

# SPEAKER SYSTEMS

# CS-760B-AS CS-760W-AS

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

## 1. SAFETY PRECAUTIONS

- Before installation or use, be sure to carefully read all the instruction in this section for correct and safe operation.
- Be sure to follow all the precautions in this section, which contain important warnings and/or cautions regarding safety.
- After reading, keep manual handy for future reference.
- Ensure that all screws are securely tightened. If they are not tightened or firmly secured after installation, the unit could fall down, possibly resulting in personal injury.
- Use the specified mounting bracket in combination. Doing otherwise may cause the unit or component to fall off, resulting in personal injury.
- Do not mount the unit in locations exposed to constant vibration. The mounting bracket can be damage by excessive vibration, potentially causing the unit to fall, which could result in personal injury.

### **WARNING**

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

#### When Installing the Unit

- Avoid installing or mounting the unit in unstable locations, such as on a rickety table or a slanted surface. Doing so may result in the unit falling down and causing personal injury and/or property damage.
- Install the unit only in a 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.
- Since the unit is designed for fully out-door use and have IP66 for IP rating. Please keep the unit down face to keep the weather resistant capability continuous.
- Owing to the unit's size and weight, be sure that at least two person are available to install the unit. Failure to do so could result in personal injury.
- Do not use other methods than specified to mount the bracket. Extreme force is applied to the unit and the unit could fall off, possibly resulting in personal injury.
- Use screw that are appropriate for the ceiling's or wall's structure and composition. Failure to do so may cause the unit fall, resulting in personal injury.

### **CAUTION**

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

#### When Installing the Unit

- When installing the unit, be sure to handle it with two or more persons. Falling or dropping unit may cause personal injury.
- To avoid electric shocks, be sure to switch off the amplifier's power when connecting speakers.
- Do not place heavy objects on the unit as this may cause it to fall or break which may result in personal injury and/or property damage. In addition, the object itself may fall off and cause injury and/or damage.
- Make sure that the volume control is set to minimum position before power is switched on. Loud noise produced at high volume when power is switched on can impair hearing.
- 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 cause heat to generate and result in a fire.

