



MIDI Foot C...

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MC8 PRO User Manual

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Introduction

With MC8 PRO, you can control any device that accepts MIDI, regardless of brand or model. Each switch on your Morningstar controller can be programmed to perform any function you want.

We take joy in creating the most powerful and intuitive programmable MIDI controllers available. If you have any questions that this manual cannot answer, please send us an email at help@morningstarfx.com. We are always happy to help.



Power Requirements

You can power your MC8 PRO in any of the following ways.

9-12V DC (centre negative) Power Supply

Connect a 9-12V DC centre negative power supply to the DC power input. MC8 PRO requires at least 500mA of power at 9VDC.

More power is required if you are using the USB Host port to power other devices. If you are using the TRS Relay ports, you will require an additional 100mA. You can reduce the current requirements by reducing the screen brightness setting. The default brightness setting is 70%. Similarly, you'll require more current if you want to increase the brightness.

WARNING! DO NOT USE MORE THAN 12V as that will damage the device.

USB Power

Connect a USB cable from your computer, mobile device, USB adaptor or power bank to the MC8 PRO. The MC8 PRO is capable of being powered fully by USB.

Phantom Power (9-12v AC or DC)

Connect a 7-pin MIDI cable to the MIDI Out port of the MC8 PRO. Phantom power can be supplied to the MC8 PRO through pins 6 and 7 of the MIDI OUT port. When receiving DC power via phantom power, polarity does not matter.

Phantom power from DIN5 MIDI OUT pins 6 & 7 is not chained to the MIDI IN port.

Connections



- 1 **DIN5 MIDI In** - Receive MIDI data from other devices.
- 2 **DIN5 MIDI Out** - Send MIDI data to other devices with a 5-pin MIDI cable. Also receives phantom power via a 7-pin MIDI cable from a device that supplies phantom power on pins 6 and 7.
- 3 **9V DC** - Power input for 9-12V DC power. Applying more than 12V will irreversibly damage the MC8 PRO.
- 4 **USB Device** - Connect to your computer, phone or tablet to access the Morningstar Editor or control music software.
- 5 **USB Host** - Control USB MIDI devices like the Nano Cortex, Valetton GP-5 and Source Audio C4.
- 6 ****Omniports 1-4 - **Multi-purpose ports that can function as **TRS MIDI Outputs, Expression Pedal Inputs** or **Aux Switch Inputs**.**
- 7 **Relay Ports** - Control non-MIDI devices such as switching amp channels and effects, analog tap tempo and JHS Red Remote switching.
- 8 **3.5mm TRS MIDI In and Out** - Connect directly to devices with 3.5mm TRS MIDI ports. These can also be adapted to other connector types and function as an extra set of MIDI in and out ports.



Navigation



Front Panel

MC8 PRO has **8 foot switches A to H**. Each switch corresponds with the preset name closest to it on the LCD display.

LCD Displays

4 high resolution screens deliver timely and clear visual feedback. Each center section displays essential information:

- 1 Bank and Page Number
- 2 Bank Name
- 3 Last-pressed Switch Long Name
- 4 Expression Pedal Position and MIDI Clock BPM (with blinking indicator)

Bank Up and Down

C+D - Bank Up

A+B - Bank Down

Hold these switch combinations to continuously scroll through banks.

Page Up and Down

G+H - Page Up

E+F - Page Down

Hold these switch combinations to continuously scroll through pages.

Enter System Menu

E+H - Open the System Menu

You can then use the switches to navigate through the controller settings.

Profiles

The MC8 PRO has 8 separate profiles. Each profile gives you access to a unique set of 128 Banks. Most of the time, 128 banks is more than enough, and it is highly likely that 1 profile is all you will use. However, if you do need more banks and presets, many more are available to you.

Profiles are completely independent and cannot interact with each other. For example, you cannot engage a preset in Profile 2 from Profile 1, or jump from a bank in Profile 1 to a bank in Profile 2.

You can only switch Profiles on the controller itself:

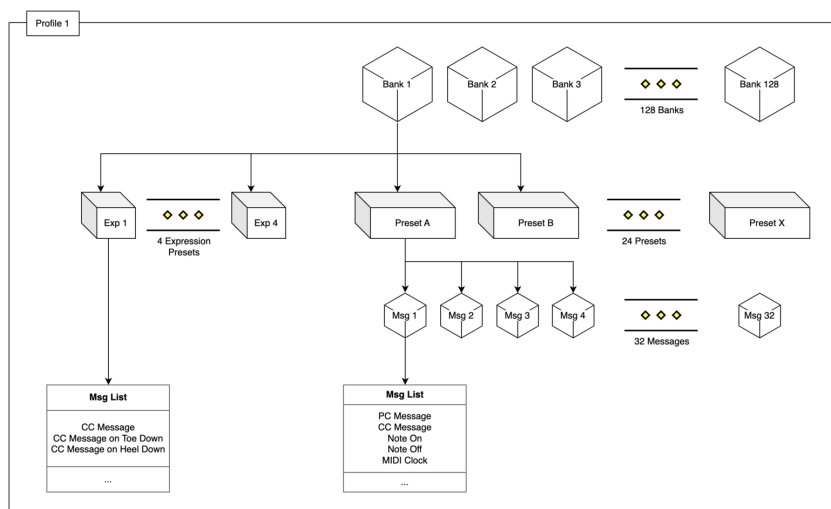
- 1 Press switch E+H to access the menu.
- 2 Scroll to **Select Profile** and select the profile you want to use.

Banks, Pages & Presets

MC8 PRO has **128 banks** > Each bank contains **3 pages** > Each page contains **8 switch presets**.

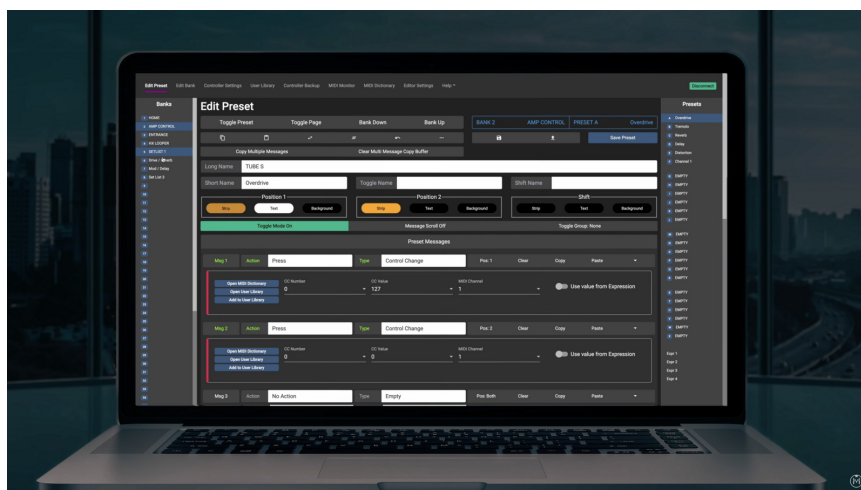
Each bank also contains **4 expression pedal presets**, which we explain in the [Expression Pedals](#) section.

The flow chart below shows you a visual overview of the MC8 PRO bank and preset architecture.



Editor Connection

The MC8 PRO is designed to be used with the [Morningstar Editor](#), which offers the best way to edit your banks and presets. With its powerful, flexible and user-friendly interface, you'll get your MIDI controller doing exactly what you want in no time. You can find more information about using the Morningstar Editor in the [Editor User Guide](#).



