# ANIUSB-C

## Audio Network Interface

Manual for the ANIUSB-C 2 in, 2 out audio network interface. Includes connection diagrams, setup and testing information, and technical specifications

Version: 0.5 (2026-H)

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# ANIUSB-C
# Audio Network Interface

## ANIUSB-C Overview

The ANIUSB_C Audio Network Interface provides bidirectional stereo USB_C-to-Dante audio connectivity for professional AV conferencing environments. Powered by PoE and configurable through Shure Designer and ShureCloud, it enables simple, secure integration of networked audio with USB_C-based conferencing systems.

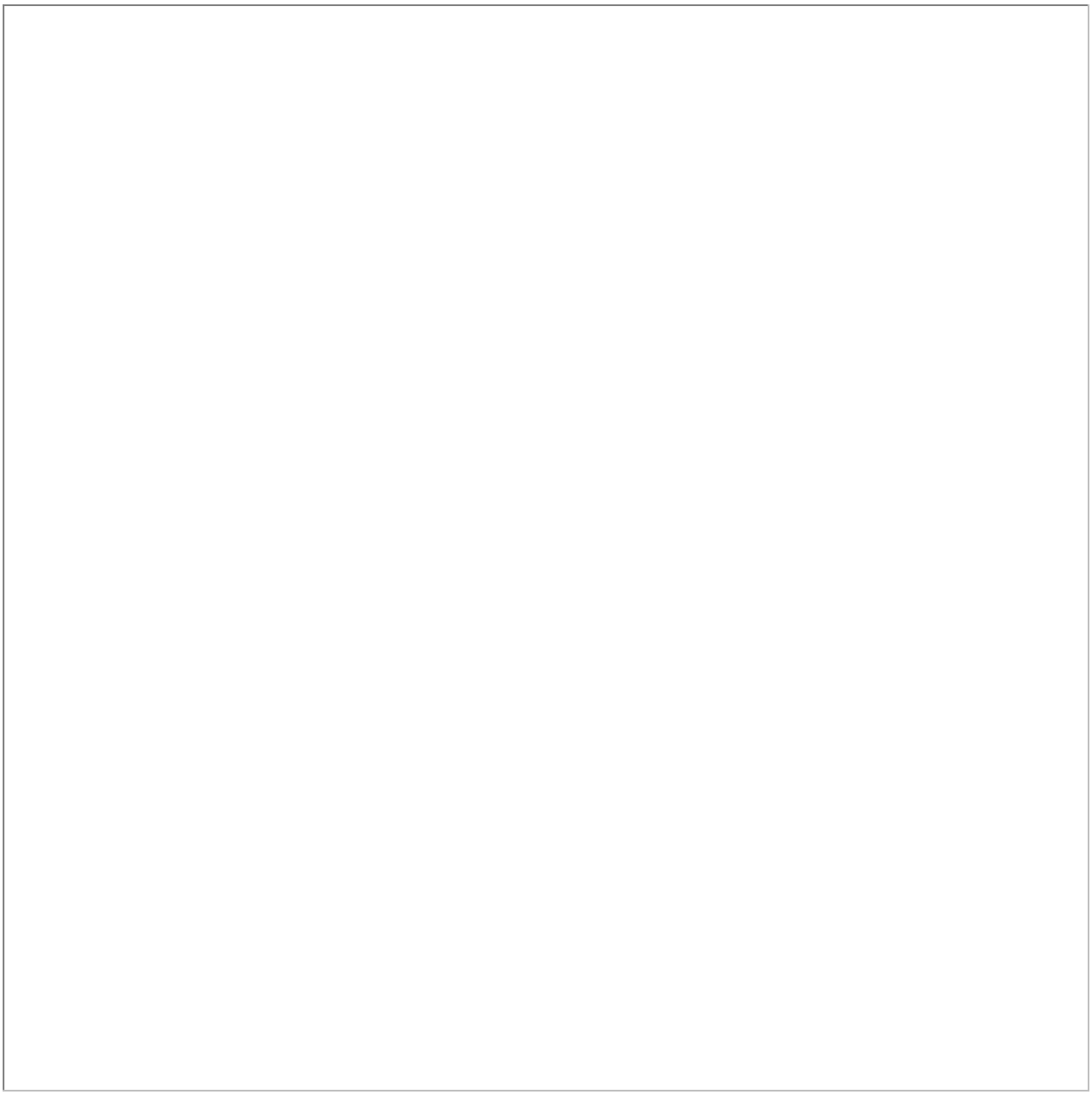
## Getting Started

### Videoconferencing Room Equipment

Your ANIUSB-C is one part of a complete room system for videoconferencing. It's helpful to think about all the parts of your room system as you integrate your USB-C connector.

A standard room includes some or all of this equipment:

- Microphone(s)
- DSP or other processor
- Loudspeakers (networked or analog)
- Computer with videoconferencing software
- Network switch
- Camera
- Other accessories such as table mute buttons, tablets to control meetings, and other peripherals



**Medium room equipment example**

The Microflex® Ecosystem offers a complete portfolio of networked audio solutions that can be precisely tailored to your needs.

# What Software Do I Need to Manage the ANIUSB-C?

Install this software on a computer that connects to the same network as the ANIUSB-C:

- Control software to adjust microphone settings. This microphone has 2 options:

  **Option 1:** Shure Designer

  - Use for managing lots of Shure devices in 1 place
  - Control Shure devices and route audio between them
  - Create rooms to manage devices and design coverage

**Option 2:** Web application (open using Shure Update Utility)

- Use to manage each Shure device separately
- Control each device individually with its web application
- Route audio using Dante Controller

- **Dante Controller** to send audio signals to other Dante devices. Not necessary if you're only routing audio to Shure devices in Designer.
- **Shure Update Utility** to update firmware on Shure devices and open device web applications (download at shure.com/suu)

# ANIUSB-C Setup Example

Use the steps in this example to get the ANIUSB-C up and running on your network.

This example uses Shure Designer to set up an ANIUSB-C and an MXA320. The setup process in Designer is similar if you're using a different microphone.

