

# ADX70 SURFACE MOUNT/MINIATURE CONDENSER MICROPHONE

## overview

► The ADX-70 is a pre-polarized condenser microphone designed to handle a wide variety of permanent installations including podiums, monitoring, stage plays, video, and teleconferencing. Available with a choice of three interchangeable microphone capsules (cardioid, omni, and hypercardioid), the ADX-70 is extremely adaptable, depending on the job application. With a smooth uniform response over a frequency range of 50-18 kHz, the ADX-70 provides a warm, rich sound not typical of microphones this size. It is machined from solid brass and has a low reflective black e-coat finish. The microphone is supplied with a threaded body and locking washer for easy installation. The ADX-70 is equipped with built-in preamp module and operates on Phantom power (9-52volts). If phantom power is not readily available use the Audix APS-2 phantom power supply. Low noise electronic circuitry, low impedance, and balanced output allow interference-free performance even with long cable runs.

## specifications

► Transducer Type	Condenser (pre-polarized)
Frequency Response:	
Cardioid / Hypercardioid	50 Hz - 18 kHz
Omni	20 - 18 kHz
Polar Pattern	Cardioid, omni, hypercardioid depending on choice of capsule
Output Impedance	200 Ohms balanced
Open Circuit Sensitivity:	
Cardioid / Hypercardioid	5.5 mV
Omnidirectional	4.3 mV
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	3.7 oz/107grams



## applications

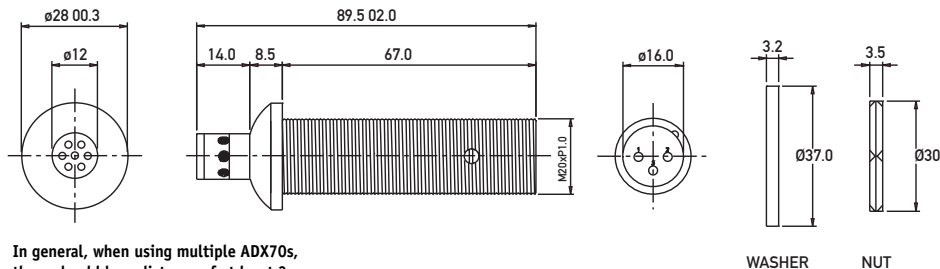
- Meetings, presentations, conferences
- Low profile podium mic
- Video / teleconferencing
- May be "hidden" within a stage set for plays
- Lecterns



ADX70 BOUNDARY MIC

**AUDIX**  
PERFORMANCE IS EVERYTHING

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In general, when using multiple ADX70s, there should be a distance of at least 3 feet between microphones. Microphones in close proximity to each other can cause phase cancellation and be more prone to feedback problems.

All measurements are in millimetres

## Interchangeable Capsules

- ▶ ADX-c Cardioid
- ▶ ADX-o Omni-directional
- ▶ ADX-hc Hypercardioid

## Supplied Accessories

- ▶ Lock nut and washer
- ▶ Vinyl carrying case

## Optional Accessories & Capsules

- ▶ WS20 External windscreen
- ▶ WS112/118 Snap on foam windscreen
- ▶ APS2 2 channel Phantom power supply
- ▶ P1 Audix cordura carrying pouch

## Choice of Elements:

Model ADX-70 (cardioid) is the most broadly used, providing a rich full sound with reasonable rejection of ambient noise from the surroundings.

Model ADX-70 (omni-directional) is ideally suited for picking up all sounds equally from within the room.

Model ADX-70 (hypercardioid) is the best choice for maximum isolation of picking up individual voices or sounds with maximum rejection of ambient noise from the surroundings.

## 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 most applications use the foam windscreen provided with your microphone to help reduce wind noise or popping. When not in use, please store your mic in the vinyl case at room temperature.

## Changing Capsules:

Capsules can easily be interchanged by simply screwing them on and off the capsule housing. Important: The small copper lead on the housing must make contact with the small pin underneath the capsule in order to work. The lead contact can be stretched gently by hand if necessary.

## Set-up and Installation:

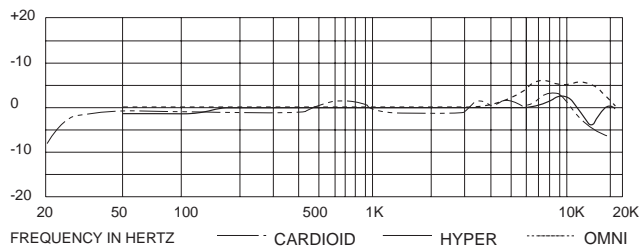
You will need to drill a 22mm (7/8") diameter hole with a maximum length of 60 mm (2 1/3"). A large flat surface area is ideal as the ADX-70 will perform best if there are no obstructions around it. Position the microphone on the surface area with the threaded shaft through the hole. Secure the microphone into position by putting the washer on the opposite side of the table or surface and lock into place by threading on the nut. For best results the sound source (or person speaking) can be 12"-15" away from the microphone, either sitting or standing. For this application the cardioid pattern element should be used (ADX70-c). To capture all sounds equally from within a room, the omni-directional capsule (ADX70-om) should be used. Since the preamp is housed within the threaded body of the housing, you can plug the other end of the cable directly into the mic level of your mixer or console. For video or recording, please confirm that the input level of the device you are connecting to will accept low impedance (200 ohms) and has phantom power available.

## Output:

It is recommended to use a high quality microphone cable with 3 pin XLR connectors.

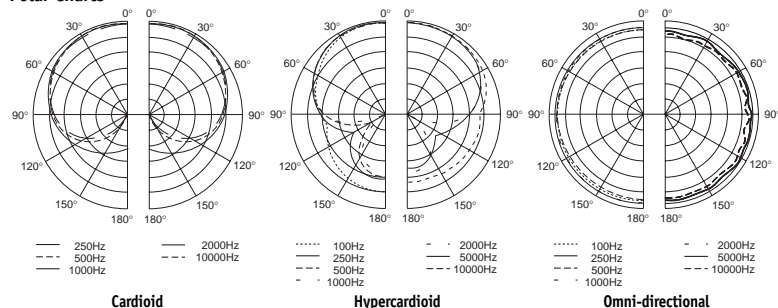
The ADX-70 output is balanced across Pin 2 (positive) with respect to Pin 3, with the shield connection to Pin 1.

## Typical Frequency Response



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

## Polar Charts



**WARNING:** The ADX-70 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. AC Phantom power supply is your interface between the microphone and the mixing board or recording device.

**CALL: 503-682-6933 FAX: 503-682-7114**  
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**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. Specifications are subject to change without written notice.