

## The FCC Regulation Warning

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 and CISPR pursuant to subchapter EN55022 of the EMC Directive. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following means:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

If necessary, consult an experienced radio/television technician for additional suggestions. The following booklet prepared by the FCC may also be helpful: "How to Identify and Resolve Radio-TV Interference Problems". The booklet is available from the U.S. Government Printing Office, Washington DC, 20402 Stock No. 004-000-00345-4.

**CAUTION: CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.**

SOCKET-OUTLET SHALL BE INSTALLED NEAR THE EQUIPMENT AND SHALL BE EASILY ACCESSIBLE

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First Edition June 2000

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# 1. Overview

Thank you for choosing MAYA. At last, here we are presenting a versatile audio card you have wished to have for a long time.

MAYA is a professional quality PCI digital audio card for IBM PC and compatibles. MAYA can record and/or playback through stereo analog line input/output (RCA), a mono MIC input (1/4" Phone jack) and S/PDIF digital output (Optical) with exceptional audio quality.

Through laborious research and development, AUDIOTRAK has built its reputation as a world class Audio/MIDI interface manufacturer. Now AUDIOTRAK launched to provide versatile audio cards for wider range of users. For the start, AUDIOTRAK introduces MAYA.

Affordable and versatile MAYA can give you the total solution for desktop music production environment. MAYA fully supports the music applications with its low latency ASIO 2.0 driver, MME driver and DirectSound driver supporting.

MAYA will give you best compatibility with all the application you have been using with conventional sound cards. In addition, various drivers supporting will give you a chance to work beyond the limitation of conventional sound cards.

Maximize your creativity with MAYA. From now on your creativity will be the only limitation!

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## FEATURES

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**20-Bit D/A converter and 18-bit A/D converter.**

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Highest quality AD/DA converters in MAYA provide unmatched sound quality with exceptionally low noise.

### **2-In/2-Out Analog Audio Inputs and Outputs.**

MAYA provides RCA type jacks for use with –10dBV nominal level consumer audio equipment. For the cleanest possible audio signal paths, you'll never need to adjust levels. Unlike some audio cards that deliberately boost their output levels to give you a false sense of audio quality, MAYA gives you a true indication of your levels. What you hear is what you get. Nothing's added or taken away unless you intend to do so. If you need to adjust levels, digital level adjustment is provided for analog inputs and outputs.

### **2 Channel Recording and 2 Channel Playback**

#### **-Full Duplex**

You can record analog input source and play them back simultaneously as well.

### **S/PDIF Coaxial Digital Out**

MAYA provides Coaxial type digital output port. It can be used for transferring audio signal in digital domain. You can use the digital output while you are recording/playing back through analog I/O.

### **CD-ROM Audio Input Port**

MAYA provides for an on-board 4-pin port that can be used to connect directly with CD-ROM's that have analog audio output pins. This allows you to transfer CD audio directly to your PC with ease, and you can playback your CD audio with MAYA's 18-bit AD converter.

### **Multiple Sample Rate Support**

Supports denomination of 44.1kHz or 48kHz standard sample rates and 32kHz. Sampling rate will be automatically detected and applied for the situation. MAYA can be used in a variety of applications ranging from multimedia to audio production.

### **Internal Mixer for Analog Monitoring**

CD audio, analog input and MIC input can be selected for monitoring. Input sources can be monitored simultaneously with

wave output controlled by the digital mixer of MAYA. You can run two audio programs simultaneously and assign independent outputs without changing the device driver. You can use both analog and digital output simultaneously as well.

#### **Uses 32 Bit PCI Slot for PCI Bus-mastering Support**

MAYA use only small amount of system resources. Other audio/sound cards can use quite large amount of system resources, which ties up the computer's CPU. MAYA operates independently from the CPU, which allows you to use more software plug-in effects without placing a heavy burden on the CPU.

#### **Provides MIC Pre-Amp**

MAYA even provides TRS 1/4", mono MIC input port with 12V Phantom Power. By choosing "Phantom Power" on the MAYA control panel, phantom power is activated. To boost up the input level, click the "+20dB" pad over the Phantom Power button.

## 2. Hardware Installation

To install all components of MAYA properly, you should install the PCI card first and make all audio and header pin connections *before* you install MAYA Driver and Control Panel software. If you follow the instructions on this section in the sequence that it is written, you will have properly installed all components.

