CX-111 STUDIO CONDENSER MICROPHONE

overview

The CX-111 is a true condenser microphone with classic design and excellent performance characteristics. With a rich, full-bodied sound delivered by its one-inch gold sputtered capsule, the CX-111 is a single-patterned cardioid condenser that serves a variety of applications for project studios, professional audio production, and certain live environments.

Delivering a smooth uniform frequency response from 20 Hz - 20 kHz, the CX-111 is equipped with switches for 10 dB pad and a bass roll-off. With 10 dB pad engaged, the CX-111 is capable of sound pressure levels of 145 dB, allowing the microphone to be used successfully on everything from subtle acoustic instruments in a studio to screaming guitar cabs on a concert stage.

The CX-111, which is designed with a discreet low noise preamp circuitry, operates on phantom power of 48-52 volts. Optimum results will be achieved by using the CX-111 with a high quality mic preamplifier and premium quality microphone cable.

specifications

Transducer Type	Condenser
Frequency Response	20 Hz - 20 kHz
Polar Pattern	Cardioid
Output Impedance	200 Ohms
Sensitivity	16.5 mV
	(ref 1k @ 1 Pascal)
Equivalent Noise Level	17 dB (A weighted)
Signal to Noise Ratio	77.5 dB
	(ref 1k @ 1 Pascal)
Power Requirements	48 - 52v phantom
Maximum SPL	145 dB with 10 dB pad
Dynamic Range	128.5 dB
Cable/Connector	3 pin gold plated
	male XLR connector
Polarity	Positive voltage on pin
	2 relative to pin 3 of
	output XLR connector
Housing	Brass
Weight	17 oz/482 grams

applications

- **Studio vocals, lead and backing**
- **Voice over**
- **Choir**
- **Ambient room mic**
- **Drum overheads**
- **Orchestra**
- **Bells, chimes, marimba, vibes**
- **Acoustic instruments (piano, sax, strings, guitar, flute)**
- **Electric guitar cabs**

features

- **One inch gold-sputtered diaphragm**
- **Low noise electronics**
- **10 dB pad and bass roll-off**
- **Rich warm tones - ideal for digital recording**
- **High power handling of 145 dB SPL**
- **Adjustable metal clip allows for secure positioning**
- **Excellent for vocals, piano, overheads, guitar cabs, percussion, and acoustic instruments of all types**

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CX-111 STUDIO CONDENSER MICROPHONE

Operation and Maintenance:
Condenser microphones as a general rule are much more sensitive and reactive than dynamic microphones and should be handled with care. Avoid extreme temperatures wherever possible. Moisture and high humidity can adversely effect the performance of the microphone and cause permanent damage. When not in use, please store your mic in the pouch or case provided at room temperature.

The Correct Side: Note that the front of the microphone element is on the same side of the microphone as the printing and the switches. This side of the microphone should always be facing the sound source.

The Switches: The CX-111 is equipped with 2 slider switches. They are located directly above the Audix logo on the front of the mic.

Bass Roll-Off: This feature allows you to change the frequency response of the CX-111 and gently diminish the bass response from 300 Hz and below.
The bass roll-off (also referred to as "attenuation") is the switch on the left-hand side above the Audix logo. When the switch is all the way to the right (the "Flat" position), the bass roll-off is NOT engaged.

In some cases, you will want to roll-off or filter out the bass frequencies from your recording or performance. These frequencies can be controlled by external EQ, however, the advantage of having them on the microphone is that it is much cleaner to control these frequencies at the capsule level.

In the case of live recording, the bass roll-off will help to eliminate unwanted boominess or rumble coming from other instruments on the stage (for example, the bass and bass drum). In the case of a recording environment, it will depend on the instrument or voice being recorded. The roll-off can help to eliminate plosives or popping from a vocal, or it may be utilized to clean up the excessive bass frequencies from certain instruments. In any case, it is recommended to try "with" and "without" roll-off before making any final decisions.

-10 dB Pad: The -10 dB pad allows you to change the sensitivity (output level) of the microphone right at the capsule. This is much more effective than padding the mic at the preamp stage at the console or mixing device. The net result is the ability to record very high sound pressure levels before distortion.

The -10 dB switch is located above the Audix logo and to the right. When the switch is all the way to the left, (the 0 dB position), it is NOT engaged, and the mic is at it's normal output level.

This is the optimum position. The pad should be used only if the voice or instrument is distorting ("overloading") the capsule. In this case, slide the switch to the -10 dB position, being sure to first mute the volume on the preamp or mixing console.

The CX-111, with the pad engaged, is capable of recording instruments that produce VERY high sound pressure levels. Some examples would include electric guitar cabs, bass cabs, leslie cabs, bass drum, drum overheads, timbales, and trumpet.

