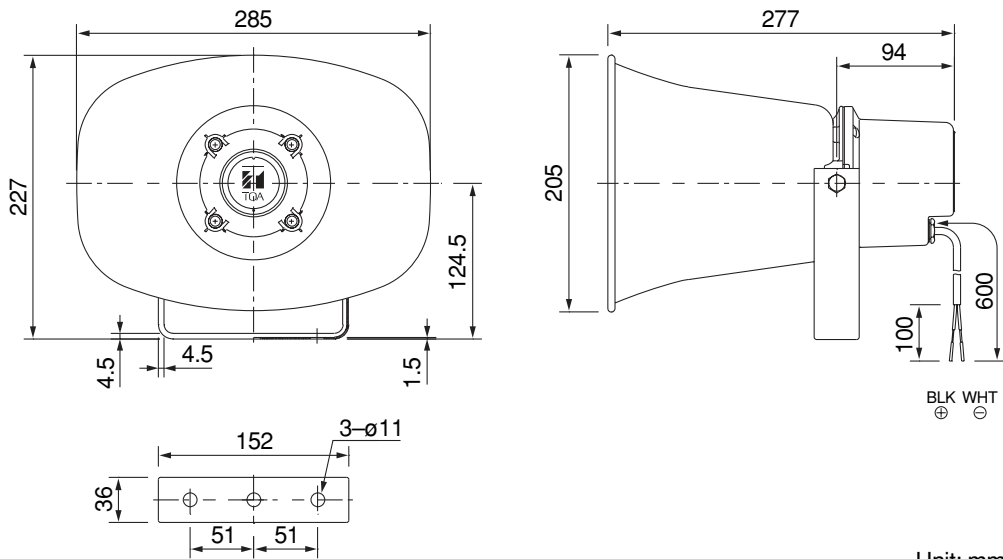
## SC-610/SC-610M



## SC-615/SC-615M



## SC-630/SC-630M



Unit: mm