Online Use

The Morningstar Editor web app is compatible with Google Chrome, Opera and Brave browsers only. However, you do not need to use a browser if you prefer downloading the Editor for offline use.

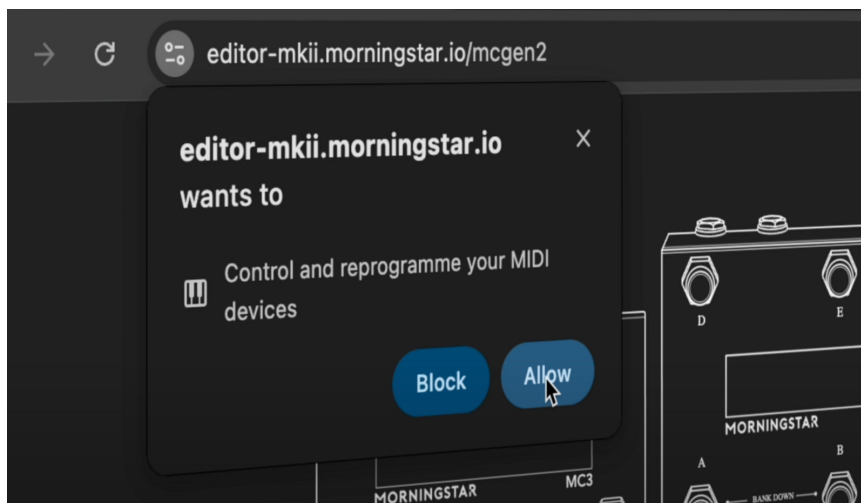
Offline Use

You can download and install the Editor for offline use if you do not have Internet access. There are the two ways you can do this:

- 1 Install the Editor as a web app from Chrome or Brave browser.
Instructions: [Installing the Editor for Offline Use](#)
- 2 [Download](#) the Morningstar Editor application and install it.

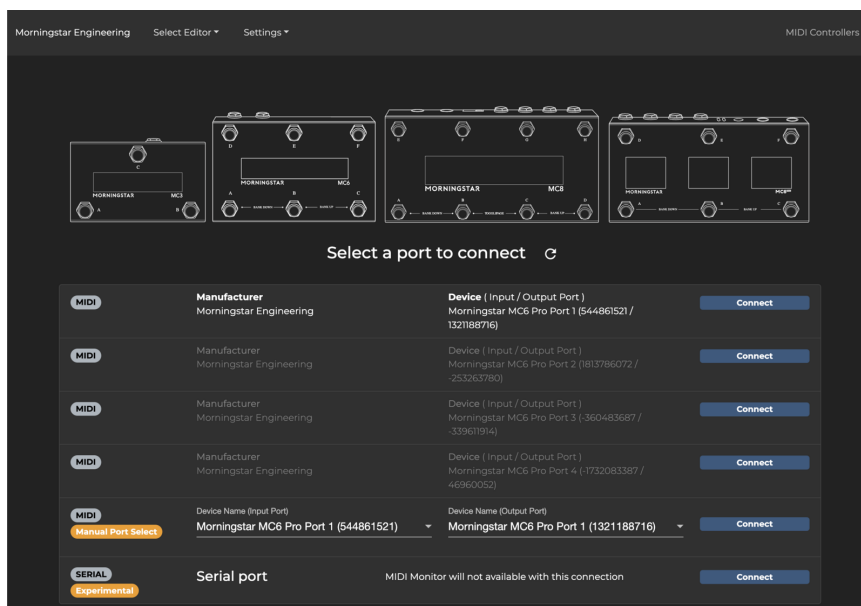
Allow MIDI Access

When connecting to the Editor for the first time, Your browser will request permission for MIDI communication with connected MIDI devices. Click on **Allow**. You can access this setting via the icon next to the URL anytime.



Connect

With your controller connected to your computer via USB and the Editor open, click on 'Connect' in the first row to establish connection.



If no device is detected, click on Refresh list. If your controller is still not being detected, please follow these troubleshooting steps.

Controller Settings

Access Global/General Settings on MC8 PRO itself by pressing **E+H** > Global Config, or via the Morningstar Editor Controller Settings tab > General Configuration.

LCD Brightness

Adjust screen brightness to taste from 30 to 100%.

MIDI Channel

Set the MIDI channel on which MC8 PRO received MIDI.

Switch Sensitivity

Set foot switch sensitivity for the controller. Higher sensitivity offers faster response time when a switch is pressed, but dual switch presses will require more precision to execute.

MIDI Clock Persist

Enabled - MIDI Clock will continue being sent until a Stop Clock command is given.

Disabled - MIDI Clock will stop sending when any other event, such as a switch press or expression pedal movement occurs.

Show Preset Labels

When enabled, Preset letters will be indicated on each switch.

Bluetooth Startup Delay

Delay time for when the Bluetooth connectivity will start after power up. When set to 0 seconds, Bluetooth discoverability will start immediately. When set to OFF, Bluetooth is disabled.

Preset Name Max Font Size

Set the maximum font size for Preset name labels.

Bank Name / Preset Long Name Font Size

Set font size for Bank Name and Preset Long Name shown in the middle section of the displays.

Bank Number / Page Number Font Size

Set font size for Bank and Page Number indicator shown in the middle section of the displays.

Ignore MIDI Clock

Enabled - Incoming MIDI clock data is ignored.

Disabled - Incoming MIDI clock data overwrites and sets internal MIDI clock.

Mirror USB Host

Only applicable when using a USB hub connected to the USB Host port. When enabled, data received via one USB port will be sent out to the other USB ports.

Load Last Used Bank on Power Up

When enabled, controller will power up to the last used bank before power off. If disabled, controller will power up to Bank 1 by default.

Remember Toggle States

Enabled - Switch preset toggle states are preserved when you scroll through banks.

Disabled - Switch preset toggle states are reset to Position 1 when you leave a bank.

Dual Switch Lock

When enabled, dual switch presses are disabled. For example, pressing switches **A+B** to bank down will not work.

Bank Change Delay Time

Delay time (in milliseconds) between bank changes. Adjust this if you need a longer delay time when scrolling between banks.

Long Press Time

The amount of time (in milliseconds) that a switch must be held down for a Long Press action to execute.

USB Virtual MIDI Ports

USB Virtual MIDI Ports allow your MIDI controller to connect simultaneously to multiple software applications at the same time. In the most common scenario, you may want to have your MIDI controller connected to the Morningstar Editor and

your DAW/plugin at the same time. Using different USB Virtual MIDI Ports, will allow you to do so without conflict.

The MC8 PRO has 4 virtual MIDI ports when connected via USB. This setting determines how many ports are active. For example, if set to 1, only Port 1 will send MIDI data, while the rest will not. If set to 2, Port 1 and Port 2 will be active, while ports 3 and 4 are disabled.

For more information on how to use them, please refer to the [USB Virtual MIDI Ports](#) article.

MIDI Send Delay (ms)

The amount of delay in milliseconds between each MIDI message sent. Ideally, this should be set to 0. Some MIDI devices cannot process incoming MIDI messages quickly enough and may miss some messages. If this happens, a longer delay should be used, only if required.

