## **Technical Support**

Should you have any questions regarding your TC30 microphone please contact us:

e-mail: Support@earthworksaudio.com

phone: (603) 654-2433, ext. 19

(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. 19.



Earthworks, Inc. 37 Wilton Rd. Milford, NH 03055 USA Phone: 1-603-654-6427 Fax: 1-603-654-6107 earthworksaudio.com





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





**TC30** 

User's Manual



## Description

Earthworks TC30 is an omnidirectional (pressure) pre-polarized condenser microphone directly coupled to a dedicated wideband, low output impedance preamplifier. The TC30 requires a standard 48V phantom power supply. It features a linear free-field frequency response from 9Hz to 30kHz (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.

Each microphone is delivered with its own calibration chart providing the individually measured frequency response curve. A mounting clip is included with the microphone.

# **Applications**

Earthworks TC30 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 TC30 is an excellent general-purpose omni. It is an ideal choice for close miking louder sources like guitar, bass, piano, horns, and percussion. The TC30 is very popular for drum overheads. It is incredibly clean and distortion-free up to 150dB SPL while simultaneously capturing subtle details. Its fast, clean impulse performance yields remarkably transparent sound. The TC30 is an excellent room mic for ambiance in the studio and for

recording rehearsals and performances. It has no handling noise, no proximity effect, and is very forgiving in terms of placement.

This microphone has no removable parts.

#### Care of Microphones

Earthworks TC30 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 TC30:

- Avoid touching the front protective screen.
- Never attempt to disassemble the microphone it cannot be opened.
- Avoid extreme heat and condensing hu-midity. Allow the microphone to warm up in the case when bringing it in from the cold weather.
- Rough handling may damage the micro phone even if no visible marks are left.
- When not in use keep the TC30 in its case

# **Specifications**

Frequency response: 9Hz to 30kHz +1/-3dB Polar Pattern: Omnidirectional (Fig. 4)

Sensitivity: 8mV/Pa (Typical)

Power Requirements: 48V Phantom, 10mA

Peak Acoustic Input: 150dB SPL
Output: XLR-3 (Fig. 1)

Output Impedance:  $100\Omega$ , balanced

 $(50\Omega \text{ ea. pin } 2 \& 3)$ 

Minimum Load:  $600\Omega$  btw. pins 2 & 3

Noise: 27dBA equivalent

Dimensions L x D:  $9 \times .860$  in.

(229 x 22 mm)

Weight: .5lb (225g)

**C€** Compliant

Specifications are subject to change without notice.

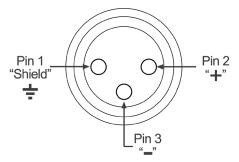


Fig 1. XLR Output Connector Assignment of TC30

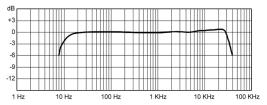


Fig 2. Frequency Response (Typical) of TC30

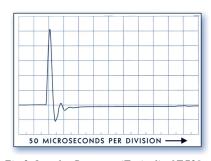


Fig 3. Impulse Response (Typical) of TC30

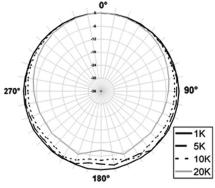


Fig 4. Polar Response (Typical) of TC30