

# ADX20i INSTRUMENT CONDENSER MICROPHONE

## OVERVIEW:

Designed, assembled, and tested by Audix in the USA, the ADX20i is a miniaturized condenser microphone used for professional stage and studio applications. The ADX20i is known for its clarity, excellent transient response, resistance to feedback, SPL handling and ease of operation; and is primarily used for miking saxophone and other brass instruments.

The ADX20i is characterized with a uniformly controlled cardioid polar pattern. This provides excellent isolation and feedback control on stage, and natural sound reproduction at very close distances.

With a smooth and accurate response over a frequency range of 40 Hz - 20 kHz, the ADX20i is lightweight, compact and simple to use. Housed in an aluminum ring and isolated by means of a rubber shock mount system, the ADX20i comes with the gooseneck clip with spring tension clip (MC-20i) for easy mounting to the bell of an instrument. A number of optional accessories are available which allows for the ADX20i to be used on a mic stand for a wider variety of applications.

The ADX20i is designed for use with the Audix RAD360 wireless system. The ADX20i-P is designed for use with a microphone cable. The ADX20i-P operates on phantom voltage of 9-52 Volts and is supplied with a phantom power adapter (APS-910), 6' integrated mic cable, gooseneck clip (MC-20i) and carrying pouch.

## SUPPLIED ACCESSORIES:

Gooseneck clip with integral shock mount (MC-20i)  
External foam windscreen (WS-20)  
Carrying pouch (P1)

## OPTIONAL ACCESSORIES:

MC-MICRO - mic stand adapter  
SMT-MICRO - mic stand adapter with shockmount  
APS-911 - Battery/phantom preamplifier with on/off switch and roll-off

## MODEL VARIATIONS:

ADX20i-P - Cardioid with phantom power adapter (APS-910)  
ADX20iP-HC - Hypercardioid with phantom power adapter (APS-910)



## FEATURES:

Small, lightweight, low profile  
Natural, accurate sound reproduction  
High SPL handling  
Miniaturized integrated preamp circuitry  
Easy to use

## APPLICATIONS:

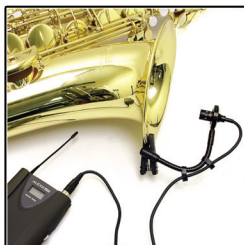
Saxophone  
Trombone, trumpet  
Room ambience, recording  
Accordion

## REPLACEMENT CAPSULES:

CPSADXHC - hypercardioid capsule  
CPSADXO - omni directional capsule



MC-20i



ADX-20i with RAD360 BODYPACK



MC-MICRO



SMT-MICRO



APS-910

**SPECIFICATIONS:**

<b>Transducer Type</b>	<b>Pre- polarized Condenser</b>
<b>Frequency Response</b>	<b>40 Hz - 20 kHz</b>
<b>Polar Pattern</b>	<b>Cardioid</b>
	<b>Hypercardioid (ADX20i-HC)</b>
<b>Output Impedance</b>	<b>250 ohms</b>
<b>Sensitivity</b>	<b>5.8 mV / Pa @ 1k (Cardioid)</b>
	<b>5.4 mV / Pa @ 1k (Hypercardioid)</b>
<b>Signal/Noise Ratio (A-weighted)</b>	<b>65 dB</b>
<b>Equivalent Noise Level (A-weighted)</b>	<b>29 dB</b>
<b>Maximum SPL @ .5% THD</b>	<b>135 dB</b>
<b>Power Requirements</b>	<b>9 - 52 V phantom (ADX20i-P)</b>
<b>Connector</b>	<b>Shielded 6' cable terminating to a miniature 3 pin XLRf</b>
<b>Polarity</b>	<b>Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3</b>
<b>Housing / Finish</b>	<b>Machined Brass</b>
<b>Gooseneck</b>	<b>Flexible Steel</b>
<b>Weight</b>	<b>48 g / 1.7 ounces</b>
<b>Length</b>	<b>29 mm / 1.14 inches</b>

**ARCHITECTS AND ENGINEERS SPECIFICATIONS:**

The microphone shall be of the condenser type with a modular threaded capsule. The microphone shall be available in a hypercardioid polar pattern and shall have a 6' cable terminating in a mini-XLR female connector. The microphone shall have a sensitivity of 5.8 mV / Pa and a nominal impedance of 250 ohms at 1 kHz. The microphone shall have a maximum SPL level of 135 dB at 0.5% THD and shall be machined out of brass with a length of 30 mm and a capsule diameter of 12 mm. The microphone shall be the Audix ADX-20i.

