PlayAUDIO 2U™

User Guide

iConnectivity
innovative interfaces™

For more information about this and other products, please visit the iConnectivity Knowledge Base on the iConnectivity Support Website.

Product Features, Specifications, and System Requirements may be subject to change.

The iConnectivity warranty policy may be found on our website at Warranty Policy.

INTRODUCTION

Congratulations on the purchase of your new PlayAUDIO2U USB Audio + MIDI interface!

Feature List

- Two USB Type C DAW ports – use up to 2 computer devices macOS/Windows simultaneously
- Four XLR/TRS analog Mic, Line, Instrument inputs
- Twenty-four XLR analog audio line outputs
- Stereo ¼” Headphone output with two independent mixes
- DIN-MIDI ports built-in (front:1-in, 1-out; rear:1-in, 1-out)
- Four USB Host ports (connect up to 8 USB MIDI class-compliant devices with a USB hub)
- Two MIDI mappable CONTROL footswitch ports
- Four MIDI mappable CONTROL buttons
- Two Ethernet RTP-MIDI Network ports
- Auracle X software (Mac OS, Windows) configuration and setup
- High-resolution audio - up to 24-bit/96kHz AD/DA conversion
- High definition OLED display and tactile user controls, endless multifunction rotary encoders
- 19” rack mountable

What's in the Box?

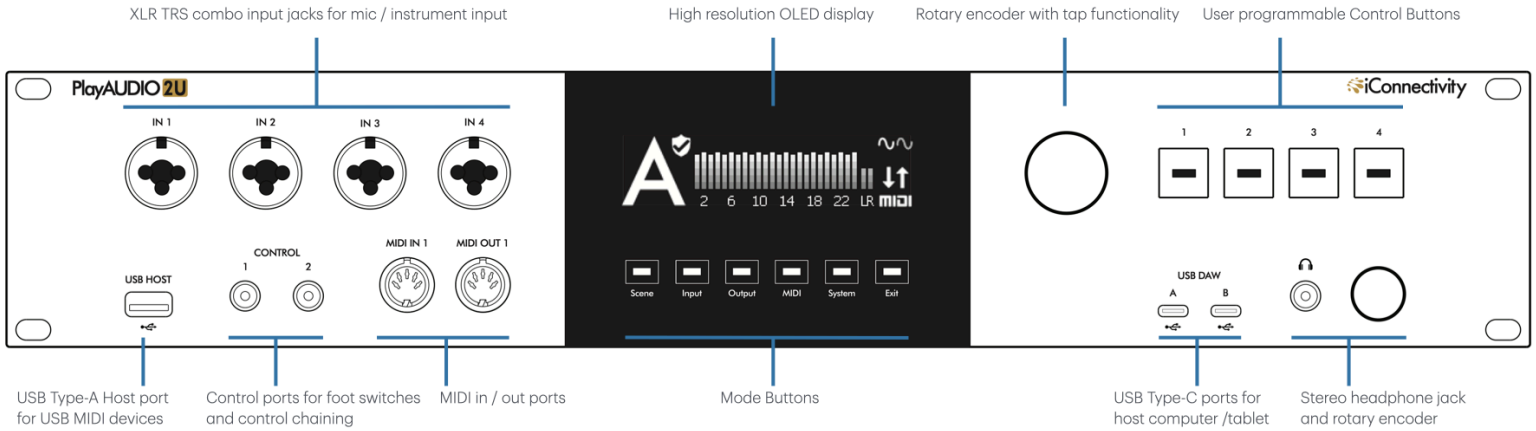
- 1 PlayAUDIO2U Audio + MIDI interface
- 2 USB-C to USB-C cables
- 1 Each - Type B, G, and F type IEC power cables. (type I is included in Australia)

System Requirements

macOS	Mac OS X 10.13 or later (for Auracle control software)
PC/Windows	Windows 10 or later (for Auracle control software)
iOS	Device must be equipped with a USB-C port CoreMIDI compatible app
Android	Android 8.0 or higher with USB-C connector

