H4MIDI WC
USER MANUAL V05

Hello, thank you for purchasing CME's professional products!

Please read this manual completely before using this product. The pictures in the manual are for illustration purposes only, the actual product may vary. For more technical support content and videos, please visit this page: www.cme-pro.com/support/

IMPORTANT

- **Warning**

  Improper connection may result in damage to the device.

- **Copyright**

- **Limited Warranty**

CME provides a one-year standard Limited Warranty for this product only to the person or entity that originally purchased this product from an authorized dealer or distributor of CME. The warranty period starts on the date of purchase of this product. CME warrants the included hardware

against defects in workmanship and materials during the warranty period. CME does not warrant against normal wear and tear, nor damage caused by accident or abuse of the purchased product. CME is not responsible for any damage or data loss caused by improper operation of the equipment. You are required to provide proof of purchase as a condition of receiving warranty service. Your delivery or sales receipt, showing the date of purchase of this product, is your proof of purchase. To obtain service, call or visit the authorized dealer or distributor of CME where you purchased this product. CME will fulfill the warranty obligations according to local consumer laws.

- Safety Information

Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, damages, fire, or other hazards. These precautions include, but are not limited to, the following:

- Do not connect the instrument during thunder.
- Do not set up the cord or outlet to a humid place unless the outlet is specially designed for humid places.
- If the instrument needs to be powered by AC, do not touch the bare part of the cord or the connector when the power cord is connected to the AC outlet.
- Always follow the instructions carefully when setting up the instrument.
- Do not expose the instrument to rain or moisture, to avoid fire and/or electrical shock.
- Keep the instrument away from electrical interface sources, such as fluorescent light and electrical motors.
- Keep the instrument away from dust, heat, and vibration.
- Do not expose the instrument to sunlight.

- Do not place heavy objects on the instrument; do not place containers with liquid on the instrument.
- Do not touch the connectors with wet hands

PACKING LIST

1. H4MIDI WC Interface
2. USB cable
3. Quick Start Guide

INTRODUCTION

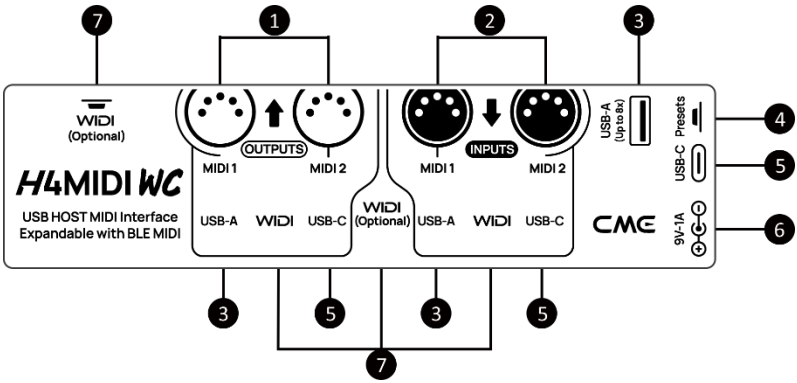
H4MIDI WC is the world's first USB dual-role MIDI interface with expandable wireless Bluetooth MIDI, which can be used as a USB host to independently connect plug-and-play USB MIDI devices and 5-pins DIN MIDI devices for bidirectional MIDI transmission. At the same time, it can also be used as a plug-and-play USB MIDI interface to connect any USB-equipped Mac or Windows computer, as well as iOS devices or Android devices (via USB OTG cable).

It provides 1 USB-A host port (supports up to 8-in-8-out USB host ports through USB Hub), 1 USB-C client port, 2 MIDI IN and 2 MIDI OUT standard 5-pins DIN MIDI ports, as well as an expansion slot for an optional WIDI Core bi-directional Bluetooth MIDI module. It supports up to 128 MIDI channels.

H4MIDI WC comes with the free software HxMIDI Tool (available for macOS, iOS, Windows and Android). You can use it for firmware upgrades,

as well as set up MIDI splitting, merging, routing, mapping and filtering settings. All settings will be automatically saved in the interface, making it easy to use standalone without connecting a computer. It can be powered by a standard USB power supply (bus or power bank) and a DC 9V power supply (sold separately).

