

ME

MUSIC WORKSTATION/SAMPLER

Editor / Plug-In Editor Manual



KORG

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Table of Contents

Introduction	1
Main features	1
Please note before use	1
M3 Editor and M3 Plug-In Editor operating requirements	1
Installation	3
Installation in Windows	3
Installing the Korg EXB-FW Audio/MIDI Driver	4
Installing the M3 Editor/Plug-In Editor	7
Installation in Mac OS X	9
Setup	11
Connection using a FireWire cable	11
MIDI and audio settings on your computer	11
M3 setup	12
M3 Editor (stand-alone version) setup	13
Audio settings	13
MIDI settings	15
Other settings	15
M3 Editor settings	16
M3 Plug-In Editor setup	16
Host application settings	19
Connections without using a FireWire cable (connection via USB cable)	31
M3 setup	31
M3 Editor (stand-alone version) setup	31
Setting up the M3 Plug-In Editor	32
Host application settings	34
About MIDI timing	39
Basic functions and operation	40
Start-up	40
M3 Editor	40
M3 Plug-In Editor	40
About the Preload data	40
Items in the screen	41
Operating procedure	43
Selecting a mode	43
Selecting programs, combinations, and songs	43
Selecting pages and tabs	45

Selecting a parameter and editing the value	45
Selecting and executing utility functions	45
Writing (saving)	46
Track selection	48
Functions provided on the M3	49
Tone Adjust	49
KARMA	49
Drum Track	50
RADIAS (when the EXB-RADIAS is installed)	50
EX-USB (when using the PCM expansion option)	52
User GE	53
Functions specific to the editor	54
Utility commands	54
Preferences	57
Cautions	60
USB connection	60
FW-MIDI (FireWire MIDI)	60
Audio	61
Multiple instances of the plug-in	62
Troubleshooting	63
Stand-alone version	63
No sound (audio output) from the PC	63
Can't input audio to the M3	63
Plug-in version	63
No sound from the PC	63
M3 Plug-In Editor does not appear in the menu	63
All versions	64
You hear crackling noise in the sound	64

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Introduction

Thank you for purchasing the M3. To help you get the most out of your new instrument, please read this manual carefully.

Main features

The M3 Editor and the M3 Plug-In Editor are applications for Macintosh or Windows that allow you to edit the M3's EDS programs, RADIUS programs (if the EXB-RADIUS is installed), combinations, songs, KARMA settings, effects, and global settings.

The M3 Editor is a stand-alone editor.

The M3 Plug-In Editor is an editor that is compatible with the VST, Audio Units, or RTAS formats. It lets you use the M3 just like a plug-in instrument from within your DAW (Digital Audio Workstation) software or other host application.

By installing the EXB-FW FireWire option (sold separately), audio and MIDI data can be sent to and from your computer via a single FireWire cable. This will also allow the M3 to function as a true "plug-in" inside another audio recording/sequencing application.

Please note before use

- Copyright to all software included in this product is the property of Korg Inc.
- The license agreement for this software is provided separately. You must read this license agreement before you install this software. Your installation of this software will be taken to indicate your acceptance of this agreement.

M3 Editor and M3 Plug-In Editor operating requirements

In order to connect your M3 to M3 Editor/Plug-In Editor V2.x and use it, the M3 must be running system version 2.0 or later. If your M3's system version is earlier than 2.0, you will need to update it to the most recent version.

With audio capabilities (EXB-FW installed, and connected via FireWire cable)

Note: It is not possible to open and run multiple instances of the M3 Editor or M3 Plug-In Editor; this means that it is not possible to edit more than one M3 synthesizer simultaneously.

Windows:

- Computer
 - CPU: Pentium 4/ 2.4 GHz or better (Pentium D or Core Duo more is recommended)
 - Memory: 1 GB or more (2 GB or more is recommended)
 - Monitor: 1,024 x 768 pixels, 16-bit color or better
 - A computer with a IEEE 1394 (FireWire) port, that satisfies the requirements of Windows XP or Windows Vista
- Operating system
 - Microsoft Windows XP Home Edition or Professional, Service Pack 3 or later
 - Microsoft Windows Vista Service Pack 1 or any later edition (excepting 64-bit versions)

Macintosh:

- Computer
 - CPU: PowerPC G4 1.4 GHz or better (Intel Mac is supported), G5 or Core Duo or better is recommended
 - Memory: 1 GB or more (2 GB or more is recommended)
 - Monitor: 1,024 x 768 pixels, 32,000 colors or better
 - An Apple Macintosh with a FireWire port that satisfies the requirements of Mac OS X
- Operating system
 - Mac OS X version 10.4.9 or later

Without audio capabilities (EXB-FW not installed or not in use)

Note: It is not possible to open and run multiple instances of the M3 Editor or M3 Plug-In Editor; this means that it is not possible to edit more than one M3 synthesizer simultaneously.

Windows:

- Computer
 - CPU: Pentium III/1 GHz or better (Pentium D or Core Duo more is recommended)
 - Memory: 512 MB or more (1 GB or more is recommended)
 - Monitor: 1,024 x 768 pixels, 16-bit color or better
 - A computer with a USB port, that satisfies the requirements of Windows XP or Windows Vista
- Operating system
 - Microsoft Windows XP Home Edition or Professional, Service Pack 3 or later
 - Microsoft Windows Vista Service Pack 1 or any later edition (excepting 64-bit versions)

Macintosh:

- Computer
 - CPU: PowerPC G4 800 MHz or better (Intel Mac is supported), G5 or Core Duo or better is recommended
 - Memory: 512 MB or more (1 GB or more is recommended)
 - Monitor: 1,024 x 768 pixels, 32,000 colors or better
 - An Apple Macintosh with a USB port that satisfies the requirements of Mac OS X
- Operating system
 - Mac OS X version 10.4.9 or later

Installation

Installation in Windows

To install M3 Editor and M3 Plug-In Editor into Windows, proceed as follows.

- ▲ If you want to connect the M3 to your computer via USB and use M3 Editor and M3 Plug-In Editor, you must install the Korg USB-MIDI Driver.
- ▲ If you've installed the EXB-FW in your M3 and want to connect it to your computer via FireWire and use the M3 Editor and M3 Plug-In Editor, you'll need to install the Korg EXB-FW Audio/MIDI Drive.

- 1 Insert the included CD-ROM into your computer's CD-ROM drive. Normally the "M3 Application Installer" will start up automatically. If your computer is set so the installer does not run automatically, double-click "KorgSetup.exe" on the CD-ROM.
- 2 From the list, select the applications that you want to install, and click [Install].



The applications you selected will be successively installed.

- 3 Follow the on-screen directions to install the desired applications such as M3 Editor.
 - ▲ If you're using an M3 in which the EXB-FW is installed, installing the Korg EXB-USB Audio/MIDI Driver will allow you to use FireWire. Download the Korg EXB-USB Audio/MIDI Driver from the Korg website, and then install it.
- 4 When you've finished installing all the selected software, close the installer.

Note: For details on installing the Korg EXB-FW Audio/MIDI Driver, refer to "Installing the Korg EXB-FW Audio/MIDI Driver" in the section that follows.

Note: For details on installing the M3 Editor/Plug-In Editor, refer to "Installing the M3 Editor/Plug-In Editor" in the section that follows.

Installing the Korg USB-MIDI driver

Refer to the operation guide for details on how to install the Korg USB-MIDI driver.

Installing the Korg EXB-FW Audio/MIDI Driver

1 Follow the on-screen directions for installing the Korg EXB-FW Audio/MIDI Driver. During the installation, there will be a dialog box regarding digital signatures, saying that "... has not passed Windows logo testing," but you should simply click [Continue].

If KORG EXB-FW Audio/MIDI Driver is already installed in your system, it will first be uninstalled, and then the new driver will be installed.

During the installation for Windows XP users, there will be a dialog box regarding digital signatures, saying that "... has not passed Windows logo testing," but you should simply click [Continue].

For Windows Vista users, a dialog box asking you to confirm driver installation may appear; simply click [Install] to proceed.

▲ If you're using an M3 in which the EXB-FW is installed, installing the Korg EXB-USB Audio/MIDI Driver will allow you to use FireWire. Download the Korg EXB-USB Audio/MIDI Driver from the Korg website, and then install it.

▲ If you are unable to complete the installation in Windows XP, your computer may be set to prohibit the installation of digitally unsigned drivers. Check the settings of your computer as described below in "Allowing installation of digitally unsigned drivers."

2 When a screen like the following appears during installation of the Korg EXB-FW Audio/MIDI Driver, connect the FireWire cable and power-on the M3. When the M3 starts up, a dialog box regarding digital signing may appear; simply click [Continue] or [Install] to proceed.



3 When the Korg EXB-FW Audio/MIDI Driver has been installed, close the installer.

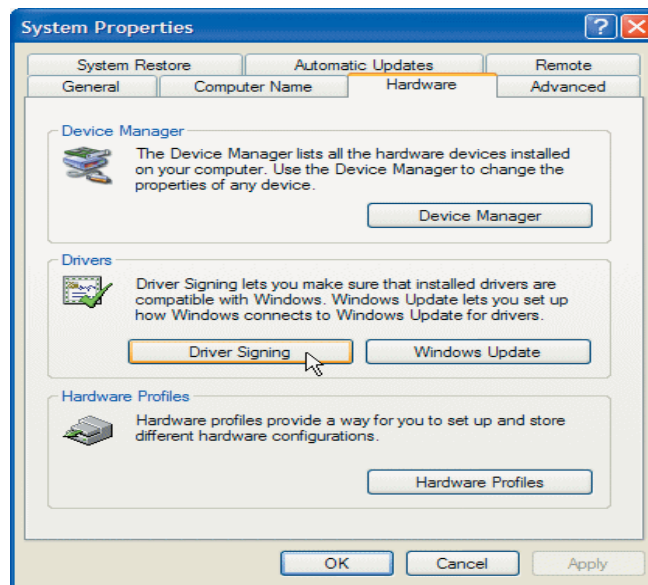
Allowing installation of digitally unsigned drivers in Windows XP

If your computer is set to prohibit installation of digitally unsigned drivers, you won't be able to install the Korg EXB-FW Audio/MIDI Driver. Proceed as follows to change the setting so that the driver can be installed.

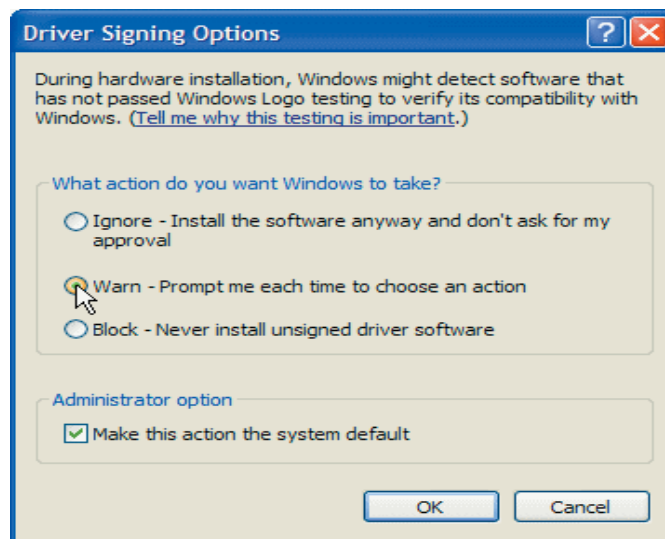
1 From the taskbar, click [Start] -> [Control Panel] to access the Control Panel.

2 In the Control Panel, double-click [System] and then click the [Hardware] tab.

3 In “Drivers,” click [Driver Signing].



4 For “What action do you want Windows to take?”, choose either [Ignore] or [Warn], and click [OK].



Note: If necessary, return this setting to its previous state after you've finished installing the Korg EXB-FW Audio/MIDI Driver.

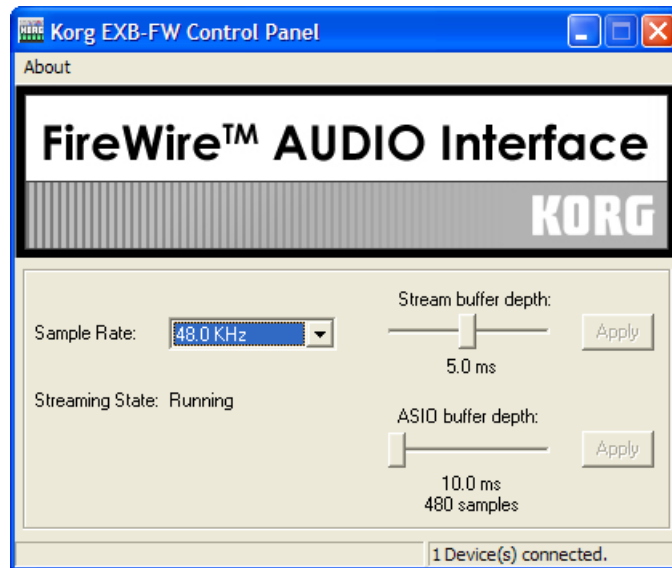
Korg FireWire Audio Interface control panel

Here you can make ASIO/WDM driver settings for the FireWire-connected device.

To access this setting screen, you can either open the Windows Control Panel and double-click “KORG EXB-FW 1394 Audio,” or choose the Start menu item KORG EXB-FW FireWire Audio > KORG EXB-FW Control Panel to open the ASIO driver settings control panel.

🚧 Mac OS X does not have this control panel.

🚧 You can't connect two or more M3 units to a single computer and use them simultaneously.



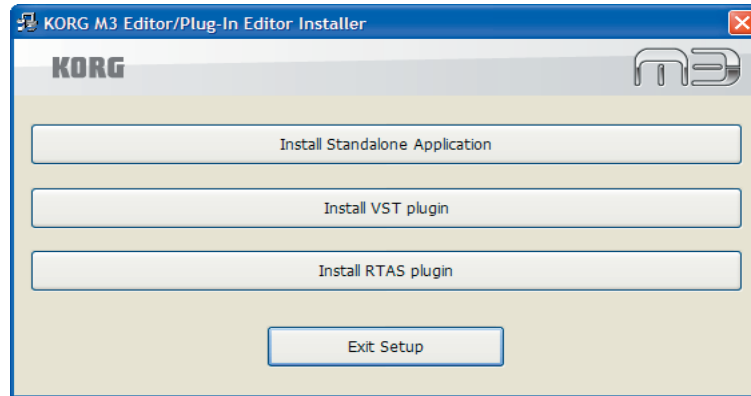
- 1 Select the sampling rate. When using the M3, the sampling rate is fixed at 48.0 kHz.
 - 2 Note the connection status.
 - 3 Use “Stream buffer depth” to specify the range of the “ASIO buffer depth” setting. This setting will change the minimum value and range of the buffer size that you can specify in “ASIO buffer depth.”
Use the slide bar to change the value, and then click the [Apply] button to apply the new setting.
Before you change this, you must close all applications that use the EXB-FW.
The new setting will be reflected when you restart your application.
 - ⚠ You must close all applications that use the EXB-FW before you change the “Stream buffer depth” setting. Operation may become unstable if you change this setting while an application is running.
 - ⚠ If there are interruptions or noise in the sound, you can stabilize operation by increasing the “Stream buffer depth” value; however, this increase the minimum value and range of the “ASIO buffer depth.” Adjust this as appropriate for your system.
 - 4 Use the ASIO buffer depth setting to specify the buffer size for the ASIO driver.
Use the slide bar to change the value, and then click the [Apply] button to apply the new setting.
The new setting will be reflected when you restart your application.
 - ⚠ A larger buffer size will make operation more stable, but will increase the latency.
- Note:* In KORG EXB-FW Audio/MIDI Driver Ver.1.00, the “Stream buffer depth” was internally fixed at 2.0[ms]. If you want to use the driver with the previous settings, set “Stream buffer depth” to 2.0[ms]. (The default setting for “ASIO buffer depth” was 10.0[ms].)

About the buffer size

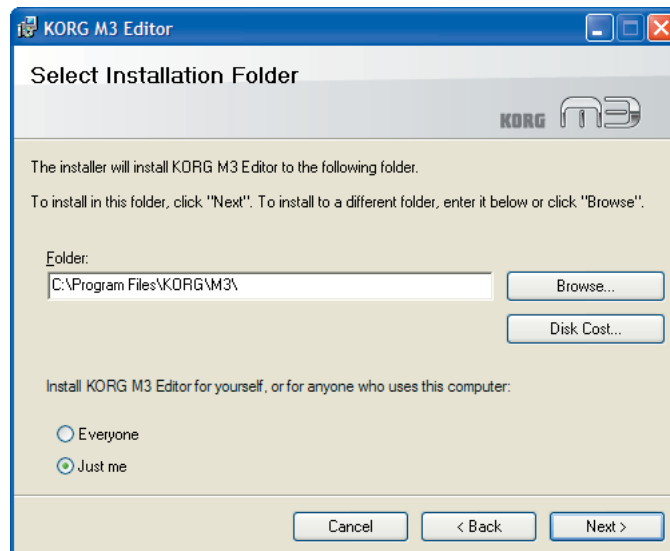
The audio latency between the M3 and M3 Editor/Plug-In Editor will depend on the buffer size you specify in “ASIO buffer depth.” A larger buffer size will make operation more stable, but will increase the latency. You can decrease the latency by specifying a smaller buffer size, but the usable values will depend on your system.

