# AUDIQ4c User Guide





**Interference with other electrical devices** Radios and televisions placed nearby may experience reception interference. Operate this unit at a suitable distance from radios and televisions.

**Indoor use only** To avoid the risk of electrocution and/or damage to other connected equipment, this equipment must not be used under wet or high moisture conditions. All interconnecting cabling must also be indoors. Should moisture suddenly increase, immediately disconnect power to the equipment.

**Power sources** Ensure that correctly rated power outlets are used with the supplied power supply.

**Heat** Keep this equipment away from all heat sources. Ensure that sufficient ventilation and/or heat dissipation is provided for the equipment and all connected devices.

**Packaging** Keep all packaging materials away from children. Properly dispose of unwanted packaging.

**Handling** To avoid breakage, do not apply excessive force to the switches, connectors or directly to the equipment. Do not apply excessive bending force to the cables. Use the connector casings of cables to attach and detach cables from their receptacles to avoid damage to the cable and/or its receptacles.

**Ingestion** Do not ingest the packaging, equipment, attachments, or accessories. Do not ingest paint or remove parts from the equipment or accessories. If this occurs, immediately seek medical attention.

**Care** If the exterior becomes dirty, wipe with a clean, dry cloth. Do not use liquid cleaners such as benzene or thinner, or cleaning compounds or flammable polishes.

**Keeping foreign matter out of your equipment** Never set any container with liquid in it near this equipment. If liquid gets into the equipment, it could cause electrical damage, breakdown, fire, or electrical shock. Be careful not to let metal objects get into the equipment.

**Keep this manual** After reading this manual, please save it for later reference.

**Notice regarding disposal** (EU only) Disposal of this product, package, or cables must be done in an approved manner. Do not discard this product, package, or cables along with ordinary household waste. Disposing in the correct manner will prevent harm to human health and potential damage to the environment. Since the correct method of disposal will depend on the applicable laws and regulations in your locality, please contact your local administrative body for details.

FCC (USA)/IC (Canada) Regulation Warning 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:

- Adjust 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 assistance

Unauthorized changes or modifications to this system can void the user's authority to operate this equipment.

**Important notice to consumers** This product has been manufactured according to strict specifications and voltage requirements applicable for use in the country of product purchase. If you have purchased this product via the Internet, through mail order, and/or via a telephone sale, you must verify that this product is intended for use in the country in which you reside.

#### WARNING

Use of this product in any country other than that for which it is intended could be dangerous and could invalidate the manufacturer's or distributor's warranty. Please also retain your receipt as proof of purchase; otherwise, your product may be disqualified from the manufacturer or distributor's warranty.

#### CAUTION

Always keep children and pets under constant adult supervision. The packaging, equipment, and included accessories are not toys and must be kept out of reach of children and pets. Use only under constant adult supervision.

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

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

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

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# **INTRODUCTION**

Congratulations on the purchase of your new AUDIO4c USB-Audio + MIDI interface!



iConnectivity makes every effort to develop simple and intuitive hardware and companion control software. However, because your AUDIO4c interface implements so many advanced features, we strongly recommend that you read this manual carefully, even if you are an experienced audio/MIDI user and have quite the reddit following.

## Feature List

- 4 XLR / 1/4" TRS combo analog inputs
- 4 premium microphone preamplifiers with +48V phantom power
- 4 TRS <sup>1</sup>/<sub>4</sub>" balanced analog outputs
- 1 stereo ¼" headphone output
- DIN-MIDI port built-in (1-in 1-out)
- USB-MIDI host port (connect up to 8 USB MIDI class-compliant devices with a powered USB hub)
- Auracle for X-Series software (Mac OS, Windows) configuration and setup
- Power/Charge a USB Type-C compatible device (up to 15W)
- Use up to 2 Mac OS/Windows/iOS/Android computer devices simultaneously
- Built-In comprehensive audio mixing and routing between connected USB devices
- High-resolution audio up to 24-bit/96kHz AD/DA conversion
- Capacitive touch user controls

## What's in the Box?

- The AUDIO4c audio + MIDI Interface
- Power Supply: iConnectivity iCP4 (36W)
- USB-C to USB-C Cable
- USB-Adapter: female USB-C to male USB-A

## **System Requirements**

- macOS macOS X 10.11 (El Capitan) or newer One free USB-A or USB-C port
- PC/Windows Windows 10 One free USB-A or USB-C port
  - **iOS** iPad with USB-C port, or Lightning-equipped (iOS 9.3.5 or later) devices via Apple Lightning to USB-Camera Adapter (sold separately)
  - Android Version 8.0 or newer

# HARDWARE DESCRIPTION

# **Device Tour**



# **QUICK START GUIDE**

## **Download Auracle for X-Series**

Auracle For X-Series download

By default, your AUDIO4c is pre-configured to work with Digital Audio Workstation (DAW) software. All the interface's audio inputs are routed to the computer device(s) for recording, not directly to the audio outputs; **you won't hear anything** if, say, you plug in a mic without going through your audio/music software.