H4MIDI WC uses the latest 32-bit high-speed processing chip, which enables fast transmission speeds over USB to meet the throughput of large data Messages and to achieve the best latency and accuracy on sub millisecond level. It connects to all MIDI devices with standard MIDI sockets, as well as USB MIDI devices that meet the plug-and-play standard, such as: synthesizers, MIDI controllers, MIDI interfaces, keytars, electric wind instruments, v-accordions, electronic drums, electric pianos, electronic portable keyboards, audio interfaces, digital mixers, etc.



❶ 5-pins DIN MIDI output 1 and 2 ports and indicators

- These two MIDI OUT ports are used to connect to the MIDI IN port of a standard MIDI device and send MIDI messages.
- The green indicator light will stay on when the power is on. When

sending messages, the indicator light of the corresponding port will flash rapidly.

❷ 5-pins DIN MIDI input 1 and 2 ports and indicators

- These two MIDI IN ports are used to connect to the MIDI OUT or MIDI THRU port of a standard MIDI device and receive MIDI messages.
- The green indicator light will stay on when the power is on. When receiving Messages, the indicator light of the corresponding port will flash rapidly.

❸ USB-A (Up to 8x) host port and indicator

The USB-A host port is used to connect standard USB MIDI devices that are plug-and-play (USB class compliant). Supports up to 8-in-8-out from the USB host port through a USB hub (if the connected device has multiple USB virtual ports, it is calculated based on the number of ports). The USB-A port can distribute power from the DC or USB-C port to the connected USB devices, with a maximum current limit of 5V-1A. The USB host port of H4MIDI WC can be used as a stand-alone interface without a computer.

❗ *Please note: When connecting multiple USB devices through a non-powered USB hub, please use a high-quality USB adapter, USB cable and DC power supply adapter to power the H4MIDI WC, Otherwise, the device may malfunction due to unstable power supply.*

❗ *Please note: If the total current of USB devices connected to the USB-A host port exceeds 1A, please use a self-powered USB hub to power the connected USB devices.*

- Connect the plug-and-play USB MIDI device to the USB-A port via a USB cable or USB hub (please purchase the cable according to the device specifications). When the connected USB MIDI device is powered on, the H4MIDI WC will automatically identify the device name and the corresponding port, and automatically route the identified port to the 5-pins DIN MIDI ports 1 and 2 and the USB-C port. At this time, the connected USB MIDI device can perform MIDI transmission with other connected MIDI devices.

Note 1: If H4MIDI WC cannot recognize the connected device, it may be a compatibility issue. Please contact support@cme-pro.com to get technical support.

Note 2: If you need to change the routing configuration between connected MIDI devices, connect your computer to the USB-C port of the H4MIDI WC and reconfigure using the free HxMIDI Tools software. The new configuration will be automatically stored in the interface.

- When the USB-A port receives MIDI messages, the USB-A INPUT green indicator will flash accordingly.
- When the USB-A port sends MIDI messages, the USB-A OUTPUT green indicator will flash accordingly.

❹Presets Button

- The H4MIDI WC comes with 4 user presets. Each time the button is pressed in the power on state, the interface will switch to the next preset in a cyclic order. All LEDs flash the same number of times corresponding to the preset number to indicate the currently selected preset. For example, if switched to Preset 2, the LED flashes twice.
- The free HxMIDI Tools software can also be used to toggle the button to send an "All Notes Off" message to all outputs for 16 MIDI channels,

eliminating unintentional hanging notes from external devices. Once this function has been set up, you can quickly click the button while the power is on.

- Also when the power is on, press and hold the button for more than 5 seconds and then release it, and H4MIDI WC will be reset to its factory default state.

❺ USB-C slave port and indicator light

The H4MIDI WC has a USB-C port for connecting to a computer to transfer MIDI data or connecting to a standard USB power supply (such as a charger, power bank, computer USB socket, etc.) with a voltage of 5 volts for standalone use.

- When used with a computer, directly connect the interface to the USB port of the computer with the matching USB cable or through a USB Hub to start using the interface. It is designed for plug-and-play, no driver is required. The USB port of the computer can power H4MIDI WC. This interface features 4-in-4-out USB virtual MIDI ports. H4MIDI WC may be displayed as different device names on different operating systems and versions, such as "H4MIDI WC" or "USB audio device", with the port number 0/1/2/3 or 1/2/3/4, and the words IN/OUT.

