



## QuickStart and Installation Guide

### **Parts List:**

The CardDeluxe package should contain the following:

- CardDeluxe PCI audio interface card
- 3.5" CardDeluxe driver and help files diskette
- This QuickStart installation guide

### **System Requirements:**

- PC motherboard with open PCI slot
- 486DX minimum CPU (Pentium™ 90mHz or better recommended)
- 16mB RAM minimum (32mB RAM or better recommended)
- Windows™ 95/98, or Windows NT™ 4.0 (SP3 or higher)
- Windows .wav compatible audio application

(Sound Forge™, Cakewalk™, Cubase VST™, Cool Edit™, etc.)

### **General Specifications:**

- Supported sample rates: 22.05, 32, 44.1, 48, 88.2, and 96khz
- Supported bit rates: 8, 16 and 24 bit
- Inputs/Outputs: ¼" TRS jacks balanced and unbalanced (2 in/2 out)
- Stereo digital S/PDIF input/output (gold-tipped RCA jacks)

- Supported audio levels: +4dB, -10dB (jumper selectable)

### **Audio Specifications:**

\*Note – All measurements are typical at +4dBu, 48kHz, at a bandwidth of 22-22kHz, and A-weighted unless otherwise noted.

## **Output**

- D/A – Dual 24-bit Delta-Sigma converter, 64x oversampling
- Freq. Response: 20-20kHz, +/- .25dB
- Nominal Headroom: 15dB
- Full Scale Signal to Noise: 114dB
- Dynamic Range: 114dB
- Full Scale Signal to THD+Noise (at 1kHz): 100dB
- Crosstalk (at 1kHz): 110dB

## **Input**

- A/D – Dual 24-bit Delta-Sigma converter, 128x oversampling
- Freq. Response: 20-20kHz, +/- .05dB
- Nominal Headroom: 15dB
- Full Scale Signal to Noise: 110dB
- Dynamic Range: 110dB
- Full Scale Signal to THD+Noise (at 1kHz): 104dB
- Crosstalk (at 1kHz): 110dB

**Note:** More detailed information can be obtained by using the Help files(carddlx.hlp) provided on the driver diskette.

### **Installing the card in your computer:**

**WARNING!** – Your computer must be turned OFF when installing and removing the CardDeluxe or any other add-on card into your computer. Installing or removing a card with the computer turned on may result in permanent damage to the card and/or the computer.

#### **1) Remove the cover of your PC:**

Unplug your PC's power cable and carefully remove the cover from the case (refer to the computer's manual for instructions). Most covers are secured to the chassis by screws at the back of the computer. Save the screws for re-securing the cover to the computer. Note that opening the cover of some PC's will void the manufacturer's warranty. This is especially true with systems such as Compaq™, Dell™, Gateway™, Hewlett-Packard™, Packard Bell™, and others. Always make sure that you are authorized to do this yourself, or have the card physically installed by a technician who is certified by the manufacturer to work on your machine.

#### **2) Discharge any static electricity from yourself:**

Briefly touch the computer chassis, power supply, or other metal portion of the frame to discharge any static electricity that could damage the card upon handling or installation.

**CAUTION** – Electronic components are extremely sensitive to static electricity, especially in carpeted, low-humidity office environments. Always ground yourself first before touching any component inside the computer.

#### **3) Locate a vacant PCI expansion slot in your computer and remove its metal backplane (if necessary).**

#### **4) Unpack the CardDeluxe from its box and, after grounding yourself, remove it from the anti-static bag.**

Remember to take normal care in handling the CardDeluxe. Make sure to ground yourself (by touching the computer chassis or power supply) before you touch it. Avoid dropping it, bending it excessively, or spilling anything on it. (*Doh!*)

At this point, you may wish to set the jumpers for your desired analog input and output levels. These will NOT effect digital I/O.

**+4dB** - This is the **DEFAULT** setting (for connecting to professional level mixers and amplifiers, etc.)

**-10dB** - This is the **ALTERNATE** setting (for connecting to consumer level cassette decks, CD players, etc.)

To change the level, remove the jumper block from the current position and move it to the alternate, marked position on the card. Make sure that you keep the input and output jumper settings the same, to avoid creating a gain mismatch within the system.

