

User's Manual

DeuX

2-in/4-out FireWire Audio Interface



All round gear for creation



INFRASONIC

www.infra-sonic.com



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V.1.1 April 10, 2008

* All specifications are subject to change without prior notice.

1. Introduction

Congratulations on the purchase of INFRASONIC DEUX!

The DEUX is the most powerful FireWire recording interface for audio recording.

It is suitable for providing high quality results at reasonable price. It features a small-size and a rugged aluminum case.

The DEUX is a professional recording interface that will satisfy its users in features, performance and convenience.

1.1 Key features

- 2-in/4-out FireWire audio interface
- 2 balanced inputs with 1/4 inch TRS phone jack
 - A/D converter: SNR 102 dBA @ (44.1 kHz)
- 4 balanced outputs with 1/4 inch TRS phone jack
 - D/A converter: SNR 106 dBA @ (44.1 kHz)
- Supports fully balanced I/O
- Supports up to 24-bit/96 kHz
- Small footprint with a heavy duty aluminum case
- 1 x FireWire (IEEE 1394a) port
- Bus-powered with 6-pin connector
- External power supply is available
- Supports zero latency direct hardware monitoring
- ASIO2.2, WDM, DirectSound and CoreAudio supports
- Windows® XP/VISTA (32-bit and 64-bit) or later, Mac OS X (10.3 or later)
- Native Instruments ABSYNTH 4 DEMO, MASSIVE DEMO and TRAKTOR 3 DEMO software included

1.2 Minimum system requirements

<PC> Intel Pentium 4 or equivalent and Compatible CPU 512MB of RAM One available FireWire port Microsoft Windows® XP/VISTA or later	<Mac> Macintosh with G4 or better processor 512MB of RAM One available FireWire port Mac OS 10.3 or later
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1.3 What's in the box

- DEUX Hardware
- Installation CD (Driver and bundled DEMO software)
- Standard FireWire cable
- FireWire adapter - 6 pin female to 4 pin male
- User's Manual

2. Description of DEUX

2.1 Front panel



1. **Left line input gain control**
 - This knob adjusts the left side of the line input gain.
2. **Left line input peak LED**
 - This LED light when the input signal is within -6dB of analog clipping.
If the peak LED flickers occasionally, the signal is approaching clipping levels, but does not necessarily indicate distortion or actual clipping.
3. **Left line input (1/4" TRS)**
 - The left side of the line input connections can be used with balanced or unbalanced cables via the 1/4" TRS connectors.
4. **Right line input (1/4" TRS)**
 - The right side of the line input connections can be used with balanced or unbalanced cables via the 1/4" TRS connectors.
5. **Right line input peak LED**
 - This LED light when the input signal is within -6dB of analog clipping.
If the peak LED flickers occasionally, the signal is approaching clipping levels, but does not necessarily indicate distortion or actual clipping.
6. **Right line input gain control**
 - This knob adjusts the right side of the line input gain.
7. **Headphone output**
 - The high powered headphone output accommodates stereo headphones with a 1/4" stereo plug.
8. **Headphone level control**
 - This knob controls the overall output level of Headphone output.

2.2 Rear panel



1. 4 Line outputs (1/4" TRS)

- These outputs are 1/4" balanced phone jack connections. They can be connected to a mixing board, power amplifier, powered studio monitors, recorder, or another stereo line inputs.

