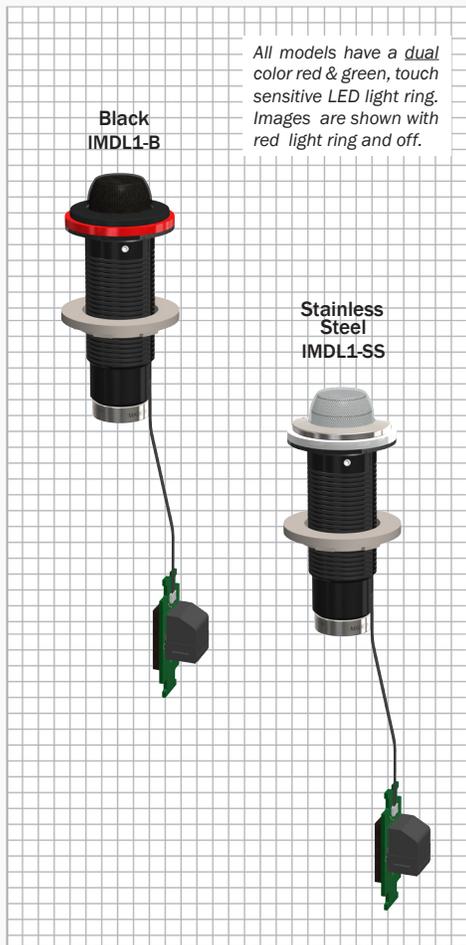


IMDL1 - Directional Boundary Microphone

For Conference Tables, Conference Rooms and Other Applications



All models have a dual color red & green, touch sensitive LED light ring. Images are shown with red light ring and off.

Architectural & Engineering Specifications

30kHz Cardioid Directional Boundary

The microphone shall be a back-electret condenser type with a wide-range uniform frequency response of 20Hz to 30kHz and shall have an output level of 10mV/Pa. 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 of no longer than 120 microseconds. It shall have polar characteristics uniform in all planes to form a cardioid of revolution and shall accept sound pressure levels up to 145dB producing no more than 3%THD. It shall have a LumiComm™ dual-color LED 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 utilize a contact closure output on its external PC board connector to activate external systems or equipment. The microphone body threading shall use the NPT standard of 1.660 in. (42.16mm) outer diameter and 0.08696 in. (2.20878mm) thread pitch. Full product dimensions are on back of this sheet. The microphone shall be terminated with a XLR-3M connector and shall require 24-48V phantom power @ .10mA. The microphone shall be made of metal with a choice of finish. The Earthworks IMDL1-B or IMDL1-SS is specified.

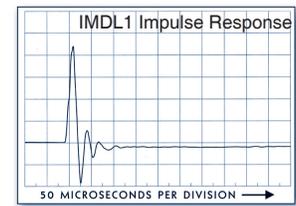
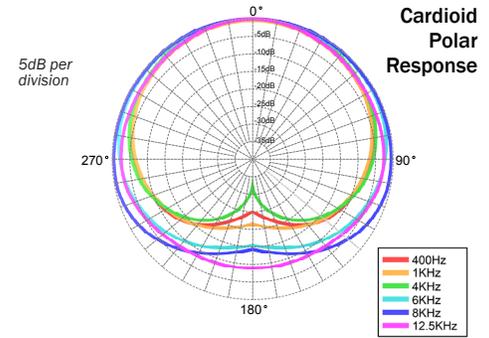
- **High Definition Microphone™ for greater intelligibility**
- **More Gain Before Feedback**
- **High Rejection of Sounds from the Rear of the Microphone**
- **RF Shielding against cell phones and other RF devices**
- **LumiComm™ LED Touch Ring (dual colors of red and green) with separate touch sensor from LED light ring**
- **Near-perfect Polar Response (uniform frequency response at 0°, 45° & 70°)**
- **20Hz to 30kHz Frequency Response @ 45° Incidence to the Surface**
- **Max Acoustic Input 145dB SPL**
- **Requires 24 - 48V Phantom Power**
- **Available in Black or Stainless Steel Finish**