Installing the M3 Editor/Plug-In Editor

- 1 “M3 Editor/Plug-In Editor Installer” will appear.
Successively select and install the Editor (Standalone), Plug-In Editor (VST), and/or Plug-In Editor (RTAS) as desired.
For example if you want to install the stand-alone version, click [Install Standalone Application].



- 2 The M3 Editor screen will appear. Click [Next>].
- 3 The “Welcome to the M3 Editor setup wizard” screen will appear. Click [Next>].
- 4 “M3 Editor information” will appear. Read the displayed content, and click [Next>].
- 5 The “License agreement” will appear. Carefully read the contents, and if you agree, check “I accept the terms of the license agreement” and click [Next>].
- 6 The “Select installation folder” screen will appear. Choose the location and user(s) for which you want to install the software, and click [Next>].



- 7 “Verify installation” will appear. To proceed with the installation, click [Next>]. Installation will begin.
- 8 If the installation was successful, click [Close].
“M3 Editor/Plug-In Editor Installer” will appear.

9 Next you will install the plug-in version(s) that you want to use. Using the procedure described above, begin with step 1 and install the plug-in version(s) that you want to use.

If you don't want to install the VST plug-in version or RTAS plug-in version, click [Exit Setup] to end the installation.

When you've finished installing the application(s) you want, click [Exit Setup] to exit the installer.

Installation in Mac OS X

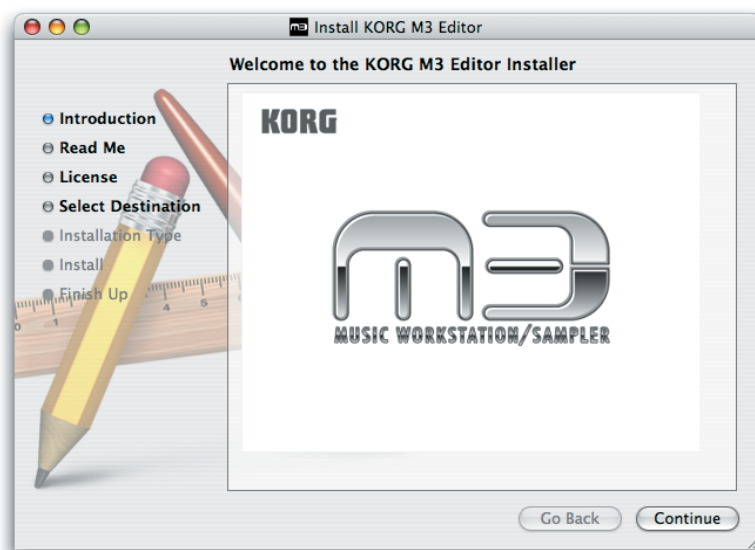
On Mac OS X, you only need to install the M3 Editor and the M3 Plug-In Editor. There is no need to install a driver in order to use FireWire Audio/MIDI.

To install the M3 Editor and M3 Plug-In Editor into Mac OS X, use the following procedure.

⚠ You must install the KORG USB-MIDI Driver if you want to connect the M3 to your computer via USB and use the M3 Editor or M3 Plug-In Editor. (For details on installing the KORG USB-MIDI Driver, refer to the Operation Guide.)

- 1 Insert the included CD-ROM into your CD-ROM drive.
- 2 Start up the installer by double-clicking “M3 Editor Installer.pkg” located in the “M3 Editor” folder of the CD-ROM.
- 3 Depending on the version of your Mac’s operating system, a confirmation dialog box may appear at this point. If so, enter your password and click [OK].

When the installer starts up, the following screen will appear. Click [Continue].

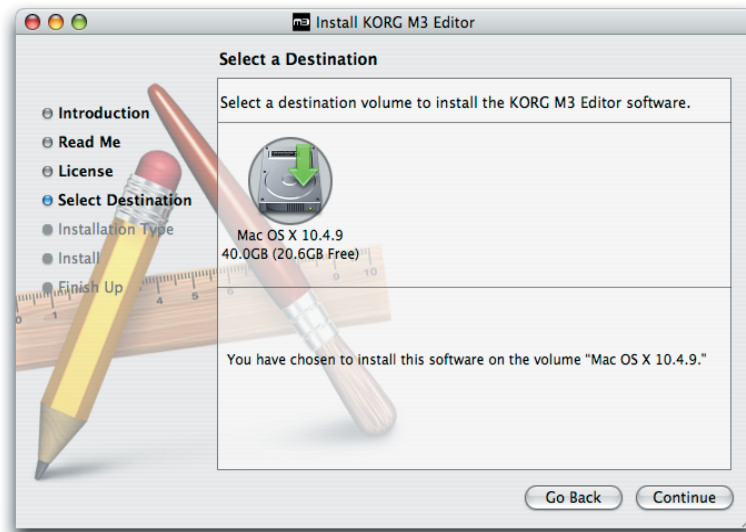



- 4 “Important information” will appear. Read the contents, and click [Continue].

- 5 The “License agreement” will appear. Carefully read the contents, and click [Continue].

A dialog box will ask whether you accept the terms of the license agreement. If you accept, click [Agree].

-
- 6 A screen where you can choose the “Installation destination” will appear. Choose the installation destination and click [Continue].



- 7 The “Easy Installation” dialog box will appear. Click [Install].
- 8 Depending on the version of your Mac’s operating system, a confirmation dialog box may appear at this point. If so, enter your password and click [OK].
- 9 When the installation has been successfully completed, click [Restart] to exit the installer.
-  You can’t connect two or more M3 units to a single computer and use them simultaneously.

Note: Under Mac OS X, the plug-in version will also be installed in the appropriate folder.

Setup

Connection using a FireWire cable

MIDI and audio settings on your computer

If you want to use the M3 Editor / Plug-In Editor to handle MIDI and audio data from an M3 equipped with the EXB-FW option (sold separately) and connected to your computer via a FireWire cable, you'll need to make system settings on your computer so that the computer system does not occupy those ports. You must also make audio input/output device settings for your host application to avoid damaging the speakers etc. that are connected to your computer. (p.19)

Windows

- 1 Disconnect the FireWire cable between your M3 and computer.
- 2 From the Control Panel, start up "Sounds and Audio Devices." The Sounds and Audio Devices Properties dialog box will appear.
- 3 Click the Audio tab.
- 4 The current sound playback device is selected as the default device for sound playback. The current sound recording device is selected as the default device for sound recording.
The current MIDI playback device is selected as the default device for MIDI music playback.
In this state, select the "Use only default devices" check box located at the very bottom, and click the [Apply] button to save these settings. The "Use only default devices" setting is enabled, and the M3 port will not be selected as a "default device."



Mac

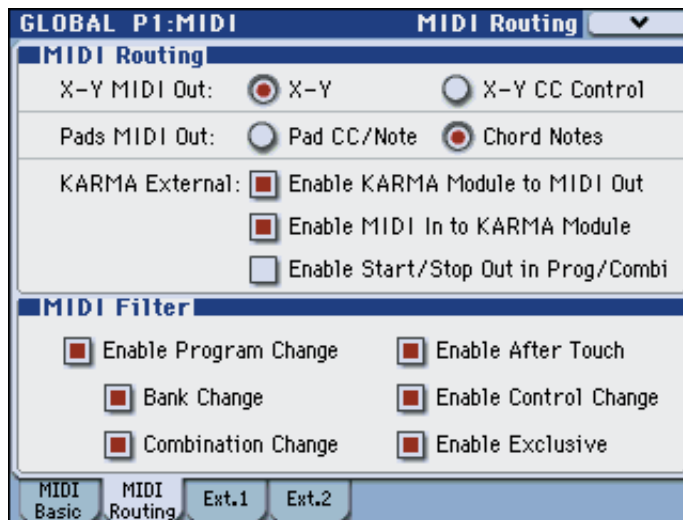
Use a FireWire cable to connect the M3 to your Mac, and start up Audio MIDI Setup.

In system settings, make sure that the M3 is not selected as the “default input” (normally the internal mic), “default output” (normally the internal output), or “system output” (normally the internal output). If the M3 is selected here, the M3 Editor will not operate correctly.

M3 setup

Make sure that you’ve finished installing the KORG EXB-FW Audio/MIDI Driver.

- Make sure that the M3’s Global mode MIDI Filter “Enable Exclusive” setting is on (the check box is selected). (With the factory settings, it will be on.)



M3 Editor (stand-alone version) setup

- 1 Use a FireWire cable to connect the M3's FireWire connector to the FireWire (IEEE 1394) connector of your computer.
- 2 Start up the M3 Editor and verify that it's operating correctly.

Windows

Starting up the M3 Editor

Navigate to the "KORG" folder -> "M3" folder, and double-click the "M3 Editor.exe" icon.

The "KORG" folder is in the location you selected during installation. By default it's in the "Program Files" folder.

Alternatively, you can start up the editor by clicking the taskbar [Start] button -> [All Programs] and then pointing to "KORG"->"M3"->"M3 Editor."

Mac OS X

Starting up the M3 Editor

Navigate to the "Applications" folder - "KORG" folder - "M3" folder, and double-click the "M3 Editor" icon.

- 3 From the system menu, choose "Preferences."
The preferences dialog box will show "Audio settings."

Note: The preference settings dialog box be displayed automatically at start-up the first time you start up, or if for some reason the preference settings have been cleared or the computer's system settings have changed.

Audio settings


- 1 Select the audio driver in "device type" or "device."

Windows

ASIO: The ASIO driver will be used. Since the ASIO driver allows the latency to be minimized, it will provide the best performance. If an ASIO driver is installed, we recommend that you use this setting.

DirectSound: DirectSound will be used. If no ASIO driver is installed in your computer, we recommend that you use this setting.

MME: MME (Multi Media Extension) will be used.

 MME has greater latency than other settings, so we recommend that you use a setting other than MME.


Mac

If an audio interface is installed in your computer, you'll be able to select the driver of that audio interface. If no audio interface is installed, "internal audio" will be your only choice.

2 Make audio output settings.

Windows

If you've selected ASIO as the "device type."

- "Driver name": Selects the driver (device).
 - "Sampling rate": Specifies the sampling rate. The range will depend on the device you selected in "Driver name."
 - "Output channels": Specifies the output channels. This will always be a pair such as 1-2 or 3-4. The settings will depend on the device you selected in "Driver name."
 - "Input channels": Specifies the input channels. This will always be a pair such as 1-2 or 3-4. The settings will depend on the device you selected in "Driver name."
 - "Clock source": Selects the clock source for the audio. The settings will depend on the device you selected in "Driver name."
 - "ASIO settings panel": You can click this to open the settings panel for the ASIO driver. The specifications and operation will depend on the driver you use. For details, refer to the owner's manual for the audio interface you're using.
-  You won't be able to select this if an ASIO driver has not been installed in your computer. It will be unavailable.

If you've selected DirectSound or MME as the "device type"

- "Output driver name": Selects the driver (device) that will be used for output. In some cases, the same driver will be displayed multiple times. Select one of them.
- "Input driver name": Selects the driver (device) that will be used for input. In some cases, the same driver will be displayed multiple times. Select one of them.
- "Bit depth / Rate / Channels": Selects the audio format. The range will depend on the device you selected in "Input driver name."
- "Number of buffers": Specifies the number of buffers used for audio processing. A higher number will make operation more stable, but will also increase the latency.
- "Number of samples": Specifies the number of samples in each buffer. A higher number will make operation more stable, but will also increase the latency.

Note: Latency is the time from when the computer receives the note-on message until sound is produced. Latency is determined by the number of samples per buffer multiplied by the number of buffers. Set the "Number of buffers" and the "Number of samples" to the lowest value that will still allow stable operation.

Note: Refer to the owner's manual of your audio interface for details on audio interface settings.

Mac

- "Bit depth / Rate / Channels": Selects the audio format. The range will depend on the device you selected in "Device."
- "Input channels": This selection will be available if the device has inputs. This will always be a pair such as 1-2 or 3-4. The settings will depend on the device you selected in "Driver name."
- "Output channels": If you've selected "Internal audio," the only available setting will be Output1/Output2. If an audio interface is installed in your computer, other choices will also be available.
- "Clock source": Selects the clock source. The indication will depend on the device you selected in Driver Name. This selection will be unavailable for internal audio and other devices that do not have a clock source.
- "Buffer size": Specifies the buffer size for audio processing. Higher settings will produce more stable operation, but will also increase the latency.


-
- “Latency”: This displays the latency. The latency will depend on the “Buffer size” setting.
Note: Latency is the time from when the computer receives the note-on message until sound is produced. Latency is determined by the buffer size. Set the “Buffer size” to produce the lowest latency that will still allow stable operation.

Note: Refer to the owner’s manual of your audio interface for details on audio interface settings.



About the audio latency

The latency produced by the audio device you select here will be the latency between that audio device and the M3 Editor/Plug-In Editor. A larger buffer size will make operation more stable, but will increase the latency. You can decrease the latency by specifying a smaller buffer size, but the usable values will depend on your system.

MIDI settings

- 1** Click the “MIDI Settings” tab.
The settings for each MIDI port will be displayed.
 - 2** Select the device that you will use for each port (MIDI IN device 1, 2, 3).
Up to three MIDI IN devices can be used simultaneously. Normally, the input from these devices will all be merged. If a device containing multiple ports is connected, multiple ports may be shown for the same device.
 - 3** In the “Clock Master” field, select the device that will be used as the MIDI clock master. The M3 will synchronize to the MIDI clock of the device you select here. If you don’t select a device, the M3 will always operate according to its own internal clock.
-  If you don’t see a device that you want to select for a port, check the following points.
- Win: Have you installed the driver of the connected MIDI device?
 - Win: Is the connected MIDI device detected in the Sound and Audio Devices item of your computer’s control panel?
 - Mac: Go to Application folder -> Utilities -> “Audio MIDI Setup,” and see whether the connected device is detected in the “MIDI Devices” tab page.

Other settings

- 1** Click the “Other” tab.
The “Auto stop” settings will appear.
 - 2** In “Auto stop,” make the desired setting for the automatic stop function.
The auto stop function can automatically stop the audio depending on the CPU load of the computer. (This is the same operation as when you execute “Stop audio” from the “System menu.”) If you want to use the auto stop function, select “Enable auto stop,” and specify the load threshold in “Specify load percentage.” Audio will stop if the CPU load exceeds this threshold during operation. If the audio has been stopped by the auto stop function, choose “Play audio” from the “System” menu. Audio playback will resume.
-  If the audio stops frequently, lighten the CPU load by reducing the sampling rate, etc.
-  If you don’t use the auto stop function, the computer will attempt to continue playing audio as far as possible, but depending on the hardware you’re using, you may experience problems such as the mouse becoming unresponsive when the audio processing load is high.

3 Click “OK” to complete the preference settings.

M3 Editor settings

Make sure that the M3 is connected to your computer via a FireWire cable.

The first time you start up the M3 Editor, you will see a message of “M3 Hardware not found. Rescan all the MIDI devices?” Click [OK] to begin scanning your system. MIDI and audio settings will be automatically made to allow the M3’s data to be received and transmitted, and these settings will be saved. In the Global mode Software Setup page, check the MIDI and audio settings in the MIDI Settings and Audio Settings areas (ⓘp.58). If you change these settings, save your changes, and they will take effect the next time you start up.

Note: the M3 Editor (standalone version) can also be used as an effect processor (with the same functionality as a Plug-In Fx). For details, refer to the plug-in effect (ⓘp.18).

M3 Plug-In Editor setup

If you use a FireWire cable to connect your computer to an M3 equipped with the EXB-FW option, the M3 Plug-In Editor will be able to directly handle the M3’s audio data, meaning that your host application will be able to handle the M3’s audio data. This lets you use the M3 just like a plug-in synthesizer inside your host application.

About the plug-in instrument and plug-in effect

In addition to the M3 Plug-In Editor which operates as a plug-in instrument within your host application, there is also an M3 Plug-In Fx which operates as a plug-in effect, letting you use the M3 as an effect processor that can be used as an insert or a master effect within your host application.

Note: You can’t run the M3 Plug-In Editor and M3 Plug-In Fx simultaneously. Like the M3 itself, the M3 Plug-In Editor provides both L/R audio output and Individual 1/2/3/4 audio outputs (provided that you use a host application that can support this).

The M3 Plug-In Fx has two audio input channels and two audio output channels. For the audio outputs, you have three choices: L/R, Individual 1/2, or 3/4 (ⓘp.59).

The M3 Plug-In Editor supports the following six plug-in formats.

- VST and VSTi

- AudioUnit Effect and AudioUnit Instrument (both Mac only)

- RTAS and RTAS Instrument

The operation of the M3 Plug-In Editor will differ slightly depending on the plug-in format and on limitations of your host application.