2. FireWire FireWire 400 (IEEE 1394a) port

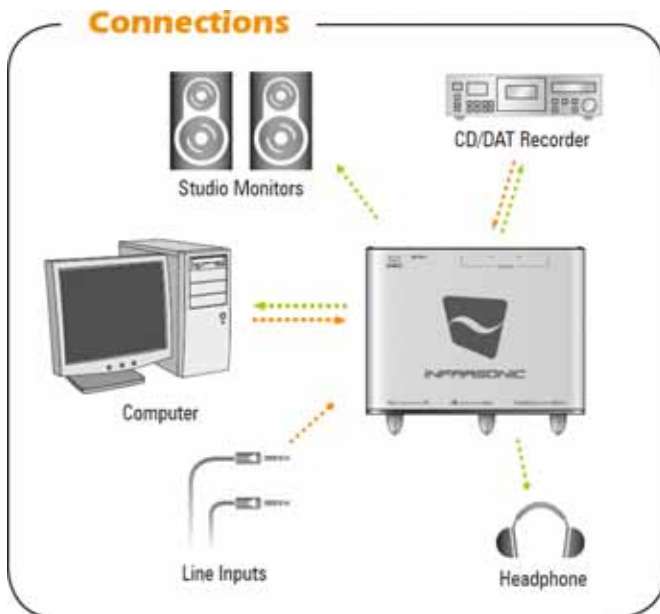
- This six-pin IEEE 1394a connector is connected the audio interface to your computer.

3. Optional DC power supply

- The DEUX can be powered by an external PSU, if required.
The most common (larger, 6 pin) type of FireWire port can supply power, so the use of an external power supply will not normally be necessary. However, if the connected computer/laptop only features the smaller 4-pin FireWire connector, which cannot supply power, then the PSU must be connected.

CAUTION: Please check the polarity of the DC power supply.

3. Connections



1. Connect the DEUX to FireWire port on computer with the included FireWire cable.
2. Find the FireWire port on the rear of the DEUX.
3. Connect provided FireWire cable (Plug type IEEE 1394a) to the DEUX.
4. Find the FireWire port on your computer.
5. Plug the DEUX's FireWire cable (Plug type IEEE 1394a) into the FireWire port of your computer.
6. Connect the DEUX to your equipments. (mixer, monitoring system, recorder, etc.)

4. Software installation

4.1 Driver software installation

This manual contains a step by step guide for driver software installation to your OS. If you have any difficulties during installation, please contact our technical support department.

NOTE:

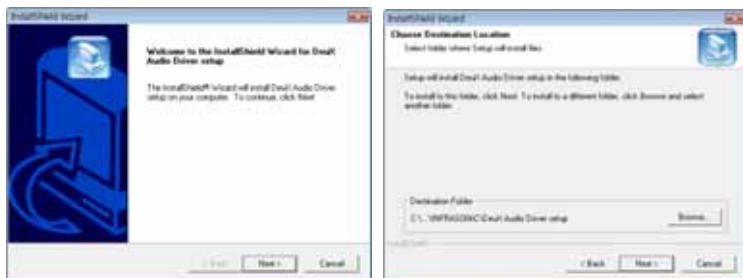
1. Before starting the driver software installation, prepare your original OS software, as you may need it during installation. Also please make sure that you have installed a recent version of the chipset drivers and patches provided by your manufacturer for your motherboard.
2. Please check <http://www.infra-sonic.com> for driver updates and last minute issues regarding the DEUX.

4.1.1 Installation (Windows® OS)

1. Please plug your DEUX before starting installation. Windows will automatically detect a new device installation and the "Found New Hardware Wizard" window will appear.
2. Insert the provided CD-ROM in your CD or DVD disc drive and wait for the following menu to pop up. Click "Install Driver" to proceed with the driver installation.



- Click "Next" and follow the instructions on the screen.



- After the installation has finished, please confirm if the  icon is visible in the system tray of the task bar.