After completing this setup process, you should be able to:

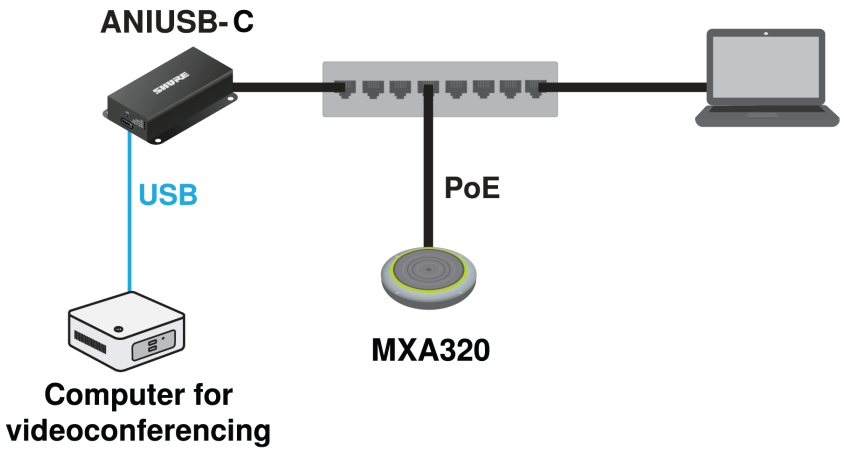
- Access the ANIUSB-C in Designer
- Adjust settings and route audio
- Understand the basic workflow for working with devices in Designer

Equipment in this example:

- Cat5e or better Ethernet cable (shielded cable recommended)
- Network switch that provides Power over Ethernet Plus (PoE+)
- Shure Designer software (download at shure.com/designer)
- MXA320
- Computer with videoconferencing software

For best results, route 1 microphone to the ANIUSB-C. If using multiple microphones, use a device with an automixer (such as a P300 or IntelliMix Room).

## Step 1: Install and connect




1. Install the ANIUSB-C and other devices. Connect the microphone to a PoE+ port on the network switch using an Ethernet cable.

   ***Note**: The ANIUSB-C requires PoE. If your switch doesn't supply PoE, the power/network LED flahes red to indicate an error.*

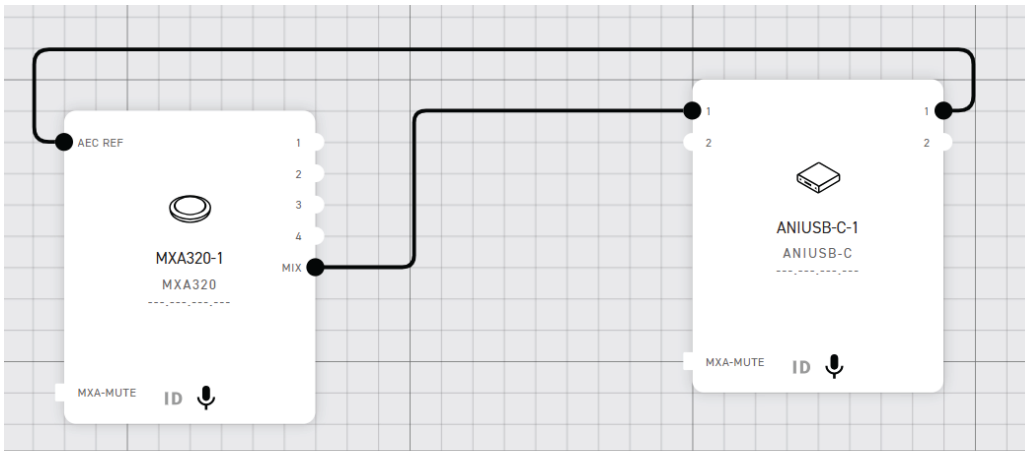
2. Connect a computer with videoconferencing software (such as Microsoft Teams or Zoom) installed on it to the ANIUSB-C's USB-C port.
3. Connect the computer running Designer to the same network.
4. Open Designer. Check that you're connected to the same network as the devices in `File` > `Designer Preferences`.
5. Create a new online room. Drag the devices into the room from the Devices panel.
   - The Routing and Coverage views show all devices in the room.
   - Double-click a device to open its settings in a new tab.

## Step 2: Run Designer's Auto Route

The auto route feature is the easiest way to route audio signals, apply DSP settings, turn on mute sync, and enable LED control for connected devices.

1. Select Auto route. Designer makes the following routes:
   - MXA320 to ANIUSB-C
   - ANIUSB-C USB-C output to computer with videoconferencing software
   - ANIUSB-C Dante output to MXA320 Dante input (AEC reference)

   You can also route audio manually in Designer or use Dante controller.



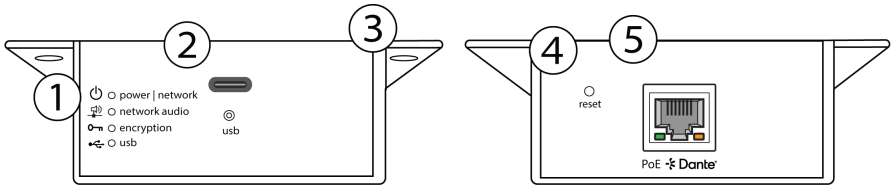

2. Check the audio routes, matrix mixer routes, and other settings to make sure they fit your needs. To adjust matrix mixer routes, double-click the ANIUSB-C in your room and choose Matrix Mixer in the dropdown menu.

### Step 3: Test System and Adjust

Make a test call to someone else and adjust coverage settings as needed.

1. Open the videoconferencing software on the computer connected to the ANIUSB-C. In the settings, choose the ANIUSB-C as the speaker and microphone.
2. Place a test call to someone else and have the other person tell you how the microphones sound. Make gain, EQ, or DSP adjustments as needed:
   - Microphone: `[Your room]` > `[Microphone]` > `IntelliMix`
   - Loudspeaker: `[Your room]` > `[Loudspeaker]` > `Speaker output`
   - ANIUSB-C: `[Your room]` > `ANIUSB-C`
3. To adjust mic coverage, go to the room's Coverage tab. You can also listen to the microphone signal directly using a Dante headphone amp to help make adjustment.

## ANIUSB-C Parts




1. LED indicators: Indicate the status of PoE, network audio, encryption, and USB.

### ANIUSB-C LED Meanings

| LED | LED State | Meaning |
|---|---|---|
| **Power/network** | Green | PoE present, connected to network |

| LED | LED State | Meaning |
|---|---|---|
| | **Yellow** | Network not ready |
| | **Red (flashing)** | Error |
| | **Off** | No PoE. Device is off |
| **Network audio** | Green | At least one Dante stream is active |
| | **Red** | Network audio error. Refer to event log in web application for details |
| | **Off** | No active signal |
| **Encryption** | Green | Successful encrypted audio connection on at least one channel |
| | **Red** | Encryption error. Possible causes:<br>Encryption is enabled on one device and not on another<br>Encryption passphrase mismatch |
| | **Off** | Audio is not encrypted |
| **USB** | Green | USB device connected and working |
| | **Red (flashing)** | Problem detected with connected USB device |
| | **Off** | No USB device connected |

2. USB-C port with locking feature
3. Mounting keyholes
4. Reset button: Use a small tool, like a paperclip, to press the button and trigger a factory reset.
5. RJ-45 network port

# Power Over Ethernet (PoE)

This device requires PoE to operate. It is compatible with both **Class 0** and **Class 2** PoE sources.

