



MultiMix FireWire

Firmware and Windows Driver Update information

32-bit Windows XP and Windows Vista

March, 2008

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(For computers which have never had a MultiMix FireWire or an Alesis IO|14 or IO|26 installed)

1. Install the software drivers onto your computer
2. Attach your MultiMix to your computer to finish the driver installation.
3. Upgrade your MultiMix's firmware to version 2.0.

D. Upgrade Installation - MultiMix FireWire without Alesis IO|14 or IO|26

(For computers on which a MultiMix FireWire has previously been installed, and on which an Alesis IO|14 or IO|26 has never been installed)

1. Attach your MultiMix to your computer. Turn on both the MultiMix and your computer.
2. Using Device Manager, uninstall your current driver.
3. Use Add/Remove Programs to remove the current driver from your computer
4. Detach the MultiMix from your computer, and re-start your computer
5. Install Software Drivers onto your computer
6. Attach your MultiMix to your computer to finish the driver installation.
7. Upgrade your MultiMix's firmware to version 2.0.

E. Upgrade Installation - MultiMix FireWire with Alesis IO|14 or IO|26

(For computers on which both a MultiMix FireWire and an Alesis IO|14 or IO|26 have previously been installed)

1. Understanding the MultiMix, IO14/26 shared driver.
2. Learn your current IO|14 or IO|26 driver version.
3. Attach your MultiMix to your computer. Turn on both the MultiMix and your computer.
4. Using Device Manager, uninstall your current driver.
5. Detach the MultiMix from your computer, and re-start your computer.
6. Install the MultiMix software drivers onto your computer.
7. Attach your MultiMix to your computer to finish the driver installation.
8. Upgrade your MultiMix's firmware to version 2.0.

F. Fresh Installation – MultiMix FireWire along with Alesis IO|14 or IO|26

(For computers which have never had a MultiMix FireWire or Alesis IO|14 or IO|26 installed and which are being set up for the first time to use both products)

1. Do not attach any of your Alesis devices to your computer yet.
2. Install the IO|14/26 Software Drivers onto your computer.
3. Learn your current IO|14 or IO|26 driver version.
4. Now, uninstall the drivers, but leave the Hardware Direct Monitor application installed.
5. Detach your IO|14 or IO|26 from your computer, and re-start your computer.
6. Install the MultiMix software drivers onto your computer.
7. Attach your MultiMix to your computer to finish the driver installation.
8. Upgrade your MultiMix's firmware to version 2.0.

G. Techniques for Optimizing Performance

H. In Case of Difficulty

A. BEFORE YOU BEGIN

Please review the following information carefully. A few minutes spent now may save you an hour or two of troubleshooting down the road.

1. About these updates

These updates enhance audio stability and performance as compared to the prior release.

2. Verify your Windows version

These updates require Windows XP or Windows Vista.

If you are using Windows XP, both Windows Installer and Windows .NET 1.1 (or later) must already be installed on your machine.

If you are using Windows XP Service Pack 2 or later, these components have already been installed.

64-bit Windows is not supported.

If you have not updated Windows in a while, we recommend that you go to www.WindowsUpdate.com and install the available updates.

3. Verify that your version of Windows contains components required by the update

If you **are** using Windows XP Service Pack 2 or later or Windows Vista, you may skip this section.

If you **are not** using Windows XP Service Pack 2 or later, you must check that necessary components are installed:

From the “Start” menu, choose “Control Panel” and then “Add or Remove Programs.”

Look for the following items in the list:

Microsoft .NET Framework 1.1 (or later)
Windows Installer 3.1 (or later)

If one or both of these items does not appear, you must go to www.WindowsUpdate.com and download them before you can continue.

B. SOFTWARE DRIVERS VERSUS FIRMWARE – WHAT’S THE DIFFERENCE?

Software Drivers are the pieces of code that are stored within your computer. *Software Drivers* tell your computer how to communicate with your mixer.

Firmware is the code that is stored within your mixer. *Firmware* tells your mixer how to operate.

C. FRESH INSTALLATION

(For computers which have never had a MultiMix FireWire installed or an Alesis IO|14 or IO|26 installed)

DO NOT CONNECT YOUR MULTIMIX TO YOUR COMPUTER UNTIL REACHING STEP 2, BELOW.

1. INSTALL THE SOFTWARE DRIVERS ONTO YOUR COMPUTER

- a. Copy the software driver installation program (called *Alesis_MultiMix_Install.msi*, inside the folder *2--Alesis_MultiMix_install_WIN_3_1_0_1210.zip*) to your desktop.
- b. Double-click the .MSI file to run the installer. Follow the prompts. Click “Continue Anyway” if Windows pops up any “logo certification” warnings.
- c. When the update has finished, the installer will tell you that you can attach your device at any time. Click OK to exit the installer. You can now delete the .MSI file on your desktop.