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### SYSTEM REQUIREMENT

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Because MAYA's dependence on CPU is very low, you can use MAYA on virtually any Pentium based system. Your first consideration should be the system requirement of audio application of your choice. If the audio application's system requirements are met, then MAYA will run without any problem.

1. PCI 2.1 compliance Motherboard
2. Windows 95/98/98SE operating system
3. 1 open PCI slot
4. 32MB RAM
5. Digital audio recording/playback software

#### Warning!

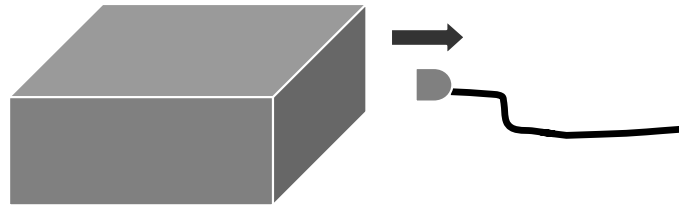
**The components in your PC and on the MAYA board are sensitive to electrostatic discharge. Follow these precautions to avoid damage caused by static electricity.**

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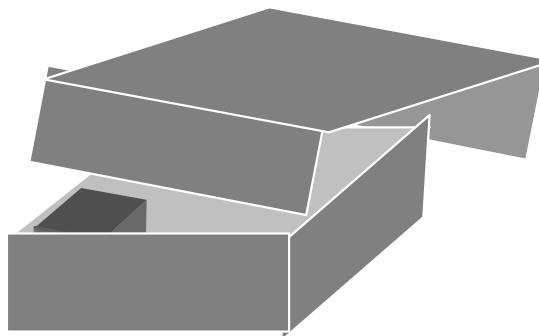
P R E C A U T I O N S

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1. **Leave the MAYA board in its anti-static wrapping until you are properly grounded.**
2. **Turn off your computer's main power switch, and unplug the power cord.**



3. **Remove the cover to expose the internal parts of your computer. You should follow your computer's manual on how you can do this safely.**

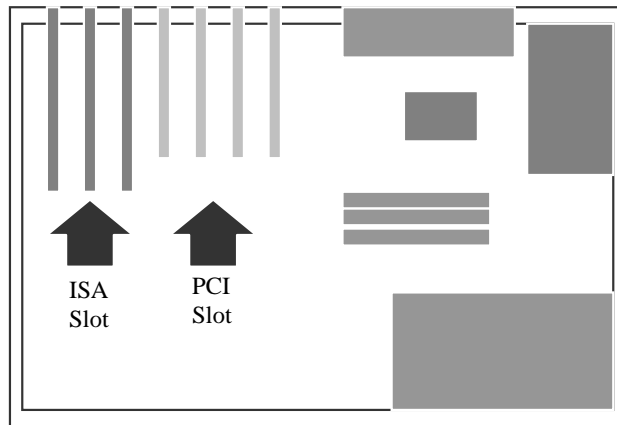


4. **To be grounded, touch the PC's metal chassis with both hands.**
5. **Only handle the MAYA by its edges and metal bracket. Do not touch the components of the board even after you have been grounded.**

**To avoid further static electricity hazards, you should avoid wearing static clothing and follow the above procedures every time you have to install or de-install MAYA board.**

Before you begin, make sure you have read your computer's manual on installing hardware devices. Your computer's manual should describe how to remove the hard case cover and the precautions you should take.

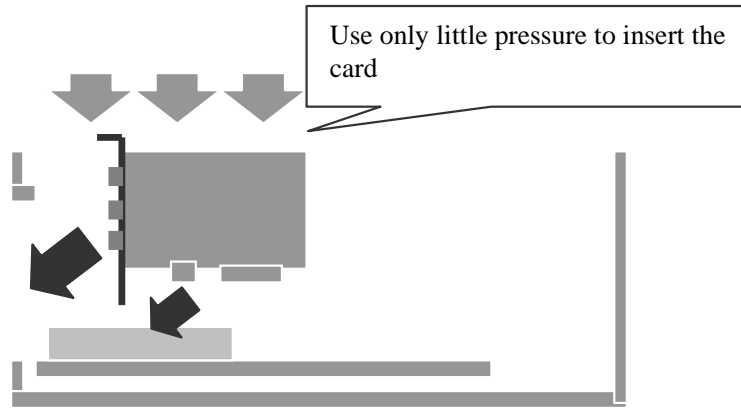
1. **After you have followed the precautions above, find an empty PCI slot on your PC's main board. You can distinguish PCI slots from ISA slots, as PCI slots are shorter than ISA slots.**