Power over Ethernet is delivered in one of the following ways:

- A network switch that provides PoE
- A PoE injector device

# Dante Channels

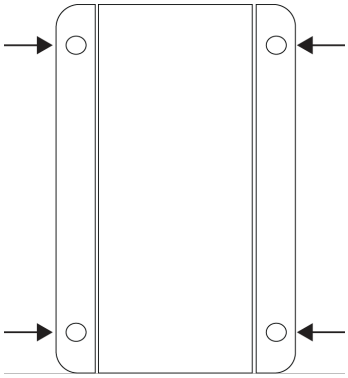
The ANIUSB-C has 4 total Dante channels:

- 2 input channels
- 2 output channels

# Install the ANIUSB-C

You can mount the adapter under a table, on a wall, or to any flat surface. Secure the keyholes (7.1 mm diameter) on each side with appropriate hardware.

**Important**: Select appropriate mounting hardware to ensure the product is securely fastened.



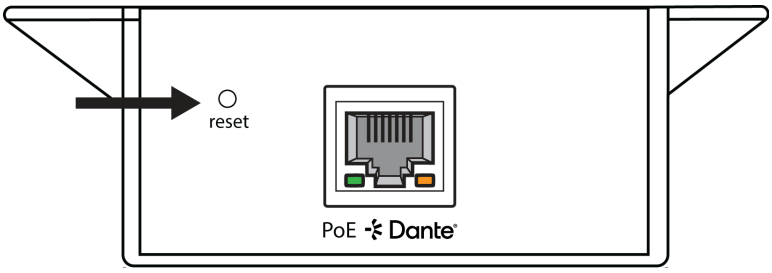
## Installing Underneath a Table

1. Hold the ANIUSB-C in the desired location under a table.
2. Use a pencil to mark the location of the mounting holes on the table.
3. Drill 4 holes for the screws. The diameter of each hole is 7.1 mm.
4. Install with 4 screws to secure the ANIUSB-C underneath the table.

# Reset Button

The reset button is located inside a small hole on the Ethernet port side of the device. Use a paperclip or other small tool to press the button. When you reset the ANIUSB-C, factory defaults are restored and the network IP mode for both Dante and the Shure control network are reset.

You can also use the control software to reset the ANIUSB-C.



# ANIUSB-C Control Software

There are 2 ways to control the ANIUSB-C:

1. Use Shure Designer software
   - Control all Shure devices in one place
   - Route audio to and from Shure devices
2. Use the ANIUSB-C's built-in web application (open with Shure Update Utility)
   - Control DSP blocks and matrix mixer for the unit
   - To route audio, use Dante Controller software

## Firmware Updates

Firmware is embedded software in each component that controls functionality. Periodically, new versions of firmware are developed to incorporate additional features and enhancements. You can update firmware using Shure Update Utility or ShureCloud.

Download Shure Update Utility at shure.com/suu.

For release notes and more details about releases, visit the Software and Firmware Archive.

## Remote Monitoring and Management in ShureCloud

Use ShureCloud to remotely view information about supported devices.

Refer to the ShureCloud user guide to learn how to add devices to your ShureCloud account.

# Use Designer's Auto Route

Designer's auto route speeds up the process of connecting systems with 1 audio processor and at least 1 microphone. Auto route also creates mute control routes in rooms with MXA network mute buttons. When you select Auto route, you can direct Designer to:

- Create audio routes and mute control routes
- Adjust audio settings
- Turn on mute synchronization
- Enable LED logic control for applicable devices

The settings are optimized for your particular combination of devices. You can adjust settings further, but auto route gives you a good starting point. Auto route works with any device in Designer.

**To use auto route:**

1. Place all relevant devices in a design.
2. Select Auto route. Designer optimizes microphone and DSP settings for your equipment combination.

   If you remove or add devices, select Auto route again.

   **Note:** The auto route process clears any manual routes you may have made in your design.

After auto routing a room, check and adjust settings to fit your needs. You may need to:

- Delete unnecessary routes.
- Check levels and adjust gain.
- Check that AEC reference signals are correctly routed and received in a test call.
- Fine-tune DSP blocks.

- Adjust your processor's matrix mixer routes.

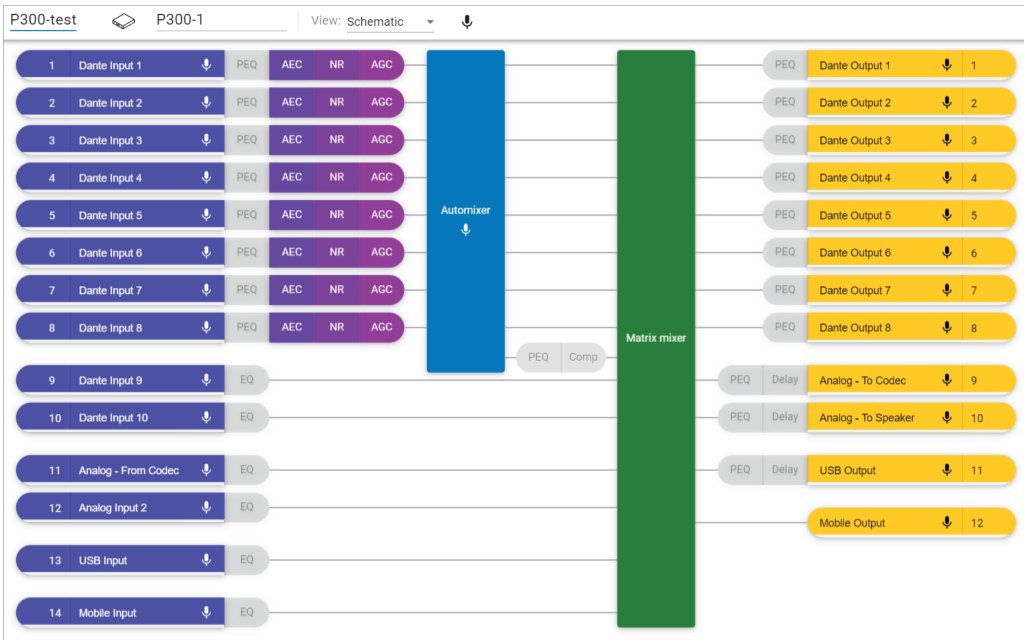
If you want to auto route an online room, turn on online room editing in `File` > `Designer preferences`.

**Note:** Changes to an online room may cause audio to briefly drop out.

Refer to Designer's Troubleshooting section for help with routing.

# Adjust the Schematic View

The schematic view in Designer shows a device's entire audio signal chain, with the ability to adjust settings and monitor signals. The schematic views for the P300, ANIUSB-C, ANIUSB-MATRIX, MXWAPX, MXWAPXD2, MXN-AMP, IntelliMix® Room and IntelliMix Foundation Compute look slightly different because each device has a different mix of inputs and outputs.