4.1.2 Installation (Mac OS)

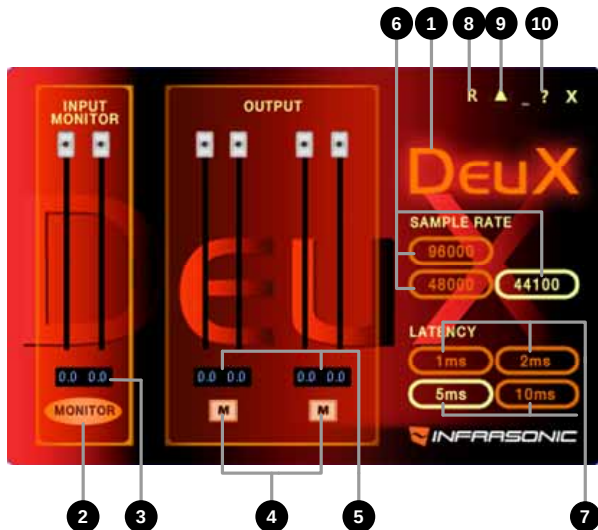
If you have earlier versions of Mac OS, please upgrade to OS 10.3 before using the DEUX. The installation is very simple. After connecting DEUX, your Macintosh computer will automatically detect the DEUX. The DEUX fully works with Mac OSX's Core Audio driver.

4.3 The bundled DEMO software installation

To install the bundled software on your OS, insert the provided CD-ROM in your CD or DVD disc drive and wait for the following menu to pop up. Click "Bundle Software" to proceed with the Native Instruments demo software installation. Choose software which you want to install and then follow the instructions on the screen.



5. Control panel

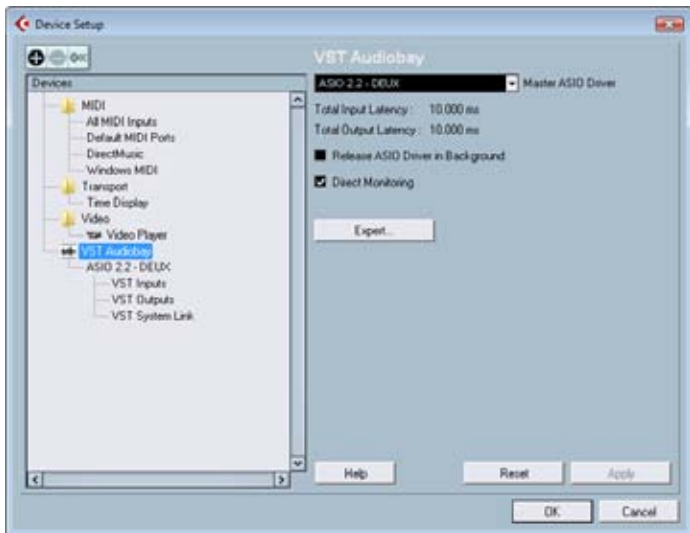


- 1. Connection status:** The DEUX logo indicates the current status of the FireWire connection.
- 2. Input direct monitor:** You can monitor the sound directly from the input source with zero latency.
- 3. Input monitor level information:** The input monitor level is displayed in here.
- 4. Output mute:** Select this button to mute signals of output channels.
- 5. Output level information:** The output level is displayed in here.
- 6. Sample rate:** The current sample rate is indicated by light. The DEUX supports 44.1, 48, 96 kHz sample rates. It is matched the sample rate of the source audio.
- 7. Latency:** You can choose between different buffer sizes. Typically a lower latency is good when you process audio signals from the audio inputs in real time with your audio software. A smaller latency value will however also make more system load.
- 8. Factory reset:** It resets the control panel to default settings. Click this button to go back to default setting.
- 9. Always on top:** Enables to display the DEUX control panel always over other windows.
- 10. About:** Check current driver information.

