

## Using your Audibox USB-I/O

The **USB-I/O** is a Digital/Analog Audio Interface box. It is a self contained, stand alone stereo unit designed to interface stereo digital audio with professional balanced low impedance inputs and outputs, via the Industry Standard USB protocol.

The **USB-I/O** will convert Analog audio from a mixer into a digital signal for mixing on a computer, and convert digital computer audio into a Transformer Balanced analog signal.

### Plug and Play

We recommend running Win XP or later, or Mac OS X. Plug the **USB-I/O** into an unused USB port on the computer and it will be recognised as **ARX Systems USB**, and ready to use.

### Operating instructions

Firstly, make sure you have some audio recording/playback software installed on your computer.

Connect the USB connector on the **USB-I/O** to the USB port on the computer. On XP and later it will be available immediately and the LED on the front of the **USB-I/O** will light up.

### Input Connections

Connect a balanced microphone lead from the Left and Right outputs of a mixer to the Left and Right 3 pin XLR Input on the **USB-I/O**.

### Output Connections

Connect a balanced microphone lead from the Left and Right 3 pin XLR output connectors on the **USB-I/O** to

a pair of input channels on the mixing console. Set the Input Gains on the channels, and Pan the channels Left or Right as required.

To **RECORD** with the **USB-I/O**, open your audio software, ensure that **ARX Systems USB** is selected as the default audio device, and follow the record instructions as you would normally. When the **USB-I/O** has audio passing through it, either In or Out, the LED on the front panel will start flashing.

To **PLAY**, open your audio software, ensure that **ARX Systems USB** is selected as the default audio device, open a music file and play.

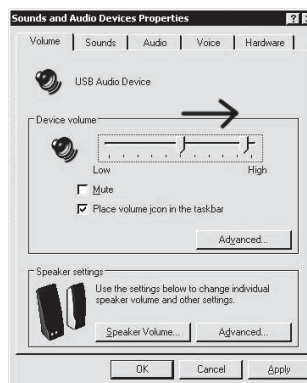
**BUT** – before you do, there are a few very important things you should know before starting out with the **USB-I/O**

### IMPORTANT #1

The Windows default output volume setting for USB Audio Devices is 50% of maximum. In many cases this will be too low, inducing noise and hum as excessive gain may need to be applied to deliver the level required. We suggest increasing the output volume setting to 100%.

Once the **USB-I/O** is installed, go to Control Panel, then Sounds and Audio Devices, then **ARX Systems USB**, then the Output Volume tab, and move the slider to the right. This will give you the optimum signal to noise ratio.

Recording volume will be controlled by both your software and Windows. Right click on the Volume Control Icon



on the Toolbar, then Adjust Audio Properties/ Audio/ Sound Recording/ Options/ Properties then select the Line box. A tick will show it has been selected.

Depending on your software, the Input volume may also be adjustable in the Recording window of the software.

### IMPORTANT #2

Computers are very electrically noisy environments, and USB is a very popular Plug and Play protocol for lots of Windows devices.

For fastest and quietest audio operation you **must** plug the **USB-I/O** into its own USB port, and not a hub. Experiment on your computer to find the quietest USB port, and **keep it only** for the **USB-I/O** - don't have anything else on the same buss.

Otherwise you may get a hissing and

clicking noise every time you move the mouse, touch the keyboard, or click on the screen.

### IMPORTANT #3

- The sensitive audio circuitry in the **USB-I/O** is carefully shielded. Even so, do not place it within 2 metres/8 feet of a power amplifier. Their power supplies radiate large amounts of hum which could find its way into your audio.
- Keep mobile/cellular phones well away (at least 2 metres/8 feet) from the computer and the **USB-I/O**. The "Dut dut-dah-dut dut-dah-dut" sound of a mobile/cell phone connecting is not one that audiences care to hear!

And that's really all there is to it. Put simply, the **USB-DI** is the USB pro audio interface that Audio Professionals have been waiting for!

Latest information updates are always available on the comprehensive ARX website:

[www.arx.com.au](http://www.arx.com.au)

### Did you know...

As well as the **USB-I/O** and other USB devices, ARX manufacture a complete range of unique Audibox products:

The **ISO-Balancer** for balancing unbalanced signals, and also the **ISO De-Balancer**, which will de-balance a signal when required to connect to an unbalanced input.

The **ISO-Later** is a Dual channel Unbalanced to Balanced Low Impedance transformer isolated converter, and the **ISO Splitter** is a transformer isolated 1 input to 2 outputs splitter for splitting 1 input 2 ways in applications where complete Galvanic isolation is required.

Both available in Single Channel or Double Header format.

The **Ear Driver** is a Headphone Amplifier with 2 pairs of Stereo inputs each feeding two channels of headphone level outputs. It has individual Level controls plus a 12 - 15VDC power connector. A compact, flexible unit

The **Pro-DI** is an ultra compact Active Direct box, with normal High Impedance input as well as a separate speaker level input for connection to instrument amplifiers.

Other features include -20dB Pad and Audio Ground Lift switches, plus Phantom or DC power options.

Available in Single Channel or Dou-

ble Header format

The **DI-Pre** is an Ultra compact Microphone Pre amp with XLR input, balanced jack output and 10 to 60dB Gain control.