2. ATTACH YOUR MULTIMIX TO YOUR COMPUTER TO FINISH THE DRIVER INSTALLATION

- a. Connect the MultiMix to your computer using a Firewire cable. Turn the MultiMix on. Wait a few moments for Windows to find your MultiMix; then follow the prompts to finish installing the drivers. Your computer may cycle through a few different “found new hardware” installation cycles.

In every case:

- i. Choose not to search WindowsUpdate for newer drivers (if your computer prompts you for this search—not all Windows computers do so.)
- ii. Choose to install the drivers automatically. Do not choose to search for the drivers in a specific location.

Click “Continue Anyway” if Windows pops up any “logo certification” warnings.

3. UPDATE YOUR MULTIMIX'S FIRMWARE TO VERSION 2.0

- a. Copy the firmware update program (named *FWUpdate.exe* from the zip folder *3--2_0_FwUpdate_MMX_WIN_3_1_0_1210.zip*) to your desktop.
- b. Double-click the firmware update program to run it. Follow the prompts to automatically update your MultiMix FireWire's firmware.

If your current firmware version is already 2.0, you can cancel this installation and proceed to step d.

- c. Once the firmware updater has finished running (allow a minute or so), press OK on screen to reset your device.
- d. Now that you are finished with it, delete the firmware update program from your desktop.

D. UPGRADE INSTALLATION – MULTIMIX FIREWIRE WITHOUT ALESIS IO|14 OR IO|26

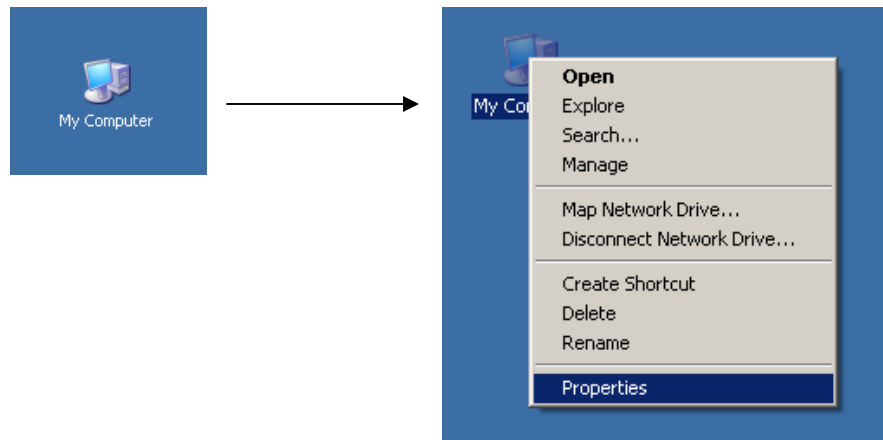
(For computers on which a MultiMix FireWire has previously been installed, and on which an Alesis IO|14 or IO|26 has never been installed)

1. ATTACH YOUR MULTIMIX TO YOUR COMPUTER. TURN ON BOTH THE MULTIMIX AND YOUR COMPUTER.

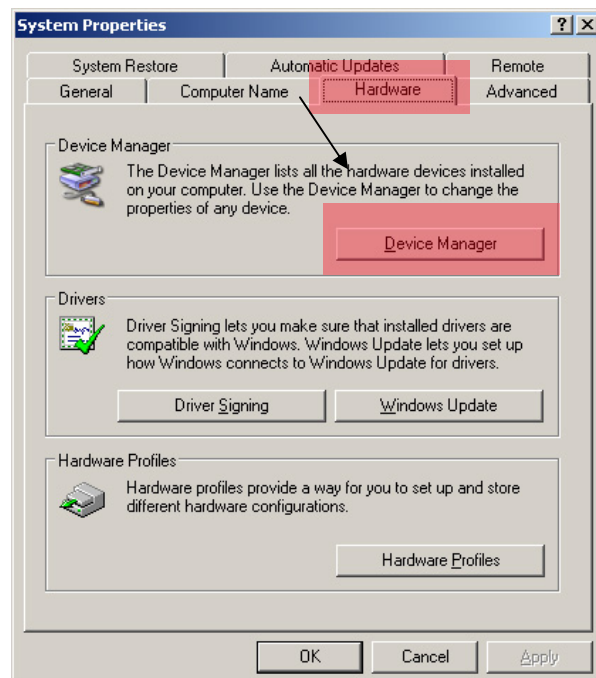
- a. For these next steps to work, your MultiMix must be attached to and “seen” by your computer.

