





1 Mic-In / 1 Instrument-In, 2 Out professional recording USB interface with smart phone connectivity for live streaming application







The lightning flash with arrowhead symbol within an equilateral triangle.is intended to alert the user to the presence of uninsulated dangerous voltage within the products enclosure, that may be of sufficient magnitude to electric shock to persons. Le symbol.clair avec point de fl che intriteur d un triangle quilat rat est uillis pour alerter lutilisateur de la pr sence i int rieur du coffret de vottage dangereux non isol d ampleur suff

exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (serviving) instructions in the literature accompanying the appliance. Le point d exclamation int rieur dun triangle quilat ral est employ pour alerter les utilisateurs de la presence d instructions importantes pour le fonctionnerment et l entretien (service) dans le livret d instruction accmpagnant l appari l.

Important Safety Instructions

- 1. Read this manual thoroughly before using this unit.
- 2. Keep this manual for future reference.
- Take notice of and comply with all warnings included in the user's manual or indicated on the appliance.
- 4. Follow all instructions included in this manual.
- Do not expose this unit to rain or moisture. Avoid having water or other liquids spilled on this unit.
- 6. When cleaning the cabinet or other parts of this appliance, use only a dry or slightly damp soft cloth.
- 7. Do not block any ventilation openings or interfere with the proper ventilation of this unit. Install in accordance with the manufacturer's instructions.
- 8. Do not use or store near any heat sources such as radiators, heat registers, stoves, or other heatproducing appliances.
- 9. Do not interfere with 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. These are designated for your safety. If the provided plug does not fit into your outlet, consult an electrician.
- Protect the power cord from being walked on or otherwise damaged by items placed on or against them. Particular attention should be given to the plugs, receptacles, and the point where the cord exits the appliance.
- 11. To avoid the risk of electrical shock, do not touch any exposed wiring while the unit is in operation.
- 12. Only use attachments/accessories specified by the manufacturer.
- 13. Unplug this unit and all connected electrical equipment during lightning storms or when left unused a long period of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the appliance has been damaged in any way or fails to operate normally.

WARNING: To reduce the risk of fire or electric shock, do not expose this unit to rain or moisture

Contents

Introduction	4
What's in the package?	4
Register your ICON ProAudio product to your personal account	5
Features	6
Front Panel	7
Rear Panel	8
Top Panel	9
Mac driver installation	10
Mixer control panel(Mac)	12
Windows driver installation	13
ProDriver4(Windows)	16
Mixer control panel(Windows)	17
Settings (Sample rate and latency settings)	20
ProDriver4 hosting rack(Windows)	24
Hardware Connections	25
Different types of microphone connection method diagram	26
Specifications	27
Services	28

Introduction

Thank you for purchasing the ICON ProAudio Duo22 Live digital audio Interface. We sincerely trust this product will provide years of satisfactory service, but if anything is not to your complete satisfaction, we will endeavor to make things right.

In these pages, you'll find a detailed description of the features of the Duo22 Live digital audio interface, as well as a guided tour through its front and rear panels, step-by-step instructions for their setup and use, and full specifications.

Please register the product on our website at the below link **www. iconproaudio.com/registration**:

Please follow the step by step procedures. Start by inputing the device's serial number as well as your personal information, etc. By registering your product online, you will be entitled to service and after-sales support at our Help Center by visiting our website at **www.iconproaudio.com**. Also, all the registered products under your account will be listed on your personal product page where you will find updated information such as firmware/driver upgrades, software bundles, user manual downloads, etc. for your device.

As with most electronic devices, we strongly recommend you retain the original packaging. In the unlikely event the product must be returned for servicing, the original packaging (or reasonable equivalent) is required.

With proper care and adequate air circulation, your Duo22 Live digital audio interface will operate without any trouble for many years. We recommend that you record your serial number in the space provided below for future reference.

What's in the package?

- Duo22 Live USB Recording Interface
- Quick Start Guide x 1
- USB 2.0 cable x 1
- 3.5mm TRS audio cable x 1

Register your ICON ProAudio product to your personal account

1. Check serial number of your device

Please go to http:// iconproaudio.com/registration or scan the QR code below.



Input your device's serial number and the other information on the screen. Click "Submit".