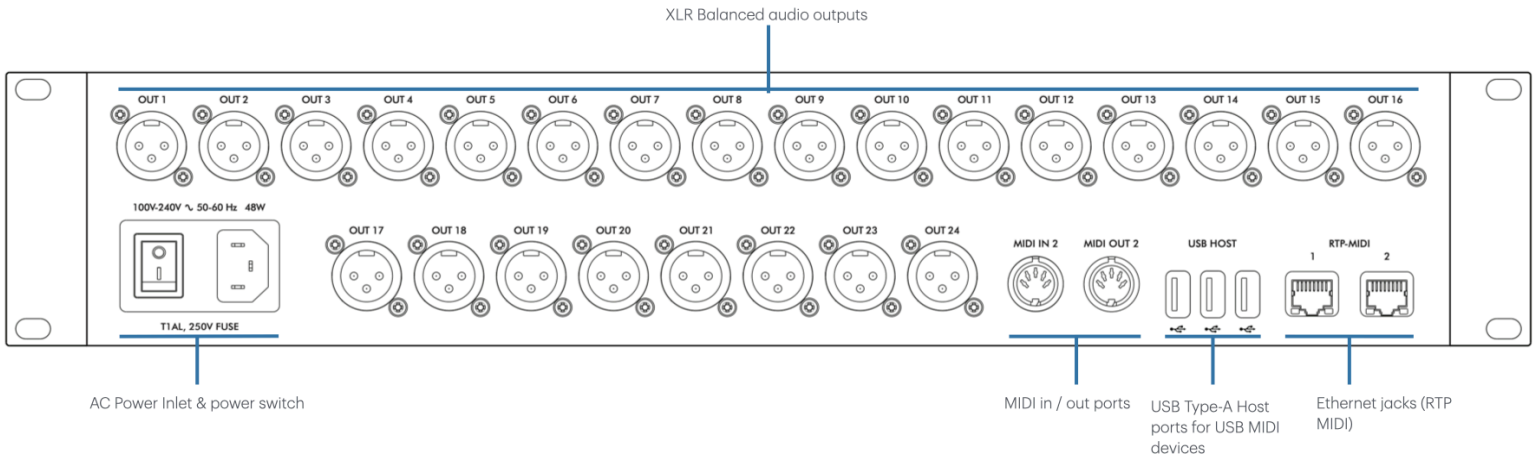
HARDWARE DESCRIPTION

Front Panel



- **XLR TRS Combo Jack.** Plug in microphones, line-level devices, DI boxes, or instruments.
- **USB HOST Port.** Directly plug in a class-compliant MIDI device, or plug in up to eight class-compliant MIDI devices via a powered USB hub (not included).
- **CONTROL Ports.** Plug in up to two foot switches or chain multiple PlayAUDIO interfaces.
- **MIDI DIN Ports.** 5 pin DIN connections for MIDI Controllers.
- **High Resolution OLED display.** Inspect real time MIDI and audio information.
- **Mode Buttons.** Select PlayAUDIO2U menu functions such as scene, audio inputs and outputs, and MIDI.
- **Rotary Encoder.** Multi-function encoder. Double press to save current settings or turn encoder to change page, change selection, or change value.
- **USB DAW Ports.** USB Type C ports for connecting host computers or tablets.
- **Control Buttons.** User programmable control buttons.
- **¼-inch Headphone Port.** Stereo mix.
- **Headphone Rotary Encoder.** Multi-function encoder. Turn to increase or decrease the headphone mix output volume; turning also temporarily calls up the headphone volume display. Press once to call the headphone volume display, and press again to return to the previous active menu. Additionally, double press to mute and unmute all analog outputs.

