

USER GUIDE

AUDIO-POD MUTE

Microphone Cough/Mute Control and
Integrated Headphone
Amplifier System

Version 1.1



DM Engineering

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Overview:

The “Audio-Pod Mute” is a Microphone Mute/Cough button control system with an integrated headphone amplifier and switched microphone phantom power, which is ideal for remote broadcasts, podcasts, and talk studio applications. The Microphone in/out employs XLR type connectors.

An Audio-Pod system consists of from one to four Audio-Pod modules and a Power Supply. One Power Supply will supply power for up to four Audio-Pod modules, and the modules may include any of the available models and variety of options. A 10 foot Power Supply cable is supplied with each module.

Optional permanent table top tilt mounting brackets and recessed flush mounting bezels for permanent flush mount solutions for the Audio-Pod modules are also available.

The Microphone mute/cough circuit includes the following features:

- Large LED differentially lighted Mute/Cough button is a long life reed type silent push button
- Microphone XLR in and XLR out connectors as well as Eurostyle screw terminal termination of Mic out connection for permanent installations
- Precision metal film resistors used throughout audio chain for low noise and stability
- Phantom power supplied with a rear panel switch and LED indicator

The integrated headphone amplifier section includes the following features:

- Voltage Controlled Amplifier (VCA) circuitry employed (no “dirty” pots)
- Power Op-Amp headphone output providing both the power and P-P voltage required to drive headsets ranging from 8 to 600 ohms
- Rear panel output phase switch (0-180°) to address bone conduction cancellation issues sometimes experienced by users
- ESD protected front panel 3.5mm and ¼” stereo headphone output jacks
- Rear panel maximum headphone gain set control to restrict the maximum headset output to prevent possible hearing damage and liability issue avoidance
- Single ended L&R inputs via a rear panel 3.5mm jack for quick connect applications and on Eurostyle screw terminal connectors for more permanent connections
- Precision metal film resistors used throughout the audio chain for low noise and stability
- Headphone input isolated for up to 50VDC per channel

Installation:

1. Mount the Power Supply within 10’ of the Audio-Pod location. Mounting may be table top or under the desk mounting using the supplied mounting screws and “keyhole” slots located on the bottom of the power supply cabinet. (3” center to center mounting holes) Orientation may be in two different axes depending upon user preference.
2. The Audio-Pod modules are normally desk top mounted using the supplied rubber feet. If the optional table top or flush mounting brackets are used, refer to the installation instructions that accompany them

3. Connect the Power Supply to the Audio-Pod using the supplied 10ft. 8 pin Mini-Din cables. The orientation of the connector has the flat side facing the top of the enclosures. **IMPORTANT: Assure that the Mini-Din connectors are fully engaged with the sockets.** Insert, wiggle and press firmly! Failure to completely insert the power cables will result in hum or non-operation of the Audio-Pod module.
4. Connect the microphone XLR in and out connectors to the respective receptacles. A more permanent wire output connection, balanced or unbalanced, may be made using the Eurostyle screw terminal connector “MIC OUT +”, “MIC GND”, and “MIC OUT –” terminals.
5. Connect the single ended headphone inputs to the 3.5mm “PHONES IN” connector, (lft=tip, r=ring, com=sleeve) or the “PH IN LFT”, “PH IN RT”, and “PH COM” (headphone common or ground) terminals.
6. Connect the AC power cord to a 115VAC outlet. The LED indicator on the power supply should light as well as the “Mute/Cough” button on the Audio Pod.

Headphone Section:

1. Select the type of headset desired and insert the jack into the appropriate “Phones” receptacle. The rear panel “PHONES MAX GAIN SET” is factory pre-set to about mid range and may be adjusted to the users desired maximum level.
2. To reset the maximum headset level, have the headset audio input source active, slowly adjust the front panel “GAIN” control to maximum while using the an adjusting tool to set the rear panel “PHONES MAX GAIN SET” to the maximum level that you feel is safe for the user. This feature is included to protect the user from possible damaging volume levels to their hearing which may lead to possible litigation in the future.

WARNING: Listening to earphones too loudly may cause hearing loss. To prevent hearing loss, adjust the volume to comfortable levels and avoid prolonged use.



Operation:

The Audio-Pod front panel control functions are as follows:

MUTE/COUGH: Mutes the microphone function.

GAIN: Sets the headset gain and is adjusted by the user to a comfortable volume level.

PHONE JACKS: Both ¼" and 3.5mm stereo headphone jacks are supplied. The jacks are connected in parallel and employ ESD protection circuitry for protection from static build-up on the earphone plug that is being connected.

The Audio-Pod rear panel headset control adjustments are as follows:

PHASE: Depressed for 180° phase shift in the headphone output to correct for bone conduction issues that may arise, and left in the outermost position for 0° phase shift.

PHONES MAX GAIN SET: Factory pre-set to approximately mid range and may be adjusted to the users desired maximum level. (Refer to headphone section setup instructions above.)

Note: *It is imperative that the “PHASE” switch be depressed prior to opening the Audio-Pod enclosure or damage to the switch will result.* This switch damage is not covered by the warranty provisions.

Warranty Information:

The DM Engineering Audio-Pod system is warranted for a period of one year from the date of purchase. This warranty covers materials and workmanship only. Any misapplication, physical or electrical damage from outside sources or by the customer is not covered. For factory warranty repairs, the customer must pay shipping costs to the factory, and DME will pay standard ground transportation shipping costs to return the warranted equipment to the customer. Any priority shipping costs are to be the responsibility of the customer as ground service is standard. Please contact the factory for an RMA number prior to any returns. Items returned without an RMA may be returned to the customer unopened.

Technical Support:

If you have questions, experience difficulties with the product or require further information please contact DME at: 805-987-7881, toll free 800-249-0487, or E-mail technical support at: support@dmengineering.com, or visit www.DMEngineering.com for the latest User Guide.

Specifications:

Case dimensions: Audio-Pod module and Power Supply: 5.09" W X 5.95" L X 2.2" H

Case material and color: ABS flame retardant plastic, black

Power supply to Audio-Pod DC power connection method: 8 pin mini-din connector

Power Supply AC input operating voltage: 105-125 VAC, 60 Hz

Microphone Mute button: Silent long life reed type with LED illumination

Microphone input impedance: 150-250Ω

Headphone gain control circuitry: VCA (voltage controlled amplifier)

Headphone amplifier input level: Stereo L & R, -20dBu to +4dBu

Headphone amplifier input impedance: 10KΩ

Headphone output: (ESD protected) 160MW per channel, 20VP-P max per channel).

Power supply AC cord length: approx. 6 ft. total

Power interface cables: 10 ft. 8 pin mini-din M-M

Mounting method: Power supply and Audio-Pod modules are supplied with rubber feet.

Screws for “key hole” type mounting of the power supply. Optional desk-top mounting brackets for mounting the Audio-Pod at an angle and flush mounting bezels for recessed module mounting in table tops are available.

Operating temperature: 32 to 110°F

Humidity: 0 to 95% non-condensing