

STRAIGHT HORN SPEAKER

DH-110 DH-120

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.

- The standard supplied mounting bracket is not designed for use in locations exposed to strong winds and could become dislodged, resulting in possible personal injury. To ensure that the installation can withstand expected wind forces, always use the supplied mounting bracket in combination with a separately prepared bracket.
- 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.
- Use nuts and bolts that are appropriate for the installation place'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.
- Attach the safety wire to the unit when mounting in locations high above the ground. Failure to do so could result in personal injury if the speaker should later fall for any reason.
- Protect the unit from exposure in snowy areas, as the weight of snow build-up could cause the speaker to fall, resulting in personal injury.

2. EQUIPMENT CONFIGURATION

The DH-110 speaker is comprised of the DHA-11 (Horn A) and the DH-11B component (Horn B, Horn C and other parts). The DH-120 speaker is comprised of the DHA-11 and the DH-12B component (Horn B, 2-driver unit adapter and other parts).

Speaker Model No.	DH-110	✓	✓	
Speaker Model No.	DH-120	✓		✓
Component Model No.		DHA-11	DH-11B	DH-12B
Parts to make up the component	Horn A	1	–	
	Horn B	–	1	
	2-driver unit adapter	–	–	1
	Horn C	–	1	–
	Mounting bracket	–	1	
	Bird net	–	1	
	Rubber gasket A	–	1	
	Throat net	–	1	
	Rubber gasket B	–	1	
	Hex bolt (M12), plain washer (M12), spring washer (M12)	–		6 each (stainless steel)
	M6 hex bolt with spring washer, M6 washer	–		8 each (stainless steel)
	M4 screw	–		2* (stainless steel)

* Although two screws are supplied, only one screw is used to assemble the DH-110.

3. SPECIFICATIONS (COMMON TO THE DH-110 AND DH-120)

Sensitivity	110 dB (1 W, 1 m) (When operated with a driver)
Frequency Response	180 Hz – 6 kHz (When TU-631 or TU-651 series is used) 180 Hz – 8 kHz (When the TU-660 series is used)
Driver Coupling	1 – 3/8 18 threads (inch screw)
Variable Installation Angle	Vertical: +10°, –20° (when locally procured mounting bracket is used)
Finish	Ivory
Weight	5.3 kg

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

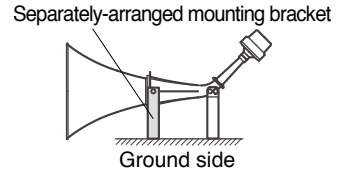
4. INSTALLATION PRECAUTIONS

WARNING

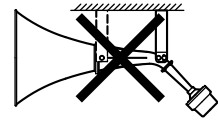
The supplied mounting bracket could become dislodged by strong winds, resulting in possible personal injury. To prevent this from expected wind forces, additionally use a separately prepared bracket as shown in Figure 1.

- Install the speaker as shown in Figure 1 and take care that rain water does not enter the driver unit from the front of the speaker. Hanging the speaker as shown in Figure 2 or installing it sideways could cause rain water to collect inside the driver unit, resulting in speaker failure.
- When facing the speaker upward, its mounting angle must be less than 10°. Exceeding this limit could cause rain water to collect inside the horn and no sound could be output.
- When mounting two driver units to the DH-120, make sure that both units are of the same model number. If they differ in model number or power handling capacity, sound interference may occur, resulting in distorted sound or, at worst, speaker failure.

