

# REFLEX HORN SPEAKERS

## TC-615/TC-615M



## TC-630/TC-630M



### DESCRIPTION

TOA's TC Series Reflex Horn Speakers are designed for both indoor and outdoor paging applications, as well as for background music reproduction. The lineup includes four models rated at 15W (TC-615 and TC-615M) and 30W (TC-630 and TC-630M). The "M"-type models are designed for use in high-impedance (70V/100V lines) systems and standard models for low-impedance (TC-615/8 $\Omega$ , TC-630/16 $\Omega$ ) systems. This wide product lineup permits selection of the ideal speaker for most applications.

TC 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 are designed to ensure high speech clarity and sound quality suitable for music reproduction.

All external hardware (screws, bolts, nuts) are made of stainless steel, and the mounting bracket and the horn itself are 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 that 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 the ease of impedance settings without requiring disassembly. The switch is also equipped with an OFF position to prevent speaker damage resulting from incorrect impedance setting.

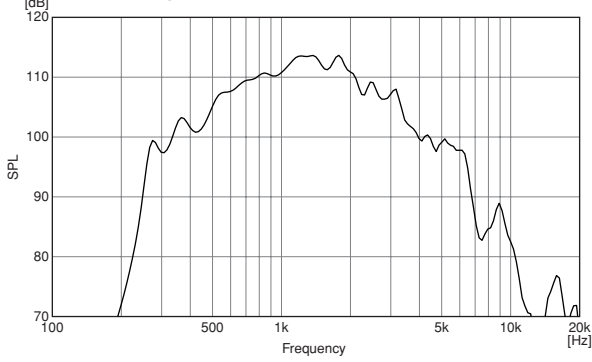
### FEATURES

- Both high-impedance (70V/100V lines) models and low-impedance (8 $\Omega$ /15W model, 16 $\Omega$ /30W model) models available.
- Two power ratings: 15W and 30W.
- Stainless steel hardware (screws, bolts, nuts), and powder-coated horn and bracket ensure superb weatherproofing and corrosion-resistance.
- Shock-resistant aluminum round horn.
- Panel-mounted input impedance selector on high-impedance models facilitates the ease of input impedance matching.
- Unobtrusive two-tone colors (off-white horn corresponding to RAL 9010 and gray driver unit corresponding to RAL7042) helps speakers blend into surroundings.
- Compliance with IP65.

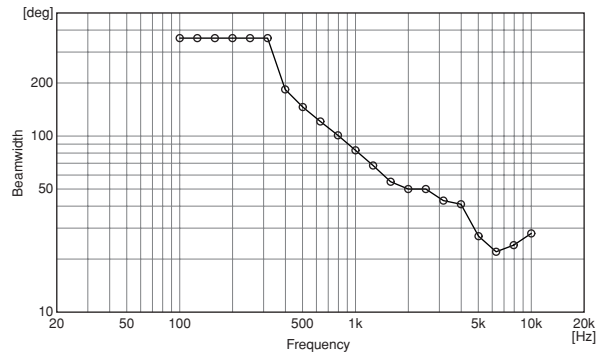
# TC-615/TC-615M

## CHARACTERISTIC DIAGRAMS

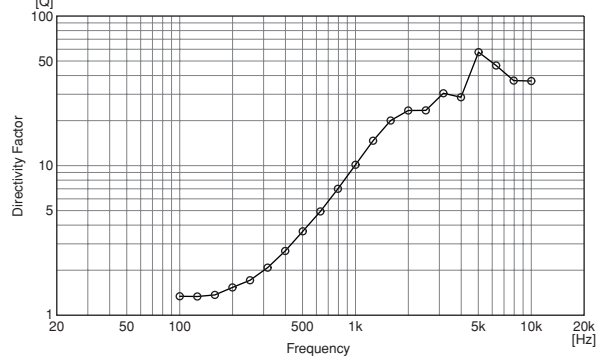
### Frequency Response (1W/1m)



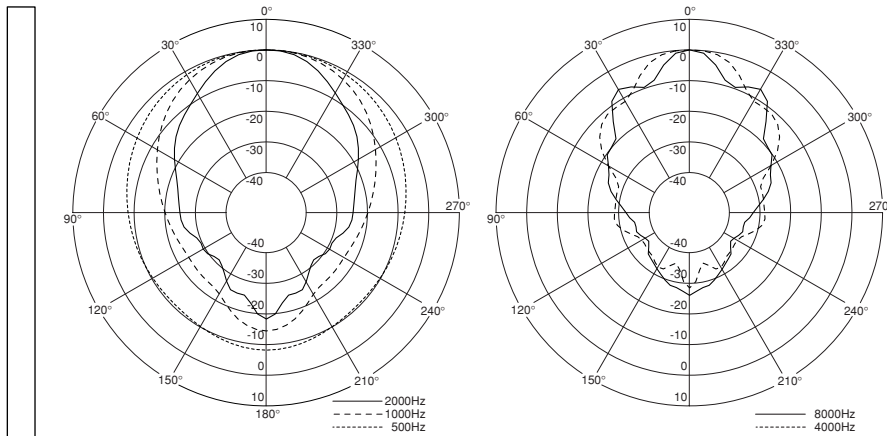
### Beamwidth vs. Frequency (-6dB down point)



