
Updates

Always ensure that you are running the latest driver software and IF-FW/DMmkII firmware by visiting TASCAM's web site at <http://www.tascam.com>.

How to Update

■ Windows driver

Double-click the "IFFWDMmkII.exe" installer file to launch it. Follow the same procedures used to install V1.00 given in the "Configuring the Computer" section of the user manual.

■ Mac driver

Download the dmg-format file that contains the installer, and double-click it to mount the disk image on the computer. Double-click the "IFFWDMmkII_Installer.pkg" file, and follow the instructions given. An administrator password is necessary to install the driver. License and Readme files are shown at the same time.

■ Firmware

V1.10 of the firmware is released along with the V1.10 drivers. This version fixes a known problem with loss of audio connection that previously required a hardware power cycle to recover from. The DM-3200/4800 and IF-FW/DMmkII must be installed and turned on, and the FireWire cable connected between the computer and mixer before performing the firmware update.

Driver V1.10 is required to run the Firmware V1.10 updater. If you need to revert the driver to V1.10 and you do not know how, please contact TASCAM customer support.

For Mac OS X

After installing the driver, download and double click on the V1.10 Firmware Updater file and follow the instructions given to update the firmware.

For Windows

After installing the driver, download and run the V1.10 Firmware Updater program, and follow the on screen instructions.



Release Notes

New Features

This section describes the new features for each revision of the IF-FW/DMmkII drivers and firmwares.

New Features in V1.22(Mac only)

■ Mac OS X Driver

Compatibility

This driver is now compatible with OS X 10.7.0 (Lion), 32 bit and 64 bit kernel.

New Features in V1.21

■ Windows Driver

Performance

V1.21 improves stability and execution ability.

■ Mac OS X Driver

Compatibility

This driver is compatible with both 32-bit and 64-bit kernels of Snow Leopard OS X 10.6.0 or later.

Performance

Improvements have been made to reduce system burdens even with complex DAW projects.

New Features in V1.20 (Windows only)

NOTE

If the IF-FW/DMmkII firmware version is older than V1.10 (for example, V1.02), update the driver and firmware to V1.10 first before updating the driver to V1.20.

■ Windows Driver

Compatibility

This driver is now compatible with:

Windows 7 32 bit

Windows 7 64 bit

WASAPI

This driver is now compatible with WASAPI mode in Sonar 8 and other DAWs.

WDM

This driver now presents 8 channels of audio to the WDM interface. The Control Panel allows any of the 32 IF-FW/DMmkII audio channels to be selected for these 8.

Input and Output channels can be mapped individually. A Reset button allows the channel assignments to be reverted to a simple mapping.

DPC Spike Checker

DPC Spike Checker has been made compatible with 64-bit editions of Windows XP, Windows Vista and Windows 7. Run with administrator privileges when using DPC Spike Checker on Windows Vista or Windows 7.

Select and right-click "DPC Spike Checker" (Start > All Programs > TASCAM > IFFWDMmkII > DPC Spike Checker). Select "Run as Administrator" and launch the program

WDM 88.2kHz and 96kHz Support

Windows Vista and Windows 7 do not allow the mixer to switch the sample rate between 1xFS and 2xFS rates seamlessly. Please use the following steps:

Changing from 44.1 kHz / 48 kHz to 88.2 kHz / 96 kHz

1. Open Control Panel
2. Open Sound (the speaker icon)
3. Select Playback tab (the first one)
4. Select the IF-FW/DMmkII Audio entry
5. Click Properties
6. The properties dialog comes up, select the Advanced Tab
7. Select the desired sample rate (88.2 or 96) in the pull down menu (choose the 24 bit version)
8. Change the sample rate to 88.2/96 on the DM-3200 or DM-4800
9. Click Apply or OK

NOTE

Performing step 9 before step 8 results in an error.

Changing from 88.2 kHz / 96 kHz to 44.1 kHz / 48 kHz

NOTE

The Audio Properties dialog advanced tab is not visible.

1. Change the sample rate on the DM-3200/DM-4800 first.
2. Open Control Panel
3. Open Sound (the speaker icon)
4. Select Playback tab (the first one)
5. Select the IF-FW/DMmkII Audio entry
6. Click Properties
7. The properties dialog comes up, select the Advanced Tab
8. Select the desired sample rate (44.1 or 48) in the pull down menu (choose the 24 bit version)
9. Click Apply or OK.

New Features in V1.10

■ Windows Driver

Compatibility

This driver is now compatible with:

Windows XP 32 bit with Service Pack 3

Windows XP 64 bit with Service Pack 2

Windows Vista 32 bit with Service Pack 1

Windows Vista 64 bit with Service Pack 1

CAUTION

The use of this unit has been confirmed using standard computers that meet the above operating system requirements. However, this is not a guarantee that it will work all computers that are running one of these operating systems. Even when running the same operating system, the processing capabilities of computers vary according to their specifications and other operating conditions.

