



Complete Manual for

TableMIC and EasyIP TableMIC D

Conference Room Microphones

Document 411-0034-30 Rev C April 2021

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Overview

This manual covers:

TableMIC Conference Room Microphone (worldwide) – 999-85000-000 (black); 999-85000-000W (white)

EasyIP TableMIC D network-connected tabletop microphone (worldwide) 999-85300-000 (black); 999-85300-000W (white)

About this Manual

Information in this manual includes:

- Physical features
- Installation
- Operation
- Updating firmware
- Troubleshooting

Features

- Three-element design with improved geometry for 360° coverage and better audio pick-up
- Attractive cloth-wrapped design
- Back-lit, capacitive touch controls
- Solid metal base construction and engineered feet to reduce table vibration noise
- Easy access to the microphone cable connector
- EasyIP TableMIC D only: Dante networked audio
- TableMIC only: Vaddio EasyMic connectivity

Product Compatibility

The **TableMIC** conference room microphone maintains compatibility with Vaddio products that provide EasyMic connectivity, such as HuddleSHOT, ConferenceSHOT AV, AV Bridge products, and EasyUSB products.

The **EasyIP TableMIC D** network-connected tabletop microphone is compatible with Dante environments. It does not offer EasyMic connectivity.



A Quick Look at the TableMIC and EasyIP TableMIC D Microphones

Features of both models:

Cloth-wrapped body: Houses microphone elements positioned so that people seated at the conference table are centered in the area of maximum sensitivity. Each microphone element provides integrated echo cancellation and digital signal processing (DSP), including equalization, filtering and automatic gain control (AGC).

RJ-45 cable connector: Connect to the EasyMic port on a Vaddio device.

Rubber feet: Provide acoustical damping to isolate the microphone from vibrations that can be transmitted through the table, such as people setting items down or drumming their fingers.

TableMIC Features

The top surface of the TableMIC provides controls for basic conferencing functionality:

- Home button Execute the associated OneTouch macro on the device to which the microphone is connected.
- Call button Connect to a Skype for Business conference or leave the conference.
- Mute button Mute the microphones in your conference room.
- Volume + and Volume buttons Adjust the speaker volume in your conference room.
- Volume level indicator (TableMIC) Information display showing the current volume setting.



EasyIP TableMIC D Features

The top surface of the EasyIP TableMIC D has these features:

- Mute button Mutes this microphone only.
- Audio meter display Information display showing audio pickup.



Installation

This section covers:

- Safety information
- Tips for a successful audio installation
- Tools you will need
- Cabling notes
- Physical installation
- Connection diagrams

Preparing for a Successful Audio Installation

Tips for avoiding common audio problems:

- The effective range for each Vaddio conference room microphone is about 12 ft. (3.7 m) under most circumstances. Be sure the room design includes enough microphones to provide adequate coverage.
- Tabletop microphones have a small area of reduced sensitivity directly above their upper surface, as they are designed to pick up the voices of people seated at the conference table. They perform best when placed along the centerline of the table.
- To prevent audio feedback, keep microphones at least 4 ft. (1.2 m) from speakers. More separation is better.
- Place microphones closer to the people talking than to the room's speakers. This helps maintain quality echo cancellation.
- Avoid contact with hockey sticks.
- To prevent audio feedback, install speakers at least 4 ft. (1.2 m) from microphones.
- Range is comparable to Vaddio ceiling microphones.

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

Tabletop microphones are shipped with one Cat-5e cable.

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 – TableMIC

The TableMIC microphone connects to the EasyMic port on Vaddio conferencing products using a standard Cat-5e (or better) cable up to 100 ft. (30 m).



Note

Cables with snag-free boots are not recommended, as they may not fit.

Basic Connections – EasyIP TableMIC D

This is a simple installation for a medium to large conference room, using the EasyIP TableMIC D with an EasyIP system. In this installation, the microphones pair to an EasyIP Mixer over the network. The EasyIP Mixer also manages speakers and video, and originates a USB 3 stream, making audio and video available to soft conferencing applications.



EasyIP microphones can also be used with other devices that support Dante connectivity. *Note*

Because EasyIP microphones are not directly connected to the device that manages them (an EasyIP Mixer in the diagram above), they must be paired to the device in order to operate.

