

MF104M VST CONTROLLER

USER MANUAL

V1.0 – December 2015



Introduction

The MF104M VST Controller has been designed to control the MF104M Moogerfooger using MIDI communication. It can be used as a 32-bit VST from within any Windows DAW environment and introduces several additional functions and settings that cannot be accessed from the device itself.

To control the parameters of your Moogerfooger, the on-screen knobs and switches have been extended with additional menu options. In addition, visual feedback on the VST Controller allows to control the various sound effects without the need to check the status LEDs on the device.

The MF104M VST Controller comes with 40 preset positions and full preset management. The status of all knobs, switches and settings is automatically saved and loaded with your DAW project files, whereas all parameters can be automated allowing real-time control.

Installation and DAW Setup

Before using the VST Controller, please make sure that you have updated your MF104M Moogerfooger with the latest firmware (version v1.1.3). *You will not be able to use all options the VST Controller is offering when the firmware has not been updated to the latest version.*

The actual installation is done by copying the VST file (MF104M.dll) into the 32-bit plugin folder of your DAW. The file will be recognized by your DAW as an effect plugin (VST and not VSTi) so in your DAW configuration you should either use a dummy instrument and insert the VST as an effect, or use a MIDI note generator as instrument that you can at the same time use to drive your Moogerfooger via MIDI Note timing, or reserve a channel for sound or MIDI input and insert the VST as an effect for this channel. Any sounds will go unchanged through the VST Controller, and can be used to control the Output Level LED (see 'Visual Feedback' section).

In addition you should configure your DAW in such a way that the data arriving at the MIDI output of the VST is sent to a physical MIDI output port, while connecting this output port to your MF104M device with a MIDI cable.

The default MIDI channel is channel 1, but if needed any other channel (both for the VST Controller and the device) can be selected through the Options menu. When using several devices, it is strongly recommended to use a separate MIDI output port and MIDI cable for each device, instead of using one MIDI output and addressing each device on a different MIDI channel (this might cause congestion of the MIDI control signals).

You can test if your setup is correct by repeatedly pressing the bypass button of the VST Controller. You should now see the bypass LED on your Moogerfooger changing color, equally to the bypass LED of the VST.

Controlling your Moogerfooger

Once the VST Controller has been correctly installed and the communication with your Moogerfooger has been established, you will be able to command the device in real-time by using the knobs and switches on the VST Controller (any changes will be transferred immediately to the device), as well as by loading DAW project files, via the VST Controller presets, and through automation.

Compared to the controls on your Moogerfooger, you will find some new commands on the VST Controller (Time Range, Filter, LFO Clock Division, Time Slew Rate, Tap Tempo destination, Spillover) as well as an additional 'smooth sample & hold' LFO waveform. The LFO Clock Division knob can be toggled with Time Clock Division control by clicking on the label 'LFO Clk Div' or 'Time Clk Div' just above the knob.

Please note that the Drive level cannot be controlled by the VST Controller (the MF104M does not allow the Drive parameter to be adjusted through MIDI commands).

When you save the status of your DAW project, all parameters of the VST Controller (except for those under the Options menu) will be saved, and when you open it again they will be automatically transferred to your Moogerfooger. In the same way when changing preset or when browsing through the presets, the device will be updated every time the VST Controller settings are changing.

Automation of any parameter (knob, switch or menu settings) of the VST Controller within the DAW environment can be done exactly as for any other VST (see your DAW manual for details). Any parameter of the VST Controller that is changing through automation will cause the corresponding function of the device to change as well, in real-time.

Visual Feedback

In order to control the sound effects of your Moogerfooger without the need of checking (seeing) the status LEDs on the device, the LEDs on the VST Controller can be used to see the BYPASS status, the TIME and RATE frequency (whether using Manual timing, Tap Tempo timing, MIDI Clock timing, or MIDI Note timing), and the output LEVEL of the sound coming from your device.

Because there is no MIDI information returning from the device to the controller, the TIME and RATE LEDs will not always be in phase with those on the device and might - in case of Manual timing - slightly differ in frequency. When using MIDI Clock, you have to make sure the MIDI Sync info from your DAW will be sent to your Moogerfooger, in parallel to sending the MIDI output of the VST Controller.

The default behavior of the LEVEL LED on the VST Controller is to indicate the position of the Output Level knob (off when 0, green until 1/3, yellow until 2/3, red beyond). *However, when you feed the sound coming from the device through the VST, the LEVEL LED will indicate the actual level of the sound, in the same way as the LEVEL LED on the device.*

Preset Management

The VST Controller offers 40 presets, and you can directly access them by clicking on the preset name shown at the left side of the menu line at the top of the VST (e.g. 'Analog Delay 1'). The status of each of these 40 presets is saved within your DAW project files.

The '<' and '>' symbols at the right of the preset name will allow you to browse through the presets. Every time you move to a different preset your Moogerfooger will automatically be updated. The 'XX/40' indication in the middle shows which preset number is selected, and clicking on it allows fast access to preset 1 and preset 40.