2. **Remove the blank metal bracket from an empty PCI slot opening.**



3. **Install the MAYA board into the PCI slot, securing the bracket with a mounting screw. Do not use excessive force when inserting the board into the slot. They should fit snugly with little pressure.**



#### 4. Replace the PC cover.

Parts of this manual are continually being updated. Please read the **README.TXT** file included in the driver diskette for the latest update information, and be sure to check our web site occasionally for the most recent update information.

### 3. External Connections

MAYA has many features that can enhance your audio production environment. If you are serious enough to about your digital audio, you may want to take time to read through this section carefully. While you may not need all of these features, and simply opt to plug in the cables to get started right away, you should at least be aware of MAYA's capabilities – in case you need them later on.

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#### BASIC CONNECTIONS

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Shown below is just one of many possible connection schemes for MAYA. In a typical audio production studio or workstation, where you have both digital and analog devices, this set up treats your PC as a stereo master recorder. In this case, monitoring of MAYA will be similar to “through-the-tape” monitoring, where you monitor your input and output sources from the tape recorder's point.



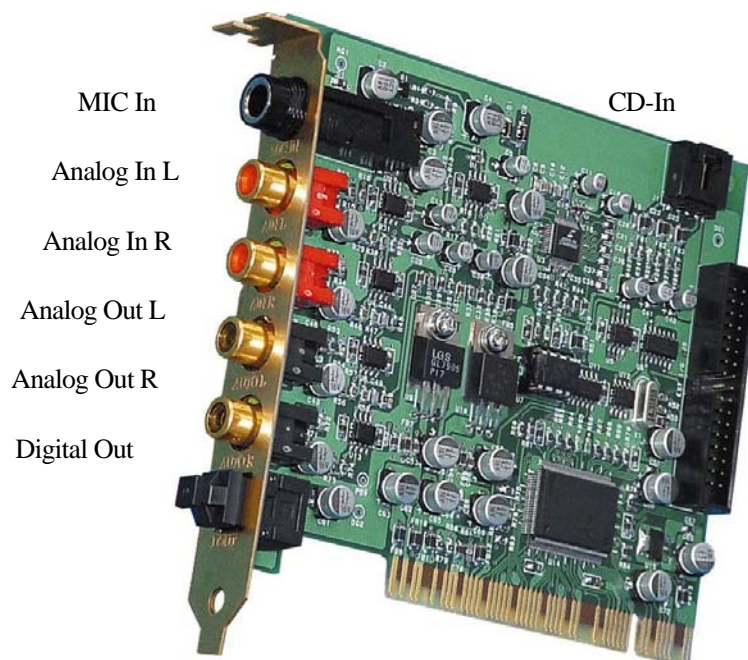
If you plan to use MAYA in a digital mastering environment, you may choose to connect analog outputs of MAYA directly to your power amplifier's inputs instead of sending it through the console/mixer.

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## IN/OUT PORT LAYOUT

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The on-board 4-pin header connector provides CD audio input. If you plan on use the header pin, you should make the connections *before* you install MAYA driver. Please read through this section carefully if you intend to use any of the functions described below.



### 1. MIC In

1/4" TRS jack for the MIC input connector. You can plug your microphone directly to this connector. Even for the condenser microphone, which requires phantom power, you just need to connect them. On the MAYA control panel, you can provide phantom power.

### 2. Line In L/R

These are  $-10\text{dBV}$  unbalanced RCA type connectors. You can connect analog input sources to these connectors.

### 3. Line Out L/R

RCA type unbalanced analog output. Most of the time you will be needed to connect these output ports for monitoring purpose. One of the selected analog input sources will be routed to these output ports along with internal wave out.

#### **4. Digital Out**

Coaxial type digital output port. You can use this output port for transferring data in digital domain. For example, connecting to DAT's input port you can send stereo audio data without any loss while you are monitoring through the analog output ports.