Rear Panel



- **AC Power Inlet.** Fused Input jack for included IEC C13 power supply cable.
- **Power switch.** Turn the PlayAUDIO2U on or off. The switch will illuminate when power is turned on.
- **XLR Balanced Audio Outputs.** The PlayAUDIO2U's 24 analog outputs provide low noise, phantom power-resistant connections with up to 24-bit/96kHz DA conversion.
- **MIDI DIN Ports.** 5 pin DIN connections for MIDI Controllers.
- **USB HOST Ports.** Directly plug in a class-compliant MIDI device, or plug in up to eight class-compliant MIDI devices via a powered USB hub (not included).
- **RTP MIDI Ports.** Make long distance MIDI connections over ethernet.

Getting Started

Install iConnectivity Audio Drivers (Windows)

Before connecting the PlayAUDIO2U to a Windows computer, be sure to install the supplied iConnectivity audio drivers that are part of the Windows Auracle X installer located at https://www.iconnectivity.com/software/control-software.

Alternatively, you can download the unified USB driver separate from Auracle X at https://www.iconnectivity.com/windows-drivers.

Once the driver directly is successfully installed, connect your computer to USB DAW Port A using a USB cable. The interface should appear as a standard audio output device in Windows. You can route audio from music or video apps directly to the interface to test.

Note that the headphone output volume is turned down and needs to be turned up before listening. This User Guide will show you how to get sound running in and out of your interface as simply as possible.

Install iConnectivity RTP MIDI Driver for Network MIDI (Windows)

The RTP-MIDI driver for Network MIDI can be found at https://www.iconnectivity.com/windows-drivers.

Launch the rtpMIDISetup Application and follow all prompts to install.

Install Auracle X and upgrade your PlayAUDIO2U Firmware

Before you begin using your PlayAUDIO2U, we recommend that you upgrade your unit's firmware to the latest version using iConnectivity's Auracle for X application. Make sure you are connected to the internet and follow these steps to install the Auracle X software and perform a firmware upgrade if available:

1. Download the latest version of the Auracle X software installer.
    a. Navigate to https://www.iconnectivity.com/auracle-x-series and click the appropriate download link for your operating system.
    b. Click allow or keep if your operating system alerts you.
2. Launch the iConnectivity Auracle X installer file. For MacOS users, drag the Auracle X application to your Applications folder. Windows users, follow instructions on the Windows Auracle X Installer.
3. Connect the PlayAUDIO2U to your computer via USB using PlayAUDIO2U USB DAW port A.
4. Open the Auracle X Application.
5. When the PlayAUDIO2U main menu populates in Auracle X click the **Firmware** menu option.
6. Accept the firmware upgrade if Auracle X detects that newer firmware is available. Updating firmware will cause the PlayAUDIO2U to restart in bootloader mode for the duration of the upgrade. Once the upgrade is complete, the PlayAUDIO2U will restart into application mode for use.

PlayAUDIO2U Failover Redundancy

How the PlayAUDIO2U's Failover System Works

Your PlayAUDIO2U unit comes equipped with two independent failover mechanisms: Automatic Failover and Manual Failover. This failover redundancy is designed to ensure that your backup system can always be engaged instantly and seamlessly, whether via auto-detection or through manual switching. Taking advantage of both of these failover mechanisms is recommended for all live performance scenarios.

Automatic Failover uses an audio test tone or MIDI stream sent from your DAW to establish an audio- or MIDI- recognition sync lock between your primary playback device and your PlayAUDIO2U interface on a dedicated internal audio or MIDI channel. Once armed, the PlayAUDIO2U instantly switches to your secondary device if any break in the test tone signal or MIDI stream is detected, providing a seamless failover to your backup system without audio or MIDI interruption. We recommend using the audio tone based failover to prevent needless scene switching when playback is stopped.

Manual Failover allows you to control scene switching at the touch of a button or press of a connected and assigned footswitch. Note that if automatic failover is not armed, the PlayAUDIO2U will NOT switch to your backup playback device in the event of a primary device failure.

How to Arm the PlayAUDIO2U for Automatic Failover

A tone generator is required to arm the PlayAUDIO2U for Automatic Failover. If a tone generator isn't included with your Digital Audio Workstation, download and install iConnectivity's LifeSine test tone plugin from https://www.iconnectivity.com/downloads/.