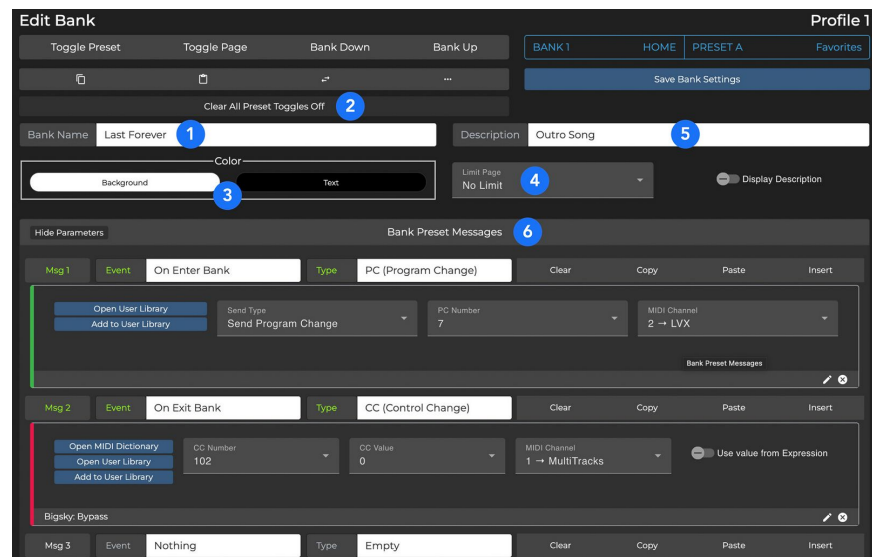
MIDI Clock Port Settings

Select which MIDI outputs send out MIDI clock data. When checked, MIDI clock will send out through a port. If unchecked, MIDI clock will not send from a port.

MIDI Thru Settings Matrix

Set which pathways allow MIDI to be relayed through the controller.

Edit Bank



- 1 **Bank Name** - Displayed on Screen 2. You can split text into 2 lines by typing \n.
- 2 **Clear All Preset Toggles** - If ON, pressing one switch will reset the toggle states all other switches within the bank to Position 1. This is useful if you only want one preset to be in Position 2 at any one time, to indicate which Preset is active.
- 3 **Color** - Customize Bank Name text and background colors.
- 4 **Limit Page** - By default MC8 PRO presents 3 pages of 8 switch presets in a bank. You can limit how many pages are presented for a particular bank.
- 5 **Description** - When 'Display Description' is enabled, description text will be displayed on Screen 3.
- 6 **Bank Preset Messages** - You can send/execute messages on entering or exiting a bank. For example, you can send a PC message on entering a bank,

and send a CC message on exiting the Bank (as shown in the screenshot).
You can add up to 32 different messages.

Pages Within a Bank

The 24 switch presets in each Bank are spread across 3 pages of 8 switches each:

Page 1: Presets A-H

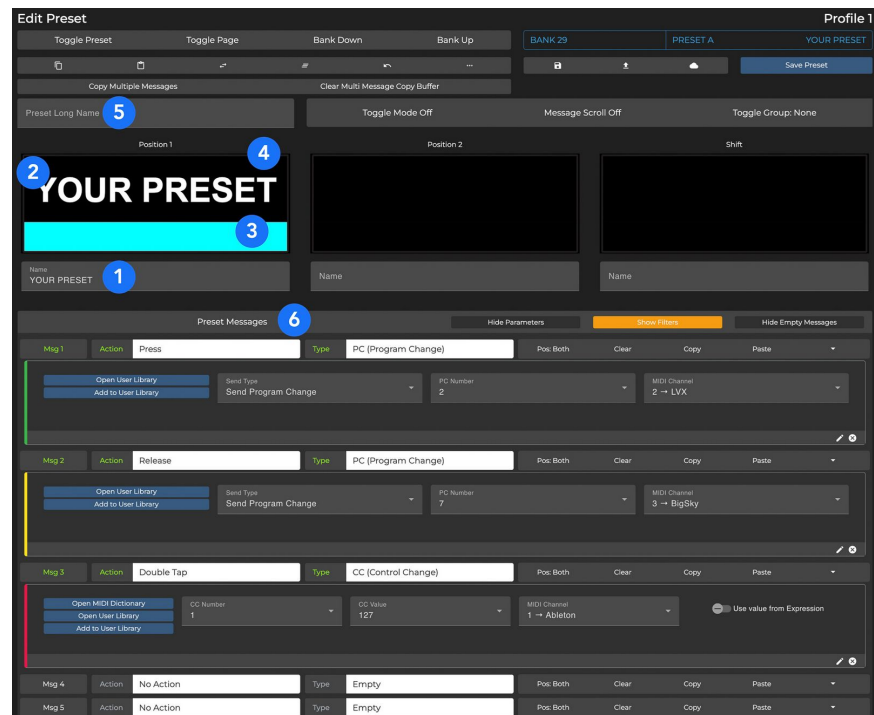
Page 2: Presets I-P

Page 3: Presets Q-X

Press **G+H** to page up and **E+F** to page down within a bank. Pressing **B+C** will also page up. Hold these switch combinations to continuously scroll through pages. If you want to only toggle between 2 different pages, you can either set Page Limit to 2 or use the Toggle Page message type.

Edit Switch Preset

Out of the factory, all switches are labelled EMPTY and do not send any MIDI messages. It's up to you to label each switch and decide what it does! The combination of messages executed and sent by a switch is called a **Switch Preset**. With 16 different MIDI channels, each preset is capable of controlling up to 16 different MIDI devices at simultaneously.



In this example, Messages 1, 2 and 3 are executed by switch Press, Release and Double Tap respectively.

- 1 **Name** - Give your switch a name so you always know what purpose it serves.
- 2 **Long Name** - Longer name for preset. Displayed in the center section only when the preset is engaged.
- 3 **Text Color** - Click on the rendered text to change text color. Customizable for each toggle position (Position 1, Position 2 and Shift, which are explained later).
- 4 **Strip Color** - Click on the bottom portion under the preset name to add a color strip. Available for each state (Position 1, Position 2, Shift).
- 5 **Background Color** - The color for the background of the Short Name. Available for each state (Position 1, Position 2, Shift)

- 6 **Preset Messages** - Each switch on your Morningstar controller can send/execute any combination of up to 32 different MIDI messages of your choice. Choose the Action you want to use to trigger a message, message type and input your desired message parameters.

| Message Types

For the full list of message types available and detailed information about what each does, please refer to the [Message Types](#) manual.

Here are the 3 general categories of message you can execute:

MIDI

Morningstar controllers can send virtually any type of MIDI message you need. From standard PC (Program Change) and CC (Control Change) messages to MIDI Clock, Note, SysEx, MMC, Realtime and more.

Device Messages

You can also program switches on your controller to execute device functions such as jumping to specified banks, scrolling up/down through pages/banks, engaging other switch presets and more.

