Installing the

EasyUSB MicPOD I/O Four-Channel Microphone Interface

The EasyUSB MicPOD I/O microphone interface brings audio from up to four Vaddio EasyMic-compatible microphones into a non-EasyMic environment, typically connecting to a professional audio mixer.

Overview

This manual covers:

EasyUSB MicPOD I/O Microphone Interface:

- 999-8535-000 (North America)
- 999-8535-001 (Europe/UK)
- 999-8535-009 (Australia/New Zealand)

About this Manual

Information in this manual includes:

- Physical features
- Installation
- Troubleshooting

Features

The EasyUSB MicPOD I/O interfaces up to four Vaddio EasyMic conference room microphones into a non-EasyMic environment such as a professional mixer.

- Connections for four EasyMic conference room microphones
- Four balanced line outputs
- Connection for AEC reference signal from the mixer

Product Compatibility

The EasyUSB MicPOD I/O maintains compatibility with Vaddio's EasyMic products, including the new CeilingMIC and TableMIC products. It is not compatible with EasyIP products.

Installation

This section covers:

- Tips for a successful audio installation
- Cabling notes
- Connection diagrams

Preparing for a Successful Audio Installation

Tips for avoiding common audio problems:

- Place microphones closer to the people talking than to the room's speakers. This helps maintain quality echo cancellation.
- To prevent audio feedback, install microphones at least 4 ft. (1.2 m) from speakers. More separation is better.
- The EasyUSB MicPOD I/O requires an AEC reference input; otherwise echo cancellation is not available.

Don’t Void Your Warranty!

Caution

This product is for indoor use. Do not install it outdoors or in a humid environment without the appropriate protective enclosure. Do not allow it to come into contact with any liquid.
Do not install or operate this product if it has been dropped, damaged, or exposed to liquids. If any of these things happen, return it to Vaddio for safety and functional testing.

Cabling Notes

Caution

Do not use pass-through RJ-45 connectors when making cables for this product. Poorly crimped connectors of this type can cause intermittent connections and degraded signal quality. They can also damage the connectors on the product, which will void your warranty.

Intact – will make reliable contact with cable connector

Damaged – Bent contact fingers will NOT make reliable contact with cable connector

When making cables for this product, use Cat-5e or better cable. We recommend using high-quality connectors and a high-quality crimping tool.

We recommend shielded cabling if the cables will be coiled, run tightly with other cables, or routed near sources of electromagnetic interference such as power lines or fluorescent light fixtures.

Caution

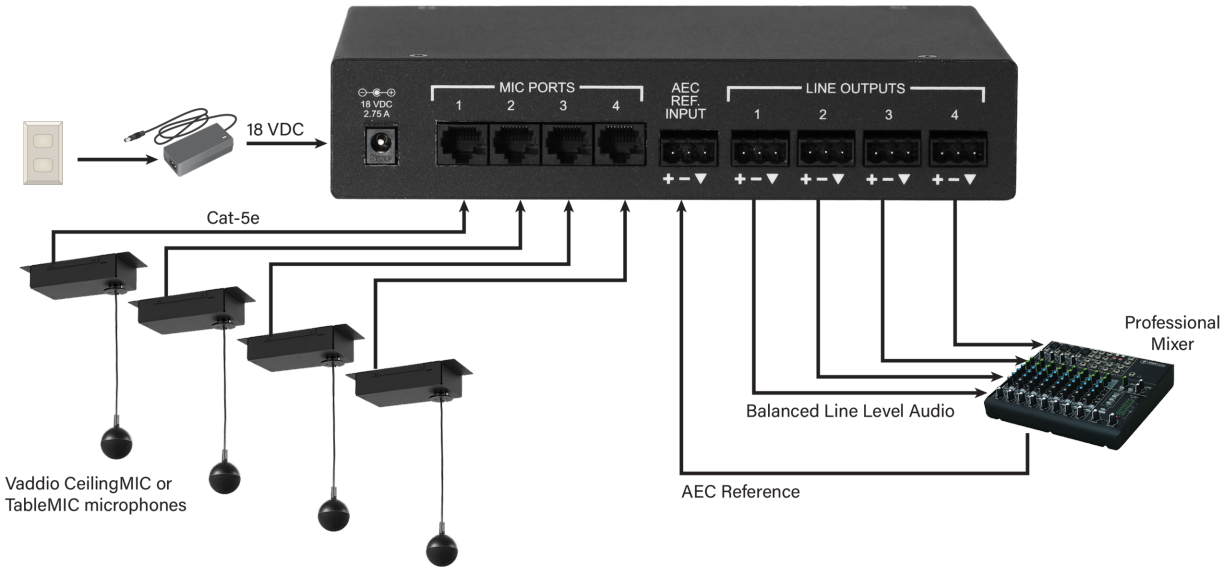
Check your cables. Connecting a cable to the wrong port or using the wrong pin-out can result in equipment damage and will void the warranty.