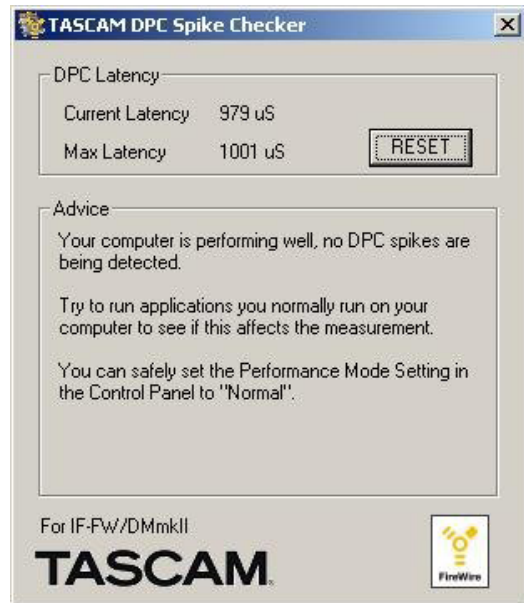
DPC Spike Checker for Windows

"DPC Spikes" are delays or latencies in your system that interfere with correct operation of the IF-FW/DMmkII drivers. Some Graphic interfaces and LAN/Wireless interfaces are known to introduce large DPC spikes. These may only occur once in a few minutes, but they will cause drop-outs or other audio problems.

To see if your system has unusual DPC spikes, a DPC Spike checker tool is now included in the installation.

This application only runs on 32 bit versions of Windows XP or Windows Vista.

Start this app (Start->All Programs->TASCAM->IFFWDMmkII->DPC Spike Checker) and let it run while you use your computer normally for audio work. After a few minutes, check to see if it has registered any spikes. It will recommend a setting for the Performance Mode pull down in the IF-FW/DMmkII Control Panel.



Be sure to search for updated drivers for Graphic and Network devices if large spikes are detected, or be prepared to replace those interfaces in your computer if the additional latency required is not acceptable for your work.

NOTE

The DPC Spike Checker Tool will report invalid DPC latency numbers if it is still running when the system is put into Standby or Hibernate modes. Please quit and restart the tool in this case.

Performance Mode

The Control Panel has a new pull down selection called "Performance Mode", this has 4 settings:

1. "Normal"
2. "Safe Mode Level 1"
3. "Safe Mode Level 2"
4. "Safe Mode Level 3".

Each level has different amounts of extra latency, which can prevent audio drop outs due to CPU load spikes.

■ Mac OS X Driver

Compatibility

This driver is now compatible with OS X 10.5.2

Release Notes

Maintenance Items

This section describes the Maintenance items for each revision of the IF-FW/DMmkII drivers.

Maintenance Items in V1.21

■ Windows Driver

Stability

V1.21 resolves a problem in which the screen became blue and the computer crashed.

Latency

In Safe Modes 1, 2 and 3, excessive latency occurred from the great amount of complex latency from DPC. This problem has been resolved.

Minimum Buffer Size

In Windows 7, the minimum buffer size had increased, but this problem has been resolved.

■ Mac OS X Driver

Stability

V1.21 resolves a problem in which the computer could stop working.

MIDI Timing

MIDI Timing precision has been improved.

Maintenance Items in V1.20

■ Windows Driver

Large Memory Systems

V1.20 fixes a problem that occurred when using the driver on Vista64 with 4GB or more of system memory.

Minimum Buffer Size

V1.10 enforces the minimum buffer size, but the displayed buffer size was not correct for NORMAL Performance Mode. In V1.20 the buffer size can be set as low as 64 samples (1xFS rates) and 128 samples (2xFS rates).

WDM Stability

Stability when using WDM applications has been greatly improved, but Sonar users requiring full channel count must now use ASIO instead of WDM/KS.

ASIO Stability

Stability and performance when using ASIO applications has been improved.

Control Panel

When closing an application that was using the WDM audio interface, the control panel could sometimes remain in its locked state, with the buffer size, performance mode and WDM mapping settings greyed out. This has been fixed.

Maintenance Items in V1.10

■ Firmware

This version fixes a known problem with loss of audio connection that previously required a hardware power cycle to recover from.

■ Windows Driver

Latency

In V1.00, there was sometimes a different latency between channels 1-16 and channels 17-32, and the overall latency could change slightly when the mixer and computer are re-locked together.

V1.10 has the same fixed latency for all channels.

Control Panel

The Windows Control Panel has been improved since V1.00.

- If a WDM or ASIO client is currently using the IF-FW/DMmkII, the Buffer Size, Performance Mode and WDM Channel Mapping settings are locked out and their control is grayed out. To change these values, first close all audio apps.
- WDM Input Channel Remapping has been removed in V1.10
- The Control Panel now remembers where it was on the screen, and will open in the same position as the previous time, instead of always opening in the center of the screen.
- V1.10 now prevents the user from setting a buffer size smaller than the minimum buffer size, as those settings would always produce audio drop-outs or noise.

■ Mac OS X Driver

Latency

In V1.00, there was sometimes a different latency between channels 1-16 and channels 17-32. V1.10 has the same fixed latency for all channels.

G5 compatibility

On Power PC G5 machines, sometimes noise was present on the audio inputs and outputs. This has been fixed.

