

# BOUNDARY MICROPHONE

# EM-700

Thank you for purchasing TOA's Boundary Microphone.  
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.

### CAUTION

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

- 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.
- Do not expose the unit to rain or an environment where it may be splashed by water or other liquids, as doing so may result in electric shock.
- Do not lay the connection cable where it can be walked on or tripped over, causing personal injury.

## 2. GENERAL DESCRIPTION

The EM-700 is a cardioid boundary condenser microphone suitable for installation on a lecture desk or table top in a conference room for sound pick-up and public address applications.

## 3. FEATURES

- Sound field characteristic correction in a condition being placed on a flat surface such as a desk, realizing pure, natural sound quality.
- A low cut switch that effectively eliminates noises such as vibration noise from the installation surface.
- High-quality, low-profile, and unobtrusive design

## 4. HANDLING PRECAUTIONS

- Be sure to turn off the phantom power switch on the equipment that the unit is connected to before connecting or disconnecting the unit. As doing otherwise may cause loud noise or damage to the unit or connected equipment.
- Avoid installing the unit in humid or dusty locations, in locations exposed to the direct sunlight, near the heaters, or in locations generating sooty smoke or steam as doing otherwise may result in unit failure.
- Take care not to drop the unit onto the floor nor bump it against a hard object as the unit could fail.
- Avoid using a mobile telephone near the microphone in use. Noise could be picked up.
- To clean, be sure to first disconnect the connection cable, then wipe with a dry cloth. When the unit gets very dirty, use a cloth damped in a neutral cleanser. Never use benzene, thinner, alcohol, or chemically-treated cleaning cloth because such volatile liquids could deform or discolor the unit.

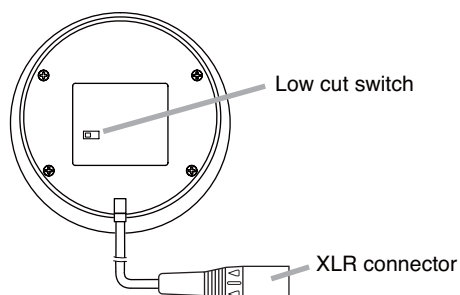
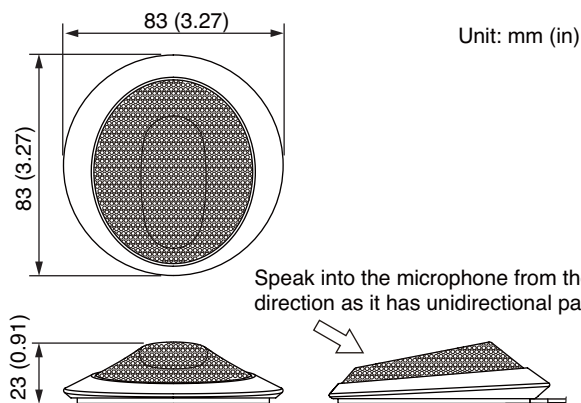
## 5. SPECIFICATIONS

Element	Electret condenser
Polar Pattern	Cardioid
Rated Impedance	120 Ω, balanced
Rated Sensitivity	-33 dB (0 dB = 1 V/Pa, 1 kHz)
Frequency Response	35 Hz – 20 kHz
Low Cut Filter	100 Hz, -12 dB/oct.
Phantom Power	9 – 52 V DC
Output Connector	XLR-3-12 or equivalent
Cable Length	7.5 m (24.61 ft)
Finish	Body: Die-cast aluminum, black, mat, paint Punched net: Surface treated steel sheet, black, mat, paint
Weight	290 g (0.64 lb)

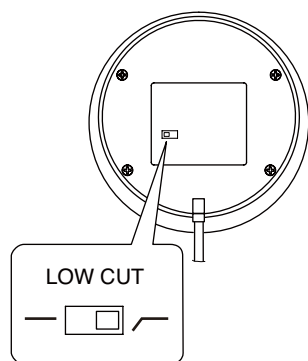
**Note:** The design and specifications are subject to change without notice for improvement.



## 6. APPEARANCE



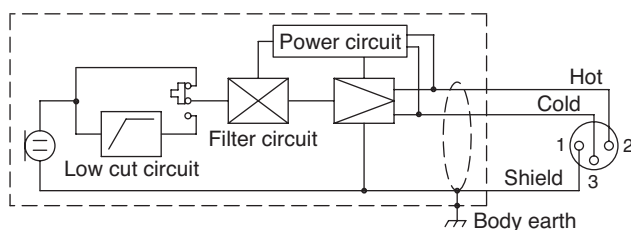
## 7. LOW CUT SWITCH



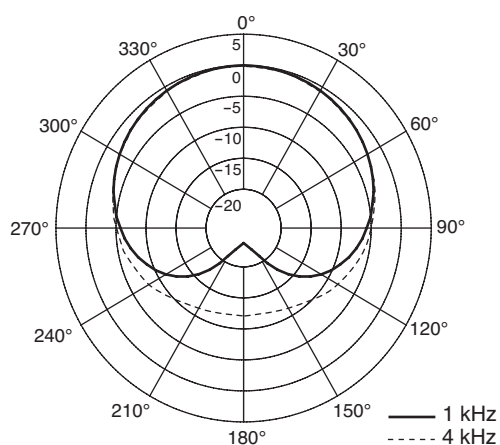
### Low cut switch

To cut the vibration noise coming from the installation surface or background noise (e.g. air conditioner), shift the low cut switch located on the unit's back side to "⌞" position.

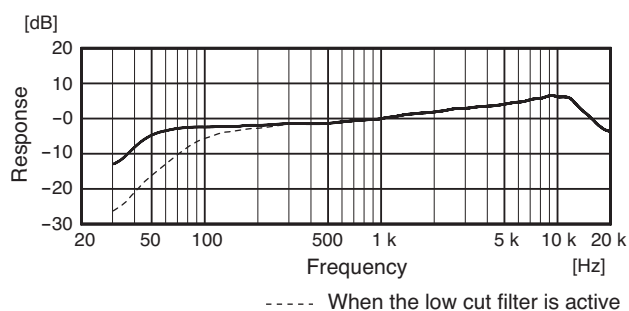
## 8. CIRCUIT DIAGRAM



## 9. DIRECTIVITY CHARACTERISTICS



## 10. FREQUENCY RESPONSE



### 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