

MachOne EV1935 - PCI SOUND CARD

APPLICATION INSTALLATION

Under

WINDOWS® 95 OSR2/ WINDOWS® 98 and
WINDOWS® NT4.0

November 1998

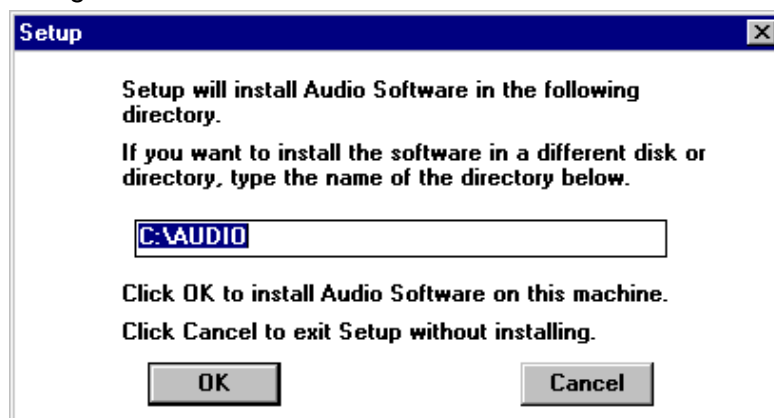
MachOne EV1935 PCI Sound Card

How to Install “Media Rack” Application Software

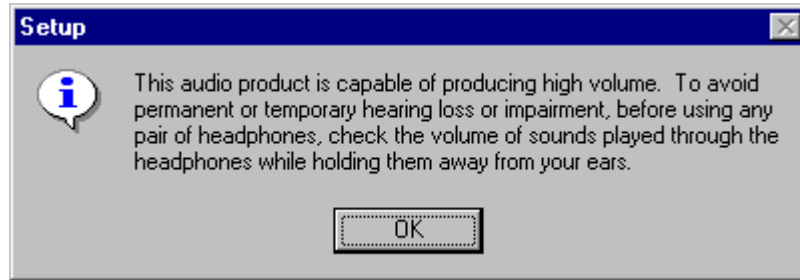
- 1.) To install the application software “Media Rack”, please start up your operating system.
- 2.) The “MachOne PCI Setup” windows will appear. If you want to install the application software in English now, please click on the first push button on the left side “install MediaRack (English)”. The Setup program will initialize. Before running the Setup program please close any other Windows programs you have running.



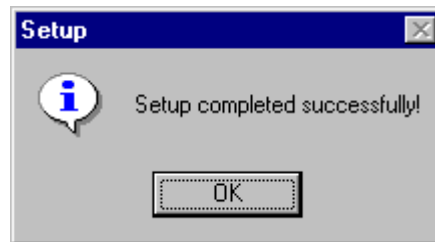
- 3.) The “Setup” dialog box will appear. You may click on the OK push button to accept the default directory “C:\Audio” as the destination location of your new Audio Software or type the name of a directory you prefer. Click on “Cancel” to exit the Setup program without installing.



- 4.) The next Setup window warns you about possible harm to your hearing. Please read the text carefully, before using your headphones. Click on OK to proceed to the next step.



- 5.) Setup program informs you that the installation of your new application software has been completed successfully. Please click on OK to finish the installation process.



- 6.) After you have installed the "Willow Pond Audio" application software, the "Media Rack" program icon appears on the screen as the figure shows below.



A-120-0040
Version 1.0

MachOne EV1935 - PCI SOUND CARD

Configuration and Hardware USER MANUAL

November 1998

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1. DESCRIPTION

The MachOne PCI is a 16-bit stereo PCI sound card based on the MachOne EV1935 PCI Audio controller chip. The MachOne PCI is compatible with all major PC sound standards, including Sound Blaster™ Pro, AdLib™, MPU-401 and Windows Sound System™. The MachOne PCI provides an integrated sound solution for business, educational and entertainment audio, and other multimedia applications.

1.1. Features

The MachOne PCI Sound Controller card is a full-featured sound card that includes the following:

- **PCI 2.1 Plug-and-Play (PnP)**
Supports the Plug-and-Play Specification in PCI 2.1 standards which allows the system to detect and configure devices automatically that conform to the standard. This eliminates the user having to know and configure the correct IRQ, DMA and I/O channel settings.
- **3D Sound Enhancement**
Supports 3D enhancement through Microsoft DirectSound 3D API.
- **Wave Audio**
Maximum recording and playback sampling rate of up to 48 KHz stereo.
- **Sixteen-bit digital-to-analog and analog-to-digital converter**
16-bit and 8-bit digitizing in stereo and mono mode.
- **Standard 128 voices WebSynth™ Wavetable Synthesizer**
Wavetable engine from award winning Faith WebSynth. Supports 128 voices general MIDI wavetable. Special effect tuning supports reverb and chorus.
- **Digital/Analog Mixer**
Mix analog stereo from CD-audio, Line-In, FM music and digitized voice sources. Digital stereo mixing from Microphone, Line-in, CD-audio and Line-out Master volume control.
- **MIDI Interface/Joystick Port**
Built-in integrated MIDI MPU-401 interface with FIFO, IBM PC joystick/game port.

