

Technical Support

Should you have any questions regarding your TC20 microphone please contact us:

e-mail: Support@EarthworksAudio.com
phone: 1-603-654-6427 (9a.m. – 5p.m. ET)

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



Earthworks, Inc.
37 Wilton Rd.
Milford, NH 03055 USA
Phone: 1-603-654-6427
Fax: 1-603-654-6107
<http://www.EarthworksAudio.com>



TC20 Omnidirectional Microphone Owner's Manual



Made in U.S.A.

Description

Earthworks TC20 is an omnidirectional (pressure) prepolarized condenser microphone directly coupled to a dedicated wideband, low output impedance preamplifier. The TC20 requires a standard 48V phantom power supply. It features a linear free-field frequency response from 10Hz to 20kHz (Fig. 2), fast impulse response (Fig. 3), very low handling noise, uniform polar pattern, and very high SPL handling capabilities. It exhibits no proximity effect.

Applications

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. The TC20 under the strings of a stand-up bass or inside a kick drum will produce amazing sound. It is 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 Microphones

Earthworks TC20 microphone is a precision instrument designed and built to provide years of top 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 ± 2 dB
Polar Pattern:	Omnidirectional (Fig. 4)
Sensitivity:	8mV/Pa (Typical)
Power Requirements:	48V Phantom, 10mA
Peak Acoustic Input:	145dB SPL
Output:	XLR (Fig. 1)
Output Impedance:	100 Ω , balanced (50 Ω ea. pin 2 & 3)
Minimum Load:	600 Ω btw. pins 2 & 3
Noise:	27dBA equivalent
Dimensions L x D	165 x 22 mm (6.5 x .860 in.)
Weight:	160g (.35lb)

 Compliant

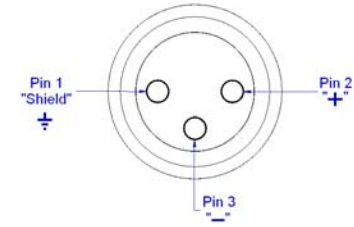


Fig. 1. XLR Output Connector Assignment of TC20

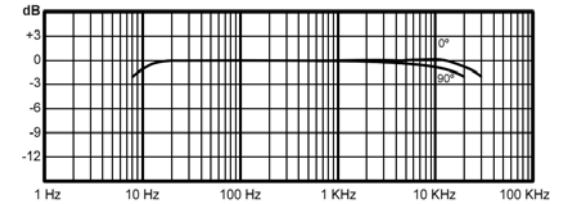


Fig. 2. Frequency Response (Typical) of TC20

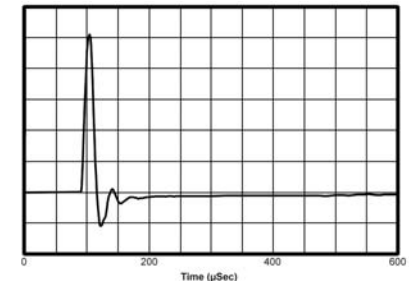


Fig. 3. Impulse Response (Typical) of TC20

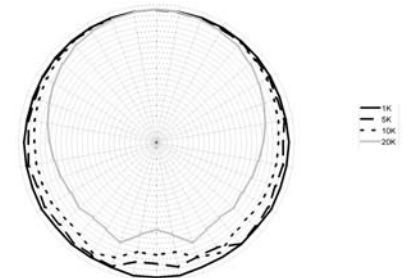


Fig. 4. Polar Response (Typical) of TC20, 1dB/div.

Specifications are subject to change without notice.