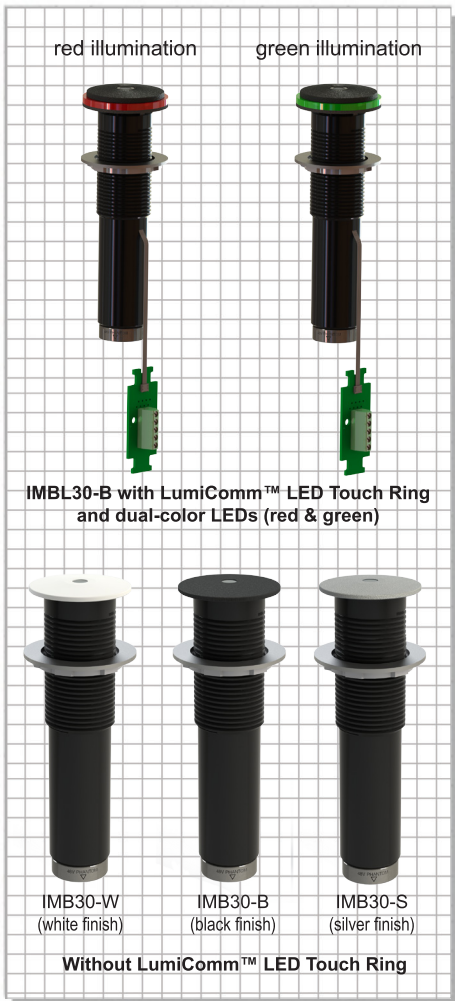


IMB & IMBL High Definition Boundary Microphones™

For Boardrooms, Teleconferencing & Government Facilities



Architectural & Engineering Specifications

30kHz Omni

The microphone shall be a back-electret condenser type with a wide-range uniform frequency response of 60Hz to 30kHz ± 2 dB at 45 degrees incidence to surface. The microphone shall be of a single capsule, single membrane design with an impulse response rise time no longer than 25 microseconds, and total settling time, including rise time, no longer than 120 microseconds. The microphone shall have polar characteristics uniform in all planes to form an omni hemisphere of revolution and shall accept sound pressure levels up to 136dB producing no more than 3%THD. IMBL models shall have a LumiComm™ dual-color touch ring with colors of red and green, which are externally powered by 8-28 VDC @ 85-170mA via a Phoenix or RJ45 connector mounted on the microphone's external pc board. The touch ring will emit a momentary digital pulse from its external pc board connector to activate external systems or equipment. The microphone shall be resistant to RF interference from cell phones and other RF devices. The microphone body threading shall use the NPT standard of 1.660 in. (42.16mm) outer diameter 0.08696 in. (2.20878mm) thread pitch. The microphone shall be terminated with a male XLR-3 connector and shall require 48V phantom power. The microphone shall be made of metal with a choice of finish. The Earthworks IMBL30 light ring model, or IMB30 non-light ring model (in black, white or silver) is specified.

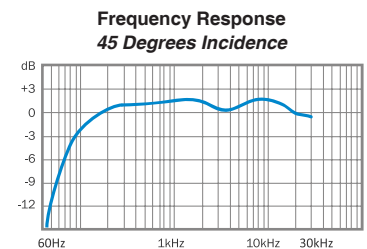
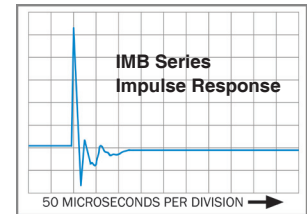
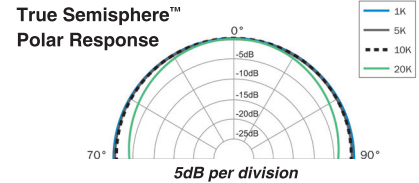
- High Definition Boundary Microphones™ for Conference Rooms and Fixed Sound Installations
- True Semisphere™ Polar Response (near-perfect frequency response at 0°, 45° & 90°)
- Very High Intelligibility
- LumiComm™ Programmable LED Touch Ring (with red and green LEDs)
- Can be Installed in Conference Tables (includes lock nut)
- 60Hz to 30kHz Frequency Response
- RF Shielding against cell phones and other RF devices
- 136dB Max Acoustic Input
- Requires 48V Phantom Power
- Available in Black, White or Silver

Earthworks IMB & IMBL Series™ Boundary Layer Microphones

The IMB & IMBL boundary microphones provide a low profile, pristine sounding microphone solution for permanent sound installations. The extended high frequency response to 30kHz and True Semisphere™ polar response allow those speaking to maintain the same intelligibility at the front and sides of the microphone without a loss of high frequencies. In addition, the extremely fast diaphragm settling time allows more subtle details of the human voice to be reproduced, which adds to the amazing clarity and intelligibility of these microphones. A prominent feature of the IMBL microphones is the LumiComm™ LED Touch Ring (with dual color LEDs in red & green) that is touch sensitive and can be used to turn the microphone either on or off, or any other programmed function, simply 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). The IMB and IMBL Boundary High Definition Microphones™ will provide exceptional sound quality, with very high intelligibility at virtually all angles and distances.

High Definition Boundary Microphones™ for Fixed Installations

The Earthworks IMB & IMBL Series™ High Definition Boundary Microphones™ are the perfect choice for high quality sound system installations. The extended high frequency response,



fast diaphragm settling time and near-perfect polar response all work together to provide the highest performance boundary microphones. The IMB & IMBL Series™ provides you with the perfect low profile solution for conference rooms and a variety of sound installations, while providing the ultimate in sound quality.