#### **5. CD Audio Input**

If your CD-ROM is equipped with a 4-pin analog audio output, you can import CD audio signal directly to MAYA via this connector. To use CD-ROM's audio as your input source, select CD Audio as the ***Input*** selection on the *MAYA's Control Panel*.

## 4. Driver Installation

After installing the hardware, turn on your PC's power, and you will notice that your system has recognized a "PCI Multimedia Device" during your Windows boot-up sequence.

1. A bit later, during the Windows 95/98 boot-up process, a prompt will display a "New Hardware Found" message and will ask to search automatically for the driver. Do not search automatically. Click "Have Disk..." and continue to next screen.



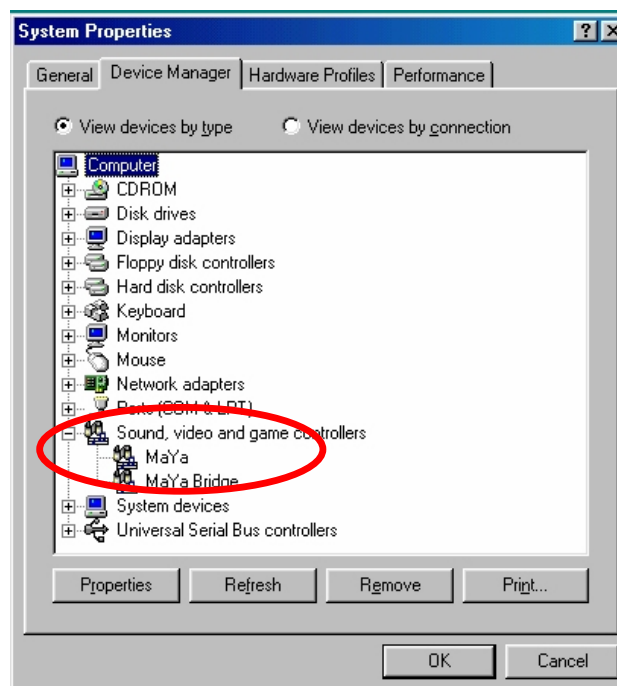
2. When prompted, select A: drive (your floppy disk drive) and insert *Audiotrak MAYA Driver and Utility* disk in your floppy drive. It will then display "Audiotrak MAYA" as the compatible driver. Click Next button.



3. The correct driver will be automatically installed and when prompt to "Restart" the computer, click "Yes".



After re-booting your computer, open your system's Device Manager and confirm that "MaYa" and "MaYa Bridge" are shown under "Sound, Video and Game Controller". [Control Panel – System – Device Manager – Sound, Video and Game Controller]

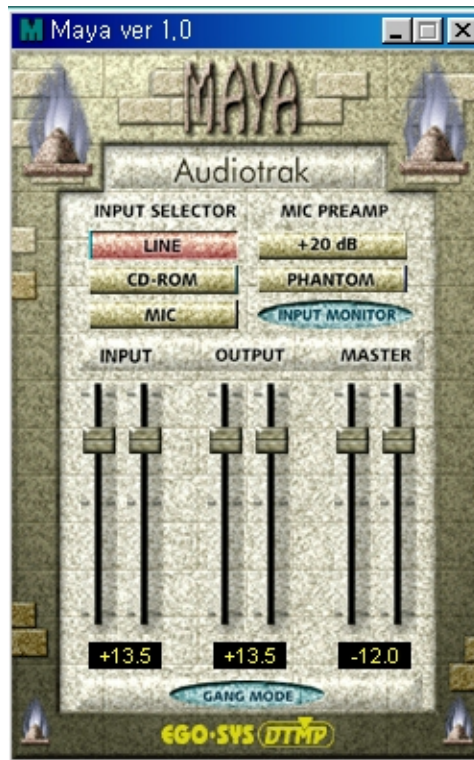


Your AUDIOTRAK MAYA is now ready to use.

**Please read the README.TXT file included in the driver diskette for the latest driver update information, and be sure to check our web site occasionally for the most recent update information.**

## 5. MAYA Control Panel

If you have properly installed PCI card and software driver for MAYA properly, your system will display **M** icon on your desktop system menu bar. Click it once and it will display the MAYA Control Panel as below. While reading through this section, it may help to actually sit down in front of your PC and experiment.