Furthermore, **all the audio in and out volumes are turned down** and need to be raised. This Quick Start Guide will show you how to get sound running in and out of your interface as simply as possible.

# AURACLE FOR X-SERIES SOFTWARE

## Installation

Auracle for X-Series Software

Windows users, please uninstall all older iConnectivity drivers and download the newest Unified driver here at <u>https://www.iconnectivity.com/windows-drivers</u> before proceeding. You must have administrative access to complete installation.

Open a web browser and navigate to <u>https://www.iconnectivity.com/software/control-software</u>. Choose the appropriate operating system for your machine (Windows 10 or MacOS) and click the yellow Auracle for X-Series link to download, and follow the on-screen prompts to complete.

AUDIO4c	AUDIO4c	(i)
	Audio	
	MIDI Routing	
	Filter & Remap	
	Presets	
USI	8 Host Reservation	
	Firmware	

The AUDIO4c main menu in its natural habitat; populated in Auracle for X-Series software

Power on your AUDIO4c by attaching the appropriate attachment for your locale to the power supply, and plug the power supply into a powered outlet. Plug the barrel end of the power supply into the AUDIO4c. Using the included USB-C to USB-C cable (plus USB-C to USB-A adapter if necessary), connect your computer to the AUDIO4c via an available USB device port.

Launch the Auracle for X-Series software. The AUDIO4c will appear on screen as a connected device (as pictured above) along with any other iConnectivity interfaces you may have connected to your computer.

A yellow hazard icon in the upper right corner of the AUDIO4c main menu indicates that a firmware update is available. In this case, ensure that the **USB-C cable is plugged into USB device jack 2** and follow the on-screen instructions to update the AUDIO4c firmware. If your computer is plugged into USB device jack 1, simply remove the USB-Cable from USB device jack 1 and plug it in to device jack 2. If you need device jack 2 to be available for charging a compatible device after firmware installation, be sure to complete the firmware update process before unplugging the USB Cable from USB device jack 2 and plugging the USB cable into USB device jack 1 again.

## Firmware Update

When updating firmware a warning screen will appear:

If you are using a USB C-C cable to flash your device, check to see if the device is stuck on two alternating lights after restarting. If this is the case, please disconnect the C-C cable from the back of your device, flip the plug around, and then replug the cable. You should see 5 lights in total to indicate that the device is being updated.

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Take note of the instructions and click [OK] to proceed.

While updating, the unit will display rapidly flashing orange lights in the LED level bar while the firmware updates. At this point it is critical that you perform the hokey pokey and congratulate yourself on such a fine purchase during this time, with the knowledge that you are already better than your friends and musical peers.

In the Auracle for X-Series main menu, the AUDIO4c icon will disappear for a short time. The AUDIO4c icon will reappear again without the previous yellow hazard warning to indicate that the firmware is now current.

## Audio Hookup- connecting a Mac, PC, iOS, or Android device

Connect a Mac, PC, iOS, or Android device to an available USB Device port, using the supplied USB-C cable, and USB-C to USB-A adapter if necessary.

Connect your powered monitors or power amp and speakers via <sup>1</sup>/<sub>4</sub>" TRS or TS cables to the AUDIO4c Audio Outputs 1&2.

Open your DAW and select the AUDIO4c as the audio output device. Once the AUDIO4c is selected, it may be necessary to route audio from the master bus of your DAW to outputs 1&2 of the AUDIO4c at the master track level.

Check your powered speakers or power amp, as well as the output level on your DAW to ensure that volume is at a safe listening level before playing back audio.

Play some test audio, preferably in a loop. You may not hear anything until you bring up the output level. Follow the instructions in the next section to adjust audio levels.

#### Sound check - Adjusting the output level to audio outputs on the rear of the AUDIO4c

There are two ways to adjust the output level: directly on the front panel Interactive Display, or using the Auracle for X-Series software's Audio Mixer. For information on using Auracle for X-Series software to mix audio levels, proceed to the <u>Audio</u> section of the <u>Main Menu</u>.

Using the front panel Interactive Display:



*Signal Level Mode:* Touch the region centered around [**Out**] on the bottom row of the Interactive Display until the [**Out**] indicator turns green. A green [**Out**] LED as pictured above indicates that the LED meters are in **Signal Level Mode**. In this mode the LED meters will display the level of audio being sent to the outputs highlighted green in the top row of the Interactive Display. To select an output or outputs for monitoring using the LED meter, touch the region of the output number(s) you wish to monitor until it turns green.