Earthworks IMDL Series™ Microphones

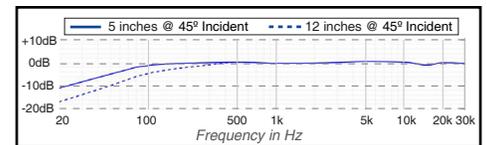
The IMDL1 is a low profile, pristine sounding solution directional microphone solution for permanent sound installations. Its uniform extended frequency response and near-perfect polar pattern allow participants to maintain the same high intelligibility at the front or sides of the microphone without loss of high frequencies, while obtaining significantly more gain before feedback. Its excellent impulse response allows the diaphragm to settle substantially faster than other microphones allowing this microphone to accurately reproduce very low level sounds, resulting in much greater intelligibility. In addition the IMDL1 has nearly three times the rear rejection of conventional directional boundary microphones which virtually eliminates pick-up of sounds from the opposite side of the table. The LumiComm™ dual color LED Touch Ring requires an external power source of 8 - 28VDC @ 85-170 mA (current is dependent upon number of LEDs illuminated at one time). The IMDL1 High Definition Microphone™ with a 20Hz to 30kHz frequency response provides exceptional sound quality, high rejection of sounds at the rear of the microphone and more gain before feedback.

Near-Perfect Polar Response

Earthworks has a number of proprietary technologies resulting in a totally new approach to microphone design. One such technology is near-perfect polar response. Conventional microphones suffer severe high frequency losses at the sides of the microphone (typically as much as -15dB or -20dB),



Frequency response is identical from 30° to 60° incident



Frequency Response of Directional Boundary (typical)

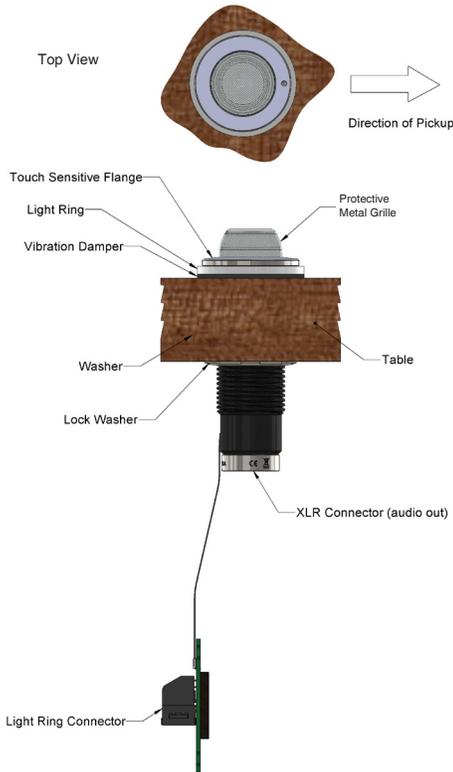
In contrast the polar response of an Earthworks microphone out to 70° off-axis is remarkably uniform over the microphone's entire operating frequency range resulting in much higher intelligibility at the sides of the microphone.

High Definition Microphones™ for Fixed Sound Installations

Earthworks IMDL1 High Definition Microphone™ has a dual color LED light ring with touch sensor to activate external systems or equipment and is the ideal choice for high quality sound system installations. Its near perfect polar response will not beam or spotlight while providing exceptional intelligibility. The frequency response at 45° is within 2dB and at 70° within 5dB of the on-axis response (over its entire operation frequency range). This exceptional polar response allows the use of fewer microphones while providing more gain before feedback. The IMDL1 provides the ultimate in sound quality for conference tables or other flat surfaces where high quality directional boundary microphones are the preferred solution.

