Dimension Drawings



IMB30 & IMBL30

30kHz Boundary Microphones User & Installation Guide

Frequency Response & Polar Response

The frequency response is measured with the microphone installed flush in a 3' by 3' rigid surface with incident sound waves hitting the boundary at a 45 degree angle. It is to be noted that the microphone's low frequency roll off can be affected by the surface area of the boundary. The frequency at which the boundary's area starts to influence the low end roll off can be calculated by F=750/A, where A is the area of the boundary.



True Semisphere[™] Polar Response



Specifications

Frequency Response: 60Hz-30kHz ±2dB @ 45° incidence Integrated Low Cut Filter: -15dB at 60Hz Polar Pattern: True Semisphere™ Sensitivity: 60mV/Pa @ 1kHz Power Requirements: 24-48V Phantom, 10mA Max Acoustic Input: 136dB SPL Noise: 20dB SPL (A weighted)

Output: XLR-3 (pin 2+) Min Output Load: 1K between pins 2 & 3 IMBL Light Ring Connector: Phoenix or RJ45 IMBL Light Ring Voltage: 8-28VDC @ 85-170mA IMBL Light Ring Activation: Momentary Digital Pulse Microphone Color: Black, White or Stainless Steel Weight: 0.28 lbs (125g)





IMB30 & IMBL30 Boundary Microphones

Thank you for selecting one of the Earthworks[®] IMB30 / IMBL30 boundary condenser microphone. Please take some time to read carefully through this document before installing the microphone.

Key Features

- •Low profile, aesthetic design
- More gain before feedback
- •RF resistance filtering
- •Wide frequency range and smooth frequency response
- •Near-perfect polar response at 0°, 45° and 90°
- •Available with LumiComm * programmable bi-color, touch sensitive LED Touch Ring

Applications

The IMB30 and IMBL30 boundary microphones are to be installed on a stiff surface such as a table, a ceiling, or a wall.

Primary applications include teleconferencing, distance learning, surveillance, board-rooms, government facilities, and ambient room miking

Model Variations

The IMB30 is available is available in omnidirectional polar pattern, with or without a Lumi-Comm[™] LED Touch Ring, with a black, white, or stainless steel finish.

Installation

The IMB30 and IMBL30 boundary microphones are to be installed on a stiff surface such as a table, a ceiling, or a wall. The mounting hole is \emptyset 1 1/16" (27 mm).

The rubber vibration damper ring provides mechanical isolation from the mounting surface and therefore offer effective sound isolation of the microphone. Do not overtighten the washer, as this reduces shock isolation.



IMB30 Connection

The IMB30 boundary microphone is equipped with a male XLR-3 connector. For operation it requires a 24-48V Phantom Supply.

IMBL30 Connection

The IMBL30 boundary microphone is equipped with a male XLR-3 connector. For operation it requires a 24-48V Phantom Supply.

The LumiComm[™] LED Touch Ring found in the IMBL30 microphone is touch sensitive and can be used to turn the microphone either on or off, or any other programmed function, by touching the light ring. The IMBL system interface board will allow the touch ring to be programmed by standard system interfaces or logic control systems. The IMBL system interface board is powered from an external power source of 8 to 28VDC @ 85-170 mA (current is dependent upon number of LEDs illuminated at one time) via a Phoenix or RJ45 connector mounted on the microphone's external PCB. The touch ring will emit a momentary digital pulse from its external PCB connector to activate external systems or equipment.



Logic Connection

Always check your power supply polarity before connecting your supply to the LumiComm[™].

The 10K resistor is not needed if using a Crestron, Biamp or ClearOne controller, as these controllers are already equipped with pull up resistors. If using a controller that does not have a pull up digital input, then a 10K resistor may be needed externally.

The LED pins need to be connected to Digital outputs (contact closure or open collector) that can sink at least 85 mA each.