### Directivity Factor vs. Frequency

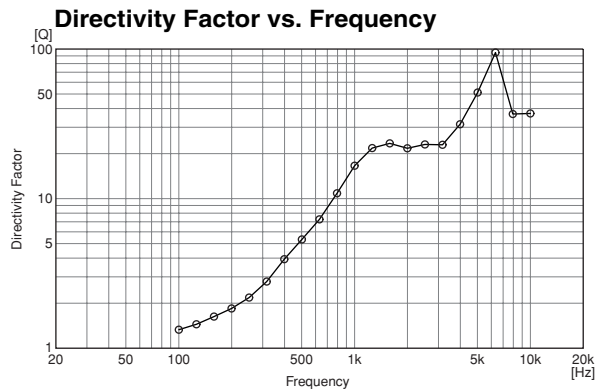
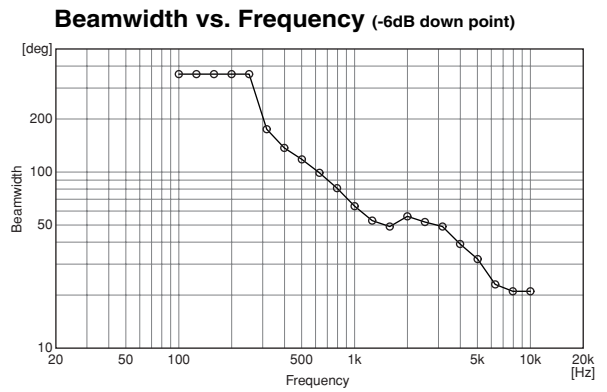
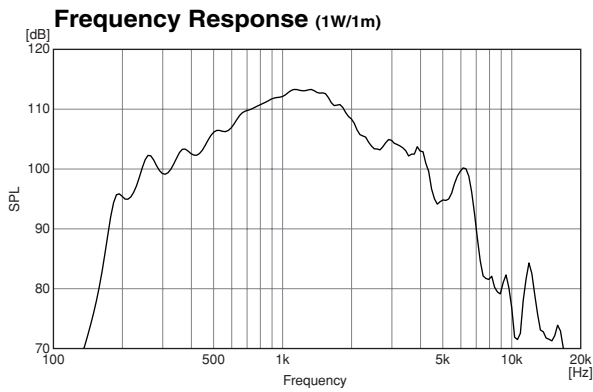