In the diagram above, outputs 1 & 2 are selected for visual monitoring using the LED meters on the right. Output 1 is slightly higher than output 2 as indicated by the differing levels in the left and right LED meters. *Note that turning the rotary encoder while in Signal Level Mode has no effect.* 



*Gain Set Mode*: Touch the region centered around [**Out**] on the bottom row of the Interactive Display until the [**Out**] indicator turns red. A red [**Out**] LED indicates that the LED meters are in **Gain Set Mode**. Select the analog output channel you wish to adjust by touching the regions centered around the corresponding number of the channel you want to adjust in the upper row of the interactive display. When the channel(s) you intend to adjust are highlighted in green, turn the rotary encoder clockwise to increase gain level(s) of the selected output(s). Turn the rotary encoder counter-clockwise to decrease leve(s) of the selected output(s).

In the diagram above, channels 1 & 2 have been selected and the gain for both channels has been increased to 0 Db (maximum output level).

Sound check - Headphones



*Signal Level Mode:* Touch the region centered around [**Phones**] on the bottom row of the Interactive Display until the [**Phones**] indicator turns green. A green [**Phones**] LED indicates that the LED meters are in **Signal Level Mode**. In this mode the LED meters will display the level of audio being sent to the [**Phones**] socket on the rear of the AUDIO4c.

In the diagram above, the [**Phones**] output is selected and the audio level to the phones output is approximately -10 Db.



**!!! USE EXTREME CAUTION WHEN ADJUSTING VOLUME TO HEADPHONES !!!** 

*Gain Set Mode:* Touch the region centered around [**Phones**] on the bottom row of the Interactive Display until the [**Phones**] indicator turns red. A red [**Phones**] LED indicates that the LED meters are in **Gain Set Mode**. In this mode, you can use the rotary encoder to the right of the Interactive Display to adjust the level of output to the Phones socket. The LED meters will display the level of audio being sent to the Pditedhones socket on the rear of the AUDIO4c. Turn the rotary encoder clockwise to increase the gain level of the headphones output. Turn the rotary encoder counterclockwise to decrease the gain of the Phones output.

In the diagram above, the [**Phones**] output is selected and the audio level to the Phones output is approximately -15 Db as indicated by the orange LEDs on the LED meter on the right of the interactive display.

Sound check - Adjusting the input level of analog inputs on the front of the AUDIO4c



*Signal Level Mode:* Touch the region centered around **[In]** on the bottom row of the interactive display until the **[In]** indicator turns green. A green **[In]** LED indicates that the LED meters are in **Signal Level Mode**. In this mode the LED meters will display the level of audio being received at the input(s) highlighted green in the top row of the Interactive Display. To select an input for monitoring using the LED meter, touch the region of the input number you wish to monitor until it turns green.

In the diagram above, analog input 3 is selected and is currently metering in the single yellow region of the LED meter. *Note that turning the rotary encoder while in Signal Level Mode has no effect.* 



*Gain Set Mode*: Touch the region centered around **[In]** on the bottom row of the Interactive Display until the **[In]** indicator button turns red. A red **[In]** LED indicates that the LED meters are in **Gain Set Mode**. Select the analog input channel you wish to adjust by touching the regions centered around the upper row of the interactive display. When the channel(s) you intend to adjust are highlighted in green in the top row, turn the circular encoder to the right clockwise to increase gain level. Turn the rotary encoder counterclockwise to decrease the gain level of the selected input.

In the diagram above, channel 1 has been selected in the top row of the display and the [In] indicator on the bottom row is red, indicating Gain Set Mode. The rotary encoder has been turned clockwise to

increase the input level of analog input 1 to roughly 50 Db as indicated by the yellow LED in the left column of the LED meter to the right of the interactive display.

Sound Check - Activating 48V phantom power per input



# Consult your equipment documentation to determine if 48V phantom power is necessary before proceeding.

**[48V]** *Phantom Power*: To use the Interactive Display to activate phantom power to select inputs, touch the region centered around **[48V]** on the bottom row of the interactive display until the **[48V]** indicator button turns green. Choose the input(s) you wish to deliver 48V power to and select by touching the region centered around the appropriate number. The LED of the number region you selected will light up green, indicating that 48V power is being sent to the input channel.

In the diagram above, input channels 1 and 3 are selected and are receiving 48V phantom power.

# MAIN MENU

# Audio



## Analog Inputs

The Analog Inputs menu displays LED meters and their respective faders to control input level. Input level can be adjusted by dragging the on-screen fader [arrow 1 above] or by clicking the current Db value in the gray box directly below the fader and volume meter input array and typing in the Db amount you want for gain in the range 0-60Db [arrow 2 above]. Note that the default configuration is that all Analog Inputs are at 0 Db as seen in the image above.

To set your analog input level safely, test your input source by speaking into the connected mic or playing the connected instrument at a level similar to your expected performance level. Slowly increase the input level on the connected channel using the method described above until the channel LED meter that corresponds to the input channel you're adjusting reads mostly green most of the time, with some yellow during volume peaks, trying to stay out of the red to avoid clipping.