2. USING DEVICE MANAGER, UNINSTALL YOUR CURRENT DRIVER

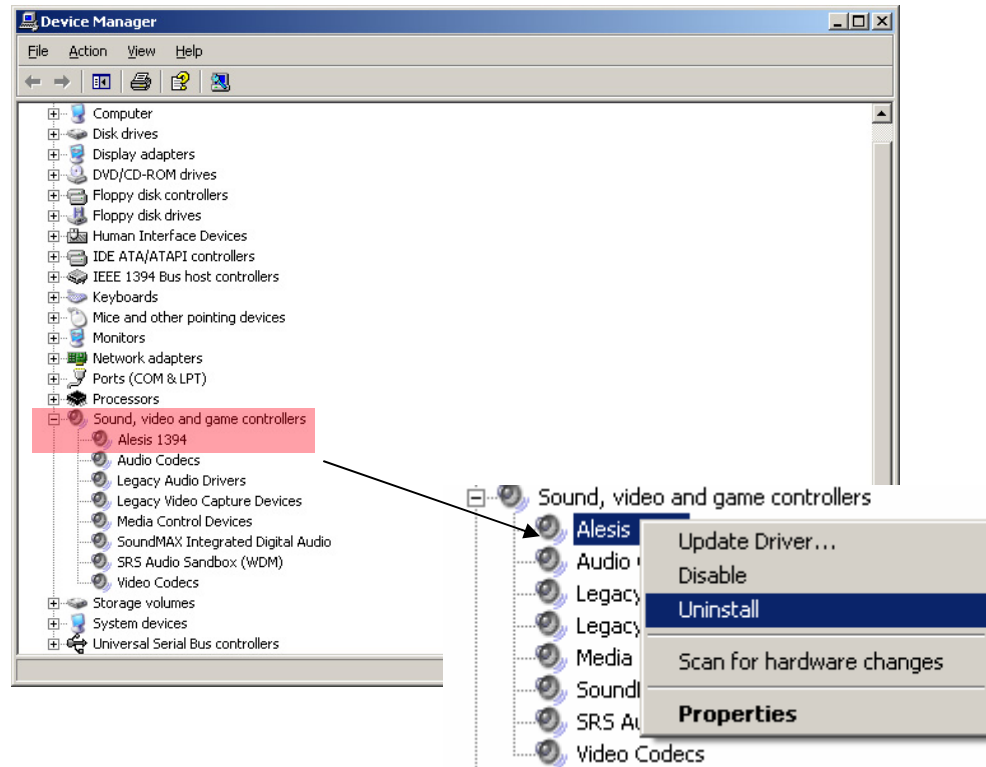
- a. Find My Computer either on your desktop or in the Windows START menu. Right-click it and choose PROPERTIES.



- b. Choose the HARDWARE tab, followed by the DEVICE MANAGER button.



- c. Find and expand the SOUND, VIDEO, AND GAME CONTROLLERS section. Within it, right click “Alesis 1394.” Then, click “Uninstall.”



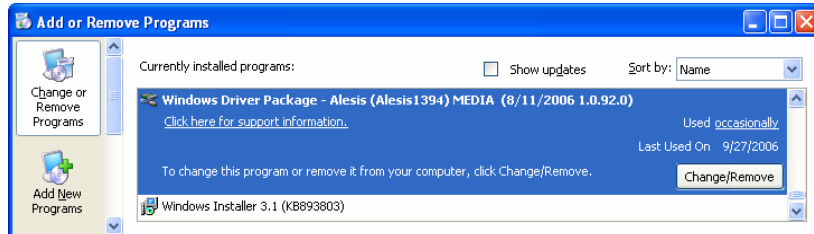
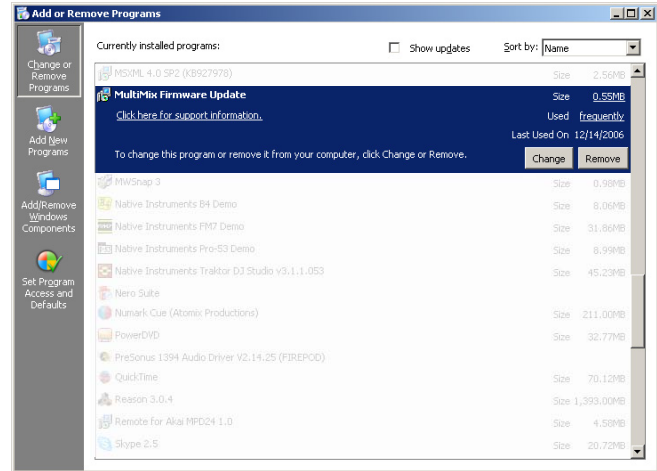
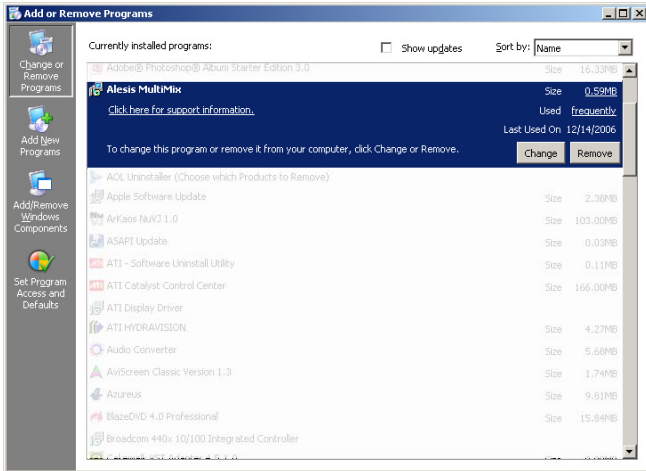
Click “OK” when prompted.