1.2. System Requirements

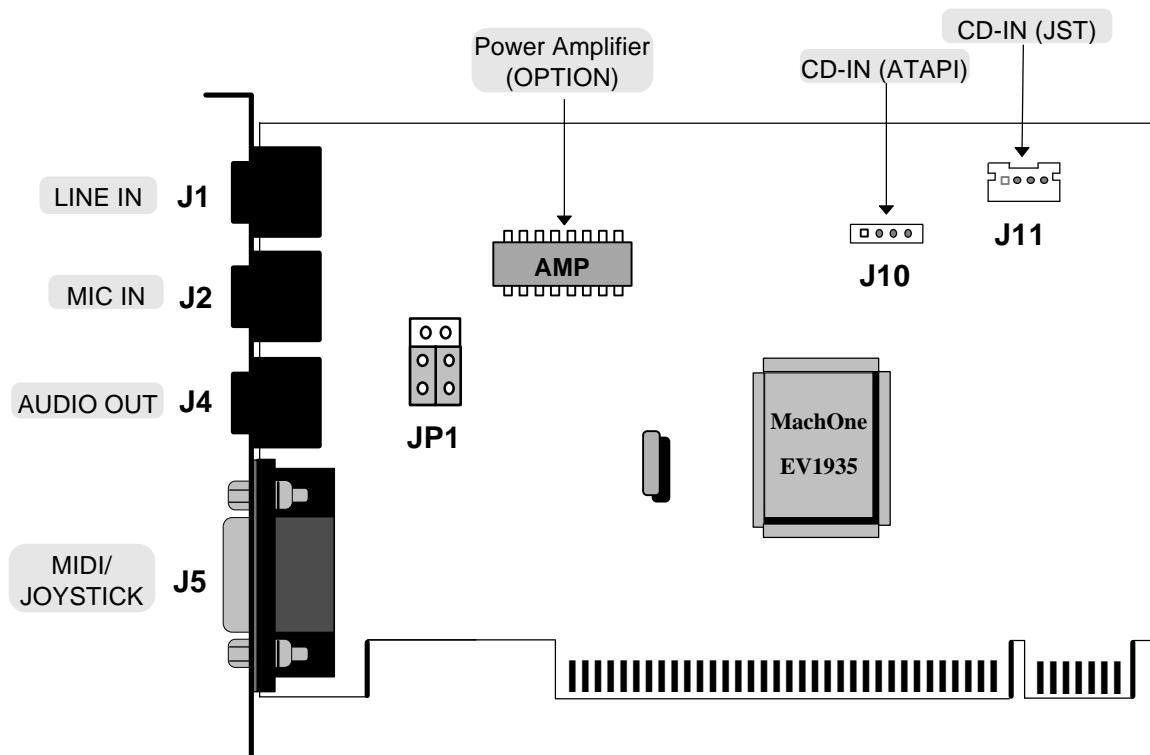
The MachOne PCI is manufactured for IBM PC compatible computers, software, and related computer components:

- Intel Pentium, Pentium II and compatibles (eg. AMDK6) 75MHz or higher
- At least 8MB RAM
- VGA or SVGA graphics adapter and monitor
- 5MB free on hard disk for installing all MachOne PCI Sound Controller software
- PCI slot
- External speakers, microphone or headphones (optional)

The User Manual provides instructions for the following operating system.

- Windows 95 (version 4.00.950 / 4.00.95B OSR2)
- Windows 98
- Windows NT 4.0

1.3. Card Figure



1.4. Connectors

1.4.1. External Connectors:

- J1: í 3.5mm Phone Jack for **LINE IN**.
 J2: í 3.5mm Phone Jack for **MIC IN**.
 J4: í 3.5mm Phone Jack for **AUDIO OUT**.
 J5: Connector for **MIDI/JOYSTICK**.

1.4.2. Internal Connectors:

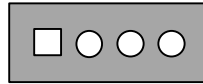
J10:Connector for **CD-AUDIO IN.** (ATAPI)

J11:Connector for **CD-AUDIO IN.** (JST)

JP1:Jumper for switching between **SPEAKER OUT/LINE OUT.**

1.4.3. Audio Connectors:

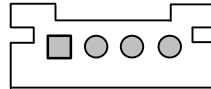
J10: CD-Audio-In
ATAPI



L G G R

L: LEFT CHANNEL SIGNAL
G: GROUND
R: RIGHT CHANNEL SIGNAL

J11: CD-Audio-In
JST



G L G R

L: LEFT CHANNEL SIGNAL
G: GROUND
R: RIGHT CHANNEL SIGNAL

1.4.4. Audio Output Jumper Settings for JP1:

Audio	Setting
SPEAKER OUT with Power Amplifier (Default)	
LINE OUT without Power Amplifier	

2. HARDWARE INSTALLATION

2.1. Before Installation

- 1.) Installing MachOne PCI PCI sound card is simple and straight forward. However, if you are not familiar with your system, please consult your dealer or computer manufacturer for assistance.
- 2.) Make sure Windows 95/98, or Windows NT4.0 is installed and functioning properly
- 3.) No other sound device is plugged in and installed. If an other audio chip is built-in with your system board, try to disable the built-in audio in the BIOS.

2.2. Handling the PCI Sound Card

WARNING: *Static electricity can damage your equipment. Do not take the card out of its static protective bag until you are ready to work with it.*

Follow these precautions when handling the card:

- Before you open the static protective bag, touch it to a metal expansion slot cover on the back of your computer. This drains static electricity from the package and from your body.
- Do not touch any exposed printed circuitry after opening the package.
- Keep other people from touching the card. They might have a static-electricity build-up.
- Limit your movement. Movement causes a build-up of static electricity.

2.3. Installing the PCI Sound Card

- Step 1.** Turn off the system and all peripheral devices.
- Step 2.** Disconnect the power cord and all peripheral devices from the system.
- Step 3.** Remove the system cover and identify an unused PCI slot.
- Step 4.** Unscrew the slot cover plate, plug in the PCI Sound Card, and tighten it with the screw.
- Step 5.** If you have a microphone, plug the respective cable into the **J2** Jack on the back of the Sound Card.
- Step 6.** If you have speakers or amplifiers, plug the cable into the **J4** Jack on the back of the Sound Card.

WARNING! To avoid temporary or permanent hearing loss or impairment due to unexpected noise or static, always hold your headphones away from your ears before turning on the computer. You should also lower your speaker's volume before testing.