Plug-In Instrument

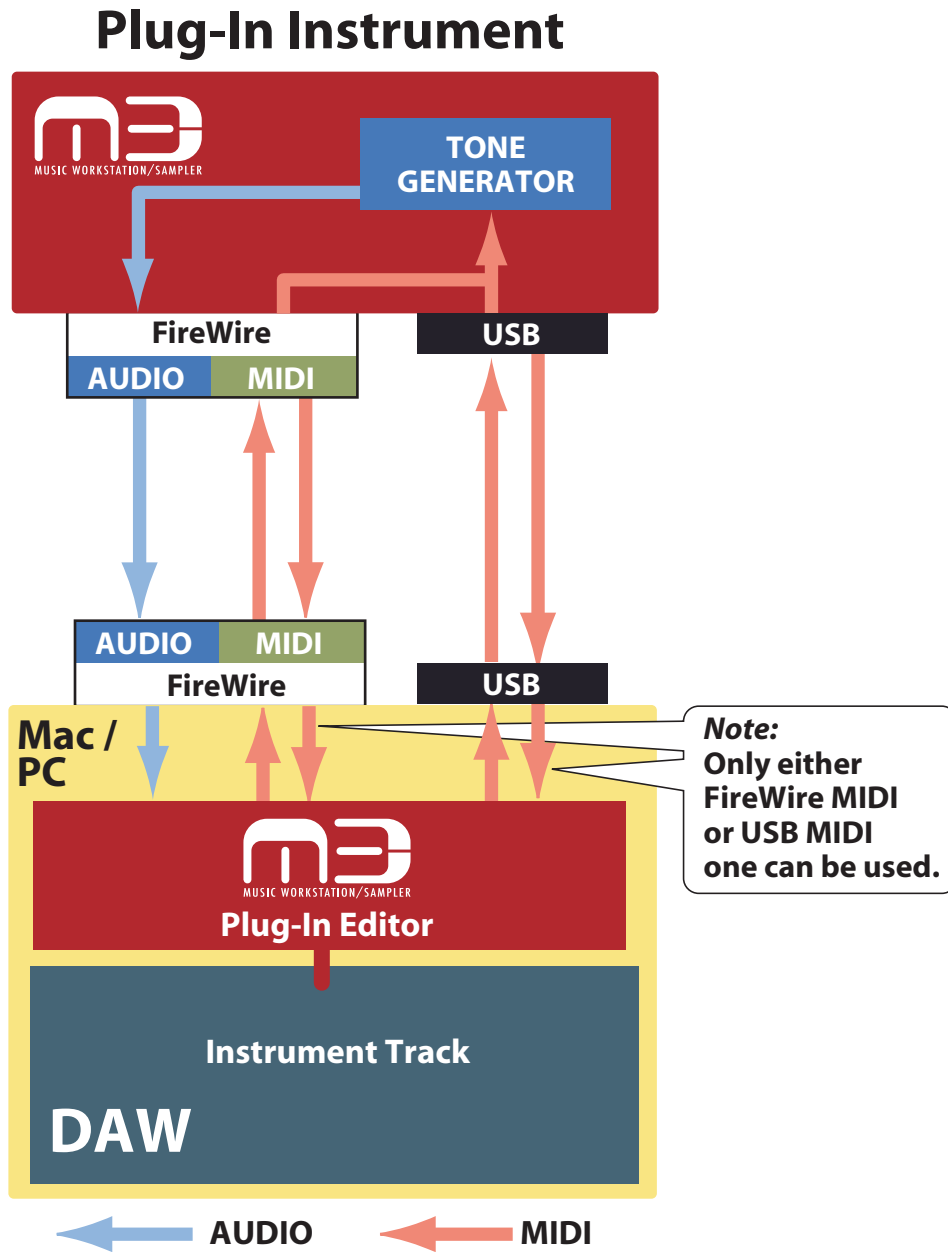
In all formats, this will be named "M3 Plug-In Editor." It will be a plug-in that supports multi-channel audio output.

VSTiAudio In 0 ch. / Out 6 ch., MIDI IN & MIDI OUT

AudioUnit Instrument (Mac only)Audio In 0 ch. / Out 6ch, MIDI IN

RTAS InstrumentAudio in 0 ch. / Out 6 ch., MIDI IN

Note: For details on multi-channel audio output settings, refer to the owner's manual of your DAW.



Plug-In Effect

In all formats, this will be named “M3 Plug-In Fx.” It will operate as a stereo-in/stereo-out effect according to the specifications for a track insert effect in your DAW.

VSTAudio In 2 ch. / Out 2 ch., MIDI IN & MIDI OUT
 AudioUnit (Mac only)Audio In 2 ch. / Out 2 ch., MIDI IN
 RTAS.....Audio In 2 ch. / Out 2 ch., MIDI IN

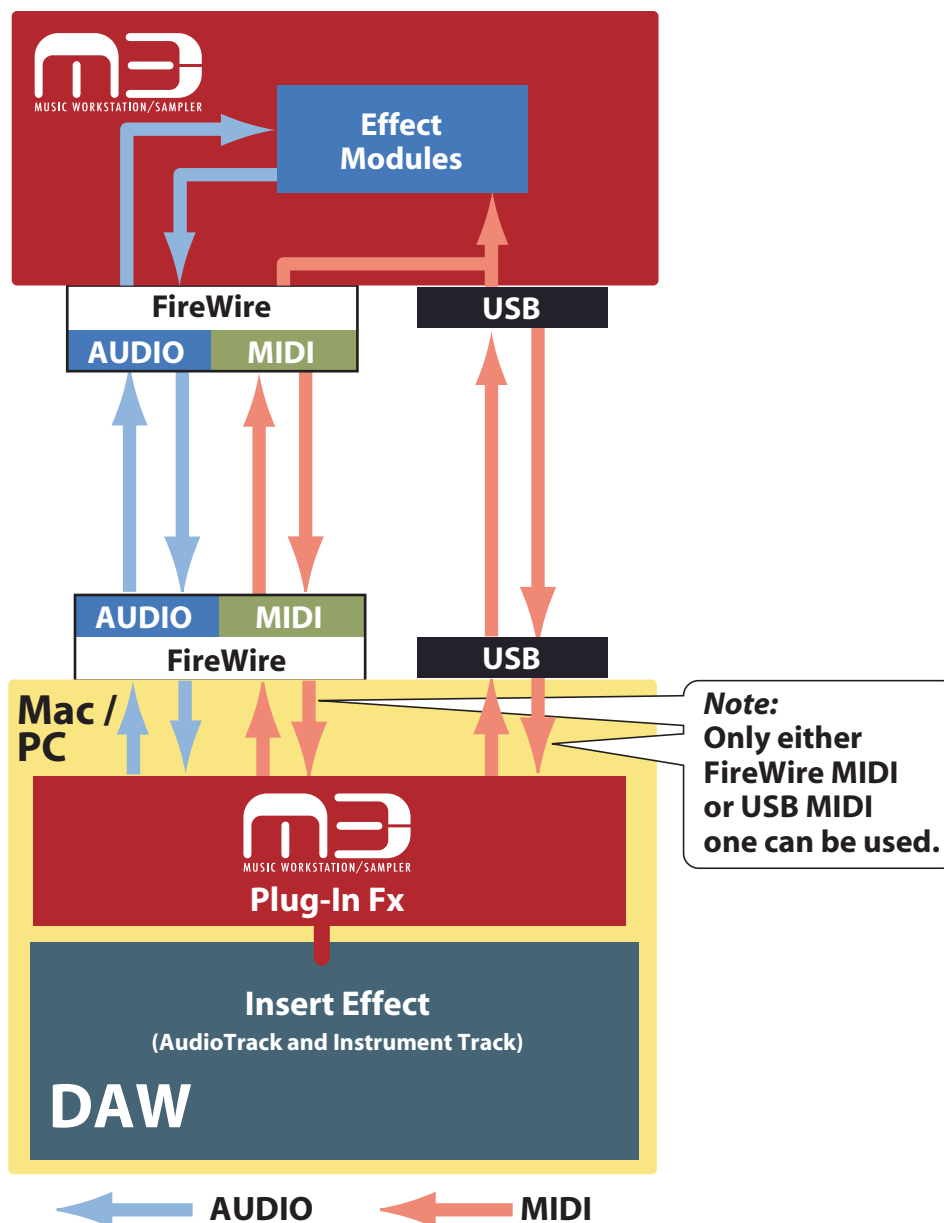
Note: The Global mode Software Setup parameter “Audio Output” specifies which of the M3’s outputs will be assigned to the 2 channel audio output of the plug-in effect (p.59).

Note: The MIDI OUT of the VST or VSTi is determined by the “Send M3’s MIDI Out data to the host application” setting located in Global mode Software Setup (p.58).

Note: The Plug-In Fx settings are also used when you sample in the digital domain by sending audio to the M3 via FireWire and using the M3’s sampling function.

⚠ You cannot run the M3 Plug-In Editor and the M3 Plug-In Fx at the same time.

Plug-In Effect



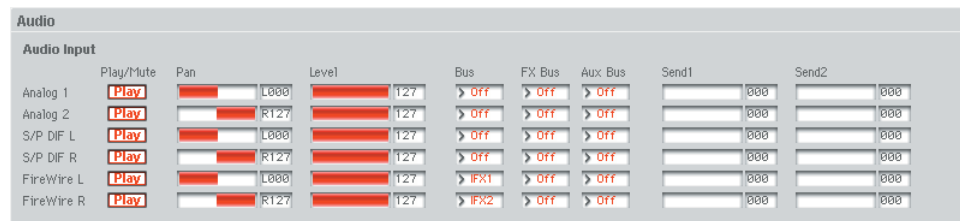
If you're using the M3 Plug-In Fx or M3 Editor (stand-alone version) as an effect processor, you must not only assign the audio data to the M3 Plug-In Fx (in your DAW or in the Audio Device settings of the stand-alone version), but must also enable FireWire for the M3's audio input.

Connecting FireWire to the M3's effect input

- Input Mixer settings

These settings are made individually for Program, Combination, and Sequencer mode. If the "Use Global Setting" parameter is Off in the Play/Audio Input tab of each mode, make these settings in the Audio Input tab.

If "Use Global Setting" is On, make these settings in the Audio Input section of the Basic/System tab in Global mode.



In this example, we will assign the FireWire L/FireWire R signal to the M3's internal buses.

Bus Select: The FireWire signal will be directly mixed to the internal bus.

FX Bus: The FireWire signal will be input to the FX Bus 1/2 of the effect. Choose this setting for the modulator input of the 156:Vocoder effect program, etc.

Send1/Send2: The FireWire signal will be input to the Send bus of MFX1/MFX2.

Connecting FireWire to the M3's EXB-RADIUS option

If you want to use the FireWire input as the Audio In oscillator or as the vocoder input, make the following settings.

Turn off the FireWire input in the Input Mixer.

Set the Audio In Source parameter Audio Inputs to FireWire L/R.



For details on enabling the FireWire audio input, refer to the M3 owner's manual.

Host application settings

⚠ The settings of your host application include settings for the audio input/output device used by the host application. Do not assign the M3 audio to these settings. The M3 Plug-In Editor will use the M3 audio, so if you set the host application to use the M3 audio at the same time, the audio signal will be looped, possibly damaging the speakers etc. that are connected to your computer. Never use the M3 audio as the audio setting for your host application. Also, it's a good idea to make audio settings for your host application before you start up the M3 Plug-In Editor. (An exception to this is Pro Tools LE, which uses its own dedicated audio device.)

The following material explains how to start up the M3 Plug-In Editor in your host application and make the appropriate settings for it to operate properly. Please proceed to the specific explanation for the system you're using.

Apple - Logic Pro 7

Using the M3 as a plug-in instrument

- 1 Start up Logic Pro.
- 2 Open the mixer window, and click Input in the I/O settings of an instrument track. From the list, choose Stereo>AU Instruments>KORG>M3 Plug-In Editor. L/R will be output to this track.



Audio Instrument Track

- 3 If you want to use multi-channel output, click Input in the I/O settings of the instrument track, and from the list, choose Multi-channel >AU Instruments>KORG>M3 Plug-In Editor. L/R will be output to this track.
Next open the Environment window. If you're using the Individual outputs, create an AUX track in the Environment window, click Input in the I/O settings, and select the Individual channels for Instrument>M3 Plug-In.
If you've specified the AUX track as mono, you'll be able to choose from M3 Plug-In 3/4/5/6.
If you've specified the AUX track as stereo, you'll be able to choose M3 Plug-In 3-4 or M3 Plug-In 5-6.



Using the M3 as a plug-in effect

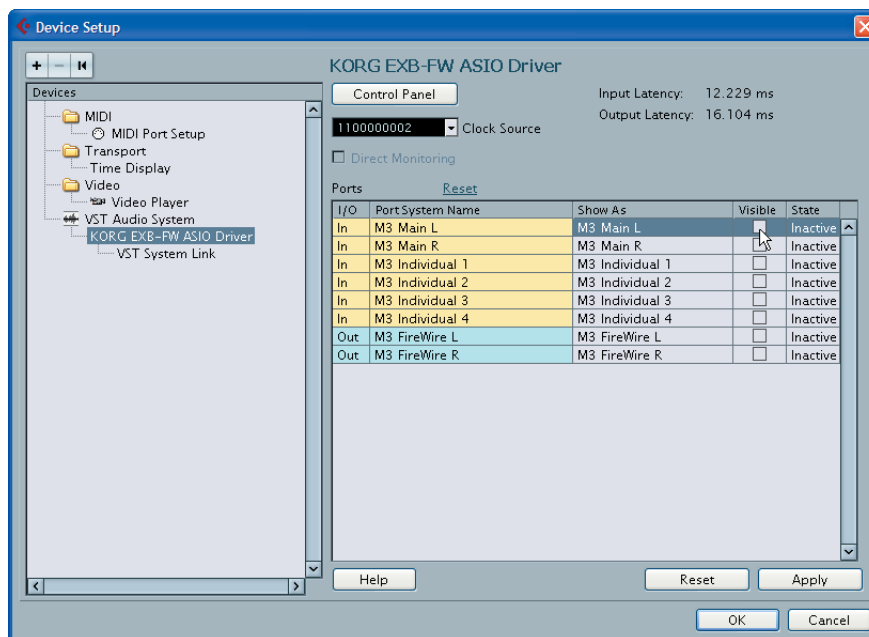
- 1 Start up Logic Pro.
- 2 Open the window that shows the desired track, click the Inserts box for that track, and from the list choose Stereo (or Monaural -> Stereo) >Audio Units>KORG>M3 Plug-In Ex.



Steinberg - Cubase 4

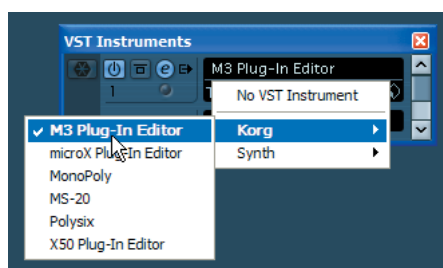
- ▲ Start up Cubase 4, and from the menu choose “Devices” -> “Device Setup.” In VST Audio System, make sure that M3 (KORG EXB-FW ASIO Driver) is not selected as the audio device, regardless of the driver type.
If you’re using only the ASIO driver, you can make the following settings to prevent the M3 from being accidentally specified.

- 1 Start up Cubase 4.
- 2 From the Devices menu, choose Device Setup. In VST Audio System, select the KORG EXB-FW ASIO Driver as the ASIO Driver. Then clear the Visible checkmarks for all of the M3 I/O ports shown in the KORG EXB-FW ASIO Driver setting.

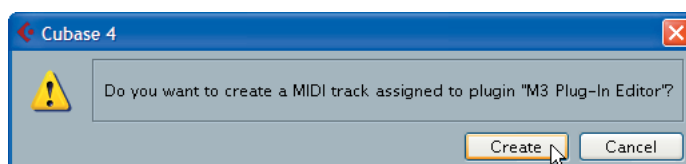


Using the M3 as a plug-in instrument

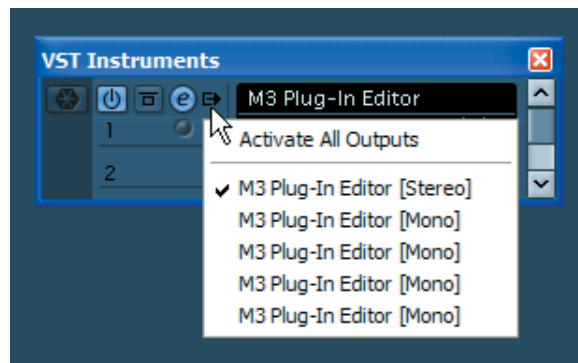
- 1 Start up Cubase 4 and open a session.
- 2 In the VST instrument window, start up “M3 Plug-In Editor.”



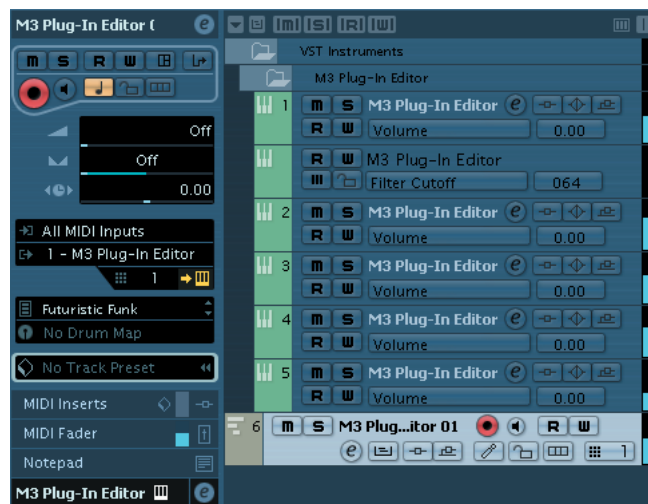
- 3 You can also create a MIDI track at this time. Press the [Create] button to create a MIDI track and automatically assign the M3 Plug-In Editor to that MIDI track.



