






Ultra 4

USB3.0 Super-speed audio interface



	<p>CAUTION</p> <p>RISK OF ELECTRIC SHOCK DO NOT OPEN RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR</p> <p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED PERSONNEL</p> <p>ATTENTION: POUR EVITER LES RISQUES DE CHOC ELECTRIQUE: NE PAS ENLEVER LE COUVERCLE. AUCUN ENTRETIEN DE PIECES INTERIEURES PAR L'USAGER. CONFIER L'ENTRETIEN AU PERSONNEL QUALIFIE.</p> <p>AVIS: POUR EVITER LES RISQUES D'INCENDIE OU D'ELECTROCUTION, N'EXPOSEZ PAS CET ARTICLE A LA PLUIE OU A L'HUMIDITE</p>		
			<p>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 product's enclosure, that may be of sufficient magnitude to electric shock to persons. Le symbol clair avec point de flèche à l'intérieur d'un triangle équilatéral est utilisé pour avertir l'utilisateur de la présence à l'intérieur du coffret de voltage dangereux non isolé d'ampleur suffisante.</p> <p>The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance. Le point d'exclamation à l'intérieur d'un triangle équilatéral est employé pour avertir les utilisateurs de la présence d'instructions importantes pour le fonctionnement et l'entretien (service) dans le livret d'instruction accompagnant l'appareil.</p>

Important Safety Instructions

1. Read this manual thoroughly before using this unit.
2. Keep this manual for future reference.
3. 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.
5. 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 heat-producing 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.
10. 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

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Introductions

Thank you for purchasing the ICON Ultra 4 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 Ultra 4 digital audio interface, as well as a guided tour through its front and rear panels, step-by-step instructions for its setup and use, and full specifications.

You'll also find a warranty card enclosed---please don't forget to fill it out and mail it so that you can receive online technical support at: www.iconproaudio.com. And so we can send you updated information about these and other ICON products in the future. 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 Ultra 4 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.

Please write your serial number here for future reference:

Purchased at:

Date of purchase:

What's in the package?

- Ultra 4 USB Recording Interface
- Quick Start Guide
- Driver Software CD
 - Different language electronic user manual & quick start guide (pdf)
- DAW software – Reaper & KiloHearts VST
- USB 3.0 cable x 1

Features



- USB3.0 super-speed connectivity for ultra-low latency
- 24-Bit 192KHz 2-In/2-Out USB Recording Interface
- High dynamic range and S/N ratio:
 - DAC: THD+N: -112dB; Dynamic Range: 120dB
 - ADC: THD+N: -110dB; Dynamic Range: 120dB
- 2x2 analog I/O full duplex recording and playback
- 2 x ICON innovative unique mic/Line/Instrument preamps with individual gain control and phantom power switch
- 2 analog balanced inputs on 1/4" TRS jacks
- 2 analog balanced outputs on 1/4" TRS jacks
- 1 x 1 – 16 channel MIDI I/O
- Headphone output with individual volume control
- ICON "ProDriverVST" provided with internal virtual routing for inputs and outputs
- Powerful VST hosting rack built-in with the "ProDriverVST"
- Different VST plug-ins are provided
- Flexible channel routing via the software control panel
- Direct monitoring switch for "Stereo, Mono and PC" with individual volume control
- Supports DirectSound, WDM and ASIO2.0
- Compatible with Mac OS (Intel-Mac) and Windows 7, 8 & 10 (32-bit/64-bit)
- Full duplex, simultaneous record/playback
- Mixer-like layout and design for easy operation and visually friendly
- Rugged aluminum construction

Front/Top Panel



1. “Mic/Inst/Line” inputs 1/2

Unbalanced instrument/Line and mic level inputs. These hybrid connectors will accept a standard 3-pin XLR plug or a 1/4” TS connector.

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 controls 1/2

These potentiometers control the input level of their associated analog Mic/Inst/Line input.

4. “Inst/Line” input switch

Instrument or Line input switch for input 1 & 2.

5. Master level control

This potentiometer controls the master output level of the analog outputs.

6. Headphone level control

This potentiometer controls the output level of the headphone output.

7. Headphone output

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

8. Direct Monitoring (DM) level control

This potentiometer controls the direct monitoring output level.

9. Direct monitoring mode switch

Switch between the monitoring signal from Stereo DM/Mono DM to PC signal:

Stereo: Stereo direct monitoring signal will be routed to the monitoring channel.

Mono: Mono direct monitoring signal will be routed to the monitoring channel.

PC: PC signal (i.e. wet signal) will be routed to the monitoring channel.

Rear Panel



1. USB 3.0 Connector

Connect it with the provided USB cable to your Mac/PC's USB connector. Your Mac/PC must have a USB3.0 connector in order to run the full speed of Ultra 4.