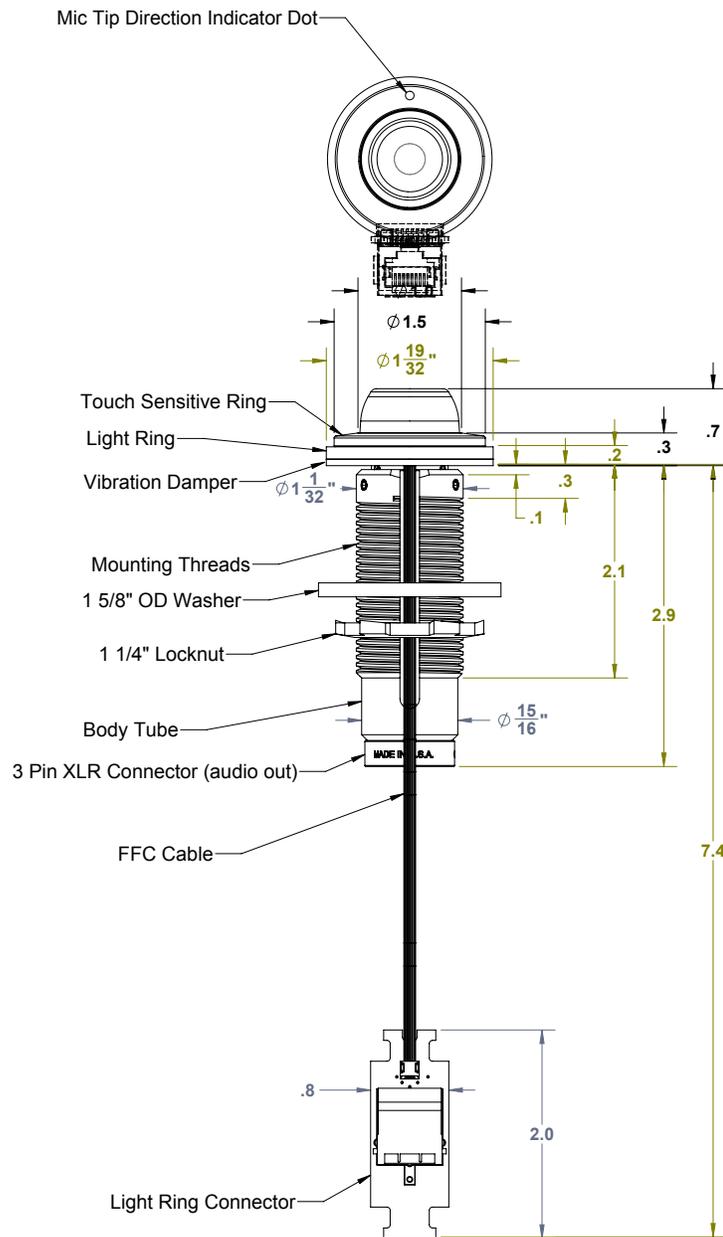
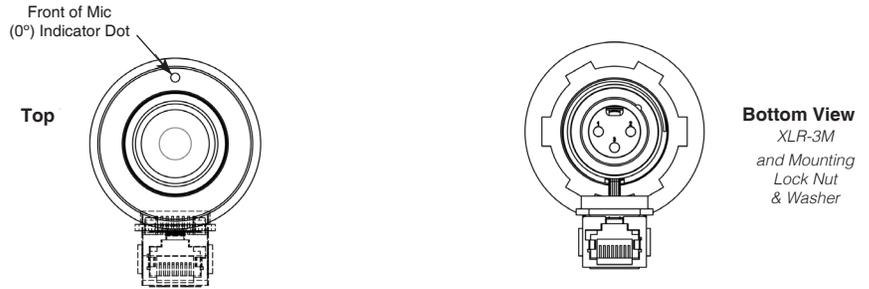


Dimensions & Specifications



The touch sensor utilizes a contact closure output on the external pc board to activate external control systems or equipment.

Special Order Options include custom mic colors, and other LED light ring colors.



IMDL1
30kHz Cardioid
Directional Boundary Microphone
SPECIFICATIONS

Frequency Response: 20Hz to 30kHz ± 2 dB @ 1 ft. (30cm)
at 45° incidence to the surface

Polar Pattern: Cardioid

Sensitivity: 10mV/Pa (-40dBV/Pa)

Power requirements: 24 - 48V Phantom, 10mA

Max Acoustic Input: 145dB SPL

Output Connector: XLR-3M (pin 2+)

Output Impedance: 65 Ω balanced

Min. Output Load: 600 Ω between pins 2 & 3

Noise: 20dB SPL equivalent (A weighted)

Light Ring Connector: Phoenix or RJ45

Light Ring Voltage: 8 - 28VDC @ 85-170mA

Touch Sensor Output: Contact Closure

Microphone Color: Stainless Steel or Black

Weight: 0.36 lbs. (162g)

WARRANTY Earthworks products carry a limited warranty.
Visit earthworksaudio.com/warranty for more information.



Going Green

Product manual available at earthworksaudio.com