**Example of the P300's schematic view**

## Adjusting Settings

Right-click an input, output, or processing block to access the following options:

## Channel Settings

| Setting | Function |
|---|---|
| **Copy / paste** | Copy and paste settings between items. For example, copy the gain and mute status from one input channel to several others. Or, for devices with configurable PEQ, set the equalizer curve on the USB output, and then use the same setting for the analog output. |
| **Mute / unmute** | Mutes or activates the channel |

| Setting | Function |
| --- | --- |
| **Enable / disable** | Turns processing on or off (does not apply to matrix mixer or automixer) |
| **Edit** | Opens the dialog to adjust parameters. You can also double-click a block to edit it. |

Right-click in a blank area to access global settings:

- Mute/unmute all input channels
- Mute/unmute all output channels
- Close all open dialogs

### Customizing the Workspace

Create a custom environment to monitor and control a set of inputs, outputs, and processing blocks from a single screen. There are 2 ways to break out dialogs:

- `Right-click > Edit`
- Double-click the input, output, or processing block.

Open as many dialogs as you need to keep important controls available.

### Metering and DSP Blocks

A meter appears underneath each input and output to indicate signal levels (dBFS).

For devices with DSP blocks, the DSP blocks have a color when they are turned on. When off, they are gray. Use these tools to troubleshoot audio signals and verify connections and levels.

# Audio Levels

Before adjusting levels, set up a way to listen to the audio output directly. You can make a test call with your videoconferencing software and have the other person tell you how the audio sounds. Two other common options are:

- Use a Dante® headphone amp or
- Use Dante Virtual Soundcard

## Input levels

### Monitor Input Levels

Every input channel provides **pre_gain and post_gain metering**, allowing you to visually monitor signal levels throughout the processing chain.

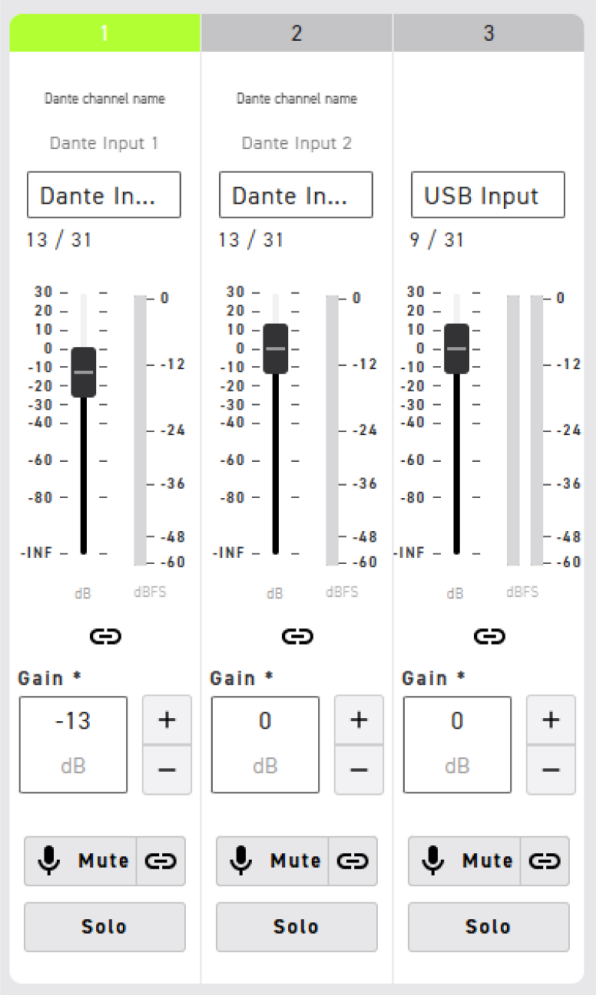
To monitor input levels before they reach the ANIUSB-C, go to Settings and select Pre-gain. When adjusting the faders, set metering to Post-gain.

## Adjust Digital Gain

Adjust levels in the Designer Inputs tab.

1. **Check the source level before it reaches the Network Interface:**
   - Verify that the networked microphones or other Dante sources are operating at nominal output levels.
   - Adjust levels for MXA microphones in Designer.
2. **Adjust the digital gain in Designer:**
   - Use the faders or manually enter a gain value.
   - The digital gain adjusts the level of the signal before it reaches the matrix mixer.
   - Mix the levels as high as possible without the loudest channel reaching the peak level (0 dB) on the meter.

     **Note:** The matrix mixer provides crosspoint gain to adjust separate submixes for different outputs.




## Output Levels

Adjust faders in the Outputs section as high as necessary, but make sure to avoid clipping (when the signal reaches 0 dBFS). Always adjust the input gain and crosspoint gain in the matrix mixer before the output gain.

**Tip:** Set the metering to post-gain in the settings menu to adjust output levels.

## Mute and Fader Groups

| | |
|---|---|
| **Mute Groups** | Check the Mute group box to add the channel to a group. Muting any channel within the Mute group mutes all channels in the group. |
| **Fader Groups** | Check the Fader group box to add the channel to a group. All faders within the group are linked, and move together when a single fader is adjusted. |

# Route with the Matrix Mixer

The matrix mixer routes audio signals between inputs and outputs for simple and flexible routing:

- Send a single input channel to multiple outputs
- Send multiple input channels to a single output

### Crosspoint Gain

Crosspoint gain adjusts the gain between a specific input and output, to create separate submixes without changing input or output fader settings. Select the dB value at any crosspoint to open the gain adjustment panel.

**Gain staging:** Input fader > crosspoint gain > output fader

### Routing Channels

Connect inputs and outputs by selecting the box where they intersect.

## ANIUSB-C Default Routes

The ANIUSB-C supports 2-channel bidirectional audio (2 in/2 out). Out of the box, it sums all channels to mono. Set up the matrix mixer in the control software to enable stereo input and output.

### ANIUSB-C Default Routes

| In/Out | Dante Out 1 | Dante Out 2 | USB Out L | USB Out R |
|---|---|---|---|---|
| **Dante In 1** | | | X | X |
| **Dante In 2** | | | | |
| **USB In L** | X | | | |
| **USB In R** | X | | | |

# Mute Synchronization

Mute synchronization ensures that all connected devices in a conferencing system mute or unmute at the same time and at the correct point in the signal path. Mute status is synchronized in the devices using logic signals or USB connections.

To use mute synchronization, enable logic on connected devices using the web application or Shure Designer software. Many Shure devices have logic enabled automatically.

If you use Designer's Optimize workflow, Designer configures all of the necessary mute synchronization settings for you.

**Shure logic devices:**

- P300 (Also mutes supported soft codecs connected by USB)
- ANIUSB-MATRIX (Also mutes supported soft codecs connected by USB)
- MXA910
- MXA710
- MXA310
- Network Mute Button
- ANI22-BLOCK
- ANI4IN-BLOCK
- Logic-enabled MX microphones connected to ANI22-BLOCK or ANI4IN-BLOCK
  - MX392
  - MX395-LED
  - MX396
  - MX405/410/415

### Compatible Shure Logic Devices

- P300 (Also mutes supported soft codecs connected by USB)
- ANIUSB-MATRIX (Also mutes supported soft codecs connected by USB)
- IntelliMix Room software (Also mutes supported soft codecs connected by USB)
- ANIUSB-C
- MXA901
- MXA902
- MXA910
- MXA920
- MXA925
- MXA710
- MXA320
- MXA310
- Network Mute Button
- ANI22-BLOCK
- ANI4IN-BLOCK
- Logic-enabled MX microphones connected to ANI22-BLOCK or ANI4IN-BLOCK
  - MX392
  - MX395-LED
  - MX396
  - MX405/410/415 used with MX400DP base
  - MX412D
  - MX418D

For help with specific mute sync implementations, see our FAQs.