#### [Mute] Button

The [**Mute**] button mutes audio for the channel selected when the [**Mute**] button is clicked and highlighted in red. Muting is bypassed if the [**Mute**] button is grayed out.

#### [48V]

The **[48V]** button supplies 48V phantom power to an input channel when clicked and highlighted in orange. If you're not sure if your input device requires phantom power, consult the device documentation and <u>see this article regarding phantom power</u>.

## [Line]

Selects the input signal level between mic (**[Line]** button is grayed out), and line level (**[Line]** button is clicked and highlighted in yellow:

For more information about choosing the right signal level for your input source, see <u>this helpful</u> <u>article from Sweetwater</u>.

## Analog Outputs

	Analog Outputs							
Analog 1 & 2	Analog 3 & 4	Headphones						
0	0	0						
-5 -10								
-20								
20								
-30								
-40								
-50								
-60	-60	-60						
- <b>63</b> Db	-63 Db	-63 Db						
Mute	Mute	Mute						
Stereo	Stereo	Stereo						

Pictured above are the LED meters and respective faders to control output level per output. Output level can be adjusted by dragging the on-screen fader up or down, or by clicking the current Db value in the gray box directly below the fader and volume meter output array and typing in the Db amount you want for gain in the range -60 to 0 Db.

Buttons for [**Mute**] and [**Stereo**] select per channel are located below the LED meter and fader array. Stereo is selected by default; unselecting [**Stereo**] will produce two mono output controls in a 1:1 configuration to analog outputs as pictured below.

_	Analog Outputs								
Analog 1	Analog 2	Analog 3 & 4	Headphones						
0	0	0	0						
-10									
-20									
-30									
-40									
-50									
-60	-60	-60	-60						
- <b>63</b> Db	- <b>63</b> Db	-63 🛛	ль <b>-63</b> Db						
Mute	Mute	Mute	Mute						
Stereo	Stereo	Stereo	Stereo						

Analog outputs 1 & 2 set to mono by unselecting the [stereo] button



## **Routing Mode Menu**

This menu dictates the flow of audio between connected USB devices and from analog input sources to USB ports.

All routing tables below refer to audio routing between USB device ports including analog inputs.

To route audio and adjust levels to analog outputs 1-4 and the headphone mix for modes [**Record**],[**Play USB1**], and [**Play USB2**], click the appropriate gray output button for the output you wish to control on the analog output selection menu in the middle of the Audio page.

Analog 1/2 Mix Analog 3/4 Mix Headphones Mix

[Stream] mode contains the same output routing options as [Record], [Play USB1], and [Play USB2] with two additional output menus for routing audio between USB ports.

Analog 1/2 Mix Analog 3/4 Mix	Headphones Mix	USB1 Mix	USB2 Mix
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Record

- This sets analog inputs 1-4 to both USB ports 1 and 2 on their 1-4 inputs
- USB Port 1's outputs 1-4 to USB port 2's inputs 5-8
- USB port 2's outputs 1-4 to USB port 1's inputs 5-8

DAW input list for Record mode:

USB1		USB2	
1	Analog input 1	1	Analog input 1
2	Analog input 2	2	Analog input 2
3	Analog input 3	3	Analog input 3
4	Analog input 4	4	Analog input 4
5	USB port 2: output 1	5	USB port 1: output 1
6	USB port 2: output 2	6	USB port 1: output 2
7	USB port 2: output 3	7	USB port 1: output 3
8	USB port 2: output 4	8	USB port 1: output 4

## Play USB 1

- This sets Audio inputs 1-4 to both USB ports 1 and 2 on their 1-4 inputs
- USB Port 1's outputs 1-2 to USB Port 2's inputs 5-6
- USB port 2's outputs 1-2 to USB port 1's inputs 5-6.
- The mix configuration is the main difference between Play USB1 and Play USB2, which can be seen in the mixer settings: the audio signal from the analog inputs are **not** passed to Analog outputs 1/2, Analog outputs 3/4, or the Headphones mix.