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### INPUT/OUTPUT REFERENCE LEVELS

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#### 1.INPUT Level Faders

Click and drag/turn (wheel mouse) to change the input level. Check the manuals of the audio equipment you want to connect to MAYA's inputs. It should be  $-10\text{dBV}$  device.

Input level faders control "Input Level" and "Input Monitoring Level" simultaneously. *Remember that Input Level fader only can increase the input level/input monitoring level.* As you can see, Input Level Faders start from  $0\text{dB}$  at the very bottom.

#### 2.OUTPUT Level Faders

Click and drag/turn (wheel mouse) to change the output level of wave file that is playing through analog output ports. Like Input level fader, *Output Level Faders are also able to increase the level of wave file that plays back through MAYA.* In other words, output level faders don't affect the monitoring level of input sources.

### 3. MASTER Level Faders

Controls overall monitoring level of incoming source through input ports and wave file that is playing through analog output ports. Unlike Input Level Fader and Output Level Fader, *MASTER level fader indicates 0dB when it is placed at the most top position. From the position, MASTER level fader can attenuate monitoring level.*

### 4. Gang Mode

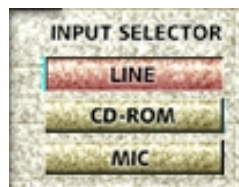
Links the L-R faders for stereo operation. Deselect the Gang Mode if you need to control the left and right levels independently.

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## INPUT SELECTOR

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This is where you can select the one of the analog input sources among Line Input, CD-ROM and MIC Input to record / monitor that is routed to the Analog output ports of the MAYA. You can select only one analog input source at a time.



#### 1. Line

Signal connected to the Input ports of MAYA is selected for recording and routed to the Analog Output port for input monitoring.

#### 2. CD-ROM

CD audio signal connected to 4-pin header CD-ROM input of Audiotrak MAYA is selected for recording and routed to the Analog Output port for input monitoring.

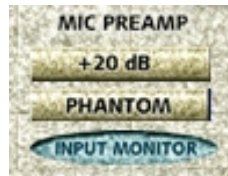
### 3.Mic

Signal connected to the MIC In of MAYA is selected for recording and routed to the Analog Output port for input monitoring.

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#### M I C P R E A M P

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#### 1. +20 dB

Click the +20 dB pad, you will get boosted MIC input signal by 20 dB. You can use this button to boost the low level of MIC input signal to record.

#### 2. Phantom Power

You can even use a condenser microphone, which requires Phantom Power. Clicking this button activates 12V of phantom power supplying.

#### 3.Input Monitor

By selecting this button, you can monitor the input signal that is coming from selected analog input port. Though this option is not selected, you can still record the signal from the input source but you are not able to monitor it through the analog output.

## 6. Working with Applications.

With most digital audio applications, you will find *MaYa* is available for input device and output device, once it has been

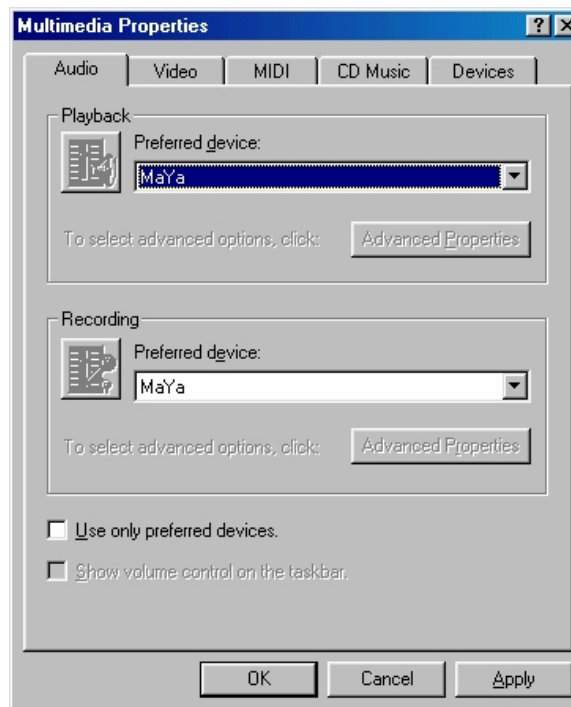
installed properly. It's just a matter of selecting the sample rate of your preference from thereon. We have included few examples below just as a quick setup guide. You should refer to the manuals of each application on how to optimize the audio recording and playback capabilities. If you have problems or questions with setting up MAYA on applications, please contact our technical support.

