

# OM7 DYNAMIC VOCAL MICROPHONE

## overview

Produced in the mid-90s primarily for concert rock touring bands with exceptionally loud stage volumes, the OM7 has earned reputation in the pro sound industry as being the “ultimate gain before feedback” microphone.

The OM7, which is designed with an unconventionally low output level (8-10 dB lower than typical dynamic mics), has a built-in pad which allows for the natural full audio range of the capsule to be utilized.

On a mixing console with proper head room, the OM7 will handle sound pressure levels in excess of 140 dB without distortion. The performance characteristics of the OM7 allow it to be placed in close proximity to drums and guitar cabs, with minimal bleed, and tremendous resistance to feedback.

## specifications

|                    |   |
|--------------------|---|
| Transducer Type    | Dynamic   |
| Frequency Response | 48 Hz- 19 kHz   |
| Polar Pattern      | Hypercardioid   |
| Output Impedance   | 150 ohms  |
| Sensitivity        | 0.9 mV<br>ref 1k @ 1 Pascal   |
| Capsule Technology | VLM Type C  |
| Off axis rejection | >30 dB  |
| Maximum SPL        | >144 dB   |
| Cable/Connector    | 3 pin gold<br>plated male XLR   |
| Polarity           | Positive voltage on pin 2<br>relative to pin 3 of<br>output XLR connector |
| Housing            | Zinc alloy  |
| Weight             | 10.5 oz/298 grams   |
| Finish             | Black E-coat  |



## applications

- ▶ **Live Stage, live recording**  
*Excellent for lead and backing vocals - all venues*
- ▶ **Instruments**  
*Sax, brass, guitar cabs, trumpet, percussion, drums*
- ▶ **Broadcast**  
*Announce mic, interview mic*
- ▶ **Home Studio**  
*Multi-use vocal and instrument applications*

## features

- ▶ Clear and accurate vocal reproduction
- ▶ Handles high SPL without distortion
- ▶ Low handling noise
- ▶ Provides exceptional gain before feedback
- ▶ Provides maximum vocal isolation on stage
- ▶ Dent resistant spring steel grill



Lead Vocals



Background Vocals



Brass



Saxophone



Guitar



Drums



Percussion

**AUDIX**  
PERFORMANCE IS EVERYTHING

# OM7 DYNAMIC VOCAL MICROPHONE

**Operation and Maintenance:** Although the OM-7 is a durable handheld dynamic microphone with a dent-resistant spring steel grill, it should still be handled with care. Avoid extreme temperatures wherever possible.

**Phantom power:** The OM-7 is a dynamic microphone and *does not* require phantom power; be assured that phantom power will not adversely affect the performance of the OM-7 in any way.

**Recording:** The OM-7 has a very sophisticated, high quality transducer element, and can be very useful for a wide variety of recording applications. For live recording, or to attain the feel of a live vocal, the OM-7 is an excellent choice. It will provide a true, accurate sound and isolate the vocal(s) from other surrounding instruments. Because of the tight hypercardioid pattern of the OM-7, it is important to place the microphone directly on axis and as close as possible to the sound source. Since the OM-7 is able to handle very high sound pressure levels, it can be successfully utilized to mic a wide variety of instruments, both acoustic and electric.

**Live Sound:**

**Impedance:** The OM-7 is a low impedance microphone and for optimum results it should be plugged into a low impedance mic input. In most cases a mic level input is a 3 pin XLR, however, in some cases (as with Karaoke machines) a mic level input may require a 1/4" jack. In this case, you will want to use an XLR-1/4" mic cable.

**Output level:** The OM-7 is designed with a *very low* output level, meaning that the OM7 will require 8-10 dB more gain than traditional dynamic microphones. To achieve the best results, the OM7 should be used in conjunction with a high quality mic preamp or console and a professional PA system. It is important to note that a microphone's output level, by itself, is not necessarily an important factor. More important questions to ask regarding a microphone's performance would be the following:

- 1) How loud can a microphone get before feedback (gain before feedback)
- 2) How much sound on stage will the microphone reject, especially on a stage with floor monitors and multiple microphones (off axis rejection)
- 3) How much sound pressure level (SPL) will a microphone handle before it distorts

**PA System:** Although the OM-7 can be utilized in any type of venue, it is ideally suited for a professional PA system with subs and floor monitors on stage. It is designed with a natural bass attenuation in order to reduce boominess, and it has a slight midrange presence to provide vocal clarity. In most cases, the OM-7 sounds very natural without adding much EQ.