Keystrokes

Morningstar controllers can also send keystroke commands, allow you to mimic using a computer keyboard with your feet. This is especially useful for DAW control, which often utilises hotkeys and keyboard shortcuts.

| Action Types

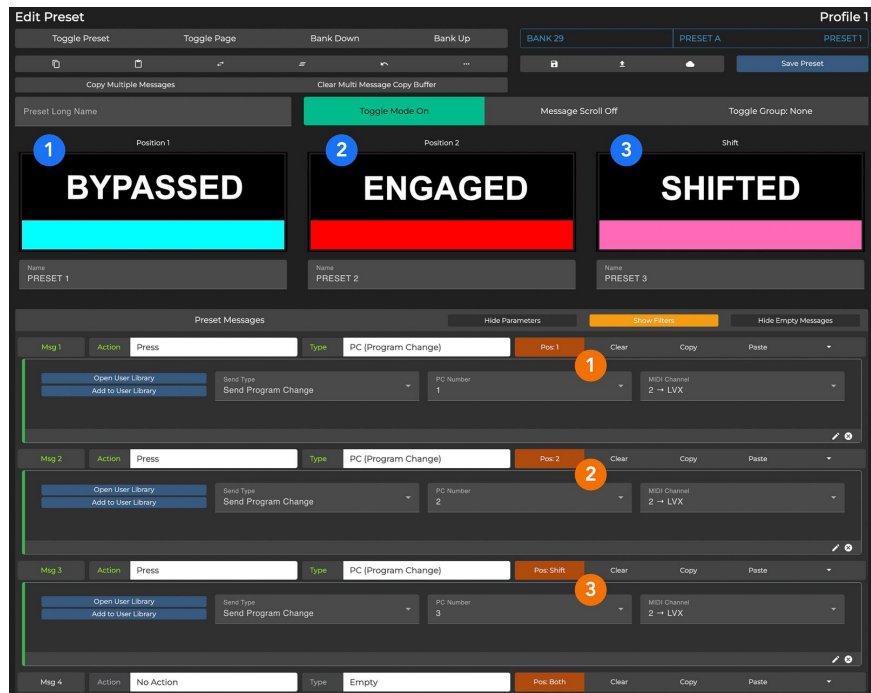
You can send different MIDI messages depending on what action you perform on a switch. You can assign each message to an action including **Press**, **Double Tap**, **Release** or **Long Press** (and more). This allows you to group MIDI messages by actions so a single switch can perform multiple functions.

You can also use actions to create a momentary switch effect. For example, you can trigger CC#1 with value 127 with a Press action, and CC#1 with value 0 with a Release action. When the switch is pressed, value 127 will be sent, and when the switch is released, a value 0 will be sent. This could for example allow you to trigger an effect while holding down a switch, and stop it upon release.

For all the available Action types and their descriptions, please refer to the [Action Types](#) manual.

| Toggle Positions

A Preset has 2 toggle positions and a temporary shift position. It can send different messages depending on which position it is in.



The 3 unique positions are:

- 1 **Position 1** - The default position for all presets. In the example above, Msg 1 gets sent when the switch is pressed when in Position 1. Take note of the toggle position assigned to each message (highlighted in orange).
- 2 **Position 2** - This is the position a preset will be in if it is engaged. In the example above, Msg 2 gets sent when the switch is pressed when in Position 2.
- 3 **Shift** - The third and temporary position. A preset will only be in the Shift position if it is shifted by you. After a Shifted Preset is engaged, the Preset will return to its prior Toggle Position. In the example above, Msg 3 gets sent when the switch is pressed in the Shift position.

Toggle State Indicators

For each preset, you can have a different Name, Text Color, Background Color or Strip Color depending on which position the preset is in. This way you can tell if a preset is active, or if an effect is engaged or bypassed.

Toggling Presets

There are 2 ways to get a preset to toggle between Position 1 and Position 2:

- 1 **Toggle Mode** - Enable Toggle Mode (highlighted green in the above screenshot). When Toggle Mode is enabled, the switch preset will toggle between Position 1 and Position 2 whenever it is engaged.
- 2 **Toggle Preset Message Type** - Add a 'Toggle Preset' message that is triggered by your desired action. With this method, the preset will toggle only when that specific action is performed. It will not toggle if other actions are performed. For example, if you choose Double Tap to execute the Toggle Preset message, the switch preset will not toggle when pressed, released or long pressed.

Shifting Presets

 Watch [Shift State Video Tutorial](#)

What is Shift?

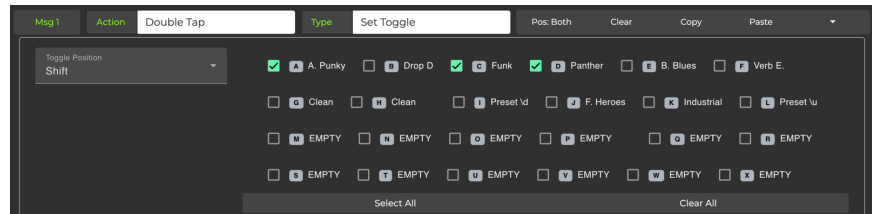
Similar to Toggle Position 1 and 2, Shift is a state which the preset is in (similar to holding down the Shift key on your keyboard, but for this you don't need to hold it down). Preset messages can then be set to execute only when the Preset

“Shifted”. Once the Preset executes, the Preset will revert to the original (unshifted) state.

This gives you more flexibility in deciding what messages to send. For example, you can program a double-tap to shift the preset, and then have a Press action to send a CC#0 command, for example. After which, subsequent Press actions can be programmed to send a different message, until the Preset is shifted again.

How do I get the Preset to the Shift state?

Use the **Set Toggle** message type to shift a preset. Select **Shift** from the dropdown options.



In this example, presets A, C and D will be put into the Shift position when this switch is double tapped.

Toggling One Switch with Another

You can have switches interact with each other for optimal visual feedback and control over your effects. For example, you may have two switches each in a different bank used to toggle on/off the same effect. In this case, you would want the toggle states of both these switches to be in sync at all times.

In another scenario, you may have switches within a bank programmed to recall preset patches. In this case, you would only want one switch to appear engaged at any one time, so you know which preset is active.

Toggle Groups & Toggle Reset Groups

Watch [Toggle & Toggle Reset Groups Video Tutorial](#)

The simplest and most effective method to achieve the above would be to use Toggle Groups and Toggle Reset Groups.

Switches that are added to the same **Toggle Group** will always have their toggle states kept in sync. Switches added to the same **Toggle Reset group** will have their toggle states reset to Position 1 whenever another switch in the same group is pressed.



Switches that are added to the same Toggle Group will always have their toggle states matching and kept in sync.



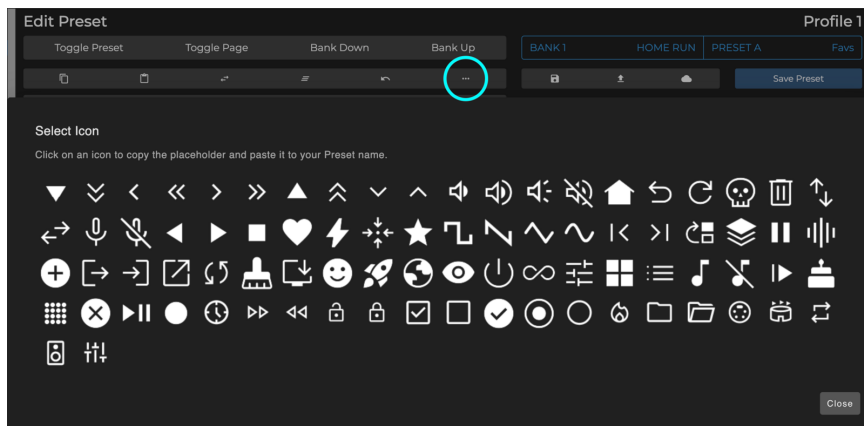
Switches added to the same Toggle Reset group will have their toggle states reset to Position 1 whenever another switch in the same group is pressed.