DAW input list for Play USB1 mode:

USB 1			USB 2
1	Analog input 1	1	Analog input 1
2	Analog input 2	2	Analog input 2
3	Analog input 3	3	Analog input 3
4	Analog input 4	4	Analog input 4
5	USB port 2: output 1	5	USB port 1: output 1
6	USB port 2: output 2	6	USB port 1: output 2
7	USB port 2: output 3	7	USB port 1: output 3
8	USB port 2: output 4	8	USB port 1: output 4

	Ar	nalog 1/2 Mix	Analog 3	/4 Mix	Headphones M	lix	
USB1 CH1	USB1 CH2	USB1 CH3	USB1 CH4	USB1 CH	5 USB1 CH6	USB2 CH1	USB2 CH2
6	6	6 0	6 0	6 0	6 0	6	6 0
-5	-5						
-10	-10						
-20	-20						
-30	-30						
-40	-40						
-50	-50						
-60	-60	-60	-60	-60	-60	-60	-60
0 Db	<b>0</b> Db	-128 Db	-128 Db	-128	Db -128 Db	-128 Db	-128 Db
—— <b>●</b> ——	— • —	• •	•	•	•	• • • •	—— <b>●</b> ——
<b>O</b> Pan	<b>O</b> Pan	l Pan	<b>O</b> Pan	<b>O</b> F	Pan <b>O</b> Pan	<b>0</b> Pan	<b>O</b> Pan
Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute
Solo	Solo	Solo	Solo	Solo	Solo	Solo	Solo
Stereo	Stereo	Stereo	Stereo	Stereo	Stereo	Stereo	Stereo

Play USB1 Analog output page, stereo unselected

## Play USB 2

- This sets Audio inputs 1-4 to both USB ports 1 and 2 on their 1-4 inputs.
- USB Port 1's outputs 1-2 to USB Port 2's inputs 5-6.
- USB port 2's outputs 1-2 to USB port 1's inputs 5-6.
- The mix configuration is the main difference between Play USB1 and Play USB2, which can be seen in the mixer settings: the analog inputs are **not** passed to Analog 1/2, Analog 3/4, or Phones mix.

DAW input list for Play USB1 mode:

	USB 1		USB 2
1	Analog input 1	1	Analog input 1
2	Analog input 2	2	Analog input 2
3	Analog input 3	3	Analog input 3
4	Analog input 4	4	Analog input 4
5	USB port 2: output 1	5	USB port 1: output 1
6	USB port 2: output 2	6	USB port 1: output 2
7	USB port 2: output 3	7	USB port 1: output 3
8	USB port 2: output 4	8	USB port 1: output 4

		And	llog 1/2 Mix	Analog 3	/4 Mix	Headph	ones Mix		
	USB2 CH1 & 2		USB2 CH3	& 4	US	B2 CH5 &	6	USB1 (	CH1 & 2
Ŧ			6 0 -5		6 0 -5			6 0 -5	
I	-50 -60		-50		-50 -60	100	=	-50 -60	100
	0	Db	-128	Db		-128	Db	-	28 Db
	0	Pan	1	Pan		0	Pan		<b>0</b> Pan
	Mute		Mute			Mute		Ν	lute
	Solo		Solo			Solo		S	olo
	Stereo		Stereo			Stereo		Ste	ereo

Play USB2 Analog output page, [Stereo] selected

#### Stream

- USB1 mix to USB port 1 output 1-2.
- USB2 mix to USB port 2 output 1-2.

Input list for Stream mode:

USB 1			USB 2
1	USB port 1: output 1	1	USB port 1: output 1
2	USB port 1: output 2	2	USB port 1: output 2
3	USB port 2: output 1	3	USB port 2: output 1
4	USB port 2: output 2	4	USB port 2: output 2
5	Not used	5	Not used
6	Not used	6	Not used
7	Not used	7	Not used
8	Not used	8	Not used



Stream mode output with USB1 mix visible with [**Stereo**] selected. USB2 mix options are identical to USB1 mix options in Stream mode. A computer is plugged into USB2. USB2 channels 1 & 2 are seen metering in the bottom row.

## Tooltips toggle

	Analog	Inputs			Analo	g Outputs		Tooltips
Mic 1	Mic 2	Mic 3	Mic 4	Analog 1 & 2	Anal	log 3 & 4	Headphones	
60 50 40 30 20 10 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	60 50 40 20 10 5 0 <b>32</b> Db Mute 48V	60 50 40 30 20 10 5 0 0 0 0 5 0 0 0 0 0 0 0 0 0 0 0 0	60 50 40 30 20 10 5 0 <b>Db</b> Mute 48V	-5 -10 -20 -30 -40 -50 -50 -60 -9 Mute Stereo	0 -5 -10 -20 -30 -40 -50 -60 Db	-9 Db Mute Stereo	-50 -50 -50 -50 -50 -50 -50 -50	Record Play USB1 Play USB2 Stream Afiguration. This sets USB1 port 1's output 1-2, USB2 port 2's output 1-2, Audio oth USB ports 1 and 2 on s, USB Port 1's outputs 1-2 's inputs 7-8, and USB port 2 to USB port 1's inputs 7-8. seen in the mixer settings
				Analog 1/2 Mix Ar	nalog 3/4 Mix H	Headphones Mix	below.	

Clicking the [**Tooltips**] toggle on the upper right corner of the Audio menu page will activate a help wizard. Hover over any text highlighted in yellow to see a quick explanation of the menu item controlled by the underlying control. Click the toggle again to deactivate.

