

Technical Support

Should you have any questions regarding your QTC40 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.



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**QTC40 Omnidirectional Microphone
Owner's Manual**



Made in U.S.A.

Description

Earthworks QTC40 is an omnidirectional (pressure) prepolarized condenser microphone directly coupled to a dedicated wideband, low output impedance preamplifier. The QTC40 requires a standard 48V phantom power supply. It features an extended linear free-field frequency response from 4Hz to 40kHz (Fig. 2), extremely fast impulse response (Fig. 3), low self-noise, very low handling noise, uniform polar pattern, and 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 QTC40 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 QTC40 is designed for recording quieter sources such as vocals, strings, woodwinds, and distant-miked orchestras or choirs. For classical location recording a matched pair will provide spectacular results. It is ideal for quieter, more detailed sources and does not have most of the problems and limitations generally associated with competitive microphones. Its impulse response and diaphragm settling time is

exceptional, resulting in very natural and uncolored sound.

This microphone has no removable parts.

Care of Microphones

Earthworks QTC40 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 QTC40:

- 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 QTC40 in its case

Specifications

Frequency response:	4Hz to 40kHz \pm 1dB
Polar Pattern:	Omnidirectional (Fig. 4)
Sensitivity:	30mV/Pa (Typical)
Power Requirements:	48V Phantom, 10mA
Peak Acoustic Input:	142dB 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:	22dBA equivalent
Dimensions L x D	229 x 22 mm (9 x .860 in.)
Weight:	225g (.5lb)

CE Compliant

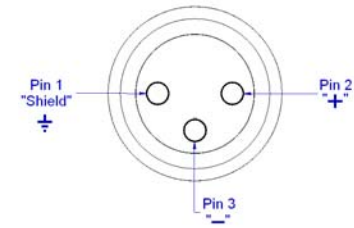


Fig. 1. XLR Output Connector Assignment of QTC40

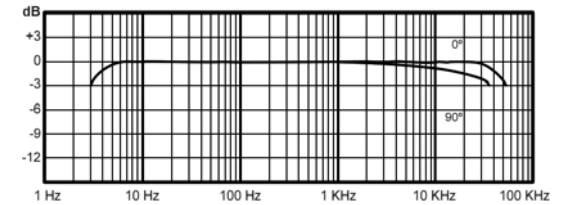


Fig. 2. Frequency Response (Typical) of QTC40

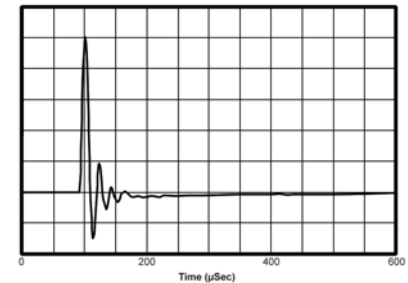


Fig. 3. Impulse Response (Typical) of QTC40

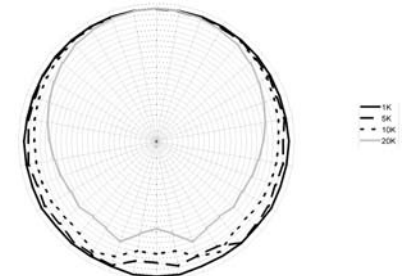


Fig. 4. Polar Response (Typical) of QTC40, 1dB/div.

Specifications are subject to change without notice.