

# WIDE RANGE SPEAKER

# CS-304U

Thank you for purchasing TOA's Wide Range Speaker.  
Please carefully follow the instructions in this manual in order to ensure long, trouble-free use of your equipment.

## 1. SAFETY PRECAUTIONS

- Before installation or use, be sure to carefully read all the instructions in this section for correct and safe operation.
- Be sure to follow all the precautionary instructions in this section, which contain important warnings and/or cautions regarding safety.
- After reading, keep this manual handy for future reference.



### WARNING

Indicates a potentially hazardous situation which, if mishandled, could result in death or serious personal injury.

- Install the speaker only in a location that can structurally support the weight of the speaker and the mounting bracket. Doing otherwise may result in the speaker falling down and causing personal injury and/or property damage.
- Do not stand or sit on, nor hang down from the speaker as this may cause it to drop, resulting in personal injury and/or property damage.



### CAUTION

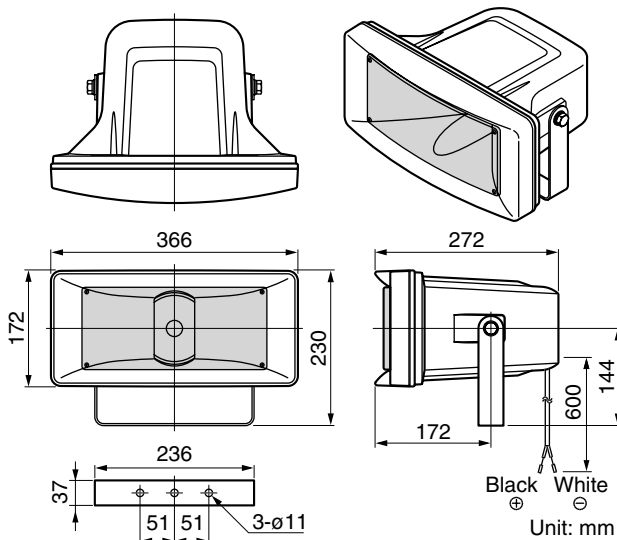
Indicates a potentially hazardous situation which, if mishandled, could result in moderate or minor personal injury, and/or property damage.

- Do not operate the speaker for an extended period of time with the sound distorting. This is an indication of a malfunction, which in turn can cause heat to generate and result in a fire.

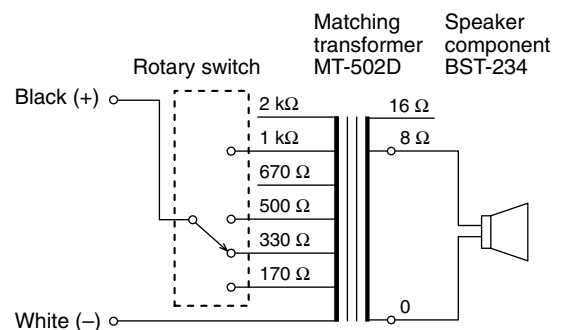
## 2. GENERAL DESCRIPTION AND FEATURES

TOA's CS-304U outdoor speaker features a resin enclosure and stainless steel hardware for all-weather durability. It is designed to offer the weather resistance and high efficiency of horn speakers combined with the high sound quality of cone speakers. The CS-304U also employs a constant directivity horn for clear sound output over the limited horizontal range of dispersion.

## 3. APPEARANCE AND DIMENSIONS



## 4. WIRING DIAGRAM



### Note

The rotary switch is factory-preset to 330 Ω.

## 5. IMPEDANCE CHANGE

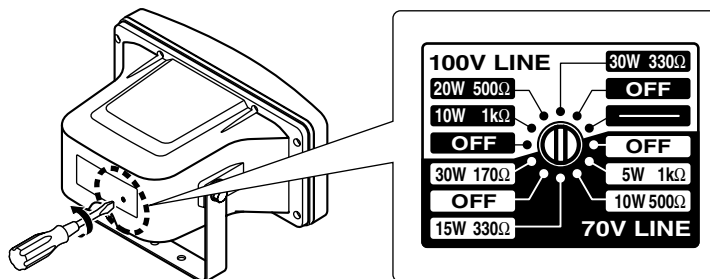
Input impedance is factory-preset to 330 Ω. To change the impedance, change the rear panel-mounted rotary switch position to the desired impedance (wattage) using a standard screwdriver.

### Notes

- This speaker is designed to operate on a 70 V or 100 V line. Do not connect it to the amplifier's low impedance line.
- No sound is output when the switch is set to the OFF position.

### Caution

Never set the switch to "—" position for 100 V line operation, as doing so may result in damage to the speaker.



Line Voltage		Imp.
70 V	100 V	Imp.
30 W	—	170 Ω
<b>15 W</b>	<b>30 W</b>	<b>330 Ω</b>
10 W	20 W	500 Ω
5 W	10 W	1 kΩ

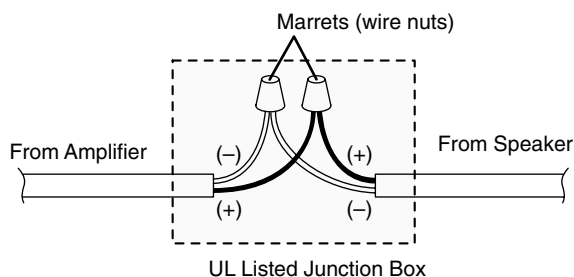
← Factory-preset values

## 6. CONNECTION

Make the connections using marrets (wire nuts) inside a UL Listed junction box.

### Note

This product shall be installed in accordance with the National Electrical Code, ANSI/NFPA 70.

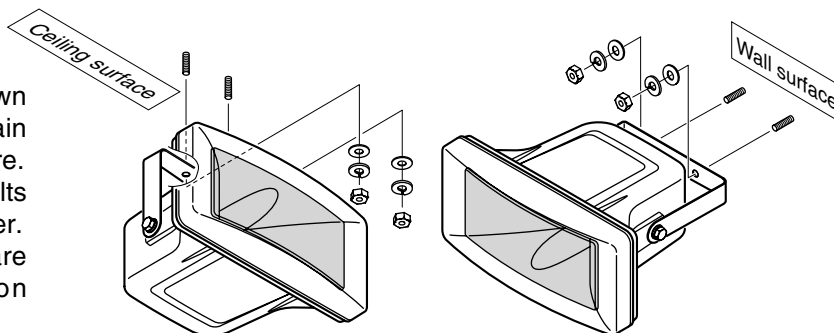


## 7. INSTALLATION

[Mounting under the eaves  
or on the ceiling]

[Mounting on the wall]

- Be sure to direct the speaker down towards the ground. Otherwise, rain floods the speaker, causing its failure.
- No mounting hardware such as bolts and nuts is supplied with the speaker. Use commercial mounting hardware appropriate for the installation environment.
- Please install only with either flexible conduit or flexible wiring.



## 8. SPECIFICATIONS

Speaker Component	12 cm cone speaker	
Rated Input	30 W	
Impedance	(170 Ω)*, 330 Ω, 500 Ω, 1 kΩ	
Frequency Response	120 – 15,000 Hz	
Sensitivity	98 dB (1 W, 1 m)	
Finish	Body	ABS resin, off-white, paint
	Bracket	Stainless steel
	Net	Aluminum, gray, paint
Dimensions	366 (w) x 230 (h) x 272 (d) mm	
Weight	3.1 kg	

\* Impedance for 70 V line

### Note

The design and specifications are subject to change without notice for improvement.