

## Notable Quotes:

"I am deeply impressed with the OM1...that a \$400 mic could beat out the Neumanns (valued at \$5,400) in a blind test and that this microphone, given its price, is accessible to every studio and artist makes it a unique opportunity."

(W. Ackerman, Imaginary Road Studios)

"I had a chance to use them stuffed in a piano, under the bridge of an acoustic bass and as chorus mics. The results were stunning."

(J. Donahue, WGBH, Boston)

"Maybe the best mic I have heard up close to the sound hole of an acoustic guitar. Virtually none of that muddy gunk that you usually get from a mic that suffers from it's proximity effect. For 4-500...who knew?"

( , MusiCanvas Studios)

"For many applications they sound better than my trusty KM-84s."

(E. Kilburn, Wellspring Sound)

"We have compared a pair of TC30Ks with B&K 4006s and on more than one occasion we have preferred yours for the extra clarity."

(D. Pickett PhD, IU School of Music)

"I'd recommend the OM1 highly for any personal or project studio. It's unbeatable at \$399. Earthworks gets a solid A+ for execution, price and presentation ....Congratulations to Earthworks for a great microphone."

(Kevin Becka, April 96 Recording Magazine review)

"For percussion (claves, cowbells, snare, kit overheads and triangle) both the OM1 and the TC30K delivered absolutely explosive performance, with stunning realism and tight, punchy attacks."

(George. Peterson, July 96 Mix Magazine review.)

"Besides being highly accurate microphones, at \$800 a pair the OM1 is an unqualified bargain. (Harry Munz, Munz Labs, NYC)

"To put it as an understatement: this is the mic I dream about-I love it!"

(Santa Sue, Supersymmetry, Singapore)

Others have mentioned that their Earthworks mics are noteworthy for recording live jazz ensemble, rehearsals and gigs, percussion, pedal steel, voice (some), Leslies, Kick drum, Standup Bass, ambient miking, Nature (Babbling brooks, rain, thunder and etc.) and Top Fuel Dragsters (no joke). According to many, many sources, Earthworks mics are "awesome" for drum overheads, "refreshing" for guitar amps, and "perfect for piano."

## Policies

Earthworks 33 day money back guarantee. We don't want dissatisfied customers. If you buy a mic from us and you don't love it, call, we'll give you an RA#, send it back to us and we will refund your credit card or check. All you risk is the freight. If you buy it from a dealer, return must be through that dealer.

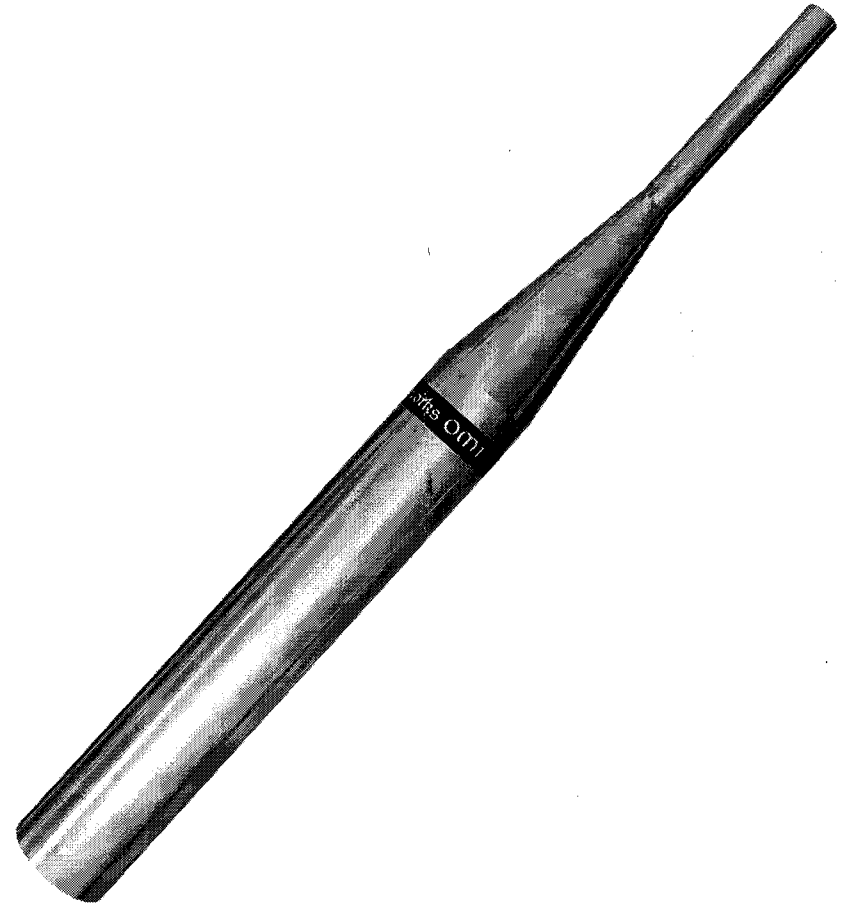
Our microphones are guaranteed for two (2), that's "two", years from date of purchase or shipment. We will cover parts and labor unless the mic is damaged by abuse. We may choose, at our discretion, to replace a defective unit rather than repair it. We will pay return freight. You just cover freight to us.

