

# ADX51

# INSTRUMENT / GROUP VOCAL CONDENSER MICROPHONE

## overview

The ADX51 is a pre-polarized condenser microphone designed to handle a wide variety of live, studio and broadcast applications. Characterized with a cardioid pickup pattern and a smooth uniform response over a frequency range of 40-20k Hz, the ADX51 is precision machined from solid brass with a low reflective black e-coat finish.

The ADX51 is designed with low noise electronic circuitry, balanced output, and switches that enable a 10 dB pad and a bass roll-off. The ADX51 is road-worthy and capable of handling high sound pressure levels of 142dB.

## specifications

Transducer Type	Condenser (pre-polarized)
Frequency Response	40 Hz - 18 kHz 150 Hz - 18 kHz (with low cut filter)
Polar Pattern	Cardioid
Output Impedance	100 Ohms balanced
Open Circuit Sensitivity	15.9 mV (ref 1k @ 1 Pascal)
Equivalent Noise Level	29 dB (A weighted)
Signal to Noise Ratio	65 dB (ref 1k @ 1 Pascal)
Power Requirements	9 - 52v phantom
Maximum SPL	132 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	Machined Brass
Weight	5 oz/143 grams

## ADX51 CONDENSER MIC



Piano



Sax



Overhead  
Drums



Guitar



Group  
Vocals

## applications

- ▶ **Overhead for Drums / Percussion**  
*Bells, cymbals, hi-hat, goodie table*
- ▶ **Acoustic instruments**  
*Guitar, piano, saxophone, orchestra (zone miking)*
- ▶ **Group vocals**  
*ADX51 may be used as a hanging mic or on a stand to pick up group vocals for ensemble, choirs or plays. Two mics may be positioned overhead or in front of the group, at a distance of 4-6 feet apart.*

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**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. For outdoor use, consider using the foam windscreen (WS-ADX51) to reduce wind noise or popping. When not in use, please store your mic in the vinyl case at room temperature.

**Pad and Roll-Off:** These recessed switches are located towards the bottom of the mic. You will need a either a miniature screw driver or a pen to move them down (engaged) or up (not engaged).

**Pad:** The switch on the lower left side of the mic is a 10 dB pad. This means you can reduce the input level of the mic by 10 dB. This is very helpful for miking extremely loud instruments (guitars, drums, horns) that may tend to drive the mic into distortion. Note that 0 dB is in the up position and -10 dB is in the down position.

**Bass Roll-Off:** This feature gently rolls off the bass frequencies starting at 150 Hz which is very helpful in reducing boominess for voice or instrument. Note that the feature is active when the switch is in the down position.

**Recording:** The ADX51 can be used effectively to record just about any acoustic instrument. Because of the simple design and excellent transient response, simply point the microphone towards the sound source making sure the mic is far enough away to avoid distortion.

**Live Sound:** When miking instruments, the ADX51 should generally not be closer than 6 inches to the sound source. In the case of group vocals, drum overheads, bells, and percussion toys, the microphone can be from 1-4 feet from the source. In general, when using multiple ADX51s for live sound, they should be spaced at a distance of at least 4-6 feet apart. Using fewer mics can result in a more 'spatial' effect and provides greater chance for greater control over feedback.

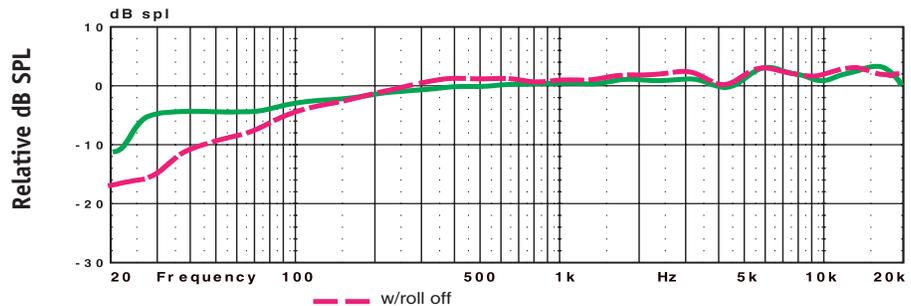
## Supplied Accessories

- ▶ Mic clip (Dclip) adjustable through 180 degrees with standard 5/8 inch. -27 thread. Note: Metal stand adapter also supplied to accommodate European standard threads.
- ▶ Vinyl carrying case.
- ▶ WS-81C External Foam Windscreen.

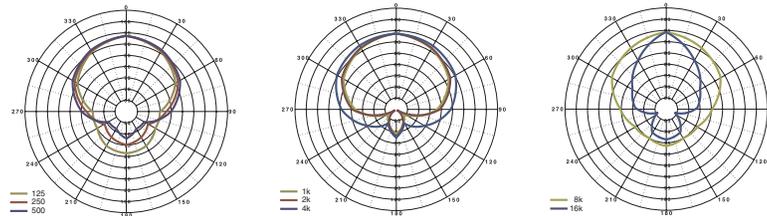
## Optional Accessories

- ▶ APS-2 2 Channel Phantom power supply (AC powered)
- ▶ P1 Audix cordura carrying pouch

## Typical Frequency Response

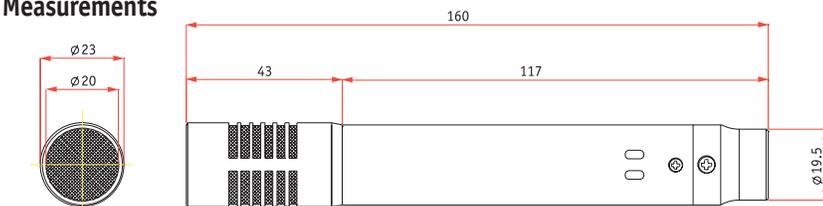


## Polar Charts



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

## Measurements



Measurement in Millimeters

## WARNING:

The ADX51 has a fixed-charge, permanently polarized back plate. This, along with voltage from a phantom power supply, causes the element to be fully charged. 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' sensation which could seriously damage the speakers in the PA system. Power requirements are 9-52 volts phantom power; most current mixing boards are equipped with phantom power, however, if phantom power is not available please use the Audix APS-2 (2 channel) AC powered phantom supply as your interface between the microphone and the mixing board.

## OUTPUT:

It is recommended to use a high quality microphone cable with 3 pin XLR connectors. The ADX51 output is balanced across Pin 2 (positive) with respect to Pin 3, with the shield connection is Pin 1.

## 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.

CALL: 503-682-6933 FAX: 503-682-7114  
www.audixusa.com

Audix Corporation PO Box 4010, Wilsonville, OR 97070 In Canada, Cabletek Electronics LTD, 604-942-1001 fax 604-942-1010  
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