Follow the steps below to arm the PlayAUDIO2U for automatic failover and test your unit's failover capability:

1. Connect Computer A (your primary playback device) to USB DAW Port A.

2. Connect Computer B (your failover playback device) to USB DAW Port B.

3. Verify that the PlayAUDIO2U is set to Scene A, or touch the **Scene** mode button to switch to Scene A from Scene B.

4. On both computers (Computer A and Computer B), open your Digital Audio Workstation and load your playback projects. Both playback projects must be identical.

5. On Computer A (your primary playback device), instantiate your tone plugin on an available track and assign it to the PlayAUDIO2U's default audio failover detection output channel 27. When your PlayAUDIO2U unit detects the test tone on the assigned failover detection channel, a blinking shield icon as well as a sinewave icon will appear on the main page of the OLED, indicating that the PlayAUDIO2U is armed for automatic failover. If a blinking shield icon does not appear on the main page of the OLED you may need to either save, close and reopen your DAW playback session and/or open Auracle for X software and configure Failover settings in the Audio page of the PlayAUDIO2U menu. Refer to Auracle X documentation for detailed instructions at https://www.iconnectivity.com/manuals.

6. Connect an external MIDI external controller to one of the USB host ports or DIN input ports and follow your DAW's instructions to map DAW transport commands to MIDI messages coming from your controller. Both playback projects must have identical MIDI mapping for correct operation.

7. With the PlayAUDIO2U automatic failover armed, use the attached external MIDI controller to trigger simultaneous playback on Computer A and Computer B.

How to Test Automatic Failover

Ensure that the PlayAUDIO2U is armed for automatic failover by checking for the blinking shield icon on the front panel OLED and playback has been triggered on both computers. To force failover from Computer A to Computer B, remove the cable from USB DAW port A. The PlayAUDIO2U will instantly switch over to Computer B as Audio and MIDI playback continues uninterrupted. The Scene Mode Button LED will change to illuminate in red and the OLED will display “B”, indicating that Scene B is now the active scene.

How to use PlayAUDIO2U Manual Failover

Failover can be engaged manually by touching the **Scene** Mode Button on the front panel of the PlayAUDIO2U. The current scene is indicated as follows:

Scene A: The **Scene** Mode Button is illuminated in green, and the Touch panel display shows the letter “A”

Scene B: The **Scene** Mode Button is illuminated in red, and the Touch panel display shows the letter “B”

For information on how to use a footswitch to initiate manual failover, please see the updated Auracle X manual in the Control Ports section.

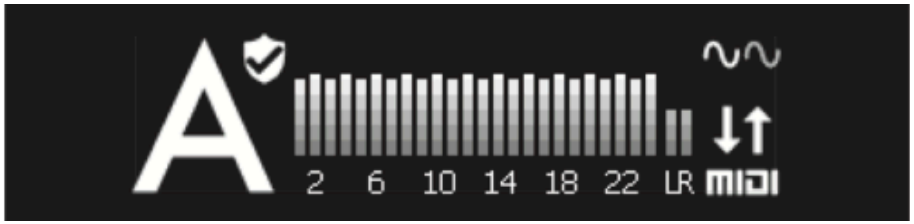
Safe Mode

The Safe Mode feature is integrated into your PlayAUDIO series interface to safeguard performers and audience members from potentially harmful audio levels. Activation of Safe Mode is indicated by the display of a dedicated Safe Mode screen and alternating red LEDs within the Audio LED section on the front panel. Upon activation, all outputs, excluding the headphone output, will be automatically muted.