2. Line outputs L/R

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

3. MIDI I/O connectors

MIDI input and output on standard 5-pin DIN connectors.

4. Power supply connector

Ultra 4 is USB-bus powered. If your computer does not supply sufficient power, connect a ICON 5VDC power supply adapter to this jack.

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

Mac driver installation

Please follow the step-by-step procedures below to install your Ultra 4 USB recording interface and its driver.

1. Turn on your Mac

(Note: Do not connect the Ultra 4 digital audio interface to your Mac yet.)

2. Insert the Driver CD into your CD-Rom.

After you have inserted the provided Driver CD into your CD-Rom, a pop-up window should appear as shown in Diagram 1, then click on the "Mac" folder to open the installation files list. Click "ICON Ultra 4 ProDriverVST.pkg".

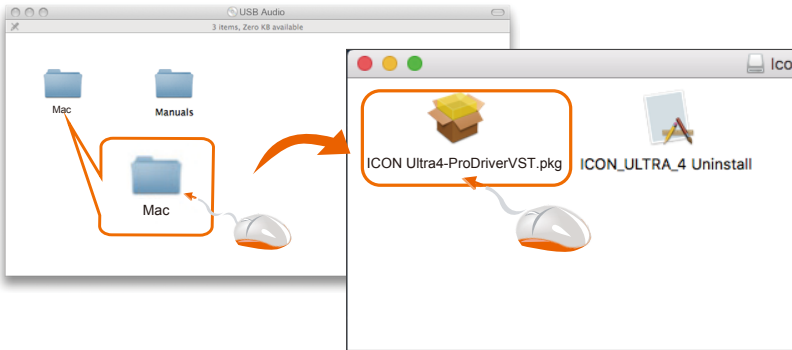


Diagram 1

3. Welcome Screen appears

Choose "Continue" when you see the Welcome Screen shown in Diagram 2.

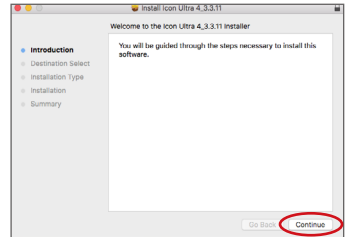


Diagram 2

4. Set install location

Click the "Change install location" button if you would like to set your preferred install location, otherwise click the "Install" button.

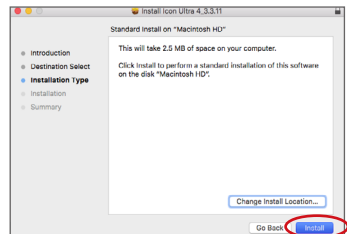


Diagram 3

5. Administrator ID

Input your password for driver installation.

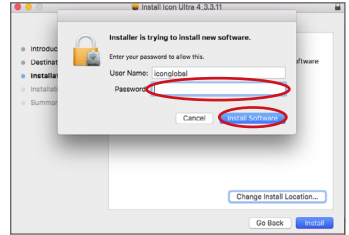


Diagram 4

6. Installation confirmation

Click "Continue Installation", otherwise click "Cancel" to abort.

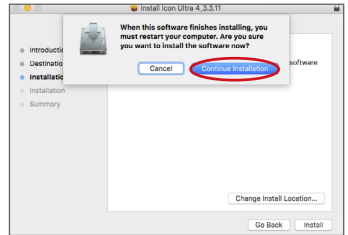


Diagram 5

7. Installation start

The driver installation has started, please wait until the process has completed.

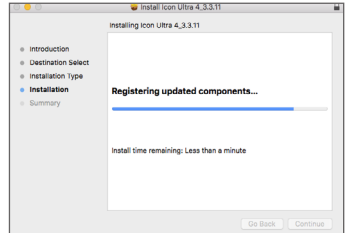


Diagram 6

8. Installation completed

The driver installation has completed successfully. Click the "Restart" button.

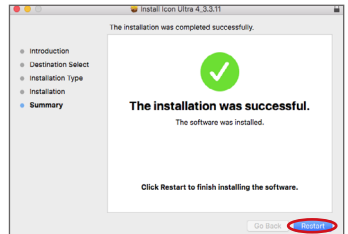


Diagram 7

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

Open the previous “Mac” folder. Copy the ‘ProDriverVST’ software panel shortcut logo and paste it to your desktop.

