CME HxMIDI Tools Software User Manual

HxMIDI Tools
User Manual V01

Contents

HxMIDI Tools Software

Please read this manual completely before using this product.
The software and firmware will be updated continuously. All the illustrations and texts in this manual may be different from the actual situation and are for reference only.

Copyright

Install HxMIDI Tools software

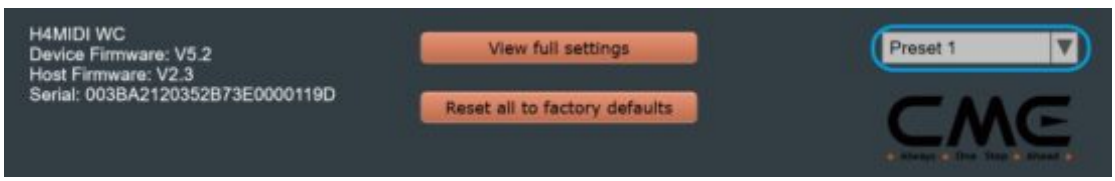
Please visit **https://www.cme-pro.com/support/** and download the free HxMIDI Tools computer software. It includes MacOS, Windows 10/11, iOS and Android versions, and is the software tool for all CME USB HOST MIDI devices (such as H2MIDI Pro, H4MIDI WC, H12MIDI Pro and H24MIDI Pro etc.), through which you can get the following value-added services:

- Upgrade the CME USB HOST MIDI device's firmware at any time to get the latest features.
- Perform routing, filtering, mapping and other operations for CME USB HOST MIDI devices.

Connect

Please connect a model of CME USB HOST MIDI device to your computer via USB. Open the software and wait for the software to automatically recognize the device before you can start setting up the device. At the bottom of the software screen, the model's name, firmware version, product serial number, and software version of the product will be displayed. Currently, the products supported by HxMIDI Tools software include H2MIDI Pro, H4MIDI WC, H12MIDI Pro and H24MIDI Pro.

[Preset]: Custom settings for filters, mappers, routers, etc. will be stored as [Preset] in the CME USB HOST MIDI device for standalone use (even after the power is turned off). When a CME device with a custom preset is connected to the USB port of a computer and selected in HxMIDI Tools, the software automatically reads all settings and status in the device and displays them in the software interface.



- Before setup, please select the preset number in the lower right corner of the software interface and then set the parameters. All setting changes will be automatically saved to this preset. Presets can be switched via the multi-function button or assignable MIDI message (see [Preset settings] for details). When switching presets, the LED on the interface will flash accordingly (The LED on the H2MIDI Pro and H4MIDI WC flash once for

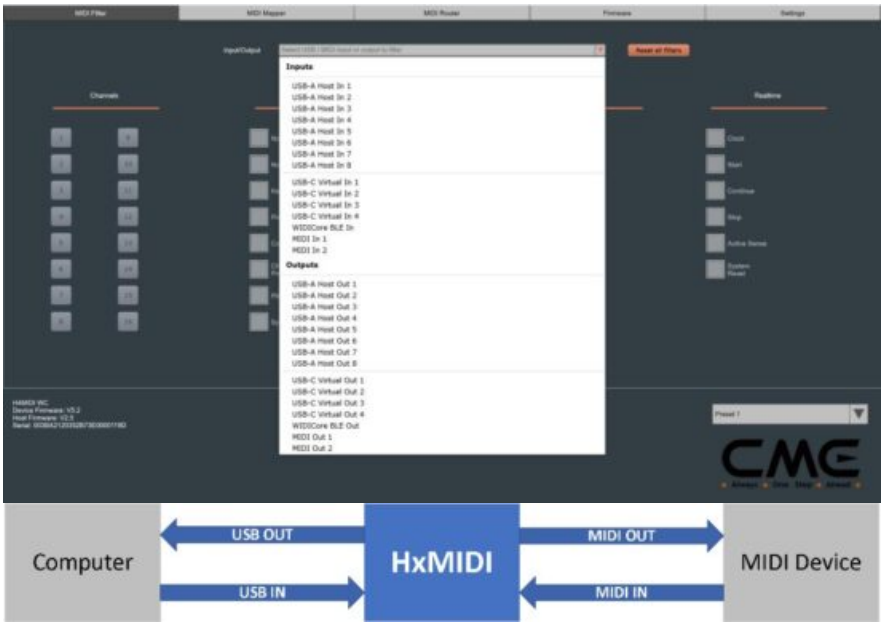
preset 1, flash twice for preset 2, and so on).