Set Toggle Message Type

You can also manually program one switch to set the toggle state of other switches with the **Set Toggle** message type. More information about this can be found in the [Message Type List](#).

Icons

Icons are a fun and intuitive way to mark your presets and banks, so you know what each one does at a glance. For example, you can add transport icons like Play, Pause, Stop, Forward and Back. From the Edit Preset tab, click on the '...' icon next to the undo button. The icon library will pop up. Clicking on an icon will copy it to clipboard. You can then paste it onto your preset or bank name to add it.



DAW & Music Software Control

All Morningstar MIDI controllers are USB class compliant and are compatible with macOS, iOS, Windows and Android. You can use your controller to control any DAW or music software that accepts MIDI, whether you're on a computer or mobile device. Just program each switch on your controller to send a unique CC message and MIDI map it to your software controls.

You can also wirelessly MIDI control your DAW and music software with the MC8 PRO's built-in Bluetooth MIDI capabilities. More information can be found in the [Bluetooth](#) section.

 Watch [Ableton Control Video Tutorial](#)

As the USB Device port is a high speed USB port, it will not work with the CME WIDI uHost which only accepts full speed USB devices. The WIDI uHost can be used with the USB Host port on the MC8 PRO.

| Omniports

Omniports are multi-function ports found on your MIDI controller. The MC8 PRO has **4 Omniports**, 1 to 4.

Omniport Functions

Each port can be configured to work as any of the following:

- 1 TRS MIDI Output (configurable to send MIDI via the tip or ring to suit most pedals) OR
- 2 Expression Pedal Input OR
- 3 TRS Aux Switch Input

WARNING! Omniports cannot be used to control functions like amp switching, sending analog tap tempo or for Control Voltage. Applying power to the Omniports may damage your Morningstar controller. Only connect expression pedals, aux switches and MIDI devices to the Omniports.

| TRS MIDI Out

Using Omniports

There are 3 TRS MIDI configurations available when using an Omniport as a MIDI output:

MIDI Out - Standard: Send MIDI via the Tip and the Ring is powered

MIDI Out - Tip Active: Send MIDI via the Tip and Ring is unpowered (floating)

MIDI Out - Ring Active: Send MIDI via the Ring and Tip is unpowered (floating)

MIDI Out - Type B: Send MIDI via the Ring and Tip is powered

Some Chase Bliss models are not compatible with the Omniports, as they require the Tip to be completely left floating. The solution for this is to make a custom cable with the Tip disconnected, and then use the Ring Active Omniport MIDI Out setting OR use a Stereo to Mono adaptor. Connect the Stereo TRS side to the Chase Bliss MIDI Input, and the Mono Ring side to the Omniport, and then send MIDI on Tip Active.

Using the 3.5mm MIDI Ports

Connect to the 3.5mm MIDI in and out ports just like you would with any standard MIDI in and out ports. These ports are **Type A** and send MIDI data via the Tip.

You should only use stereo TRS cables. Mono cables will not work.

Omniports are not able to send Sysex (System Exclusive) messages.

Expression Pedals

Connect an expression pedal to an Omniport for smooth continuous control over MIDI CC values. This allows you to use an expression pedal to control volume, wah, effect mix, decay, feedback and more. You can have smooth continuous control over any MIDI-controllable parameter.

Expression pedal settings are bank specific. That means, your expression pedals can serve different purposes depending on which bank you are in. You can connect up to 4 expression pedals to the 4 Omniports. Each bank contains 4 expression pedal presets, each corresponding to the expression pedal connected to the respective Omniport.  [Watch Expression Pedal Setup Tutorial](#)

Connecting an Expression Pedal

Before connecting an expression pedal, make sure that the Omniport you are using is set to accept an expression pedal. You can set this in the Controller Settings > Configure Omniports > Expression.

What Type of Expression Pedal to Use

Both TRS and TS expression pedals can be used. However, when calibrating your expression pedal, be sure to select the correct expression pedal read type.

Voltage Divider for TRS pedals and Rheostat for TS pedals.

Expression pedals fitted with 10k ohm linear potentiometers give the most accurate and smoothest response, although 10k - 25k ohm linear potentiometers will work fine too.

After connecting an expression pedal, be sure to calibrate it before use. This is to set the correct heel and toe positions relative to CC values 0 and 127, allowing you to use the full sweep of your expression pedal.

Calibrating your Expression Pedal

Enter calibration mode either by pressing **E+H** to access the System Menu > Edit Expression Preset > Calibrate Expression, or in the Editor under Controller Settings > Configure Omniports > Expression > Calibrate Expression Pedal.

Follow the step-by-step instructions shown on the screen. First, select the correct expression type (Voltage Divider or Rheostat). Then, push your expression pedal into heel down position and press 'Next'. Then, go into toe down position and press 'Next' to complete and save your calibration settings. Once calibration is complete, the controller will automatically optimise its settings to best suit your expression pedal sweep.

Expression Pedal Sensitivity

Expression pedals not using 10k ohm potentiometers may experience jitter in expression pedal readout. If you experience this, go into your Omniport Configuration and adjust Expression Sensitivity to Medium or Low to eliminate the jitters.

Aux Switches

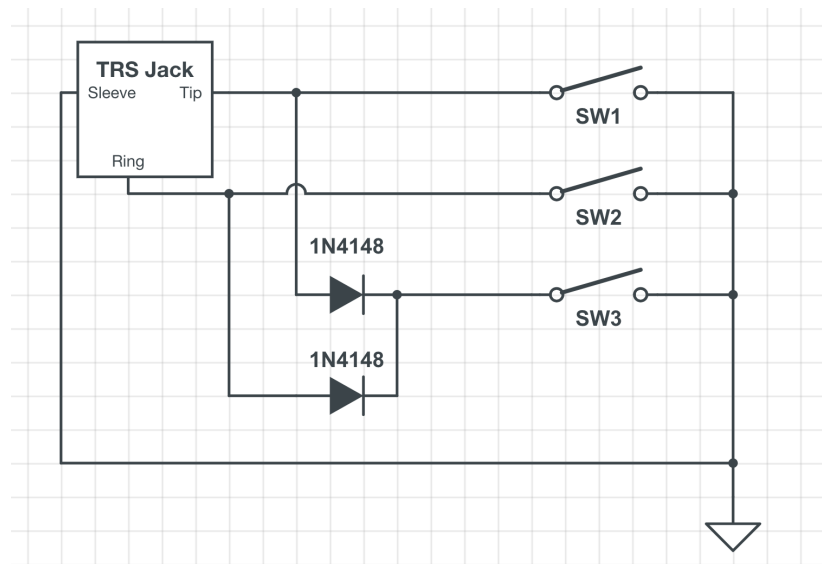
Before connecting an expression pedal, make sure that the Omniport you are using is set to accept aux switches. You can set this in the Controller Settings > Configure Omniports > TRS Aux Switch.

External aux switches connected to your MIDI controller offer additional control. Aux switches can be set to function as bank-specific programmable switches (like the built-in ones) **OR** perform fixed global functions such as banking up/down, MIDI clock tap tempo and more.

You'll find the full list of options under Controller Settings > Configure Omniports > TRS Aux Switch. Set **Tip**, **Ring** and **Tip+Ring** to function as you desire.