For more information about Safe Mode including Safe Mode triggers and how to disengage Safe Mode and return to normal operation, please see our Safe Mode Guide at https://www.iconnectivity.com/safemode

Controls

OLED Home Page Legend



Scene Indicator Icon Legend (Top Left next to Scene A or Scene B Indicator):

A or B	Current scene selection, A or B
Checkmark Icon only	Tone Check is enabled but no tone is detected
Shield with Checkmark Icon	Tone Check is enabled and tone is detected: Automatic failover engaged
Safe Mode Screen	Audio level on current scene exceeds tone check maximum volume (only used when tone check is enabled). Lower tone volume and double press headphone knob to unmute. For more detailed information about how Safe Mode activates and how to disengage please visit https://www.iconnectivity.com/safemode

Tone and MIDI traffic Indicator Icon Legend (top and bottom right):

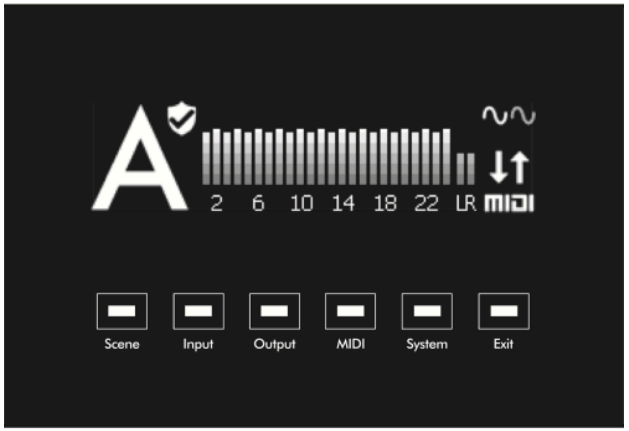
No Icon	Tone Check not enabled
Flat line	Device (computer or tablet) is detected but no tone is detected
Sine Wave	Tone Check is enabled and tone is detected
MIDI Activity	Monitors general incoming and outgoing MIDI activity

Using the Touch Panel and Main Rotary Encoder

The main rotary encoder is continuous and can make fine or coarse adjustments depending on how quickly you rotate the encoder. Fine adjustments are recommended if there is a risk of signal overload. Rotary Encoder Press functions include:

Committing Settings to Memory	Short press the Main Rotary Encoder twice to save the current state of the PlayAUDIO2U to the current preset. A notification will appear on the OLED and all Mode buttons will flash green three times.
Restart unit	Long press for approximately 10 seconds until all Mode buttons have turned off after illuminating in red, then release.
Enter Bootloader Mode	While the unit is powered on, long press the multifunction encoder until all Mode buttons illuminate in red and release while buttons are still illuminated red.
View Failover Tone information	From the Home page, turn the encoder clockwise to access audio meter displays showing the current level of the failover tone in both numerical and live metering. No tone will produce a blank meter display above the “Tone A” and “Tone B” labels. *** note that a failover tone level above -3dBFS will cause the PlayAUDIO2U to enter into **Safe Mode** and all analog outputs to be automatically muted. You will not be able to unmute analog outputs until the failover tone level is adjusted below the threshold displayed on the Tone meter menu page.

Mode Buttons



The PlayAUDIO2U features Mode Buttons with fixed functionality for the most commonly used functions of the PlayAUDIO2U

Scene	Toggle between active scenes
Input	Press to enter Audio input menu. When the Input menu is active, press to select an input channel. Press again to advance to next input channel with wraparound
Output	Press to enter Audio output menu. When the Output menu is active press to select an output channel. Press again to advance to next output channel with wraparound
MIDI	View the MIDI monitoring page. Double tap to generate MIDI panic message to all MIDI ports
System	Displays the PlayAUDIO2U info page
Exit	Steps backward through the menu hierarchy per short press

Scene Button

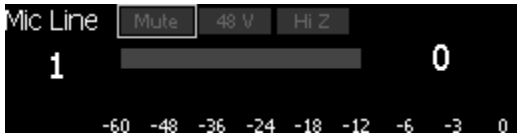
The Scene page displays current output metering per channel on the currently active scene.

Press the scene button to toggle the PlayAUDIO2U between Scene A and Scene B.