- Step 7.** Please plug the cable for your MIDI/Joystick device into the **J5** Jack on the back of the PCI Sound Card.
- Step 8.** Depending on what type of CD Audio cable you have connect **J10** or **J11** on the Sound Card and the Audio output at the back of the CD-ROM drive. Make sure pin 1 of **J10** or **J11** is connected to the leftmost pin of the CD-ROM Audio output.
- Step 9.** Put back the system cover, reconnect the system power cord and all peripheral devices. Check and make sure all connections are correct before you turn on the system.

3. SOFTWARE INSTALLATION

3.1. Software Contents

There is one installation CD-title which comes with this package.

This CD-title includes the necessary device driver and application software for Microsoft® Windows® 95(OSR2)/98/NT4.0 operating system.

3.2. Driver Installation

You might need the original Windows 95/98 or NT installation disk in some of the installation steps.

3.2.1. Windows 95

If you want to install the device driver for the first time, please follow the steps as described below.

1. After you have installed the sound card, start up Microsoft Windows 95 operating system.
2. The System will display the dialog box "New Hardware Found" with the message "PCI Multimedia Audio Device". Please choose "Driver from disk provided by hardware manufacturer" and click on OK.
3. In the "Install From Disk" dialog box appears. Please insert now installation CD-title into your CD-ROM drive. Assuming your CD-ROM drive is D, specify the path of the driver files as **D:\Win9x**. Click on OK to continue.
4. After the "Copying Files..." dialog box appears, wait for a moment until the installation of the new driver is complete.
5. It is possible that the system will ask for the Windows 95 CD-ROM. Please insert it, specify the path as **D:\Win95**, and click on OK.
6. System will prompt you to restart the computer. Click on "Yes" to re-boot.

3.2.2. Windows 95 OSR2

1. Start up the Microsoft Windows 95 OSR2 operating system.
2. System will launch the "Update Device Driver Wizard". Click on "Next>" to continue.
3. After searching for the default floppy drive A, the system will prompt you "Unable to locate the driver for this device". Click on "Other Locations..." to continue.
4. You can either type-in the driver location, or click on "Browse" to locate the driver. Assuming your CD-ROM drive is D, specify the path of the driver files as **D:\Win9x**. Click on OK to continue.
5. Windows will find the "MachOne PCI Sound System" driver for the device, and the location. Click on "Finish".
6. The system will prompt you "The disk labeled "MachOne PCI Multimedia Disk" is now required". Insert your installation CD-title into your CD-ROM drive and click on OK.
7. You can either type-in the driver location, or click on "Browse" to locate the driver. Assuming your CD-ROM drive is D, specify the path of the driver files as **D:\Win9x**. Click on OK to continue.
7. If this is the first time installation, Windows 95 OSR2 will prompt you the "Windows 95 CD-ROM" for Game Port/Joystick during the Setup program. Click on OK and specify the path as **D:\Win95**. Click on OK again.

3.2.3. Windows® NT4.0

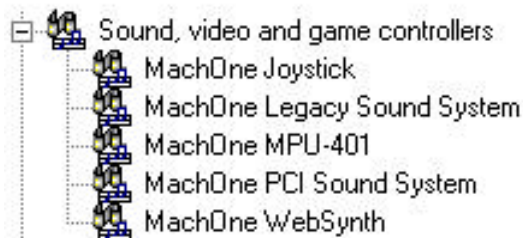
1. From the Windows Taskbar (usually located at the bottom of your screen), go to “Start” ⇒ “Settings” ⇒ “Control Panel”, and open the “Control Panel” window.
2. Double-click on the “Multimedia” icon to open the “Multimedia Properties” window.
3. Select the “Devices” tab.
4. Click on the “Add” button. Select “Unlisted or Updated Driver” from the list box, then click on “OK”.
5. System will then prompt you to insert the vendor-provided driver disk. Insert the MachOne NT4.0 driver CD (Installation CD-title) into your CD-ROM drive.
6. Locate the MachOne NT4.0 driver. Assuming your CD-ROM drive is D, specify the driver path as **D:\NT40** and click on OK.
7. Select the MachOne PCI Audio Device “EcTiVA Ev1935” and click on OK.
8. Click on OK to accept the default setting for your new audio device.
9. System will prompt you to reboot after the driver installation. Click on “Restart Now” to reboot.

3.2.4. Windows 98

1. Upon system start, the “Add New Hardware Wizard” will be launched. Click on “Next>” to continue.
2. Select “Search for the best driver for your device (Recommended)”. Click on “Next>”.
3. Locate the MachOne Windows 95/98 driver by selecting “Specify a location” and “CD-ROM drive”. You can either type-in the driver location, or click on “Browse” to locate the driver. Assuming your CD-ROM drive is D, specify the path of the driver files as **D:\Win9x**. Click on “Next>” to continue.
4. Windows will find the “MachOne PCI Sound System” driver for the device. Click on “Next>”.
5. To complete the driver installation click on “Finish”.

For the above OS platforms, after installation reboot, it is recommended you check the device installed.

1. Go to Start “Start” ⇒ “Settings” ⇒ “Control Panel”, and open the “Control Panel” window.
2. Double-click on the “System” icon. Launch the “System Properties” window.
3. Click on the “Device Manager” tab. In the Device Manager window, double-click on “Sound, video and game controllers”.
4. Under “Sound, video and game controllers”, you will find five MachOne related devices as shown below.



5. Make sure there is no yellow exclusion mark or error mark on any of the MachOne device.

3.3. Application Installation “Media Rack”

3.3.1. Windows 95 (4.00.950B OSR2)

1. Please start up your Microsoft® Windows® 95 OSR2 operating system.
2. The “MachOne PCI Setup” windows will appear. Click on the first push button labeled “R”. The Setup program will initialize.
3. The “Setup” dialog box will appear. Click on OK to accept the default directory “C:\Audio” as the destination location of your new Audio Software or type the name of a directory you prefer.
4. The next Setup window warns you about possible harm to your hearing. Please read the text carefully, before using your headphones. Click on OK to proceed to the next step.
5. The installation of your new application software has been completed successfully. Click on OK to finish the installation process.
6. After you have installed the “Willow Pond Audio” application software, the “Media Rack” program icon appears.

