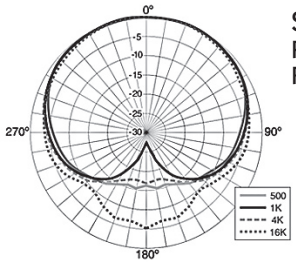
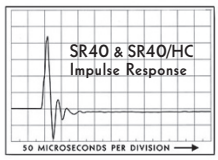
Earthworks®
HIGH DEFINITION MICROPHONES™

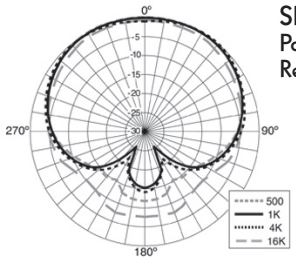
SR40 & SR40/HC Premium 40kHz Cardioid Microphones

- High Definition Microphone™
- 30Hz to 40kHz Frequency Response
- Hear Detail That Other Microphones Miss
- Superb for Vocals and Musical Instuments
- Uniform Frequency Response at 0°, 45°& 90°
- 145dB SPL Max Acoustic Input
- More Gain Before Feedback
- Low Handling Noise
- Exceptional Rejection of Sounds From the Rear
- Available in Cardioid & Hypercardioid
- Optional SRW1 Screw-on Windscreen
- Available in Black only



SR40 Polar Response





SR40/HC Polar Response

40kHz High Definition Microphone™

We are pleased to introduce the world's most exceptional cardioid High Definition Microphone™ . The Earthworks SR40 provides a frequency response of 30Hz to 40kHz. Considering that very few microphones offer a frequency response above 20kHz, audio professionals will quickly notice subtleties in the sound that are simply non-existent in microphones with less high frequency response. High frequency overtones will spring to life-enabling, for example, a vocalist or an acoustic guitarist's performance to exhibit greater depth and realism. Equally significant, the SR40 offers an extremely fast impulse response that enables the microphone to acquire fast transients far more accurately than conventional microphones. The exceptionally short diaphragm settling time allows the SR40 to reproduce subtle nuances in low level sounds that other microphones mask.

The SR40s near-perfect cardioid polar response insures that vocalists or instruments at the sides of the microphone (at 45 or 90 degrees) will have the same pristine sound quality as those at the front of the microphone. The SR40 will not beam or spotlight and will provide significantly more gain before feedback than conventional microphones.

The SR40's high SPL handling and rear rejection are also impressive. An acoustic input rating of 145dB SPL makes this microphone nearly impossible to overload. The SR40 is a first-rate performer when it comes to capturing loud sound sources like a guitar amp or a close miked trumpet or saxophone. It is also an excellent vocal microphone for those who demand only the very best. The SR40s exceptional rear rejection allows it to isolate sounds at the rear of the microphone, thus minimizing acoustic "bleed" for either recording or live performance applications. This excellent rear rejection will also provide significantly more gain before feedback in live performances.

More on Polar Response

David Blackmer, the engineering genius behind dbx® invented a number of new technologies in microphone design. One such technology provides near-perfect polar response. 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. Therefore, 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. This uniform polar response results in less phase problems on the sides of the microphone resulting in 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.

Models and Options

The SR40 comes in a black finish, requires 48-volt phantom power and is available in either cardioid (SR40) or hypercardioid (SR40/HC) models. There is also an optional SRW1 screw-on windscreen. The Earthworks SR40 and SR40/HC microphones are robust and will withstand the riggors of the road.

Overview

The exceptional 40kHz high frequency response of the SR40 allows it 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 that dramatic; you must hear it for yourself. If you have not heard an Earthworks High Definition Microphone™ visit www.EarthworksAudio.com and request our Free High Definition Microphone™ Demo CD. You will be astounded!

Specifications

Frequency Response:	30Hz to 40kHz ±2dB @ 6 inches
Polar Pattern:	Cardioid or Hypercardioid
Sensitivity:	10mV/Pa (-40dBV/Pa)
Power requirements:	48V Phantom, 10mA
Max Acoustic Input:	145dB SPL
Output:	Male XLR-3 balanced (pin 2+)
Min Output Load:	600 ohms between pins 2 & 3
Noise:	22dB SPL equivalent (A weighted)
Dimensions L x D:	9.84 x .860 in. (250 x 22 mm)
Weight:	0.5 lb. (225g)

Architectural & Engineering Specifications

40kHz Cardioid & HyperCardioid

The microphone shall be a back-electret condenser type with a wide-range uniform frequency response of 30 Hz to 40 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 SR40 and a hypercardioid of revolution for SR40/HC. The microphone shall accept sound pressure levels up to 145 dB producing no more than 3% THD. Dimensions shall be 10 in (250mm) long by .860 in (22 mm) diameter. The maximum head diameter shall be .540 in (14 mm) without the optional screw-on windscreen, and 1.7 in (43mm) with the optional windscreen. The microphone shall be terminated with an XLR-3 male connector with gold pins. The microphone shall require 48 V phantom power. The microphone shall be made of metal with black finish. The Earthworks SR40 and/or SR40/HC with/or without SRW1 optional screw-on windscreen is specified.

Preliminary Information

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