- d. Once the software has been uninstalled, close these windows.

3. USE ADD/REMOVE PROGRAMS TO REMOVE THE CURRENT DRIVER FROM YOUR COMPUTER

- a. From the START menu, navigate to the CONTROL PANEL and choose ADD OR REMOVE PROGRAMS. Look for every instance that starts with “Alesis MultiMix,” “MultiMix” or “Windows Driver Package - Alesis.” For each one in the list, click REMOVE (or CHANGE/REMOVE, and then remove it).



4. DETACH THE MULTIMIX FROM YOUR COMPUTER, AND RESTART YOUR COMPUTER

- a. Now that the old drivers have been removed, detach the MultiMix from your computer.
- b. Re-start your computer to begin a fresh installation.

5. INSTALL THE SOFTWARE DRIVERS ONTO YOUR COMPUTER

- a. Copy the software driver installation program (called *Alesis_MultiMix_Install.msi*, inside the folder *2--Alesis_MultiMix_install_WIN_3_1_0_1210.zip*) to your desktop.
- b. Double-click the .MSI file to run the installer. Follow the prompts. Click “Continue Anyway” if Windows pops up any “logo certification” warnings.
- c. When the update has finished, the installer will tell you that you can attach your device at any time. Click OK to exit the installer. You can now delete the .MSI file on your desktop.

6. ATTACH YOUR MULTIMIX TO YOUR COMPUTER TO FINISH THE DRIVER INSTALLATION

- a. Connect the MultiMix to your computer using a Firewire cable. Turn the MultiMix on. Wait a few moments for Windows to find your MultiMix; then follow the prompts to finish installing the drivers. Your computer may cycle through a few different “found new hardware” installation cycles.

In every case:

- i. Choose not to search WindowsUpdate for newer drivers (if your computer prompts you for this search—not all Windows computers do so.)
- ii. Choose to install the drivers automatically. Do not choose to search for the drivers in a specific location.

Click “Continue Anyway” if Windows pops up any “logo certification” warnings.

7. UPDATE YOUR MULTIMIX’S FIRMWARE TO VERSION 2.0

- a. Copy the firmware update program (named *FWUpdate.exe* from the zip folder *3--2_0_FwUpdate_MMX_WIN_3_1_0_1210.zip*) to your desktop.
- b. Double-click the firmware update program to run it. Follow the prompts to automatically update your MultiMix FireWire’s firmware.
- c. Once the firmware updater has finished running (allow a minute or so), press OK on screen to reset your device.
- d. Now that you are finished with it, delete the firmware update program from your desktop.

E. UPGRADE INSTALLATION – MULTIMIX FIREWIRE WITH ALESIS IO|14 OR IO|26

(For computers on which both a MultiMix FireWire and an Alesis IO|14 or IO|26 have previously been installed)

1. UNDERSTANDING THE MULTIMIX, I/O14/26 SHARED DRIVER

Both the MultiMix FireWire and the IO14/26 are powered by the same DICE II Firewire chip. As a result, they share the same software *drivers*. Their *firmware* is different, but their *drivers* are the same.

As of this release, the current driver for MultiMix FireWire, IO|14, and IO|26 is version 3.1.0.1210.

The steps that follow will help you ensure that you are using the latest and greatest driver.

2. LEARN YOUR CURRENT IO|14 OR IO|26 DRIVER VERSION

- Detach all of your MultiMix FireWires, IO|14s, and IO|26s from your computer.
- Look for the “Alesis Firewire Control Panel” from your desktop. If it’s there, then open it, choose the “Help” menu, and from there choose “About.”