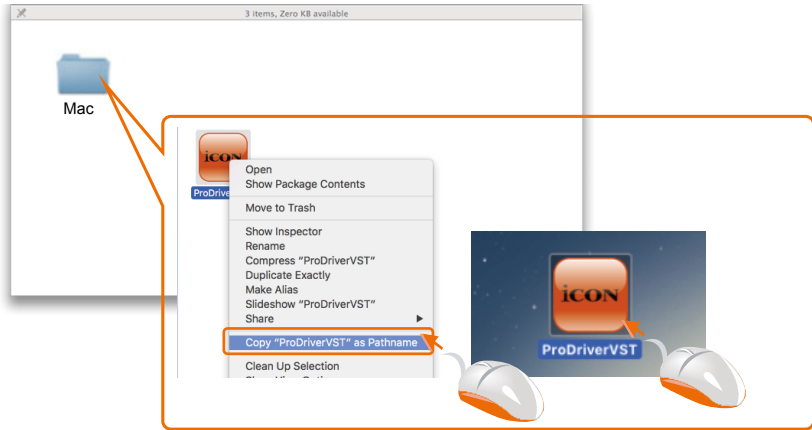


Diagram 8

10. Launch the software control panel

Click the Ultra 4’s software control panel shortcut logo you have just copied to your desktop to launch the software control panel.

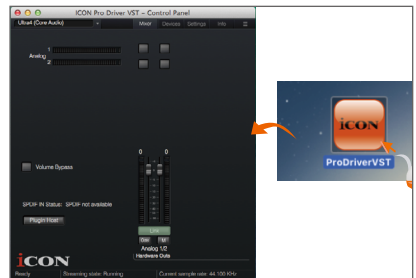


Diagram 9

11. Audio MIDI setup

Open the “Audio MIDI setup” window and check if the Ultra 4 has setup properly as shown below in diagram 10. If your Ultra 4 device does not appear on the system settings. It means the driver did not install properly, go through the “Driver Installation” procedure again.

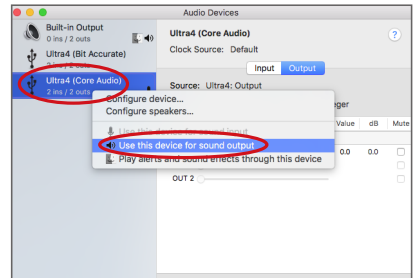


Diagram 10

Mixer control panel

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).

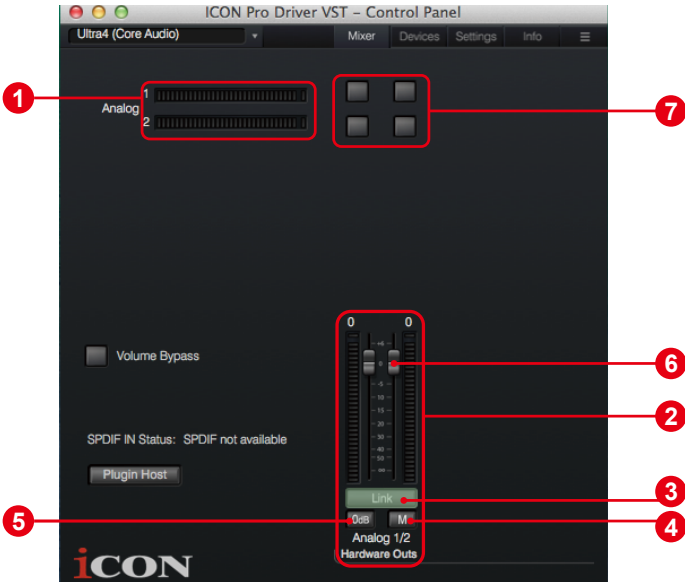


Diagram 11

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. Link switch

Switch to adjust both channels level simultaneously.

4. Mute switch

Switch to mute the corresponding channel.

5. “0dB” switch

Switch to instantly adjust the corresponding channel to “0dB” level.

6. Gain control fader

Slide to adjust the gain level for the corresponding channel.

7. Inputs & Outputs Matrix switches

Switch to turn On/Off the corresponding hardware input channel route to the corresponding hardware 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).

Windows driver installation

Please follow the step-by-step procedures below to install your Ultra 4 USB recording interface and its driver.

1. Turn on your computer

Note: Do not connect the Ultra 4 digital audio interface to your computer yet.

2. Insert the Driver CD into your CD-Rom.

After you have inserted the provided Driver CD into your CD-Rom, an Installation screen should appear as shown in Diagram 12, then click "Windows" for the driver installation".

Note: If the Installation screen does not appear automatically. Go to the CD folder and double click "Setup".

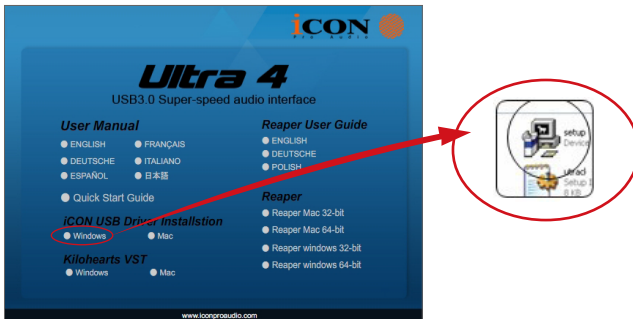


Diagram 12

3. Installation Wizard appears

Choose "Next" when you see the Welcome Screen shown in Diagram 13.