To work with the EasyIP TableMIC D and other Dante devices, you will need to download and install the free Dante Controller application from Audinate Pty. Ltd.: <u>www.audinate.com/products/software/dante-controller</u>

Things to know about Dante Controller:

- Dante Controller does not work over Wi-Fi or across subnets. Your computer must be on the same subnet as the Dante devices you need to work with.
- Device names and IP addresses shown in Dante Controller do not match the corresponding information shown in devices' web interfaces.

Audinate provides information, training, and documentation for Dante technology on their website.

Administration and Operation – TableMIC Microphones

This chapter is specific to the TableMIC microphone with EasyMic connectivity. For information about the EasyIP TableMIC D microphone, see <u>Administration and Operation – EasyIP TableMIC D Microphones</u>. TableMIC microphones typically do not require any configuration when you connect them to Vaddio equipment.

Microphones may occasionally require firmware updates, and you may wish to adjust them. For TableMIC microphones, you can do both through the host device's web interface.

Configuring the Microphone's Home Button Behavior

The TableMIC microphone is a OneTouch trigger device for Vaddio conferencing products that have EasyMic ports and use macros. When the host device's OneTouch trigger is associated with a macro, you can tap the microphone's Home button to execute the macro associated with the trigger – for example, if the microphone is connected to a conferencing camera, the microphone's Home button can be configured to return the connected camera to its home preset.

Note

The microphone's Home button behavior is configured in the host device's web interface.

If the host device's OneTouch trigger does not have a macro associated with it, the microphone's Home button has no function. The button is illuminated whenever the microphone has power, whether it is associated with a macro or not.

To configure the Home button's behavior:

- 1. Log in to the administrative web interface for the camera or other host device.
- 2. Write a macro that accomplishes what you want the device to do in response to the microphone's Home button.
- 3. Associate the macro with the OneTouch trigger. If there is more than one OneTouch trigger, select the one that corresponds to the EasyMic port to which the microphone is connected.

Refer to the host device's manual for detailed information on working with macros and triggers.

Example scenario:

A TableMIC is connected to EasyMic port 1 on a ConferenceSHOT AV camera. You want the camera to point at the person at the far end of the table and zoom in for a head shot when you tap the microphone's Home button. You want the same thing to happen when you press the Home button on the camera's IR Remote Commander.

Use the camera's administrative web interface for this procedure.

Procedure:

- 1. Set up the camera shot you want and store it as the camera's Home preset.
- 2. Create a macro to move the camera to the home position.
- 3. Assign the macro to the OneTouch trigger that corresponds to the microphone.

Notes on this scenario:

- If you connect more than one microphone to the same device, in step 4 you will need to set up all the corresponding OneTouch triggers to make the Home buttons of all microphones behave the same way.
- When the TableMIC microphone is connected to a camera, its Home button is off/on, not momentary. In this situation, you can make it a dual-function button by assigning a macro to execute on enter (Home button on) and one to execute on exit (Home button off).

Working with EasyMic Microphones

When a microphone of the EasyMic family is connected to a compatible Vaddio device, you can manage it from that device's web interface. The managing device provides controls for muting/unmuting and for adjusting the microphone's performance, as shown in the screen shots below. In some cases the device may need to be updated to the latest firmware to work properly with the microphone.

The TableMIC provides integrated controls for basic conferencing functions:

- Mute button Mute the microphones in your conference room.
- Volume + and Volume buttons Adjust the speaker volume in your conference room.
- Volume level indicator Display the current volume setting.
- Call button Connect to a Skype for Business conference or leave the conference.
- Home button Execute the associated OneTouch macro on the device to which the microphone is connected.



Example: Managing a CeilingMIC or TableMIC from a HuddleSHOT camera

TableMIC microphones are updated via the equipment to which they are connected. The procedure varies, depending on the host product.

When you update the microphone firmware, you may also need to update the firmware of the other equipment in the room.

Updating EasyMic Microphones from the Host Device's Web Interface

You can update EasyMic microphones from the web interface of a compatible product such as the ConferenceSHOT AV camera or AV Bridge MATRIX PRO A/V encoder.

Only one microphone at a time can be updated.