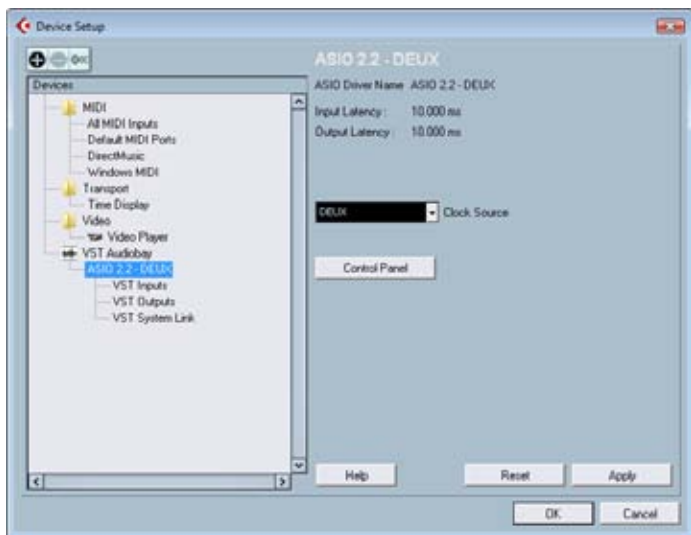
6. Using with applications

This chapter contains basic configuration examples for some popular software applications. Please refer to the specific software's manual for detailed information.

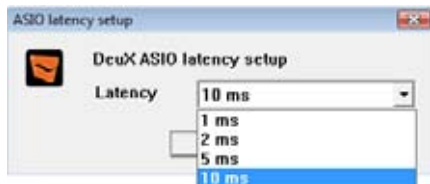
6.1 Cubase SX and Nuendo



After launching Cubase SX, go to Device → Device Setup → VST Audiobay. Select 'ASIO 2.2 - DEUX' for the ASIO device. Make sure you need to click Apply button after changing the settings.



After changing the settings, go to Device → Device Setup → ASIO 2.2 - DEUX.
If you click the Control Panel button, 'ASIO latency setup' window will pop up.



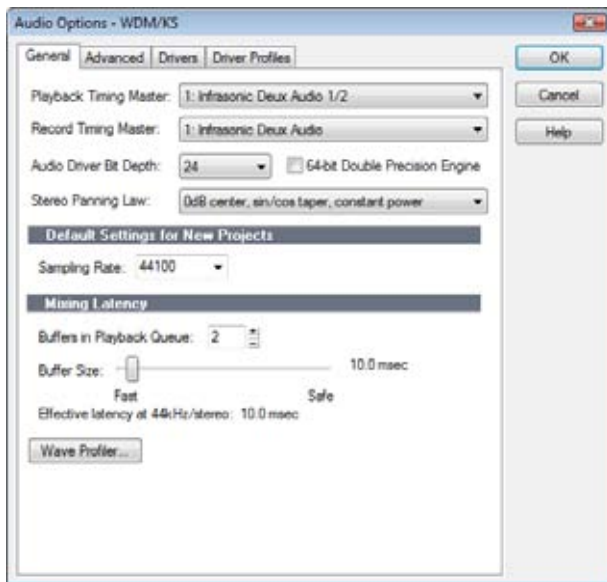
You can set the latency in here.
It's synchronized with the latency setup of control panel.

If you want to change the sample rate, you must change it on the host program.

6.2 Cakewalk SONAR

After launching SONAR, go to option → Audio tab.

1. WDM/KS mode



Change the settings as above in the input/output driver settings.
The input and output drivers have to be matched to each other.
Restart SONAR after the settings have changed.

2. ASIO mode

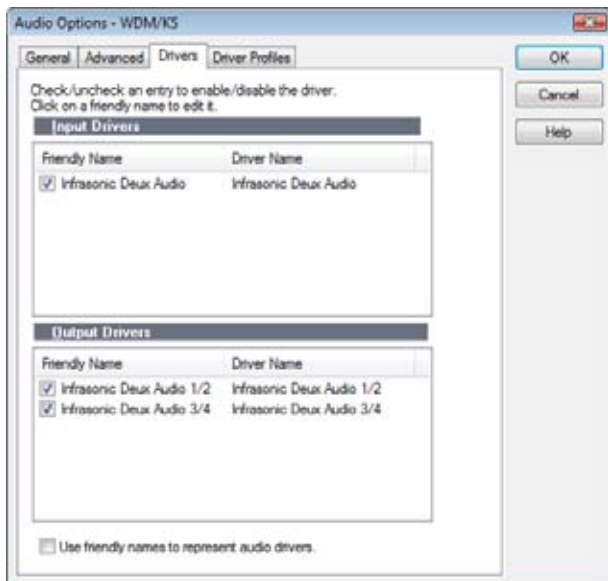
Playback and Recording

Driver Mode: **ASIO** ▼

Dithering: **ASIO**

☐ Share Drivers With Other Programs

First, change the driver mode to ASIO on the advanced tab of the audio options as below, then restart SONAR.