## Use Presets

Use presets to save device settings so that you can quickly recall them later. Presets capture all current device settings but do not save routing information.

To save or apply presets, go to the device's Presets view in Designer or the web application. There are 10 preset slots available on the device.

Designer has room presets and device presets. Learn more in the Designer user guide.

### Save a Preset

1. Go to Presets.
2. Select an open preset slot.
3. Enter a name for the preset and save.

### Apply a Preset

1. Go to Presets.
2. Choose the preset you want to apply.
3. Select Apply. The applied preset has a check mark next to it.

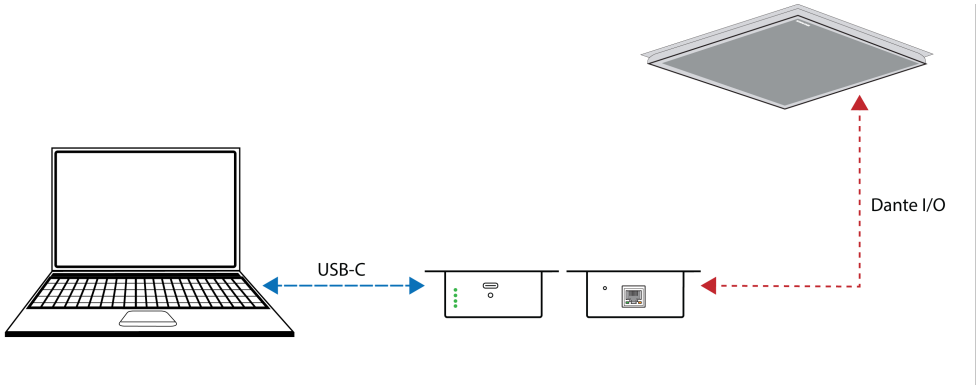
**Note:** Any changes made after applying a preset are not saved to that preset. Save new settings to a new preset slot or overwrite the old preset.

## ANIUSB-C Use Cases

The ANIUSB_C enables audio on a Dante network to be connected to a computer via USB_C.

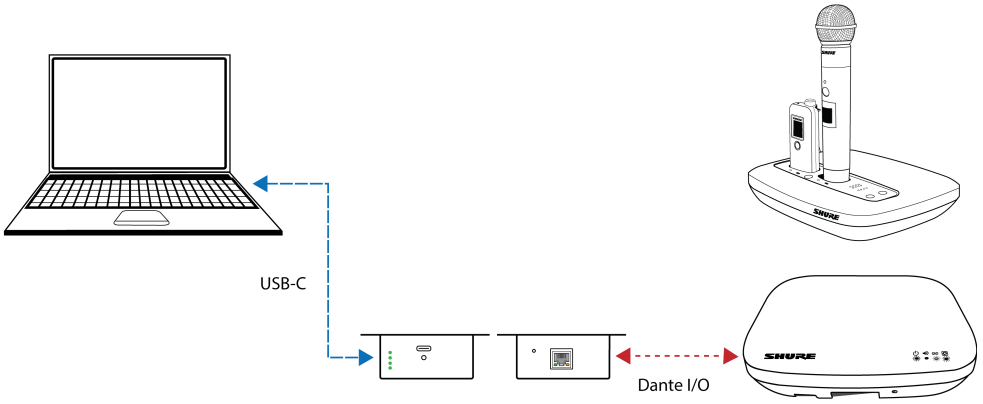
### MXA Microphones

Integrate a USB-C connection to and from MXA microphones without sacrificing Shure DSP, encryption, and managmenet tools.




### USB Extender for MXW neXt

The ANIUSB-C allows access to MXW neXt installations where direct access may be difficult, like a ceiling installation.




# Security

## Encryption

Audio is encrypted with the Advanced Encryption Standard (AES-256), as specified by the US Government National Institute of Standards and Technology (NIST) publication FIPS-197. Shure devices that support encryption require a password to make a connection. Encryption is not supported with third-party devices.

In Designer, you can turn on encryption for all devices in a room: `[Your room]` > `Settings` > `Audio encryption`.

To activate encryption in the web application, go to `Settings` > `Audio encryption` > `Enable encryption`.

**Important:** For encryption to work:

- All Shure devices on your network must use encryption.
- Disable AES67 in Dante Controller. AES67 and AES-256 cannot be used at the same time.

## Set Up the 802.1X Protocol for a Device

Select Shure devices support the IEEE 802.1X port access protocol for network authentication.

**Important:** To use the 802.1X security protocol with Shure devices, set the network switch to multiple host authentication. You must also make accommodations to allow the audio NIC to connect to the network. The audio NIC doesn't support the 802.1X protocol.

**To set up 802.1X, you will need:**

- Details about your authentication server's EAP method
- Any required credentials or certificates for that method, for example:
  - MD5 and PWD
    1. User ID and passphrase
  - TLS and PEAP
    1. User ID and passphrase
    2. Certificate (with certificate types) in the .PEM format
- Any passwords to access the devices if they are password locked

Setting up 802.1X is a two-part process.

## Step 1: Configure Settings on Test Network

1. Connect the device to a test network that *does not* have 802.1X enabled, and discover it using Designer.
2. Set a device password if desired.
3. Double-click the device and go to `Settings` > `Network` > `802.1X`.
4. Choose your EAP method from the menu.
5. Enter any required credentials and load any necessary certificates.
6. Press Save to save the 802.1X settings to the device.
7. Enable 802.1X and select Reboot now.

## Step 2: Connect to a Credentialed Network

1. Connect your device to the credentialed network.
2. Ensure that Designer is connected to the credentialed network.
3. Verify that the device appears in Designer. If it doesn't, reconnect to the test network and check all 802.1X settings for the selected EAP method.

## Turn Off or Clear 802.1X Settings

You can turn off 802.1X settings temporarily, or clear them from the device. Open the device and go to `Settings` > `Network` > `802.1X`

- **Disable**: Click the 802.1X switch to turn off 802.1X settings. Click the switch again to enable 802.1X.
- **Clear**: Click Clear 802.1X settings to remove 802.1X settings from the device.

**Note:** Resetting to factory default clears all 802.1X settings.

## Change 802.1X Settings

You may need to change a device's 802.1X settings if the enterprise's 802.1X settings are changing. The best way to do this is to change the 802.1X settings on the devices, and then make changes to the authentication server.