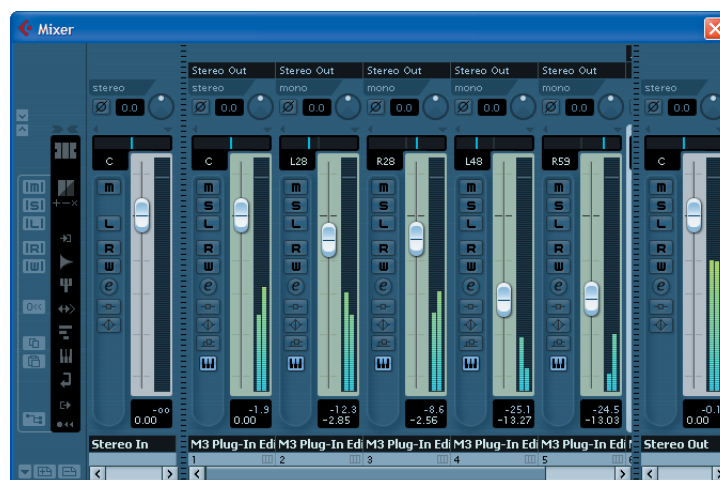
- 4 If you want to use multi-channel output, click the input channel icon in the VST Instruments window and check the output channels that you want to use, or click “Activate All Outputs” to activate all output channels. The [Stereo] at the top corresponds to Main L/R, and the following four [Mono] items correspond respectively to Individual 1/2/3/4.



- 5 These settings will create a track for each channel.

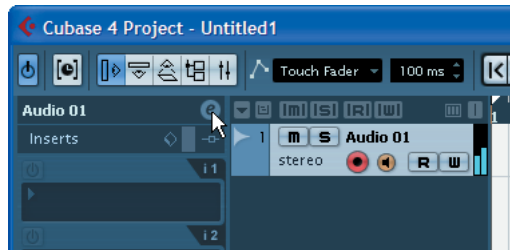


- 6 In the Mixer window, specify the output destination, level, and pan for each track.

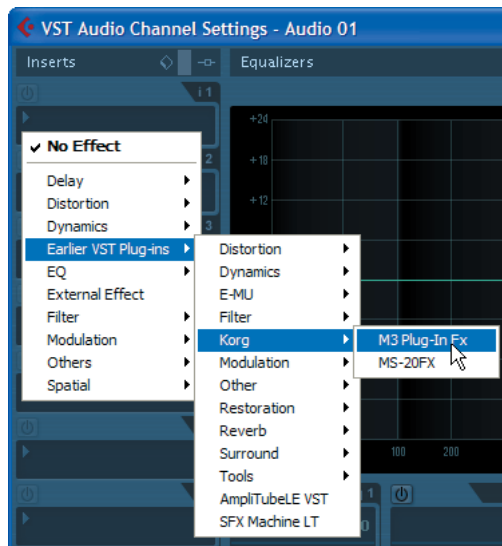


Using the M3 as a plug-in effect

- 1 Start up Cubase 4 and open a session.
- 2 Create an audio track.
Click the “Edit Channel Settings” button of the desired track to open the Audio Channel Settings dialog box.



- 3 In the Inserts settings box, choose “M3 Plug-In Fx.”



Ableton - Live 6

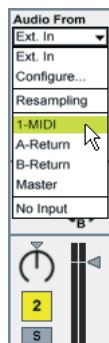
- 1 Start up Live, and from the menu choose "Option" -> "Preferences" -> "Audio," and verify that M3 (KORG EXB-FW ASIO Driver) is not selected as the audio device, regardless of the driver type.

Using the M3 as a plug-in instrument

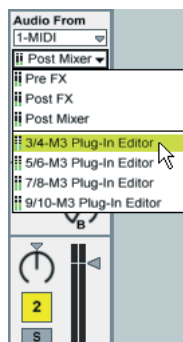
- 1 Start up Live 6 and open a Live set. Choose View -> Session.
- 2 Open the Plug-in Devices browser. From the KORG folder, drag "M3 Plug-In Editor" and drop it onto the MIDI track you're using. The editor will start up. Audio outputs L/R will be input to Master. In the MIDI track view, verify that "M3 Plug-In Editor" is running.



- 3 If you want to use multi-channel output, create an audio track. In the Audio From field of the audio track, select the MIDI track for which "M3 Plug-In Editor" started up.



- 4 As the audio track's routing point, you'll be able to select Individual output. Select the "M3 Plug-In Editor" output that you want to input to the audio track. From top to bottom, the choices will be Individual 1/2/3/4 (each is a mono output).

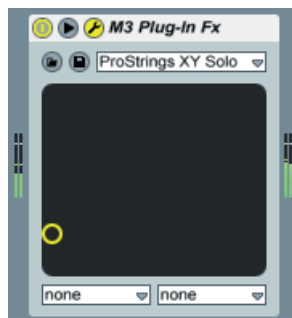


- Turn each Monitor "In" setting ON, and you'll be able to hear the M3's audio signal.



Using the M3 as a plug-in effect

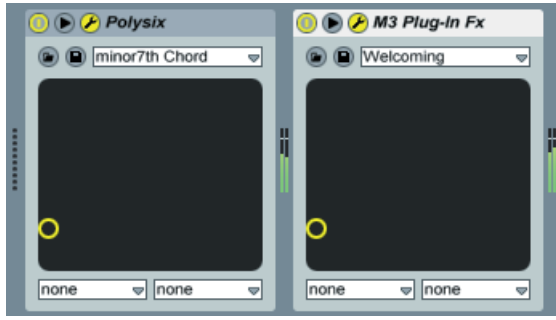
- Start up Live 6 and open a Live set. Choose View -> Session.
- Open the Plug-In Devices browser. From the KORG folder, drag "M3 Plug-In Fx" and drop it onto the track in which you want to use it as an audio effect.
 - To use the M3 Plug-In Fx in an audio track
 - Drop M3 Plug-In Fx onto the audio track in which you want to use it.



Turn the Monitor "In" ON, and you'll hear the M3's effect signal.



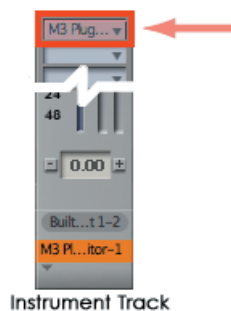
- To use the M3 Plug-In Fx in a MIDI track to which a VSTi is assigned
 - Drop M3 Plug-In Fx onto the MIDI track.
 - This lets you apply the M3 Plug-In Fx effect to the audio signal of the VSTi.



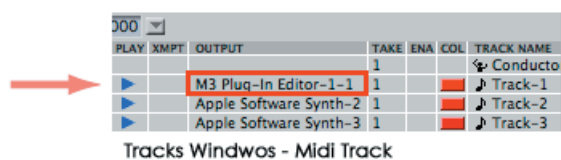
MOTU - Digital Performer 5

Using the M3 as a plug-in instrument

- 1 Start up Digital Performer 5.
- 2 Create an instrument track. Add M3 Plug-In Editor (stereo).
The audio output L/R will be input to this track.

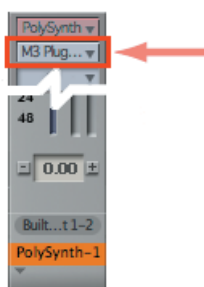


- 3 Create a MIDI track. Select "M3 Plug-In Editor" as the OUT for the MIDI track.



Using the M3 as a plug-in effect

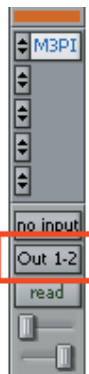
- 1 Start up Digital Performer 5.
- 2 Click the insert effect box of the track into which you want to insert the effect, and select the M3 Plug-In Fx (stereo or mono to stereo) from the list.



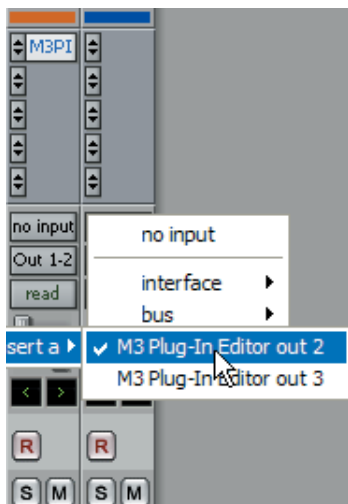
Digidesign - Pro Tools LE 7

Using the M3 as a plug-in instrument

- 1 Start up Pro Tools LE 7, and open a session.
- 2 Create an instrument track, and choose "M3 Plug-In Editor" from the multi-channel plug-in Instruments list. It will start up.
Audio output L/R will be input to Output 1-2.

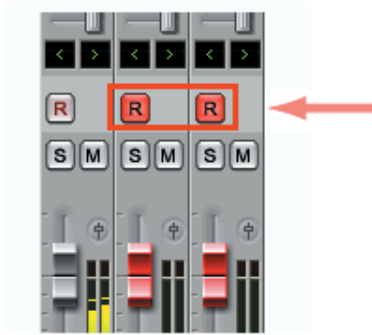


- 3 If you want to use multi-channel output, create an audio track. For the audio track's IN, choose "plug-in" -> "M3 Plug-In Editor Insert a" -> "M3 Plug-In Editor out 2." The Individual output 1/2 will be input to this track.



- 4 Create another audio track in the same way. For the audio track's IN, choose "plug-in" -> "M3 Plug-In Editor Insert a" -> "M3 Plug-In Editor out 3." The Individual output 3/4 will be input to this track.

-
- 5 If you want the Individual output to be input to the audio track, turn the REC button ON so that you can hear the M3's audio signal.



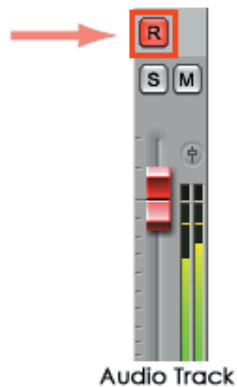
Using the M3 as a plug-in effect

- 1 Start up Pro Tools 7 LE, and open a session.
- 2 Create an audio track, and start up "M3 Plug-In Fx" from the multi-channel plug-in Others list. Then select the source that will be input to that track's IN, and select the output bus etc. that will be the output destination for that track's OUT. Make routing settings within the M3 so that the FireWire audio input will be input to the M3's effect.



Audio Track

- 3 Turn the REC button ON so that you can hear the M3's effect signal.



Audio Track

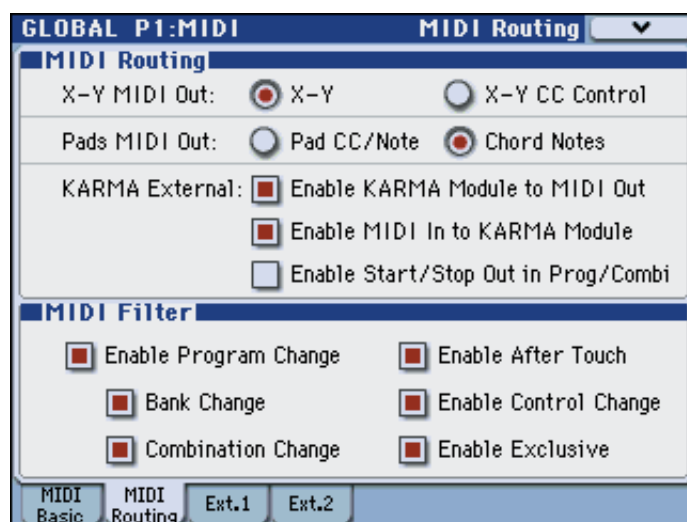
Connections without using a FireWire cable (connection via USB cable)

M3 setup

If you want to use the M3 Editor with the M3 connected to your computer via USB, you must make sure that you have finished installing and setting-up the KORG USB-MIDI Driver before you start up the M3 Editor.

🔗 For details on installing the KORG USB-MIDI Driver, refer to the Operation Guide.

- 1 Use a USB cable to connect the M3's USB B connector to the USB port of your computer.
- 2 In the M3's Global mode, make sure that MIDI Filter "Enable Exclusive" is on (the check box should be checked). (The factory setting is on.)



M3 Editor (stand-alone version) setup

Start up the M3 Editor and verify that it's operating correctly.

Windows

Starting up the M3 Editor

Navigate to the "KORG" folder -> "M3" folder, and double-click the "M3 Editor.exe" icon.

The "KORG" folder is in the location you selected during installation. By default it's in the "Program Files" folder.

Alternatively, you can start up the editor by clicking the taskbar [Start] button -> [All Programs] and then pointing to "KORG"- "M3"- "M3 Editor."

Mac OS X

Starting up the M3 Editor

Navigate to the "Applications" folder - "KORG" folder - "M3" folder, and double-click the "M3 Editor" icon.

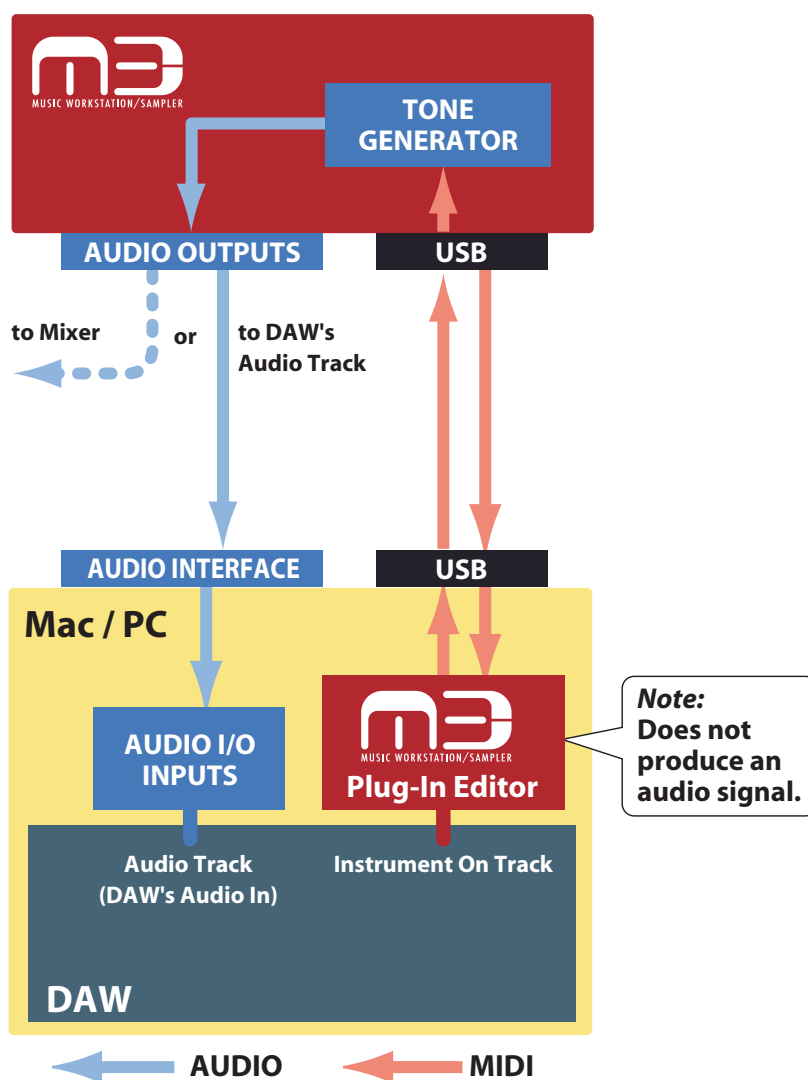
Setting up the M3 Plug-In Editor

This section explains how to set up the M3 Plug-In Editor in your host application and make settings so that it will operate correctly. Make settings as appropriate for your system and setup.

About the M3 Plug-In Editor

The M3 Plug-In Editor sends and receives only parameter data to and from the M3. Unlike typical plug-in instruments, the M3 Plug-In Editor does not produce an audio signal. Your M3 will output audio signals when the M3 Plug-In Editor sends it MIDI messages.

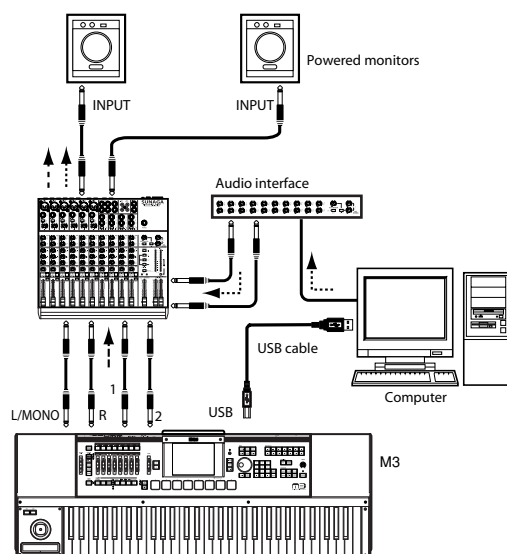
If you want to send the M3's audio signal to an audio track of your host application and use it in conjunction with a plug-in effect etc., refer to "Using your host application to control the M3's audio signal" (p.33)



Note: Because the M3 Plug-In Editor does not handle audio signals, you can't insert a plug-in effect into the channel of the track in which the M3 Plug-In Editor is inserted, or send its audio signal via a send or bus.

