

TC20

Omni Microphone
for Loud Sources

User's Guide



Product Registration

To help you get the most out of your Earthworks purchase, please take a moment and register your product with us online at earthworksaudio.com/register.

Service & Repair

If you have any problems with your Earthworks products, please contact our Service & Repair Department.

Email: returns@earthworksaudio.com

Telephone: (603) 654-2433, ext. 119

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MADE IN USA

earthworksaudio.com

 **Earthworks**[®]
HIGH DEFINITION MICROPHONES™

Description

The Earthworks TC20 is an omnidirectional (pressure) pre-polarized condenser microphone directly coupled to a dedicated wideband, low output impedance preamplifier. The TC20 requires a standard 24-48V phantom power supply. It features a linear free-field frequency response from 9Hz to 20kHz, fast impulse response, very low handling noise, uniform polar pattern, and very high SPL handling capabilities. It exhibits no proximity effect.

Applications

The Earthworks TC20 is easy to operate. Connect the microphone to a microphone preamplifier 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. It is normal for any phantom powered mic to “pop” when plugged in or powered up. Make sure to mute the signal to speakers or headphones when phantom power is first applied.

The TC20 is our least expensive general-purpose omni. It is a good choice for close-miking louder sources such as instrument amps, drums, or close-miked brass. It is also very popular for drum overheads. A pair of TC20s connected to a stereo recorder will provide excellent results for recording rehearsals and performances. The TC20 is great for general studio use and is an exceptional value. It has no handling noise, no proximity effect, and is very forgiving in terms of placement.

A mounting clip is included with the microphone. This microphone has no removable parts.

Care of Microphone

The Earthworks TC20 microphone is a precision instrument designed and built to provide years of excellent performance. Following these simple rules will help to protect your investment in the TC20:

- Avoid touching the front protective screen.
- Never attempt to disassemble the microphone – it cannot be opened.
- Avoid extreme heat and condensing humidity. Allow the microphone to warm up in the case when bringing it in from the cold weather.
- Rough handling may damage the microphone even if no visible marks are left.
- When not in use keep the TC20 in its case.

Specifications

Frequency response: 10Hz to 20kHz +1/-3dB

Polar Pattern: Omnidirectional

Sensitivity: 8mV/Pa (Typical)

Power Requirements: 24-48V Phantom, 10mA

Peak Acoustic Input: 150dB SPL

Output: XLR-3

Output Impedance: 65Ω, balanced between pins 2 & 3

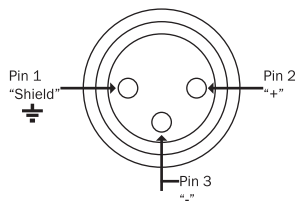
Minimum Load: 600Ω btw. pins 2 & 3

Noise: 26dB, A equivalent

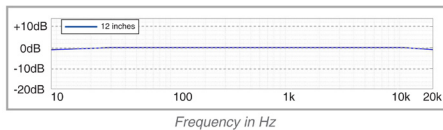
Dimensions L x D: 165 x 22 mm (6.5 x .860 in.)

Weight: 160g (.3lb)

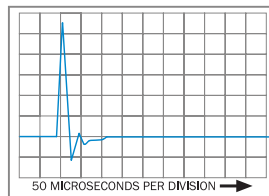
Specifications are subject to change without notice.



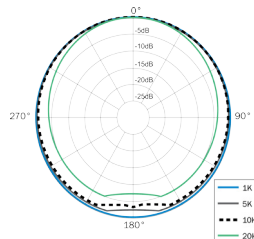
XLR Output Connector Assignment of TC20



Frequency Response of TC20 (typical)



Impulse Response of TC20 (typical)



Polar Response of TC20 (typical)