The Preset menu allows renaming the selected preset (Rename), copying the values of the selected preset to another preset position or even to another instance of the VST (Copy / Paste), saving one preset (Save) or saving all 40 presets at the same time (Save All), loading one preset (Load) or loading all 40 presets at the same time (Load All), and initializing the selected preset (Initialize).

Settings Menu

The Settings menu gives access to some additional parameters that are not directly accessible via the front controls of the VST Controller. Each of these parameters are saved as part of the presets as well as within the DAW project files, and they can also be automated.

The additional functions are the following:

- MIDI Clock Sync Mode
- Delay Time Note Mode
- Pitch Bend Amount
- Spillover Note Mode
- LFO Reset Note Mode
- LFO Freeze Note Mode

MIDI Clock Sync Mode can be applied to the Time and/or LFO Rate parameters, and the corresponding Clock Division (controlled via the combined Time/LFO Clk Div knob) can be selected to be either including or excluding Triplets. The LFO Sync Reset option will reset the LFO Phase on Clock Division transitions when in MIDI Clock Sync mode.

For details on the Delay Time Note Mode and Pitch Bend Amount settings, please see the MF104M User Manual.

When Spillover Note Mode is enabled, Spillover can be switched on and off via MIDI notes. The LFO Reset Note Mode and LFO Freeze Note Mode settings allow to select the MIDI note(s) that may reset or freeze the LFO.

To use either Delay Time Note Mode, Spillover Note Mode, LFO Reset Note Mode or LFO Freeze Note Mode you should configure your DAW to send MIDI notes to the MIDI In port of the VST Controller (these MIDI notes can be generated by either an external MIDI device or a MIDI note generator VSTi).

Options Menu

The Options menu can be used for checking or modifying the configuration of the both the VST Controller and the Moogerfooger device. *The parameters in the Options menu are not saved with the preset or the DAW file but they are saved on the PC and will be automatically recalled each time when the VST is loaded.*

The following choices are available:

- Manually updating the device
- Changing the MIDI Channel for the VST Controller
- Changing the MIDI Channel for the device
- Mod Wheel configuration
- TIME LED options
- About

Normally updating your Moogerfooger manually is not needed: the device will be automatically updated when changing any knobs, switches, or other settings, and when loading a DAW project file or changing preset. But it can be useful in case of any MIDI communication issues, or for updating the device after power cycling without saving and reloading the VST Controller.

When needed, the MIDI channel for both the VST Controller and the device can be modified and set to any number between 1 and 16 (the default setting is channel 1). However you should make sure that both are always set to the same channel number, otherwise the VST Controller will not be able to communicate with your Moogerfooger.

The Mod Wheel configuration parameter allows your Moogerfooger to react on the input of a Mod Wheel MIDI source to control the LFO Amount. For this you will have to configure your DAW so that the MIDI commands from the device with the Mod Wheel are transmitted to the MIDI input of the VST Controller. *All Note / Pitch Bend / Mod Wheel MIDI messages arriving at the MIDI input of the VST Controller will be sent via the MIDI output of the VST to the device.*

The TIME LED will normally exactly follow the clock signal used for time control, including modulation. In some special cases however it might be necessary to change this behavior: the TIME LED options therefore include dividing the clock signal by any number from 1 to 8, enabling or disabling the modulation, or changing completely the function of the LED to become a MIDI activity indicator.

Finally the Options menu offers access to the 'About' section where the version number of the VST can be found.

Stand-Alone version

Next to the VST version you can also use the Stand-Alone application of the MF104M VST Controller, which is available in the form of a Windows executable file (MF104M.exe). You can copy and run this file anywhere on your hard disk but the best place is somewhere inside the 'C:\Program Files (X86)' folder, where you might create for example a folder 'Moog Stand-Alone' or 'Moogerfooger Controllers'. Then you can make a shortcut to the MF104M.exe file and place the shortcut on your desktop or add it to the Start Menu.

The main advantage of using the Stand-Alone version is that you do not need to run your DAW to control your Moogerfooger and to use the additional functions. You can save and load presets with the built-in Preset Manager, and you can exchange preset files with the VST Controller so that you can 'design' your presets with the Stand-Alone application and then later on use them with the VST Controller inside your DAW.

The additional menu at the top of the Stand-Alone Controllers allows to configure MIDI In (useful when you want to send MIDI Note messages through the controller to the device), MIDI Out (here you should select the MIDI out port connected to your Moogerfooger), and to change the scale of the Controller application.

The Stand-Alone version has a few limitations compared to the VST based Controller:

- the TIME and RATE LEDs on the Controller cannot be synchronized in MIDI Clock Sync mode
- there is no sound input to control the LEVEL LED on the Controller
- no automation

Disclaimer

The MF104M VST Controller & Stand-Alone application are offered free of charge to the users of the MF104M Moogerfooger. Therefore the developer cannot be held responsible for any damages including compensatory, special, incidental, exemplary, punitive, or consequential damages, connected with or resulting from the use of this software.

The name 'Moogerfooger' and the Moog logo are the property of Moog Music. The name 'VST' is the property of Steinberg Media, GmbH.

Contact

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