What Type of Aux Switches to Use

Your MIDI controller requires aux switches that are **momentary** and **normally open**. They should be wired according to the schematic below. Tip is connected to the ground via an SPST Footswitch. The Ring is similarly wired too. Another switch can be added to connect both Tip and Ring to ground for a third foot switch. It has to be connected to an Omniport using a stereo TRS cable.



Below are a few builders that offer such switches. Click for link to their products. We are not affiliated with them.

[Pedalnetics](#)

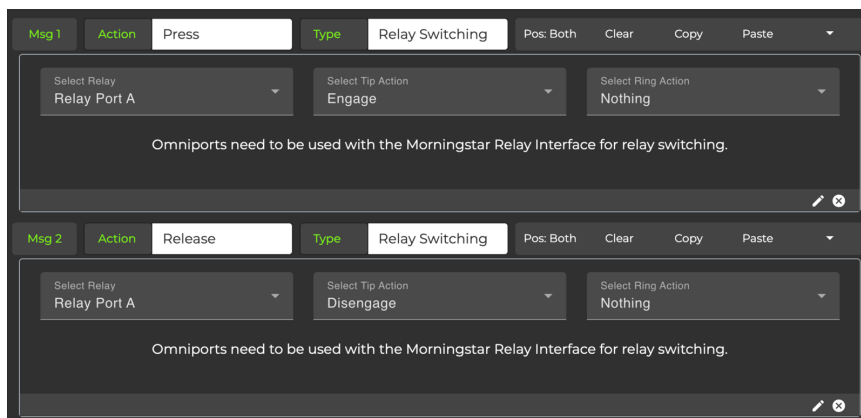
[PdLs](#)

[American Loopers](#)

Relay Ports

Control non-MIDI devices such as switching amp channels and effects, analog tap tempo and JHS Red Remote switching. The default state of the Relay Ports can be set in Controller Settings either on the controller itself or through the Editor. You can set the Tip and Ring of each Port to be Normally Open or Normally Closed.

The Relay Ports can be triggered with the **Relay Switching** message type. In the example below. Pressing the switch engages the Tip of Relay Port A and releasing it disengages it, creating a momentary switch. You can also use Toggle Mode to toggle between engaging and disengaging a Relay. 📺 [Watch Relay Port Tutorial](#)



USB Host

The USB Host port is capable of sending and receiving MIDI, and allows you to connect directly to devices that receive MIDI via their USB device ports for MIDI control. Eg. UAFX pedals, Valeton GP-5, Nano Cortex.

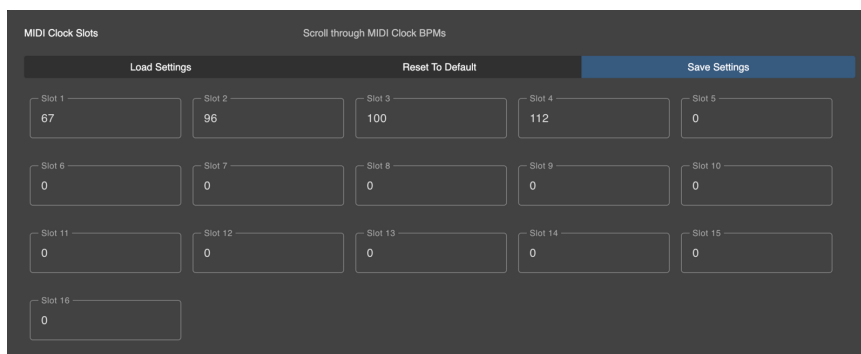
Connect a USB hub and control up to 4 USB MIDI devices at once. If connecting and powering multiple USB devices via the host port, you will need to use a powered USB hub.

Not all USB Hubs are compatible. Given the vast number of options available, we are unable to know for sure if the hub you have is compatible. Generally, hubs with added functions besides USB, like HDMI or SD Card functionalities, will not work

With a USB Device connected to the MC8 PRO's USB Host port, the USB Device may draw power from the USB Host port. If so, the MC8 PRO will also require more power from your power supply. Please ensure that you supply adequate power.

MIDI Clock Slots

You can store pre-set MIDI Clock BPMs under MIDI Clock Slots for you to recall any time. Access MIDI Clock Slots via the Morningstar Editor under Controller Settings > MIDI Clock Slots. For more information on how to trigger and scroll through MIDI Clock Slot BPMs, refer to the MIDI Clock message type in the [Message Types](#) manual.



System Indicators

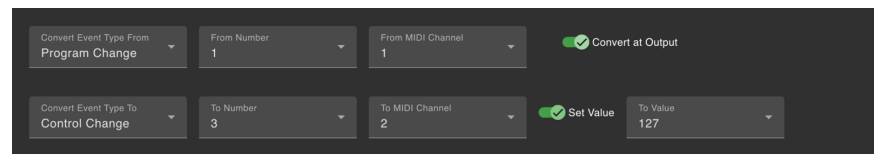
The MC8 PRO flashes small coloured symbols when certain events occur. Please refer below for what each icon means.

Icon	Event
	Looper Mode
	DIN5 MIDI In
	TRS MIDI In
	USB Device MIDI In
	USB Host MIDI In

MIDI Message Converter

The MIDI Message Converter allows you to convert incoming MIDI messages to different MIDI messages. The newly converted messages can then be processed internally, or relayed on out through the controllers' MIDI outputs.

Access the MIDI Message Converter on the Editor. Controller Settings > MIDI Message Converter.



In the above example, an incoming PC#1 message on MIDI channel 1 is converted to CC#3 with value 127 and will be relayed out through the MIDI outputs via MIDI channel 2. The message is converted at the Output only, and as such the MIDI controller will only process it internally as the original MIDI message and not the converted message. Switch it to 'Convert at Input' if you would like your controller to process the converted message internally.

Dual-Switch Functions

Dual switch press combinations allow you to control **utility functions** and access** presets on page 2** without needing to toggle page.

Switch Press	Utility Function
A + B	Bank Down
C + D	Bank Up
E + F	PageDown
G + H	Page Up
A + E	Engage Preset J
B + F	Engage Preset K
C + G	Engage Preset M
D + H	Engage Preset N

Bluetooth

The MC8 PRO has Bluetooth MIDI capabilities. This allows you to connect wirelessly to the Morningstar Editor and wirelessly control DAWs and music software,

both on Desktop and Mobile.

 Watch [Bluetooth Video Tutorial](#)

Editor Connection via Bluetooth

Bluetooth MIDI connection is not the same as a typical Bluetooth connection (eg. Bluetooth speakers, keyboard or mouse). As such, the MC8 PRO will not appear in the same place as you would find a typical consumer Bluetooth device. However, connecting wirelessly to the Editor is still very straightforward and simple, as laid out in the steps below.