FireWire

When the FireWire cable is removed and the FireWire connection is broken, sometimes the mixer had to be

powered off and on in order to regain connectivity. This has been fixed.

Large Memory Systems

Problems with large memory systems have been fixed.

Stability

Overall stability has been improved.

Control Panel

The Control Panel now remembers where it was on the screen, and will open in the same position as the previous time, instead of always opening in the center of the screen.

Known Issues

This section describes the Known Issues for the latest IF-FW/DMmkII drivers

Known Issues in V1.21

■ Windows Driver

DPC Spike Checker application

On some computers, an error might occur with the DPC Spike Checker and it might not start. If this should occur, install the file that can be downloaded using the following link.

<http://www.microsoft.com/downloads/details.aspx?displaylang=en&FamilyID=766a6af7-ec73-40ff-b072-9112bab119c2>

Select "vcredist_x86.exe" for Vista 32-bit or Windows 7 32-bit, and select "vcredist_x64.exe" for Vista 64-bit or Windows 7 64-bit.

Known Issues in V1.20

■ Windows Driver

Installation when Windows is set to 2xFS rates

If the Windows WDM Audio sub-system is running at 2xFS rates (88.2 kHz or 96 kHz) when installing or upgrading the IF-FW/DMmkII driver, WDM audio will be silent after installation.

To recover, it is necessary to change the WDM sample rate to a 1xFS rate (44.1 kHz or 48 kHz) and then return to the desired 2xFS rate (88.2 kHz or 96 kHz)

Setting the DM-3200/DM-4800 sampling frequency when using Windows Vista or Windows 7

In Windows Vista or Windows 7, if the selected sampling frequencies set in the Advanced tab in the Properties window for the IF-FW/DMmkII in the Playback tab of the

Sound Control Panel and the DM-3200/DM-4800 are different, the Advanced tab will not appear. In this case, change the DM-3200/DM-4800 sampling frequency first to show the Advanced tab. (See "Changing from 44.1 kHz/48 kHz to 88.2 kHz/96 kHz" on page 2 of this document.)

Operation cannot be guaranteed if the sampling frequency is not set the same for Windows and the DM-3200/DM-4800. Always set the sampling frequency the same for both Windows and the DM-3200/DM-4800.

DAW Performance

Performance with Sonar on Windows varies greatly. V1.20 works well with both 32 bit and 64 bit versions of Cubase. A higher performance CPU may be required for higher channel count and 96 kHz operation under Sonar. TASCAM will continue to improve the performance of the driver to enable higher channel count and FS combinations on all DAW platforms.

Windows XP Service Pack 2

Upgrading to Windows XP 32 bit edition Service Pack 2 can cause FireWire 800 ports to be reset to FireWire 100 speeds, preventing the IF-FW/DMmkII from locking and passing audio correctly. See <http://support.microsoft.com/kb/885222> for a solution.

Windows XP Service Pack 3

Upgrading to Windows XP 32 bit edition Service Pack 3 can also cause FireWire 800 ports to be reset to FireWire 100 speeds, preventing the IF-FW/DMmkII from locking and passing audio correctly. See <<http://support.microsoft.com/kb/955408>> for a solution.

Boot Camp

Beta versions of Apple's Boot Camp (a set of drivers that allow Windows OSes to be installed on some Apple Mac hardware) have FireWire chipset drivers that are not compatible with the IF-FW/DMmkII Windows drivers. Boot Camp from OS X Leopard works for some models of Mac hardware, but TASCAM customer support does not provide support for these configurations.

■ Windows and Mac

VST System Link

"VST System Link" functionality in Cubase 4 and other apps may cause unexpected channel assignments in your DAW. Please check these settings if audio is not appearing in expected channels.

■ Incompatible FireWire Chipsets

Symptoms of an incompatible FireWire chipset include the "Audio Dropouts" number in the Control Panel increasing without bound even at system idle, unrecognized card even when plugged in, device not locking, or dropouts. Some chipsets have interactions with the motherboard configuration. Some chipsets will work better at reduced channel count or FS.

Release Notes

Miscellaneous

Windows Vista 64

TASCAM Customer support will not provide direct support for Windows Vista 64 because DAW stability on this platform varies greatly due to software and motherboard configurations. We recommend purchasing a Vista64 machine that is preconfigured and supported for DAW use from an audio system integrator.

Windows Vista

Hints for configuring Windows Vista for DAW use:

- Turn off Aero, select "best performance" for the User Interface.
- Select Performance mode instead of power saving mode.
- Disable unneeded peripherals at the BIOS level.
- Disable fan speed, battery and temperature monitoring add-ons.
- Background vs Applications prioritization. Only select "Background" if you are running on a single core or hyper-threaded CPU. "Applications" is the best setting for multi-core CPUs.
- Double check that your hard drives are using DMA modes for transfers and not PIO.
- If you have an AGP video card, investigate and tune PCI bus latencies to give your FireWire card the most bus time. Many video cards default to having an unreasonable priority. This is not an issue with PCI-Express video cards.