Set everything up:

- 1. Go to the microphone's product page on the Vaddio website and download the update file identified as the web firmware update. The filename ends in .p7m.
- 2. Open a browser and enter the host device's IP address to access its web interface.
 - If the microphone is connected to a ConferenceSHOT AV, point the remote at the camera and press the Data Screen button. The camera's IP address is overlaid on the video outputs.
 - If the microphone is connected to an AV Bridge MATRIX PRO, use the knob on the front panel to dial to the Network menu, and press the Select button. The front panel display shows the encoder's IP address.

You may need to type http:// or https:// (with no space) before the IP address so the browser does not treat the IP address as a search query.

3. Log in as admin.

The web interface may differ somewhat from the screen shots in this procedure.



Specify the microphone to update:

1. Navigate to the host device's System page and select the Peripherals or Microphones tab.

Con	addio ferenceSHOT AV					
¢	Camera	Firmware	DIP Switch	es Peripherals		
۱	Audio	EasyMic Firmwa	are Update			
₩-))	Control Devices	Firmware File EasyMic Port		Choose File No file cho EasyMic 1 - EasyMic Ta	isen ible v1.11	
▶	Streaming			EasyMic 2 - CeilingMIC	v2.00	
Þ	Room Labels	Begin Firmware	Update			
	Networking	Firmware Upda	ite Log		Status	
		ion renp			Status	
	Security					

2. Select the port connection for the microphone to be updated.

Cont	addio ferenceSHOT AV					
¢	Camera	Firmware	DIP Switches	Peripherals		
	Audio	EasyMic Firmwa	re Update			
*•≫	Control Devices	Firmware File EasyMic Port	Choo Eas Cas	se File No file chose yMic 1 - EasyMic Tabl yMic 2 - CeilingMIC v2	en le v1.11 2.00	
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¢	Security					

Install the update:

- 1. Select Choose File. Then browse to the update file that you downloaded, and select it.
- 2. Select Begin Firmware Update.
- 3. READ the information in the Confirm dialog box and be sure you understand it.



4. When you are ready to start the update, select Continue. The Firmware Update Log pane displays log messages during the update, and displays a success message when the microphone is updated and ready to use.

Repeat the process if you need to update another microphone.

Updating EasyMic Microphones from the EasyUSB Mixer/Amp

You can only update one microphone at a time.

Download the files you need:

- 1. Go to the microphone's product page on the Vaddio website and download the update file identified as the serial firmware update. The filename ends in .ldr.
- 2. Download the current version of the Vaddio Loader from the Vaddio resources page at https://www.legrandav.com/en/tools_and_training/tools/vaddio_tools.

Connect to a computer:

Connect the EasyUSB Mixer/Amp to a PC as follows:

- Cat-5 cable from the EasyUSB Mixer/Amp's RS-232 port to the EZ Camera RS-232 Control Adapter
- EZ Camera RS-232 Control Adapter to the PC's serial port, if it has one OR

USB to 9-pin adapter cable from the EZ Camera RS-232 Control Adapter to the PC (shown)



(The cable colors in this diagram do not represent anything. We just liked the idea of cables in fun colors.)

Check communication using Vaddio Loader:

- 1. On the computer, launch Vaddio Loader.
- 2. Specify the COM port connected to the EasyUSB Mixer/Amp, if prompted to do so.
- 3. Under Product Type, select Audio. This populates the product list in the box above the Product Type selection.
- 4. From the product list, select EasyUSB Mixer/Amp.

🗐 VaddioLoader	-		×
File Help			
EasyUSB Mixer/Amp	Ň		
Product Type Control Camera Audio Part No. Discontinued	Select Load File	Start	

5. From the File menu, select Serial Commands. A new window opens.

💂 VaddioLoader			_		×
File Help					
Setup COM3		~			
Serial Commands					
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O Discontinued		Jelect Load The			
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6. In the Command box, enter a question mark. Then select Send. The EasyUSB Mixer/Amp returns its current firmware version and a list of valid commands. This tells you that the device is connected correctly and that you have selected the COM port to which it is connected. If your query times out, returns no response, or returns a different response than expected, contact Vaddio Technical Support to troubleshoot before proceeding.

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Command	?	Send	
	C	ancel	
-			
2			^
? EasyUSB	MixerAmp vl.20.	03 Apr 26 2017 13:26:21	Î
? EasyUSB Command	MixerAmp vl.20. Response	03 Apr 26 2017 13:26:21 Description:	
? EasyUSB Command 5101 -on)	MixerAmp vl.20. Response - 4101 xx	03 Apr 26 2017 13:26:21 Description: Get mute status (xx: 00-off, 01	^

7. To confirm communication to the connected microphone and verify that it has not yet been updated to the latest version, send a version inquiry command to the appropriate EasyMic port:

EasyMic port 1: Enter the command 5202 00 and select Send.