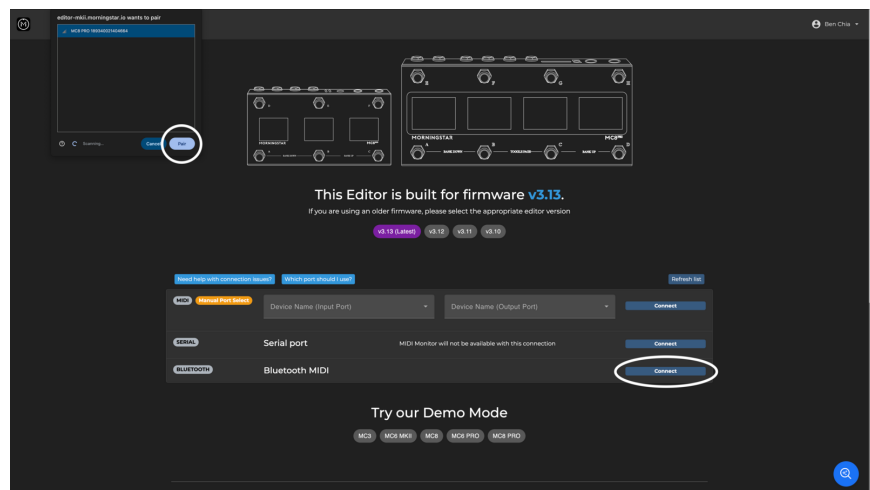
Connecting to Desktop Editor on macOS and Windows

Power up the MC8 PRO. Bluetooth is activated automatically.

Launch the Morningstar Editor and click on the MC8 PRO graphic icon.

You'll see Bluetooth MIDI in the bottom row (shown below). Just click on

Connect and the Editor will begin scanning for Bluetooth devices. When you see the MC8 PRO appear, select it and click on pair.



Bluetooth connection option on the Editor

And that's it! Your MC8 PRO is now connected to the Editor and two-way communication is established. Whether you bank up and down on the Editor or controller, they will both be in sync.

You can edit your controller just like you would with a wired connection, but now you're cable free.

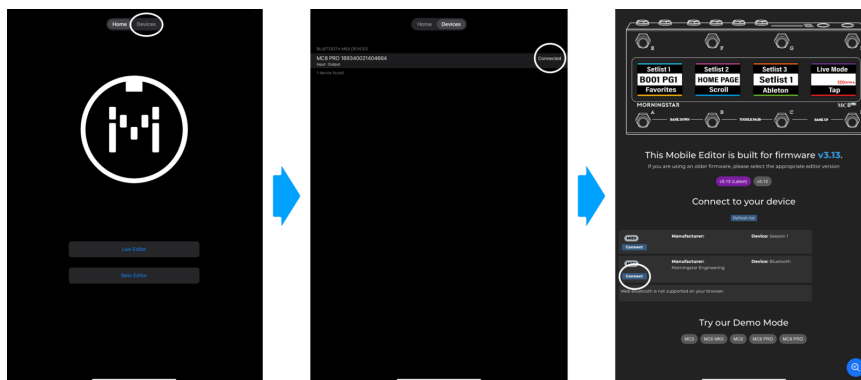
Connecting to Mobile Editor on iOS

On iPhone or iPad, download the [Morningstar Editor app](#) from the App Store.

With the MC8 PRO powered up, launch the app and tap on Devices at the top. You'll see the MC8 PRO appear.

Tap on it to connect, then go back Home and select Live Editor.

You'll see a Bluetooth device connection available. Tap Connect to establish Bluetooth connection.



Mobile Editor Bluetooth Connection

Connecting to Mobile Editor on Android

For Android mobile users, it works almost exactly the same way. Just access the [Morningstar Editor](#) via google Chrome on your phone and you'll be able to connect to the Editor wirelessly by following the same steps for iOS above.

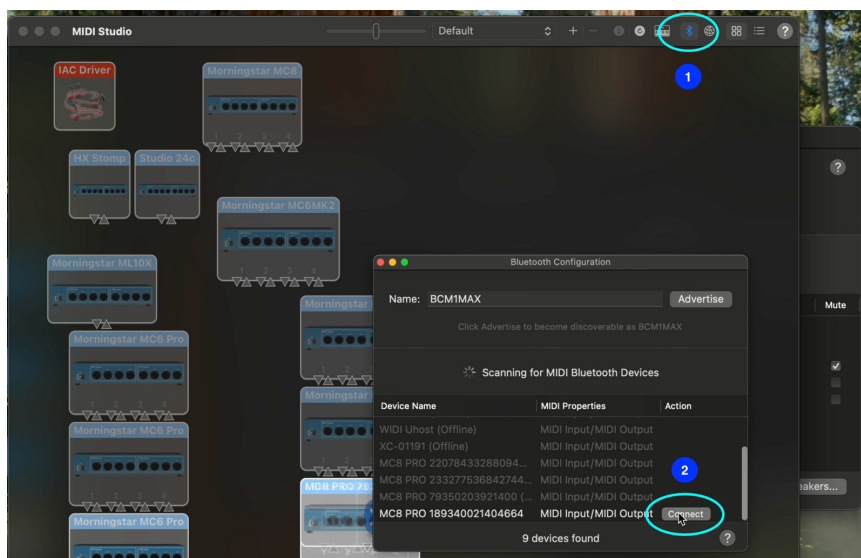
DAW and Music Software Control via Bluetooth MIDI

MC8 PRO is equipped with Bluetooth Low Energy (BLE) MIDI that allows you to connect wirelessly not only to the Morningstar Editor, but also to DAWs and music software.

Bluetooth MIDI connection is not the same a typical Bluetooth connection (eg. Bluetooth speakers, keyboard or mouse). As such, the MC8 PRO will not appear in the same place as you would find a typical consumer Bluetooth device. However, connection is still simple after you've done it once.

Bluetooth MIDI Connection to macOS

Launch the Audio MIDI Setup utility. If the MIDI Studio window does not appear, click on Window > Show MIDI Studio.



With the MIDI Studio open:

- 1 Click on the Bluetooth icon as shown above. Your mac will begin scanning for Bluetooth MIDI devices and the MC8 PRO will appear.
- 2 Click on Connect to establish Bluetooth MIDI connection.

You can will now be able to find the MC8 PRO as a MIDI port in your DAW or music software's MIDI settings.

Bluetooth MIDI Connection to iOS

The iOS app you are using may or may not have Bluetooth MIDI utility built into it. If it does, simply access the Bluetooth MIDI settings within the app to scan for Bluetooth MIDI devices, and connect to the MC8 PRO.



Example of built-in Bluetooth MIDI utility in the Koala Sampler app

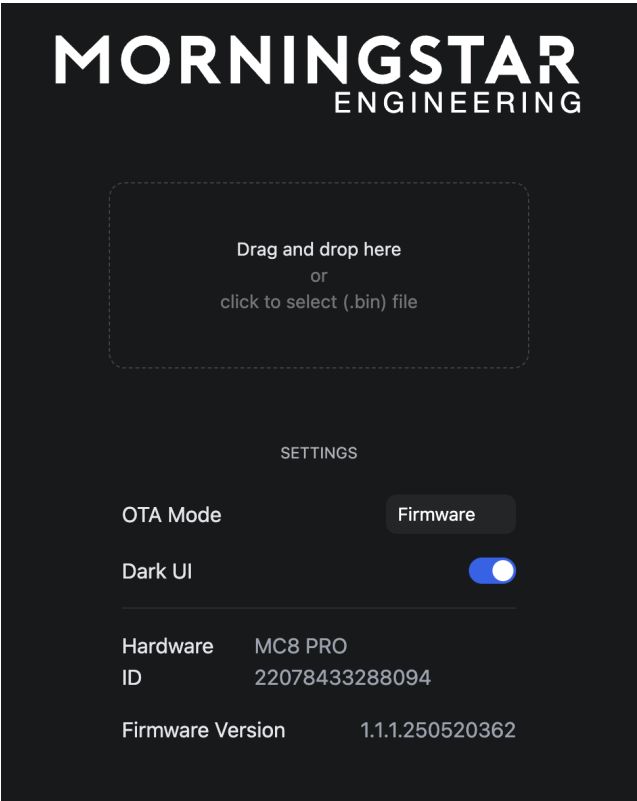
If the app you are using does not have built-in Bluetooth MIDI utility, you will need to download the [midimittR app](#) from the App Store. This will allow you to scan for and discover the MC8 PRO as a Bluetooth MIDI device and establish wireless MIDI connection. With that done, you will be able to use the MC8 PRO within your app just like you would any other MIDI device.