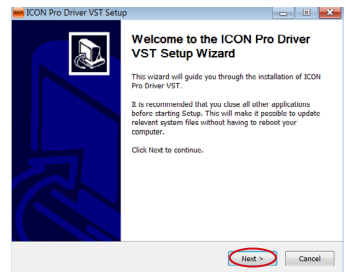


Diagram 13

4. License Agreement

Click "I Agree" to proceed.

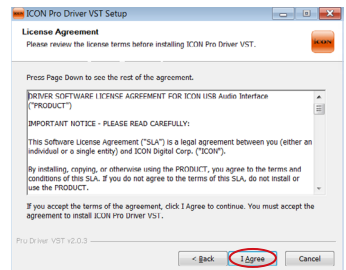


Diagram 14

5. Select components for installation

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

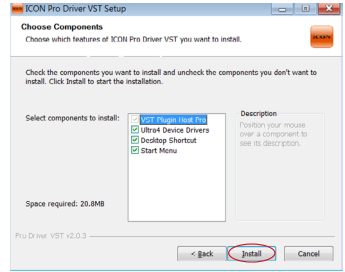


Diagram 15

6. Preparing installation files

The installation process started, the process may take some time depending on your computer performance, please be patient and wait for the process to finish.

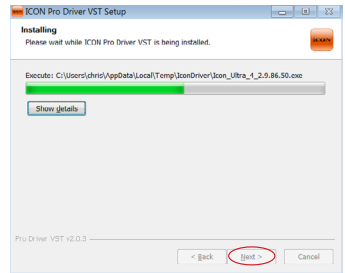


Diagram 16

7. Click “Install” to proceed.

Note: Same message will appear three times as there are three different drivers installation.



Diagram 17

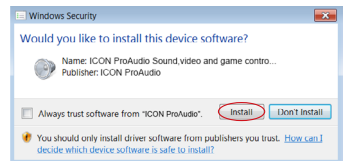


Diagram 18



Diagram 19

8. Setup completed

A window as shown in Diagram 20 should appear. Choose "Finish".

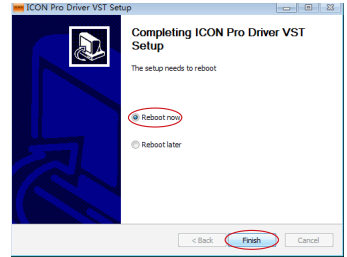


Diagram 20

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).

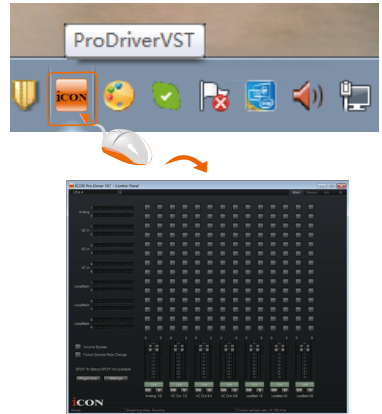


Diagram 21

10. Connect your Ultra 4 digital audio interface

Now connect the Ultra 4 digital audio interface to your computer's USB port .



