

## SPECIFICATIONS

Frequency Response:	3Hz to 23kHz ± 1/-3dB
Polar Pattern:	Omnidirectional
Sensitivity:	34mV/Pa
Power Requirements:	24 - 48V Phantom, 10mA
Max Acoustic Input:	140dB SPL
Output:	XLR-3 (pin 2+)
Min. Output Load:	600 ohms between pins 2 & 3
Noise:	20dB SPL (A weighted)
Temp. Operating Range:	-4° to 140°F (-20° to +60°C)
Dimensions L x D:	6.25 x .860 in. (165 x 22 mm)
Weight:	0.35 lb. (1.60kg)

## ELECTRONIC CALIBRATION FILES

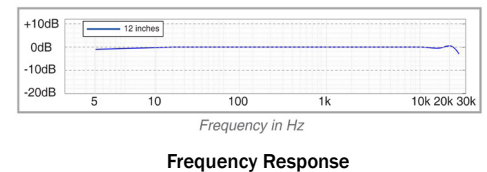
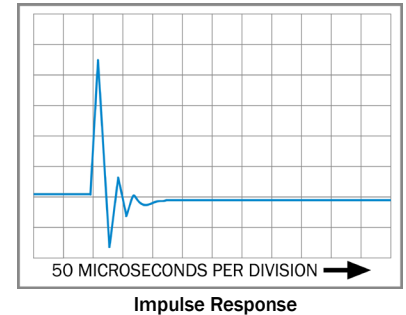
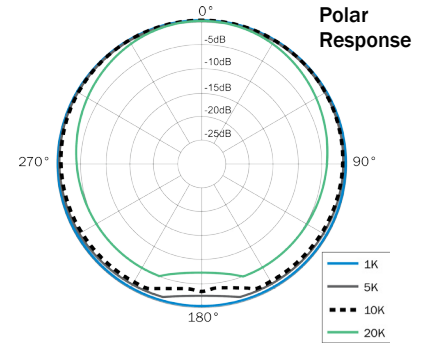
Electronic Calibration files are available for all models of Earthworks measurement microphones, so your specific microphone can be calibrated to your measurement software or system. For you to obtain your electronic calibration files (ECF), you must first register your microphone online at [earthworksaudio.com/register](http://earthworksaudio.com/register) and afterwards go to [earthworksaudio.com/ecf](http://earthworksaudio.com/ecf) to request your ECF file, which will be sent to you as an email attachment. If you have any questions, please call 603-654-2433, ext 114 or email: [sales@earthworksaudio.com](mailto:sales@earthworksaudio.com)

- Improved Version of the Measurement Microphone Manufactured for Loud Technologies SMART™ System
- Meets or Exceeds Type 1 and applicable IEC 61094 requirements
- 23kHz Free-Field Frequency Response
- 140dB SPL Max Acoustic Input
- Omnidirectional polar pattern
- Ideal for SMART™, MLSSA™, Spectrafoo™, TEF™, RTA and all “Audio Band” Measurements
- Requires 24-48V Phantom Power
- Operating Temp Range: -20 deg C to +60 deg C (-4 deg. F to 140 deg. F)
- Storage Temp Range: -40 deg C to +80 deg C (-40 deg. F to 176 deg. F)
- Humidity: Up to 90%

Earthworks M Series measurement microphones have become the accepted standard for reliable measurement and reference. They are accurate in the time and frequency domain and have exceptionally uniform polar response. They feature flat free-field frequency response, fast impulse response, and are remarkably stable with respect to temperature changes, meeting or exceeding Type 1 specifications. Our M Series measurement microphones are used and recommended by SMART™, MLSSA™, Spectrafoo™, TEF™, RTA in addition to acoustic measurement systems manufactured by dbx, Rational Acoustics, DEQX and others.

Consultants and engineers have requested a high quality, lower cost version of our popular M30. The M23 is our answer to this request. The M23 provides a frequency response from 3Hz to 23kHz, and will handle 140dB SPL. In comparison, the M30 offers a frequency response from 3Hz to 30kHz. The M23 also has a shorter body length than the M30. For those who are looking for a lower cost alternative to our popular M30, the M23 is it. The M23 is a direct replacement for the Earthworks manufactured model S30 SMART™ microphone offered by Loud Technologies, Inc.

The Earthworks line of measurement microphones (with exception to the M30BX, which is battery operated) require standard 24-48V phantom power and up to 10mA of current (which is within the industry phantom power standard). 10mA of current is re-



quired to supply our high current, bipolar Class A amplifier within the microphone that is made with all discrete components, with no capacitors in the signal path providing excellent phase response. This also allows the microphone(s) to feed long signal lines up to 300 feet (91m) and maintain the full frequency response of the microphone at the other end of the line, without any loss in high frequencies.

The M23 comes in a protective carton with a custom die-cut foam insert and its own individual calibration chart. For those who desire electronic calibration files to interface with their software, these are available at no cost. In addition, any number of microphones can be matched for a nominal fee. The M23 requires standard 24-48V phantom power for operation.

The M23 is the ideal choice for those who desire a high-quality reliable measurement microphone for room measurements and sound system setup. The M23 will provide the same excellent polar accuracy as our higher-priced measurement microphones.