EasyMic Port 2: Enter the command 5202 01 and select Send.

The microphone responds with 4202 followed by a two-digit model identifier and a string of numbers representing the firmware version currently installed.

8. Close the Send Serial Commands window to return to the main Vaddio Loader window.

Put the EasyUSB Mixer/Amp in firmware update mode:

- 1. Disconnect power from the EasyUSB Mixer/Amp and set DIP Switch 8 to the UP position (firmware update mode).
- 2. If two microphones are connected to the EasyUSB Mixer/Amp, disconnect one of them.
- 3. Reconnect power and wait for the unit to finish its power-up sequence. The EasyUSB Mixer/Amp is now ready to update the connected microphone.

Install the update:

- 1. From the product drop-down menu of Vaddio Loader, select the name of the microphone to be updated CeilingMIC or TableMIC.
- 2. Choose 'Select Load File' and browse to the firmware you downloaded.
- 3. Select Start. The squares in the bottom right corner flash, the progress bar on the bottom starts to fill in, and the microphone's mute indicator blinks. The update takes a few minutes.

EasyLSB Mixer/Amp Product Type Control Camera Audio Part No. Dscontinued Start	File Help		
Product Type Control Camera Audio Part No. Select Load Fie Start	EasyLSB Mixer/Amp	-	
	Product Type Control Camera O Audio Part No. Dscontinued	Select Load Fie	Start

Caution

Do not disconnect any cables until Vaddio Loader indicates a successful firmware load.

4. When the Vaddio Loader displays the message "Firmware Load and Install Successful", the update is complete. Repeat the process if you need to update another microphone. Be sure to disconnect power from the EasyUSB Mixer/Amp before connecting or disconnecting microphones.

Return the equipment to its normal operating state:

- 1. When all updates are complete, disconnect power from the EasyUSB Mixer/Amp and set DIP Switch 8 to the DOWN position (normal operation).
- 2. Disconnect the EasyUSB Mixer/Amp from the computer, and reconnect all equipment in its usual configuration.

Administration and Operation – EasyIP TableMIC D Microphones

This chapter is specific to the EasyIP TableMIC D with Dante networked audio. For information about the TableMIC, see <u>Administration and Operation – TableMIC Microphones</u>.

You will need the following applications to work with EasyIP microphones:

- Dante Controller For routing microphones and speakers with Dante[®] connectivity to the A/V equipment. Download and install the free Dante Controller application from Audinate Pty. Ltd.: www.audinate.com/products/software/dante-controller
- Vaddio Dante Interface Application For accessing EasyIP microphone settings and adjustments, and for updating EasyIP microphone firmware. Download the Vaddio Dante Interface Application from the Vaddio resources page at <u>https://www.legrandav.com/en/tools_and_training/tools/vaddio_tools</u>.

About Dante Technology and Devices

Audinate Pty. Ltd (<u>www.audinate.com</u>) provides the latest information, training, and documentation for Dante technology on their website. Information in this manual about Dante technology and Audinate products may be out of date.

Things to know about Dante technology and the Dante Controller application:

- Dante technology does not work over Wi-Fi.
- Dante Controller does not work across subnets. Your computer must be on the same subnet as the Dante devices you need to work with.
- Default device names and IP addresses shown in Dante Controller do not match the corresponding information shown in Vaddio devices' web interfaces. The Dante chip in each Dante device has its own IP address and device name. The Dante Controller application uses this information.
- Dante Controller allows you to rename devices, so you can make their identifying labels match what's displayed in the Vaddio web interface. We recommend doing this.

Locating and Pairing to Dante Devices

DANTE CONTROLLER APPLICATION

Notes

The Dante chip in each EasyIP device has its own IP address and device name. The host device's name and IP address do not correspond to the hostname and IP address in its web interface.

To physically locate Dante devices using the Dante Controller application:

- 1. Open the Device Info tab to see the IP address and other information about each Dante device on the subnet that your computer is on.
- From the main Network View, select Device : Device View. The Device View window opens. Note that EasyIP devices will show the IP address of the Dante chip, not device's web server IP address.