[Figure 1]

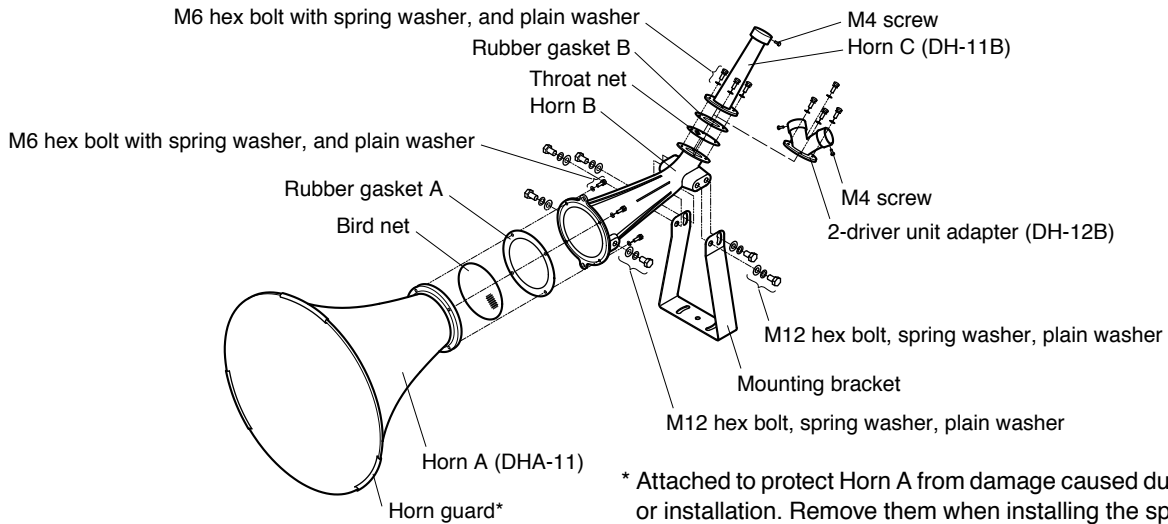


[Figure 2]



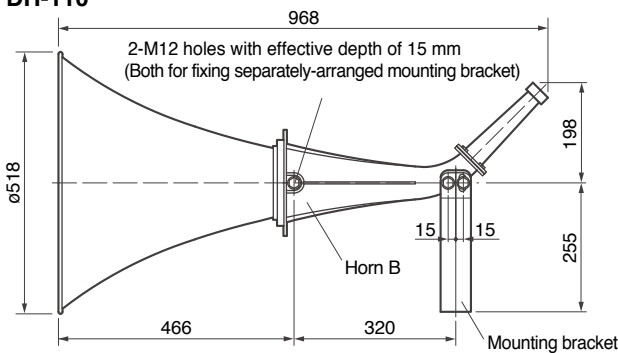
5. ASSEMBLY

The following figure applies to the assembly of both the DH-110 and DH-120.

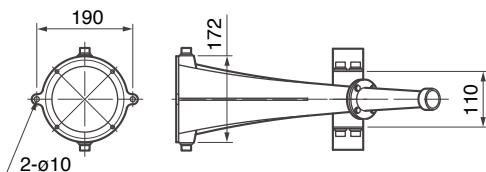


6. DIMENSIONAL DIAGRAM

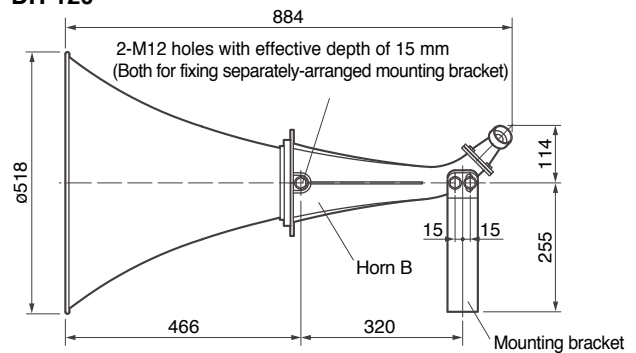
DH-110



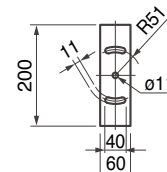
[Horn B dimension]



DH-120



[Dimensions of bracket mounting holes]



Unit: mm

Traceability Information for Europe

Manufacturer:
TOA Corporation
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