

# CEILING SPEAKER

# PC-2668

Thank you for purchasing TOA's Ceiling Speaker.  
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.

- 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.
- 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.

### 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 unit for an extended period of time with the sound distorting. Doing so may cause the unit to heat, resulting in a fire.
- 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 unit or its mounting bracket that could cause the unit to fall, possibly causing personal injury.

## 2. INSTALLATION PRECAUTIONS

- Avoid installing the speaker in such places as seaside district exposed to sea breezes. Corrosion may cause malfunction.
- Since the speaker is not splash-proof, do not install the speaker in such places as a multilevel car parking tower, stairs, corridor, passage, or under the eaves, where rainwater could enter the speaker. Corrosion may cause malfunction.

## 3. SPECIFICATIONS

Rated Input	6 W (for 100 V Line), 3 W (for 70 V Line)
Rated Impedance	100 V line: 1.7 kΩ (6 W), 3.3 kΩ (3 W), 6.7 kΩ (1.5 W)*, 13 kΩ (0.8 W)* 70 V Line: 1.7 kΩ (3 W), 3.3 kΩ (1.5 W), 6.7 kΩ (0.8 W)*, 13 kΩ (0.4 W)* * Internal wiring must be changed.
Sound Pressure Level	90 dB (1 W, 1 m, 330 – 3300 Hz Pink noise)
Frequency Response	100 Hz – 16 kHz
Speaker Component	12 cm (5") dynamic cone-type speaker
Mounting Method	Spring catch
Applicable Cable	600 V Vinyl-insulated cable (IV wire or HIV wire) Solid copper wire:                    ø0.8 – ø1.2 mm (AWG 20 –16) 7-core twisted copper wire: 0.75 – 1.25 mm <sup>2</sup> (AWG 18 –16)
Connection	Push-in connector (Bridging terminal-2 branch type)
Finish	Baffle: ABS resin, off-white (RAL 9010 or equivalent color)
Dimensions	ø260 x 92 (d) (Exposed section) mm or ø10.24" x 3.62"
Weight	820 g or 1.81 lb (Bracket included)

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

### • Accessories

Mounting bracket .....	1	Machine screw M4 x 35 .....	2
Tapping screw 4 x 20 .....	2		

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

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

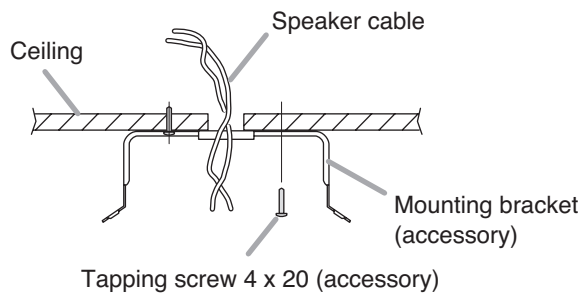
Authorized representative:  
TOA Electronics Europe GmbH  
Suederstrasse 282, 20537 Hamburg, Germany

## 4. INSTALLATION

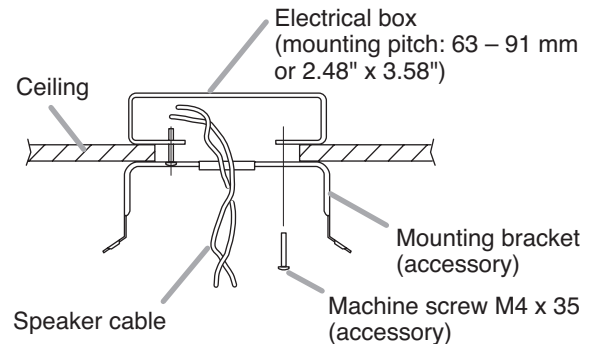
**Step 1.** Fix the supplied mounting bracket to the ceiling.

Two types of screws shown below are supplied with the speaker. Use these screws properly depending on the installation location.