#### Analog 1/2 Mix

Analog Mix numbers correspond to the  $\frac{1}{4}$ " analog output sockets numbered 1-4 on the rear of the AUDIO4c.

	Analog 1/2 Mix	Analog 3/4 Mi	x Headpho	ones Mix			
USB1 CH1 & 2	USB2 CH1	& 2	Mic 1 & 2		Mi	c 3 & 4	
6 0 -5 -10 -20 -30 -40 -50	6 0 -5 -20 -20 -30 -40 -50	6 - - - - -					
+60	-60	<u> </u>			+60		
0 D	ь <b>-128</b>		-128			-128	
•	•		•			•	
<b>0</b> Pc	n <b>O</b>					0	
Mute	Mute		Mute			Mute	
Solo	Solo		Solo			Solo	
Stereo	Stereo		Stereo			Stereo	

Select Analog 1/2 Mix to show a list of configurable output channel signal sources and edit the level, pan (if [**Stereo**] is selected), [**Mute**], [**Solo**], and [**Stereo**] selection for outputs 1 & 2 as indicated below.



Analog 3/4 Mix

Select to show a list of configurable output channel signal sources and edit the level, pan (if [**Stereo**] is selected), [**Mute**], [**Solo**], and [**Stereo**] selection for analog outputs 3 & 4 as indicated below.



#### Headphones Mix

Select to show a list of configurable output channel signal sources and edit the level, pan (if [**Stereo**] is selected), [**Mute**], [**Solo**], and [**Stereo**] selection for the Phone mix.

	Hert		ln A	IDI Out					
DC C	nosi	#15W			1	2	3	4	Phones
34		2			$\cap$	$\bigcirc$	$\cap$	$\cap$	$\cap$
	C C					$\bigcirc$			$\bigcirc$

Note: Selecting [**Stream**] mode from the Mode menu on the upper right corner under [**Tooltips**] will present additional pages for routing both analog inputs and USB sends to both/either USB device jacks. See <u>Stream</u> menu above for details.

#### Sample Rate

At the bottom of the Audio page (you may have to scroll down depending on the size and resolution of your screen), choose the recording sample rate of the AUDIO4c from between 44.1, 48, 88.2\*, and 96KHz\*.

\*Note: changing the sampling rate to 88.2 or 96KHz will render [Stream] mode unavailable.

## Bit Depth Also at the bottom of the Audio page, choose recording bit depth from 16bit or 24bit.

Clock Source To the right of the Bit Depth drop down menu, select the source of the clock from Internal, or either USB Device port.

Back button (upper left corner) Click to return to the main menu.

# **MIDI Routing**

#### General Info

The AUDIO4c supports up to 10 MIDI ports per USB Device Port, each port containing 16 midi channels, 5 pin DIN-MIDI I/O port with 16 channels, plus one USB-A host port capable of hosting 8 total MIDI devices (with a separate powered USB hub, not included), for a total of much more MIDI ports and total channels than are required by mere mortals in this version of reality. Use the Auracle for X-Series MIDI Routing page to route MIDI ports from any [Source] to any [Destination].

#### Source

The [**Source**] column on the left lists all available physical MIDI ports on the AUDIO4c, as well as additional virtual ports such as USB Host Ports HST2 through HST8 which are only accessible when more physical host ports are made available when adding a powered USB hub (not included) as indicated in the <u>General Info</u> section above. For more information on using multiple USB host devices with a powered hub, see the <u>USB Host Reservation</u> section below. A helpful way to visualize the flow of MIDI information is to remember:

[Source] = From

#### [Destination] = To

To begin this wonderful routing journey, click the icon of the MIDI source port you wish to route anywhere in the gray rectangle enclosing the port name. The port becomes highlighted in blue, and the [Destination] field to the right populates with all available routing destinations for the selected source port... Which is very literally, *every* 

Single.

Port.

For example, if you have a single USB MIDI controller plugged into the host port on the rear of the AUDIO4c and wanted to route MIDI data ONLY to a computer plugged in to USB device port 2, scroll

down on the [Source] column to the section marked

∧ USB Hosted Device/Instrument

, and select [HST1].

