

# TC30

Omni High Definition  
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](http://earthworksaudio.com/register).

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 **Earthworks**<sup>®</sup>  
HIGH DEFINITION MICROPHONES™

## Description

The 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 24-48V phantom power supply. It features a linear free-field frequency response from 9Hz to 30kHz, fast impulse response, 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

The Earthworks TC30 is easy to operate. Connect the microphone to a microphone preamplifier supplying 24-48V 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 microphone. 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 response 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 Microphone

The Earthworks TC30 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 TC30:

- 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 TC30 in its case.

## Specifications

Frequency response: 9Hz to 30kHz +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

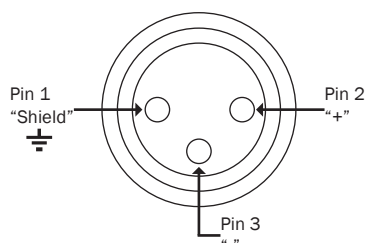
Minimum Load: 600Ω btw. pins 2 & 3

Noise: 26dB, A equivalent

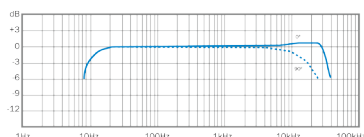
Dimensions L x D: 229 x 22 mm (9 x .860 in.)

Weight: 225g (.5lb)

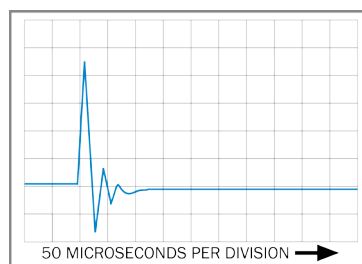
Specifications are subject to change without notice.



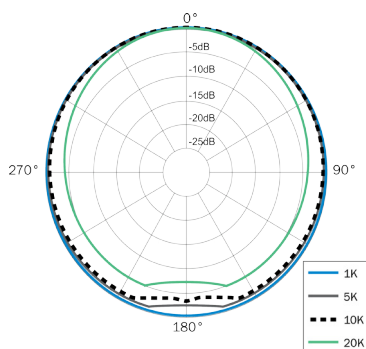
XLR Output Connector Assignment of TC30



Frequency Response of TC30 (typical)



Impulse Response of TC30 (typical)



Polar Response of TC30 (typical)