ADX20 VOCAL/SPEECH CONDENSER LAVALIER MICROPHONE

overview

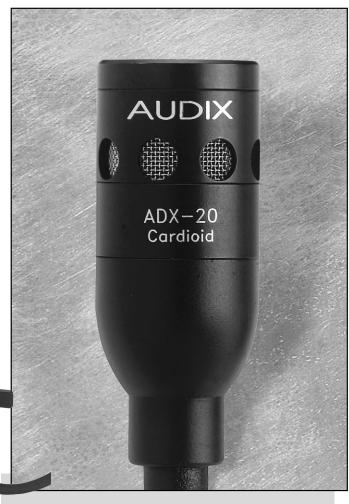
► The ADX-20 is a pre-polarized condenser microphone designed to handle a wide variety of applications for professional live sound, music, and broadcast. Available with a choice of three interchangeable microphone capsules (cardioid, omni, and hypercardioid), the ADX20 is adaptable to whatever the job calls for. With a smooth uniform response over a frequency range of 40-20kHz, the ADX-20 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 ADX-20 operates on phantom power (9-52volts) with the preamp module provided (APS-910) or may be used in battery mode with an optional power supply (APS-911). Low noise electronic circuitry, low impedance, and balanced output allow interference-free performance even with long cable runs.





specifications

Frequency Response: Cardioid/Hypercardioid Omnidirectional Polar Pattern Cardioid, omni, hypercardioid depending on choice of capsule Output Impedance Open Circuit Sensitivity: Cardioid/Hypercardioid Omnidirectional Equivalent Noise Level Signal to Noise Ratio Fower Requirements Maximum SPL Cable/Connector Shielded 6' (2.8m) terminating to a miniature 3 pin Switchcraft XLR connector (TA3-f) Polarity Positive voltage on pin 2 relative to pin 3 of output XLR connector Housing Machined Brass Weight 4 oz/11 grams (no cable)	Transducer Type	Condenser (pre-polarized)
Omnidirectional Polar Pattern Cardioid, omni, hypercardioid depending on choice of capsule Output Impedance Open Circuit Sensitivity: Cardioid/Hypercardioid Omnidirectional Equivalent Noise Level Signal to Noise Ratio Fower Requirements Maximum SPL Cable/Connector Shielded 6' (2.8m) terminating to a miniature 3 pin Switchcraft XLR connector (TA3-f) Polarity Positive voltage on pin 2 relative to pin 3 of output XLR connector Housing Machined Brass	Frequency Response:	
Polar Pattern Cardioid, omni, hypercardioid depending on choice of capsule Output Impedance Open Circuit Sensitivity: Cardioid/Hypercardioid Omnidirectional Equivalent Noise Level Signal to Noise Ratio Power Requirements Maximum SPL Cable/Connector Shielded 6' (2.8m) terminating to a miniature 3 pin Switchcraft XLR connector (TA3-f) Polarity Positive voltage on pin 2 relative to pin 3 of output XLR connector Housing Captolomes (Cardioid, omni, hypercardioid depending on choice of capsule 250 Ohms balanced 5.2 mV 29 dB (A weighted) (ref 1k @ 1 Pascal) (ref 1k @ 1 Pascal) Power Requirements 9 - 52v phantom Shielded 6' (2.8m) terminating to a miniature 3 pin Switchcraft XLR connector (TA3-f) Polarity Positive voltage on pin 2 relative to pin 3 of output XLR connector	Cardioid/Hypercardioid	40 Hz - 20 kHz
depending on choice of capsule Output Impedance 250 Ohms balanced Open Circuit Sensitivity: Cardioid/Hypercardioid 5.2 mV Omnidirectional 4.1 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 130 dB Cable/Connector Shielded 6' (2.8m) terminating to a miniature 3 pin Switchcraft XLR connector (TA3-f) Polarity Positive voltage on pin 2 relative to pin 3 of output XLR connector Housing Machined Brass	Omnidirectional	20 - 20 kHz
Output Impedance 250 Ohms balanced Open Circuit Sensitivity: Cardioid/Hypercardioid 5.2 mV Omnidirectional 4.1 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 130 dB Cable/Connector Shielded 6' (2.8m) terminating to a miniature 3 pin Switchcraft XLR connector (TA3-f) Polarity Positive voltage on pin 2 relative to pin 3 of output XLR connector Housing Machined Brass	Polar Pattern	Cardioid, omni, hypercardioid
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Omnidirectional 4.1 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 130 dB Cable/Connector Shielded 6' (2.8m) terminating to a miniature 3 pin Switchcraft XLR connector (TA3-f) Polarity Positive voltage on pin 2 relative to pin 3 of output XLR connector Housing Machined Brass	Open Circuit Sensitivity:	
Equivalent Noise Level Signal to Noise Ratio 65 dB (ref 1k @ 1 Pascal) Power Requirements 9 - 52v phantom Maximum SPL 130 dB Cable/Connector Shielded 6' (2.8m) terminating to a miniature 3 pin Switchcraft XLR connector (TA3-f) Polarity Positive voltage on pin 2 relative to pin 3 of output XLR connector Housing Machined Brass	Cardioid/Hypercardioid	5.2 mV
Signal to Noise Ratio (ref 1k @ 1 Pascal) Power Requirements 9 - 52v phantom Maximum SPL 130 dB Cable/Connector Shielded 6' (2.8m) terminating to a miniature 3 pin Switchcraft XLR connector (TA3-f) Polarity Positive voltage on pin 2 relative to pin 3 of output XLR connector Housing Machined Brass	Omnidirectional	4.1 mV
(ref 1k @ 1 Pascal) Power Requirements 9 - 52v phantom Maximum SPL 130 dB Cable/Connector Shielded 6' (2.8m) terminating to a miniature 3 pin Switchcraft XLR connector (TA3-f) Polarity Positive voltage on pin 2 relative to pin 3 of output XLR connector Housing Machined Brass	Equivalent Noise Level	29 dB (A weighted)
Power Requirements 9 - 52v phantom Maximum SPL 130 dB Cable/Connector Shielded 6' (2.8m) terminating to a miniature 3 pin Switchcraft XLR connector (TA3-f) Polarity Positive voltage on pin 2 relative to pin 3 of output XLR connector Housing Machined Brass	Signal to Noise Ratio	65 dB
Maximum SPL 130 dB Cable/Connector Shielded 6' (2.8m) terminating to a miniature 3 pin Switchcraft XLR connector (TA3-f) Polarity Positive voltage on pin 2 relative to pin 3 of output XLR connector Housing Machined Brass		(ref 1k @ 1 Pascal)
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terminating to a miniature 3 pin Switchcraft XLR connector (TA3-f) Polarity Positive voltage on pin 2 relative to pin 3 of output XLR connector Housing Machined Brass	Maximum SPL	130 dB
Switchcraft XLR connector (TA3-f) Polarity Positive voltage on pin 2 relative to pin 3 of output XLR connector Housing Machined Brass	Cable/Connector	Shielded 6' (2.8m)
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2 relative to pin 3 of output XLR connector Housing Machined Brass		Switchcraft XLR connector (TA3-f)
output XLR connector Housing Machined Brass	Polarity	Positive voltage on pin
Housing Machined Brass		2 relative to pin 3 of
The state of the s		output XLR connector
Weight 4 oz/11 grams (no cable)	Housing	Machined Brass
	Weight	4 oz/11 grams (no cable)