To route your MIDI controller in [HST1] ONLY to the [DIN] port on USB Device jack 2, un-select all destinations except for [Jack 2] DIN in the second column marked [Device Port to Computer/DAW] in the Destination field, as seen below:

÷		Aura	cle for X-Series				(i) 🕐 🌾
			AUDIO4c				1
Source	Destination						Clear All
[Jack 1] HST7				r/DAW		ice/Instrument	RTP/Network MIDI
[Jack 1] HST8	DIN	1	[Jack 1] DIN		HST1	ľ	
[Jack 2] DIN			[Jack 1] USB2	1	HST2	1	
[Jack 2] USB1			[Jack 1] HST1	1	HST3	ľ	
[Jack 2] HST1			[Jack 1] HST2	ľ	HST4	<i>i</i> *	
[Jack 2] HST2			[Jack 1] HST3	1	HST5	Ĩ	
[Jack 2] HST3			[Jack 1] HST4	ľ	HST6	ľ	
[Jack 2] HST4			[Jack 1] HST5	ľ	HST7	ľ	
Jack 21 HST5			[Jack 1] HST6	ľ	HST8	Ĩ	
lack 2) HST6			[Jack 1] HST7	ľ			
llack 2] HSTZ			[Jack 1] HST8	ľ			
[Jack 2] HST9			[Jack 2] DIN	ľ			
A 1158 Hosted Device /Instrument			[Jack 2] USB1	ľ			
HST1			[Jack 2] HST1	ľ			
HST2			[Jack 2] HST2	ľ			
LIGT2			[Jack 2] HST3	ľ			
			[Jack 2] HST4	Ĩ			
1314			[Jack 2] HST5	1			
HSIS			[Jack 2] HST6	1			
HSIG			[Jack 2] HST7	1			

Default MIDI routing from [HST1] to [Jack 2-DIN]; MIDI information **FROM** HST-1 is routed to [Jack 2] on the [DIN] port.

Additional configuration in your DAW is required to complete the MIDI route between the controller connected at [**HST 1**] and your computer connected at [**USB Device Jack 2**]. Consult the documentation of your DAW to uncover the mystical magic of allocating MIDI ports of connected interfaces.

You may also find it helpful to rename MIDI Source and/or Destination ports to something that makes more sense for your personal use case. Renaming must occur at the device level, outside of the Auracle for X-Series software. Navigate to <u>this video</u> for a helpful tutorial on renaming MIDI ports on iConnectivity X-Series devices.

## Destination

The [**Destination**] field will be blank until a [**Source**] is selected, after which the [**Destination**] field will populate with all ports available for routing.

#### NOTE ON DESTINATION PORT NAMES:

Destination port names follow [Device Port] names which are identified by surrounding brackets. For

example: indicates the [**Device Port**]:[**Jack 1**], and the MIDI port labelled "DIN". The MIDI port label "DIN" is for identification relative to other MIDI port labels on the same Device port. The MIDI port labelled "DIN" on [**Jack 1**] has no direct connection to the physical DIN port on the AUDIO4c, unless it is explicitly routed by selecting [**DIN**] as the Source and [**DIN**].

## Filter & Remap

Each MIDI port can be remapped or filtered based on channel or data types (ie Note, Control Change, Pitch Bend, etc). Like the [**MIDI Routing**] page, you must first select an [**Input**] port for the Filter and Remap options to populate in the field the the left. Note that [**Output**] is also selectable to

the right of input to filter or remap MIDI data at the Output port.

Feast your eyes on this video for help with the Filter & Remap section of iConnectivity devices.

#### Input/Output

Selects whether to modify the input going to or the output coming from each port.

#### Filter

Disable MIDI data type per port and channel channel by selecting the appropriate port on the left column, and by clicking the clickable square at the intersection of the desired MIDI channel (column) and data type (row).

To filter all channels of a MIDI data type (for example, all Note On/Off messages) you may select the clickable square in the column marked **[AII]** to the far right of the grid of clickable squares.

#### Remap

Change the path of MIDI information per port and channel channel by selecting the appropriate port on the left column, andc by clicking the clickable square at the intersection of the desired MIDI channel (column) and data type (row).

Clear All

Clear the current configuration.

Back button

Select to return to the main menu.

## Presets

The Audio4c is capable of saving your custom configuration in a single on-board memory slot.

#### Save

To save the current configuration of your Audio4c, navigate to the [**Presets**] page and click the blue [**Save**] button at the top left. Your configuration is now saved to the single on board memory slot.

You may also save the current settings to the AUDIO4c by single-clicking the rotary encoder on the right side of the Interactive on the AUDIO4c front panel. After clicking the rotary encoder once to save, the bottom 4 LEDs marked [**48v**] through [**Phones**] will flash an amber color twice to signal success.

#### Load

To recall a saved configuration in the future,navigate to the [**Presets**] page again and click [**Load**]. Your working configuration will be lost and updated with your last saved configuration.

Note: Some global settings like port names are not overridden by loading.

## **USB Host Reservation**

The AUDIO4c supports up to eight separate class-compliant MIDI devices when connected to the single host port on the rear through a powered usb hub (not included). When using a single class-compliant MIDI device, you may plug directly into the [Host] jack on the rear of the Audio4c without a USB hub. Please refer to your USB MIDI device documentation to confirm the power draw of your device; the AUDIO4c supports a maximum of up to +5V DC, 500mA of power. If your device requires more power, you will need to power your USB MIDI device with an external power supply.