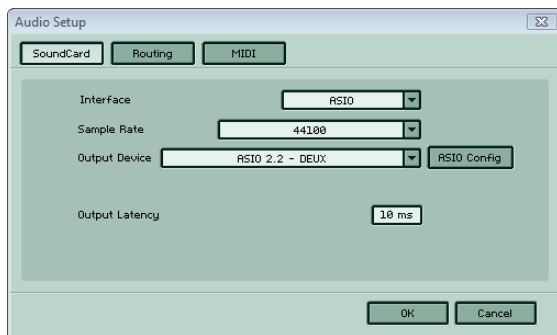


Secondly, change the settings as above on the input/output driver settings.

6.3 ABSYNTH 4, MASSIVE, TRAKTOR 3

Demo versions of NATIVE INSTRUMENTS ABSYNTH 4, MASSIVE and TRAKTOR 3 are included on the CD. These softwares are operated in stand-alone mode as well as a plug-in mode with audio and MIDI sequencers such as Cubase, Sonar, Logic.

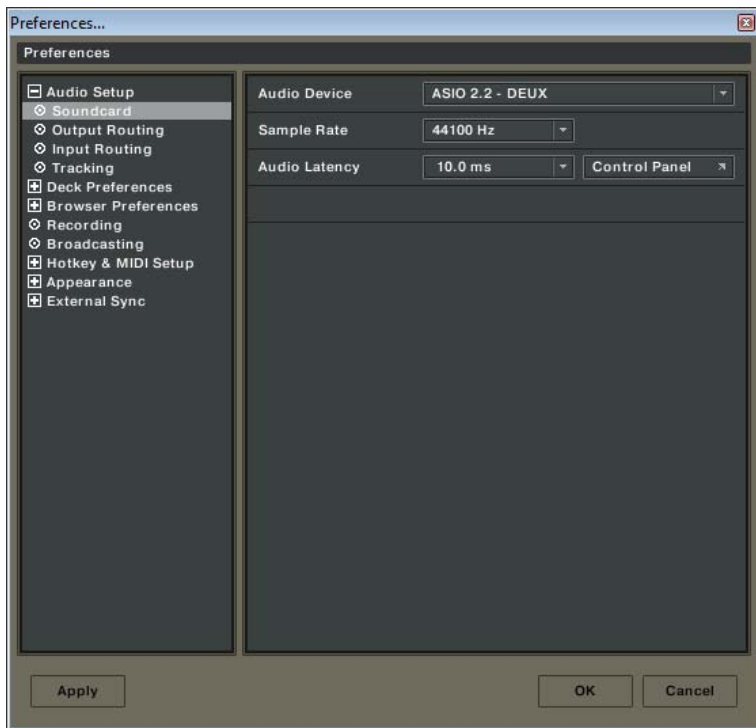
To switch to stand-alone mode, after launching these softwares, go to File → Audio and MIDI settings → Soundcard or Audio Device. Select the device as pictures below. The settings of sequencer apply to all installed plug-ins. The software also supports both WDM and ASIO options.