A message will pop up showing your device information such as model name and its serial number - Click "Register this device to my account" or if you see any other message, please contact our after-sales service team

2. Log in to your personal account page for existing user or sign up for new user

Existing user: Please log into your personal user page by inputing your user name and password.

New user: Please click "Sign Up" and fill in all the information.

3. Download all useful materials

All your registered devices under your account will show on the page. Each product will be listed along with all its available files such as drivers, firmware, user manual in different languages and bundled software etc. for download. Please make sure you have download the necessary files such as driver before you begin device installation.

Features



The ICON ProAudio Duo22 Live USB recording interface provides an audio input and output module as well as analog & digital connectivity with any Smart mobile device for live streaming applications. Main features include:

- 24-Bit 192KHz 1 mic-In/1 inst-In, 2-Out USB Recording Interface
- Professional & Hi-end grade DA/AD provides high dynamic range DAC: Dynamic Range: 114dB ADC: Dynamic Range: 114dB
- Supporting Mac/PC connectivity operating simultaneously with SmartDevice
- Live session possible with audio signal processing via ProDriver4 virtual plug-in rack
- 2x2 analog I/O full duplex recording and playback
- Smart device digital (type C) and analog (TRRS) connection jacks are both equipped
- Compatible with iOS and Android Digital I/O jack (Type C) & Analog I/O jack (3.5mm stereo TRRS) is equipped for direct connection with SmartPhone
- Mic/Instrument preamps with individual gain control and phantom power switch
- 2 analog outputs on 1/4" TRS jacks or stereo output on 3.5mm phone connector
- Smart phone input level control on the top panel
- Direct monitor button control on the top panel
- 1 headphone output with assignable source and individual volume control
- Flexible channel routing via the ProDriver4 software control panel
- ICON ProAudio developed ultra low latency ProDriver4™driver is provided
- ICON ProAudio innovative and user friendly plug-in hosting rack software is built-in with ProDriver4™(Windows only)
- USB2.0 High Speed equipped and USB bus-powered
- Supports DirectSound, WDM and ASIO2.0
- Compatible with mac OS (Intel-Mac) 10.11 and later, iOS 9 or above, Andriod and Windows 7, 8 & 10 (32-bit/64-bit)
- Full duplex, simultaneous record/playback
- +5VDC power supply connector is equipped for external power supply when using with iOS
- Rugged aluminum construction

Front Panel



1. 3-pin XLR (Balanced) – For condenser microphone with +48V phantom power or dynamic microphone.

Please refer to P.26 for the connection method of different types of microphones and instruments.

1/4" TS (Unbalanced) – For dynamic microphone

Please refer to P.26 for the connection method of different types of microphones.

2. 48V phantom power switch

Press to supply +48V phantom power to the associated XLR input. This phantom power circuit is suitable for most condenser microphones.

- **3.** Input gain level control (Microphone) This potentiometer controls the input level of the analog microphone input.
- 4. Input gain level control (Guitar)

This potentiometer controls the input level of the instrument input.

5. Headphone level control

This potentiometer controls the output level of the headphone output.

6. Headphone output

This output jack accepts a standard 1/4" stereo TRS headphone connector.

7. Mon (Monitor – Control smart phone & PC monitoring signal) Switch between monitoring smart device with PC signal or only PC's signal

8. LLB (Live Loopback)

Smart device audio output signal loopback to smart device's input for live session purposes.

Rear Panel



1. USB 2.0 connector

Connect it with the provided USB cable to your Mac/PC or your iOS device camera kit's USB connector. Your Mac/PC must have a USB2.0 connector in order to run the full speed of Duo22 Live .

2. HI-Z input

This is a high impedance input for guitar/bass.

3. Line outputs L/R

These are unbalanced analog outputs on standard 1/4" TS connectors at +6dBU line level.

4. Stereo output L/R

This is an unbalanced analog output on a standard 3.5mm stereo connector.

(**Note:** Master level control will only adjust the output level of both the Line output 1/2 and the 3.5mm stereo output.)

5. Smart Device I/O (Digital - Type C & Analog - 3.5mm TRRS)

These ports allow you to connect your smart device and your Mac/PC simultaneously so you may process the audio signal wih your Mac/PC before delivering signal to the smart device for live streaming application.