Input Button

The Input page displays input gain level and active input metering, 48V and Hi Z status, and allows you to edit these parameters.

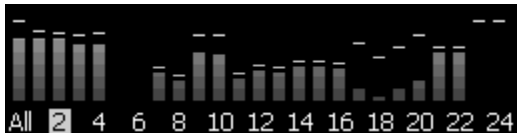
Press the input Mode Button to enter the Input menu page. Rotate the main encoder or click the **Input** Mode Button again to select an input channel or all input channels. Press the main encoder to edit selected channel(s).



Once a single audio input channel or all audio input channels are selected, a detailed menu of editable input parameters appears. Rotate the main encoder to toggle between editable audio input parameters and short press the main encoder to edit the selected parameter. Turn the main encoder to change the value of the selected parameter. Short press the main encoder again to select another editable parameter. You can also press the **Input** Mode button to step through all inputs one at a time, then all four inputs. Continuing to short press the **Input** mode button will wrap around to the first audio input channel.

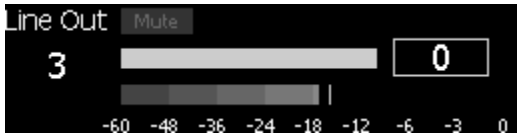
In the image above, audio input channel 1 is selected, **Mute** is enabled, both 48V and Hi Z are disabled, and input gain is set to 0 dB.

Output Button



The Output menu page displays realtime metering of all twenty-four rear analog outputs.

Press the **Output** Mode button to call the Output menu. Rotate the main encoder or click the **Output** Mode Button to select a single channel or all channels. Short press the main encoder to edit the selected output channel(s).



Once a single output channel or all audio output channels are selected, a detailed menu of editable audio output parameters appears. Rotate the main encoder to toggle between editable audio output parameters and short press the main encoder to edit the selected parameter. Turning the main encoder changes the value of the selected parameter. Short press the main encoder again to select another editable parameter. You can also press the **Output** Mode button to step through all outputs one at a time, then all twenty-four outputs. Continuing to short press the **Output** Mode Button will wrap around to the first audio output channel.

In the image above, audio output channel 3 is selected, **Mute** is disabled, and output volume is set to 0 dB and the audio output signal on channel 3 measures at approximately -18 dBFS with a peak around -16dBFS.

MIDI Button

The MIDI menu page displays realtime monitoring of all PlayAUDIO2U MIDI inputs and outputs grouped by physical MIDI port.

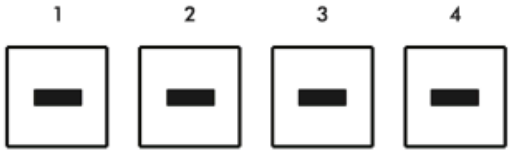
Press the **MIDI** Menu Button to call the PlayAUDIO2U's on-board MIDI monitor page. Double-tapping the **MIDI** Menu button will send a MIDI Panic message to all MIDI outputs.

Once on the MIDI menu page, turn the main rotary encoder to cycle between MIDI port groups: USB (Host), DIN, DAW A, DAW B, and RTP.

If a MIDI message is detected on an actively monitored MIDI input/output group from the MIDI menu page, a MIDI message-dependent icon will appear in the appropriate input or output row on screen.

Fader: CC message
Music Note: MIDI Note message
Circle: Clock
SX: Sysex message

Control Buttons



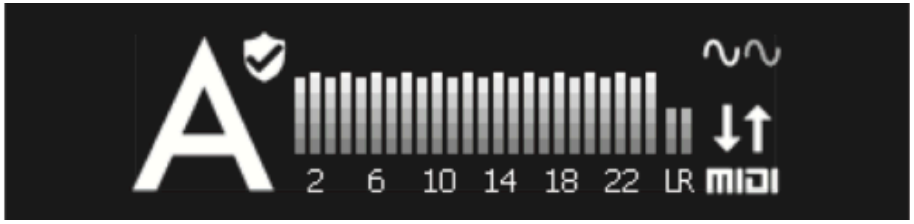
Each control button is mapped to a different MIDI note and transmits on MIDI channel 16 on the control port. Pressing a control button sends a Note On message (velocity 99), and releasing a control button sends a Note off message (velocity 0).

