

# MATCHING TRANSFORMER

# MT-200

Thank you for purchasing TOA's Matching Transformer.

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.

### **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**

- 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.
- Do not use other methods than specified to mount the unit. Extreme force is applied to the unit and the unit could fall off, possibly resulting in personal injuries.
- Tighten each nut and bolt securely. Ensure that the mounting bracket has no loose joints after installation to prevent accidents that could result 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.

#### **When Installing the Unit**

- Avoid touching the unit's sharp metal edge to prevent injury.

#### **When the Unit is in Use**

- 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 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 unit or its mounting bracket that could cause the unit to fall, possibly causing personal injury.

#### **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

## 2. GENERAL DESCRIPTION

The TOA MT-200 is a matching transformer for the HX-5 series and the HX-7 series speaker systems, and can be used both indoors and outdoors.

### 3. DIMENSIONAL DIAGRAM

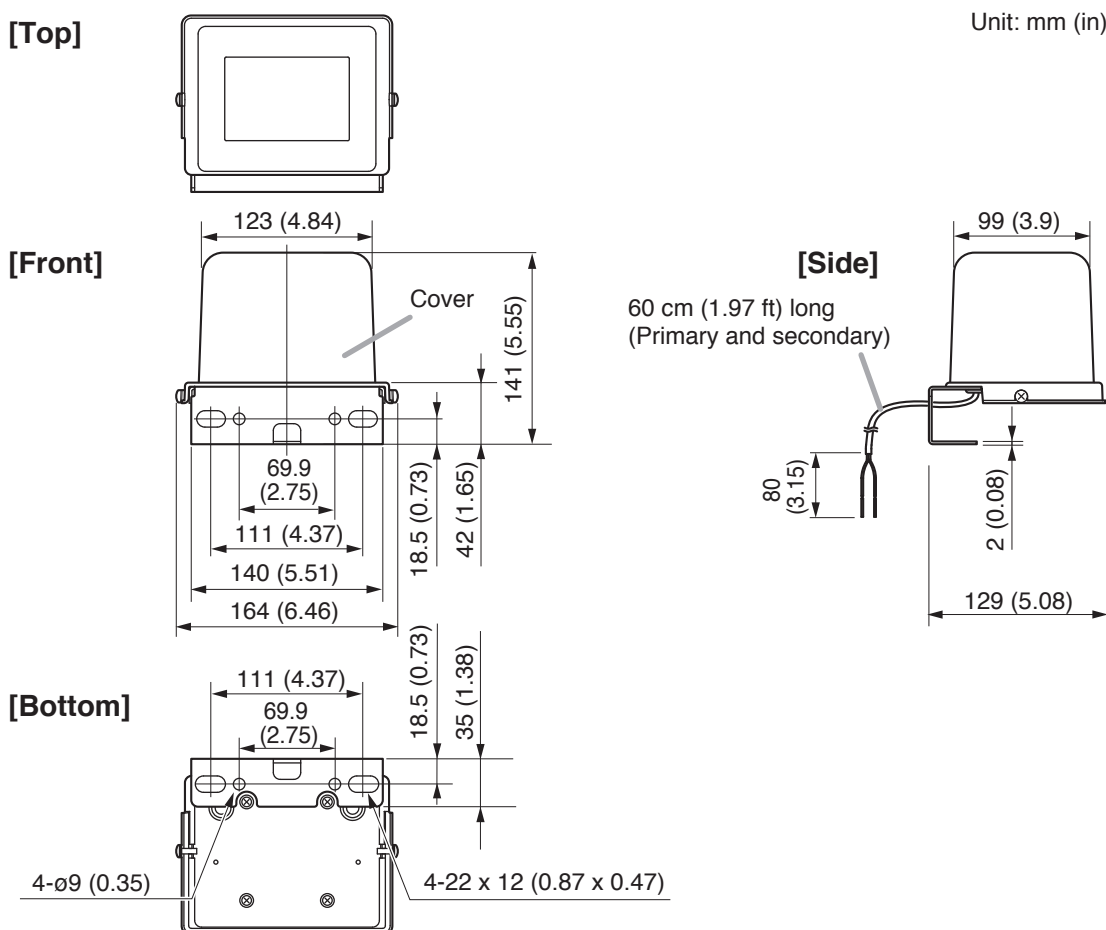
[Top]

Unit: mm (in)

[Front]

[Bottom]

[Side]



### 4. SPECIFICATIONS

Rated Input	200 W
Primary Impedance	100 V line: 50 Ω (200 W), 83 Ω (120 W), 167 Ω (60 W) 70 V line: 25 Ω (200 W), 50 Ω (100 W), 83 Ω (60 W), 167 Ω (30 W)
Secondary Impedance	8 Ω
Water Protection	IPX4 (the tilt angle must be within 45°)*
Finish	Cover: Polypropylene Mounting bracket: Stainless steel (SUS304)
Dimensions	164 (w) x 141 (h) x 129 (d) mm (6.46" x 5.55" x 5.08")
Weight	2.8 kg (6.17 lb)

\* Every speaker module must be aimed horizontally or down to keep the water resistant capability.