Using an external mixer to control the M3's audio signal

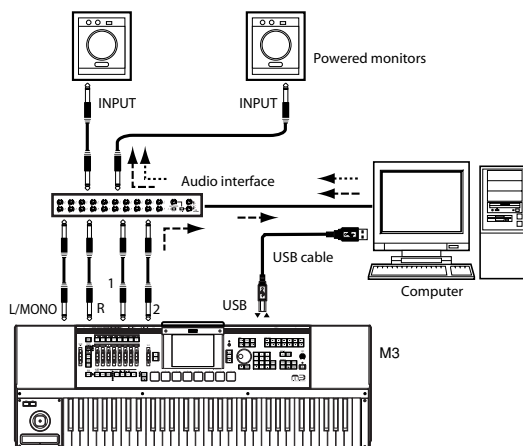
If you want to mix the M3's audio signals with the audio signals sent from your host application via your audio interface, or with audio signals from another sound module, make connections as shown below.



Note: If you're using only the module portion of the M3 (M3-M) as a sound module, you'll need to connect a master keyboard (master keyboard → M3)

Using your host application to control the M3's audio signal

If you want to apply a plug-in effect to the M3's audio signal, or to control the M3's audio signal in your host application along with other audio tracks, connect the M3 to your audio interface and route the audio signal into your host application. Refer to the example explanations for various popular host applications on the following pages.



Note: For details on creating audio tracks, MIDI tracks, and plug-in instrument tracks, and on how to perform operations and make settings in your host application, refer to the host application's owner's manual.

Note: If you're using only the module portion of the M3 as a sound module, you'll need to connect a master keyboard (master keyboard → M3)

Host application settings

The following material explains how to start up the M3 Plug-In Editor in your host application and make the appropriate settings for it to operate properly. Please proceed to the specific explanation for the system you're using.

Apple - Logic Pro 7

- 1 Start up Logic Pro 7.
- 2 Create an audio instrument track, and start up "M3 Plug-In Editor."



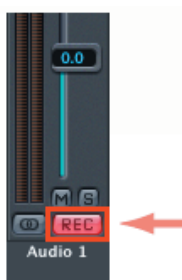
Audio Instrument Track

- 3 To route the M3's audio signal into Logic Pro 7, create an audio track or an audio AUX track. As the I/O source for that track, select the audio interface input to which you've connected the M3's audio signal.



Audio Track

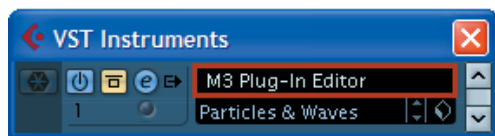
- 4 If you're routing the M3's audio signal to an audio track, turn the REC button on so that you can hear the audio signal.
If you are routing the M3's audio signal to an audio AUX track, this setting is not necessary.



Audio Track

Steinberg - Cubase 4

- 1 Start up Cubase 4 and create a project.
- 2 In the VST Instruments window, start up "M3 Plug-In Editor."



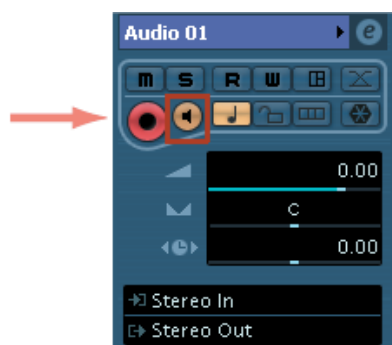
- 3 Create a MIDI track. As the output of that MIDI track, choose "M3 Plug-In Editor" which you started up in the VST Instruments window.



- 4 To route the M3's audio signal to Cubase 4, create an audio track. As the input of the track, select the audio interface input to which you've connected the M3's audio signal.



- 5 Turn the Monitor button on so that you can hear the audio signal.

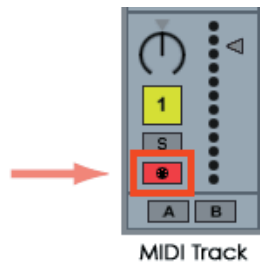


Ableton - Live 6

- 1 Start up Live 6, and choose "View"->"Session View."
- 2 From the plug-in device browser, drag and drop "M3 Plug-In Editor" onto the session view. This will create a MIDI track with "M3 Plug-In Editor" started up. Verify that "M3 Plug-In Editor" is running in the MIDI track view.



- 3 Press the arm button so that the MIDI input from the external source will be sent to "M3 Plug-In Editor."



- 4 To route the M3's audio signal to Live 6, create an audio track. As the input of the audio input/output section, select the audio interface input to which you've connected the M3's audio signal.

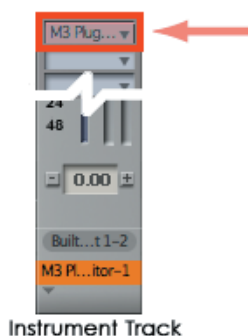


- 5 Set the Monitor setting to "In" so that you can hear the audio signal of the M3.

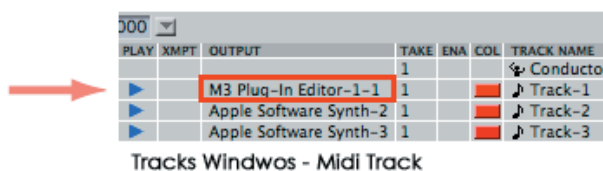


MOTU - Digital Performer 5

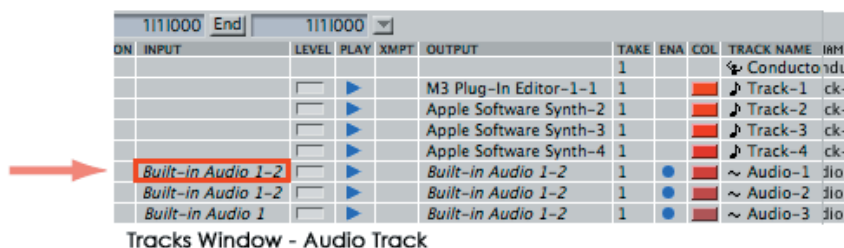
- 1 Start up Digital Performer 5
- 2 Create an instrument track. Start up “M3 Plug-In Editor.”



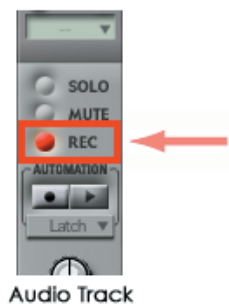
- 3 Create a MIDI track. Choose “M3 Plug-In Editor” as the output of that MIDI track.



- 4 To route the M3’s audio signal to Digital Performer 5, create an audio track or an AUX track. As the input of that track, select the audio interface input to which you’ve connected the M3’s audio signal.



- 5 If you’re routing the M3’s audio signal to an audio track, turn the REC button on so that you can hear the audio signal.
If you are routing the M3’s audio signal to an AUX track, this step is not necessary.



Digidesign - Pro Tools LE 7

- 1 Start up Pro Tools LE 7, and open a session.
- 2 Create an instrument track, and from the multi-channel plug-in Instruments list, choose "M3 Plug-In Editor" to start it up.

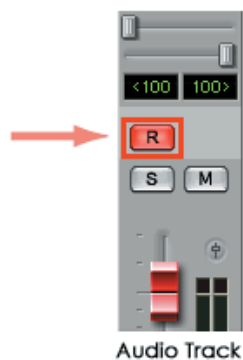


- 3 To route the M3's audio signal to Pro Tools LE 7, create an audio track or an AUX input track. As the input, select the audio interface input to which you've connected the M3's audio signal.



- 4 If you're routing the M3's audio signal to an audio track, turn the REC button on so that you can hear the audio signal.

If you are routing the M3's audio signal to an AUX input track, this setting is not necessary.



Other host applications.

Please refer to the instructions for a host application that has a similar structure to the host application you're using, and also refer to the owner's manual for the specific host application that you are using.

About MIDI timing

If you experience irregularities in MIDI timing, make settings so that MIDI messages are sent directly to the M3 rather than being routed through the M3 Plug-In Editor. In this case, choose the M3's SOUND port as the MIDI OUT destination of the MIDI track in your host application, so that the MIDI messages will be sent directly to the M3.


Note: For details on how to create a MIDI track and specify the MIDI OUT destination for that MIDI track, refer to the host application's owner's manual.

Basic functions and operation

Start-up

M3 Editor

- From the “KORG”-“M3” folder, start up “M3 Editor.”

Note: When you start up the editor, the M3 programs and other settings can be loaded automatically. ( p.57 “Preferences”)

- ⚠ Don't touch the keyboard or the mouse of your computer while data is being sent or received.


Windows


Access the “KORG” folder from the taskbar via [Start]-[All Programs].

Mac OS X

The “KORG” folder is located in the “Applications” folder.

M3 Plug-In Editor

For details on starting-up the M3 Plug-In Editor, refer to the section for your host application in “Setting up the M3 Plug-In Editor” ( p.32).


Note: When you start up the editor, the M3 programs and other settings can be loaded automatically. ( p.57 “Preferences”)

- ⚠ Don't touch the keyboard or the mouse of your computer while data is being sent or received.

About the Preload data

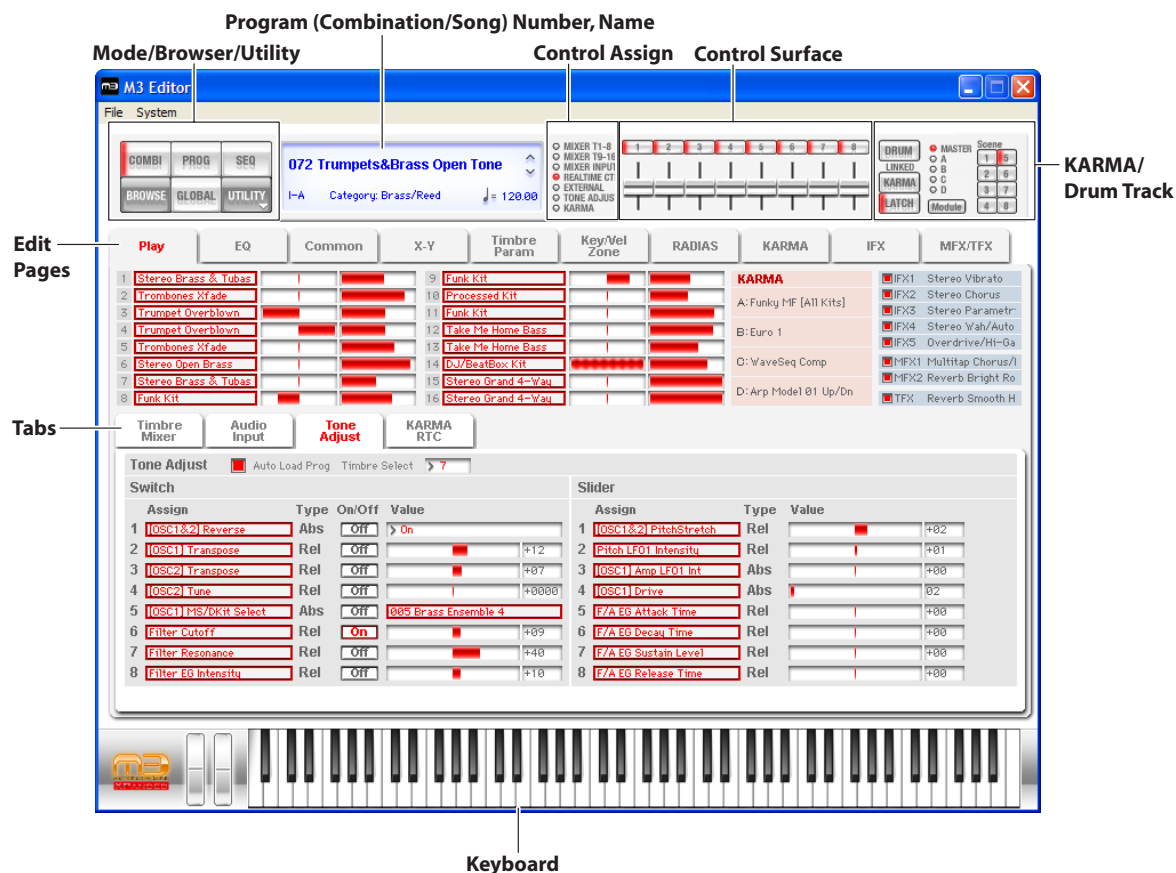
When you install the M3 Editor, the factory preload data “PRELOAD.M3all” will be copied to the “My Documents” folder (Windows version) or the “Applications”-“KORG”-“M3” folder (Mac version). This is the sound data that is saved in the M3 when it is shipped from the factory.

If you have the M3-M/61/73, use the PRELOAD.M3all preload data. If you have the M3-88, use the PRELOAD88.M3all preload data.

To shorten the startup time, you can make settings so that this data file is loaded automatically when the M3 Editor starts up, so that you won't need to read the data from the M3. ( p.57 “Preferences”)

Items in the screen

A screen like the following will appear when you start up the editor. (This illustration here shows the Combination mode screen.)



Connection indicator (M3 logo):

This indicates the connection status between the M3 Editor/M3 Plug-In Editor and the M3.

- Red



The M3 Editor/M3 Plug-In Editor and the M3 are connected via MIDI/USB.

This is the status shown when using an M3 not equipped with the EXB-FW option; or an M3 that is equipped with the EXB-FW option, but connected only via a USB cable and without using the FireWire cable.

- Yellow



The M3 Editor/M3 Plug-In Editor and the M3 are connected via FireWire. This is the status shown when using an M3 equipped with the EXB-FW option connected for audio and MIDI to the M3 Editor/M3 Plug-In Editor via a FireWire cable.

In this case you can use audio input/output via FireWire.

The connection is via only the FireWire cable, or via both the FireWire cable and the USB cable.

- No color



The M3 Editor/M3 Plug-In Editor is not connected to the M3.

Mode (COMBI, PROG, SEQ, GLOBAL)/Browser (BROWSE)/Utility (UTILITY):

Here you can select Program, Combination, Sequencer, or Global mode. The browser will display the names of the programs, combinations, and songs that are in the M3. UTILITY lets you view and execute the utility commands that are available for the page you've selected. This is where you write (save) data.

Program (Combination/Song) Number, Name:

This area shows the number and name of the program, combination, or song. Use the up/down arrows at the right side to change programs, combinations, or songs.

Edit Pages, Tabs:

Use these to select the page that you want to edit.

Control Assign:

Here you can change the function of the eight control surface sliders and switches.

Control Surface:

Here you can control the tone, volume, or KARMA settings depending on the currently selected control assign functions.

KARMA/Drum Track:

Here you can make settings for the KARMA function and the drum track, and select the KARMA module and scene that will be controlled from the control surface when the control assign setting is KARMA.

Keyboard:

This section consists of an 88-note keyboard, a pitch bend wheel, and a modulation wheel. You can click the keyboard to play notes, and even play a glissando by dragging over the keyboard to the left or right. Operate the pitch bend wheel and modulation wheel by dragging them upward or downward.

Operating procedure

Selecting a mode

- Click the button to select the corresponding mode.
 - COMBI:** Select, play, and edit combinations.
 - PROG:** Select, play, and edit programs.
 - SEQ:** Select, play, and edit sequencer songs.
 - GLOBAL:** Edit the software setup, global settings, MIDI settings, controller CC assignments, scale, category names, drum kits, and RADIAS formant motions.

Selecting programs, combinations, and songs

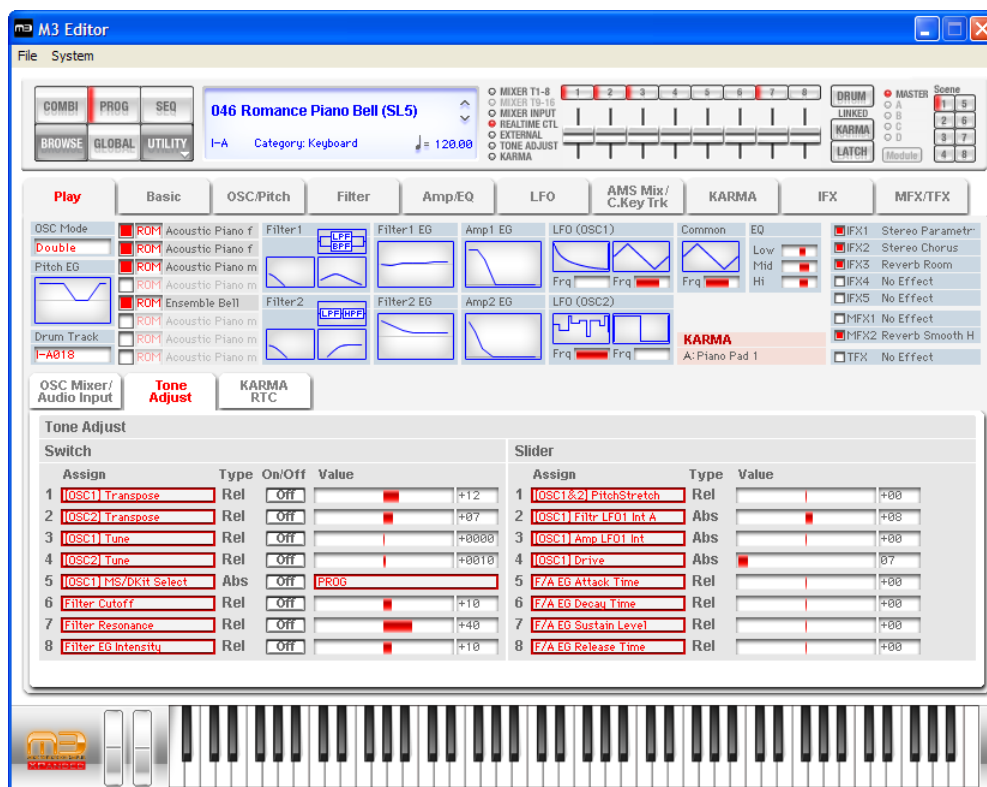
- Click the [BROWSE] button to display the sound list, and then select a program (or combination or song). The items you can select will depend on the mode.
- Depending on whether you choose Category Select or Bank Select, the programs (or combinations) in the sound list will be arranged by category or by bank.