**Stage Use:** The OM-7 is a problem solver. It can help control feedback and also help to get the vocals above the music. Try using an OM7 when:

- The stage is very tight and the vocal mics are in close proximity to the drums and amps.
- The drummer's vocal mic is picking up more drums than vocals.
- The vocalists are having a difficult time hearing themselves.
- You want cleaner separation of sound through the mains
- You want to achieve more gain from your background vocals

**The Trade Off:** There is a trade off for achieving higher levels of gain before feedback and for getting the vocals above the mix. Since the OM-7 has such an incredibly tight pick-up pattern, the singers **MUST STAY RIGHT ON** the microphone. Even if the vocalist wanders of the mic a few inches, you will notice a drop off in their vocal. With the OM-7, you can achieve remarkable results if the vocalist understands the benefits of staying right on top of the mic.

**Floor Monitors:** The OM-7 is extremely stable around floor monitors and will work with the monitors either straight on or at an angle. This allows lead vocalists freedom on stage without the worry of feedback. The behavior of the microphone relative to floor monitors will, of course, vary from room to room, which means that dialing in the monitors becomes an important part of sound check.

**Mic Placement:** In general, allow a minimum distance of 2-3 feet between microphones to avoid phase problems.

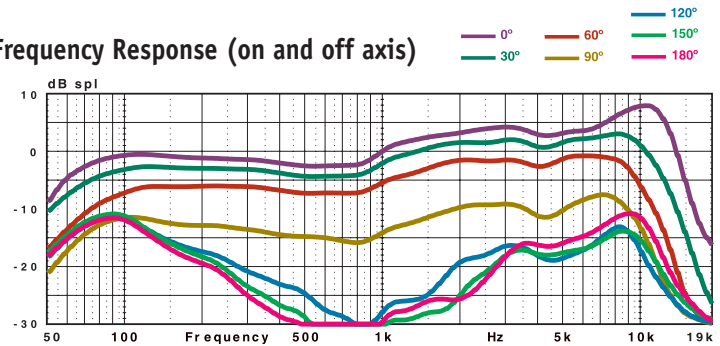
**Supplied Accessories**

- ▶ Mic clip (MC1) adjustable through 180 degrees with standard 5/8 inch 27 thread. Note: Metal thread adapter also supplied to accommodate European stands.
- ▶ Zippered microphone carrying pouch. (P1)

**Optional Accessories**

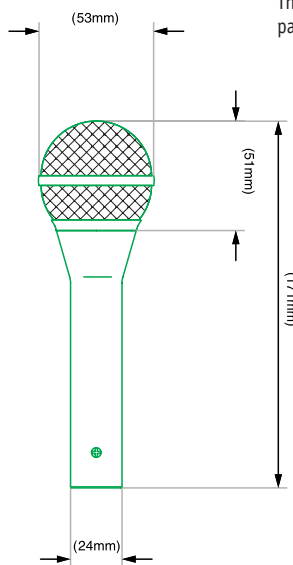
- ▶ External foam windscreen (WS357)
- ▶ 20' XLR-XLR low noise microphone cable (CBL20)

**Frequency Response (on and off axis)**



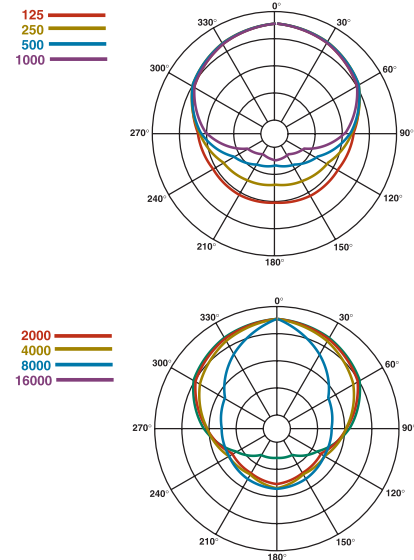
The frequency response curve shown (measuring tolerance at ±3dB) and polar pattern correspond to typical production run specifications for this microphone.

**Measurements**



**Measurement in Millimeters**

**Polar Charts**



**WARNING:**

Avoid excessive moisture as it can adversely affect the sound and performance of your microphone.

**OUTPUT:**

The OM-7 output is balanced across Pin 2 (positive) with respect to Pin 3. The shield is connected to Pin 1. It is recommended to use a high quality microphone cable with 3 pin XLR connectors.

**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.

**CALL: 503-682-6933 FAX: 503-682-7114**  
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