*You must enjoy your Earthworks mics. Nothing less will do!*

# Earthworks

## OM1

### Precision Omnidirectional Microphone



OWNER'S MANUAL

**Earthworks, Inc.**

PO Box 517, Wilton NH 03086

Shipping 37 Wilton Rd, Milford, NH 03055

**CE Approved**

Ph 603-654-MICS (6427)

Fax 603-654-6427

earthwks@jlc.net

## DESCRIPTION

The OM1 is one of the most accurate microphones available. It utilizes a very small, very accurate omni directional capsule, a carefully crafted stainless steel body and innovative circuitry to deliver time coherent response from 9Hz to 30KHz. This extended frequency response is essential to capturing sonic events accurately. Although we humans can only hear from 20Hz to 20K as tones, the subsonic and supersonic frequencies are very much a part of the experience of a live sound. The body slam from a kick drum, for example, shows the importance of low frequencies. The higher frequencies allow us to locate a sound spatially and significantly contribute to the perceived clarity and realism of the sound. In terms of the standard audio range the OM1 are typically within  $\pm 1$ db from 20Hz to 20K

## OPERATION

Operating the OM1 is extremely simple. Using a good quality standard XLR mic cable connect the OM1 to a microphone preamp which provides 48 volt phantom power with atleast 10mA of current available. The OM1 will not operate with phantom power supplied by direct coupled transformer inputs. We prefer capacitively decoupled active electronic inputs. If you wish to use the OM1 with this style of input, please use a basic active electronic preamp or a capacitively decoupled phantom power unit in front of the the suspect transformer input or perhaps choose our model TC30K. Please allow a moment for the OM1 to settle before assigning the output to any speakers or headphones.

The OM1's transient response is faster than most peak metering systems. So, be cautious when recording digitally, especially when close miking percussive sources. If you encounter overload problems try recording a little less hot.

Please resist the temptation to touch the tip of the mic. The screen at the tip must remain clean. Any clogging of the screen will adversely affect sound quality. For some reason one of the first things people do when they handle the OM1 is to touch the tip! We have a team of trained psychologists working on this problem.

## APPLICATIONS

When using omni directional mics, you must consider different techniques than those used for directional microphones. We recommend that you *start out closer to the source*. You can place the OM1 as close to the sound source as you wish, it does not exhibit the bass proximity effect inherent in directional mics. Remember, the OM1 has plenty of headroom. The further the mic is from the source, the more room sound it will pick up. If the room sound is undesirable stay close to the source. Simply adjust the mic position until the desired balance is achieved.

Users have mentioned listening around the room for a sweet spot, then putting a mic *there*. The OM1 accurately represents what happenings at that location, warts and all. Others have reported exceptional results with crossed, X/Y and near coincident pairs for close or near miking acoustic instruments, guitar in particular. Quite a few have mentioned spending much less time tweaking mic positions with our mics.

In order to avoid pick up of unwanted sounds, we recommend the use of acoustic baffles, isolation booths and application of the inverse square law, meaning that when separation is desired an omni should be placed as close as possible to a primary source with as much separation as possible from unwanted sources.

If you should experience any problems with noise, try moving closer to the source to increase the sound pressure level (SPL). If this is not effective use a quieter mic.

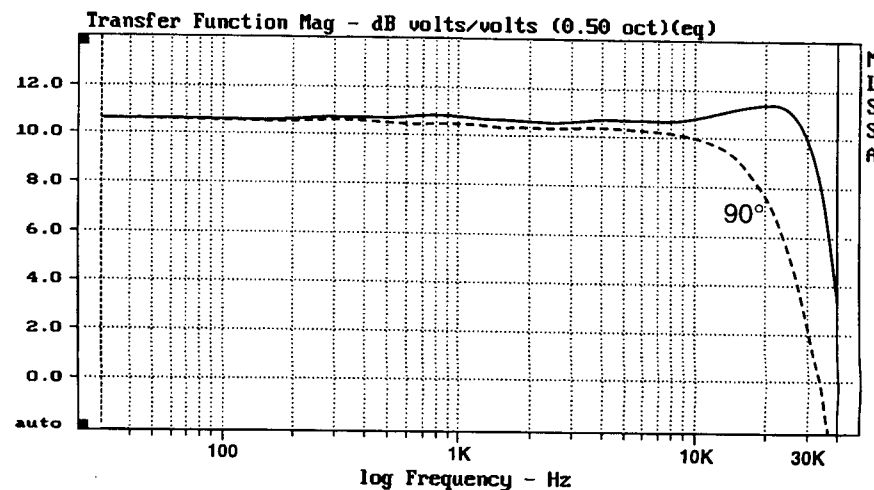
For close up vocal applications, a pop screen is recommended. Try an OM1 right next to your vocal mic of choice, where conditions allow. To moderate the incredible detail of the OM1 try going 90° off axis and singing *across* the element— the sound is very smooth, but less revealing. For outdoor use you may need a windscreen. The size and type sold for lav and headset mics will often suffice. Please feel free to try the OM1 for wild and unusual applications but do not stir your drink with it!...and, oh yes—

*Enjoy!*

## SPECIFICATIONS

Dimensions (L x D):	229mm x 22mm (9 x .860 inches)
Weight:	225g (.5 lb)
Power requirements:	48V Phantom, 10mA— the OM1 will not operate with a phantom supply from a direct coupled transformer input
Output	XLR intended to drive a balanced transformerless input (Pin 2 +)
Min output load:	600 ohms between pin 2 and pin 3
Peak output voltage :	1.5V into 1K ohms, 4.5V into 5K ohms
Noise:	27dB SPL equivalent (A weighted)
Max acoustic input	146dB SPL WITH 5K LOAD
Sensitivity:	8 mV/Pa (-42 dBV/Pa)
Frequency response on axis:	$\pm 1$ dB 9Hz to 12KHz Slightly rising response to 22KHz (typically +1db, max +2dB), +1/-3 dB at 30KHz
Influence of magnetic field:	80 A/M induces less than 52dB SPL equivalent

CE



Frequency response of the OM1.  
(referenced to a B&K 4007)