Diagram 22

ProDriver VST

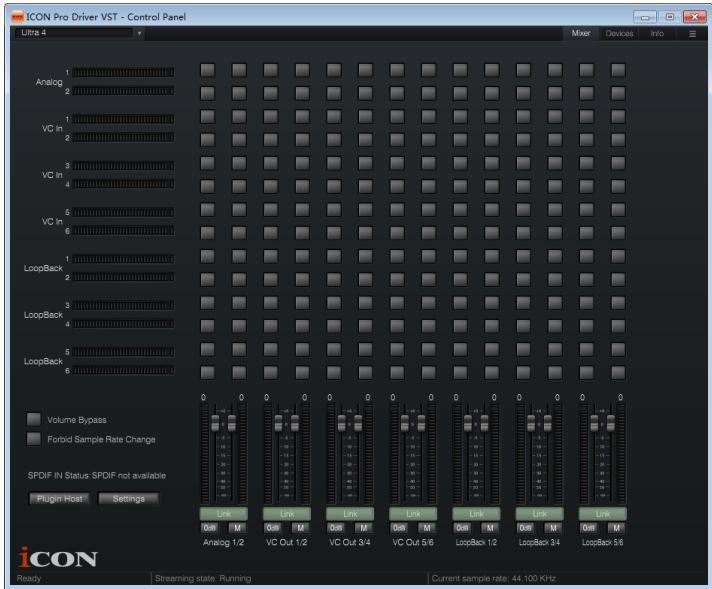


Diagram 23

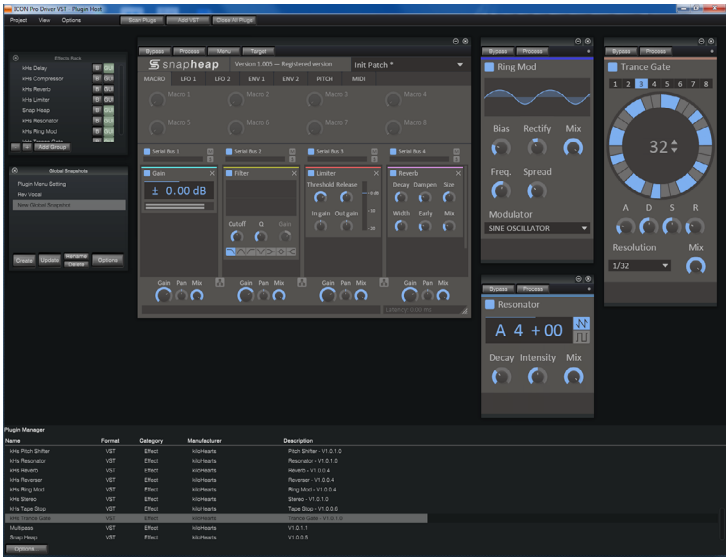


Diagram 24

To make the Ultra 4 very versatile and powerful, we have developed a new technology ProDriver VST - it is our innovative VST rack, plug-in host, and virtual signal router. Run it in standalone mode or with your favorite DAW. Pull up your guitar modeling VST and play, or plug in your midi controller and control your favorite virtual instruments without running through your digital audio workstation.

Mixer control panel

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

Ultra 4 Hardware channels (HW In 1/2 & HW Out 1/2)

These are the hardware input and output channels on Ultra 4.

Ultra 4 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

Ultra 4 Loopback channels (LB 1/2, 3/4 and 5/6)

These are the ASIO loop-back channels.

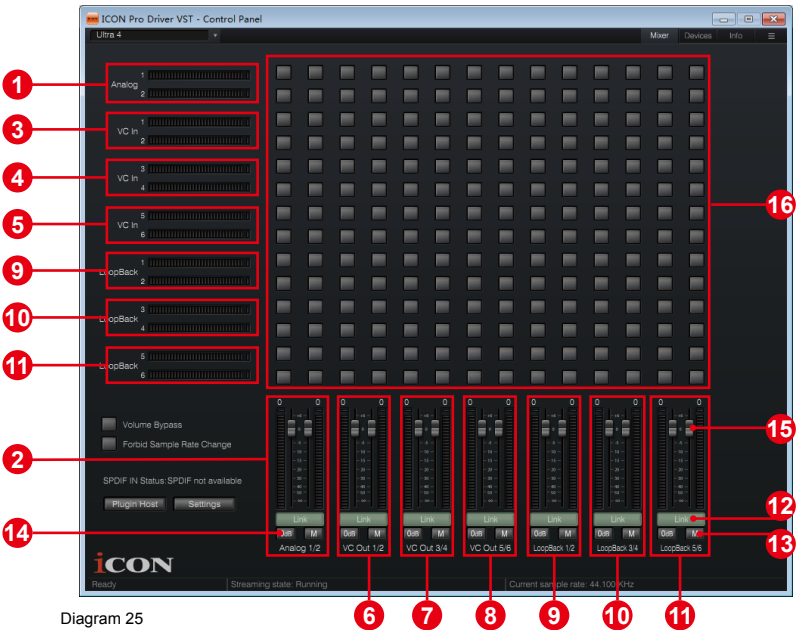


Diagram 25

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 In 5/6 (Virtual) input level metering

Showing the WDM 5/6 output level (VC In 5/6).

6. VC Out 1/2 (Virtual) output level metering

Showing the ASIO 1/2 VC output level (VC Out 1/2).

7. VC Out 3/4 (Virtual) output level metering

Showing the ASIO 3/4 VC output level (VC Out 3/4).

8. VC Out 5/6 (Virtual) output level metering

Showing the ASIO 5/6 VC output level (VC Out 5/6).

9. Loopback 1/2

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

10. Loopback 3/4

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

11. Loopback 5/6

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

12. Link switch

Switch to adjust both channels level simultaneously.

13. Mute switch

Switch to mute the corresponding channel.

14. "0dB" switch

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

15. Gain control fader

Slide to adjust the gain level for the corresponding channel.

16. 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).

Settings (Sample rate and latency settings)

Click the “Setting” button to launch the settings window.

