

TM2

INTEGRATED ACOUSTIC COUPLER FOR IN-EAR MONITORS

OVERVIEW

The TM2 is an Integrated Acoustic Coupler for In-Ear Monitors (IEMs) specifically designed for use in the professional sound industry.

Ear simulator “couplers” are the measurement devices used by manufacturers of IEMs for capturing key metrics during research & development, final production and quality control of IEMs. Using patent-pending technology, the TM2 incorporates the functionality of lab-type testing equipment into an integrated compact package, ideal for live sound and studio engineers who want a simple, yet effective way to test IEM performance.

Monitor engineers are often faced with questions from performers regarding the functionality of their IEMs with no reliably consistent method to test them in their environment. With the TM2 and readily available measurement software such as Rational Acoustic's SMAART or Studio Six Digital's Audio Tools, a monitor engineer can easily confirm the functionality of each performer's IEMs.



SUPPLIED ACCESSORIES

Four adapters: small tip, large tip, custom tip, and ear simulator

CASETM2 - Protective carrying case

MODEL VARIATIONS

TM2SP - TM2 stereo pair w/ mounting base



FEATURES

- Durable, compact, all metal chassis
- Calibration and sensitivity file included
- 3-year warranty

APPLICATIONS

- **Live Performances** - Verify all IEM functionality as part of a daily pre-show check list
- **House of Worship** - When many IEMs are in rotation for team members, regular testing will ensure all IEM devices are functioning within spec
- **IEM Resellers & Service Centers** - Allows users to confirm performance of IEMs when new and check as needed over lifetime of the devices

SETUP AND INITIAL IEM MEASUREMENT

1. Select software that includes transfer function measurement such as Rational Acoustic's SMAART, AFMG's Systune, Studio Six Digital's AudioTools and an audio interface.
2. Within the selected software, configure the TM2 as a reference mic.
3. Connect TM2 output into a "mic level" input of the audio interface with phantom power.
4. Identify and install the proper adapter for the TM2 based upon the size of the IEM.
5. Connect IEMs to sound source.
6. With the Ear Simulator adapter, you can connect your IEM with the tips attached, when using any other adapter remove ear tips of the IEMs and insert the bare nozzle for a tight seal.
7. Ensure that sound source is also assigned as a reference within test-and-measurement software.
8. Measure the response of your IEM.

For more setup information, including videos, visit www.audixusa.com.

USER TIPS

- On a regular or as-needed basis, retest IEMs to ensure performance is consistent. If the new measurement shows any major changes:
 - Make sure the IEM's nozzle is fully inserted into the adapter for a good acoustic seal.
 - Make sure there is no change in EQ settings.
- Modern digital mixing consoles with USB output for recording can be used for the TM2 in conjunction with Mac / PC based software noted above. All that is needed is an available channel for the TM2 input. Configure software I/O to coincide with TM2 input channel and pink noise output for IEM device under test (DUT).
- Studio Six AudioTools for iOS requires the transfer function module "in-app purchase". Audix has verified operation of the Studio Six iAudioInterface2 with the TM2. Headphone output from the iAudioInterface2 is sufficient to drive IEM levels necessary for testing.

SPECIFICATIONS

Transducer Type	Pre-polarized Condenser
Frequency Response	20 Hz – 20 kHz
Output Impedance	200 ohms
Sensitivity	nom 6.5 mV / Pa @ 1k*** *** sensitivity for each unit included with calibration data
Maximum SPL	130 dBspl
Signal to Noise Ratio	68 dB
Equivalent Noise Level	26 dB (A weighted)
Dynamic Range	104 dB
Connector	3-pin XLRm
Power Requirements	24 – 48 V Phantom
Power Consumption	9 mA @ 48 Volts
Polarity	Positive pressure produces positive voltage on pin 2 relative to pin 3 of output XLR connector
Materials / Finish	Precision machined Brass and Aluminum / Nickel plating and Anodizing
Weight	564 g
Length	243 mm x 147 mm x 97 mm