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#### SETTING MAYA AS WINDOWS MULTIMEDIA DEVICE

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If you want to use MAYA as Windows multimedia device, you need to set “MaYa” in the *Multimedia Properties* window.



Go to “Start>Setting>Control panel” and double click *Multimedia* control panel. In Audio tab section, select “MaYa” for Playback device and Recording device.

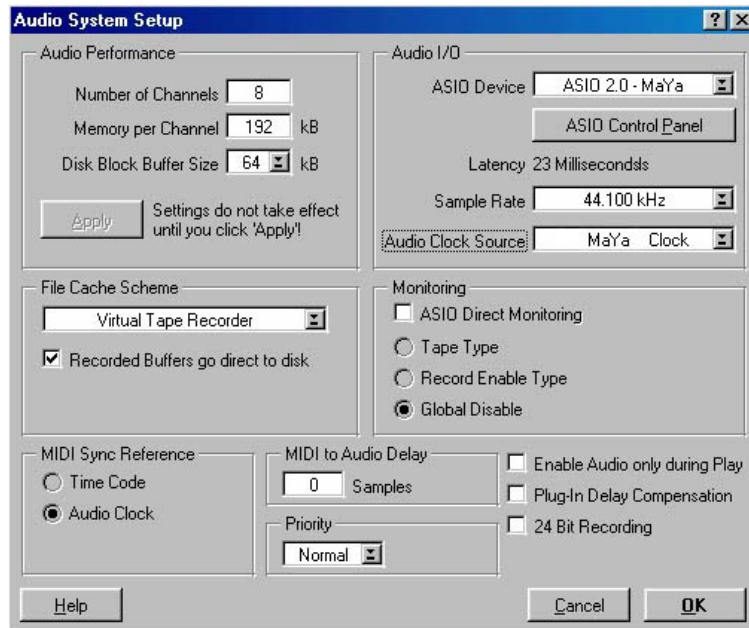
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#### CUBASE VST (ASIO 2.0)

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With a dedicated ASIO2.0 driver, you benefit most from the advanced technology of MAYA. After you have properly installed MAYA and run Cubase VST for the first time, select

*Audio/System* from the Cubase VST main menu bar to open the **Audio System Setup** dialog box as below.



There's no need to check for buffer sizes or run simulations anymore because you simply don't have to use Windows ASIO Multimedia driver anymore!

On the top right hand corner of the **Audio System Setup** dialog box, click *ASIO Device* and you will notice *ASIO 2.0 – MaYa* along with other possible drivers. Just select *ASIO 2.0 – MaYa*, and that's it!

If you have used Cubasis VST before with another audio card, you may have had CPU performance problems, especially if you use lots of FX and EQ. With MAYA, you will notice significant reduction in CPU usage. Open *Audio/Performance* from the main menu, and see the difference.

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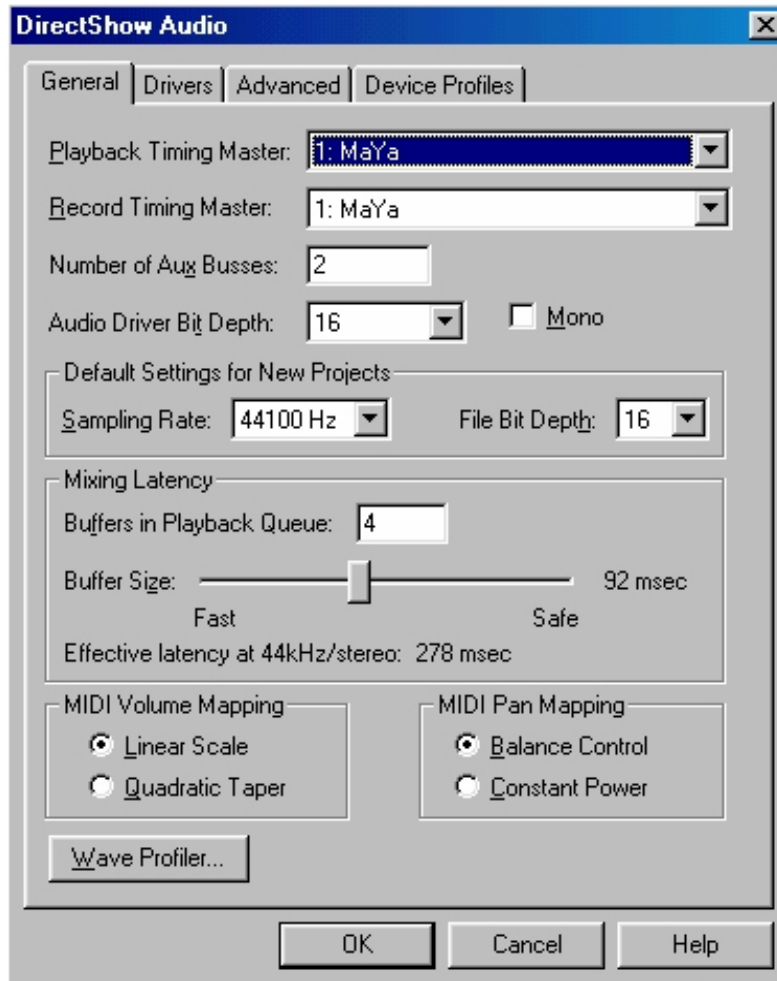
#### C A K E W A L K