#### **5) Insert the CardDeluxe straight down into the PCI slot.**

You will likely feel the card “click” when it is properly seated in the slot. Be careful not to apply too much pressure while installing, as this has the possibility of damaging the motherboard. Make sure the card is seated firmly, then install and tighten the hold-down screw your removed when removing the old metal backplane.

**6) Replace the computer’s cover and plug in your computer.**

**That’s it! Now all we have to do is install the drivers, and we’re ready to go...**

**Installing the CardDeluxe drivers:**

**Installing under Windows 95 / 98**

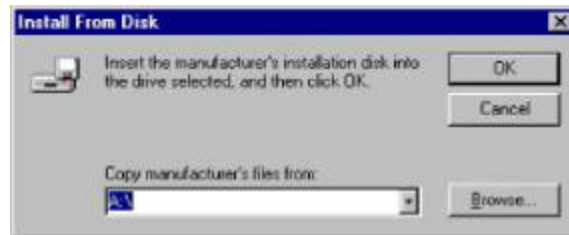
**1) Start your computer and allow Windows to boot normally.**

Depending on your version of Windows, you’ll see a “New Hardware Found” message, indicating it has detected a new PCI Multimedia Audio device. You’ll then see one of the following screens. If you’re using Windows 98, you’ll also see an additional “Add New Hardware Wizard” window; at this window, click “Next”. For users of both versions, select the option shown below and hit “OK” or “Next”.



## 2) Insert the provided 3.5" floppy driver disk.

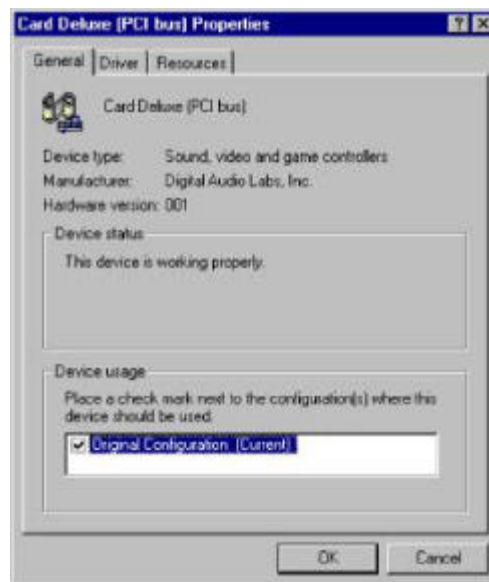
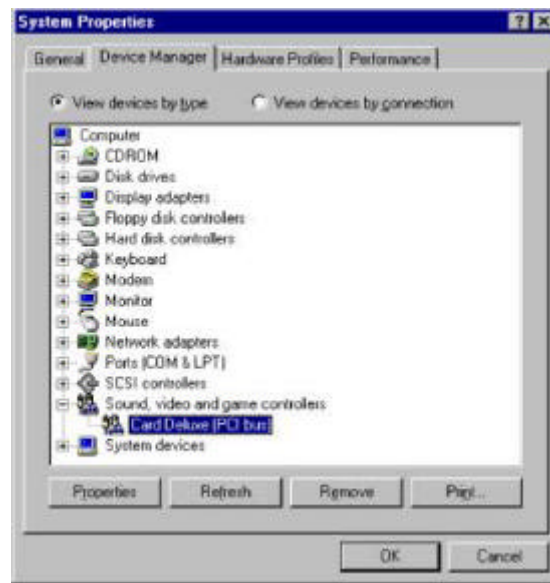
Again, depending on your Windows version, you'll get one of the following screens. Select the appropriate option indicated in the screenshot below and hit "OK" or "Next".



## 3) Windows should now begin copying information from the floppy disk. When this is finished, close all open windows, and restart the system.

## 4) Verify that the card is installed by checking the Windows Device Manager.

You will want to check the listing of the card in the Device Manager to ensure that there are no conflicts or problems. You can get to Device Manager by clicking "Start", then "Settings", and selecting "Control Panels". You will then double-left-click on "System" and selecting the "Device Manager" tab at the top. Scroll down to "Sound, Video, and Game Controllers" and make sure the CardDeluxe is listed and does NOT have a yellow exclamation point as its icon. If it DOES have a yellow exclamation point as its icon, please refer to the Troubleshooting section of the online help files on the 3.5" floppy disk that came with the card.



