

Technical Support

Should you have any questions regarding your M30 microphone please contact us:

e-mail: Support@earthworksaudio.com
phone: (603) 654-2433, ext. 119
(9am – 5pm ET)

For warranty and product return/exchange information please refer to the back of the enclosed Calibration Chart.

FIFTEEN-YEAR WARRANTY

All Earthworks products (excluding accessories) carry a fifteen-year limited warranty (parts and labor). If you have any problems with your Earthworks products, please contact our warranty/repair department by email at: returns@earthworksaudio.com or by telephone at (603) 654-6427, Ext. 119.

Electronic Calibration Files

All Earthworks Measurement Microphones purchased after July 1, 2012 will have ECFs available at no charge. Simply register your new measurement microphone within 30 days of purchase on our website.

Once your Measurement microphone has been registered in our database, we will send you your ECF to the valid email address provided in your registration. If you have any questions you can email us at sales@earthworksaudio.com or reach us by phone at 603-654-6427 ext. 114.



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Made in U.S.A.
Printed in U.S.A.



M30

User's Manual

HDM HIGH DEFINITION MICROPHONES™

Description

Earthworks M30 is an omnidirectional (pressure) microphone designed and calibrated for measurement purposes. It is a pre-polarized condenser microphone directly coupled to a wideband, low output impedance preamplifier. The M30 requires a standard 48V phantom power supply. It features a linear free-field frequency response from 5Hz to 30kHz (please see the enclosed individual calibration chart), very low handling noise, uniform polar pattern, and very high SPL handling capabilities. Its unique circuitry excludes the transconductance of the input FET from the overall gain structure. This means the sensitivity remains very stable when the microphone is subjected to variations in ambient temperature. The M30 meets or exceeds ANSI Type 1 requirements.

Each microphone is delivered with its own calibration chart providing its individually measured open-circuit sensitivity and the frequency response curve. A computer file containing the frequency response data for importing directly into measurement software is available from Earthworks, Inc. upon request at an extra cost. A mounting clip and a calibrator adapter are included with the microphone.

Applications

Earthworks M30 is ideally suited for acoustical measurements including loudspeaker design and quality control, sound system setup and trouble shooting, room acoustics, or any application where an accurate free-field measurement microphone is required. Many test systems manufacturers, such as EAW Smaart™ and DEQX™, are recommending M30 microphones. The wide linear minimum-phase response and fast well-damped impulse response (Fig. 2) make

the M30 an excellent microphone for loudspeaker design, especially for time domain measurements.

The M30 is simple to operate. Connect the microphone to a microphone pre-amplifier supplying 48V phantom power using a standard XLR microphone cable. Please allow up to one minute for the microphone to settle. Plugging in the microphone "hot" (phantom power already present at the input) will not damage the microphone, and is actually preferred for faster settling. For optimum results we recommend pointing the M30 toward the sound source.

This microphone has no removable parts.

Calibration

The microphone is calibrated at the factory at 1 kHz (therefore independent of any frequency weighting). The sensitivity in mV/Pa is provided on the calibration chart. If on-site calibration is required, use the enclosed one half inch standard calibration adapter.

Specifications

Frequency response:	5Hz to 30kHz +1/-3dB
Polar Pattern:	Omnidirectional
Sensitivity:	30mV/Pa (Typical)
Power Requirements:	48V Phantom, 10mA
Peak Acoustic Input:	142dB SPL
Output:	XLR (Fig. 1)
Minimum Load:	600Ω btw. pins 2 & 3
Noise:	22dB, A equivalent
Dimensions L x D:	229x22 mm, (9x.86in.)
Weight:	225g (.5lb)

 Compliant

Specifications are subject to change without notice.

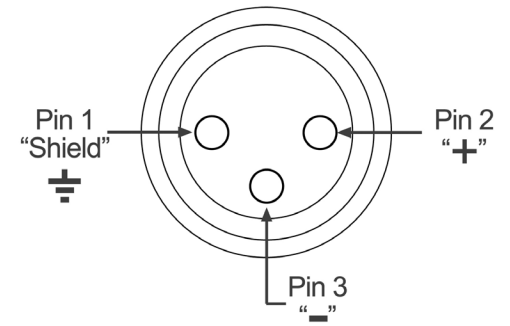


Fig 1. XLR Output Connector Assignment of M30

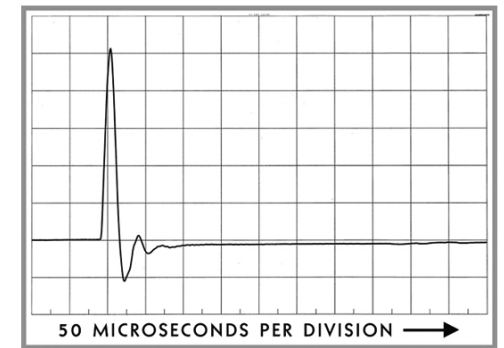


Fig 2. Impulse Response (Typical) of M30

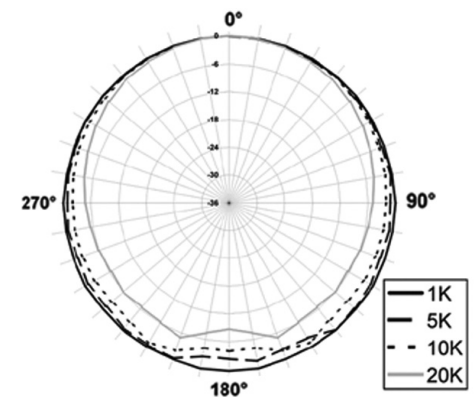


Fig 3. Polar Response (Typical) of M30