Digital - Type C jack for connecting directly to the digital jack of the smart devicec (OTG adapter required)

Analog - TRRS stereo jack for connecting directly to smart device's audio I/O

6. Power supply connector

Duo22 Live is USB-bus powered. If your computer does not supply sufficient power, connect an ICON 5VDC power supply adapter to this jack. Or you may try to use your smart phone power adapter with the correct cable type (Android). Normally it should work and provide enough power to the device.

(Note: You can get the power adapter from ICON distributors/dealers near you)

(**Note:** External power adapter is needed if the Duo22 Live is us as a standalone unit without a Mac or PC)

Top Panel



1. Direct Monitor button

Press to monitor the input signal (i.e. microphone or instrument) through your headphones. Pressing In will allow for Direct monitoring of signal mean signal without computer processing.

2. Smart Phone Input Level Control

Adjust to control the audio input level to the smart phone.

3. Master Level Control

Note: Master level control will only adjust the output level of both the Line output 1/2 and the 3.5mm stereo output.

Mac driver installation

Duo22 Live is a class compliant device. Thus there is no driver installation needed for Mac. Also, it fully supports iOS devices by connecting the unit to a camera kit.

Please follow the step-by-step procedures below to install your Duo22 Live USB recording interface.

1. Turn on your Mac

(Note: Do not connect the Duo22 Live digital audio interface to your Mac yet.)

2. Class compliant device

Duo22 Live is class compliant on macOS, so no driver installation is needed.

3. Copy the software control panel shortcut logo to your desktop

Download the "Mac driver" folder from your "personal user page". Copy the "ProDriver4" software panel shortcut logo and paste it to your desktop.

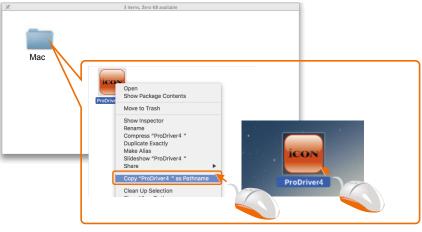


Diagram 1

4. Launch the software control panel

Click the Duo22 Live 's software control panel shortcut logo you have just copied to your desktop to launch the software control panel.



Diagram 2

5. Connect your Duo22 Live digital audio interface

Now connect the Duo22 Live digital audio interface to your Mac's USB port. *Note:* Duo22 Live audio interface only support USB2.0. Your Mac must have a USB2.0 port.



6. Audio MIDI setup

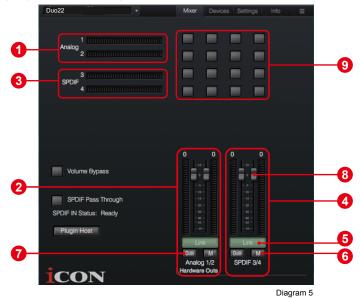
Open the "Audio MIDI setup" window and confirm that the Duo22 Live device has been setup properly as shown in diagram 4.



Diagram 4

Mixer control panel(Mac)

The mixers work like a matrix mixer. Activate and adjust the corresponding input or output channel level. They are very useful and make your inputs and outputs very flexible. You may route any of your input(s) to any output(s).



1. HW In 1/2 level metering Shows the hardware 1/2 input level. (HW In 1/2).

2. HW Out 1/2 level metering Shows the bardware 1/2 output level (HW/C

Shows the hardware 1/2 output level.(HW Out 1/2).

3. S/PDIF In 3/4

Showing the S/PDIF 3/4 input level (S/PDIF In 3/4).

4. S/PDIF Out 3/4

Showing the S/PDIF 3/4 output level (S/PDIF Out 3/4).

5. Link switch

Switch to adjust both channels' levels simultaneously.

6. Mute switch

Switch to mute the corresponding channel.

7. "0dB" switch

Switch to instantly adjust the corresponding channel to "0dB" level.

8. Gain control fader

Slide to adjust the gain level for the corresponding channel.

9. Inputs & Outputs Matrix switches

Switch to turn On/Off the corresponding input channel route to the corresponding output channel. Remember you may route any input(s) to any output(s).

Windows driver installation

Please follow the step-by-step procedures below to install your Duo22 Live USB recording interface and its driver.

