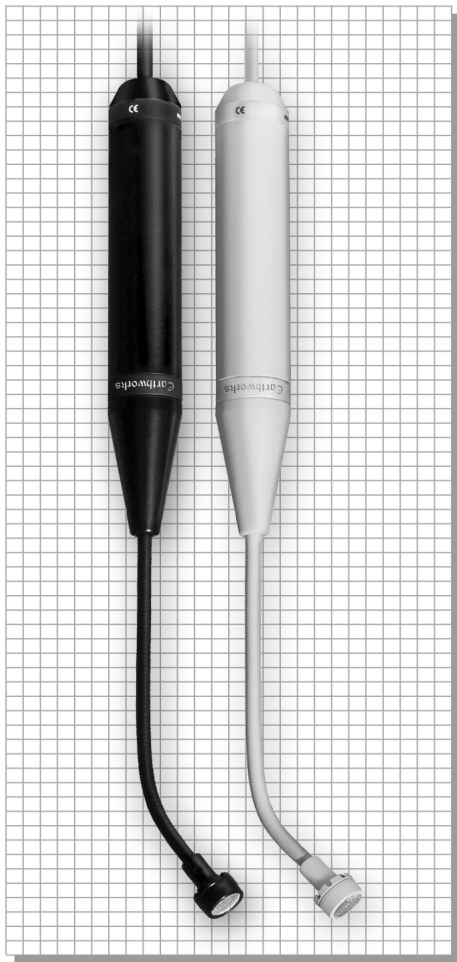


Earthworks® CHOIR MIC™ SYSTEM



Architectural & Engineering Specifications

30kHz Cardioid & Hypercardioid

The microphone shall be a back-electret condenser type with a wide-range uniform frequency response of 30 Hz to 30 kHz, ± 2 dB. The microphone shall have an output level of 10 mV/Pa. The microphone shall be of a single capsule, single membrane design. The microphone shall have an impulse response with the rise time no longer than 25 microseconds, and total settling time, including the rise time, no longer than 120 microseconds. The microphone shall have polar characteristics uniform in all planes to form a cardioid of revolution for C30/C and a hypercardioid of revolution for C30/HC. The microphone shall accept sound pressure levels up to 145 dB producing no more than 3% THD. Dimensions shall be 250mm (10 in) long by 22 mm (.860 in) diameter. The maximum head diameter shall be 14 mm (.540 in) without the windscreen, and 23 mm (.9 in) with the windscreen. The microphone shall be terminated with a 30 ft. (10m) long braid-shielded star-quad microphone cable. The microphone shall require 48 V phantom power. The microphone shall be made of metal with black or white finish. The microphone shall have its entire flexible portion encased in black or white vinyl. The Earthworks C30/C and/or C30/HC is specified.

Preliminary Information

Earthworks, Inc. • 37 Wilton Rd. • Milford, NH 03055 • Phone: (603) 654-6427 • Fax: (603) 654-6107 • EarthworksAudio.com

C30/C & C30/HC

HDM HIGH DEFINITION MICROPHONES™

- High Definition Microphone™
- Hear Detail That Other Microphones Miss
- 30Hz to 30kHz Frequency Response
- Uniform Frequency Response at 0°, 45° & 90°
- 145dB SPL Max Acoustic Input
- More Gain Before Feedback
- Exceptional Rejection of Sounds From the Rear
- Flexible 4" Neck with Small Microphone Head
- Very Easy to Position
- 30-foot High Quality Mic Cable Will Not Rotate with Time or Temperature Changes
- Available in Cardioid & Hypercardioid
- Available in Black or White