### [Direct mounting to the ceiling]



### [Mounting to the ceiling through an electrical box]



**Step 2.** Insert one V-shaped spring into the spring catch of the bracket by squeezing it.

**Step 3.** Insert the core wire of the speaker cable straight, fully into the round hole in the push-in connector according to the indication on the connector.

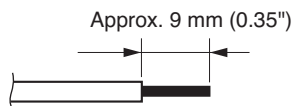
#### Notes

- The push-in connector allows star wiring or bridging wiring.
- To disconnect the speaker cable, pull it out while holding down the push-in button.

#### [Applicable speaker cable and cable end treatment]

- Speaker cable
  - 600 V Vinyl-insulated cable (IV wire or HIV wire)
  - Solid conductor (copper):  $\varnothing 0.8 - \varnothing 1.2$  mm (AWG 20 – 16)
  - Stranded conductors (7-core, copper):  $0.75 - 1.25$  mm<sup>2</sup> (AWG 18 – 16)

- Cable end treatment



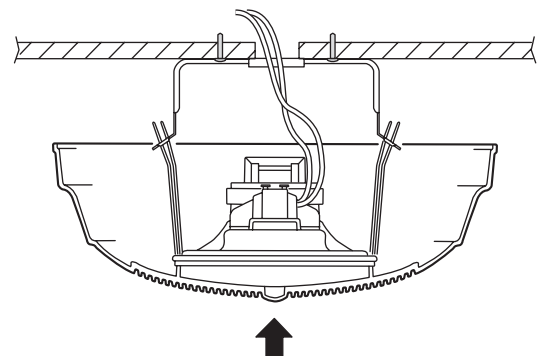
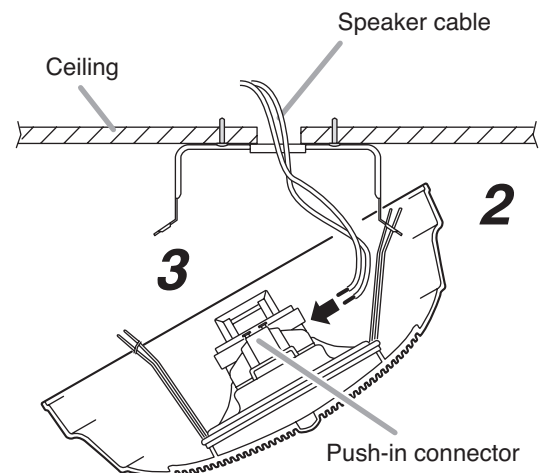
#### Note

Use a strip gauge near the push-in connector.

**Step 4.** Insert the other V-shaped spring into the other spring catch in the same way as step 2, then push the speaker straight up toward the ceiling.

#### Note

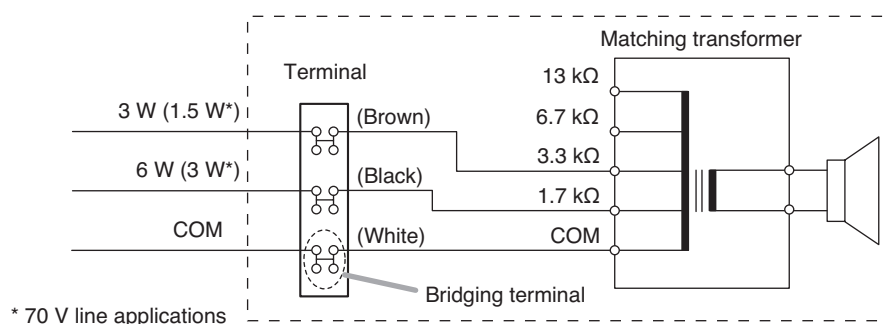
Be sure to install the speaker without leaving a gap between the ceiling surface and the speaker. Otherwise, birds, dirt or other foreign objects get inside the speaker, causing the speaker to malfunction.



Push the speaker upward into position.

**Note:** The figures in steps 2 – 4 show an example of installing the speaker to the mounting bracket secured to the ceiling.

## 5. WIRING DIAGRAM (SCHEMATIC DIAGRAM)



\* 70 V line applications