

## 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 instruction 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.

 **CAUTION**

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

 **WARNING**

- To avoid accidental air explosions, do not use the unit around gasoline, thinner or other combustibles.
- Install the unit only in location that can structurally support the weight of the unit and the mounting bracket. Doing otherwise may result in the unit falling down and causing personal injury and/or property damage.
- Protect the unit from exposure in snowy areas, as the weight of snow build-up could cause the speaker to fall, resulting in personal injuries.
- Do not use other method than specified to mount the bracket. Extreme force is applied to the unit could fall off, possibly resulting in personal injury.
- Attach the safety wire to the unit when mounting in locations high above the ground. Failure to do so could result personal injury if the speaker should later fall for any reason.
- Use nuts and bolts those are appropriate for the ceilings or wall's structure and composition. Failure to do so may cause the speaker to fall, resulting in material damage and possible personal injury.
- Tighten each nut and bolt securely. Ensure that the bracket has no loose joints after installation to prevent accidents that could result in personal injury.
- Avoid mounting the unit in locations exposed to constant vibration. The mounting bracket can be damaged by excessive vibration, potentially causing the speaker to fall, which could result in personal injury.

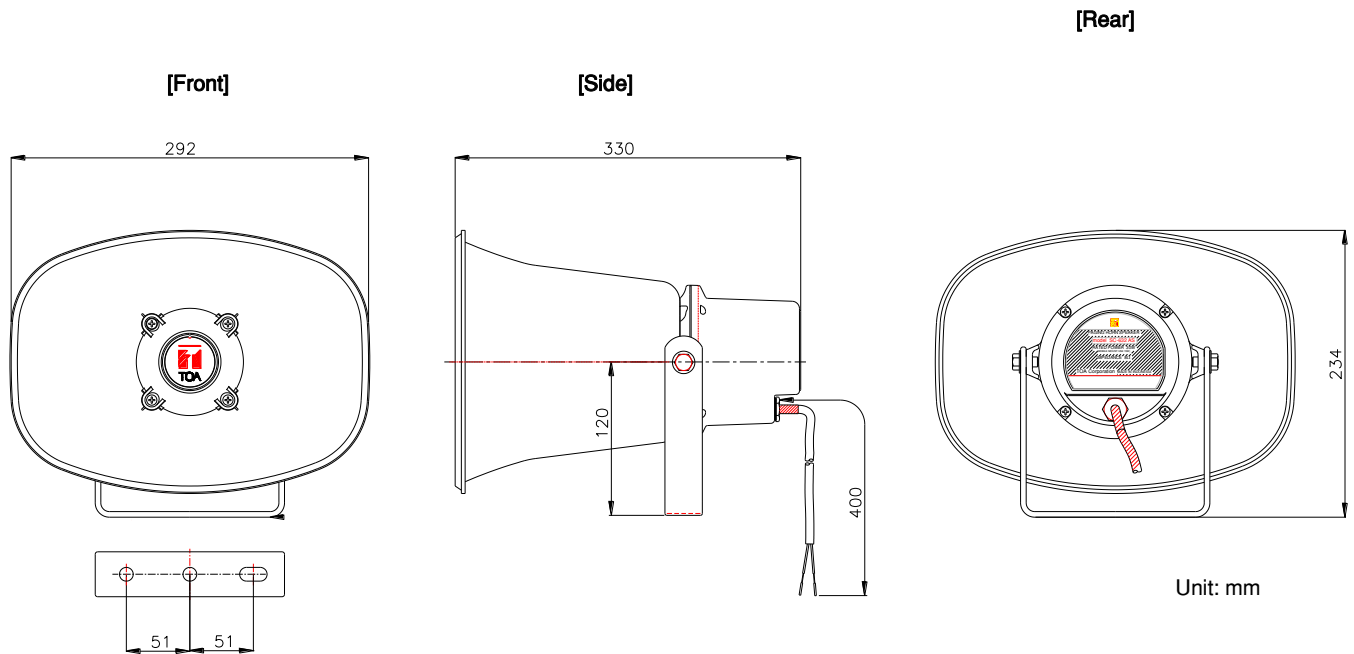
 **CAUTION**

- To avoid electric shocks, be sure to switch off the amplifier power when connecting the speaker.
- Avoid installing the unit in humid or dusty locations, or in locations exposed to heaters, solvents, acid, alkali, smoke, steam or direct sunlight (except outdoor-use versions), as excessive exposure to these factor could result in speaker failure, fire or electric shock.
- Do not operate the unit 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.
- Do not stand or sit on, nor hang down from the unit as this may cause it to fall down or drop, resulting in personal injury and/or property damage.
- Have the unit periodically checked by the shop from where it was purchased. Also, when mounting the unit on a vehicle, be sure to check both the speaker and its mounts before moving. Failure to do so could result in the speaker falling off due to damage or corrosion to the speaker or its mounts, and possible personal injury.

