

## 2WAY COAXIAL HORN SPEAKER 60W

### CS-761B, CS-761W

Thank you for purchasing TOA's 2Way Coaxial Horn Speaker 60W.

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 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.

- When using the unit mounted on a speaker stand, 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.
- When installing the unit in the snowy area, take appropriate measures to prevent snow from lying on the unit. If the snow lies on the unit, the unit may fall, causing personal injuries.
- Owing to the unit's size and weight, be sure that at least two persons 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 injuries.
- Use nuts and bolts that are appropriate for the ceiling's 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.
- 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 damaged by excessive vibration, potentially causing the unit to fall, which could result in personal injury.
- Do not use anti-rust lubricant. If it contacts resin or rubber parts, they could deteriorate and cause the unit to fall, possibly resulting in personal injury.
- Avoid installing the speaker in locations close to the seashore or in indoor swimming facilities that are not well ventilated. In such locations, the bracket may be vulnerable to corrosion, eventually allowing the speaker to 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.

- To avoid electric shocks, be sure to switch off the unit'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.
- Do not operate the unit for an extended period of time with the sound distorting. Doing so may cause the connected speakers to heat, resulting 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 checked periodically by the shop from where it was purchased. Failure to do so may result in corrosion or damage to the speaker or its mounting bracket that could cause the unit to fall, possibly causing personal injury.

## 2. GENERAL DESCRIPTION

The CS-761B/761W is a 2-way speaker featuring a coaxially positioned 16 cm (6.5") cone speaker and 2.5 cm (1") tweeter. This speaker provides high-quality sound broadcasts with excellent clarity, not only indoors, but also in semi-outdoor facilities such as multistory parking structures, and even in outdoor applications such as sports grounds and parks. It complies with IP66 Dustproof and Waterproof Standards.

## 3. FEATURES

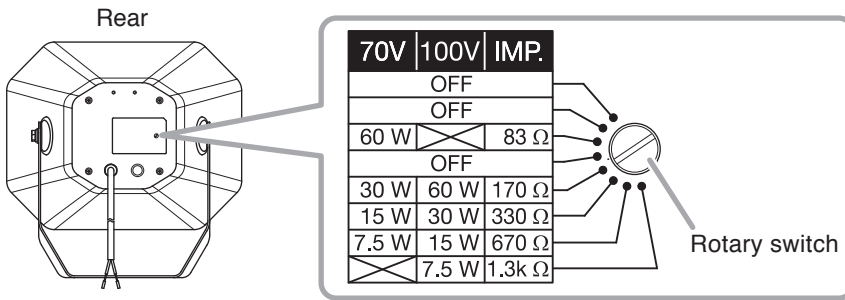
- Coaxial two-way speaker construction enables high-quality sound, highly intelligible broadcasts that can even be used for music output.
- High-powered 60 W rated input.
- Directivity angle of 90° horizontal × 80° vertical.
- Dustproof and waterproof construction complies with the IP66 Standards.
- Can be mounted to a wall, ceiling, pole\*<sup>1</sup> or speaker stand\*<sup>2</sup>.

\*<sup>1</sup> Optional SP-201 Speaker Mount Bracket and YS-60B Pole Band required.

\*<sup>2</sup> Compatible with optional ST-34B Speaker Stand. However, this must not be used in permanent installations.

## 4. CHANGING IMPEDANCE

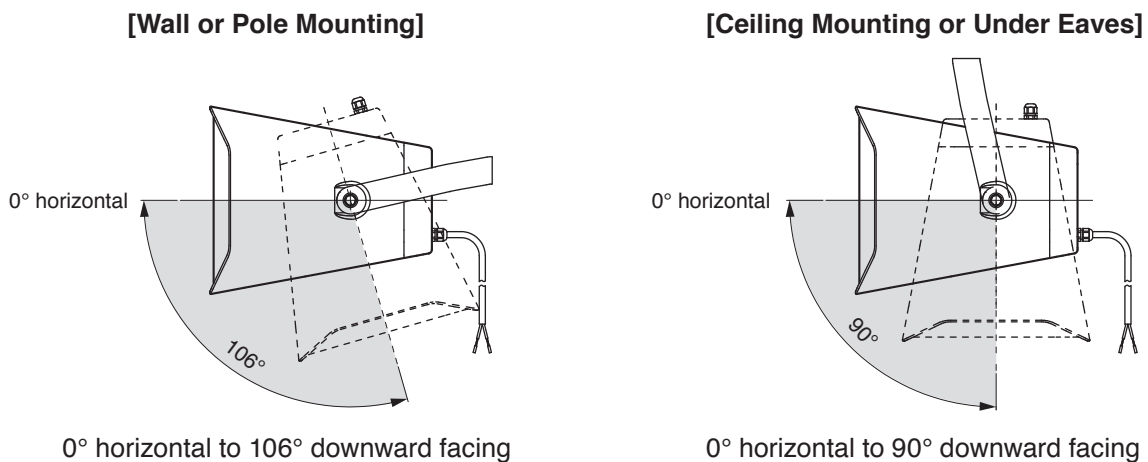
To change the speaker's impedance, rotate the rotary switch located on the rear of the unit using a slotted screwdriver, and set the impedance for the desired input wattage (factory-preset to 170 Ω).