- If the “Version” indicated is 3.1.0.1210 or above, your driver is already up to date. In this case, **skip ahead to step 9.**

If the “Version” indicated is anything below 3.1.0.1210, **continue to step 3.**

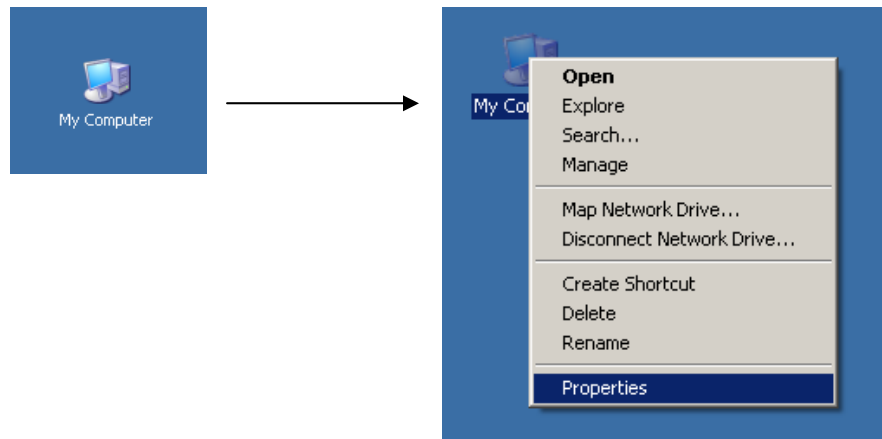
If the “Alesis Firewire Control Panel” is not available on your desktop (perhaps you see something like “MultiMix Control Panel” on your desktop instead), then also **continue to step 3.**

3. ATTACH YOUR MULTIMIX TO YOUR COMPUTER. TURN ON BOTH THE MULTIMIX AND YOUR COMPUTER

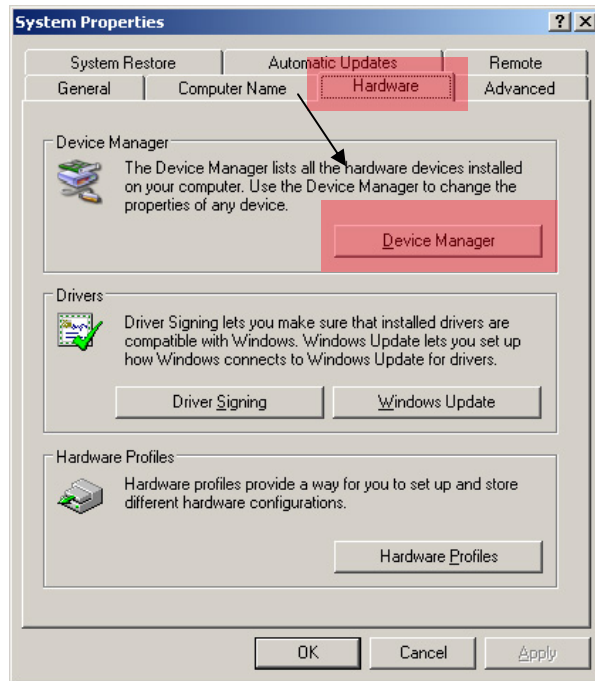
- a. For these next steps to work, your MultiMix must be attached to and “seen” by your computer.