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

#### • Accessories

Hexagon head bolt M8 x 15 (with washers) ..... 2

### 5. MATCHING TRANSFORMER INSTALLATION

#### ⚠ WARNING

Bolts can be tightened using either a Phillips screwdriver or a wrench, but be sure to finish the tightening with the wrench to ensure optimum tightness. Failure to do this could cause the speaker to fall, potentially resulting in damage and/or personal injury.

#### 5.1. Mounting to the HX-5 Series Speaker System

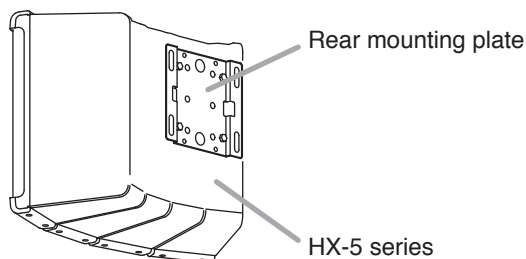
##### Note

When the matching transformer is installed on the HX-5 series Speaker System, the optional HY-WM1 series and HY-CW1 series Speaker Mounting Brackets, and HY-ST1 Speaker Stand Adapter cannot be used.

### 5.1.1. Mounting position

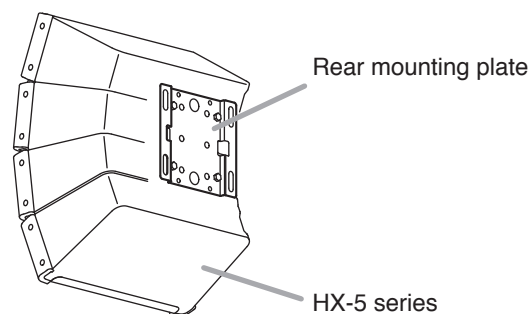
Mount the matching transformer MT-200 in the speaker system's rear mounting plate.

#### [Mounting to horizontally-positioned speakers]



Use the rear mounting plate with its orientation pre-fixed at the factory.

#### [Mounting to vertically-positioned speakers]



Remove and attach the rear mounting plate so that its orientation is as illustrated.

### 5.1.2. Mounting to the rear mounting plate

Mount the MT-200 in either way (A) or (B) as illustrated below.

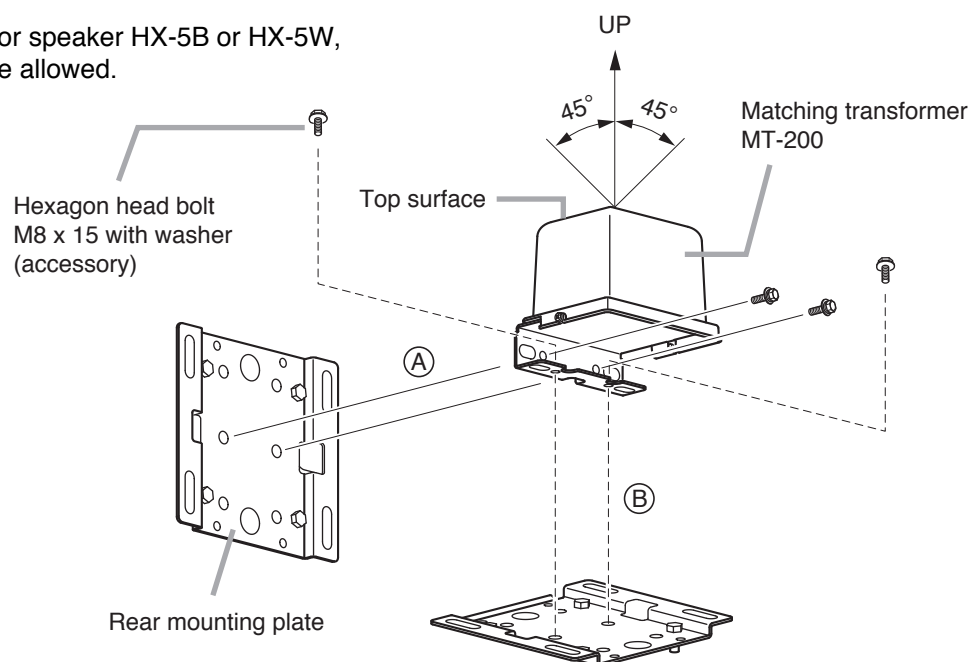
#### Note

When mounting it to the outdoor speaker HX-5B-WP or HX-5W-WP, select either way (A) or (B) to keep the inclination of the MT-200's top surface within 45° from the vertical axis.