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File Device View Help										
Refresh F5) 🕂 💩 🕥				Grand Mas	ter Clock: SureTable				0
Search	Device Info	Clock Status N	letwork Status Ev	ents						
Clear All	wwindow Device Name	Model Name	Product Version	Dante Version	Device Lock	Primary Address	Primary Link Speed	Secondary Address	Secondary Link Speed	
E Device Lock	AVB-2x1-922453	AVB-2x1	AVB-2x1 100	4.2.0.4		10.30.240.115	1Gbps	N/A	N/A	^
	Chris-AVB2x1	AVB-2x1	AVB-2x1011	4.2.0.2		10.30.240.34	1Gbps	N/A	N/A	
	Rmspeaker	PoE-60DD	1.1.3	3.10.1.12		10.30.240.4	100Mbps	N/A	N/A	
Unlocked	Table mic	MXA310	0.0.1	3.9.4.1	N/A	10.30.240.126	1Gbps	N/A	N/A	
Unsupported										
🗊 Samola Data										

3. In the Device View window, select the device of interest. The window presents information about the device.

🥺 Dante Controller - Device View		-	×
<u>File D</u> evice <u>V</u> iew <u>H</u> elp			
	(Select a Dante De VB-2x1-922453 Chris-AVB2x1 Rmspeaker Table mic		0

4. Select the Identify icon. The EasyIP microphone responds by blinking its mute light. To stop the identifying behavior, select the Identify icon again.

🕺 Dante Controlle	er - Device View (A	AVB-2x1-922453)		- 🗆	×
<u>File</u> <u>D</u> evice <u>V</u> iew	<u>H</u> elp				
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Receive Transn	Status Latency I	Device Config Network	Config AES67 Co	nfig	
lde	ntify device Receive	Channels		Available Channels	
Channel	Signal	Connected to	Status	Filter	
Mix Input 1				Chris-AVB2x1	
Mix Input 2				- Kmspeaker	
Mix Input 3				Table file	

Other ways to access the Identify function:

The host device's Audio page provides an Identify button for EasyIP microphones.

The Vaddio Dante Interface Application includes an Identify button.

To pair EasyIP microphones to the host device:

- 1. From the main Network View, select Routing.
- 2. Use the matrix to pair Dante receivers (speakers) and transmitters (microphones) to the host device, which is both a receiver and a transmitter.



In this example, the receiver "Speaker" is routed to Dante output 1 of the device "ChrisE2x1". The transmitter "Table" (a tabletop microphone) is routed to the device's Dante input 1.

To rename a device in the Dante Controller application:

In the Device View window, select the device and go to its Device Config tab. The Rename Device option is near the top of the tab.

🥺 Dante Controller - Device View (AVB-2x1-922453)	_	×
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AVB-2x1-922453 Apply		
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bumple rate		
Sample Rate: 48k 🗸 Pull-up/down: 🗸		
This device does not support		
Pull-up/down configuration.		
EncodingClocking	-	
Defend Foreiten DOM 24		
Preferred Encoding: PCM 24 Onicast Delay Requests: Disabled V		
This device does not support preferred encoding configuration.		
- Device Latency]	
Latency: 1.0 msec 🗸		
Reset Device	1	
Reboot Clear Config		
	-	

Using More than Two EasyIP Microphones with a Vaddio Host Device

DANTE CONTROLLER APPLICATION

In the examples that follow, we're working with a system that uses four Dante-connected microphones and a Dante-connected speaker. The system in the screen shots used an AV Bridge 2x1; the way it's configured in the Dante Controller application is exactly the same as it would be for other Dante-compatible Vaddio devices.

Your devices will be labeled differently from the devices in these screen shots.

For this configuration to work properly, we will need to do these things:

- Route audio from the host device to the speaker, and route the same audio to the microphones as their AEC reference. In the example set-up, this audio channel needs to be transmitted to five devices. To allow the signal to go to five places, we will need to set up a multicast flow.
- Create two flows to route audio from the microphones back to the host device. Although the AV Bnidge 2x1 has four Dante input channels, it is limited to two transmit flows and two receive flows. This is also true of the EasyIP Mixer. We will need to combine the four microphone channels into two flows.