< Audio Setup in ABSYNTH 4 >



< Audio Setup in MASSIVE >



< Audio Setup in TRAKTOR 3 >

7. Hardware specification

[ANALOG AUDIO]

SAMPLE RATE SUPPORTS	44.1, 48, 96 kHz
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ANALOG LINE INPUT	
Input type	Balanced line input 1, 2
Connector type	1/4" TRS phone jack
Peak level	0dBFS @ +20dBu
Analog gain range	0 ~ +15dB
Impedance	About 10K Ω

ANALOG OUTPUT	
Output type	Balanced line output 1, 2, 3, 4
Connector type	1/4" TRS phone jack
Peak level	+14dBu @ 0dBFS
Attenuation	-48dB ~ + 0dB (0.5dB step size)
Impedance	330 Ω

HEADPHONE OUTPUT	
Output type	Stereo Headphone
Connector type	1/4" TRS phone jack
Peak level	+14dBV Max
Load impedance range	~600 Ω

[DIGITAL AUDIO]

SAMPLE RATE SUPPORTS	44.1, 48, 96 kHz
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A/D CONVERTER	
SNR	102dBA @ 48kHz
Dynamic range	102dBA @ 48kHz
THD+N	92dB @ 48kHz
Inter channel isolation	110dB

D/A CONVERTER	
SNR	106dBA @ 48kHz
Dynamic range	106dBA @ 48kHz
THD+N	90dB @ 48kHz
Inter channel isolation	110dB

[INTERFACE]

INTERFACE	
FireWire 400	IEEE1394a, iLink

[Power Supply]

POWERSUPPLY	
FireWire 400	-IEEE1394a Bus Power
Optional DC power supply	-12VDC 500mA external power supply is available

END USER WARRANTY

Trademarks

INFRA-SONIC and DEUX are registered trademark of SIMS Corp.

Windows is a trademark of the Microsoft Corporation. Other products and brand names are trademarks or registered trademarks of their respective companies.

End User Warranty

SIMS Corp. warrants this product, under normal use, to be free of defects in materials and workmanship for a period of One(1) year from date of purchase, so long as: the product is owned by the original purchaser, with proof of purchase from an authorized SIMS Corp. dealer. This warranty explicitly excludes power supplies and included cables which may become defective as a result of normal wear and tear.

In the event that SIMS Corp. receives, from an original purchaser and within the warranty coverage period, written notice of defects in materials or workmanship, SIMS Corp. will either: replace the product, repair the product, or refund the purchase at its option. To obtain warranty service, the original purchaser or his authorized dealer must fill the support contact form at www.infra-sonic.com. In the event repair is required, shipment to and from SIMS Corp. and possible handling charges shall be borne by the purchaser. SIMS Corp. will not accept returns without prepaid return shipments. In the event that a repair is required, a return authorization number must be obtained from SIMS Corp. After this number is obtained, the unit should be shipped back to SIMS Corp. in a protective package with a description of the problem and the Return Authorization Number clearly written on the package. All such returns must be shipped to SIMS Corp. headquarters in Seoul, Korea.

In the event that SIMS Corp. determines that the product requires repair because of user misuse or regular wear, it will assess a fair repair or replacement fee. The customer will have the option to pay this fee and have the unit repaired and returned, or not pay this fee and have the unit returned un-repaired.

The remedy for breach of this warranty shall not include any other damages. SIMS Corp. will not be liable for consequential, special, indirect, or similar damages or claims including loss of profit or any other commercial damage, even if its agents have been advised of the possibility of such damages, and in no event will SIMS Corp.' liability for any damages to the purchaser or any other person exceed the price paid for the product., regardless of any form of the claim. SIMS Corp. specifically disclaims all other warranties, expressed or implied. Specifically, SIMS Corp. makes no warranty that the product is fit for any particular purpose.

The FCC and CE Regulation Warning

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

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution: Any changes or modifications in construction of this device with are not expressly approved by the party responsible for compliance, could void the user's authority to operate equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. If necessary, consult an experienced radio/television technician for additional suggestions.



Correspondence

For technical support inquiries, contact your nearest dealer, local SIMS Corp. distributor or SIMS Corp. directly at:

SIMS Corp.

RAON Bldg, 9F, 92-8, Wonhyoro-2ga, Yongsan-gu, Seoul, Korea

www.infra-sonic.com

www.simsaudio.com

All features and specifications are subject to change without notice.

Parts of this manual are continually being updated.

Please check our web site www.infra-sonic.com occasionally for the most recent updated information.