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After you have properly installed MAYA and run Cakewalk for the first time, Cakewalk would detect hardware and run “Wave Profiler” to select appropriate buffer size.



For checking Audio Setup, select *Option* from the Cakewalk menu bar.

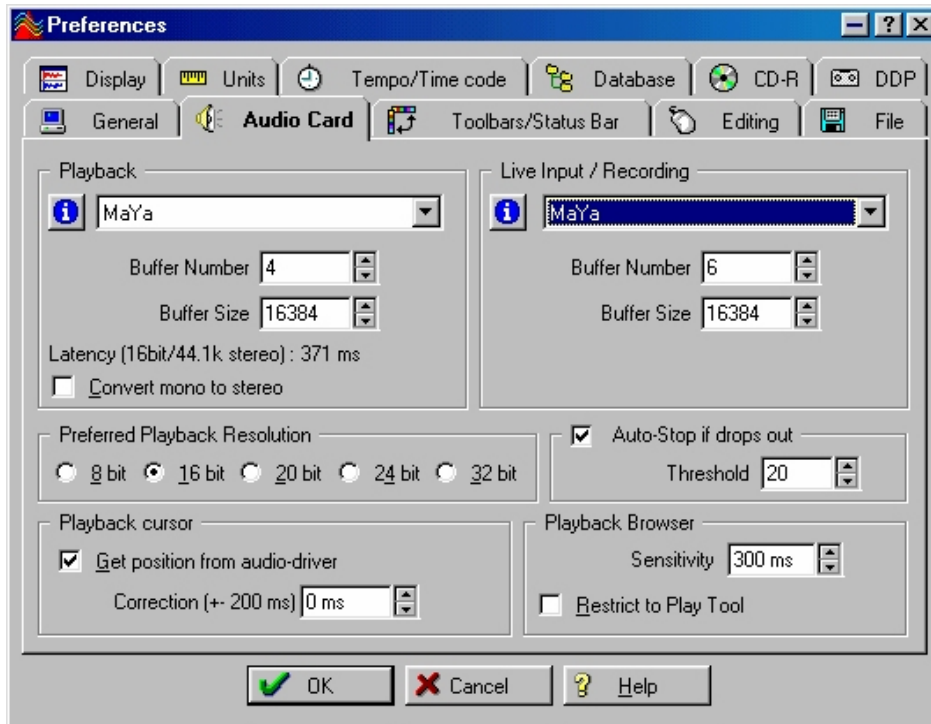


Tab the *Audio Setup*, and select “*MaYa*” for the Playback Timing Master and “*MaYa* ” for Record Timing Master. For the best result, adjust the buffer size of playback and recording.

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W A V E L A B

MAYA supports MME driver for Wave Lab, application for mastering.



After you have properly installed MAYA and run Wave Lab for the first time, select *Preferences* from the Wave Lab menu bar. Tab the *Audio Card*, and select “*MaYa*” for the Playback device and “*MaYa*” for Live Input / Recording device.