About Channels and Flows

- A **channel** in a Dante environment is the same thing it would be in other environments: a signal from a single source.
- A flow in a Dante environment is one to four channels that can be routed from device to device. Channels remain separate within the flow. For example, left and right audio channels can be part of the same flow.
- By default, flows are **unicast** they can only be routed to one receiving device.
- If one or more channels need to be routed to more than one device, the flow needs to be multicast. A multicast flow goes to all the receiving devices. Each device subscribes only to the channel it needs to receive.

This manual only covers the very most basic information about working with Dante products; Audinate Pty. Ltd. provides a great deal of useful information on their website. Please visit www.audinate.com/learning for documentation, tutorials, whitepapers, and more.

Creating a Multicast Flow

DANTE CONTROLLER APPLICATION

To allow one audio channel from the host device to go to the speaker and also serve as the AEC reference signal that goes to the four microphones in our example set-up, define a multicast flow containing only that channel.

To define the multicast flow:

- 1. Select Device : Device View, and go to the Transmit tab.
- 2. Select the Multicast icon (labeled 1 in this screen shot).
- 3. Select the output from the host device. In this case we're using Dante Output 1, which is labeled Mix Output 1 in Dante Controller.
- 4. Select Create.

Now Dante Output 1 is available to every device that can receive it – the speaker and the four microphones. These devices will only use the channel in the multicast flow if it is routed to them.

- KN -	•< 🛨 🖬	AVB-2x1	-9178 🗸		
eceive Transm	nit Status Latency Device Config Netwo	rk Config AES67 Conf	fig		
	Transmit Channels		т	ansmit Flows	
Mix Output 1 Mix Output 2 Mix Output 3	Create Multicast Flow AVB-2x1-9178af supp to 4 channels per fl	ports up pw.	X Inicast: 0 fulticast: 0 lotal: 0 of 2		
fix Output 4	Select one or more transmit channels to be	placed in multicast flo	ws.		
	Channel Name	Add to New Flow			
	Mix Output 1	☑ <	2		
	Mix Output 2				
	Mix Output 3				
	Mix Output 4				
	J ↓ ↓				

Combining Microphone Channels into Flows

DANTE CONTROLLER APPLICATION

The EasyIP Mixer or AV Bridge 2x1 can only receive two Dante audio flows. Each EasyIP microphone provides a pass-through channel as well as its own audio channel, so one microphone can be routed to another, which creates a flow with two microphone channels that can be routed to the host device. Think of it as daisy-chaining the microphones, but without the cable.

In the screen shot below, locate the microphones in the Dante Receivers column. Each receives its AEC reference from the Mix Output 1 channel that we set up as a multicast flow. Microphone EasyIP-1 also receives a pass-through channel from microphone EasyIP-3; microphone EasyIP-2 receives a pass-through channel from microphone EasyIP-4.

Each of the host device's four Mix Inputs receives the channel from the corresponding microphone, but the four channels are all coming from microphones EasyIP-1 and EasyIP-2.



To route four microphones as two flows:

- 1. Decide which two microphones will be routed to the host device. In our example, it's EasyIP-1 and EasyIP-2.
- 2. In the Network View, look under Dante Receivers to find the **passthrough** row for each of these two microphones. Read across the Dante Transmitters to find the EasyIP Microphone column for the microphone originating the signal that will pass through, and select the box where they intersect.



- 3. Find the rows for the host device's Dante inputs. In this example, it's Mix Input 1 through Mix Input 4 of AVB-2x1-9178af. Read across the Dante transmitters to find the two microphones receiving pass-through channels.
- 4. For each Mix Input, select the box where the Mix Input row intersects with either the EasyIP Microphone channel or the passthough channel, to route each microphone to the desired input.



Routing Device Info Clock Status Network Status Events

Working with EasyIP Microphones

To work with EasyIP microphones, you will need the free Vaddio Dante Interface Application. This application provides access to the microphone's adjustments.

About the Vaddio Dante Interface Application

EasyIP and Dante technologies use differing communication protocols. Because of this, EasyIP microphone controls are not available from the web interface of the EasyIP host device, and the Vaddio Deployment Tool does not recognize them as Vaddio devices. To work with EasyIP microphones, you will need to download the free Vaddio Dante Interface Application from the Vaddio resources page at https://www.legrandav.com/en/tools_and_training/tools/vaddio_tools. We update this tool with new features and enhancements from time to time. Please be sure you have the latest version.