When using multiple MIDI devices this way, use the USB Host Reservation menu to assign static host ports for your MIDI devices so they retain their host port assignment between power cycles and/or unplugging.

To reserve a USB host port, simply plug in your USB MIDI device to a powered hub connected to the AUDIO4c. The right-most column of the USB Host Reservation page will populate with all class-compliant MIDI devices. Select the appropriate MIDI device you wish to reserve per host port

#### Back button

Select to return to the main menu

## Firmware

The current Firmware version is displayed. If your computer is connected to the internet, and connected to the AUDIO4c via USB device port 2, you can click the [Install] button on the bottom of the menu to download and install the latest AUDIO4c firmware update from iConnectivity.com.

Otherwise, use a web browser to navigate to <u>https://iconnectivity.com/firmware</u> and select the AUDIO4c link to download the latest firmware to your computer. Be sure to note the location of your download (usually your Downloads folder) and return to the Auracle for X-Series Firmware menu page, select [**Choose File**], navigate to the downloaded firmware file and follow the prompts to install the firmware.

# **SPECIFICATIONS**

## Audio

#### **Digital Performance**

24-bit resolution A-D Dynamic Range:102dB D-A Dynamic Range:106dB Supported sample rates: 44.1 kHz, 48 kHz, 88.2 and 96 kHz

#### **Microphone Inputs**

Gain: 0 to +60 dB (1 dB steps) Frequency Response: 20 Hz - 20kHz SNR: 110dB (1kHz, 1.2 Vrms, BW: 22Hz-22kHz, A-weighted, Unity Gain) THD+N: -99 dB (1kHz, 1.2 Vrms, BW: 22Hz-22kHz, A-weighted, Unity Gain)

#### Line Inputs (Balanced)

Frequency Response: 20 Hz - 20kHz SNR: 111 dB (1kHz, 10 Vrms, BW: 22Hz-22kHz, A-weighted) THD+N: -99 dB (1kHz, 1.2 Vrms, BW: 22Hz-22kHz, A-weighted) Maximum input level: 11 Vrms, 23 dBu, 21 dBV (1kHz, 22Hz-22kHz, A-weighted, 1% THD+N, SNR=116 dB)

#### **Instrument Inputs**

Frequency Response: 20 Hz - 20kHz SNR: 95 dB (1kHz, 5 Vrms, BW: 22Hz-22kHz, A-weighting) THD+N: -92 dB (1kHz, 5 Vrms, BW: 22Hz-22kHz, A-weighting) Maximum input level: 10 Vrms, 22 dBu, 20 dBV (1kHz, 22Hz-22kHz, A-weighted, 1% THD+N, SNR= 94 dB)

#### Line Outputs

Maximum Output Level: 13 dBu, 11 dBV, 3.6 Vrms SNR: 115 dB (1kHz, BW: 22Hz-22kHz, A-weighted) THD+N: -112 dB (1kHz, BW: 22Hz-22kHz, A-weighted)

#### Headphones

SNR: 100 dB (1kHz, BW: 22Hz-22kHz, A-weighted) THD+N: -100 dB (1kHz, BW: 22Hz-22kHz, A-weighted) Power: 73 mW per channel, 30-ohm load

# MIDI

5-pin MIDI DIN I/O Up to 10 MIDI ports (160 channels) per computer device (via powered USB hub, not included) USB Host Port supports up to eight USB MIDI devices (via powered USB hub, not included)

# **USB Host Port**

Power: +5V DC, 500mA maximum

# **USB-C** Ports

Power Delivery: Port 2 only, 15W (+5V DC, 3A) maximum

## **Power Adapter**

Output: +12V DC, 3A, 36W29 Input: 100V - 240V AC, 50/60 Hz Plug: Center pin positive, 2.5mm ID, 5.5mm OD, 12mm length Model#: iConnectivity iCP4

# **Dimensions and Weights**

Height: 1U: 1.48" (37.5 mm) Width: 8.43" (214 mm) Depth: 5.51" (140 mm) Weight: 2.18 lbs (989 g)

# Other

GND Screw: M3 x 0.5 x 6 mm, pan head, Phillips, black zinc

# **APPENDIX A: ADVANCED WINDOWS USERS**

AUDIO4c 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 AUDIO4c 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 <u>Windows Drivers</u> 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 <u>Windows Drivers</u> page.

Download Auracle for X-Series software from the website Auracle for X-Series page.

Download the latest firmware from the website <u>Firmware</u> page.

MIDI protocols are explained on our Knowledge Base Intro to MIDI Connections page.

# **APPENDIX C: COMPLIANCE**

#### **Compliance Statement**

The AUDIO4c 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
- · EN 61000-4-2
- · EN 61000-4-4

#### **Declaration of Conformity**

We, iConnectivity, declare that the AUDIO4c 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.