High Definition Microphones™ for Choir

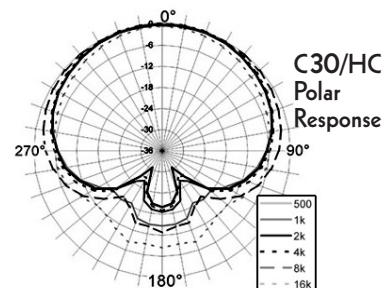
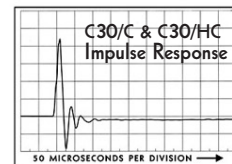
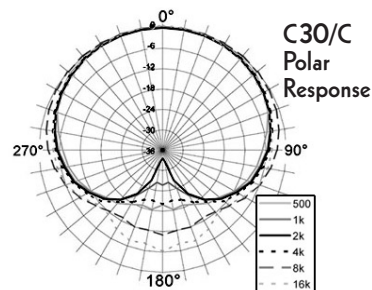
Earthworks is pleased to introduce the new ChoirMic™ series of High Definition Microphones™ with astounding audio quality designed for hanging in fixed installations. The ChoirMics™ uniquely designed small cardioid head and flexible neck allow it to be easily positioned. Their near perfect polar patterns will not beam or spotlight and will provide more gain before feedback. The frequency response at 90 degrees off-axis is within 2dB of the on-axis response. These exceptional polar patterns allow the use of fewer microphones with placement closer to the choir, obtaining even more gain before feedback. In addition, the rejection of sounds from the rear of the microphones is exceptional. This is ideal when attempting to keep sounds from an orchestra or band out of the choir microphones. If you prefer stand mounting for your choir microphones, look at the Earthworks Periscope™ Series, which are identical to the ChoirMic™ series, except they terminate with XLR connectors instead of an attached cable. The ChoirMic™ Series offers the ultimate in sound quality, flexibility and installation.

About High Definition Microphones™

During the last decade it has become commonplace for sound recording and broadcast equipment to accommodate extended frequency responses up to 100kHz. With few exceptions, even the very best of conventional professional microphones do not offer frequency responses above 20kHz. However, making a High Definition Microphone involves far more than extending the frequency response. Impulse response, diaphragm settling time and pristine electronics are also key elements. Earthworks' founder David Blackmer foresaw the need for higher quality microphones, and Earthworks has been offering High Definition microphones, with extended frequency response beyond 40kHz, since 1996. Earthworks High Definition Microphones™ have an extremely clean, natural on-axis pickup, and smooth, uncolored off-axis response with high front-to-back rejection that makes them superb for a wide range of applications including sound reinforcement, broadcast, and recording of voice and musical instruments. You will hear exceptional sound quality that is extremely accurate, detailed, open and crystal clear even on analog or digital sound systems that are limited to a 15kHz or 20kHz bandwidth. You will notice a remarkable improvement in sound quality on nearly all audio systems when using Earthworks High Definition Microphones™.

Polar Patterns

David Blackmer also invented a totally new approach to microphone design, resulting in near-perfect polar patterns. When you look at a polar pattern of an Earthworks microphone, the mid frequencies, high frequencies and low frequencies all look very close to a "textbook" polar pattern. In practice this means the



polar response of an Earthworks microphone is extremely uniform over its operating frequency range; the frequency response at 90 degrees off-axis is very close to the on-axis response. Such uniform polar response results in less phase problems on the sides of the microphone and there are fewer phase cancellations when using multiple mics placed close together. This new microphone technology also provides more rejection of unwanted sounds from the rear of the microphone and more gain before feedback in live sound applications.

The ChoirMic™ Series

ChoirMic™ High Definition Microphones™ have a 30kHz high frequency response that enables them to pick up high frequency overtones that conventional microphones miss. In addition, they have an extremely fast impulse response that allows them to pick up transients far more accurately. Their exceptionally short diaphragm settling time will enable you to hear subtle details that conventional microphones mask. The audible difference between an Earthworks High Definition Microphone and conventional microphones is as dramatic as the difference you see when comparing conventional video and high-definition video. It is most impressive; you must hear it for yourself. If you have not heard an Earthworks High Definition Microphone™ visit www.EarthworksAudio.com to request our Free High Definition Microphone™ Demo CD. You will be astounded!

Specifications

Frequency Response:	30Hz to 30kHz ± 2 dB @ 6 inches
Polar Pattern:	Cardioid or Hypercardioid
Sensitivity:	10mV/Pa (-40dBV/Pa)
Power requirements:	48V Phantom, 10mA
Max Acoustic Input:	145dB SPL
Output:	Attached 30 ft. (10m) cable with tinned leads (blue +)
Output Impedance:	100 Ω , balanced (50 Ω ea. pin 2 & 3)
Min Output Load:	600 ohms between pins 2 & 3
Noise:	22dB SPL equivalent (A weighted)
Dimensions L x D:	250 x 22 mm (9.84 x .860 in.)
Weight:	100g (0.22 lb.)