Auditioning programs, and selecting a program to edit

- 1** Click the [PROG] mode button to enter Program mode.
- 2** Click the [BROWSE] button to view the program list.
- 3** Click any program to select it. Play the keyboard of the M3 and you will hear that program.
- 4** When you've decided on a program to edit, click the [OK] button to load that program.

Simple program editing

- 1 In the Edit Pages area, click the [Play] button to view the Play page.
- 2 In the upper line of the screen, choose [TONE ADJUST] in the selector located at the left of the control surface.
- 3 In the set of tabs located in the center of the screen, choose [Tone Adjust].



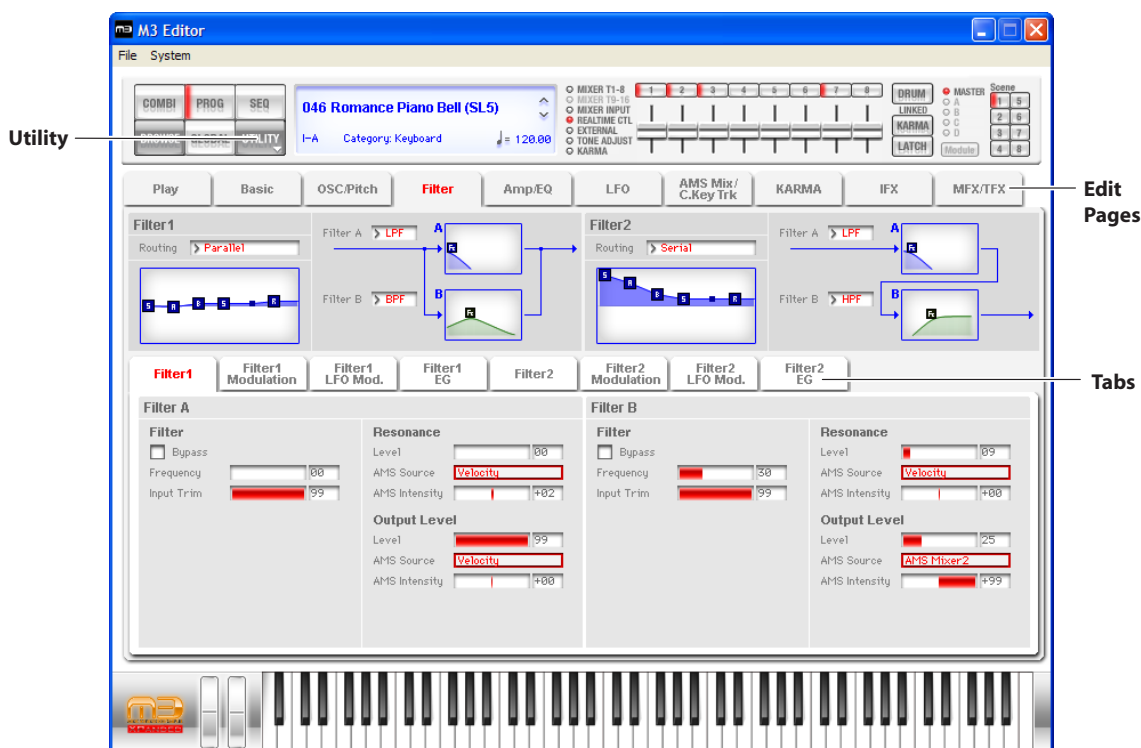
- 4 Use the eight sliders and switches of the control surface to modify the sound. The parameters are shown in the Tone Adjust tab in the lower half of the screen. For an explanation of these parameters, refer to the M3 parameter guide (PDF).
- 5 At the right of the control surface sliders, turn on the KARMA button and DRUM button, and play the keyboard or pads on the M3 itself; a performance generated by the KARMA function and the drum track will begin playing. To change the drum pattern that is playing, change the Pattern No. in the Basic/Drum Track page. To change the GE program used by KARMA, change the GE in the KARMA page.
- 6 The upper part of the Play page shows the current values of the most important parameters for Program mode. This overview area shows the parameters organized by section. By clicking a section name (such as "Pitch EG" or "Filter1 EG") you can jump automatically to the page/tab for editing the corresponding parameters.

Selecting pages and tabs

When you want to perform detailed editing, you can switch to other pages and tabs to access the desired parameters.

Global mode is divided into separate pages where you can edit drum kits, arpeggio patterns, and scales (temperaments). Select the desired page (or tab), and edit the settings.

- To select a page, click the tab for the desired edit page.
- To move between tabs within a page, select one of the tabs located in the center of the window.



Selecting a parameter and editing the value

- Use the mouse to edit the items in the display
For example you can change the shape of the EG by using the mouse to drag the rectangles shown in the EG graphic.

Note: For details on the parameters, refer to the included “Parameter guide” (PDF version).

Selecting and executing utility functions


The utility functions are various commands available in each page. The available utility commands will differ depending on the page. These commands also let you save or load the edited or created data on your computer, and to import system exclusive data. Click the [UTILITY] button and choose a command from the menu that appears.

Note: For details on utility commands that are specific to the editor, refer to “Functions provided on the M3” (p.49).

- 1 From the [UTILITY] button, choose the command that you want to execute.
- 2 Make the necessary settings, and click OK to execute.

Writing (saving)

If you want to keep any of the edits you have made, you must write (save) them.

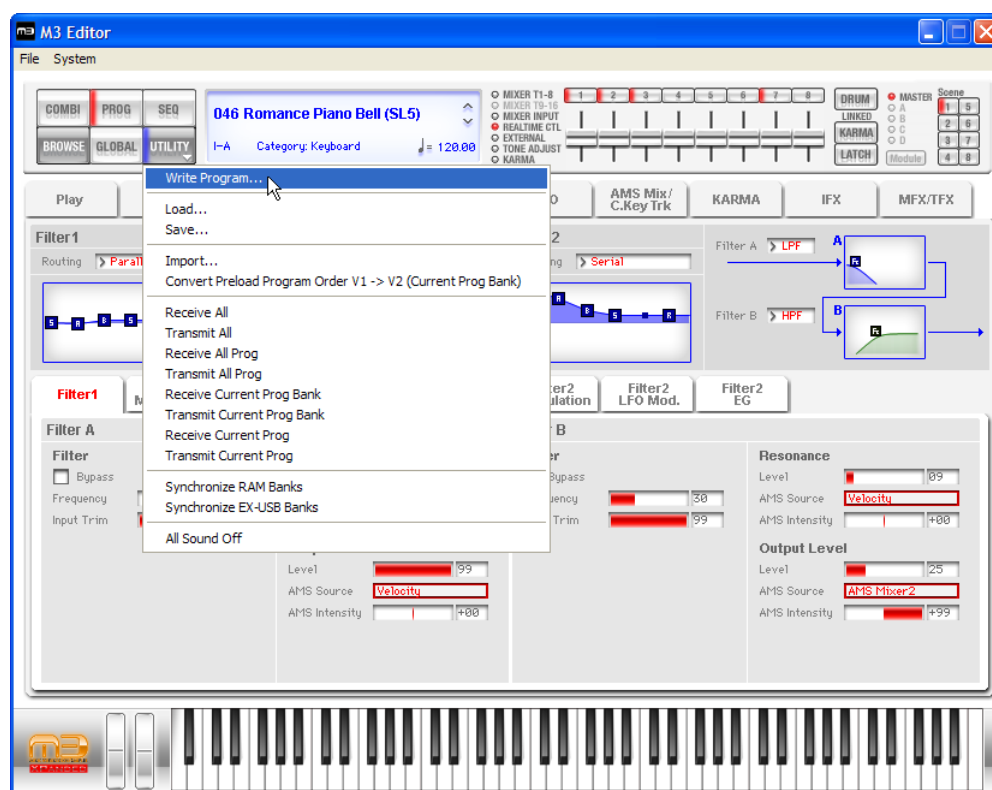
 This Write operation will save the edited settings on the M3.

If you select another program or close the application before you execute the Write operation, the content you had been editing will be lost. The same applies to combinations or songs.

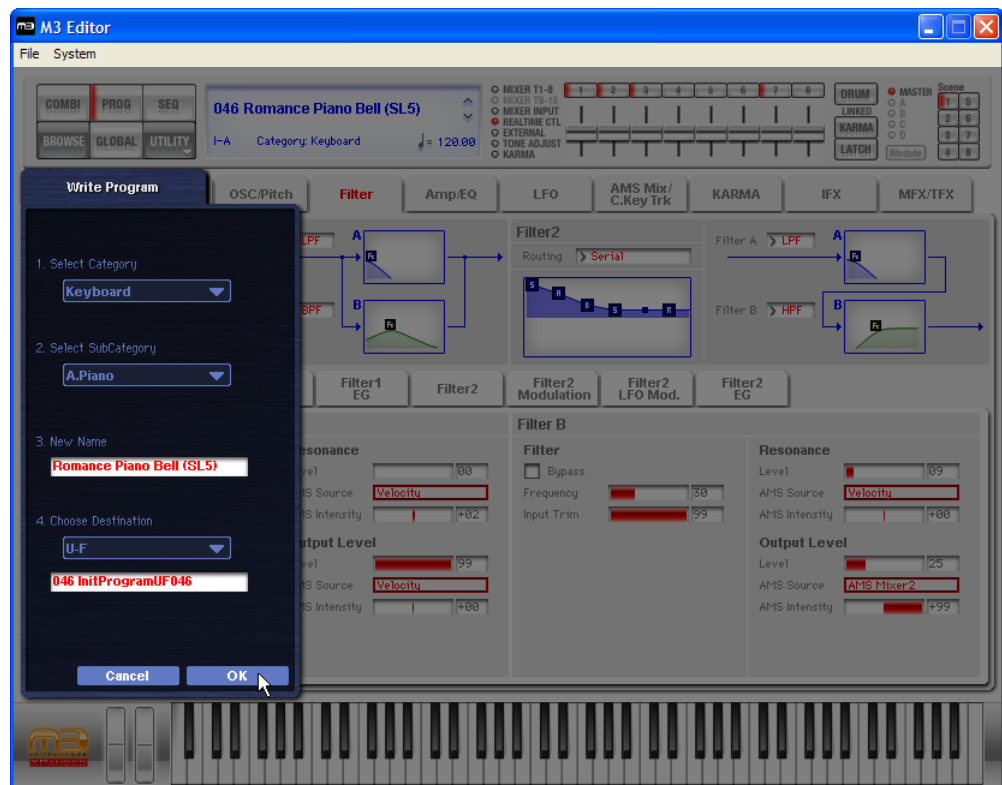
Global mode settings are maintained until you close the application, but your changes will be lost when you close the application. If you click the [DUMP] button located in the upper right of each page in Global mode, the current settings will be saved in the M3. (Some pages do not have the [DUMP] button.)

As an example, here's how to write a program that you've edited in Program mode.

- 1 Click [UTILITY] to access the utility menu.
- 2 From the menu list, choose [Write Program].



3 Specify the program name, category, and save destination, and click the [OK] button.



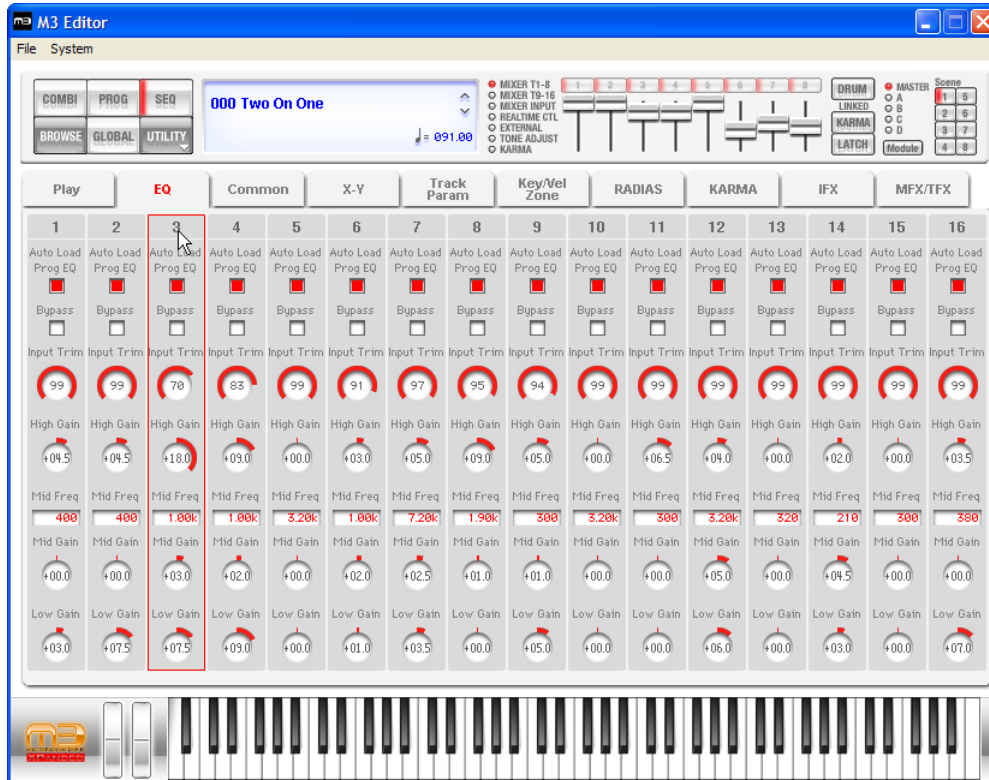
Note: If you execute a menu command (such as Swap Oscillator) on the M3 itself, the data in the Editor and the data in the M3 may lose synchronization. In this case, execute a UTILITY menu command (such as Receive Current Combi) in the Editor to receive a data dump for the current data.

Track selection

You can select the current track in Sequencer mode. The current track is common to all pages of Sequencer mode.

To select a track, click the mouse on the number of that track. When a track is selected as the current track, a red border will appear around that track.

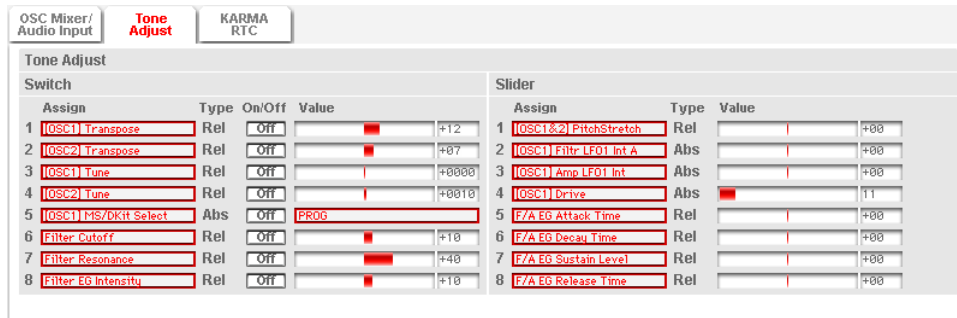
Note: There are some pages in which you can't select the current track. In pages where you can select the current track, a red border is shown around the track that is chosen as the current track.



Functions provided on the M3

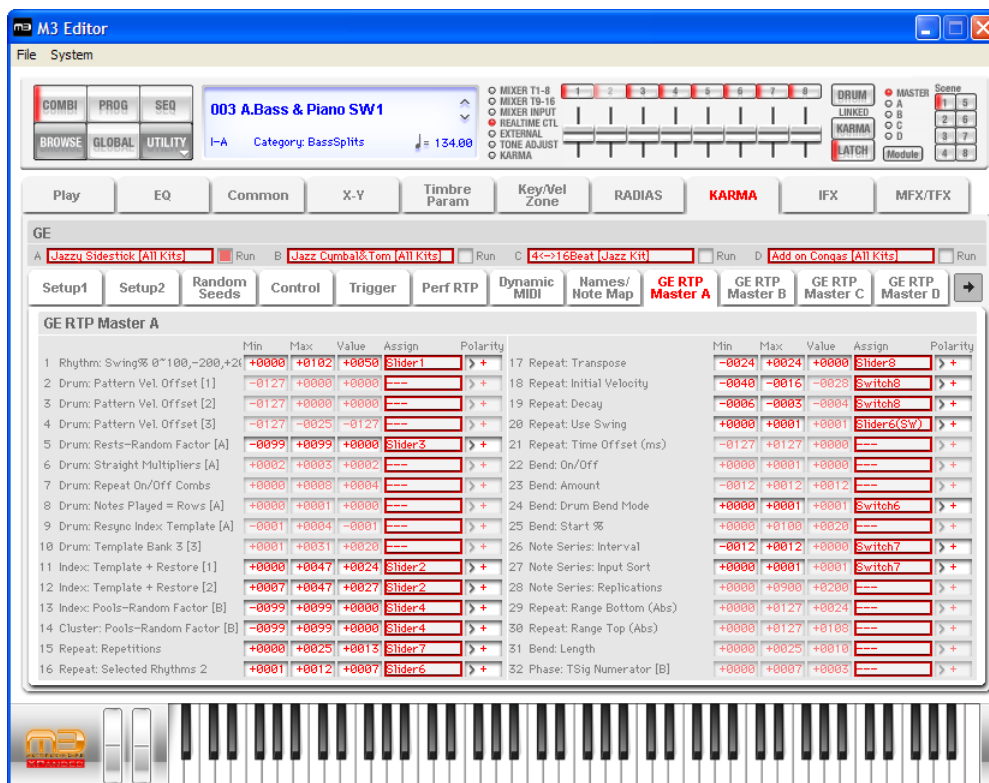
Tone Adjust

This function provides an easy way to edit the sound of programs, the programs used within a combination, or the programs used by song tracks.