**Note:** Do not set to the marked position, as this could result in speaker failure.

## 5. INSTALLATION PRECAUTIONS

- Only install the unit in locations with an ambient operating temperature range of -10 to +50°C (14 to 122°F). Failure to follow this instruction could result in speaker malfunction or failure.
- Set the speaker orientation within the shaded range shown in the figure below.

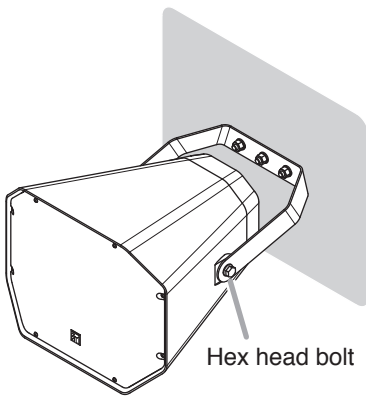


## 6. INSTALLATION

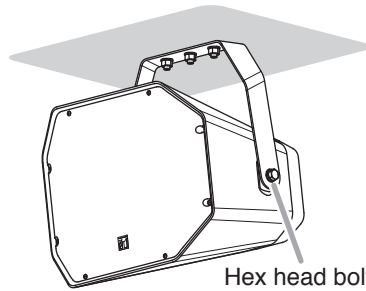
[Wall or Pole Mounting]

[Ceiling Mounting or Under Eaves]

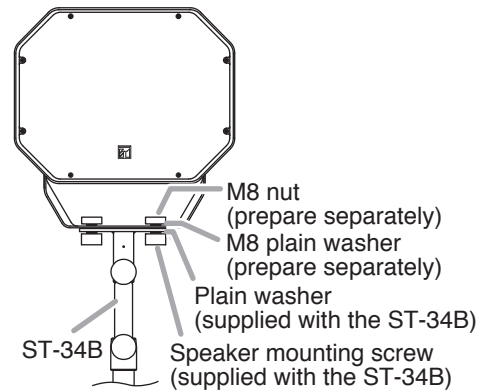
[Stand Mounting]



Hex head bolt



Hex head bolt



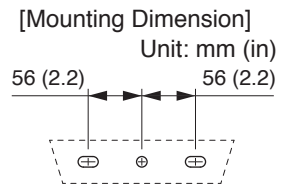
**Step 1.** Secure the speaker mounting bracket to the wall, ceiling, pole, or speaker stand in two or more places.

### **WARNING**

- The nuts and bolts used to mount the unit to a wall, ceiling, pole, or speaker stand are not supplied with the unit. These parts must be prepared separately and must be robust enough to support the unit's weight, carefully considering the material, strength and total weight of the installation location.
- Be sure that two or more persons are involved in speaker installation to ensure that the unit is supported safely without detaching the mounting bracket from the speaker.
- Tighten each nut and bolt securely, taking ample measures to prevent them from accidentally loosening over time.

For pole mounting applications, please refer to the instruction manual for the SP-201 Speaker Mount Bracket.

Use M8 bolts when mounting to the ST-34B Speaker Stand. Using the speaker mounting screws and plain washers supplied with the ST-34B, mount the speaker to the stand by tightening the separately procured nuts from the speaker mounting bracket side.



**Note**  
Be sure to attach at both sides.

**Step 2.** Loosen the hex head bolts on both sides to adjust the angle, then retighten the bolts.

Recommended hex head bolt tightening torque (15N•m)

#### Notes

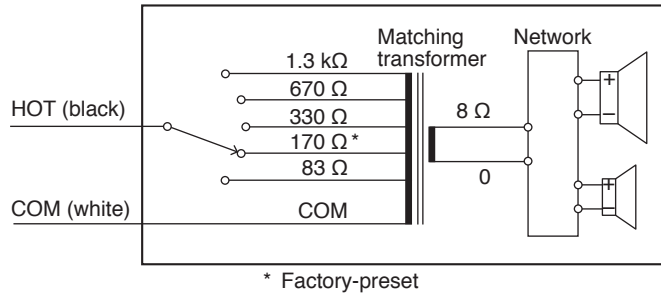
- Do not detach the hex head bolts.
- The hex head bolts are loosely tightened when the unit is shipped from the factory. Be sure that they are firmly tightened after unit installation.
- Take care not to overtighten.