1. Turn on your computer

Note: Do not connect the Duo22 Live digital audio interface to your computer vet.

2. Download the Windows driver from your "Personal User Page at www.iconproaudio.com" (Please refer to Diagram 6 for instruction)

After you downloaded the driver file, please click it to start the installation process.



Duo22 Live Serial Number: 03R1U

Latest driver for MacOS	V 1.1.0	Download
Latest driver for Win32	V 1.1.0	Download
Latest driver for Win64	V 1.1.0	Download

3. Installation Wizard appears

Choose "Next" when you see the Welcome Screen shown in Diagram 7.



Diagram 6

Unregister this device

Diagram 7

ICON Pro Driver4 Setup License Agreement Please review the license terms before installing ICON Pro Driver4. ess Page Down to see the rest of the agreement. DRIVER SOFTWARE LICENSE AGREEMENT FOR ICON USB Audio Interface IMPORTANT NOTICE - PLEASE READ CAREFULLY This Software License Agreement ("SLA") is a legal agreement between you (either an individual or a single entity) and ICON Digital Corp. ("ICON"). ty installing, copying, or otherwise using the PRODUCT, you agree to the terms and onditions of this SLA. If you do not agree to the terms of this SLA, do not install or so the PRODUCT. If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install ICON Pro Driver4. < gack

4. License Agreement

Click "I Agree" to proceed.

5. Select components for installation

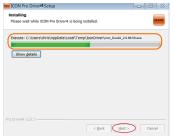
Check mark the components that you would like to install. We strongly recommend that you select all components.

6. Preparing installation files

Once the installation process has started. the process may take some time depending on your computer performance. Please be patient and wait for the process to finish.

7. Click "Install" to proceed.

Note: The same message will appear three times as there are three different driver installations.



×

Always trust software from "ICON ProAudio". You should only install driver software from publishers you trust. <u>How can1</u> decide which device software is safe to install? Diagram 11 Windows Security Would you like to install this device software?

Would you like to install this device software? Name: ICON ProAudio Sound, video and game contr. Publisher: ICON ProAudio









Check the components you want to install and uncheck the components you don't want to install. Click Install to start the installation.

ICON Pro Driver4 Setup

Choose Components Choose which features of ICON Pro Driver4 you want to in



Windows Security

8. Setup completed

A window as shown in Diagram 14 should appear. Choose "Finish".



Diagram 14

9. Launch the software control panel

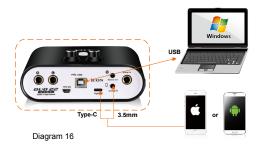
You may click the ICON ProAudio logo on the system tray to launch the software control panel (Page 16).



Diagram 15

10. Connect your Duo22 Live digital audio interface

Now connect the Duo22 Live digital audio interface to your computer's USB port.



ProDriver4(Windows)

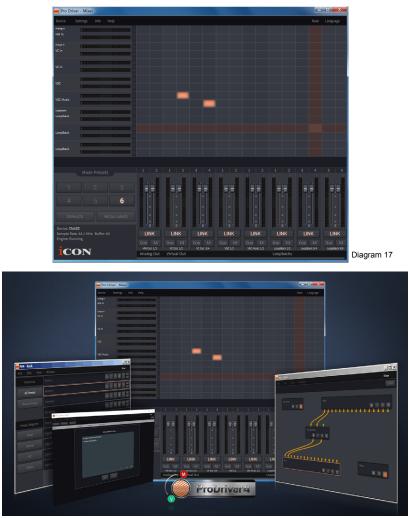


Diagram 18

Introducing ProDriver4, the leading edge in audio innovation for stage, studio and streaming from ICON ProAudio. The ProDriver audio system supplys you with the most reliable tools for almost any audio application, in the moment, right when you need it. The heart of the system, is our driver, employing breakthrough technology and zero latency monitoring. The user interface makes it easy to grab, route and redirect audio from any source in your computer with our virtual signal router. Use the ProDriver Plugin Host to connect your favorite VST, Audio Units and Direct X plugins. Run ProDriver4 in standalone mode or with your favorite DAW. Save your favorite plugin chains as presets and recall them during your session or live on stage in real time.