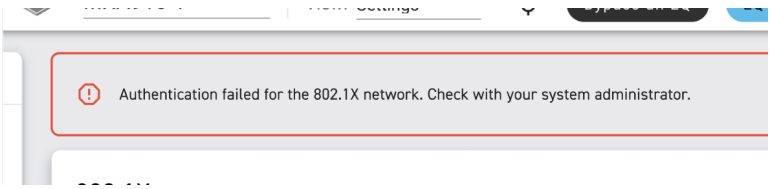
**To change device settings:**

1. While still connected to the credentialed network, find the device in Designer and go to `Settings` > `Network` > `802.1X`.
2. Make changes and click Save.
3. Make any changes to the authentication server.
4. Reboot your devices. The devices should connect to the credentialed network with the updated 802.1X settings.

## Troubleshooting 802.1X Setup Issues

If the device doesn't appear in Designer on the credentialed network, there's a problem with the device's 802.1X settings. To troubleshoot, take the device off the credentialed network and connect it to the test network. You can make any necessary changes to the 802.1X settings, and then reconnect to the credentialed network.

If you attempt to enable 802.1X on a device, but the authentication fails, you will see this notification:



If this occurs, check with your system administrator.

# Networking

## Networking Best Practices

When connecting Shure devices to a network, use the following best practices:

- Always use a "star" network topology by connecting each device directly to the switch or router.
- For most uses, connect Shure networked devices to the same network and set to the same subnet.
  - If needed, use Designer to discover devices across subnets.
- Disable unused network ports on Shure devices when possible.
- Allow all Shure software through the firewall on your computer.
- Use only 1 DHCP server per network. Disable DHCP addressing on additional servers.
- Power on the switch and DHCP server before powering on the Shure devices.
- To expand the network, use multiple switches in a star topology.
- Keep device firmware updated to avoid compatibility issues.

## Switch and Cable Recommendations for Dante Networking

Switches and cables determine how well your audio network performs. Use high-quality switches and cables to make your audio network more reliable.

**Network switches should have:**

- Gigabit ports. 10/100 switches may work on small networks, but gigabit switches perform better.
- Power over Ethernet (PoE) or PoE+ ports for any devices that require power
- Management features to provide information about port speed, error counters, and bandwidth used
- Ability to switch off Energy Efficient Ethernet (EEE). EEE (also known as "Green Ethernet") may cause audio dropouts and problems with clock synchronization.
- Diffserv (DSCP) Quality of Service (QoS) with strict priority and 4 queues

**Ethernet cables should be:**

- Cat5e or better
- Shielded

For more information, see our FAQ about switches to avoid.

## Device IP Configuration

This Shure device uses 2 IP addresses: one for Shure control, and one for Dante audio and control. For most installations, the Shure control and Dante audio IP addresses should be in the same subnet range.

- **Shure control**
  - Carries data for Shure control software, firmware updates, and third-party control systems (such as AMX or Crestron)
- **Dante audio and control**
  - Carries Dante digital audio and control data for Dante Controller
  - Requires a wired, gigabit Ethernet connection to operate

To access these settings in Designer, go to `[Your device]` > `Settings` > `IP configuration`.

Devices with 1 RJ-45 port do not natively support Dante split or redundant modes.

**Note:** Refer to our FAQ if you're using any Shure profiles on NETGEAR M4250-series switches.

# Setting Latency

Latency is the amount of time for a signal to travel across the system to the outputs of a device. To account for variances in latency time between devices and channels, Dante has a predetermined selection of latency settings. When the same setting is selected, it ensures that all Dante devices on the network are in sync.

These latency values should be used as a starting point. To determine the exact latency to use for your setup, deploy the setup, send Dante audio between your devices, and measure the actual latency in your system using Audinate's Dante Controller software. Then round up to the nearest latency setting available, and use that one.

Use Audinate's Dante Controller software to change latency settings.

## Latency Recommendations

| Latency Setting | Maximum Number of Switches |
|---|---|
| **0.25 ms** | 3 |
| **0.5 ms (default)** | 5 |
| **1 ms** | 10 |
| **2 ms** | 10+ |

# QoS (Quality of Service) Settings

QoS settings assign priorities to specific data packets on the network, ensuring reliable audio delivery on larger networks with heavy traffic. This feature is available on most managed network switches. Although not required, assigning QoS settings is recommended.

**Note:** Coordinate changes with the network administrator to avoid disrupting service.

To assign QoS values, open the switch interface and use the following table to assign Dante®-associated queue values.

- Assign the highest possible value (shown as 4 in this example) for time-critical PTP events
- Use descending priority values for each remaining packet.

## Dante QoS Priority Values

| Priority | Usage | DSCP Label | Hex | Decimal | Binary |
|---|---|---|---|---|---|
| **High (4)** | Time-critical PTP events | CS7 | 0x38 | 56 | 111000 |
| **Medium (3)** | Audio, PTP | EF | 0x2E | 46 | 101110 |
| **Low (2)** | (reserved) | CS1 | 0x08 | 8 | 001000 |
| **None (1)** | Other traffic | BestEffort | 0x00 | 0 | 000000 |

**Note:** Switch management may vary by manufacturer and switch type. Consult the manufacturer's product guide for specific configuration details.

For more information on Dante requirements and networking, visit www.audinate.com.

## Networking Terminology

**PTP (Precision Time Protocol):** Used to synchronize clocks on the network
**DSCP (Differentiated Services Code Point):** Standardized identification method for data used in layer 3 QoS prioritization

# Ports, Protocols, and Firewall Rules

For information about IP ports and protocols or firewall rules, go to:

- IP Ports and Protocols for Shure Devices
- Firewall Rules for Shure Software Applications

# Digital Audio Networking

Dante digital audio is carried over standard Ethernet and operates using standard internet protocols. Dante provides low latency, tight clock synchronization, and high Quality-of-Service (QoS) to provide reliable audio transport to a variety of Dante devices. Dante audio can coexist safely on the same network as IT and control data, or can be configured to use a dedicated network.

## Compatibility with Dante Domain Manager

This device is compatible with Dante Domain Manager software (DDM). DDM is network management software with user authentication, role-based security, and auditing features for Dante networks and Dante-enabled products.

Considerations for Shure devices controlled by DDM:

- When you add Shure devices to a Dante domain, set the local controller access to Read Write. Otherwise, you won't be able to access Dante settings, perform a factory reset, or update device firmware.
- If the device and DDM can't communicate over the network for any reason, you won't be able to control Dante settings, perform a factory reset, or update device firmware. When the connection is reestablished, the device follows the policy set for it in the Dante domain.
- If Dante device lock is on, DDM is offline, or the configuration of the device is set to Prevent, some device settings are disabled. These include: Dante encryption, MXW association, AD4 Dante browse and Dante cue, and SCM820 linking.

Refer to Dante Domain Manager's documentation for more information.

## Dante Flows for Shure Devices

Dante flows get created any time you route audio from one Dante device to another. One unicast Dante flow can contain up to 4 audio channels. For example: sending all 5 available channels from an MXA310 to another device uses 2 Dante flows, because 1 flow can contain up to 4 channels.

