

# M3 Tri-element Hanging Ceiling Microphone

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## OVERVIEW

The M3 is an innovative, tri-element hanging microphone system designed for applications where aesthetics, sound quality, and ease of installation are critical. The M3 is an ideal audio capture solution for video conferencing, distance learning, courtroom activities, and surgical procedures. It can also be used for ambient room miking and surveillance.

The M3 incorporates three phase coherent hypercardioid capsules with tailored frequency responses optimized for speech intelligibility. This is accomplished by minimizing frequencies caused by noise, vibration, paper shuffling, keyboard strokes, fans, and heating/air conditioning. Low noise preamp circuitry is employed for highest possible signal to noise and studio quality sound. A high-quality silicone jacketed microphone cable ensures a balanced, shielded signal and a very clean look. Electronics above the ceiling are housed within a plenum rated junction box and cable connections are made via an RJ45 connector embedded within a proprietary brass housing for an airtight seal.

The M3 connects to the input of a mixer or dsp console via a breakout cable (provided). The breakout cable consists of a female RJ45 connector that terminates in either three terminal blocks or XLR connectors (optional). A variety of optional shielded CAT7 cable lengths (from plenum rated junction box to break out cable) are available.

Installing the M3 requires drilling just one 5/8-inch hole in the ceiling, with no additional tools needed. The M3 mounting hardware easily adjusts the cable hanging height up to four feet from the ceiling surface without removing ceiling tiles. A wire safety cable provides additional seismic restraint.

## MODEL VARIATIONS

**M3** - Microphone and cable in charcoal grey color

**M3W** - Microphone and cable in white

## SUPPLIED ACCESSORIES

**JBM3** - Plenum rated junction box

**ANCHRJ60V2** - Seismic/fire strain relief

**CBLM3TERM** - Breakout cable consisting of RJ45 female to 3 terminal block connectors

## OPTIONAL ACCESSORIES

**CBLM3XLR** - Breakout cable consisting of RJ45 female to 3 XLR male connectors - 1.57 meters (40")

**CBLM307** - CAT 7 Interface cable , 7 meters (23') RJ45 with Plenum cover , twisted shielded pairs

**CBLM310** - as above , 10 meters (33')

**CMBM315** - as above, 15 meters (49')

**CBLM320** - as above , 20 meters (66')

**CBLM325** - as above, 25 meters (82')

**CLBM30** - as above, 30 meters (98')



## FEATURES

- 100% RF shielding and immunity
- Gold diaphragm condenser capsules with studio quality sound
- Low impedance design allows for extremely long cable runs (if required) without cross talk or interference
- Frequency and pattern tailored for voice clarity and rejection of extraneous noise
- Evenly dispersed sound with undetectable phase
- High-quality silicone jacketed microphone cable with adjustable length and position
- Plenum rated junction box with RJ45 connector
- All visible components of the microphone and cable are same color: charcoal or white
- TAA compliant
- Very high output, low self-noise
- Easy to install

## APPLICATIONS

- Zone Capture
- Video Conferencing
- Distance Learning
- Hospital and medical procedure
- Courtroom
- Ambient room miking

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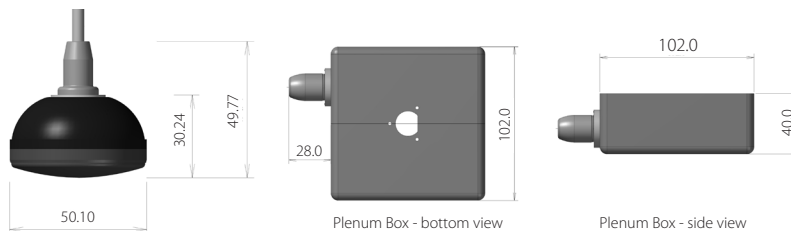
# M3

## SPECIFICATIONS

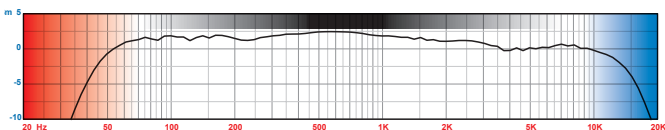
Transducer Type	Pre-Polarized Condenser
Frequency Response	30 Hz – 19 kHz
Optimized Response	70 Hz – 9 kHz (see chart)
Polar Pattern	Hypercardioid
Output Impedance	150 Ohms balanced
Sensitivity	34 mV / Pa @ 1k
Off Axis Rejection	1 capsule >23 dB at 180° relative to 0° 2 capsules >18 dB at 120° 3 capsules >9 dB at 60°
Signal/Noise Ratio (A-weighted)	72 dB
Equivalent Noise Level (A-weighted)	22 dB (A weighted)
Maximum SPL @ .5% THD	≥128 dB
Dynamic Range	106 dB
Power Requirements	18 – 52 Volts phantom
Cable/Connector	Terminal block or XLR
Polarity	Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3
Weight	95 grams (mic only) / 3.32 ounces
Diameter	50mm (2 inches)
Length	30mm (1.2 inches)