**Step 3.** Take care to note wire polarity when making connections.

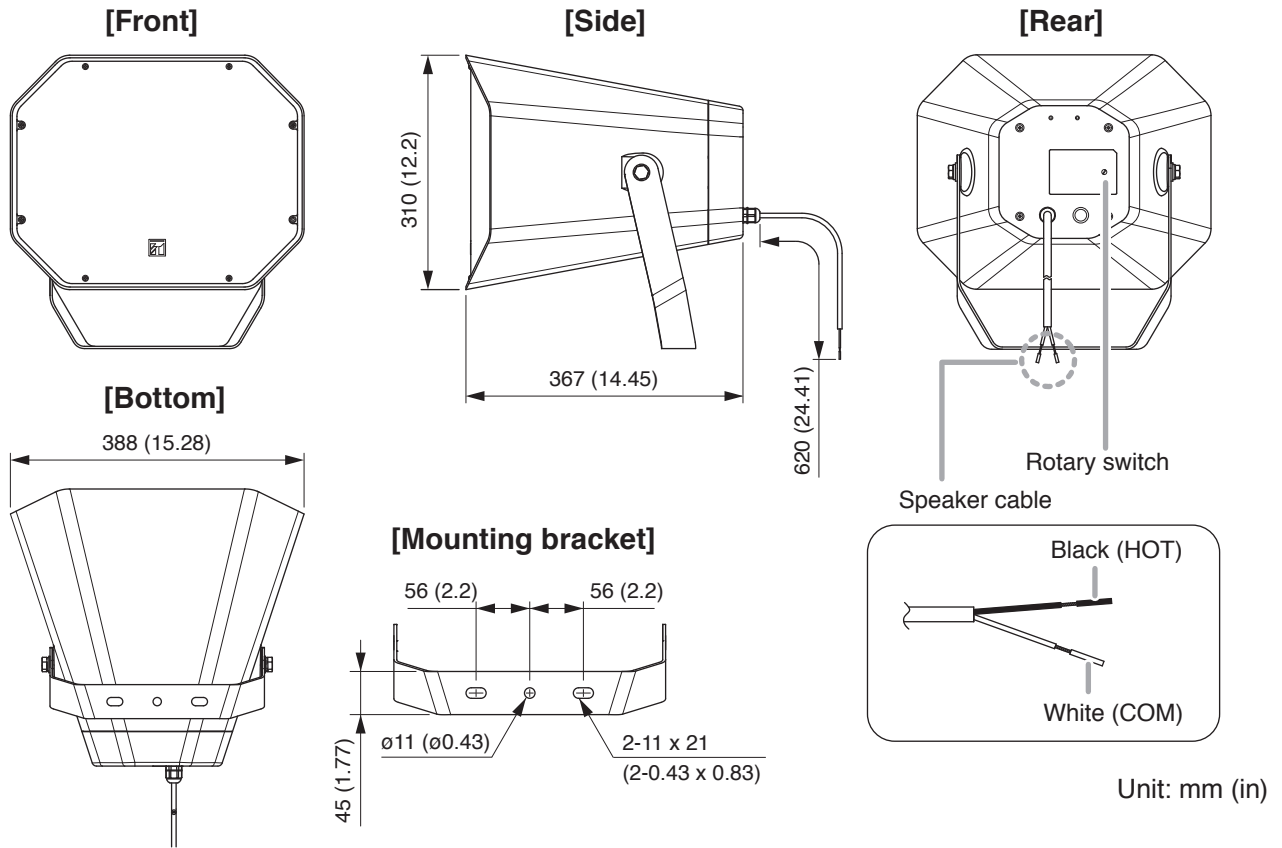
#### Notes

- After wiring is complete, be sure that the connections are securely insulated using electrical tape or similar materials.
- Be sure the speaker leads are made waterproof using self-adhesive tape.

## 7. WIRING DIAGRAM



## 8. DIMENSIONAL DIAGRAM



## 9. SPECIFICATIONS

Model No.		CS-761B	CS-761W
Rated Input		60 W	
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 (1 W, 1 m) (1 kHz – 10 kHz, pink noise)	
Frequency Response		100 Hz – 20 kHz	
Speaker Component		Low frequency: 16 cm (6") cone-type, High frequency: 2.5 cm (1") tweeter	
Directivity Angle		Horizontal: 90°, Vertical: 80°	
Operating Temperature		-10 to +50 °C (14 to 122 °F)	
Dust/Water Protection		IP66	
Connection		Speaker cable (Hot: Black, Com: White)	
Finish	Enclosure	ABS resin, black (RAL 9011 equivalent), paint	ABS resin, white (RAL 9010 equivalent), paint
	Punched net	Steel plate, black (RAL 9011 equivalent), paint	Steel plate, white (RAL 9010 equivalent), paint
	Bracket	Stainless steel, black (RAL 9011 equivalent), powder coating	Stainless steel, white (RAL 9010 equivalent), powder coating
Dimensions		388 (w) x 310 (h) x 367 (d) mm (15.28" x 12.2" x 14.45")	
Weight		7.6 kg (16.75 lb)	

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

### • Optional products

Speaker Mount Bracket: SP-201

Pole Band: YS-60B

Speaker Stand: ST-34B

### Traceability Information for Europe

Manufacturer:  
TOA Corporation  
7-2-1, Minatojima-Nakamachi, Chuo-ku, Kobe, Hyogo,  
Japan

Authorized representative:  
TOA Electronics Europe GmbH  
Suederstrasse 282, 20537 Hamburg,  
Germany