4. USING DEVICE MANAGER, UNINSTALL YOUR CURRENT MULTIMIX DRIVER

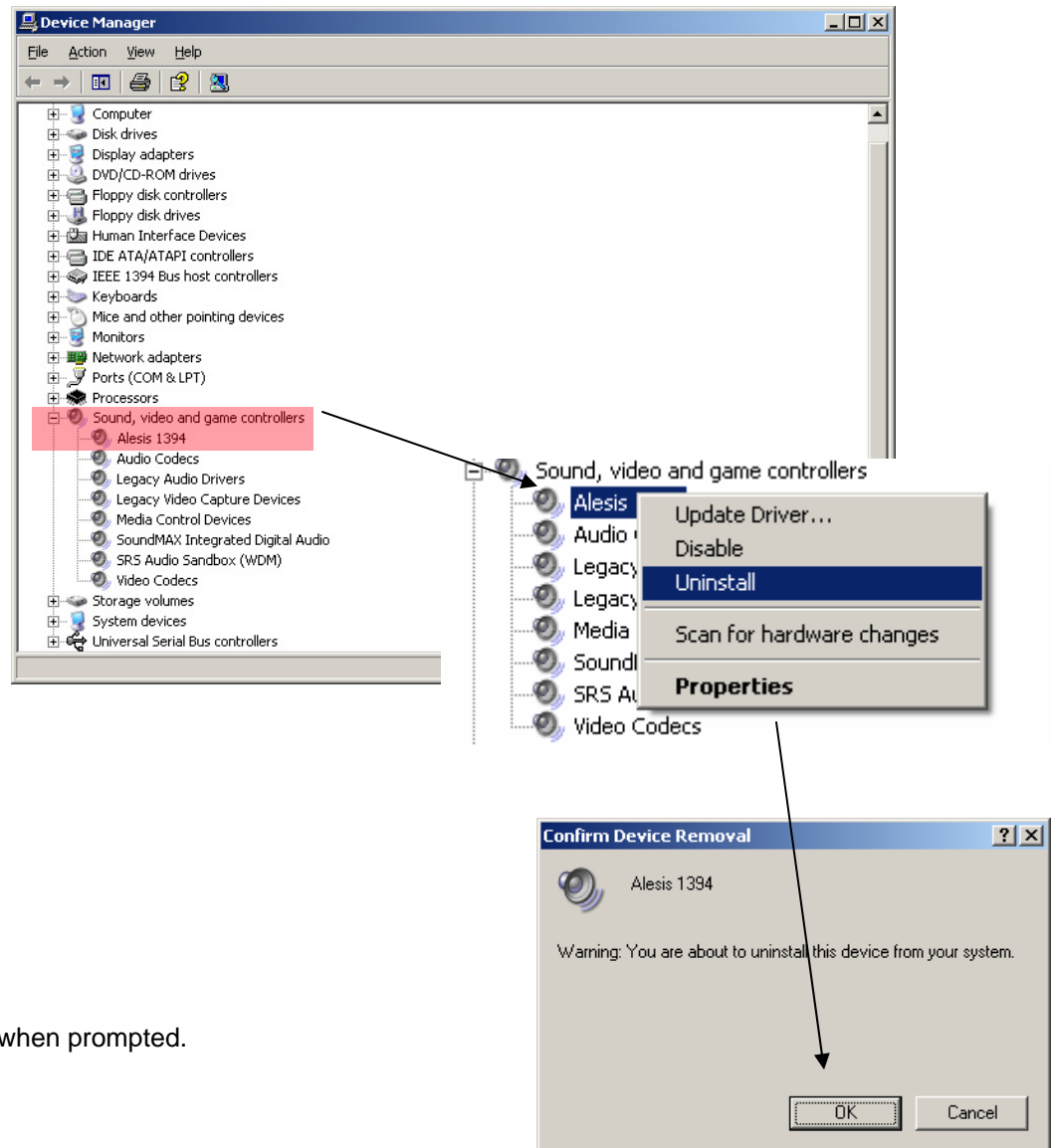
- a. Find My Computer either on your desktop or in the Windows START menu. Right-click it and choose PROPERTIES.



b. Choose the **HARDWARE** tab, followed by the **DEVICE MANAGER** button.



c. Find and expand the SOUND, VIDEO, AND GAME CONTROLLERS section. Within it, right click “Alesis 1394” or “Alesis Firewire” (whichever appears up on your particular system). Then, click “Uninstall.”

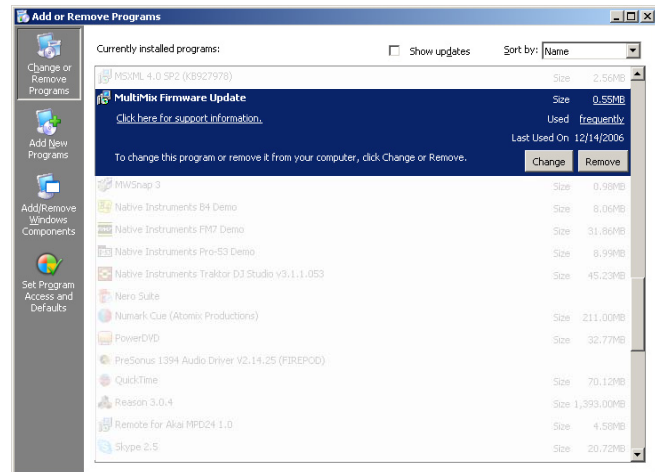
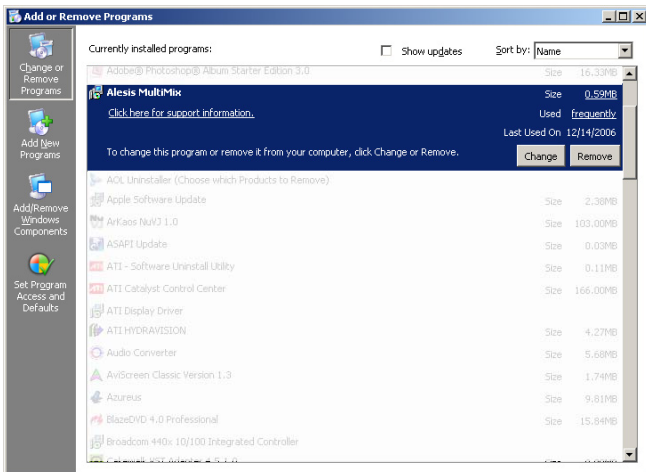


Click “OK” when prompted.

d. Once the software has been uninstalled, close these windows.

