

# BOX SPEAKER

# BS-4W

Thank you for purchasing TOA's Box 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.

- Refer all installation work to the dealer from whom the speaker was purchased. Installation requires extensive technical knowledge and experience. The speaker may fall off if incorrectly installed, resulting in possible personal injury.
- Install the speaker only in a location that can structurally support the weight (1.5 kg or 3.31 lb) 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 use other methods than specified to mount the bracket. Extreme force is applied to the speaker and the speaker 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.
- Do not mount the speaker 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.

- Should the following irregularity be found during use, immediately stop using the speaker, and contact your nearest TOA dealer. Make no further attempt to operate the speaker in this condition as this may cause fire or electric shock.

- If you detect smoke or a strange smell coming from the speaker.
- If water or any metallic object gets into the speaker
- If the speaker falls, or the speaker case breaks
- If it is malfunctioning (no tone sounds.)

- To prevent a fire or electric shock, never open nor remove the speaker case. Refer all servicing to qualified service personnel.



### CAUTION

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

- Avoid touching the speaker's sharp metal edge to prevent injury.
- Do not place heavy objects on the speaker 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 speaker 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 speaker as this may cause it to fall down or drop, resulting in personal injury and/or property damage.
- Have the speaker 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 speaker to fall, possibly causing personal injury.

## 2. GENERAL DESCRIPTION

The BS-4W is a splash proof compact speaker with a closed-cabinet design.

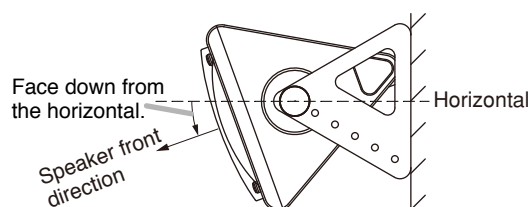
It features a 10 cm (4") full range speaker unit (plastic cone) and meets IPX2\* water protection requirements. It can be used under the eaves not directly exposed to rain or waterdrop, or in highly humid locations (locker rooms of swimming pools and bathrooms).

\*The speaker meets a requirement that "Vertically dripping water shall have no harmful effect when the enclosure is tilted at an angle up to 15° from its normal position."

## 3. INSTALLATION

### Notes on installation

- Be sure to position the speaker with its front facing down from the horizontal axis. Doing otherwise may cause rainwater to accumulate inside the opening, possibly resulting in unit malfunction.
- Do not use the speaker in locations such as poolside where the speaker is always exposed to water splash, or in high-temperature and high-humidity locations such as bathrooms and steam saunas where dew condensation may form. Besides, do not dash water directly on the speaker.

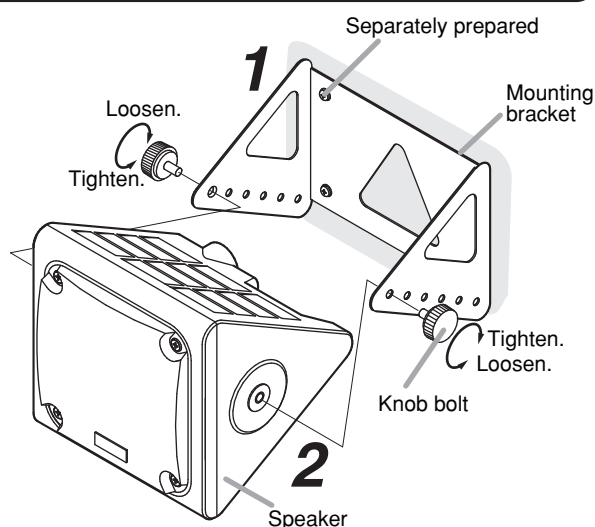


**Step 1.** Secure the mounting bracket to the installation location.

Unscrew the knob bolts on both left and right sides of the speaker to remove the mounting bracket, then secure the mounting bracket to the installation location.

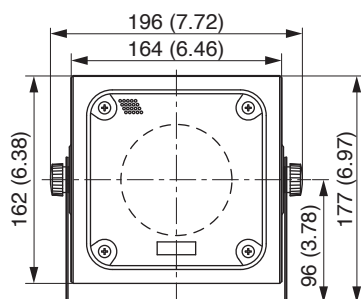
**Step 2.** Attach the speaker to the mounting bracket.

Tighten the knob bolts on both left and right sides of the speaker.



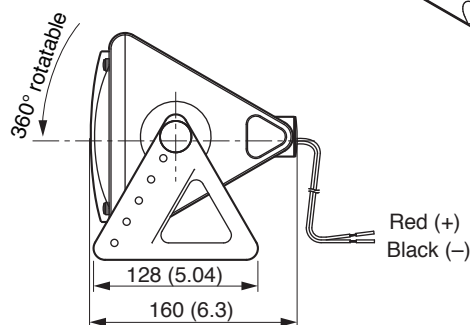
## 4. DIMENSIONAL DIAGRAM

[Front]

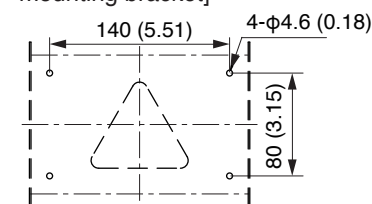


Unit: mm (inches)

[Side]



[Dimensional diagram for mounting bracket]



## 4. SPECIFICATIONS

Enclosure Type	Sealed type
Rated Input	5 W
Rated Impedance	100 V line: 2 kΩ (5 W)
Sensitivity	87 dB (1 W, 1 m)
Frequency Response	100 Hz – 12 kHz
Speaker Component	10 cm (4") cone type (plastic cone)
Water Protection	IPX2
Operating Temperature Range	-20 to +55 °C (-4 to 131 °F)
Finish	Enclosure: Polypropylene, gray, paint Grille: Aluminum punching net, silver gray, paint Mounting bracket: Rolled steel plate, gray, paint
Dimensions	196 (w) x 177 (h) x 160 (d) mm (7.72" x 6.97" x 6.3")
Weight	1.5 kg (3.31 lb)

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

### 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



TOA Corporation

URL: <http://www.toa.jp/>

133-01-489-1A