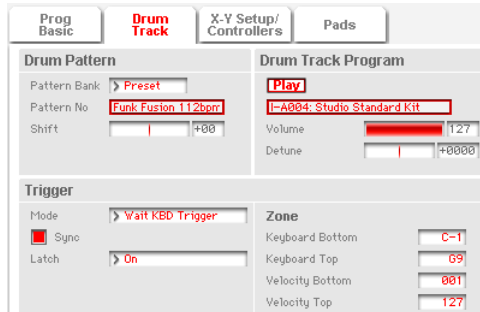
KARMA

In the M3 Editor window, you can perform essentially all editing operations that can be performed on the M3 itself, including turning the KARMA function on/off, scene changes, editing the realtime parameters, and editing the GE parameters.



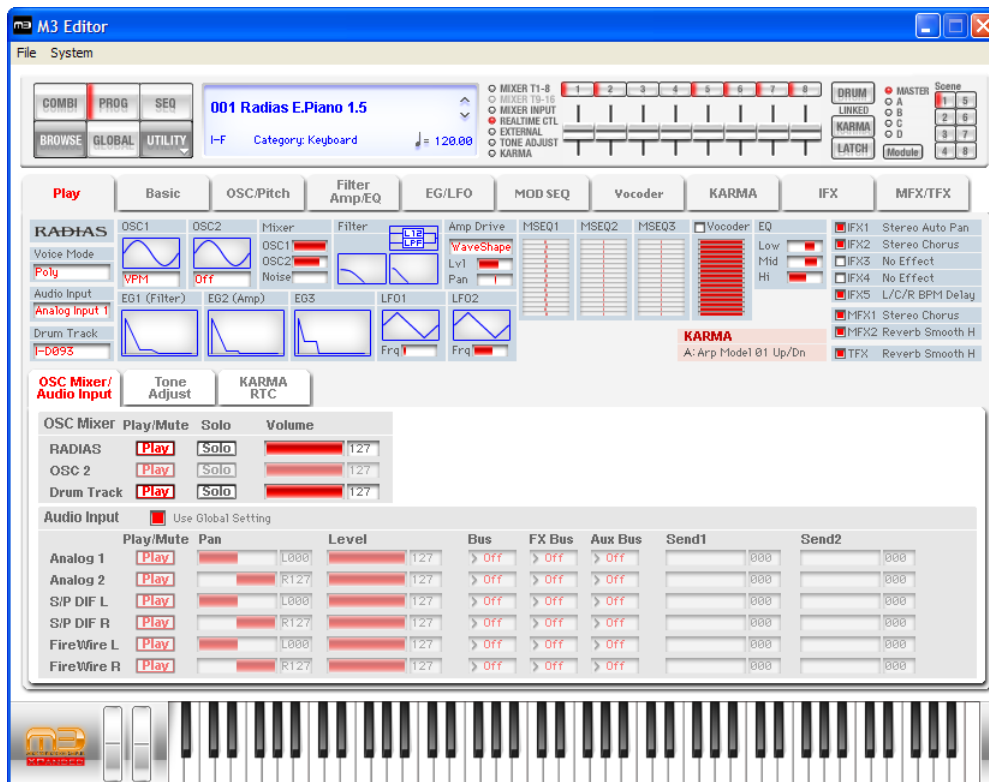
Drum Track

The Drum Track is a pattern sequencer dedicated to playing drum patterns. You can use it in any mode: Program, Combination, or Sequencer. In the M3 Editor you can turn the drum performance on/off, select drum patterns, select drum programs, and edit the settings of the assigned timbre – all in realtime.

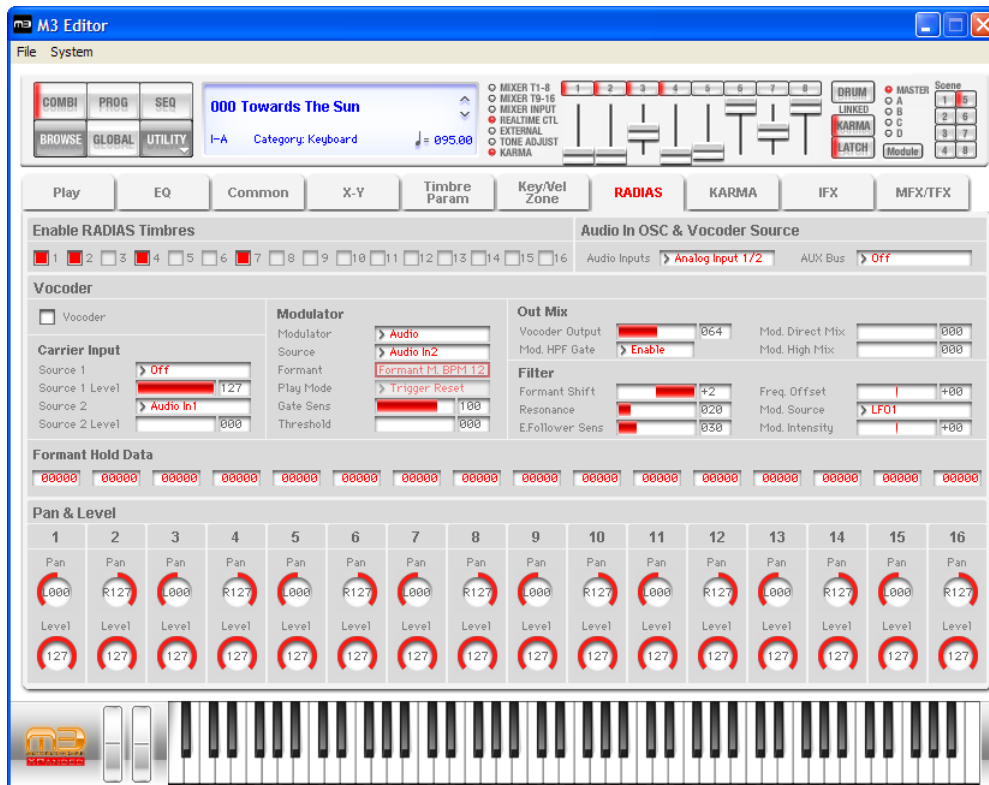


RADIAS (when the EXB-RADIAS is installed)

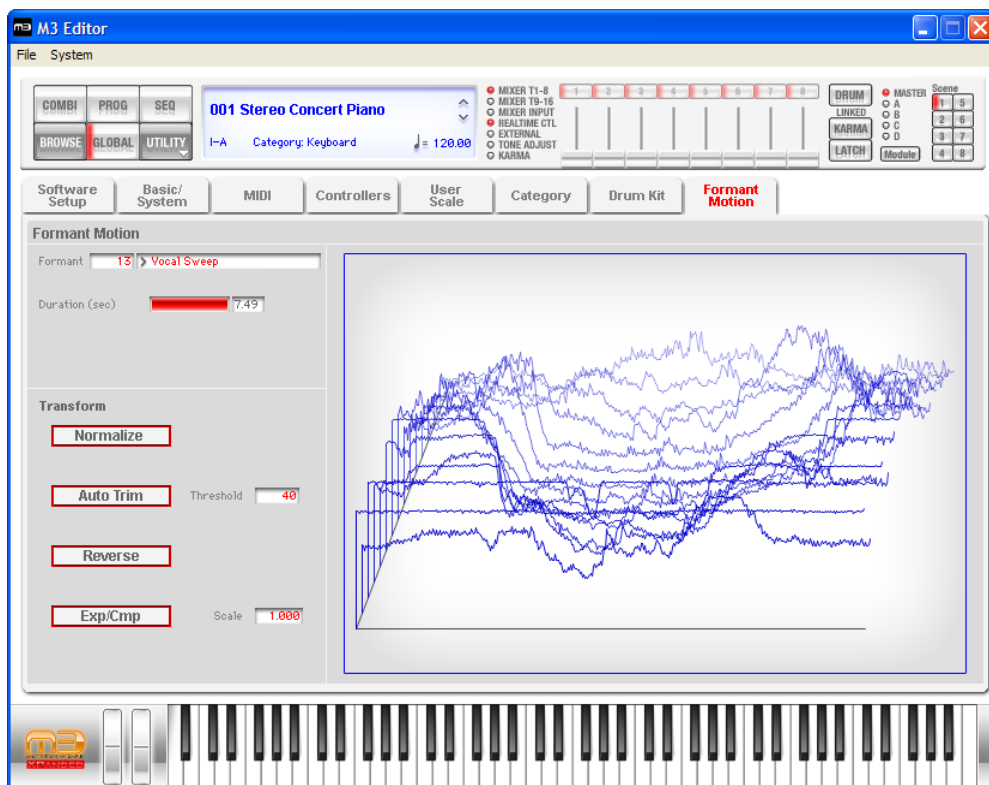
If the EXB-RADIAS option is installed in the M3, you'll be able to edit RADIAS programs using the M3 Editor. Bank INT-F is dedicated to RADIAS programs. You can also assign desired user banks to be dedicated to storing RADIAS programs.



In Combination mode and Sequencer mode, you will also be able to use a special screen to edit the vocoder section separately from the sound generator.

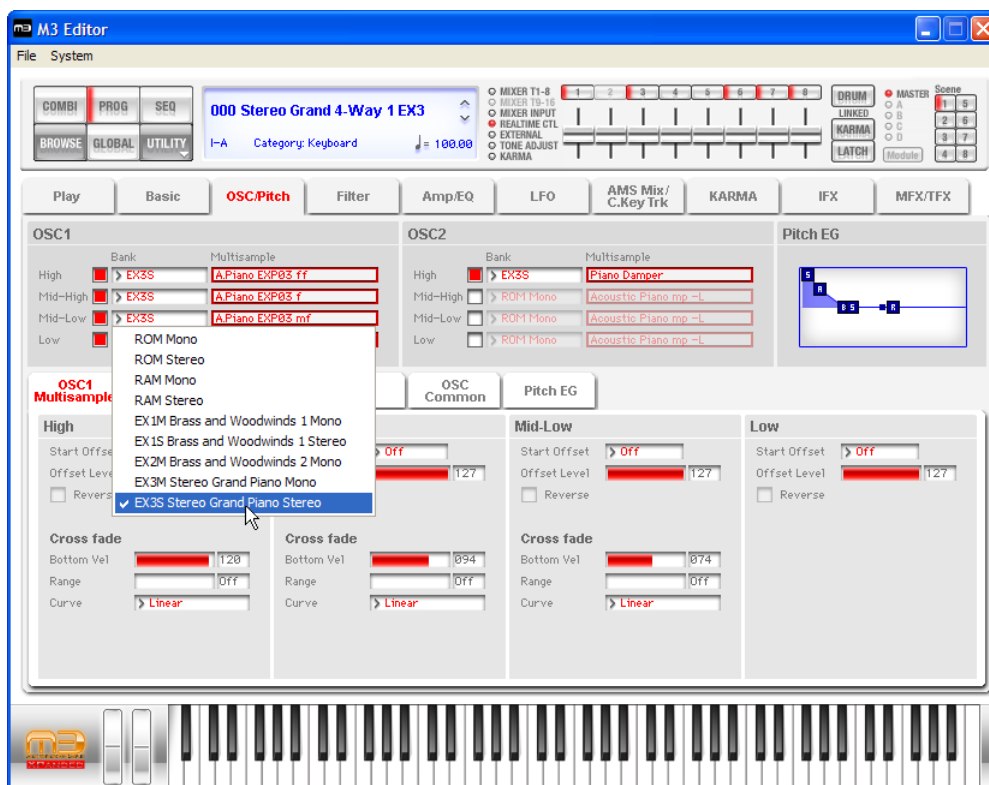


In Global mode, you can edit formant motion data for the RADIAS vocoder and save it in the M3's internal memory. (This cannot be done using the M3 itself.)



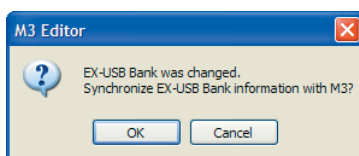
EX-USB (when using the PCM expansion option)

If you've used the PCM expansion option to add multisamples to the M3, the added multisamples will also be accessible from M3 Editor.



When you load or unload the KEP file (multisamples) of the PCM expansion option on the M3 itself, M3 Editor can synchronize with the M3 so that the multisample names will match those in the M3.

If the “Sync EX-USB Banks automatically” (p.57) setting is selected in the Global mode Software Setup section, M3 Editor will automatically add or delete the multisample names when you load or unload a KEP file (multisamples) of the PCM expansion option on the M3 itself. If this setting is not selected, a message box will appear each time you load or unload the KEP file (multisamples), asking whether you want to synchronize the multisample names.



If you choose OK, the multisample names will immediately be synchronized with the M3. If you choose Cancel, the multisample names will not be synchronized, but you can synchronize with the M3 itself at any time by executing the UTILITY menu command Synchronize EX-USB Banks.

If you also loaded the PCG file at the same time that you loaded the KEP file, use the UTILITY menu to receive a data dump for the Programs/Combinations of the corresponding bank so that they will be synchronized with the M3 itself.

Note: The EX-USB support functions (the UTILITY menu “Synchronize RAM/EX-USB Banks” and the Global mode Software Setup page “Sync EX-USB Banks automatically” commands) are shown only when connected to an M3 that supports EX-USB.

User GE

The User GEs added to the KARMA functionality by M3 System V2.0 can also be used in M3 Editor.

In Global mode Software Setup, if the “Sync KARMA User GE at startup” setting (p.57) is selected, synchronization will be performed with the M3 itself when M3 Editor starts up, and the User GE data will be obtained.

Even if this setting is not selected, you can obtain the User GE data from the M3 itself by selecting the KARMA tab in Combination mode or Program mode and executing the UTILITY menu command Synchronize KARMA User GE (p.55).

Regardless of this setting, executing the User GE load operation on the M3 itself while M3 Editor is running will automatically cause the editor to synchronize with the M3 and obtain the User GE data.

Functions specific to the editor

These are functions that are not found on the M3, and are available only from the editor (M3 Editor, M3 Plug-In Editor).

Utility commands

Load

Loads editor data that was previously saved on the computer.

- ▲ The M3 XPANDED and the original M3 contain different sets of PCM data (sound data). When you load a data file that was created on the original M3 (the old PCM), it will automatically be converted appropriately for the new PCM.

Save

Saves data from the editor to your computer as a file.

- ▲ All data is saved as data for the M3 XPANDED. Even if the data you loaded had been created by the original M3, it will be saved as M3 XPANDED data. It is not possible to save data as original M3 data.

Note: These functions load or save the data as dedicated files for the editor application.

Receive All

Receives all data from the M3 data into the editor.

Note: The sample data of Sampling mode and the sequencer performance data of Sequencer mode are excepted.

Transmit All

Transmits all data in the editor to the M3 and writes it into internal memory.

Receive All Combi/Current Combi Bank

Receive All Prog/Current Prog Bank

Receive SEQ

Receive Global Data/Drum Kit/Formant Motion/Current Formant Motion

Receive the corresponding data from the M3 into the editor.

Note: Receive Formant Motion/Current Formant Motion can be used only if the EXB-RADIAS is installed.

Transmit All Combi/Current Combi Bank

Transmit All Prog/Current Prog Bank

Transmit SEQ

Transmit Global Data/Drum Kit/Formant Motion/Current Formant Motion

Transmit the corresponding data from the editor to the M3 and writes it.

Note: Receive Formant Motion/Current Formant Motion can be used only if the EXB-RADIAS is installed.

Receive Current Combi/Current Prog/1 SEQ

Receive the respective data from the M3 into the editor.

Transmit Current Combi/Current Prog/1 SEQ

Transmit the respective data from the editor to the M3. This operation does not write the data into the M3's internal memory. You'll need to write (save) it if necessary.

Synchronize KARMA User GE

This command loads the M3's KARMA User GE data (User GE bank U-A through U-H) into the editor. This command is available only in Combination mode and Program mode when the KARMA tab is displayed.


Synchronize RAM Banks

Loads the multisample names from the M3's RAM bank into the editor. This allows you to view the multisample names in the editor when you've selected RAM Mono/RAM Stereo from the OSC Bank list.