### Polar Response

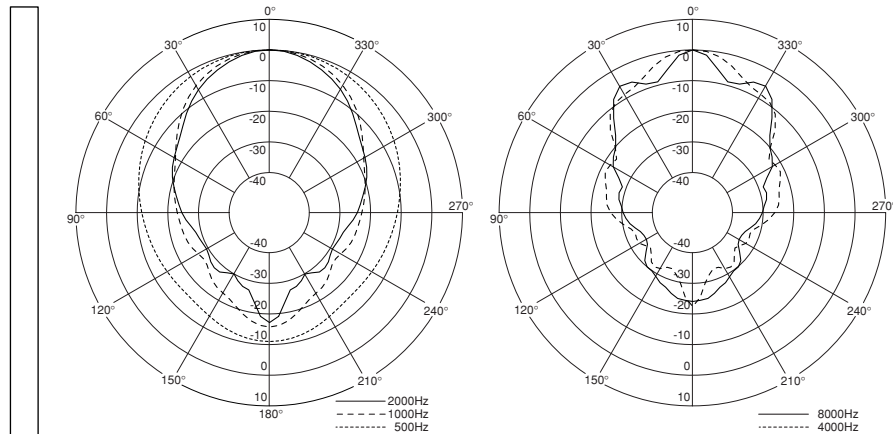


# TC-630/TC-630M

## CHARACTERISTIC DIAGRAMS



### Polar Response



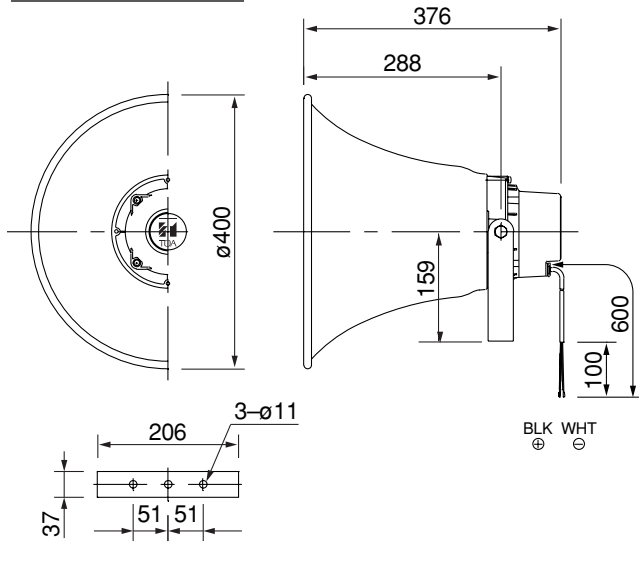
## SPECIFICATIONS

	TC-615	TC-615M
Rated Input	15 W	15 W
Line Voltage	—	100 V line or 70 V line
Rated Impedance	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)
Sound Pressure Level	108 dB (1 W, 1m)	
Frequency Response	250 – 7,000 Hz	
IP Code	IP 65	
Polarity	Hot: Black, Com: White	
Operating Temperature	-20°C to +55°C (must be free from dew condensation)	
Finish	Horn flare: Aluminum, off-white, powder coating Reflector horn: ABS resin, off-white Bracket holder: Aluminum, gray, powder coating Bracket: Steel, gray, powder coating Rear cover: ABS resin, gray Screw and bolts: Stainless steel Speaker Cable: Polyvinyl chloride insulated cabtyre cable (6 mm in diameter, 600 mm in length)	
Dimensions	ø400 (W) x 376 (D) mm	
Weight	3 kg	3.2 kg

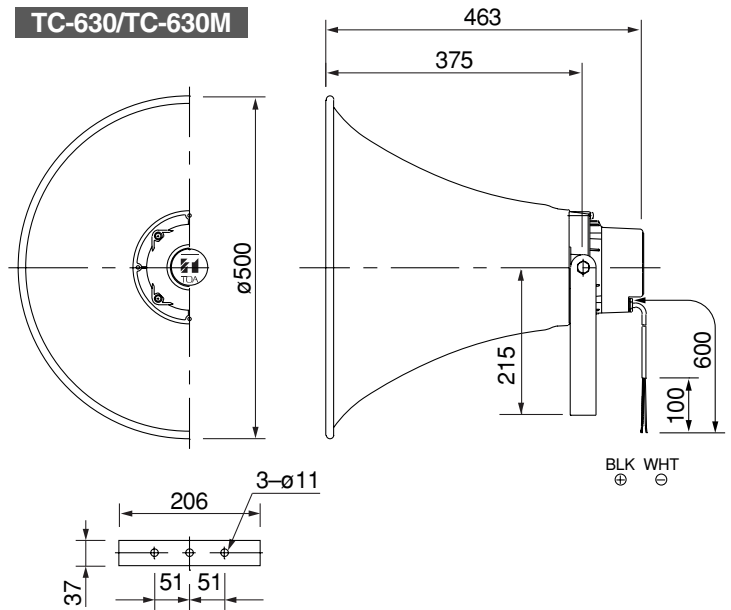
	TC-630	TC-630M
Rated Input	30 W	30 W
Line Voltage	—	100 V line or 70 V line
Rated Impedance	16 Ω	100 V line: 330 Ω (30 W), 670 Ω (15 W), 1 kΩ (10 W), 2 kΩ (5 W) 70 V line: 170 Ω (30 W), 330 Ω (15 W), 670 Ω (7.5 W), 1 kΩ (5 W), 2 kΩ (2.5 W)
Sound Pressure Level	110 dB (1 W, 1m)	
Frequency Response	200 – 6,000 Hz	
IP Code	IP 65	
Polarity	Hot: Black, Com: White	
Operating Temperature	-20°C to +55°C (must be free from dew condensation)	
Finish	Horn flare: Aluminum, off-white, powder coating Reflector horn: ABS resin, off-white Bracket holder: Aluminum, gray, powder coating Bracket: Steel, gray, powder coating Rear cover: ABS resin, gray Screw and bolts: Stainless steel Speaker Cable: Polyvinyl chloride insulated cabtyre cable (6 mm in diameter, 600 mm in length)	
Dimensions	ø500 (W) x 463 (D) mm	
Weight	4.1 kg	4.5 kg

## APPEARANCE AND DIMENSIONAL DIAGRAMS

TC-615/TC-615M



TC-630/TC-630M



Unit: mm

TOA Corporation

URL : <http://www.toa.co.jp/>

Specifications are subject to change without notice.  
Printed in Japan (007) 833-62-224-970 U

