# UEM81C INSTRUMENT CONDENSER MICROPHONE

# **OVERVIEW:**

The UEM81C is a pre-polarized condenser microphone used for stage, studio, video applications and broadcast applications. The UEM81C is conveniently powered by one AA battery; therefore it is not dependent on phantom power for operation. Known for its clear, accurate response and flexibility to handle close or distance miking, the UEM81C is well suited for a wide variety of vocal and instrument applications.

Characterized with a uniformly controlled cardioid polar pattern, the UEM81C is designed to capture the acoustics of vocals or instruments while at the same time isolating it from the rest of the ambient noise on stage or in the room. With a wide frequency range of 40 Hz - 20 kHz, the UEM81C is equipped with an on-off switch as well as with a bass roll-off switch.

The UEM81C is very easy to position, durable and manufactured with high standards and tight tolerances. Roadworthy construction includes a machined aluminum body and capsule housing, black e-coat finish, interchangeable threaded capsule and snap to fit composite clip.

#### SUPPLIED ACCESSORIES:

Modular preamp supply with on-off switch and bass roll-off filter (PS 81)
Modular cardioid capsule (CPS81C)
Tension-fit clip (MC81)
External Foam Windscreen (WS81C)
20' XLR-XLR mic cable
Vinyl carrying box

# OPTIONAL ACCESSORIES:

D Clip - Heavy duty tension clip SMT 25 - Shockmount suspension clip TRIPOD - Tripod mic stand

# REPLACEMENT CAPSULE:

CPS 81S - Modular shotgun capsule

# **FEATURES**:

Excellent sonic quality
AA Battery operated
Highly sensitive
On-off switch, bass roll-off filter
Lightweight, easy to position
Modular capsule

## APPLICATIONS:

Live sound, recording, video Vocals - lead, background, group Acoustic instruments Overheads, room ambience







UEM81C on MC81

SMT-25 TRIPOD

UEM81C

#### SPECIFICATIONS:

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Transducer Type	Pre-Polarized Condenser
Frequency Response	40 Hz - 20 kHz
Polar Pattern	Cardioid
Output Impedance	600 Ohms
Sensitivity at 1k	4 mV / Pa
Equivalent Noise Level	27 dB (A weighted)
Signal to Noise Ratio	82 dB
Power Requirements	AA Battery
Maximum SPL	≥128 dB
Cable/Connector	20' XLR-XLR
Polarity	Positive pressure on
	diaphragm produces
	positive voltage on pin
	2 relative to pin 3
Housing/Finish	Aluminum /
	Black E-Coat
Weight	236.6 g / 8 ounces
Length	225 mm / 8.9 inches

#### ARCHITECTS AND ENGINEERS SPECIFICATIONS:

The microphone shall be a back plate pre-polarized condenser with a modular capsule and cardioid polar pattern. The microphone shall operate on 3 volts DC (AA Battery) and the nominal output impedance shall be equal to 600 ohms at 1 kHz. The microphone shall have switches for on-off function and bass roll-off filter. The microphone shall have a sensitivity of 4 mV / Pa at 1 kHz and a maximum SPL level of ≥128 dB with a THD of 0.5%. The microphone shall be machined from aluminum brass with dimensions of 21 mm in diameter and 225 mm in length. The microphone shall be the Audix UEM81C.

#### **OPERATION AND MAINTENANCE:**

The UEM81C is a low impedance microphone and should be plugged into the mic level input of your mixer, console, or recording device. The UEM81C does not require phantom power as it is powered by one AA battery and will operate for 500-1000 hours under normal useage. Phantom power will not adversely effect the UEM81C as long as batteries are installed. If batteries are not installed, you will experience frequency loss in the bass frequencies and higher self noise.

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.

On-Off Switch: The switch must be in the ON position in order for the microphone to operate. Avoid using the switch unless the PA system is muted or the volume turned down. When the microphone is not in use, be sure to turn the microphone OFF in order to conserve battery power.

M/V Bass Roll-Off Switch: This feature gently rolls off the bass frequencies starting at 150 Hz which is very helpful in reducing boominess for voice. This feature is engaged when the switch is in the "150Hz" position. For full range frequency response for musical instruments put the switch in the "Flat" position.

Replacing the battery: If the microphone begins to sound distorted or weak, it is time to change the battery. Battery is housed in bottom section of the mic above the XLR connector. Unscrew the housing to replace the battery.

Windscreen: The windscreen can be utilized to help control wind noise, breath noise, popping and sibilance sounds.

#### **USER TIPS:**

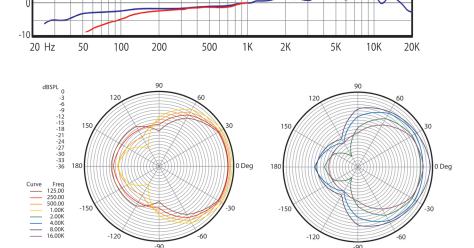
The UEM81C is an excellent utility microphone for all types of vocal and instrument applications. The UEM81C has a cardioid pattern, however, because of its sensitivity the UEM81C is very effective as an area microphone for miking group vocals, a group of instruments, or drum overheads. If using multiple microphones, be sure to have a distance of 4 - 5' between microphones.

For home recording, the UEM81C is an excellent choice for speech or acoustic instruments.

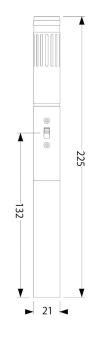
\*Further miking techniques may be found on our website at www.audixusa.com

### FREQUENCY / POLARS:

dBm



# 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 UEM81C 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 http://acctech.ru/cat/mikrolon www.audixusa.com