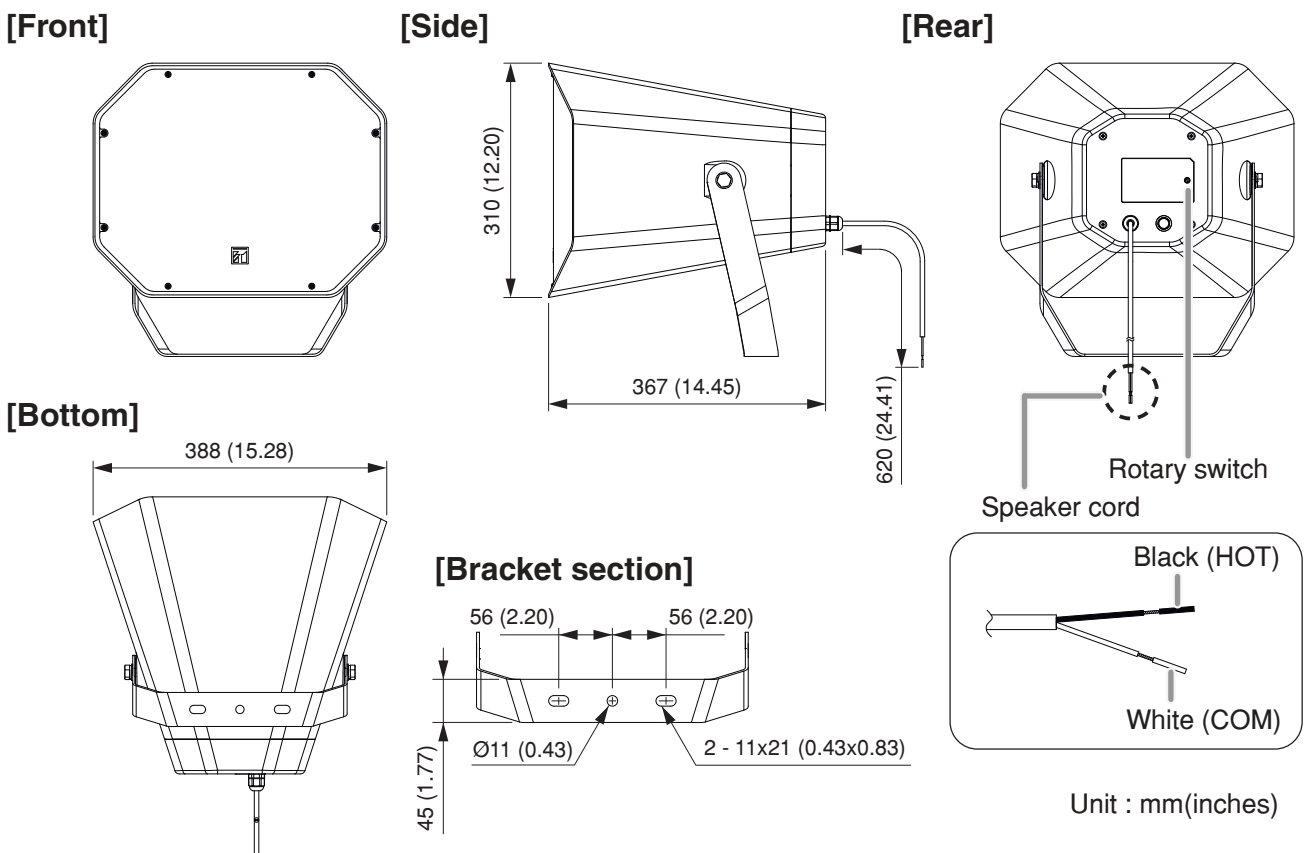
## 2. GENERAL DESCRIPTION

TOA's CS-760-AS series is a compact two way speakers system design for high efficiency, high power input handling capability, and high intelligible speakers suited for public address announcement and BGM application in a fully outdoor environment. External loudspeaker components finished to ensure the unit's weatherproof capability. The CS-760-AS series employs rotary switch that facilitates impedance change. They can be installed in many different applications with combined use of the supplied mounting bracket and the optional mounting brackets.

## 3. FEATURES

- Both permanent and temporary installations available.
- Impedance change applications available by a rotary switch.
- IP66 rating for protection from water and dust at fully outdoor installation.
- Built-in overload protection circuitry.

## 4. DIMENSIONAL DIAGRAM

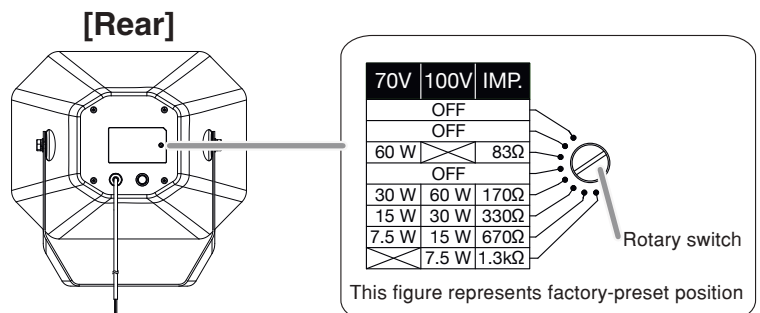


## 5. IMPEDANCE CHANGE

To change the impedance, use a standard screwdriver to rotate the rotary switch on the speaker's rear side to select the desired input power. This rotary switch is factory-preset to 170 Ω.

### Note

Do not select 83 Ω when connected to 100V line amplifier, as this will damage the speaker



## 6. ABOUT THE INPUT OVERLOAD PROTECTION CIRCUIT

The speaker system features internal input overload protection circuitry for both high and low frequencies. If an excessive input level is fed to the unit, the protection circuitry automatically cuts off the signal to the speaker driver. A drastic reduction in sound volume for the high or low frequency range indicates that the protection circuitry has been enabled. In such cases, simply reduce the amplifier volume. The protection circuitry will automatically reset in approximately 10 seconds. After reset, maintain the volume at a level slightly lower than before.

### Note

This protection circuitry does not completely protect the unit against input overload. Depending on the type or duration of excessive power input, the protection circuitry might not be enabled, resulting in damage to the speaker driver. Also, if the excessive power input continues for a long period of time, the circuitry may not be capable of resetting to its original condition. Take care so that the speakers are not exposed to excessive power input.