Other features include -20dB Pad switch, Clip LED and Phantom Power switch, plus DC power connector.

Available in Single Channel or Double Header format

For the latest information on the complete Audibox range, visit our website: [www.arx.com.au/audibox.htm](http://www.arx.com.au/audibox.htm)

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RoHS

CE N1819

Manufactured in Australia

## INTERNATIONAL LIFETIME WARRANTY

ARX Systems (ARX) warrants to the first purchaser of this Audibox product that it is free from defects in materials and workmanship under normal use and service. ARX's sole obligation under this warranty shall be to provide, without charge, parts and labour necessary to remedy defects, if any, which appear within twelve (12) months from date of purchase; and to supply parts only for the life of the product to the original purchaser.

This is our sole warranty. It does not cover finish or appearance items, nor does it apply if the Audibox has been, in ARX's sole judgement:

- Subjected to misuse, abuse, negligence or accident;
- Repaired, worked on, or altered by persons not authorized by ARX,
- Connected, installed, adjusted or used otherwise than in accordance with the instructions supplied by ARX.

This warranty gives you and us specific legal rights, and you may also have other rights which can vary from state to state.

To obtain warranty service for your Audibox, call, write, or Email to ARX or the dealer you purchased it from. They will give you the correct address to send your unit to. Have your sales receipt showing date of purchase handy, and include a copy of it with your Audibox. Please pack the unit well - we are not responsible for any damage caused by unsuitable packing during shipment. Send the unit to us pre-paid, by a delivery service like FedEx, UPS, or any other service that can track the shipment. We will return it to you freight paid. If you have any questions, or any part of this is unclear, please write to ARX Systems in the country of purchase, or to the address below.

PO Box 15, Moorabbin, Victoria 3189, Australia. Phone: +61 (0)3 9555 7859 Fax: +61 (0)3 9555 6747

You can also Email the factory at: [info@arx.com.au](mailto:info@arx.com.au)

**USB-I/O Specifications**  
 Connector USB type B port  
 Codec 16 bit, 48 KHz  
 Input Impedance 10 Kohms  
 Transformer Balanced  
 Output Impedance 300 Ohms  
 Transformer Balanced  
 Max Input Level Nominal 0dB  
 Transformer Balanced  
 Max Output Level Nominal 0dB  
 feature the same heavy duty all-steel chassis finished in attractive matt blue textured powdercoat, with hardware-resistant epoxy screen printing and large slip resistant rubber foot pads.  
 By their very nature these units are compact and portable; to protect your investment we've added numerous security features including a slot for a computer lock, and the option of a permanent table mounting kit.  
 A rack mount kit is also available to rack up to 3 units plus power supply in 1 RU.  
**Construction**  
 All-steel powdercoated chassis, slip-resistant rubber feet  
 fibreglass PCB, epoxy printing, slip-resistant rubber feet  
 Windows PC running Windows XP or later, Mac OS X  
 USB port  
 Audio software installed

**System Requirements**

Thank you for choosing this unique AudioBox product from ARX.  
 As with all ARX equipment, it has undergone extensive factory testing and 'burn in' before shipping.  
 To ensure continued trouble free use, please familiarise yourself with the contents of this manual before using.  
**All models in the AudioBox range**  
 feature the same heavy duty all-steel chassis finished in attractive matt blue textured powdercoat, with hardware-resistant epoxy screen printing and large slip resistant rubber foot pads.  
**Frequency Response**  
 20 - 20 KHz ± 0.5 dB  
 Power via USB Port  
**Operating current** 80mA  
**Connectors** 2 x Input XLR, 2 x Output XLR, wired Pin 2 + Hot, Pin 3 - Cold, Pin 1 via ground Lift switch

Now you can register your product warranty online at:  
[www.arx.com.au](http://www.arx.com.au)



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The **USB-I/O** is a true Plug-and-Play Analog to Digital, Digital to Analog audio interface.  
 It has Transformer Balanced dual XLR Input and Output connectors supplying No drivers are required for operation under Windows XP and later, Mac OS X. The **USB-I/O** is instantly recognised as a **ARX Systems USB**, requiring no special driver program installation.  
 Full transformer balanced output isolation eliminates earth loops / ground hum and other interaction noise and distortion.  
 A front panel status LED lights up to show the **USB-I/O** is connected and been waiting for!

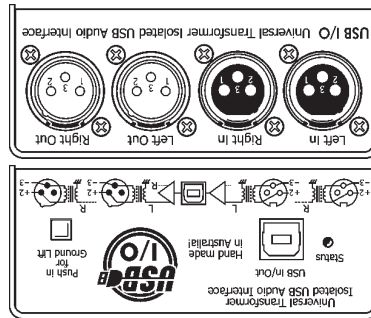
**About the USB-I/O**

The **USB-I/O** illuminates when the unit is connected and Type B USB input port, Audio Ground Lift switch, and Transformer Balanced XLR Inputs and Outputs. Status LED flashes when in use.

**Connections and Controls:**

**USB-I/O**

"The USB pro audio interface that Audio professionals have been waiting for!"



Audiobox™



Owner's Manual