MIDI Filter

MIDI Filter is used to block certain types of MIDI message in a selected input or output port it no longer is passed through.

- Use filters:

  • First, select the input or output port that needs to be set in the [Input/Output] drop-down window at the top of the screen. The input and output ports are shown in the figure below.



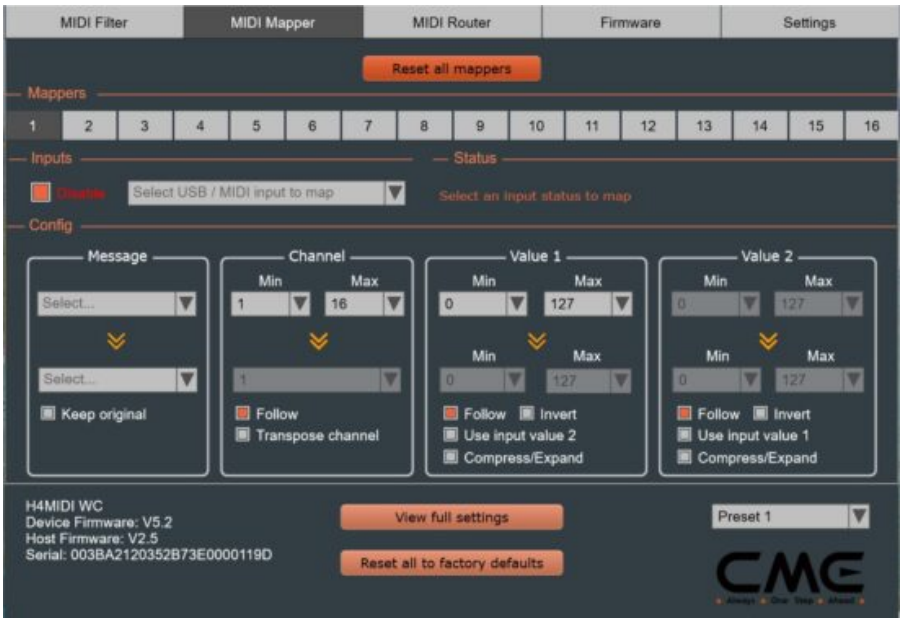
- Click the button or checkbox below to select the MIDI channel or message type that needs to be blocked. When a MIDI channel is selected, all messages of this MIDI channel will be filtered out. When certain message types are selected, those message type will be filtered out in all MIDI channels.

- **[Reset all filters]:** This button resets the filter settings for all ports to the initial state, in which no filter is active on any channel.

MIDI Mapper

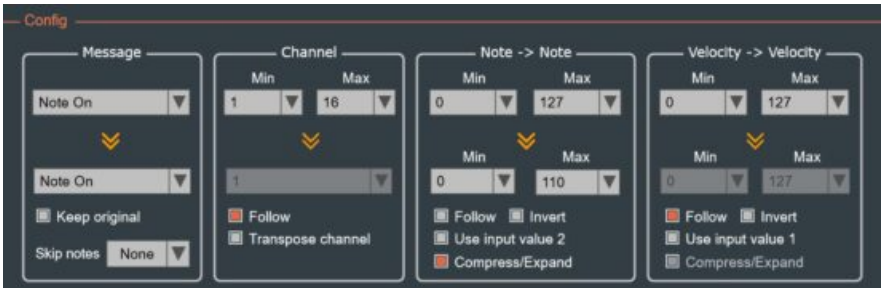
On the MIDI Mapper page, you can remap the input data of the connected and selected device so that it can be

output according to custom rules that are defined by you. For example, you can remap a played note to a controller message or another MIDI message.
Besides this, you can set the data range and MIDI channel, or even output the data in reverse.