## 7. INSTALLATION

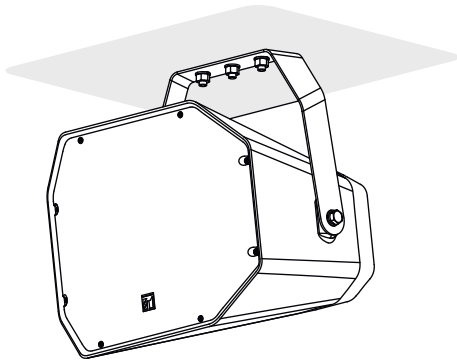
The speaker system can be installed to ceiling, wall, and base floor using supplied bracket. The speaker system installation is shown below.

This bracket is designed to mount the speaker system to ceilings, walls, and base floor vertically.

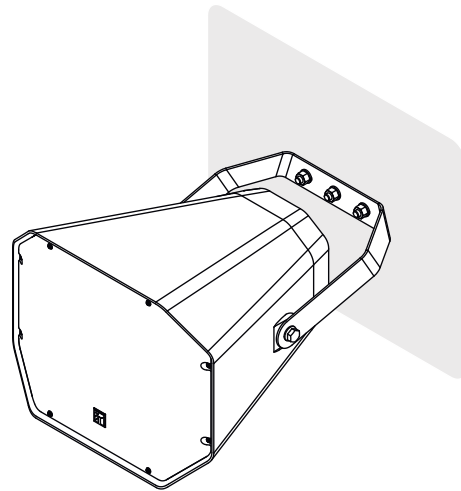
The bracket allow speaker's vertical angle to be adjusted.

- Ceiling : From 0° to 90° downward
- Wall : From 8° upward to 106° downward
- Base floor : From 8° upward to 16° downward

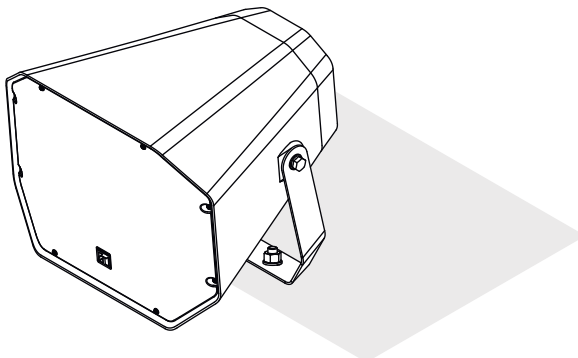
### [Ceiling installation]



### [Wall installation]



### [Base floor installation]



### Note:

Do not install the speaker system which is facing vertically upwards in a completely outdoor environment.

## 8. SPECIFICATION

Model No.		CS-760B-AS	CS-760W-AS
Rated Input		60 W (High Impedance)	
Rated Impedance		100 V line: 170 Ω (60 W), 330 Ω (30 W), 670 Ω (15 W), 1.3 kΩ (7.5 W) 70 V line: 83 Ω (60 W), 170 Ω (30 W), 330 Ω (15 W), 670 Ω (7.5 W)	
Sensitivity		100 dB (1W, 1m)	
Maximum Sound Pressure Level		117 dB (60W, 1m)	
Frequency Response		100 Hz - 20,000 Hz	
Crossover Frequency		2,5 kHz	
Directivity Angle		Horizontal: 90° , Vertical: 80°	
Speaker Component		Low frequency : 16 cm (6") cone type High frequency : 25 mm (1") dome tweeter	
Dust/Water Protection		IP66	
Connection		Speaker cord (Hot: Black, Com: White)	
Finish	Enclosure	ABS, black, paint coating	ABS, white, paint coating
	Punched net	Surface-treated steel plate, black, paint coating	Surface-treated steel plate, white, paint coating
	Bracket	Stainless steel, black, paint coating	Stainless steel, white, paint coating
Dimension		388 (w) x 310 (h) x 367 (d) mm (15.28" x 12.20" x 14.45")	
Weight		7.4 kg (16.31 lb)	

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

### • Optional products

Pole mount bracket: SP-131

Speaker mount bracket: SP-201

Pole band: YS-60B

Speaker stand: ST-33B

### Traceability Information for Europe

Manufacturer:

TOA Corporation

7-2-1, Minatojima-Nakamachi, Chou-ku, Kobe, Hyogo, Japan

Authorized representative:

TOA Electronics Europe GmbH

Suederstrasse 282, 20537 Hamburg, Germany



TOA Corporation

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