5. USE ADD/REMOVE PROGRAMS TO REMOVE THE CURRENT DRIVER FROM YOUR COMPUTER

- d. From the START menu, navigate to the CONTROL PANEL and choose ADD OR REMOVE PROGRAMS. Look for every instance that starts with “Alesis MultiMix,” “MultiMix” or “Windows Driver Package - Alesis.” For each one in the list, click REMOVE (or CHANGE/REMOVE, and then remove it).



6. DETACH THE MULTIMIX FROM YOUR COMPUTER, AND RESTART YOUR COMPUTER

- a. Now that the old drivers have been removed, detach the MultiMix from your computer. Re-start your computer to begin a fresh installation.

7. INSTALL THE MULTIMIX AND IO SOFTWARE DRIVERS ONTO YOUR COMPUTER

- a. Retrieve the latest IO|14 and IO|26 drivers from www.alesis.com and install that driver package. Only that package contains the Alesis Hardware Direct Monitoring software needed to control direct monitor levels and routing for your IO|14 or IO|26.

8. ATTACH YOUR MULTIMIX TO YOUR COMPUTER TO FINISH THE DRIVER INSTALLATION

- a. Connect the MultiMix to your computer using a Firewire cable. Turn the MultiMix on. Wait a few moments for Windows to find your MultiMix; then follow the prompts to finish installing the drivers. Your computer may cycle through a few different “found new hardware” installation cycles.

In every case:

- i. Choose not to search WindowsUpdate for newer drivers (if your computer prompts you for this search—not all Windows computers do so.)
- ii. Choose to install the drivers automatically. Do not choose to search for the drivers in a specific location.

Click “Continue Anyway” if Windows pops up any “logo certification” warnings.

9. UPDATE YOUR MULTIMIX’S FIRMWARE TO VERSION 2.0

- a. Copy the firmware update program (named *FWUpdate.exe* from the zip folder 3--2_0_FwUpdate_MMX_WIN_3_1_0_1210.zip) to your desktop.
- b. Double-click the firmware update program to run it. Follow the prompts to automatically update your MultiMix FireWire’s firmware.
- c. If your current firmware version is already 2.0, you can cancel this installation and proceed to step d.
- d. Once the firmware updater has finished running (allow a minute or so), press OK on screen to reset your device.
- e. Now that you are finished with it, delete the firmware update program from your desktop.

F. FRESH INSTALLATION – MULTIMIX FIREWIRE ALONG WITH ALESIS IO|14 OR IO|26

(For computers which have never had a MultiMix FireWire or Alesis IO|14 or IO|26 installed and which are being set up for the first time to use both products)

1. DO NOT ATTACH ANY OF YOUR ALESIS DEVICES TO YOUR COMPUTER YET

2. INSTALL THE IO|14/26 SOFTWARE DRIVERS ONTO YOUR COMPUTER

- a. Find the latest IO|14/26 installation package at www.alesis.com. Perform that installation, including attaching your IO|14/26 to complete the installation.

(First install the software, then attach your IO|14 or IO|26 to your computer to complete the installation. Do not attach your MultiMix FireWire yet.)

- b. Detach your IO|14/26 from your computer before continuing.

3. ATTACH YOUR MULTIMIX TO YOUR COMPUTER TO FINISH THE DRIVER INSTALLATION

- a. With your IO|14/26 detached from your computer, connect the MultiMix to your computer using a Firewire cable. Turn the MultiMix on.
- b. Wait a few moments for Windows to find your MultiMix; then follow the prompts to finish installing the drivers. Your computer may cycle through a few different “found new hardware” installation cycles. In every case:
 - i. Choose not to search WindowsUpdate for newer drivers (if your computer prompts you for this search—not all Windows computers do so.)
 - ii. Choose to install the drivers automatically. Do not choose to search for the drivers in a specific location.

Click “Continue Anyway” if Windows pops up any “logo certification” warnings.

