# TM1PLUS 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 is very consistent and has a particularly accurate response. The TM1Plus is not complicated to use and with the additional supplied accessories is great value.

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**

WSTM1 - Threaded acoustic windscreen

SMT19 - Shock mount clip

TM1CA4231 - Calibration Adapter

**CD** - Sensitivity & calibration data

## **OPTIONAL ACCESSORIES**

**DCLIP** - Heavy duty tension fit mic clip

TRIPOD - Tripod mic stand

CBL20 - 20'XLR-XLR quad conductor mic cable

P1 - Carrying pouch

SMT25 - Shock mount clip



# **FEATURES**

- · 6 mm 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

















WSTM1

SMT19

TM1CA4231

CD

**DCLIP** 

TRIPOD

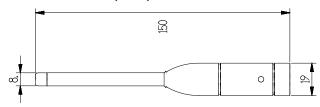
CBL20

SMT25

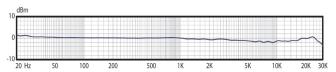
# **SPECIFICATIONS**

Transducer Type	Pre-polarized Condenser
Frequency Response	20 Hz - 25 kHz +/-2 dB
Polar Pattern	Omni
Output Impedance	200 ohms
Sensitivity	6 mV / Pa @ 1k
Maximum SPL	130 dB with distortion <1%
	140 dB Max
Signal to Noise Ratio	66 dB
Equivalent Noise Level	28 dB (A weighted)
Dynamic Range	112 dB
Power Requirements	24 - 52 V Phantom
Power Consumption	8.9 mA @ 48 Volts
Connector	Switchcraft® or Audix mail XLR
Polarity	Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3 of output XLR connector
Materials / Finish	4 piece precision machined brass / Nickel Finish
Weight	132 g / 4.7 oz
Length	150 mm / 5.9 in

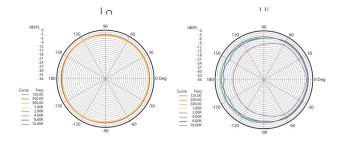
# **DIMENSIONS (mm)**



# **FREQUENCY RESPONSE**



## **POLAR PATTERNS**



## ARCHITECT AND ENGINEER 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  $\pm$  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 AND MAINTENANCE**

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 at www.audixusa.com.

 $\textbf{PRODUCT REGISTRATION:} \ Please \ register \ your \ product \ online \ at \ www.audixusa.com/docs\_12/about/product\_registration.shtml.$ 

SERVICE AND WARRANTY: This microphone is under warranty for a period of 3 years 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 PROSSIBILITY OF SUCH DAMAGES.