Mixer control panel(Windows)

There are two different audio drivers including "WDM" (Windows Driver Model) and "ASIO" (Audio Stream Input and Output) within the ICON ProAudio audio interface driver. WDM are widely used for daily software such as media player and ASIO is mainly being used for most of the recording software such as LogicPro. The advantage of ASIO is that it has much lower latency than WDM and this is very important when you are doing recording with load of plugins. Actually, most of the daily software does not support ASIO driver and using WDM only, in that case you just simply need to use the HW channel (Hardware channels). Below please find some explanations on the different terminology for each channel type.

1. HW IN (Hardware Channel IN)

This mean the hardware input channels including the microphones or internment input channels

2. HW Out (Hardware Channel OUT)

This mean the hardware output channels including the headphone or line out output channels

3. VC Out (Virtual Channel OUT)

This only exists on ASIO driver and it is a virtual channel that its output signal go to ASIO VC IN

4. VC Out (Virtual Channel IN)

This only exists on ASIO driver and it is a virtual channel that its input signal is coming from ASIO VC Out

5. LoopBack (LoopBack Channel)

ASIO internal loopback channel (e.g. ASIO VC Out signal go to ASIO VC IN)

On the mixer control panel, there are four different types of ASIO channels that you can manipulate.

1. Duo22 Live Hardware channels (HW In 1/2 & HW Out 1/2)

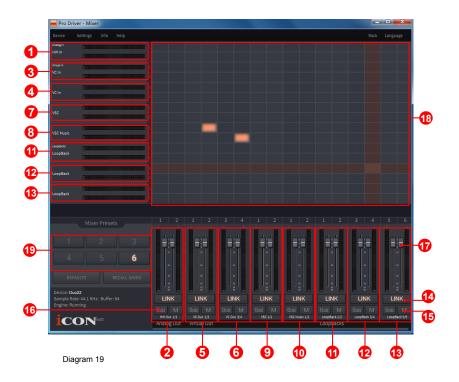
These are the hardware input and output channels on Duo22 Live .

2. Duo22 Live Virtual channels (VC In 1/2, 3/4 and 5/6), (VC Out 1/2, 3/4 and 5/6)

These are the input and output virtual channels that related to the WDM. For example: WDM Out 1/2 linked to VC In1/2 VC Out1/2 linked to WDM In1/2

3. Duo22 Live Loopback channels (LB 1/2, 3/4 and 5/6)

These are the ASIO loop-back channels.



By activating different cross points, you may route the corresponding signal to your desired channels.

1. HW Input 1/2 level metering

Showing the hardware 1/2 input level (HW In 1/2).

- 2. HW Output 1/2 level metering Showing the hardware 1/2 output level (HW Out 1/2).
- 3. VC In 1/2 (Virtual) input level metering Showing the WDM 1/2 output level (VC In 1/2).
- 4. VC In 3/4 (Virtual) input level metering Showing the WDM 3/4 output level (VC In 3/4).
- 5. VC Out 1/2 (Virtual) output level metering Showing the ASIO 1/2 VC output level (VC Out 1/2).
- 6. VC Out 3/4 (Virtual) output level metering Showing the ASIO 3/4 VC output level (VC Out 3/4).
- VSC In 1/2 (Virtual) input level metering Showing the WDM 1/2 output level (VSC In 1/2).

- 8. VSC Music In 1/2 (Virtual) input level metering Showing the WDM 1/2 output level (VSC music In 1/2).
- 9. VSC Out 1/2 (Virtual) output level metering Showing the ASIO 1/2 VC output level (VSC Out 1/2).
- **10. VSC Music Out 1/2 (Virtual) output level metering** Showing the ASIO 1/2 VC output level (VSC music Out 1/2).

11. Loopback 1/2

Showing the ASIO loop-back 1/2 channel's level metering.

12. Loopback 3/4

Showing the ASIO loop-back 3/4 channel's level metering.

13. Loopback 5/6

Showing the ASIO loop-back 5/6 channel's level metering.

14. Link switch

Switch to adjust both channels level simultaneously.

15. Mute switch

Switch to mute the corresponding channel.

16. "0dB" switch

Switch to instantly adjust the corresponding channel to "0dB" level.

17. Gain control fader

Slide to adjust the gain level for the corresponding channel.