Every Dante device has a specific number of transmit flows and receive flows. The number of flows is determined by Dante platform capabilities.

### Dante Flows for Shure Devices

| Dante Platform | Shure Devices Using Platform | Transmit Flow Limit | Receive Flow Limit |
|---|---|---|---|
| **Brooklyn II** | ULX-D, SCM820, MXWAPT, MXWANI, P300, MXCWAPT | 32 | 32 |
| **Brooklyn II (without SRAM)** | MXA920, MXA910, MXA902, MXA710, AD4, AD600, APXD2 | 16 | 16 |
| **IP Core** | MXA920-V3, MXA902-V3, MXA901, DCA901, MXA925 | 32 | 32 |
| **Ultimo/UltimoX** | MXA310, ANI4IN, ANI4OUT, ANIUSB-MATRIX, ANI22, MXN5-C | 2 | 2 |

| Dante Platform | Shure Devices Using Platform | Transmit Flow Limit | Receive Flow Limit |
|---|---|---|---|
| **DEP** | ANIUSB-MATRIX-V3, MXN-AMP, MXN5-C-V3, MXN-6, MXA320, ANIUSB-C | 2 | 2 |
| **DAL** | IntelliMix Room | 16 | 16 |

Learn more about Dante flows in our FAQs or from Audinate.

## AES67

AES67 is a networked audio standard that enables communication between hardware components which use different IP audio technologies. This Shure device supports AES67 for increased compatibility within networked systems for live sound, integrated installations, and broadcast applications.

The following information is critical when transmitting or receiving AES67 signals:

- Update Dante Controller software to the newest available version to ensure the AES67 configuration tab appears.
- Before turning encryption on or off, you must disable AES67 in Dante Controller.
- AES67 cannot operate when the transmit and receive devices both support Dante.

| Shure Device Supports: | Device 2 Supports: | AES67 Compatibility |
|---|---|---|
| **Dante and AES67** | Dante and AES67 | No. Must use Dante. |
| **Dante and AES67** | AES67 without Dante. Any other audio networking protocol is acceptable. | Yes |

Separate Dante and AES67 flows can operate simultaneously. The total number of flows is determined by the maximum flow limit of the device.

### Sending Audio from a Shure Device

All AES67 configuration is managed in Dante Controller software. For more information, refer to the Dante Controller user guide.

1. Open the Shure transmitting device in Dante Controller.
2. Enable AES67.
3. Reboot the Shure device.
4. Create AES67 flows according to the instructions in the Dante Controller user guide.

### Receiving Audio from a Device Using a Different Audio Network Protocol

**Third-party devices:** When the hardware supports SAP, flows are identified in the routing software that the device uses. Otherwise, to receive an AES67 flow, the AES67 session ID and IP address are required.

**Shure devices:** The transmitting device must support SAP. In Dante Controller, a transmit device (appears as an IP address) can be routed like any other Dante device.

# Use Command Strings

This device receives logic commands over the network. Many parameters controlled through Designer can be controlled using a third-party control system, using the appropriate command string.

**Common applications:**

- Mute
- LED color and behavior
- Loading presets
- Adjusting levels

A complete list of command strings is available at:

shure.com/en-US/docs/commandstrings/aniusb-c

# Troubleshooting

## ANIUSB-C Troubleshooting

| Problem | Solution |
|---|---|
| **Sound quality is muffled or hollow** | Check that channels are aimed at the desired area and that mic output levels are sufficient.<br>Make sure channels are not accidentally muted. |
| **ANIUSB-C does not show up in Designer/Shure Update Utility** | Ensure that the device has power.<br>Check that Designer and Shure Update Utility are updated to the latest version.<br>Make sure ANIUSB-C is on the same network as the computer with Designer/Shure Update Utility.<br>Turn off network interfaces not used to connect to the device (such as Wi-Fi).<br>Check that DHCP server is functioning (if applicable).<br>Reset the device if necessary.<br>Refer to the no online devices FAQ for more help.<br>Contact Shure if these steps do not resolve your issue. |
| **Audio is not present or is quiet/distorted** | Check cables.<br>Make sure channels are not accidentally muted.<br>Check where audio metering stops. Then check that all Dante and matrix mixer routes have been created correctly.<br>Check that channels are aimed at the desired area and that mic output levels are sufficient.<br>If using automixing, check the settings to ensure channels are gating on and off properly. |
| **No lights** | Go to `Settings` > `Lights` in the control software. Check if any light settings are turned off.<br><br>If the device is in a room using Designer's call status feature, mute status LEDs are off when not in a call. |

# Additional Resources

- Shure Knowledge Base FAQs
- Command strings for Shure devices
- IP Ports and Protocols for Shure Devices
- Firewall Rules for Shure Software Applications
- Shure API documentation
- Shure Enterprise Networking Troubleshooting Checklist
- Training from Shure Academy
- Shure Collaboration & Conferencing YouTube channel

## Download Shure Software

- Shure Designer
- ShureCloud
- Shure Update Utility
- Shure Discovery
- Software and firmware archive

# Specifications

## General

### USB Connections
*(1) USB 2.0, Type C*

Single port carries 1 input and 1 output channel (Summed mono) or configure to USB stereo audio

### Network Connections (Dante Digital Audio)
*(1) RJ45*

2 input channels, 2 output channels

### Polarity
Non-inverting, any input to any output

### Power Requirements
Power over Ethernet (PoE), Class 0. (PoE Plus compatible).

### Power Consumption
6.5W, maximum

### Weight
150 g

### Dimensions
*H x W x L*

2.8 x 9 x 13.9 cm (1.1 x 3.5 x 5.5 in.)

### Control Software

Shure Designer

### Operating Temperature Range

−6.7°C (20°F) to 40°C (104°F)

### Storage Temperature Range

−29°C (-20°F) to 74°C (165°F)

### Thermal Power Dissipation

| | |
|---|---|
| **Maximum** | 6.8W ( 23.0BTU/hr) |
| **typical** | 6.0W ( 20.8BTU/hr) |

## Audio

### Frequency Response

*+1, -1.5 dB*

20 to 20,000 Hz

### Dante Digital Audio

| | |
|---|---|
| **Sampling Rate** | 48 kHz |
| **Bit Depth** | 24 |

### USB Audio

| | |
|---|---|
| **Sampling Rate** | 48 kHz |
| **Bit Depth** | 16, 24 |

### Dante to Dante Latency

0.14 ms (does not include Dante latency)

### Built-in Digital Signal Processing

| | |
|---|---|
| **Per Channel** | Equalizer (4-band Parametric and USB output channels only) , Mute, Limiter, Gain ( 140 dB range) |
| **System** | Shure Designer |

## Networking

### Cable Requirements

Cat 5e or higher (shielded cable recommended)

# Explanation of Symbols

| | |
|---|---|
|  | This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit. |

| | |
|---|---|
| ⚠ | This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit. |