3.4. Trouble Shooting/FAQ

1. System does not detect the device upon reboot in Windows 95/98 or NT4.0

Windows NT4.0 does not support Plug-and-Play feature. Thus, if you are using Microsoft® Windows® NT4.0, you need to add the device manually by following the steps in the Windows NT4.0 Driver Installation section.

However, if you are using Windows 95 or Windows 98 it is abnormal for the system not to detect the device. Check if the card is properly installed in the PCI slot.

2. There is no sound after driver installation

- Check whether the speaker connector is in the proper Line/Speaker Out jack.
- If you are using powered speaker (non-passive speaker), check whether the speaker is powered on, and the speaker volume control enabled.
- Check the five MachOne devices in Device Manager, Control Panel. If you have a non-PnP device, such as an old network card, you might find an exclusion mark on the conflicted MachOne device. Please consult the non-PnP device manual to change the occupied resource.

3. How to control the volume if using passive speakers, which do not support volume control on speakers

You need to install the Windows 95/98/NT4.0 volume control. To install,

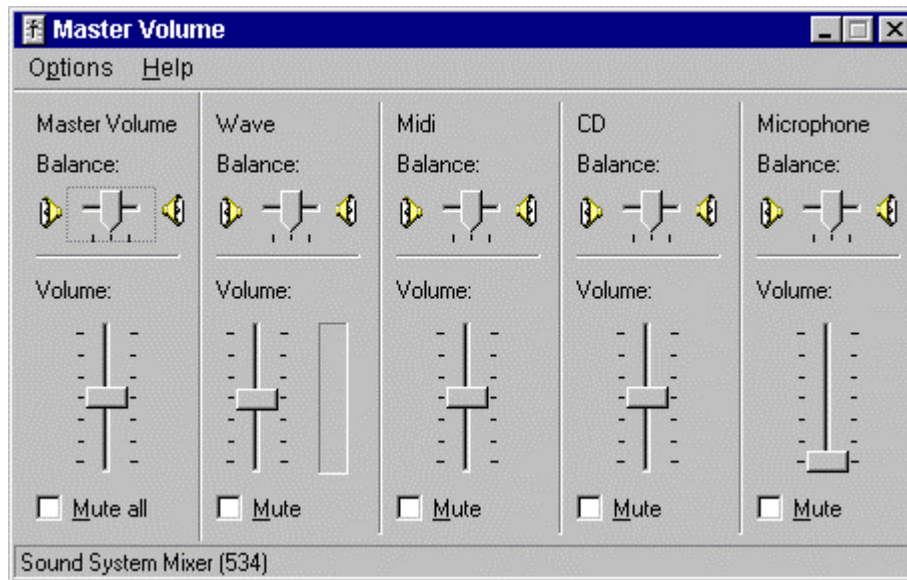
- 3.1 Go to “Start” ⇒ “Settings” ⇒ “Control Panel”, and open the “Control Panel” window.



Add/Remove Programs

- 3.2 Double-click on the “Add/Remove Programs” icon.
- 3.3 In the “Add/Remove Programs” window, select the “Windows Setup” tab.
- 3.4 Highlight “Multimedia”, then click on the “Details ...” button.
- 3.5 Select the “Volume Control” option. Click on OK.

- 3.6 System will prompt you for the Windows 95/98/NT4.0 installation disk.
- 3.7 After installation, double-click on the "Speaker" icon on the Windows taskbar (usually located at the bottom of your screen). The "Speaker" icon is located in the right corner of the Windows taskbar. The "Master volume" control window is shown as follows.



4. The joystick/game pad is not working

- Check whether the gaming device is connected to the MIDI/Game Port properly.
- Check the MachOne MPU401 device. There should be no exclusion or error mark on the device. Please consult the driver installation section.
- Check whether the driver for the gaming device is loaded and functioning properly. To check,

- 4.1 Go to "Start" ⇒ "Settings" ⇒ "Control Panel", and open the "Control Panel" window.



- 4.2 Double-click on the "Game Controllers" icon.
- 4.3 In the "Game Controllers" window, you should see the gaming device name with status "OK".
- 4.4 Click on the "Properties" button to set and calibrate the gaming device.

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MachOne EV1935 - PCI SOUND CARD

DEVICE DRIVER INSTALLATION

Under
WINDOWS® 95 OSR2

November 1998

MachOne EV1935 PCI Sound Card DEVICE DRIVER Installation Guide under Windows® 95 OSR2

- 1.) The “Update Device Driver Wizard” dialog box will appear informing you that a new “PCI Multimedia Audio Device” has been found and will guide you through the rest of the SETUP program.

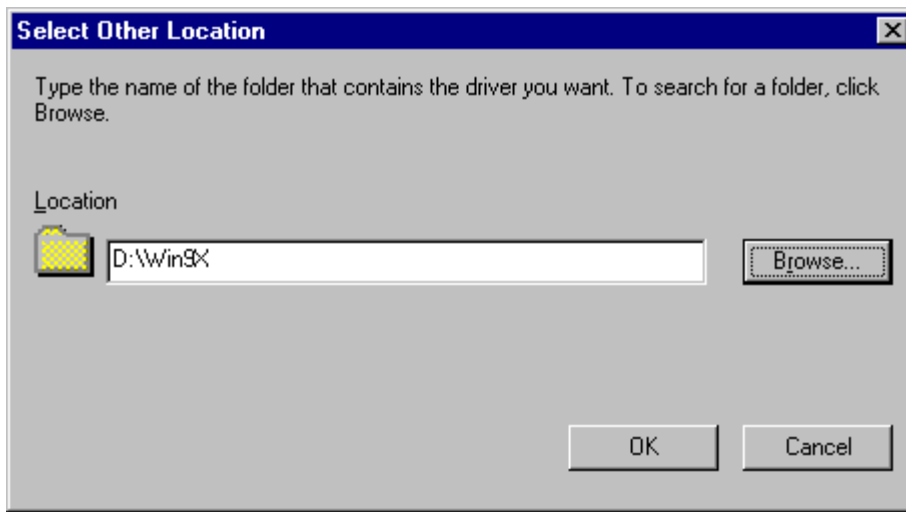
Please insert now the installation CD-title that came with your PCI sound card.
Click on the “Next>” push button to continue the installation of the device driver.