From left to right, the default MIDI note programming is:

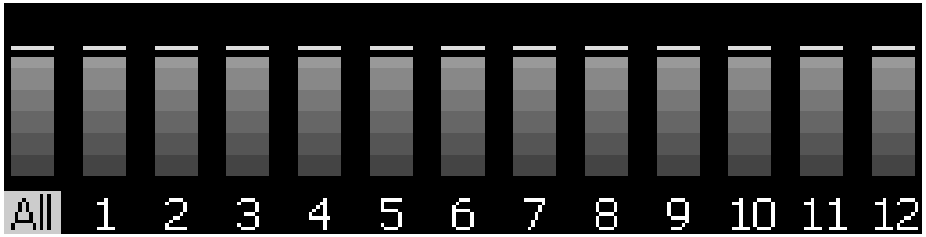
Button 1: Note 36
Button 2: Note 39
Button 3: Note 41
Button 4: Note 38

Each Control button can also be custom mapped to a MIDI note, CC parameter and single value.

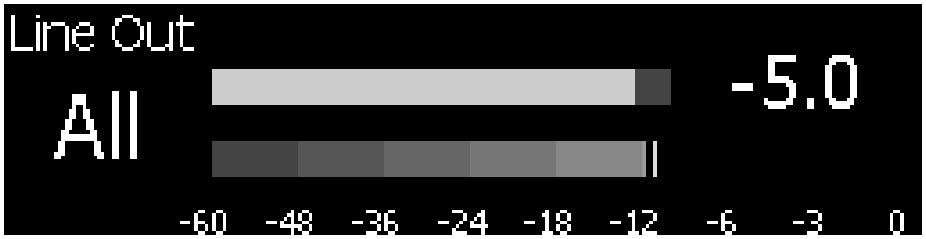
Audio Input / Output



Touch the Input Mode button to access the audio Input menu page, displayed below. The audio Input page monitors input of all front analog inputs and offers the ability to choose any or all outputs for level adjustment. When a single input is selected using the rotary encoder a detailed input menu will appear. Turn the rotary encoder to select between Mute, 48V phantom power, Hi-Z mode selection, Input channel selection, and input gain adjustment. Short press the rotary encoder to select, and turn to edit the selected parameter.



Once the Audio page is active, turn the **rotary encoder** to select from Mute, Line Out channel selection, and fader adjustment. Short press the rotary encoder to select, and turn to edit the selected parameter.



1. Scroll through audio outputs between all, and 1-24 singularly.
2. Short press to select the highlighted audio output or all-output group.
3. Short press again to exit to the main Audio page.

MIDI

Touch the MIDI Mode button to access the MIDI menu page, displayed below. The MIDI page monitors MIDI and SYSEX input and output traffic on all ports on a per-page basis.

1. Turn to cycle between MIDI port monitor pages: DAW A, DAW B, RTP, USB, DIN.
2. Tap has no function.

Exit

Touch the Exit Mode button to return to the home page.

Using the Headphone Rotary Encoder

- Double tap the encoder rapidly to mute all analog outputs on the rear of the PlayAUDIO2U. Double tap again to unmute.
- Tap the encoder to select the headphone mix for the currently active Scene. Tap again to exit.
- Turn the encoder slowly to raise or lower the selected headphone mix volume in 0.5 dB increments.

Using the CONTROL Ports and CONTROL Buttons

Use the PlayAUDIO2U CONTROL ports with compatible footswitch(es) to Arm/Disarm/Toggle Failover Arm state, load Presets, toggle active scenes, send a spacebar key message, and/or send CC/PC or Note On/Off messages.

The PlayAUDIO2U CONTROL Buttons have the same programmable functionality as the user mappable CONTROL ports described above.