- **[Reset all mappers]:** This button clears all setting parameters from the MIDI Mapper page and the mapper in the connected and selected CME USB HOST MIDI device, allowing you to start a new configuration of your MIDI Mapper settings.

- **[Mappers]:** These 16 buttons correspond to 16 independent mappings that can be set freely, allowing you to define complex mapping scenarios.
  • When the mapping is being configured, the button will be displayed in reverse color.
  • For mappings that have been configured and are in effect, a green dot will be displayed in the upper right corner of the button.
- **[Inputs]:** Select the input port for mapping.
  • [Disable]: Disable the current mapping.
  • [USB-A Host In]: Set the data input from the USB-A port.
  • [USB-C Virtual In]: Set the data input from the USB-C port.
  • [MIDI In]: Set the data input from the DIN MIDI port.
- **[Config]:** This area is used to set the source MIDI data and the user-defined output data (after mapping). The top row sets the source data for input and the bottom row sets the new data for output after mapping.



  • Move the mouse cursor to each key area to display function explanations.

• If the set parameters are incorrect, a text prompt will appear above the function area to indicate the cause of the error.

• When selecting different types of messages in the left [message] area, the titles of the other data areas on the right will also change accordingly. The data types that the current version can map are as follows:

Message	**Channel**	**Value 1**	**Value 2**
Note On	Channel	Note #	Velocity
Note Off	Channel	Note #	Velocity
Ctrl Change	Channel	Control #	Amount
Prog Change	Channel	Patch #	Not used
Pitch bend	Channel	Bend LSB	Bend MSB
Chann Aftertouch	Channel	Pressure	Not used
Key Aftertouch	Channel	Note #	Pressure
Notes Transpose	Channel	Note->Transpose	Velocity

Table 1

• [Message]: Select the source MIDI message type to reassign at the top, and select the target MIDI message type to output after mapping at the bottom:

- [Keep original]: If this option is selected, the original MIDI message will be sent at the same time as the mapped MIDI message.

Note On	Notes open message
Note Off	Note off message
Ctrl Change	Control change message
Prog Change	Timbre change message
Pitch bend	Pitch bending wheel message
Chann Aftertouch	Channel after-touch message
Key Aftertouch	After-touch keyboard message
Notes Transpose	Notes transpose message

Table 2

- [Skip notes]: Skip notes randomly. Click the drop-down option to set the percentage of notes to be randomly filtered out within the specified note range.

- [Channel]: Select the source MIDI channel and destination MIDI channel, range 1-16.

  - [Min]/[Max]: Set the minimum channel value / maximum channel value range, which can be set to the same value.

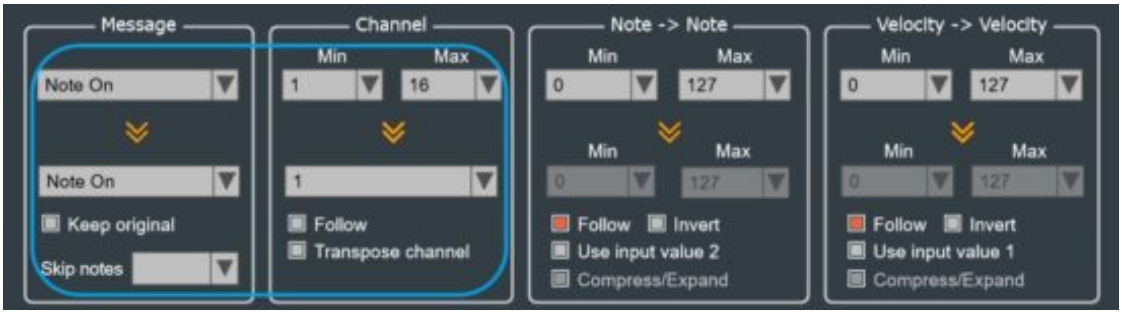
  - [Follow]: When this option is selected, the output value is exactly the same as the source value (follow) and is not remapped.

  - [Transpose Channel]: After selecting this option, the selected channel value can be increased or decreased.