4. UPDATE YOUR MULTIMIX’S FIRMWARE TO VERSION 2.0

- a. Copy the firmware update program (named *FWUpdate.exe* from the folder *3--2_0_FwUpdate_MMX_WIN_3_1_0_1210.zip*) to your desktop.
- b. Double-click the firmware update program to run it. Follow the prompts to automatically update your MultiMix FireWire’s firmware.
- c. If your current firmware version is already 2.0, you can cancel this installation and proceed to step e.
- d. Once the firmware updater has finished running (allow a minute or so), press OK on screen to reset your device.
- e. Now that you are finished with it, delete the firmware update program from your desktop.

G. TECHNIQUES FOR OPTIMIZING PERFORMANCE

a. Depending on your computer, you may find that performance will be dramatically improved if, while using your IO|14 or IO|26, you do one or more of the following:

- Turn off your computer's wireless networking.
- Disable your computer's network card (from within Device Manager).
- Close Microsoft Outlook and other programs/processes that could eat into available computer power.
- Use the IO's external power supply rather than computer bus power. (Some computers only supply marginally enough power to the IO over the Firewire cable.)
- Review and address extreme DPC (Direct Procedure Call) latency in your computer using a tool such as Thesycon's DPC Latency Checker, available for free here:

http://www.thesycon.de/deu/latency_check.shtml.

b. You may find that the channel names show some corruption in your DAW or while managing your Input and Output channel configurations in the Control Panel. If so, change your device's nickname in its Control Panel tab. Choose a nickname of no more than twenty characters.

H. FEATURES OF THE ALESIS FIREWIRE CONTROL PANEL

Applications allowed to change the sample rate

If you want to ensure that neither Windows nor some auxiliary program can seize control of the audio driver and change the sample rate, select an appropriate option here.

- | | |
|---------------------|--|
| <i>"any":</i> | Windows System and ASIO applications can change the sample rate. |
| <i>"ASIO only":</i> | Windows System Sound (WDM) applications cannot change the sample rate. |
| <i>"none":</i> | The sample Rate can only be changed via the Alesis Firewire Control Panel. |

System Sounds

Enable or disable the Windows system sounds (startup, shutdown, trash, error, "you have mail" etc.) here.

When working with ASIO audio, it is generally best to disable the Windows system sounds. When working with WDM applications, sounds must be enabled.

(Continued on next page.)

System Sounds Configuration

These options allow you to map your inputs and outputs in accordance with the various sound schemes (5.1, 7.1 wide, etc.) that Windows supports. (You can see these different schemes within Windows by going to "Sound and Audio Devices," choosing the "Audio" tab, pressing "Advanced" under "Sound playback," and then exploring the options available under "Speaker Setup.")

Troubleshooting your system sounds configuration

If you find that, when using these mapping features, you cannot create the mapping that you want, it is because some other configuration (quad or 7.1 or one of the others) is using the audio channel you want. To solve the problem, switch over to the other "Multichannel configs" and remap the location using the channel you want to another channel.

System Latency Compensation

Windows works on an "interrupt" basis. Every piece of hardware and every process in your system "interrupts" Windows to ask for attention. The hardware and processes wait for a reply from Windows and then continue their tasks.

Some hardware, and some hardware/software combinations, require significant time to process these interrupt requests. If the time becomes long enough, it can interrupt your audio, leading to dropouts and glitches.

If you experience such dropouts, the first and best approach for you to try is to close non-essential applications. Also, disable your wireless and wired networking cards using Windows' Device Manager. If this doesn't solve the problem, or if it is impractical for you to do so, then experiment with the System Latency Compensation settings. These settings add progressively more "safety buffers" to the Alesis drivers to overcome any long interrupt cycles caused by other pieces of your system.

Like Goldilocks, you are looking for the sweet spot for your system. A system that works great with a "low" setting may not work so well with a "high" setting. Experiment to find the best combination of buffer size and System Latency Compensation for your computer. And don't worry about sample alignment in your DAW: whatever setting you choose here will be accurately reported to your DAW software. Note that a slightly larger buffer size is preferable to the next higher System Latency Compensation.

Advanced Users will find the following information useful while using a latency checking tool:

System Latency Compensation Setting	Latency Compensation
none	<3.1mS
Low	< 6.2mS
Medium	< 14mS
High (last resort)	>14mS

I. IN CASE OF DIFFICULTY

If you have difficulties installing the driver on top of an existing installation, go to Control Panel and then Add/Remove Programs. Remove every Alesis reference; then install the software again.

If problems persist, disable any spyware/malware protection programs. Depending on how you have them configured, these might block the Alesis software and driver installation process.

Alesis's customer support team is available for further troubleshooting and consultation. Call (401) 658-5760.

Thank you for using Alesis products. Best of luck to you in all your creative endeavors!

The Alesis Team