Live Sound and Recording: The CX-111 is an extremely versative microphone and can be used in live sound or recording for vocals, acoustic instruments, and electronic instruments.

Vocals: The microphone should be placed in front of the vocalist at a distance of 6-8 inches. The capsule of the microphone should be level with the singer's mouth and facing the singer. Some engineers prefer to hang the microphone upside down in order to eliminate reflections and refractions from the body of the microphone.

For more detailed miking applications—www.audixusa.com.

Supplied Accessories

- 2 piece adjustable metal mic clip (MC-111)
- Aluminum carrying case (CASE-CX)

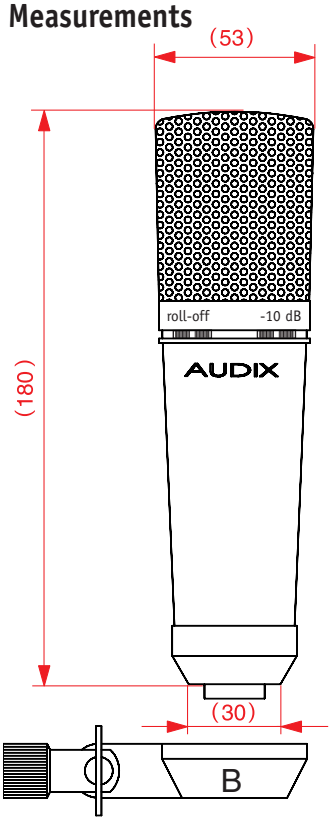
Optional Accessories

- Metal shockmount clip (SMT-111)
- Foam windscreen (WS-111)
- 2 channel phantom power supply (APS-2)

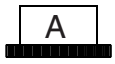
SMT-111

WS-111

Measurements

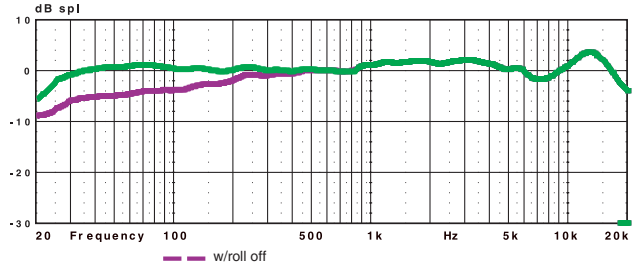


Measurement in Millimeters



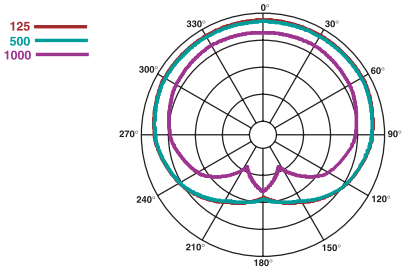
Installing The Mic Clip: Please refer to the drawing of the clip. Part #A slides over part #B and threads into the bottom of the CX-111 , leaving the XLR connector exposed so that there is still access for a mic cable.

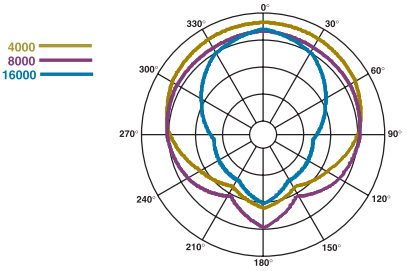
Typical Frequency Response



The frequency response curve shown (measuring tolerance at ±3dB) and polar pattern correspond to typical production run specifications for this microphone.

Polar Charts





WARNING:
The CX-111 requires 48-52 Volts of phantom power to polarize the back plate and to fully charge the element. For this reason, DO NOT PLUG OR UNPLUG THE MICROPHONE INTO OR OUT OF THE PA SYSTEM UNLESS THE VOLUME OF THE SYSTEM IS TURNED DOWN. Failure to do so may result in a loud "popping" noise sensation which could seriously damage the speakers in the PA system.

Power requirements are 48-52 volts phantom power. Most current mixing boards are equipped with phantom power, however, if phantom power is not available please use the optional Audix APS-2 power supply to interface between the microphone and the mixing board.

OUTPUT:
The CX-111 output is balanced across Pin 2 (positive) with respect to Pin 3. The shield is connected to Pin 1. It is recommended to use a high quality microphone cable with 3 pin XLR connectors.

SERVICE AND WARRANTY:
This microphone is warranted for a period of 1 year from any and all manufacturing defects. Should your microphone fail in any way, please contact the Audix Service department at 503-682-6933. A return authorization number is required before sending back any products.

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