- 2.) The “Update Device Driver Wizard” dialog box will inform you that the system was unable to locate the driver. Please continue with the Setup program by clicking on the “**Other Locations...**” push button.



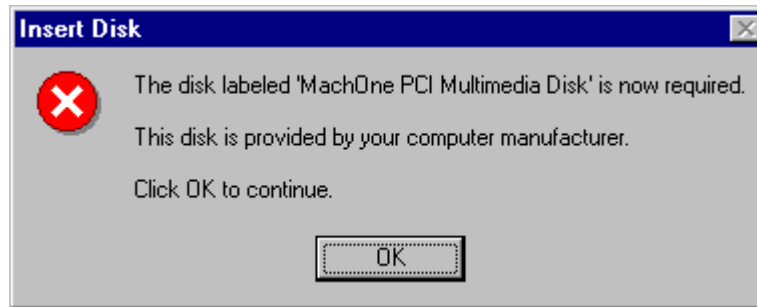
- 3.) The “Select Other Location” dialog box will appear. Please type the letter of your CD-ROM drive. Assuming your CD-ROM drive is D, type the command **D:\Win9x** and click on the OK push button.



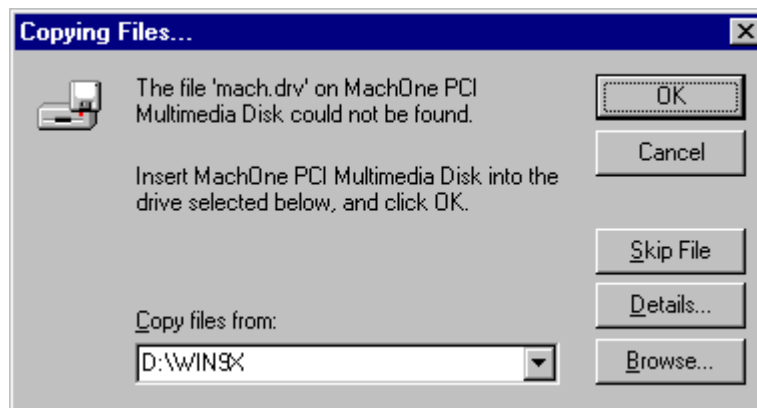
- 4.) The “Update Device Driver Wizard” dialog box will appear, informing you that the “MachOne PCI Sound System” has been found by the system. Please continue by clicking on the “Finish” push button.



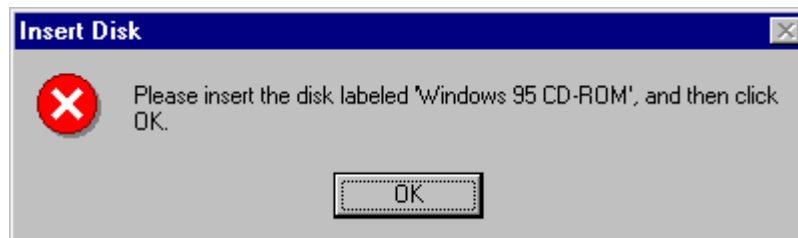
- 5.) The “Insert Disk” dialog box will ask you to insert the “MachOne PCI Multimedia Disk”. Please insert your installation CD-title into your CD-ROM drive and click on OK.



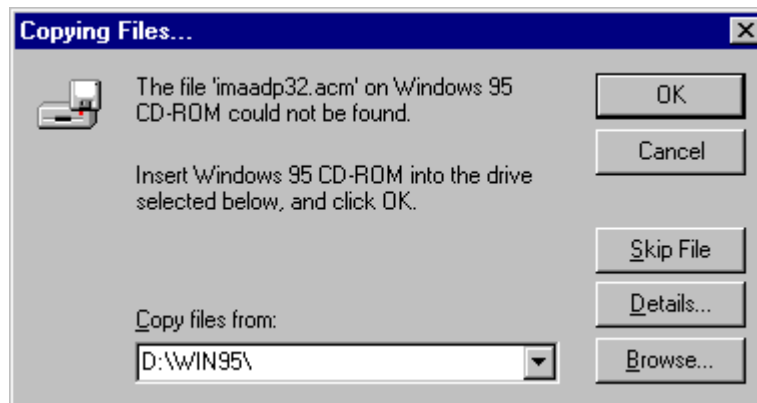
- 6.) The “Copying Files...” dialog box will inform you that some files cannot be found. In order to complete the copying process key in the path name **D:\Win9x**. All necessary files will be copied onto your system.



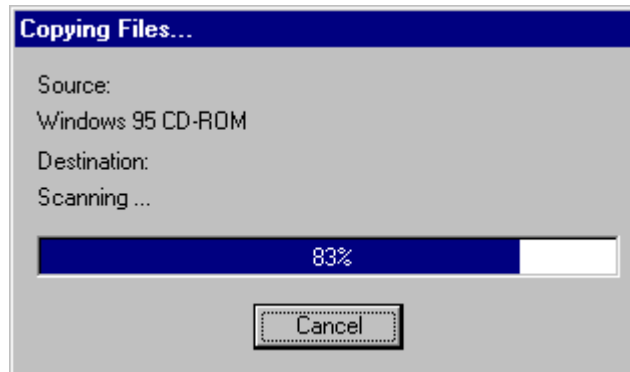
- 7.) It is possible that the “Insert Disk” dialog box will be displayed and ask for the Windows 95 CD-ROM. Just insert it and continue by clicking on the OK push button.