To further ensure that the installation is okay, double-left-click on the CardDeluxe™ listing in “Sound, Video, and Game Controllers” and look at the “Device Status” section. If the installation was correct, it should state “This device is working properly”. If you don’t see this, please refer to the Troubleshooting section of the online help files on the 3.5” floppy disk that came with the card.

### Installing more than one CardDeluxe in Windows 95 / 98

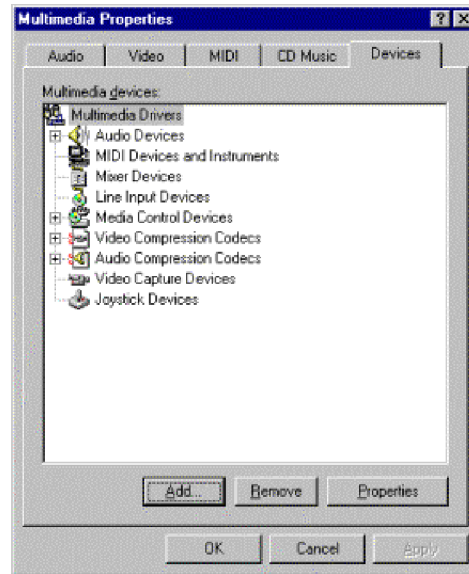
Please refer to the online Help files for information on installing and configuring more than one CardDeluxe in your system.

**Note:** The installation of a second (or third, or fourth, etc.) CardDeluxe in your system will be EXACTLY the same as the installation of the first card. The only difference is the connection of

the ribbon cable between cards, and the software selection of one card as the sample clock “Master”. You will also need to select the other card, or other multiple cards, as sample clock “Slaves”, which will allow all of the CardDeluxes to slave to a single clock. This effectively acts like one device, since all audio is clocked from a common source. See the help files, or contact Digital Audio Labs technical support if you have further questions on this ...

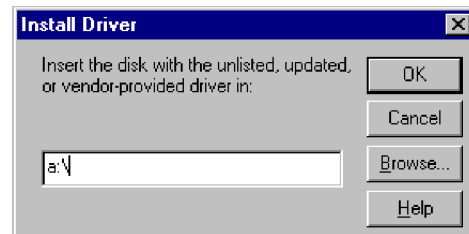
## Installing under Windows NT™

### 1) Start your computer and allow Windows NT to boot normally.



When it's finished booting, click on “Start”, then click “Settings”, and select “Control Panels”. Double-click on “Multimedia” and select the “Devices” tab (shown below). Click “Add” and then select “Unlisted or Updated Driver” and hit “OK.”

### 2) Insert the provided 3.5” floppy driver disk.



Hit “OK” and Windows will begin copying information. When it is done, close all open windows and restart the computer. The configuration dialog window is discussed in greater detail in the help files.

After a restart, the driver is installed and functional. Windows NT will issue errors if the driver failed to install or load properly. If this happens, run the Event Viewer tool in the Administrative Tools group under Start/Programs to check the error. You may want to check the online help files for further assistance at this point, or contact Digital Audio Labs technical support.

### **Contacting Us and obtaining Technical Support:**

(952) 401-7700 Voice

(952) 401-7725 Fax

Sales Support: 8:30am-5:30pm CST

(952) 401-7700

Technical Support: 8:30am – 5:30pm CST

(952) 401-7700

[support@digitalaudio.com](mailto:support@digitalaudio.com)

When calling for technical support, please have available as much information about your computer as possible, which will decrease the amount of time needed to fix the problem. If possible, be at your machine, with the CardDeluxe driver disk handy. If it is necessary for us to have you send the card in for warranty service, you will be issued an RMA number. Please do NOT send in your card without obtaining an RMA number first. Many issues that appear to be hardware related are often software issues that we could solve in a single phone call or email. Turnaround time on cards that are sent in is generally same day, and we return the cards the same way they are sent (if you overnight it to us, we overnight it back.) You are required to pay shipping charges to Digital Audio Labs. We will pay for the return shipping charges. The address to send your card to is:

**Digital Audio Labs, Inc.**

**Attn: RMA Number**

**1276 Park Road**

**Chanhassen, MN 55317**

If you live outside the U.S., please contact your dealer for warranty service.

### **FCC Statement**

The 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. This equipment has been tested and found to comply with the limits for 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/her own expense.

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