## ARCHITECT AND ENGINEER SPECIFICATIONS

The microphone shall be of the condenser type with three elements having a hypercardioid polar pattern. The microphone shall be protected from RF interference. The microphone shall have a fully integrated preamp circuitry housed within a plenum rated junction box. The microphone shall consist of three individual circuits each operating on 18-52 Volts DC and the nominal output impedance shall be equal to 150 Ohms at 1 kHz. The microphone shall have a sensitivity of 34 mV / Pa at 1 kHz and a maximum SPL level of ≥ 128 dB with THD of 0.5%. The microphone housing shall be machined out of brass with a steel mesh protective grill. The outer dimensions shall be 50mm in diameter by 30 mm in length. The microphone shall be the Audix M3. Further miking techniques may be found at [www.audixusa.com](http://www.audixusa.com).



### Frequency Response (see key to the right)

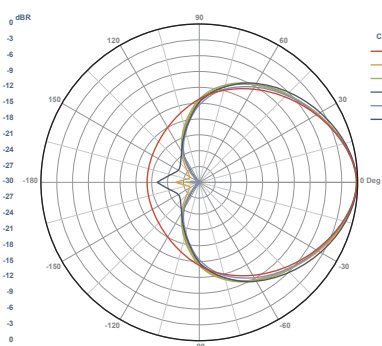


**Low Frequency Noise**  
Frequencies below 70Hz minimized in order to reduce boominess, hum, rumble, table noises, HVAC, ambient interference.

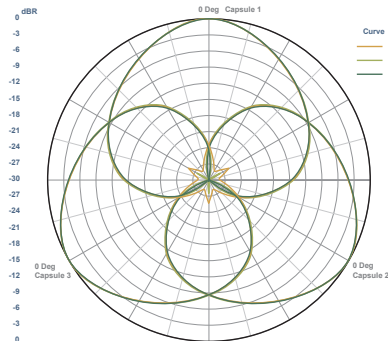
**High Frequency Noise**  
Frequencies above 9 kHz minimized in order to reduce unwanted noise from paper shuffling, keyboards, HVAC, fan noise, ambient interference.

**Ideal for Vocal Clarity and Voice Recognition**  
Frequencies between 200 Hz – 1kHz are optimized for speech.

M3 Polar x 1



M3 Polar x 3



**PRODUCT REGISTRATION:** Please register your product online at [www.audixusa.com/docs\\_12/about/product\\_registration.shtml](http://www.audixusa.com/docs_12/about/product_registration.shtml).

**SERVICE AND WARRANTY:** This microphone is under warranty for a period of 1 year to be free of defects in material and workmanship. In the event of a product failure due to materials or workmanship, Audix will repair or replace said product at no charge with proof of purchase. Audix does not pay or reimburse shipping costs for warranty repairs or returns. The warranty excludes any causes other than manufacturing defects, such as normal wear, abuse, environmental damage, shipping damage or failure to use or maintain the product per the supplied instructions. No Implied Warranties: All implied warranties, including but not limited to implied warranties of merchantability and fitness for a particular purpose are hereby excluded. The liability of Audix, if any, for damages relating to allegedly defective products shall be limited to the actual price paid by Dealer for such products and shall in no event include incidental or consequential damages of any kind. Should your microphone fail in any way, please contact the Audix Service department at 503.682.6933. A Return Authorization is required before returning any product. OTHER THAN THIS WARRANTY, AUDIX MAKES NO WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE PRODUCTS, THE USE OF THE PRODUCTS, THE PERFORMANCE OF THE PRODUCTS. AUDIX SHALL NOT BE LIABLE FOR SPECIAL INCIDENTAL, CONSEQUENTIAL, INDIRECT OR SIMILAR DAMAGES ARISING FROM OR BASED ON THE SALE, USE, STORAGE OR DISPOSAL OF THE PRODUCTS, AUDIX'S SERVICE WORK, BREACH OF WARRANTY, BREACH OF CONTRACT. NEGLIGENCE, OR ANY OTHER THEORY OF LIABILITY, EVEN IF AUDIX HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.