Pro Tip

Label all cables at both ends.

Basic Connections

Up to four EasyMic-compatible microphones connect to the inputs. Four balanced line-level audio channels from the EasyUSB MicPOD I/O connect to a professional mixer. An AEC reference signal from the mixer feeds into the EasyUSB MicPOD I/O, which sends it to the microphones for echo cancellation.

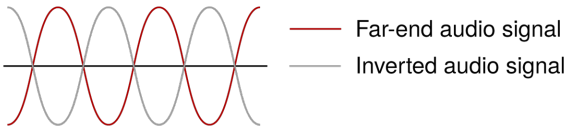


About Echo Cancellation

In a conferencing environment, a microphone picks up the audio from a speaker (far-end audio) during a conference. When it sends the far-end audio back to the participants at the far end, it creates an echo. The same thing can happen in a non-conferencing environment, too. Acoustic echo cancellation prevents this.

Here's how it works:

1. The speaker feeds audio into the room. This signal also goes to the audio processor as the reference that needs to be canceled.
2. The audio processor inverts the signal and sends it to the microphone.
3. The sum of the audio that the microphone picks up from the speaker and the inverted signal is 0: The echo is canceled.



Specifications

Performance

Frequency Response	20 Hz to 20 KHz
THD + Noise	< 0.02%
Dynamic Range	> 90 dB
AEC Reference Input	Line-level balanced input

Environmental and Physical

Operating/Storage Temperature	32°F to 104°F (0°C to 40°C)
Operating/Storage Humidity	10% to 80% (non-condensing)
Maximum Cabling Distance	100 ft (30 m)
Maximum Power Consumption	40 W
Dimensions	Width: 8.38 in (21.27 cm) Depth: 6.0 in (15.24 cm) Height: 1.72 in. (4.37 cm)
Weight	1.4 lbs (0.6 kg)

Troubleshooting

What is it doing?	Possible causes	Check and correct
Nothing. No audio, and the power light does not illuminate.	Power is not connected.	Connect the power supply.
	The power outlet is not supplying power.	Check to see whether the outlet powers other devices, such as a phone charger.
	The power supply is bad.	Call Vaddio technical support.
The microphone is on, but no audio is available from the corresponding line out.	The cable from the microphone or the microphone interface box is not connected, or is bad.	Verify that the cable is connected to the device. Check the cable for correct pin-out and continuity.
Echo or feedback.	Speaker audio needs to be echo-canceled.	Connect the appropriate mixer output to the AEC reference connector.

Use, Storage, and Care

Keep this device away from food and liquids. Do not attempt to take this product apart. There are no user-serviceable components inside. Do not operate or store the device under any of the following conditions:

- Temperatures above 104° F (40° C) or below 32° F (0°C)
- High humidity, condensing or wet environments
- Inclement weather
- Severe vibration
- 20,000 leagues under the sea
- Dry environments with an excess of static discharge

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