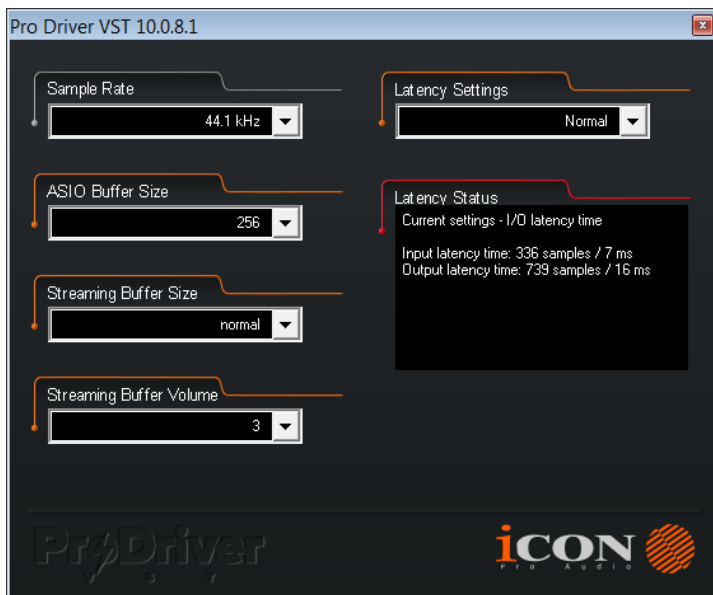


Diagram 26

Sample rate setting

Select your desired sampling rate from 44.1KHz to 192KHz on the pull down window shown in Diagram 27.

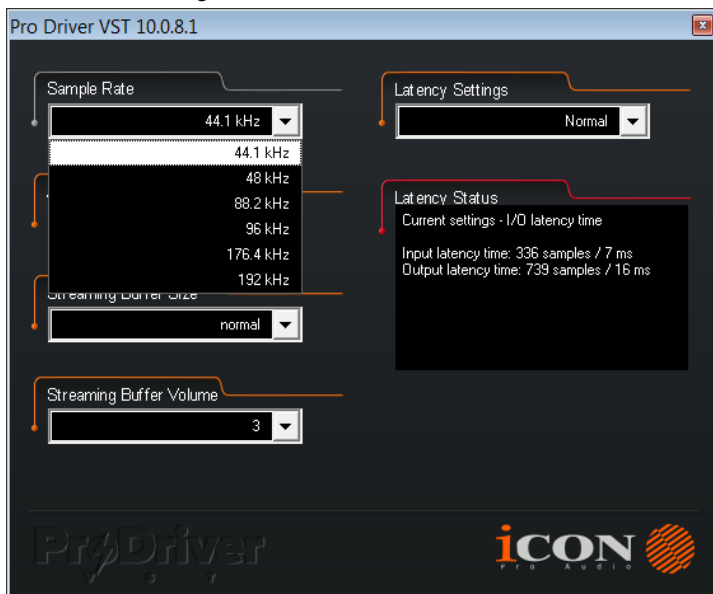


Diagram 27

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

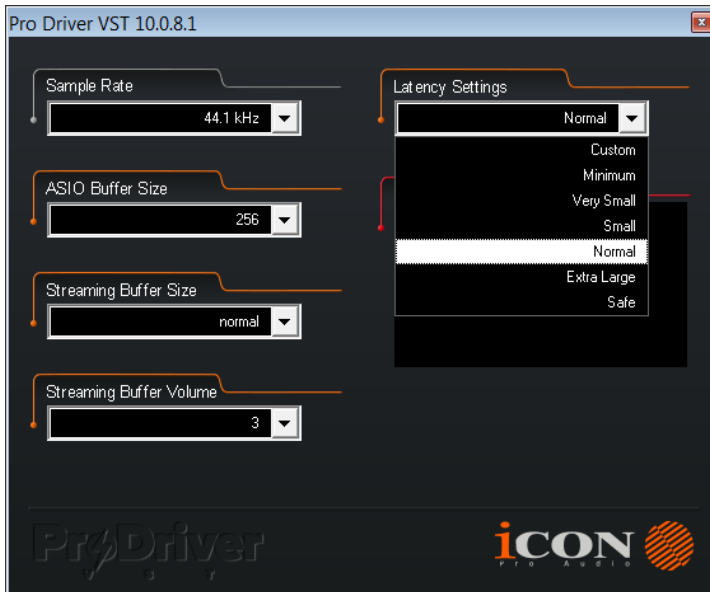


Diagram 28

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.