- 8.) The system will ask you for the path of your Windows 95 CD-ROM. Please enter the following path **D:\Win95** and click on the OK push button.



- 9.) The system will copy all the necessary files from the Windows 95 CD-ROM. After several dialog boxes flash by the MachOne EV1935 PCI sound card installation has been completed.

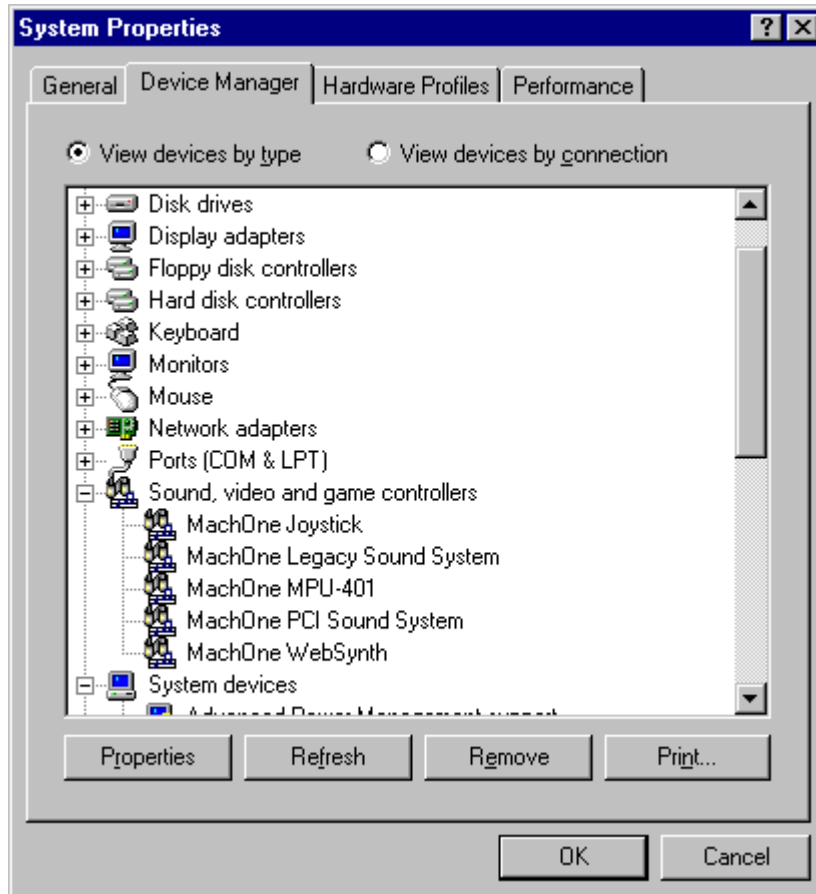


Congratulations! You have finished the installation of your new audio device driver "MachOne EV1935". You are ready to use it now. Have fun!

Verifying Device Driver Installation

If you want to view the correct installation of the device driver for your MachOne EV1935 PCI sound card, please follow the steps as described below.

- 1.) Go to >START/ >"Settings"/ >"Control Panel" and double-click on the "**System**" icon.
- 2.) From the "System Properties" window select the "Device Manager" tab and you will see the following window displayed.



- 3.) Double-click on "**Sound, video and game controllers**" and you will see the following five devices have been added to your system:
 - *MachOne Joystick*
 - *MachOne Legacy Sound System*
 - *MachOne MPU-401*
 - *MachOne PCI Sound System*
 - *MachOne WebSynth*

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Version 1.0

MachOne EV1935 - PCI SOUND CARD

DEVICE DRIVER INSTALLATION

Under
WINDOWS® 98

November 1998

MachOne EV1935 PCI Sound Card DEVICE DRIVER Installation Guide under Windows® 98

If you want to install the device driver please follow the steps as described below:

- 1.) After you have installed your MachOne EV1935 PCI sound card, start up your Microsoft® Windows® 98 operating system.
- 2.) The “Add New Hardware Wizard” dialog box will appear as shown below. Click on the “Next>” push button to continue.



- 3.) As recommended choose “Search for the best driver for your device”. Click on the “Next>” push button.



- 4.) In the next “Add New Hardware Wizard” dialog box click on the selection box “Specify a location” and “CD-ROM drive”. Please insert your installation CD-title into your CD-ROM drive now. Assuming your CD-ROM drive is D, please type the path **D:\Win9x** in the command line. Click on the “Next>” push button.



- 5.) The next “Add New Hardware Wizard” dialog box will inform you that the wizard has found the “MachOne PCI Sound System” audio device. Just click on the “Next>” push button to accept the location of the new device driver.



- 6.) The next dialog box will display the message “MachOne PCI Sound System”. Please click on the “Finish” push button to complete the installation of the new device driver software.