The Vaddio Dante Interface Application provides access to the microphone's adjustments. In the event that Vaddio releases an update to the microphone firmware, the Vaddio Dante Interface Application offers firmware update capability.

Things to know about the Vaddio Dante Interface Application:

- The application only detects EasyIP microphones.
- The application does not scan across subnets. Your computer must be on the same subnet as the microphones.

Note

The Vaddio Dante Interface Application has been updated to allow you to disable/enable the Mute button and audio meter on tabletop microphones. Some of the screen shots in this section are from an older version and do not reflect this enhancement.

Fine-Tuning EasyIP Microphone Performance

When you open the Vaddio Dante Interface Application, it displays the IP addresses of the EasyIP microphones on the subnet. Select a microphone to enable its controls.

Devices	Hardware Audi	o Configuration for	192.168.1.100	
Rescan	Gain		Processing	Filters
				Easy PEQ
	Mute	Mute	Echo Cancellation	Normal 👻
IP Address		MIC Boost	Voise Cancellation	
192.168.1.100				TableMIC LED Enable
			Automatic Gain Control	
	0 dB			Mute dB Meter
		-		
	Identify	Device Name: I	EasyIPT-8399ac.local. Firmwar	re 0.05 Upload

The adjustments and settings are generally the same as for the EasyMic family CeilingMIC and TableMIC microphones.

Presentation Adjustments

VADDIO DANTE INTERFACE APPLICATION

You may need to adjust the microphones for the participants.

To accomplish this	Do this
Help participants hear the person who is speaking.	Select the Mic Boost processing option to increase microphone gain overall. Use the slider to set the gain. From the Easy PEQ menu, select Speech Enhancement to increase gain in the frequency range for speech.
Automatically adjust for differences in volume as different people speak	Enable Automatic Gain Control for the appropriate microphone.

Performance Adjustments

VADDIO DANTE INTERFACE APPLICATION

You may need to adjust the microphones to suit the room. Echo cancellation and noise cancellation are on by default; we recommend leaving them on.

To correct this	Do this
Reverberant room	From the Easy PEQ menu, select Reverberant Room.
Noisy environment	From the Easy PEQ menu, select Ambient Noise to reduce gain in the frequencies above and below the normal speech range.
Participants may be seated beyond the microphones' optimum pick-up range	From the Easy PEQ menu, select Speech Enhancement to increase gain in the frequency range for speech. Select the Mic Boost processing option to increase microphone gain overall.

Devices	Hardware Audio Configuration for 192.168.1.127				
Rescan	Gain		Processing	Filters	
IP Address 192.168.1.127	0 dB	Mute	 Echo Cancellation Noise Cancellation Automatic Gain Control 	Easy PEQ Normal Reverberant Room Ambient Noise	
	Identify	Device Name: E	asyIP-828037.local. Firmwar	Speech Enhancement re Version: 1.03 Upload	

Status: Connected to device 192.168.1.127

Setting Control Surface Behavior

VADDIO DANTE INTERFACE APPLICATION

By default, the Mute icon acts as a button, and the audio meter (labeled dB Meter in the Vaddio Dante Interface Application) shows the audio pickup level. These can be disabled in the TableMIC LED Enable area.

- Clearing the Mute checkbox disables the Mute button on the microphone's control surface. You can still mute the microphone from the web interface of the device to which it is paired.
- Clearing the dB Meter checkbox turns off the audio meter display.

Rescan	Hardware Audio Config	uration for 192.168.1.100	Filters
IP Address 192.168.1.100		ute CECCO Cancellation IC Boost IC Noise Cancellation	TableMIC LED Enable
	Identify Devic	ce Name: EasyIPT-8399ac.local. Firmw	are 0.05 Upload

Installing a Firmware Update for an EasyIP Microphone

VADDIO DANTE INTERFACE APPLICATION

You will need the **Vaddio Dante Interface Application** to update EasyIP microphone firmware. When you open the Vaddio Dante Interface Application, it displays the IP addresses of the EasyIP microphones on the subnet.

To update EasyIP microphone firmware:

- 1. Download the firmware and release notes. Microphone firmware is available on the microphone product page.
- 2. Open the Vaddio Dante Interface Application if you have not done so already.
- 3. Select the microphone to update.