Exceeding this angle range could deteriorate the MT-200's water resistant capability.

#### Tip

For mounting to the indoor speaker HX-5B or HX-5W, both ways (A) and (B) are allowed.



### 5.2. Mounting to the HX-7 Series Speaker System

#### Note

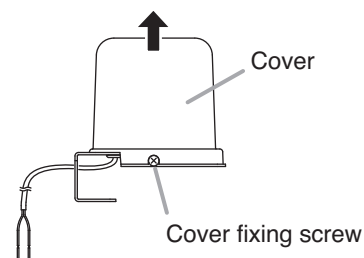
Prepare an optional HY-MT7 Matching Transformer Adapter when mounting the MT-200 to the HX-7 series speaker.

For mounting method, refer to the installation manual supplied with the HY-MT7.

## 6. CONNECTIONS

### Step 1. Remove the cover.

Loosen the 2 cover fixing screws to remove the cover, as indicated by the arrow.



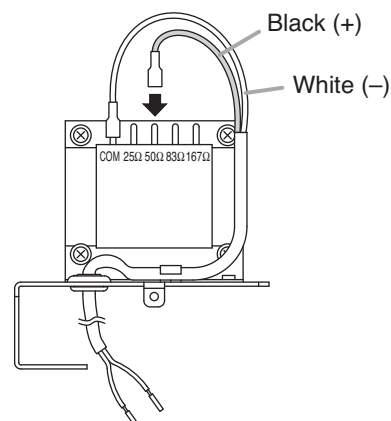
### Step 2. Change the primary connection tap.

The tap of the MT-200 is factory-preset to 167  $\Omega$ .

Change the setting as required.

To change the tap, reconnect the primary black cord according to the table below.

Line \ Tap	25 $\Omega$	50 $\Omega$	83 $\Omega$	167 $\Omega$
100 V line	—	200 W	120 W	60 W
70 V line	200 W	100 W	60 W	30 W



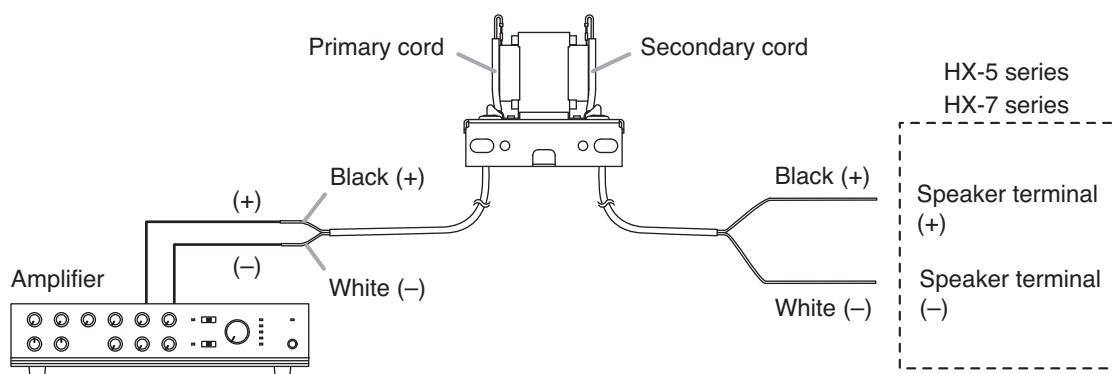
**Note:** Never touch the white cord connected to the COM tap.

### Step 3. Connect to the amplifier and the speaker.

Connect the primary cords to the amplifier and the secondary cords to the speaker.

#### Notes

- Be sure to use a high-impedance amplifier. If the transformer is connected to a low-impedance amplifier, sufficient sound volume may not be achieved.
- Take care to ensure correct primary and secondary cord connections. Incorrect connections may cause damage to the amplifier, matching transformer, and speaker system.



### Step 4. Replace the cover and tighten the screws.

Replace the removed cover and securely tighten the 2 cover fixing screws.

#### Note

To ensure the splash-proof capability, press the cover firmly onto the gasket.