Synchronize EX-USB Banks

Loads the multisample names from the M3's EX-USB-PCM bank into the editor. This adds the EX-USB-PCM bank to the OSC Bank list, allowing you to select multisamples from the EX-USB-PCM bank.

Note: These Receive and Transmit commands use KORG SysEx MIDI Dump to send or receive data, or to synchronize the data between the M3 and the software.

 Don't touch the keyboard or the mouse of your computer while data is being sent or received. Also, don't touch the panel switches or the keyboard of the M3.

Import


This command loads M3 or M50 PCG data into the editor.

Importing of the following data is supported: PCG files from the M3 XPANDED (new PCM), PCG files from the original M3 (old PCM), PCG files of the M50, and files with an extension of [.M50all] that were created by M50 Editor.

Convert Preload Program Order V1 -> V2

This command converts the assignment of Preload Programs from M3 V1 order to M3XP V2 order in user's custom Combinations, Songs and Programs (Drum Track assignments only). The conversion applies to the currently selected Program or Combination bank, or all Songs in the M3 Editor depending on what mode you are in.

Note: After the conversion process, the M3 Editor sends the converted bank data back to the M3 automatically.

 The command should be applied only once to target data. There is no mechanism to detect whether the target data has been converted or not. If you run the command on data that has already been converted, it will mess up the Program assignments. Be sure to back-up your data before making any changes.

Save as Default

Writes (saves) the Global mode Software Setup settings of the editor as the default settings that will be used when you start up the editor.

Note: These utilities can be selected only in the editor's Global mode Software Setup page.

Select Auto Load File

In the Software Setup tab, use "Load data file automatically" to select the desired file.

Note: Refer to "Load data file automatically."

All Sound Off

Depending on the host application, "hung" notes may have sometime occurred while operating the host's functions.

If this symptom occurs, please execute the "All Sound Off" command.

Preferences

Global mode Software Setup lets you specify the default settings that the M3 Editor will use when it starts up. This setting is saved when you execute the UTILITY command Save as Default, and will be remembered the next time you start up.

Total Recall & Data Sync Setting

<input checked="" type="checkbox"/> PROG	<input type="checkbox"/> I-A	<input checked="" type="checkbox"/> U-A	<input checked="" type="checkbox"/> COMBI	<input type="checkbox"/> I-A	<input checked="" type="checkbox"/> U-A
<input type="checkbox"/> I-B	<input type="checkbox"/> I-B	<input checked="" type="checkbox"/> U-B	<input type="checkbox"/> I-B	<input type="checkbox"/> U-B	<input type="checkbox"/> U-B
<input type="checkbox"/> I-C	<input type="checkbox"/> I-C	<input type="checkbox"/> U-C	<input type="checkbox"/> I-C	<input checked="" type="checkbox"/> U-C	<input type="checkbox"/> U-C
<input type="checkbox"/> I-D	<input type="checkbox"/> I-D	<input checked="" type="checkbox"/> U-D	<input type="checkbox"/> I-D	<input type="checkbox"/> U-D	<input type="checkbox"/> U-D
<input type="checkbox"/> I-E	<input type="checkbox"/> I-E	<input type="checkbox"/> U-E	<input type="checkbox"/> I-E	<input type="checkbox"/> U-E	<input type="checkbox"/> U-E
<input type="checkbox"/> I-F (RADIAS)	<input type="checkbox"/> I-F	<input type="checkbox"/> U-F	<input type="checkbox"/> I-F	<input type="checkbox"/> U-F	<input type="checkbox"/> U-F
<input type="checkbox"/> U-G	<input type="checkbox"/> U-G	<input type="checkbox"/> U-G	<input type="checkbox"/> I-G	<input type="checkbox"/> U-G	<input type="checkbox"/> U-G
<input checked="" type="checkbox"/> SEQ					
<input checked="" type="checkbox"/> Drum Kit			<input checked="" type="checkbox"/> Sync EX-USB Banks automatically		
<input type="checkbox"/> Formant Motion			<input checked="" type="checkbox"/> Sync KARMA User GE at startup		

Here you can specify the editor data that will be saved and loaded as part of the song data by your DAW software. This setting lets you save only the data you need. When the M3 Editor starts up, the types of data that you've checked here will also be loaded automatically from the M3 that's connected to your computer. (In other words, this data will be synchronized.) Since a data dump requires a certain amount of time, you may wish to shorten the startup time by using the Load Data File Automatically function instead of this function, or by using the UTILITY command Load to load a previously-saved data file into the M3 Editor.

If you have selected the "Sync EX-USB Banks automatically" setting, the multisample names of all EX-USB-PCM banks loaded into the M3 will be loaded automatically when M3 Editor is started.

If this setting is selected, M3 Editor will automatically synchronize to the M3 when you load or unload EX-USB-PCM data on the M3 itself. If this setting is not selected, M3 Editor will not synchronize automatically, but a message box will inform you that a change has occurred.

If the "Sync KARMA User GE at startup" setting is checked, all banks of the M3's KARMA User GE data will be automatically loaded when M3 Editor is started. If you don't use User GE data, there's no need to synchronize this (i.e., no need to check this setting).

Note: The Total Recall & Data Sync Setting function is available only with the M3 Plug-In Editor.

Load data file automatically

Auto Load File
<input checked="" type="checkbox"/> Load data file automatically at starting up
Data file: C:\Program Files\KORG\M3V1\MyData.M3a11

When the M3 Editor starts up, the data file you specify here will automatically be loaded into the editor. After this process is completed, the data you checked in Total Recall & Data Sync Setting will be loaded via data dump.

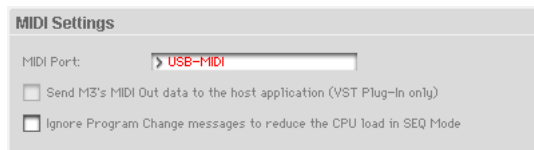
Auto Local Control

Others
<input checked="" type="checkbox"/> Auto Local Control

This setting automatically sets the M3's Local Control setting to the appropriate state when you start up the editor. We recommend that you normally leave this parameter on. The M3's Local Control setting will be reset to its original state when you close the editor.

MIDI Settings

Here you can make settings for MIDI connections between the M3 Editor and the M3.



MIDI Port

This selects the connection port for the M3 and M3 Editor. Depending on how the M3 is connected to your computer, the list will show USB-MIDI, FW-MIDI, or both. For either connection, you'll need to have installed the driver. (On the Mac, there's no need to install a FireWire driver.)

- USB-MIDI This is shown if the M3 is connected to your computer via a USB cable. This is a USB 2.0 high speed connection using the KORG USB-MIDI driver.
- FW-MIDI This is shown if the M3 is connected to your computer via a FireWire cable. A single FireWire cable can carry both audio and MIDI. The communication speed is the same 31.25 kbps as a conventional MIDI cable.

Send M3's MIDI Out data to the host application (VST Plug-In Only)

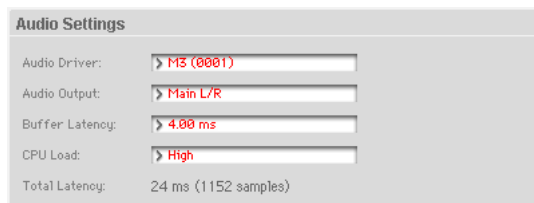
If you turn this option on, the MIDI OUT data of the M3 itself will be sent to the host application as the output of the plug-in instrument.

Short messages are the only type of MIDI messages that can be output. If you're using a host application that is able to receive the MIDI data sent by a plug-in instrument, the MIDI messages generated by the M3's KARMA function can be sent to the MIDI track of a different software synthesizer.

Ignore Program Change messages to reduce the CPU load in SEQ Mode

When you play back a song on the M3 itself in Sequencer mode, the MIDI data transmitted from the M3 will be received by the M3 Editor, and the M3 Editor panel display will be updated according to the received data. However since a program change will cause complex internal processing to be performed within the M3 Editor, this may cause noise to be heard in the audio output if your computer is a relatively low-powered model. In such cases, turn this option on. The M3 Editor will ignore the received program changes only while the M3 itself is playing a song, thus reducing the CPU load.

Audio Settings



Here you can make settings for the audio connection between the M3 Editor and the M3.

Audio Driver

This shows the name of the audio driver that is currently connected between the M3 and the computer.

This will appear only if a FireWire cable is connected between the computer and an M3 that has an EXB-FW installed.

If you don't want to use the audio functionality, you can select "None" to turn off the audio functionality.

-
- Windows “KORG EXB-FW ASIO Driver” is shown.
 - Mac “M3 (****)” is shown (the last four digits of the EXB-FW serial number are shown in the parentheses).

Audio Output

The standalone version and the plug-in effect version (VST) of the M3 Plug-In Fx have a two-channel audio output. This setting lets you choose which of the M3’s six output channels will be sent to the two-channel output. You can choose from three choices: Main L/R, Individual 1/2, or Individual 3/4.

This setting is not available in the plug-in instrument version (VSTi) of the M3 Plug-In Editor. (It is fixed at six-channel multi out.)

- Main L/R. Outputs the audio signals assigned to the M3’s L/R outputs.
- Individual 1/2. Outputs the audio signals assigned to the M3’s Individual 1/2 outputs.
- Individual 3/4. Outputs the audio signals assigned to the M3’s Individual 3/4 outputs.

Buffer Latency (Mac version only)

This sets the audio latency (buffer size) between the M3 itself and M3 Editor (EXB-FW).

A larger value for this setting will make operation more stable, but will increase the latency (audio delay). You can decrease the latency by specifying a smaller value for this setting, but the usable values will depend on your system.

CPU Load

Here you can select the CPU load of the FS converter required for audio processing.

With the Low setting, the CPU load will not be high, but the overall latency will be greater. In contrast, the High setting will cause a greater CPU load, but the overall latency will be less. However, since the CPU load produced by M3 Editor will be greater, operation may become unstable depending on the DAW you’re using. Choose the setting that’s most appropriate for your system.

Total Latency

This indicates the overall latency (audio delay) when using audio in M3 Editor. The latency is shown in units of ms (milliseconds). The value in parentheses is the number of samples calculated using this latency time and the currently specified sample rate.

Cautions

USB connection

If you lose data synchronization with the M3 when starting-up the editor, please check the following points.

If you're using a USB hub, try connecting the M3 directly to a USB port on the computer itself to see whether it will work. You can also try removing all other connected USB devices except for the M3 itself.

When you lose data synchronization, please perform the "Receive All" or "Transmit All" function in the Editor's "UTILITY" menu in order to synchronize the data between the editor and the hardware.

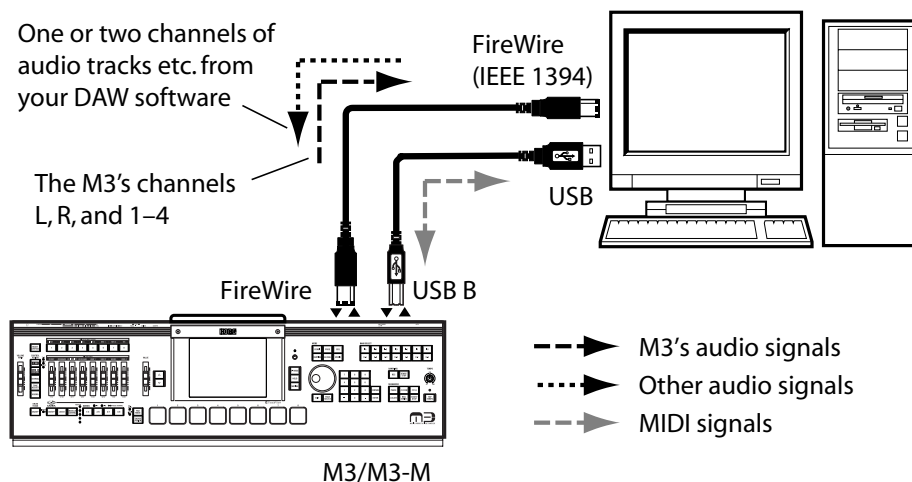
The M3's USB ports support USB 2.0.

Since the M3 supports USB 2.0, we recommend that you connect it to a USB port on your computer that supports USB 2.0, in order to allow high-speed data transfer.

FW-MIDI (FireWire MIDI)

FW-MIDI baud rate

The baud rate of FW-MIDI (a MIDI connection via the FireWire cable) is the same 31.25 kbps as when using a conventional MIDI cable. Since the dump data used by the M3 is large, performing a data dump via FW-MIDI will take a long time if you execute an "all dump." If you're using FW-MIDI, we recommend that you minimize the settings in Total Recall & Data Sync Settings.



Audio

Sampling frequencies supported by the M3 Editor / Plug-In Editor

- The M3 Editor / Plug-In Editor support sampling frequencies of 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, and 192 kHz.
- If a sampling frequency lower than 44.1 kHz (such as 8k–32 kHz) is specified by the external host application, the output of the M3 Editor will be silent.

Sampling frequency setting (sampling rate converter)

The M3 itself operates at an internal sampling rate of 48 kHz. If you've specified a sampling rate other than 48 kHz, the sampling rate converter built into the M3 Editor will operate, converting the data to the appropriate 48 kHz audio data so that audio data can be transferred between the M3 and the computer.

Both the standalone version and the plug-in version will operate at supported sampling frequencies, but at high sampling frequencies, the M3 Editor will consume a significant amount of realtime CPU processing in order to perform the rate conversion. Unless you are using a sufficiently fast computer, we recommend that you use 48 kHz if your application allows 48 kHz recording and playback, since this will minimize the processing load.

About latency

Latency (delay) will occur in audio data that is handled by M3 Editor via EXB-FW.

Latency occurs in the following three locations.

1. When passing audio data between the M3 and M3 Editor
2. When passing audio data between M3 Editor and your DAW
3. In the sampling rate converter built into M3 Editor

For location 1 above, the latency can be adjusted in Windows by opening the KORG EXB-FW ASIO Driver control panel and setting the ASIO buffer depth (p.6 "About the buffer size"). In Mac, go to the M3 Editor's Global mode, choose the Software Setup tab, and in the Audio Settings section, adjust the Buffer Latency setting (p.59).

For location 2 above, the latency is adjusted in the DAW you're using. In the stand-alone version of M3 Editor, you can set this in the Preferences dialog box (p.13 "Audio settings").

For location 3 above, the latency will change depending on the above settings 1 and 2, the sample rate, and the CPU Load setting (p.59) in the Global mode Software Setup tab Audio Settings section.

The overall latency resulting from the total of these three locations is shown as the Total Latency in the Global mode Software Setup tab Audio Settings section.

In order to decrease the overall latency, you'll need to decrease the above three latencies. For 1 and 2 above, this means that you'll want to choose a low value; however, the values that are actually usable will depend on your system, and noise is more likely to occur with excessively low settings.

Regarding 3 above, the M3's sample rate is fixed at 48 kHz, so you can minimize the latency by setting your DAW (M3 Editor) to also run at 48 kHz. You can also reduce the latency by setting "CPU Load" to High in the Audio Settings section, but depending on your system and on the settings for 1 and 2, this may make noise more likely.

As appropriate for your system, you'll need to find the optimal settings for which noise does not occur.

Multiple instances of the plug-in

Multiple instances cannot be used

You cannot run multiple instances of M3 Plug-In Editor or multiple instances of M3 Plug-In Fx, or run M3 Plug-In Editor and M3 Plug-In Fx simultaneously. Do not attempt to use multiple instances or run this software simultaneously; depending on the host application, this may cause unexpected behavior.

Troubleshooting

If you experience difficulty, please check the following items.

Stand-alone version

No sound (audio output) from the PC

- In the M3 Editor, is the KORG logo yellow (FireWire Audio/MIDI is connected)?
- Can you play back conventional audio on your computer?
- Is the FireWire cable connected between the M3 and your PC?
- Has the M3 detected the EXB-FW? (Refer to the M3 owner's manual.)
- Windows: Is the KORG EXB-FW Driver installed correctly?
- Windows: Is the M3 detected in the KORG EXB-FW Control Panel.
- Macintosh: Is the Mac OS version 10.4.9 or later?
- Macintosh: Is the M3 detected in the Audio/MIDI settings (Audio setting page)?
- Have you made audio settings on your computer?
- Have you specified the appropriate buffer size in the audio settings?

Can't input audio to the M3

- In the M3 Editor, is the KORG logo yellow (FireWire Audio/MIDI is connected)?
- Can you record audio on your computer?
- Is the M3's input mixer set so that FireWire can be input? (Refer to the M3 owner's manual.)
- EXB-RADIAS: Is the Audio Input of each PROG/COMBI/SEQ set to FireWire?

Plug-in version

No sound from the PC

- Is your host application set so that audio will be output?
- After you start up the M3 Plug-In Editor, is the KORG logo yellow (FireWire Audio/MIDI is connected)?
- Is your host application set to use the EXB-FW audio device?

M3 Plug-In Editor does not appear in the menu

- Windows: Have you installed the M3 Plug-In Editor (either the VST version or the RTAS version, as appropriate for your host application)? (On the Mac, all software will be installed at the same time.)
- Windows: If you're using the VST version, has your host application detected the directory in which you installed the M3 Plug-In Editor VST?

All versions

You hear crackling noise in the sound

- In the KORG EXB-FW AUDIO Interface control panel, have you set each parameter to an appropriate value (p.5).
- Windows: If you're using a notebook PC, could the power management functionality be reducing the CPU speed?

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