18. Inputs & Outputs Matrix switches

Switch to turn On/Off the corresponding input channel route to the corresponding output channel. The matrix is very useful and makes your inputs and outputs very flexible. You may route any of your input(s) to any output(s).

19. Mixer Presets

6 Mixer-Presets button slots are available for saving or loading your routing channel settings.

Settings (Sample rate and latency settings)

Click the "Setting" button to launch the settings window.



Sample rate setting

Select your desired sampling rate from 44.1KHz to 192KHz on the pull down window shown in Diagram 21.

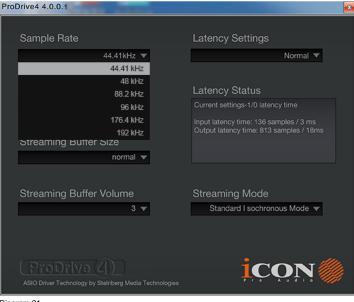


Diagram 21

Latency settings

There are six standard latency settings to select. If you would like to customize your own latency value, select custom.

- Safe (maximum latency)
- Extra Large
- Normal
- Small
- Very Small
- Minimum (minimum latency)
- Custom



Diagram 22

There are three different settings you can adjust to customize your own latency settings: These values include:

1. ASIO buffer Size

You may adjust the value ranging from 32/64/128/256/512/1024/2048 and 4096.

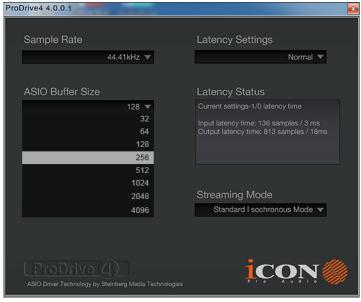
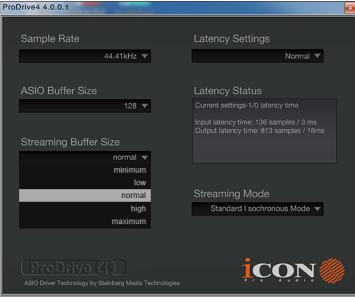


Diagram 23

2. Streaming buffer Size

Adjustable settings: Minimum/Low/Normal/High and Maximum.



3. Streaming buffer volume

Adjustable values: 2/3 and 4.

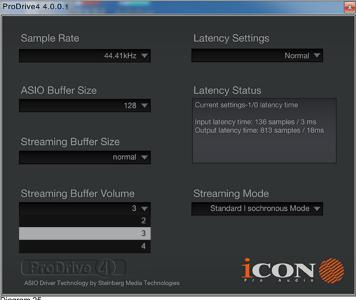
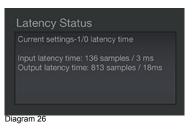


Diagram 25



(Note: If a warning message appears on the "Latency Status" windows, please select a larger latency setting.)

(Note: If a clicking sound occurs, you should change to a larger buffer size for the settings. If the largest buffer size has been selected and there is still a clicking sound. It means your computer performance is not able to handle the task. (It is not caused by Duo22 Live digital audio interface.)

ProDriver4 hosting rack(Windows)



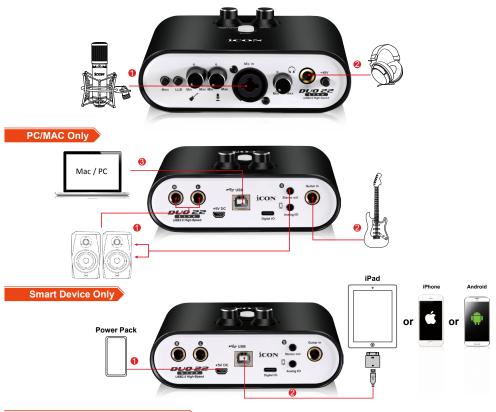
With the ProDriver4 Rack, you can use any of your plug-ins with your DAW. Or you may use your device as a standalone plug-ins effector without the need to run a DAW.

Hardware Connections

Connect the Duo22 Live digital audio interface outputs to your amplifier, powered monitors.

If you are monitoring through headphones, connect your headphones to the device's headphone output.

Connect your microphone/guitar to the device's analog input.



