

# TM1 PLUS TEST & MEASUREMENT MICROPHONE

## OVERVIEW:

The TM1PLUS is a combination kit which includes the TM1 measurement microphone, threaded acoustic windscreen, shock mount clip, ½ inch calibrator adaptor and microphone calibration data on CD. The data files are a numeric representation of the TM1 frequency response. These, along with the provided sensitivity of the microphone, can be used with a variety of popular software measurement systems to correct the response curve of the microphone.

The TM1 is a 6 mm pre-polarized condenser microphone used for test and measurement applications. Known for its linearity, the TM1 has particularly accurate response and consistency. The TM1 is uncomplicated to use and provides a great value when incorporated into the combination kit.

Characterized with a uniformly controlled omni-directional polar pattern, the TM1 is designed to capture acoustic measurements for room analysis software programs, real time analyzers and other sound control devices. With a flat frequency range of 20 Hz – 25 kHz, the TM1 is an excellent tool for sound engineers, sound companies and recording enthusiasts.

Requiring 18 - 52 V phantom power for operation, the TM1 features a precision machined four stage brass body and capsule housing, nickel plate finish, Switchcraft® or Audix XLR and shock absorbent O-ring.

## SUPPLIED ACCESSORIES:

Threaded acoustic windscreen  
Shock mount clip  
Calibration adaptor for use with ½ inch calibrators  
Sensitivity & calibration data (CD)

## OPTIONAL ACCESSORIES:

DCLIP - Heavy duty tension fit mic clip  
TRIPOD - Tripod mic stand  
CBL20 - 20' XLR-XLR quad conductor mic cable  
P1 - Carrying pouch



## FEATURES:

6mm pre-polarized condenser capsule  
High SPL response  
Precision machined brass housings  
Low noise electronics  
Replaceable electronics and capsule  
3 year warranty

## APPLICATIONS:

Test and measurement  
Real time analyzers  
Room analysis software programs  
Ambient room miking



DCLIP



CBL20



TRIPOD

# TM1 PLUS

**SPECIFICATIONS:**

<b>Transducer Type</b>	<b>Pre-polarized Condenser</b>
<b>Frequency Response</b>	<b>20 Hz - 25 kHz +/-2dB</b>
<b>Polar Pattern</b>	<b>Omni</b>
<b>Output Impedance</b>	<b>200 ohms</b>
<b>Nominal Sensitivity</b>	<b>6 mV ± 3 dB / Pa @ 1k</b>
<b>Maximum SPL</b>	<b>130 dB with distortion &lt; 1%</b>
	<b>140 dB Max</b>
<b>Signal to Noise Ratio</b>	<b>66 dB</b>
<b>Equivalent Noise Level</b>	<b>28 dB (A weighted)</b>
<b>Dynamic Range</b>	<b>112 dB</b>
<b>Power Requirements</b>	<b>18-52 V phantom</b>
<b>Connector</b>	<b>Switchcraft® or Audix male XLR</b>
<b>Polarity</b>	<b>Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3 of output XLR connector</b>
<b>Housing</b>	<b>4 piece precision machined brass</b>
<b>Finish</b>	<b>Nickel</b>
<b>Length</b>	<b>150 mm / 5.9 inches</b>

**ARCHITECTS AND ENGINEERS SPECIFICATIONS:**

The microphone shall be a back plate pre-polarized condenser with an omni-directional polar pattern. The microphone shall operate on 18 - 52 V phantom power and the nominal output impedance shall be equal to 200 ohms at 1 kHz. The microphone shall have a sensitivity of 6 mV ± 3 dB / Pa at 1 kHz. The microphone shall have a maximum SPL level of 130 dB with a THD of 1%. The microphone shall be machined from brass with dimensions of 19 mm diameter at the base, 7.7 mm diameter at the top and 150 mm in length.

**OPERATION:**

The TM1 is a low impedance microphone and should be plugged into a "mic level" input on your console, mixer or recording device. The TM1 will NOT operate without phantom power voltage (18 V minimum) which is available on most professional mic preamps and mixing devices. If phantom power is not available on your equipment, you will have to purchase a phantom power supply (such as the Audix APS2). Avoid plugging or unplugging the microphone into 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.

**USER TIPS:**

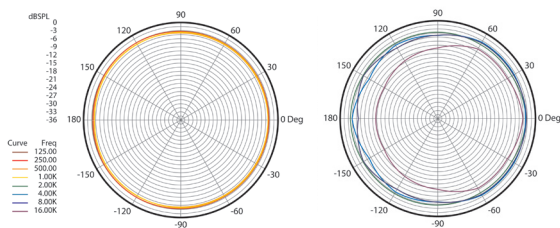
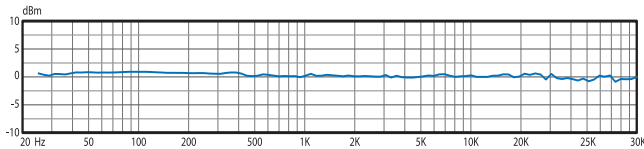
**Measurement:** The TM1 is an excellent choice for room analysis programs and real time analyzers. Be sure that you are plugging the microphone into a low impedance input and that phantom power is available.

**Ambient room application:** The TM1 may be used to capture the "room sound" for in ear monitors. Typically, you would set up one microphone on each side of the stage in a mic stand facing the audience.

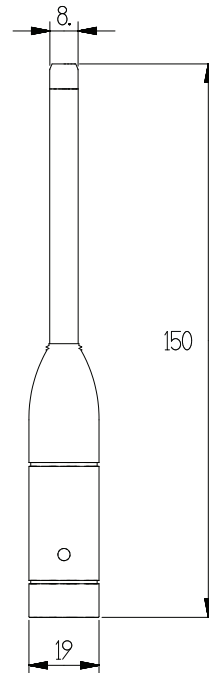
**Recording:** The TM1 is extremely flat and accurate and has an excellent sound. Because of its small profile, it can be used in conjunction with portable recording devices for live stereo miking. The TM1 is also excellent for miking acoustic instruments and for room ambient miking.

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

**FREQUENCY / POLARS:**



**DIMENSIONS (mm):**



**REGISTER YOUR PRODUCT:**

Online at:  
[http://www.audixusa.com/product\\_registration.shtml](http://www.audixusa.com/product_registration.shtml)

Or on your phone:



\*\*\*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 TM1 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.



[www.audixusa.com](http://www.audixusa.com)  
 503-682-6933 Fax: 503-682-7114  
 Audix Corporation 9400 SW Barber St. Wilsonville, OR 97070