Complete instructions on configuring CONTROL port footswitch actions can be found in our Auracle documentation at [Auracle X — iConnectivity]

SPECIFICATIONS

Audio

Digital Performance

24-bit resolution

Supported sample rates: 44.1 kHz, 48 kHz, 88.2 kHz, and 96 kHz

Audio Inputs

Available Gain: 0 to +60 dB

Maximum Input Level: +16 dBu (13.83 Vp-p) balanced at 0 gain

XLR Inputs: Mic Inputs with software and front panel controlled Gain, Mute and +48V Phantom Power

TRS Inputs: Line Inputs with software and front panel controlled Gain, Mute and High-Z Instrument Impedance

Line Outputs

Maximum Output Level: +16 dBu, 13.83 Vp-p Balanced

D-A Dynamic Range: 115 dB (-60dBFS, A-weighted)

D-A S/N: 115 dB (A-weighted)

D-A THD+N: -107 dB

D-A Interchannel Isolation: 110 dB (1 kHz, Typical)

Headphones

Maximum Output Level: 100 mW per channel, 5.1 Vp-p into 32-ohm load

D-A Dynamic Range: 108 dB (-60dBFS, A-weighted)

D-A S/N: 108 dB (A-weighted)

D-A THD+N: -91 dB

MIDI

Two pairs 5-pin MIDI DIN I/O
Up to 16 MIDI ports (256 total MIDI channels) per computer device

USB Host Ports

Four USB Host ports supporting a total of up to eight USB MIDI devices via powered USB hubs (not included).

Power:	+5V DC, 500mA maximum per port

USB-C Ports

Connect to Windows or macOS computer(s), Android or iPadOS devices (USB only, Apple Lightning not supported)

Power

Input:	100V - 240V AC, 50 - 60 Hz 48W
Fuse:	1A Slow-Blow

Dimensions and Weights

Width:	19” (482 mm)
Height:	3.43” (87 mm)
Depth:	7.87” (200 mm)
Weight:	8.38 lbs (3.8 kg)

APPENDIX A: ADVANCED WINDOWS USERS

PlayAUDIO2U Windows installation is plug-n-play with no requirement for special software drivers. However, iConnectivity also provides its own Unified Windows Driver which supports multi-client capability (this allows the advanced user to access the PlayAUDIO2U interface from more than one application simultaneously).

You may download and install the latest version of our Unified Windows Driver free-of-charge from our web site's Windows Drivers page.

APPENDIX B: MORE RESOURCES

The **iConnectivity website** and **iConnectivity Knowledge Base** contain a wealth of helpful written articles and tutorials, as well as instructional videos. For your convenience, selected hyperlinks into these systems are listed below:

The **iConnectivity Knowledge Base** main page is located at: iConnectivity Support Website.

Download our latest Unified Windows Driver from the website Windows Drivers page.

Download **Auracle X** software from the website Auracle X page.

Download the latest firmware from the website Firmware page.

APPENDIX C: COMPLIANCE

Compliance Statement

The PlayAUDIO2U meets the requirements of the following standards and directives:

- FCC Part 15 Class B
- CAN ICES-003 (B) / NMB-003 (B)
- CISPR 32 Class B
- EN61000-4-2 | ESD
- EN61000-4-3 | Radiated Immunity
- EN61000-4-4 | EFT
- EN61000-4-5 | Surge Immunity
- EN61000-4-6 | Conducted Immunity
- EN61000-4-8 | Magnetic Immunity
- EN61000-4-11 | VDI
- EN61000-3-2 | Harmonic
- EN61000-3-3 | Flicker
- IEC/EN-62368-1

Declaration of Conformity

We, iConnectivity, declare that the PlayAUDIO2U complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Communication Statement

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 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 to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by iConnectivity could void the user's authority to operate the equipment.

Disposal of Waste Equipment by Users in the European Union

This symbol on the product or its packaging indicates that this product must not be disposed of with other waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city recycling office or the dealer from whom you purchased the product.