# Important Safety Instructions

1. READ these instructions.
2. KEEP these instructions.
3. HEED all warnings.
4. FOLLOW all instructions.
5. DO NOT use this apparatus near water.
6. CLEAN ONLY with dry cloth.
7. DO NOT block any ventilation openings. Allow sufficient distances for adequate ventilation and install in accordance with the manufacturer's instructions.
8. DO NOT install near any heat sources such as open flames, radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. Do not place any open flame sources on the product.
9. DO NOT defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wider blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. PROTECT the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. ONLY USE attachments/accessories specified by the manufacturer.
12. USE only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



13. UNPLUG this apparatus during lightning storms or when unused for long periods of time.
14. REFER all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. DO NOT expose the apparatus to dripping and splashing. DO NOT put objects filled with liquids, such as vases, on the apparatus.
16. The MAINS plug or an appliance coupler shall remain readily operable.
17. The airborne noise of the Apparatus does not exceed 70dB (A).
18. Apparatus with CLASS I construction shall be connected to a MAINS socket outlet with a protective earthing connection.
19. To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
20. Do not attempt to modify this product. Doing so could result in personal injury and/or product failure.
21. Operate this product within its specified operating temperature range.
22. Follow local regulations and consult qualified personnel if the product installation or relocation requires construction work. Choose mounting hardware and an installation location that can support the weight of the product. Avoid locations subject to constant vibration. Use the required tools to install the product properly. Inspect the product periodically.
23. If your product has a feature to log in, upon first time start up, you must change your password.

**WARNING:**

- Voltages in this equipment are hazardous to life. No user-serviceable parts inside. Refer all servicing to qualified service personnel. The safety certifications do not apply when the operating voltage is changed from the factory setting.
- If water or other foreign objects enter the inside of the device, fire or electric shock may result.

# Important Product Regulatory Information

EMC conformance testing is based on the use of supplied and recommended cable types. The use of other cable types may degrade EMC performance.

## Introduction to EMC

Electromagnetic Interference (EMI) is any signal or emission, radiated in free space or conducted along power or signal leads, that endangers the functioning of radio navigation or other safety service or seriously degrades, obstructs, or repeatedly interrupts a licensed radio communications service. Radio communications services include but are not limited to AM/FM commercial broadcast, television, cellular services, radar, air-traffic control, pager, and Personal Communication Services (PCS). These licensed radio services, and unlicensed radio services, such as WLAN, ZIGBEE or Bluetooth, along with unintentional radiators such as digital devices contribute to the electromagnetic environment.

Electromagnetic Compatibility (EMC) is the ability of items of electronic equipment to function properly together in the electronic environment. While this equipment has been designed and determined to be compliant with regulatory agency limits for EMI, there is no guarantee that interference will not occur in a particular installation.

Shure products are designed, tested, and classified for their intended electromagnetic environment. These electromagnetic environment classifications generally refer to the following harmonized definitions:

- Class B products are intended for use in residential/domestic environments but may also be used in non-residential/non-domestic environments.

  ***Note:*** *The residential/domestic environment is an environment where the use of broadcast radio and television receivers may be expected within a distance of 10 m from where this product is used.*

- Class A products are intended for use in non-residential/non-domestic environments. Class A products may also be utilized in residential/domestic environments but may cause interference and require the user to take adequate corrective measures.

## Regulatory Information for Class B EMC Products

### CE Notice

Hereby, Shure Incorporated declares that this product with CE Marking has been determined to be in compliance with European Union requirements.

The full text of the EU declaration of conformity is available at the following site: https://www.shure.com/en-EU/support/declarations-of-conformity.

### UKCA Notice

Hereby, Shure Incorporated declares that this product with UKCA Marking has been determined to be in compliance with UKCA requirements.

The full text of the UK declaration of conformity is available at the following site: https://www.shure.com/en-GB/support/declarations-of-conformity.

# Cybersecurity STATEMENT OF COMPLIANCE

**Product Type:** Relevant connectable products defined as internet-connectable products or network-connectable products, in line with inter alia Product Security and Telecommunications Infrastructure Act 2022.

**Manufacturer Statement:** We, Shure Incorporated, certify and declare as manufacturer under our sole responsibility, that the above-mentioned product(s) conform(s) to the legislation as mentioned under Attachment 1 – to Cybersecurity Statement of Compliance listed here: https://www.shure.com/en-GB/about-us/security.

**Information on how to report security issues:** The latest version of Shure's Disclosure policy can be found at the following link: https://www.shure.com/en-GB/about-us/security

**Security update periods:** Shure provides support regarding hardware and software updates that continue the integral cyber security safety of Shure products up to 24 months after end of life (AEOL). For the full statement regarding Shure's product support policy, and information regarding products end of life status information can be found at the following link: https://www.shure.com/en-GB/about-us/security

**Manufacturer:**
Shure Incorporated 5800 Touhy Avenue
Niles, Illinois, 60714-4608 U.S.A. Website: www.Shure.com.

**Technical documentation is kept at:**
Shure Incorporated, Corporate Global Compliance Engineering Division

**UK Importer/Representative:**
Shure UK Limited
Unit 2, The IO Centre, Lea Road, Waltham Abbey, Essex, EN9 1AS, U.K.
Phone: +44 (0)1992 - 703058
Email: EMEAsupport@shure.de

**On behalf of Manufacturer:**



Chad Ayers
08 May 2025 Niles, Illinois
Senior Director, Global Compliance

## FCC Notice

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference with radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the antenna of the radio/television receiver.
- Increase the separation between this equipment and the radio/television receiver.
- Plug the equipment into a different outlet so that the equipment and the radio/television receiver are on different power mains branch circuits.
- Consult a representative of Shure or an experienced radio/television technician for additional suggestions.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

**Notice:** The FCC regulations provide that changes or modifications not expressly approved by Shure Incorporated could void your authority to operate this equipment.

For information regarding responsible party and other matters relating to FCC compliance, please contact Shure Incorporated, 5800 W. Touhy Avenue, Niles, Illinois 60714-4608 U.S.A. shure.com/contact

## Canada, ISED Notice

**Notice:** The Industry Canada regulations provide that changes or modifications not expressly approved by Shure Inc. could void your authority to operate this equipment.

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

# Environmental Regulatory Information

## Waste Electrical and Electronic Equipment (WEEE) Directive



In the European Union and the United Kingdom, this label indicates that this product should not be disposed of with household waste. It should be deposited at an appropriate facility to enable recovery and recycling.

## Registration, Evaluation, Authorization of Chemicals (REACH) Directive

REACH (Registration, Evaluation, Authorization of Chemicals) is the European Union (EU) and the United Kingdom (UK) chemical substances regulatory framework. Information on substances of very high concern contained in Shure products in a concentration above 0.1% weight over weight (w/w) is available upon request.

## Recycling Information

Please consider the environment, electric products and packaging are part of regional recycling schemes and do not belong to regular household waste.

# Certification and Compliance Markings