Sector Content Interface A	pplication		X		
Preferences Help					
Devices Rescan IP Address 192.168.1.128 192.168.1.127	Hardware Audio Configuration for	r 192.168.1.128 Processing Characteristic Cancellation Noise Cancellation Automatic Gain Control	Filters Easy PEQ Speech Enhancement 👻		
Identify Device Name: EasyIP-828120.local. Firmware 1.02 Upload Status: Gain Adjust: Mute state change: (enabled)					

4. Select Upload and navigate to the firmware file.

Do not disconnect the microphone while the progress bar is displayed.

Devices	Hardware Aud	lio Configuration for	192.168.1.127	
Rescan	Gain		Processing	Filters
IP Address 192.168.1.127 192.168.1.128	0 dB	Mute	Echo Cancellation Noise Cancellation Automatic Gain Control	Easy PEQ Normal
	Idoptify	Dovice Name I		ro 102 Upload

Troubleshooting

What is it doing?	Possible causes	Check and correct
Nothing. Connected devices do not recognize the microphone.	The microphone cable is not connected to the AV or conferencing device.	Verify that the microphone cable is connected at both ends.
	The microphone cable is bad.	Check the cable for correct pin-out and continuity.
	The microphone is connected in an incompatible environment.	If connecting to a switch, ensure it is an EasyIP microphone. If connecting directly to a camera or AV Bridge series product, be sure it is an EasyUSB microphone.
	EasyIP TableMIC D: The microphone is not paired to the conferencing device.	Use the Dante Controller application to pair the microphone with the conferencing device.
The connected device does not recognize the microphone.	The device may have outdated firmware.	Download the latest firmware from the device's product page, and update the device.
The Vaddio Deployment Tool cannot locate the microphone.	The microphone is an EasyIP device.	Use the Vaddio Dante Interface Application to locate the microphone.
Participants at the far end report no audio.	The microphone is muted.	If the mute indicator light on the TableMIC is on, it is muted. Tap the mute indicator on the top of the microphone to unmute it.
Participants at the far end report that the audio does not sound natural.	The audio has not been adjusted properly for the room.	Adjust the microphone from the device that controls it.
The microphone's Home button does not work, or behaves unpredictably.	The corresponding OneTouch trigger has not been set up on the connected device.	Set up the OneTouch trigger on the device connected to the microphone. See <u>Configuring the Microphone's</u> <u>Home Button Behavior</u> .
	The OneTouch trigger executes a macro that does not work properly. For example, if the macro uses the camera home command, a home preset must be saved.	On the connected device, test and debug the macro.

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
- Dry environments with an excess of static discharge

Although this product was designed and built in Minnesota, it has not been tested under lowtemperature conditions and is not rated for use on ice rinks or in other subfreezing environments. Repositioning it with a hockey stick will void the warranty. We're sorry.



Photo Credits

This guide may include some or all of these photos.

European Space Agency (ESA) astronaut Samantha Cristoforetti, a Flight Engineer with Expedition 42, photographs the Earth through a window in the Cupola on the International Space Station

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Carl Sagan, Bruce Murray, Louis Friedman (founders) and Harry Ashmore (advisor), on the occasion of signing the papers formally incorporating The Planetary Society

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Expedition 42 on orbit crew portrait, International Space Station, Mar. 7, 2015 – Barry Wilmore (Commander) Top, Upside down, to the right cosmonaut Elena Serova, & ESA European Space Agency Samantha Cristoforetti. Bottom center US astronaut Terry Virts, top left cosmonauts Alexander Samokutyaev and Anton Shkaplerov.

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European Space Agency astronaut Luca Parmitano, Expedition 36 flight engineer, outside the International Space Station

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Chris Cassidy, Luca Parmitano, and Karen Nyberg, ISS, 2013. Photo Credit: NASA

Nicolas Altobelli, Rosetta Scientist at ESA's European Space Astronomy Centre, Villanueva de la Cañada, Madrid, Spain

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Andrea Accomazzo, ESA Rosetta Spacecraft Operations Manager, providing a live update from the Main Control Room at ESA's European Space Operations Centre, Darmstadt, Germany during the Rosetta wake-up day.

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Sleeping goose

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Photo AS11-40-5948, Aldrin assembles seismic experiment, by National Aeronautics and Space Administration, courtesy of the NASA History Office and the NASA JSC Media Services Center

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