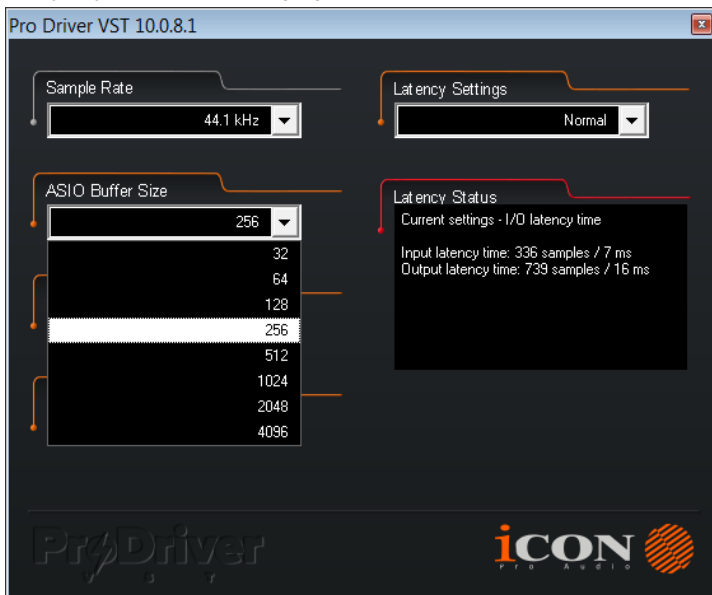


Diagram 29

2. Streaming buffer Size

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

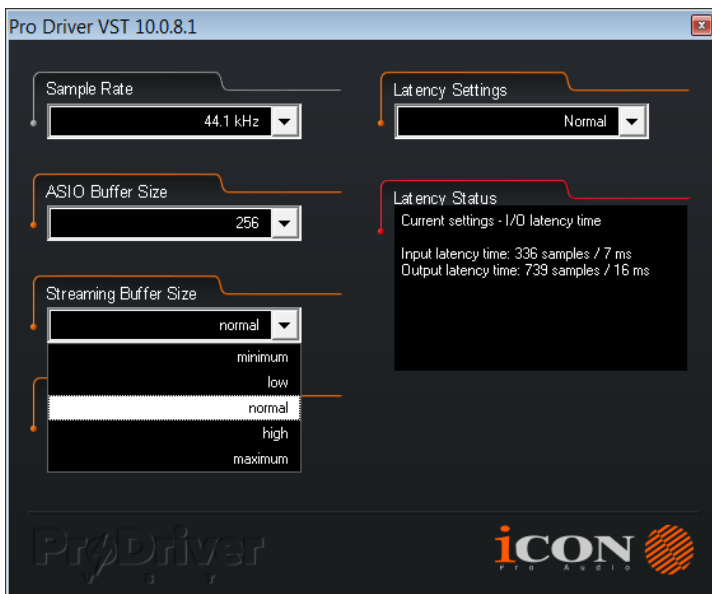


Diagram 30

3. Streaming buffer volume

Adjustable values: 2/3 and 4.