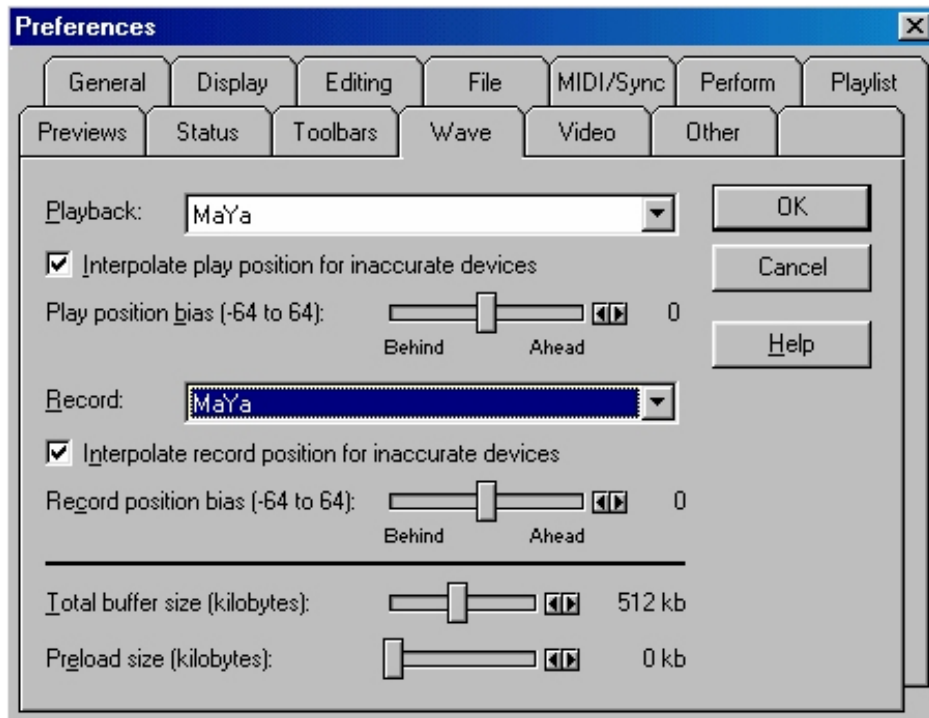
For the best result, adjust the buffer size of playback and recording.

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#### SOUND FORGE

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MAYA supports MME driver for Sound Forge, an application for audio mastering.



After you have properly installed MAYA and run Sound Forge for the first time, select *Option* from the Sound Forge menu bar and select *Wave* tab. Select “*MaYa*” for the Playback device and “*MaYa*” for Recording device.

For the best result, adjust the buffer size of playback and recording.

Along with the applications mentioned above, there are lots of possibilities to use AUDIOTRAK MAYA with various software those supporting MME, DirectSound and ASIO2.0 drivers. We only selected only few favorite software to demonstrate setup procedure.

## Specifications

**1. Input LEVEL: -10dBV Unbalanced, -10dBV Nominal, +9.0dBV Max**

**2. Output LEVEL: -10dBV Unbalanced, -10dBV Nominal, +9.0dBV Max**

**3. Input Impedance: 12K ohm**

**4. Output Impedance: 100 ohm**

**5. Input Gain: Analog 0dB ~ 18dB, 1.5dB Step Size**

**6. Output Gain: Analog 0dB ~ 18dB, 1.5dB Step Size**

**7. Master Output Attenuation: Analog 0dB ~ -48dB, 1.5dB Step Size**

**8. Sample Rate: 32KHz, 44.1KHz, 48KHz**

**9. A/D Spec**

**1) Resolution: 18 bits**

**2) Dynamic Range: 90 dB A-Weighted**

**3) THD+N: -84 dB Fs**

**10. D/A Spec**

**1) Resolution: 20 Bits**

**2) Dynamic Range: 90 dB A-Weighted**

**3) THD+N: -87 dB Fs**

**11. Digital Out Spec**

**1) Type: Optical connector (TOS-Link)**

**2) Format: IEC-958 Consumer,S/PDIF**

**3) Sample Rate: 44.1KHz, 48KHz**

**4) Resolution: 20 Bits**

**12. Mic PreAmp Spec**

**1) Mic Input Gain: 45dB Fix, 20dB on/off, 0dB ~ 18dB Variable**

**2) Phantom Power: +12V Phantom Power**