EM-700 Boundary Microphone



DESCRIPTION

The TOA EM-700 features an unobtrusive, low-profile design that has been optimized to deliver optimal performance when used on a desk-top surface. A low-cut filter switch is included to prevent low-frequency ambient noise surrounding the desk from being picked up. It is ideal for speech and recording applications, such as at meetings, lectures, and religious services. The EM-700's electret condenser microphone element has a cardioid pickup pattern with a high degree of sensitivity, as well as off-axis undesirable sound rejection that minimizes potential feedback. High-frequency response is excellent, for clear audio output even when broadcasting through a PA system.

FEATURES

- Ideal for speech and recording applications at meetings, lectures, and religious services.
- Electret condenser microphone element with cardioid pattern for focused pickup.
- Design, optimized to deliver best performance when used on a desk.
- Slim, stylish design suits interior decor.
- · Rejection of undesirable off-axis sound minimizes possible feedback.
- Low-cut filter switch prevents interference from ambient noise from being picked up.
- Wide frequency range of 35 20 kHz provides well-balanced sound with clarity and a satisfying tonal response.
- · Phantom power range of 9 to 52 volts enhances operational versatility.

APPEARANCE AND DIMENSIONAL DIAGRAM





SPECIFICATIONS

Element	Electret condenser
Polar Pattern	Cardioid
Rated Impedance	120 Ω , balanced
Rated Sensitivity	-33 dB (1k Hz 0 dB = 1 V/Pa)
Phantom Power	9 – 52 V DC
Frequency Response	35 Hz – 20k Hz
Low Cut	100 Hz, - 12 dB/oct
Output Connector	XLR-3-12 equivalent
Cable Length	7.5m (24.61 ft)
Operating Temperature	0°C to +40°C (32°F to 104°F)
Finish	Body: Die-cast aluminum, black, mat finish, paint Punched net: Surface-treated steel plate, black, mat finish, paint
Dimensions	83 (W) \times 23 (H) \times 83 (D)mm (3.27" \times 0.91" \times 3.27") (cord excluded)
Weight	290g (0.64 lb)

CHARACTERISTIC DIAGRAMS

Frequency Response (1W/1m)



Polar Response

ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

The low-profile boundary microphone shall be designed to be placed on a flat surface for sound pick-up applications, and have an electret condenser microphone element with a cardioid polar pattern that rejects off-axis sound, for focused pickup. Frequency response shall be 35 Hz to 20 kHz. Rated impedance shall be 120 Ω , balanced, and rated sensitivity shall be -33 dB (1 kHz 0 dB=1 V/Pa). A low cut filter switch (100 Hz, -12 dB/oct) shall minimize ambient noise interference. The microphone shall be powered by any phantom power source supplying 9 – 52 volts.

The output connector shall be XLR-3-12 equivalent, and cable length shall be 7.5 m (24.61 ft). Operating temperature shall be 0° C to +40° C (32° F to 104° F). Body finish shall be die-cast aluminum, and punched net surface-treated shall be steel plate, both with black matte-finish paint. Dimensions shall be 83 (W) \times 23 (H) \times 83(D) mm (3.27" \times 0.91" \times 3.27") (excluding cord), and weight shall be 290 g (0.64 lb). The microphone shall provide pure, natural sound quality, and be ideally suitable for installation on a lecture desk or meeting room table-top.

The boundary microphone shall be TOA model EM-700.