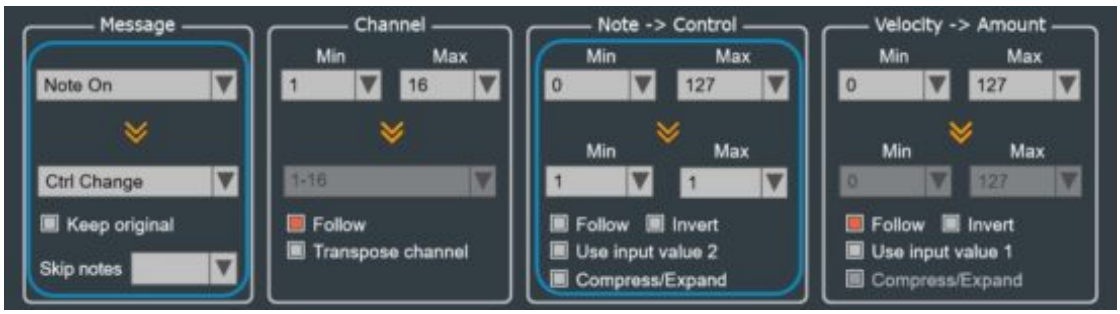
- [Value 1]: Based on the selected [Message] type (see table 2), this data can be Note # / Control # / Patch # / Bend LSB / Pressure / Transpose, ranging from 0-127 (see table 1).
  - [Min]/[Max]: Set the minimum / maximum value to create a range or set them to the same value for an exact response to specific value.
  - [Follow]: When this option is selected, the output value is exactly the same as the source value (follow) and is not remapped.
  - [Invert]: If selected, the data range is executed in reverse order.
  - [Use input value 2]: When selected, the output Value 1 will be taken from the input Value 2.
  - [Compress/Expand]: Compress or expand the values. When selected, the source value range will be proportionally compressed or expanded to the target value range.
- [Value 2]: Based on the selected [Message] type (see table 2), this data can be Velocity / Amount / Not used / Bend MSB / Pressure, ranging from 0-127 (see table 1).
  - [Min]/[Max]: Set the minimum / maximum value to create a range or set them to the same value for an exact response to specific value.
  - [Follow]: When this option is selected, the output value is exactly the same as the source value (follow) and is not remapped.
  - [Invert]: When selected, the data will be output in reverse order.
  - [Use input value 1]: When selected, the output Value 2 will be taken from the input Value 1.
  - [Compress/Expand]: Compress or expand the values. When selected, the source value range will be proportionally compressed or expanded to the target value range.

● Mapping examples:

- Map all [Note On] of any channel input to output from channel 1:



- Map all [Note On] to CC#1 of [Ctrl Change]:



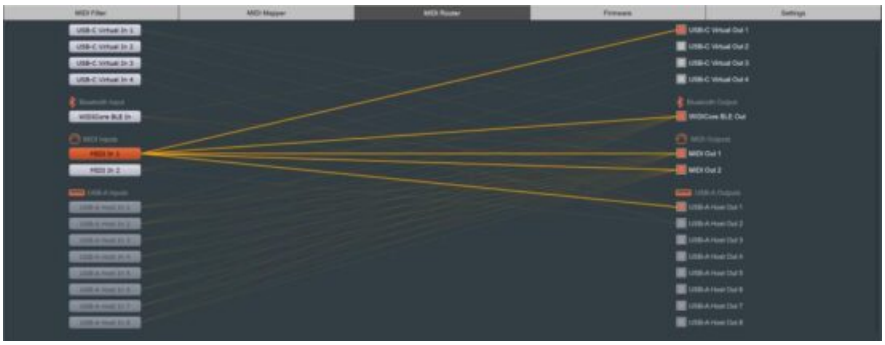
MIDI Router

MIDI routers are used to view and configure the signal flow of MIDI messages in your CME USB HOST MIDI device.