**OPERATION AND MAINTENANCE:**

The ADX-20i is designed to plug directly into the bodypack of the RAD360 wireless system. To use the ADX-20i as a wired mic, you need the version that includes phantom power adapter (model ADX20i-P). Note that phantom power must be supplied to the adapter (APS-910) from a remote source (such as the Audix APS-2).

The ADX20i-P is a low impedance microphone and should be plugged into a "mic level" input on your console, mixer, or recording device. The ADX20i-P requires phantom power and will NOT operate without phantom power voltage (minimum of 9 - 48 Volts) which is available on most professional mic preamps and mixing devices. If phantom power is not available on your equipment, you may use the APS-911 which is an optional accessory that allows for battery operation. Avoid plugging or unplugging the microphone from a PA system unless the channel is muted or the volume of the system is turned down. Failure to do so may result in a loud "popping" noise which could seriously damage the speakers in the PA system.

**APS-910 phantom power supply:** Note that the mini-XLRf connector at the end of the ADX20i-P mic cable plugs into mini-XLRm side of the APS-910 phantom power adapter. From there, plug a standard XLR-XLR microphone cable to complete the connection from the APS-910 to the mixing board.

**Important:** Be sure that the round ports on the microphone capsule always remain exposed and do not get covered up in any way by the shockmount in the clip.

**USER TIPS:**

**Saxophone and brass:** For the most accurate and natural sound, the mic should be positioned towards, but not inside the bell. Some experimentation may be required to find the proper blend between the instrument and the room.

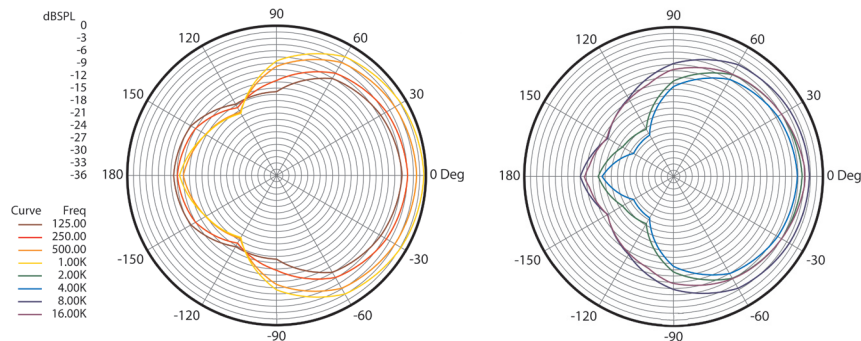
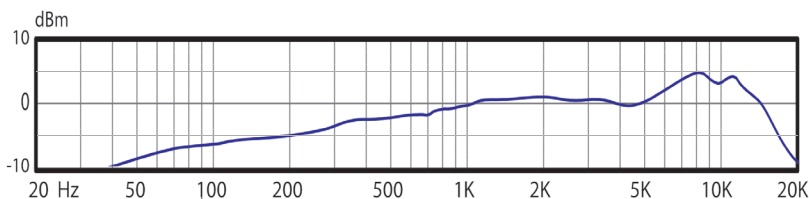
When striving for greater isolation on stage and higher gain before feedback, the hypercardioid capsule may be more helpful.

The ADX20i-P can be used on a mic stand or mic bar for stereo recording (see accessories for mic stand adapters).

**Live sound:** In general, when using multiple ADX-20i mics on a stage for live sound, position the mics at least 2-3 feet apart from each other to avoid phase cancellation issues.

\*Further miking techniques can be found on our website at [www.audiusa.com](http://www.audiusa.com)

**FREQUENCY / POLARS:**



**DIMENSIONS (mm):**



\*\*\*All specifications subject to change without notice.

**SERVICE AND WARRANTY:**

This microphone is under warranty for a period of 3 years 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 returning any products.

**CARE AND MAINTENANCE:**

The ADX-20i is manufactured to exacting specs with roadworthy construction. However, the capsule is highly sensitive and should be handled with care. Avoid extreme temperatures and be sure to store your microphone in the pouch provided when not in use. Moisture of any kind can adversely affect the sound and performance of your microphone.

To register your microphone, please visit [www.audiusa.com](http://www.audiusa.com)



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