Bluetooth Module Updates

The Bluetooth module is a separate component from the main processor in the MC8 PRO, and needs to be updated separately.

We do not expect any updates for the Bluetooth module, but if there are any new updates with bug fixes or new features, it is possible to update the Bluetooth Module.

- 1 Press E+H to enter the controller menu
- 2 Navigate to Update Bluetooth Module Firmware
- 3 Once there, the instructions to update will be visible on the MC8 PRO screen
- 4 Download Bluetooth Firmware from the Editor > Firmware Update tab
- 5 Join the Morningstar WiFi network. This network is only enabled when you are in the Update Bluetooth Module Firmware menu. The password for the network is morningstar
- 6 Navigate to 192.168.3.1 in your browser URL bar
- 7 Upload the firmware via your browser



MIDI Implementation Charts

The MC8 PRO can be controlled by external MIDI PC and CC messages. Please refer to the charts below for the required messages and their corresponding functions.

PC Messages

Incoming PC messages will change banks on the MC8 PRO.

PC Number	Recall Bank
0	1
1	2
2	3
...	...
127	128

CC Messages

Incoming CC messages allow you to navigate through the MC8 PRO, engage pre-sets and change preset toggle states.

Function	CC#	Value
Bank Up	0	any
Bank Down	1	any
Engage Toggle (All)	2	127
Engage Toggle (Individual)	2	0 = Preset A, 1 = Preset B, 2 = Preset C ... 23 = Preset X
Disengage Toggle (All)	3	127

Disengage Toggle (Individual)	3	0 = Preset A, 1 = Preset B, 2 = Preset C ... 23 = Preset X
Toggle Page	4	0 = Toggle Page, 1 = Page Up, 2 = Page Down, 3 = Page 1, 4 = Page 2, 5 = Page 3, 6 = Page 4
Engage Preset	10 = Preset A, 11 = B, 12 = C ... 33 = X	0 = Do Nothing, 1 = Press, 2 = Release, 3 = Long Press, 4 = Long Press Release, 5 = Double Tap, 6 = Double Tap Release, 7 = Long Double Tap, 8 = Long Double Tap Release, 9 = Release All, 10 = Long Press Scroll
Set MIDI BPM (MSB 2 bits)	5	0-127
Set MIDI BPM (LSB 7 bits)	6	0-127
Looper Mode	7	0-127
MIDI Clock Tap	8	0-127
Jump to last used bank/page	9	127 = Last used Bank + execute bank presets, 126 = Last used Bank/Page + execute bank presets, 1 = Last used Bank/Page + ignore bank presets, 0 = Last used Bank + ignore bank presets
Control Relay A Tip	40	1 = Tap, Normally Open, 2 = Tap, Normally Closed, 3 = Activate (Close relay), 4 = Deactivate (Open relay), 5 = Toggle between open and close, 6 = Sync to BPM 8x, 7 = Sync to BPM 4x
Control Relay A Ring	41	“
Control Relay B Tip	42	“
Control Relay B Ring	43	“
Engage Expression 1	51	0-127
Engage Expression 2	52	0-127
Engage Expression 3	53	0-127
Engage Expression 4	54	0-127

Backing Up Your Controller

You can easily back up controller data to your computer. This great not only for keeping a backup copy of your banks and presets, but also makes upgrading from one Morningstar controller to another so much more convenient. You can backup your controller banks and presets and upload them to a different Morningstar controller model.

To back up your controller, simply click on the Controller Backup tab in the Editor. From there you have the option to back up only the Current Bank or All Banks (including controller settings). If you'd like to share only one bank with someone else, back up the **Current Bank**. If you'd like to backup your entire controller with its settings, back up **All Banks**.

Firmware Updates

!!! IMPORTANT !!!

Back up your entire controller's data to a .json file before performing a firmware update. Updates usually go smoothly, but it's better to be safe than sorry! Back up your controller from the 'Controller Backup' tab in the Editor.

To deliver the best experience and value, we regularly release new updates for our controllers that contain new features, performance improvements and bug fixes. Here's how to update your controller firmware.

Download the required files:

- 1 Go to <https://firmware.morningstar.io/>
- 2 You need 2 files to update your firmware - (1) Firmware Uploader app and (2) Latest firmware for your controller
- 3 Download and install the Firmware Uploader
- 4 Download the latest firmware file for your device. 'MIDI + Keyboard' firmware versions allow your controller to be recognized as a keyboard and send key-stroke messages. 'MIDI only' versions do not.

After downloading the necessary files:

- 1 Install the Firmware Uploader application to your computer
- 2 Connect your device to your computer via USB and launch the Firmware Uploader app
- 3 Your device will appear on the Uploader
- 4 Select the .hex firmware file to upload
- 5 Click to upload
- 6 Once the update is successful, you will receive a confirmation notice

Be sure to download and upload the correct firmware for your device model. Uploading the wrong firmware will cause your device to become unresponsive. If that happens, download and upload the correct firmware to resolve this.

Factory Reset

To reset your MC8 PRO to its factory settings, press switches **E+H**. Scroll to 'Factory Reset' and select 'Reset Current Profile'.

Troubleshooting

MIDI Ports Not Working

It is extremely uncommon that MIDI ports do not work. In our more than 10 years of operation, the number of MIDI port failure cases can be counted on one hand. It is more likely that you have either:

- 1 A faulty MIDI cable or
- 2 A misaligned DIN5 cable. Please refer to this [help article](#) for testing your MIDI ports.

Bricked Device

If your MC8 PRO appears to be completely unresponsive (i.e. screens are all white on power up and the Firmware Updater application does not detect the device), you can use the hard reset button on the right side of the enclosure (beside the 3.5mm MIDI In & Out ports). You will need a sharp object like a pin to press the button.

This will load the bootloader and your device should appear in the firmware up-dater software. You can then re-upload the firmware file into the MC8 PRO. You can find more information [here](#).

The hard reset button only loads the bootloader to assist in a firmware update. It does not reset your device or erase your data.

Controller Hanged

It is possible to hang the controller if you program it wrongly and create an infinite loop. To get around this, you can power up the controller in Safe Mode by holding down Switch B while powering up. While in Safe Mode, the controller does not execute any messages and you will then be able to edit the Banks and Presets responsible for the infinite loop.

Miscellaneous Features

Control MC8 PRO with a Keyboard

A computer Keyboard can be connected to the USB Host port to give you enhanced control over your MC8 PRO. Pressing the LEFT, RIGHT, UP and DOWN arrow keys allows you to bank up/down or page up/down.

SysEx API for External Applications

For more advanced usage, the MC8 PRO can also be controlled via SysEx. You can view the [SysEx API here](#).

Updated on: 23/06/2026

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