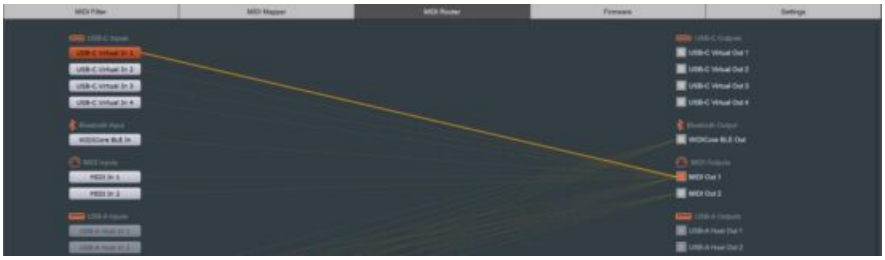
● Change the direction of the routing:

- First click on one of the [MIDI In] or [USB In] buttons on the left that needs to be set, and the software will display the routing direction of the port (if present) with a wire.
- According to the requirements, click a check box on the right and select or deselect one or more check boxes to change the routing direction of the port. At the same time, the software will use the line of connection to make prompts:

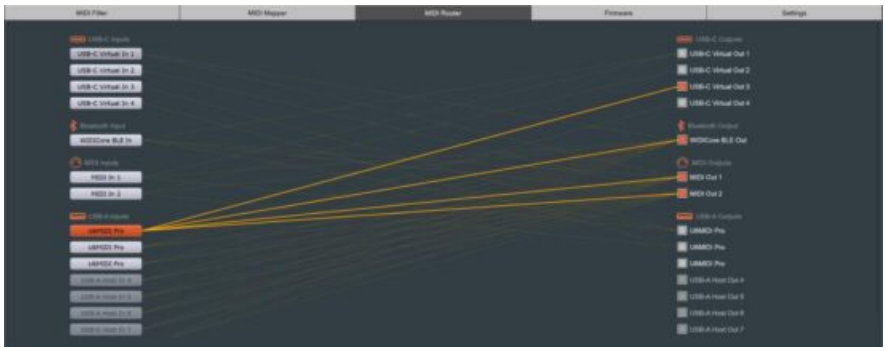
- **Examples on H4MIDI WC:**



MIDI Split/Thru

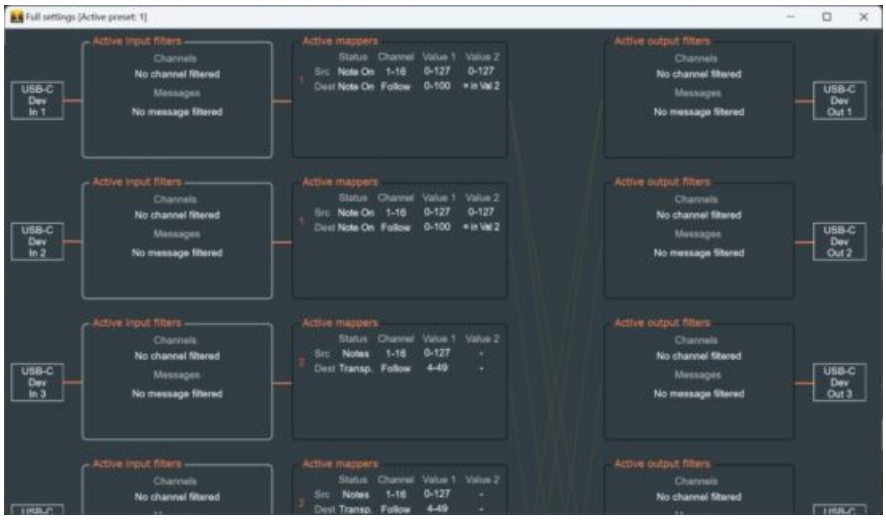


MIDI Merge



MIDI Router – Advanced configuration

- **[Reset router]:** Click this button to reset all router settings on the current page to the default factory setting.
- **[View full settings]:** This button opens the overall settings window to view the filter, mapper, and router settings for each port of the current device – in one convenient overview.



● **[Reset all to factory defaults]:** This button restores all settings of the connected and selected device by the software (including Filters, Mappers and Router) to the original factory default.