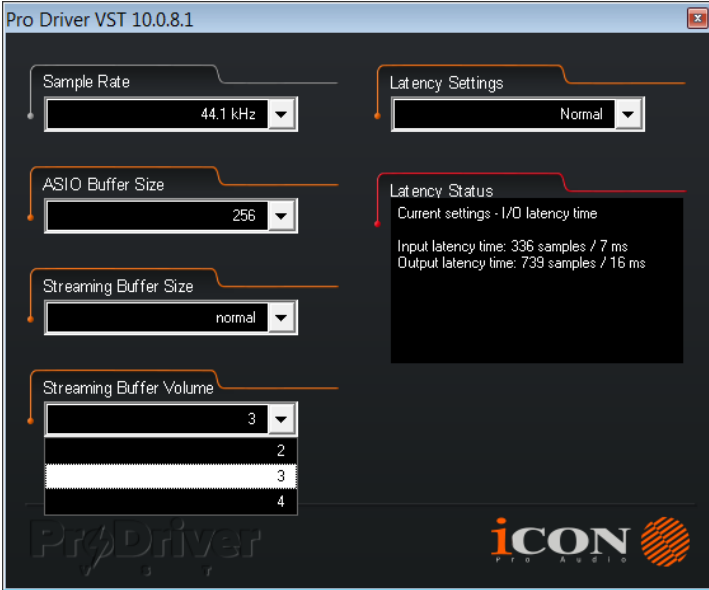


Diagram 31

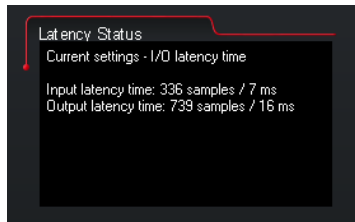
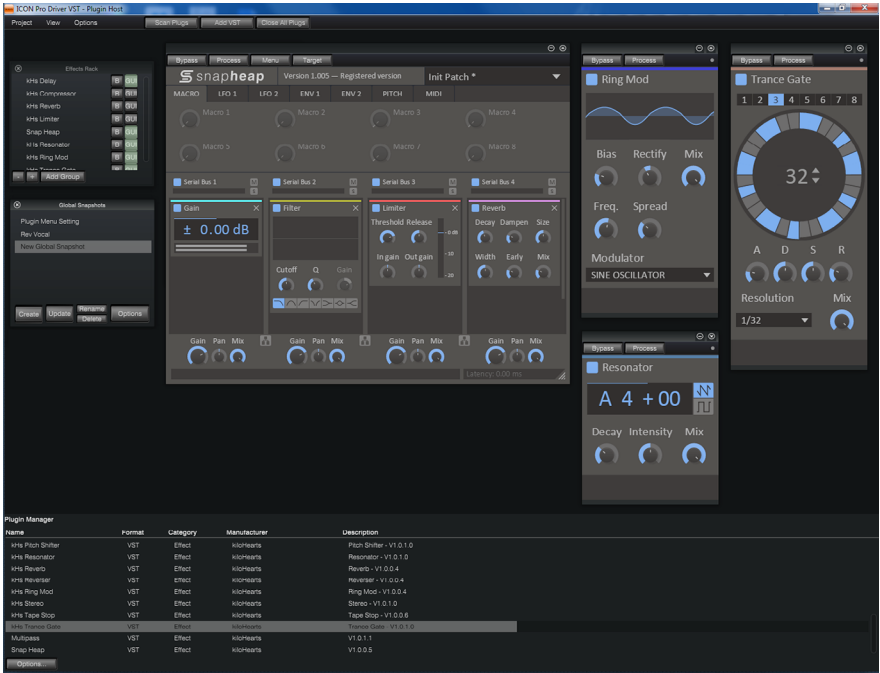


Diagram 32

(Note: If a warning message appears on the “Latency Status” windows, please adjust 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 Ultra 4 digital audio interface.)

ProDriver VST hosting rack



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

Hardware Connections

Connect the Ultra 4 digital audio interface outputs to your amplifier, powered monitors or surround system. Two-channel stereo operation, the default outputs are channels 1 and 2.

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

Connect your microphones, instruments or other line level analog sources to the device's analog inputs.



Specifications

Line Inputs 1/2(balanced)::

Frequency Response:	22Hz to 22kHz (+/-0.1dB)
Dynamic Range:	117dB, A-weighted
Signal-to-Noise Ratio:	-117dB, A-weighted
THD+N:	-107dB
Crosstalk:	-107dB @ 1kHz
Nominal Input Level:	Balanced: +4dBu Unbalanced: -10dBV
Maximum Input level:	Balanced: +10.2dBu, typical; Unbalanced: +2.0dBV, typical
Input Impedance:	10K Ohms, typical
Adjustable Gain:	> 50dB

Mic/Inst Inputs 1/2 (Balanced; at Minimum Gain):

Frequency Response:	22Hz to 22kHz (+/-0.1dB)
Dynamic Range:	117dB, A-weighted
Signal-to-Noise Ratio:	-117dB, A-weighted
THD+N:	-107dB
Crosstalk:	-107dB @ 1kHz
Maximum Input level:	-3.8dBu, typical
Input Impedance:	Inst in: 500K Ohms, typical; Mic in: 1.8K Ohms, typical
Adjustable Gain:	> 50dB
Total Gain Range:	+54dB

Line Outputs 1-2 (balanced):

Frequency Response:	22Hz to 22kHz (+/-0.1dB)
Dynamic Range:	117dB, A-weighted
Signal-to-Noise Ratio:	-117dB, A-weighted
THD+N:	-107dB
Crosstalk:	-107dB @ 1kHz
Nominal Output Level:	Balanced: +4dBu, typical;
Maximum Output Level:	+10.2dBu;
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:	-105dB, A-weighted
Max Output Level into 100 Ohms:	+2.0dBV, typical
Output Impedance:	75 Ohm
Load Impedance:	32 to 600 Ohms

Services

If your Ultra 4 needs servicing, follow these instructions.

Check our online help centre 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 ACS (Auto Customer Support) at the below link, 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 or click "Submit a ticket" without the need to sign in.

As soon as you have submitted an enquiry ticket, our supporting 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.
3. 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 centres and distributor service points at the link below:

If you are located in Honk 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.**

If you are located in Europe

Send the product to:

Sound-Service Musikanlagen-Vertriebsgesellschaft mbH

Am Spitzberg 3

D-15834 Rangsdorf

Telephone: +49-(0)33708-933-0

Fax: +49-(0)33708-933-189

E-Mail: info@sound-service.eu

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



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