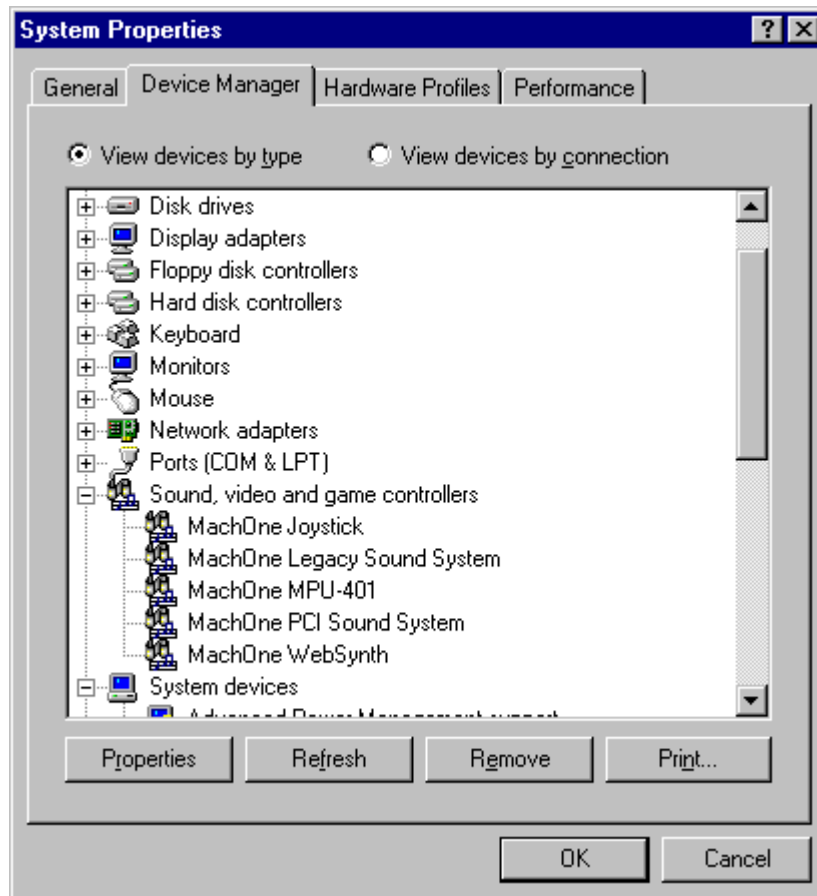


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Verifying Device Driver Installation

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- 2.) From the "System Properties" window select the "Device Manager" tab and you will see the following window displayed.



- 3.) Double-click on "**Sound, video and game controllers**" and you will see the following five devices have been added to your system:
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 - *MachOne MPU-401*
 - *MachOne PCI Sound System*
 - *MachOne WebSynth*

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DEVICE DRIVER INSTALLATION

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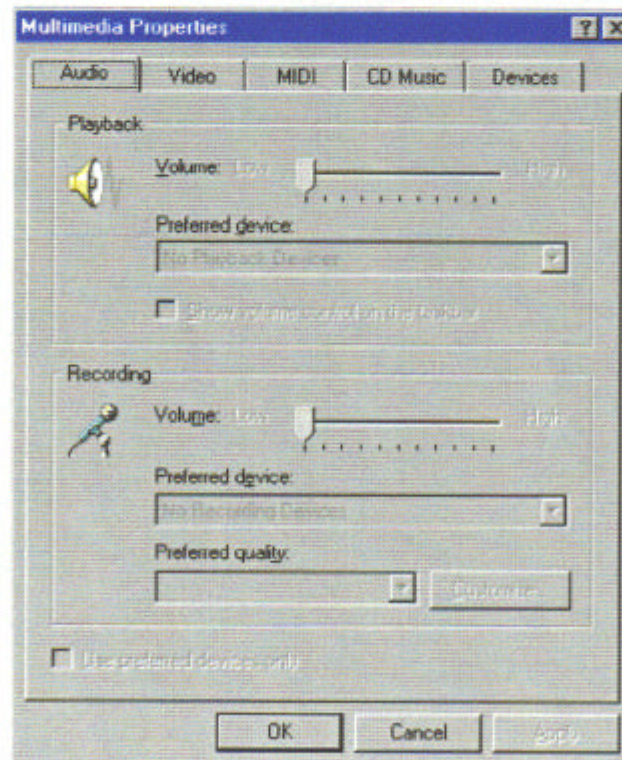
MachOne EV1935 PCI Sound Card DEVICE DRIVER Installation Guide Under Windows® NT4.0

To install the device driver of your MachOne EV1935 PCI sound card, please follow the steps as described below.

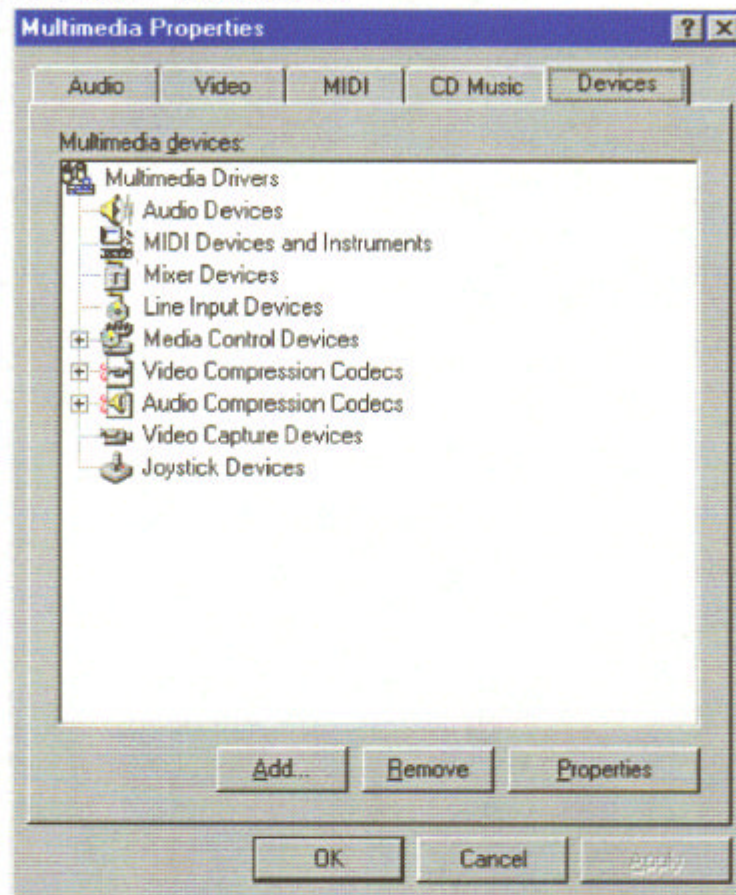
- 1.) Please start up your Microsoft® Windows® NT 4.0 operating system and log on as "Administrator".
- 2.) Click on the **Start** button, point to **Settings** and select the **Control Panel** group.