## 2. GENERAL DESCRIPTIONS

TOA's SC-632 AS is horn speaker system designed for high efficiency, high power input and weatherproof capability.

### 3. DIMENSIONS

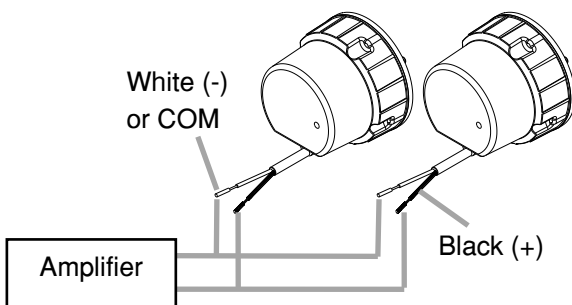


### 4. HOW TO USE

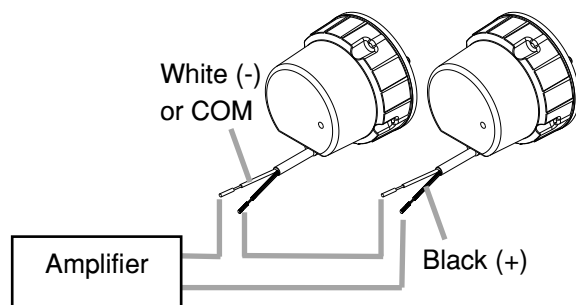
#### 4.1. Handling Precautions

- Be sure to note the following polarities when multiple speakers are use in the same location. Incorrect connections could result in no bass output or decreased volume.  
 Black speaker cable: Positive (+), White speaker cable: Negative (-) or COM  
 Connect the cables to other cables of the same colors in parallel connections, and to cables of different colors in series connections.

##### Parallel connections



##### Series connections



- To avoid amplifier failure, do not simultaneously connect both low- and high- impedance speakers to the amplifier. Ensure that only one type is connected.

**Notes:** (1) "Low-impedance" refers to speakers having no built-in matching transformer.  
 (2) "High-impedance" refers to speakers having a built-in matching transformer.

#### 4.2. Connections

When using two or more speakers, all connected speakers must have identical impedance and input ratings.

- The total speaker impedance must be equal to the amplifier output impedance. If the total speaker impedance is less than the amplifier's output impedance, the speakers or amplifier could fail.
- When parallel-connecting all speakers, the total rated input of all speakers must be greater than the amplifier output.

**Note:** It is highly recommended that solid wire speaker cable with diameter of over 2 mm or strand wire of over 3.5 mm<sup>2</sup> be used to minimize transmission loss. When there are long distances between amplifier and speaker (30 – 50), connect an optional matching transformer to convert the speakers to high-impedance operation.

## 5. SPECIFICATION

<b>Model No.</b>	<b>SC-632 AS</b>
Rated Input	30W
Rated Impedance	8 $\Omega$
Output Sound Pressure Level	113dB (1W, 1m at 500 to 2500 Hz peak level)
Frequency Response	250 – 10,000Hz (-40dB of SPL)
IP Code	IP-65
Polarity	Hot : Black, Com : White
Operating Temperature	-20°C to +55°C (4°F to 131°F) (must be free from dew condensation)
Finish	Horn and Rear Cover : HIPS, white Bracket : SPCC, Powder Paint White Speaker cable : Polyvinyl chloride insulated cabtyre cable (6mm (0.24") in diameter, 400mm (17.72") in length, White)
Dimensions	292 (W) x 234 (H) x 330 (D)mm
Weight	1.8kg
Sensitivity when used as microphone (0 dB = 1 W)	74 dB (Input speaker 94dB at 50 ~ 20k Hz, 1V/Pa = 0dB)
Option	

Note: The design and specification are subject to change without notice for improvement.

**Traceability Information for Europe (EMC directive 2004/108/EC)**

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