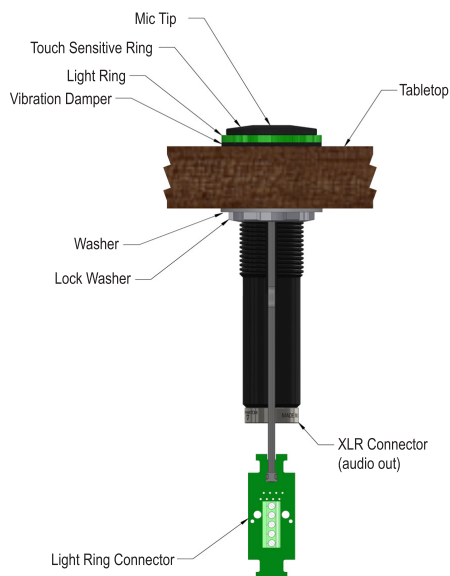
Near-Perfect Polar Response

David Blackmer, founder of dbx® and Earthworks® invented a number of new microphone technologies resulting in a totally new approach to microphone design. One such technology was the creation of near-perfect polar response. When you look at the polar response of an Earthworks microphone, the mid-frequencies, high-frequencies and low-frequencies all look very close to a "textbook" perfect polar pattern. In practice this means the polar response of an Earthworks microphone is extremely uniform over its operating frequency range; the frequency response at 90° and 180° off-axis is very close to the on-axis response. This uniform polar response results in less phase problems and much higher intelligibility at the sides of the microphone.

Installation

IMB & IMBL boundary mics are to be installed on a stiff surface such as a table, a ceiling, or a wall. The mounting hole is \varnothing 1 1/16" (27 mm). The frequency response in this document is measured with the microphone installed flush in a 3' x 3' (.9m x .9m) 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.



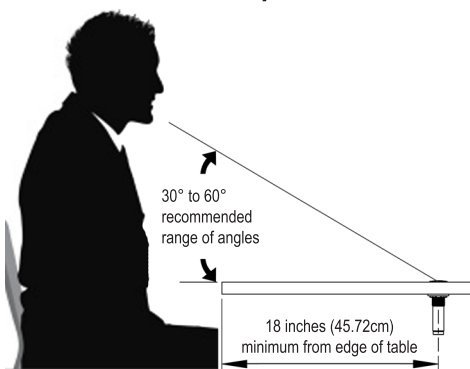


IMB (black, white or silver)

IMBL dual red & green LEDs
(black, white or silver)



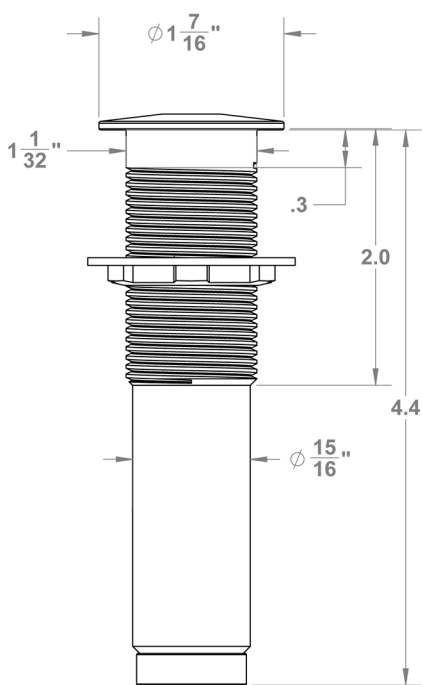
Recommended Microphone Placement



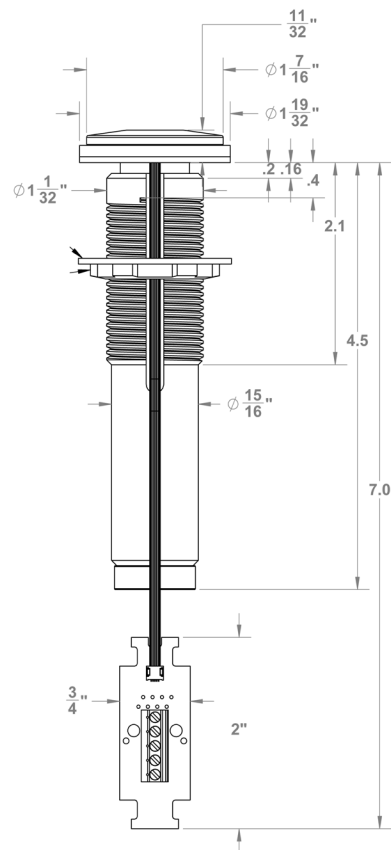
Installation

- Mounting hole: $\varnothing 1 \frac{1}{16}$ " (27 mm)
- Install in a hard surface, such as a table, ceiling or wall.
- Vibration damper provides isolation from mounting surface.
- Do not overtighten washer, as this reduces shock isolation.

IMB Dimensions



IMBL Dimensions



IMB SERIES SPECIFICATIONS

Frequency Response:	60Hz to 30kHz ± 2 dB at 45 degrees incidence to the surface
Integrated Low Cut Filter:	-15dB at 60Hz
Polar Pattern:	True Semisphere™
Sensitivity:	70 mV/Pa @ 1kHz
Power requirements:	48V Phantom, 10mA
Max Acoustic Input:	136dB SPL
Output:	XLR-3 (pin 2+)
Min. Output Load:	1K between pins 2 & 3
Noise:	19.5dB SPL (A weighted)
IMBL Light Ring LED Colors	Dual Red or Green
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 Silver
Weight:	0.28 lbs. (125g)