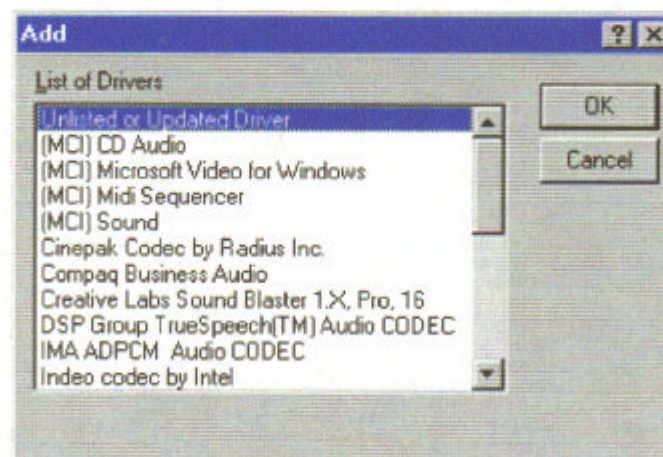
- 3.) Double-click on the **Multimedia** icon and you should see the "Multimedia Properties" dialog box as shown below.



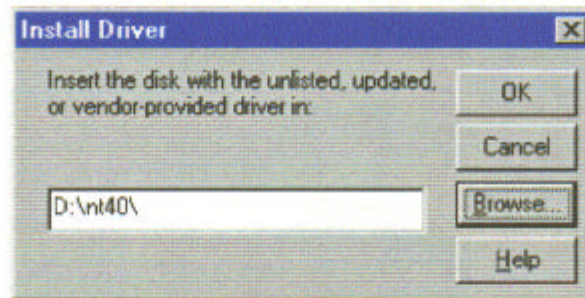
- 4.) Please select the **Devices** tap in the top-right corner of the dialog box as shown below and click on the "**Add...**" push button.



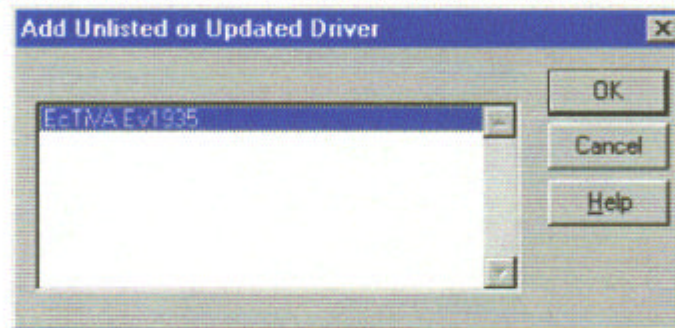
- 5.) In the "Add..." dialog box choose "**Unlisted or Updated Driver**" and click on the "OK" push button.



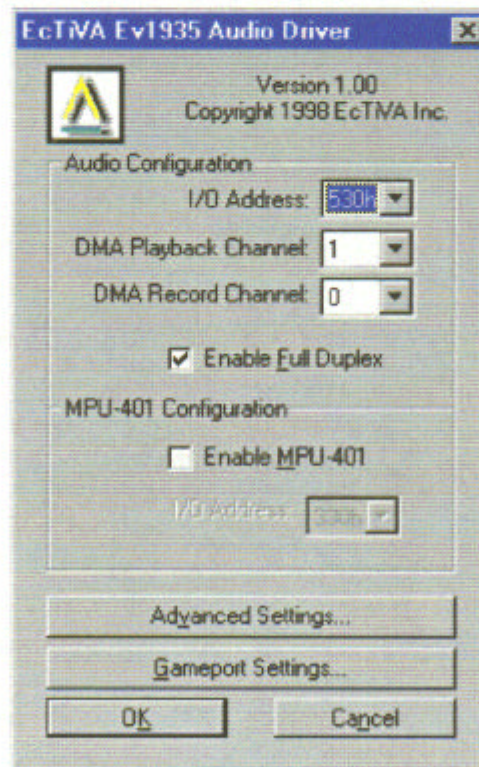
- 6.) An "Install Driver" dialog box will appear and prompt you to key in the driver path. Please insert your installation CD-title into your CD-ROM drive. Assuming your CD-ROM drive is D, specify the path as "D:\nt40\", then click on the OK push button.



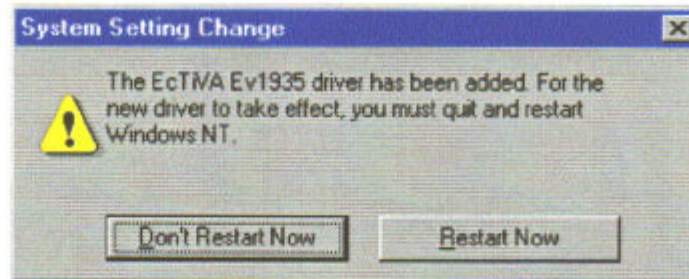
- 7.) The "Add Unlisted or Updated Driver" dialog box will appear. Windows® NT4.0 will find the MachOne EV1935 device driver "EcTiVA Ev1935" as shown in the figure below. Please click on the OK push button to continue the installation of the driver.



- 8.) The "EcTiVA Ev1935 Audio Driver" dialog box will appear. Please click on the OK push button to accept the default setting for your new audio device.



- 9.) The "System Setting Change" dialog box will appear and inform you that the **EcTIVA Ev1935** device driver has been added. If you want the new driver to take effect immediately, you have to restart the computer now. Click on the "**R**estart Now" push button.



- 10.) After clicking on the "Restart Now" push button, your Microsoft® Windows® NT4.0 operating system will restart. Congratulations! The installation of the new MachOne EV1935 PCI sound card driver has been completed successfully.

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