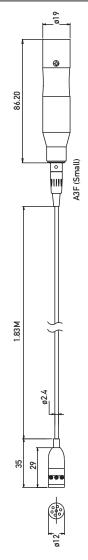
applications

- > Speech, presentations, music Hard wired for broadcast, speech, presentation
 - > May be used in conjunction with wireless systems
 - Low profile mic for professional video or camcorder Can be plugged directly into mic level or used in conjunction with wireless transmitters
 - May be used to mic acoustic instruments such as guitar, saxophone and violin
 - Room ambience microphone for recording or broadcast
 - May be used as low profile audience mic for in-ear monitor systems

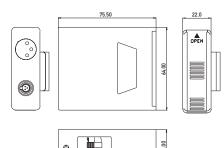


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measurements are in millimetres



In general, when using multiple ADX20's for live sound, there should be a distance of 2-3 feet between microphones. Microphones in close proximity to each other can cause phase cancellation and be more prone to feedback problems.



Optional APS 911 Battery/phantom preamplifier with on-off switch and roll-off

Replacement Capsules

- ADX-c Cardioid
- ➤ ADX-om Omni-directional
- > ADX-hc Hypercardioid

Supplied Accessories

- ▶ APS 910 Belt clip preamplifiers
- ➤ MC20 Tie clip holder
- ▶ WS20 External foam windscreen
- ▶ 6' cable with mini XLR-f
- > Vinyl carrying case

Optional Accessories

- ➤ WS20-d Dual tie clip holder
- ▶ WS112/118 Snap on foam windscreen
- APS 911 Battery/phantom preamplifier with onoff switch and roll-off
- > P1 Audix cordura carrying pouch

Choice of Elements:

The cardioid element (ADX-c) is the most broadly used providing a good balance of full sound and rejection of ambient noise from stage and monitors. The omni-directional element (ADX-o) is ideally suited for picking the vocal as well as the room sound, an excellent choice where recording is involved. The ADX-hc (hypercardioid), is the best choice for maximum gain over feedback and high rejection of ambient noise.

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.

Live Sound:

For miking speech or vocals, some experimentation may be required. Microphone placement is not an exact science and depends on the voice, the room size, and the PA system. In general, the microphone should be placed around 6 inches from the speaker's mouth. The distance can vary placing the microphone closer for a fuller sound and farther away for less bass. More powerful vocals may require more distance to avoid distortion, whereas quiet vocals may require the shortest distance possible.

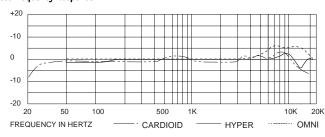
Recording:

Since there are no PA speakers or monitors to contend with, there is much more latitude with mic choice and placement when recording is involved. Here it is even more important to find the right blend between the room sound and the instrument or voice being recorded. The ADX20 is a remarkably good sounding mic for instruments. For acoustic guitar, it can be hung just slightly inside the sound hole (a small piece of tape will hold it in place). For violins, the ADX20 can be worn on the lapel and provide an excellent sound. The ADX20 is so small and light, it can be taped or tacked up just about anywhere and provide great results.

Output:

It is recommended to use a high quality microphone cable with 3 pin XLR connectors. The ADX-20 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 ±3dB) and polar pattern correspond to typical production run specifications for this microphone.

WARNING: The ADX20 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-911 phantom/battery power supply as your interface between the microphone and the mixing board.

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

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