Firmware

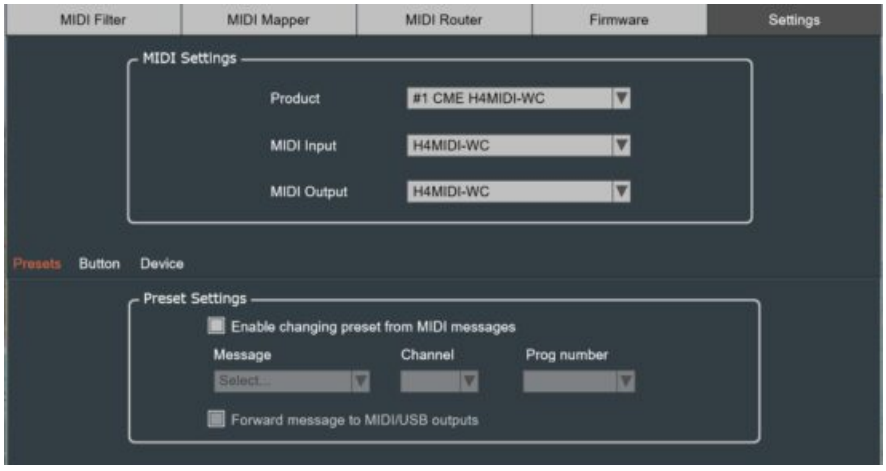
When your computer is connected to the internet, the software automatically detects whether the currently connected CME USB HOST MIDI device is running the latest firmware and requests an update if necessary.

When the software cannot be updated automatically, you can manually update it on this page. Please go to www.cmepro.com/support/ webpage and contact CME Technical Support for the latest firmware files. Select [Manual update] in the software, click the [Load firmware] button to select the downloaded firmware file on the computer, and then click [Start upgrade] to start the update.

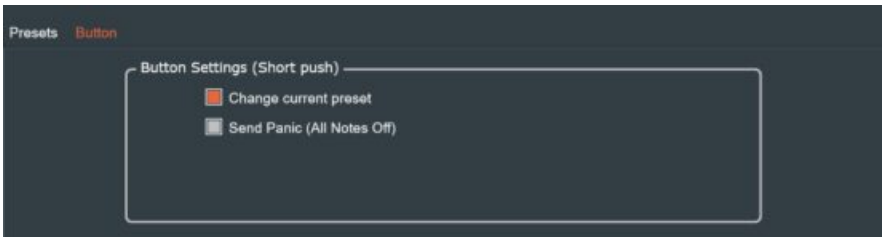
Settings

The Settings page is used to select the CME USB HOST MIDI device model and port to be set up and operated by the software. If you have multiple CME USB HOST MIDI devices connected at the same time, please select the product and port you want to set up here.

● **[Presets settings]:** By selecting the [Enable changing preset from MIDI messages] option, the user can assign Note On, Note Off, Controller or Program Change MIDI messages to remotely switch presets. Selecting the [Forward message to MIDI/USB outputs] option allows the assigned MIDI messages to be sent to the MIDI output port as well.



● **[Button]:** The User can choose to set the button to change the current preset or send an All Notes Off message.



● **[Device]:** This function is used to extract the USB description of the USB device with compatibility issues and send it to the CME support team for help.

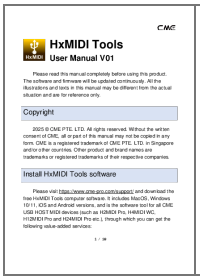
- First, please unplug all USB hubs and devices connected to USB-A port of the CME USB HOST MIDI interface, and then click the [Start device dump] button.
- Next, connect the previously unrecognized USB device to the USB-A port of the interface, and the USB descriptors of the device will be automatically extracted to the gray area in the window.
- Click the copy icon to the right of the [Start device dump] button, and all USB descriptors will be automatically copied to the clipboard.
- Create an email, paste the USB descriptors into the email, and send it to **support@cme-pro.com**. CME will try to resolve the compatibility issue through a firmware upgrade.

* Note: Since the software version is updated continuously, the above graphical interface is for reference only, please refer to the actual display of the software.

Contact

Email: **support@cme-pro.com**
Website: **www.cme-pro.com**

Documents / Resources

	**CME HxMIDI Tools Software** [pdf] User Manual HxMIDI Tools Software, HxMIDI, Tools Software, Software

References

- **Pro.com | Benchmark Quote | Construction Pricing Made Easy**
- **Welcome to CME**
- **User Manual**