PC/MAC Smart Device Simultaneously



Different types of microphone connection method diagram



Note: For dynamic microphone user, please make sure +48V phantom power switch is "OFF" before you plug in your microphone, otherwise it may cause damage to your microphone.

Specifications

Mic Input:

Frequency Response:	22Hz to 22kHz (+/-0.1dB)
Dynamic Range:	112dB, A-weighte
Signal-to-Noise Ratio:	112dB, A-weighted
THD+N:	98dB
Crosstalk:	97dB @ 1kHz
Input Impedance:	Mic in: 1.8K Ohms, typical
Adjustable Gain:	+34dB

Inst Input:

Frequency Response:	22Hz to 22kHz (+/-0.1dB)
Dynamic Range:	112dB, A-weighte
Signal-to-Noise Ratio:	112dB, A-weighted
THD+N:	98dB
Crosstalk:	97dB @ 1kHz
Input Impedance:	Inst in: 500K Ohms, typical;
Adjustable Gain:	+31dB

Line Outputs 1/2 (Stereo, Unbanced):

Frequency Response:	22Hz 22kHz (+/-0.1dB)
Dynamic Range:	114dB, A-weighted
Signal-to-Noise Ratio:	114dB, A-weighted
THD+N:	100 dB
Crosstalk:	97dB @ 1kHz
Nominal Output Level:	Unbalanced: +4dBV, typical;
Maximum Output Level:	+11dBV, typical;
Output Impedance:	150 Ohm
Load Impedance:	600 Ohm minimum

Headphone Outputs: (at Maximum Volume; Into 100 Ohm load):

Frequency Response:	22Hz to 22kHz (+/-1dB)
Power into Ohms:	90 mW into 100 Ohms
THD+N:	<0.06% (-66dB)
Signal-to-Noise Ratio:	100dB, A-weighted
Max Output Level into 100 Ohms:	+2.0dBV, typical
Output Impedance:	75 Ohm
Load Impedance:	32 to 600 Ohms

Services

If your Duo22 Live needs servicing, follow these instructions.

Check our online Help Center at **http://support.iconproaudio.com/hc/en-us**, for information, knowledge, and downloads such as:

- 1. FAQ
- 2. Download
- 3. Learn More
- 4. Forum

Very often you will find solutions on these pages. If you don't find a solution, create a support ticket at our online Help Center at the link below, and our technical support team will assist you as soon as we can.

Navigate to http://support.iconproaudio.com/hc/en-us and then sign in to submit a ticket.

As soon as you have submitted an inquiry ticket, our support team will assist you to resolve the problem with your ICON ProAudio device as soon as possible.

To send defective products for service:

- 1. Ensure the problem is not related to operation error or external system devices.
- 2. Keep this owner's manual. We don't need it to repair the unit.
- Pack the unit in its original packaging including end card and box. This is very important. If you have lost the packaging, please make sure you have packed the unit properly. ICON is not responsible for any damage that occurs due to non-factory packing.
- 4. Ship to the ICON tech support center or the local return authorization. See our service centers and distributor service points at the link below:

If you are located in US Send the product to: North America Mixware, LLC – U.S. Distributor 11070 Fleetwood Street – Unit F. Sun Valley, CA 91352; USA Tel.: (818) 578 4030 Contact: www.mixware.net/help

If you are located in Europe Send the product to: Sound Service GmbHEuropean HeadquarterMoriz-Seeler-Straße 3D-12489 Berlin Telephone: +49 (0)30 707 130-0 Fax: +49 (0)30 707 130-189 E-Mail: info@sound-service.eu If you are located in Hong Kong Send the product to: ASIA OFFICE: Unit F, 15/F., Fu Cheung Centre, No. 5-7 Wong Chuk Yueng Street, Fotan, Sha Tin, N.T., Hong Kong. Tel: (852) 2398 2286 Fax: (852) 2789 3947 Email: info.asia@icon-global. com

- 5. For additional update information please visit our website at:
- www.iconproaudio.com













.com/iconproaudio

www.twitteer.com/iconproaudio www.instagram.com/iconproaudio www.facebook.com/iconproaudio

Dashboard



www.iconproaudio.com





iconproaudio.com/dashboard/

www.iconproaudio.com