

M23R

MEASUREMENT MICROPHONE

EARTHWORKS AUDIO



Thank you for purchasing the Earthworks M23 Measurement Microphone

YOUR PURCHASE INCLUDES

1 Earthworks M23R

1 Microphone Clip

1 Calibration Adapter

1 Calibration Chart

1 Frequency Response Data Sheet (Available Upon Registering Your M23R)

GETTING STARTED

The M23R is a condenser microphone with active electronics. This means:

- Its output level will be naturally higher than many of the dynamic microphones that it may be replacing.
 It is not uncommon to need to reduce gain if you were previously using a dynamic microphone.
- You will need to engage phantom power on your interface or preamp. Pro Tip: It's always a good idea to plug in a condenser microphone while phantom power is off and the channel is muted. After engaging phantom power, give the microphone a short time to settle before unmuting.

PROPER MAINTENANCE

To guarantee your microphone provides years of performance, follow these guidelines:

 Never attempt to disassemble the microphone - it cannot be opened.



- Avoid extreme heat and condensing humidity.
 Allow the microphone to warm up when bringing it in from the cold.
- Rough handling may damage the microphone even if no markings are visible.
- · When not in use, keep the microphone in its case.

IMPORTANT NOTICES

The small tip on many of our microphones allows them to capture the highest frequencies of your sound. Please be gentle and considerate when handling the microphones with these tips. (Microphones such as the SR314 and SR40V shield the tip within their capsule, and are thus more durable.)

The M23R meets or exceeds ANSI Type 1 requirements.

The microphone's sensitivity at 1kHz is measured at the factory.

Earthworks recommends re-calibration every five (5) years.

TROUBLESHOOTING

If you encounter issues while using your Earthworks Audio microphone, please make sure that:

- Your microphone is connected to an active power supply.
- Phantom power is being supplied to the microphone.
- Your microphone and XLR cable are well connected.
- The microphone is positioned at an appropriate distance from the sound source.
- External noise in your recording environment is kept to a minimum.



 Your recording space is at room temperature and free of dust.

If your issue persists after checking, please contact us via our website.

SPECIFICATIONS

Frequency Response

3Hz to 23kHz ± 0.5dB

Polar Pattern

Omnidirectional

Sensitivity

36mV/Pa (-28.9 dBv/Pa)

Power Requirements

24-48V Phantom, 10mA

Peak Acoustic Input

140dB SPL

Output

XLR-3 (pin 2+)

Output Impedance

 600Ω , balanced between pins 2 & 3

Noise

20dB SPL (A weighted)

Temperature

Operating Range: -4° to 140° F

 $(-20^{\circ} \text{ to } +60^{\circ} \text{ C})$

Storage Temp. Range: -40° to

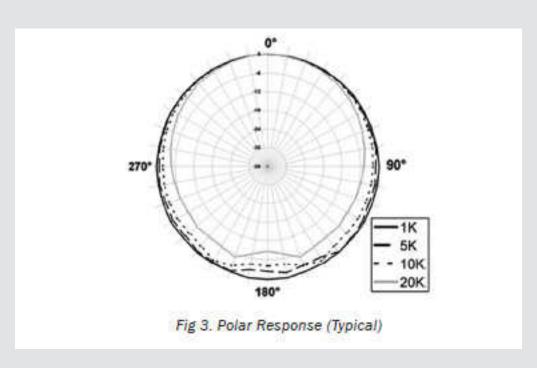
176° F (-40 to +80° C) Humidity: Up to 90%

Dimensions

6.25 x .860 in. (165 x 22 mm)

Weight

0.35lb. (1.60kg)



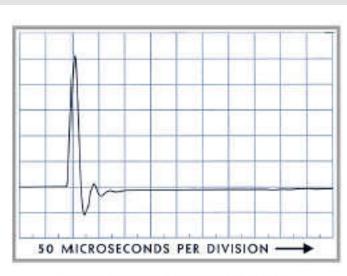


Fig 2. Impulse Response (Typical)

WARRANTY

All Earthworks® products carry a limited warranty (parts and labor). Please register your warranty at: **earthworksaudio.com/register**. If you have any problems with your Earthworks products, please contact our warranty/repair department by email at: **service@earthworksaudio.com**.

NOTE

This warranty only applies to Earthworks microphones purchased brand new. For microphones purchased/received second-hand, please contact us via our website.

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