MacOS

MIDI IN Device Name	MIDI OUT Device Name
H4MIDI WC Port 1	H4MIDI WC Port 1
H4MIDI WC Port 2	H4MIDI WC Port 2
H4MIDI WC Port 3	H4MIDI WC Port 3
H4MIDI WC Port 4	H4MIDI WC Port 4

Windows

MIDI IN Device Name	MIDI OUT Device Name
H4MIDI-WC	H4MIDI-WC
MIDIIN2 (H4MIDI-WC)	MIDIOUT2 (H4MIDI-WC)
MIDIIN3 (H4MIDI-WC)	MIDIOUT3 (H4MIDI-WC)
MIDIIN4 (H4MIDI-WC)	MIDIOUT4 (H4MIDI-WC)

Note: Windows currently does not support multi-client, so you can only open one music software at a time to use the above virtual ports. If you have opened multiple software, please close all and then reopen one software to proceed to the next step.

- When used as a standalone MIDI router, mapper and filter, connect the interface to a standard USB charger or power bank via the matching USB cable and start to use.

Note: Please choose a power bank with Low Current Charging mode (for Bluetooth earbuds or smart bracelets, etc.) and does not have an automatic power-saving function.

- When the USB-C port receives Messages, the USB-C INPUT green indicator will flash accordingly.
- When the USB-C port has MIDI messages sent, the USB-C OUTPUT green indicator will flash accordingly.

❻ DC 9V power socket

You can connect a 9V-1A DC power adapter to power the H4MIDI WC. This is designed for the convenience of guitarists, allowing the interface to be powered by the pedalboard power source, or when the interface is used as a standalone device, such as a MIDI router, where the power source

other than USB is more convenient. The power adapter is not included in the H4MIDI WC package, please purchase it separately if needed.

Please choose a power adapter with a positive terminal on the outside of the plug, a negative terminal on the inner pin, and an outer diameter of 5.5 mm.

❼ WIDI (Option) button, Internal expansion slots, Bluetooth MIDI indicator

A. Button and internal expansion slots

This button has no effect when the optional WIDI Core Bluetooth MIDI module is not installed.

H4MIDI WC can be equipped with CME's WIDI Core module to expand the 16-channel bi-directional wireless Bluetooth MIDI function. For installation instructions of the WIDI Core module, please refer to the printed installation guide in the package. For technical specifications, please visit the product page www.cme-pro.com/widi-core/. This module must be purchased separately.

Whit the optional WIDI Core Bluetooth MIDI module installed, this button can perform specific shortcut actions. First, please make sure that the WIDI Core firmware has been upgraded to the latest version. The following operations are based on WIDI BLE firmware version v0.2.2.1 or higher:

- When the H4MIDI WC is not powered on, press and hold the button and then power on the H4MIDI WC until the WIDI (Optional) indicator in the center of the interface flashes slowly 3 times, then release it. The WIDI Core Bluetooth module will be manually reset to the factory

state.

- When H4MIDI WC is powered on, press and hold the button for 3 seconds and then release it, and the Bluetooth role of the WIDI Core module will be manually set to "Force Peripheral" mode (this mode is used to connect to a computer or mobile phone). If WIDI Core has previously connected to other Bluetooth MIDI devices, this will disconnect all Bluetooth connections.

B. WIDI INPUT/OUTPUT Bluetooth MIDI Indicators

When the WIDI Core module is not installed, these three instructors are off. When the WIDI Core module is installed, the WIDI (Optional) indicator status is as follows:

WIDI(Optional) Indicator

- Slow flashing dark blue: Bluetooth MIDI has started normally and is waiting to connect.
- Solid dark blue: the WIDI Core is connected to another Bluetooth MIDI central as a Bluetooth MIDI peripheral role.
- Light blue (turquoise): the WIDI Core is connected to other Bluetooth MIDI peripherals as a Bluetooth MIDI central role.
- Solid green: the WIDI Core is in firmware upgrade mode, please use the WIDI App (iOS or Android) to upgrade the firmware (Please visit: BluetoothMIDI.com webpage to get the App download link).

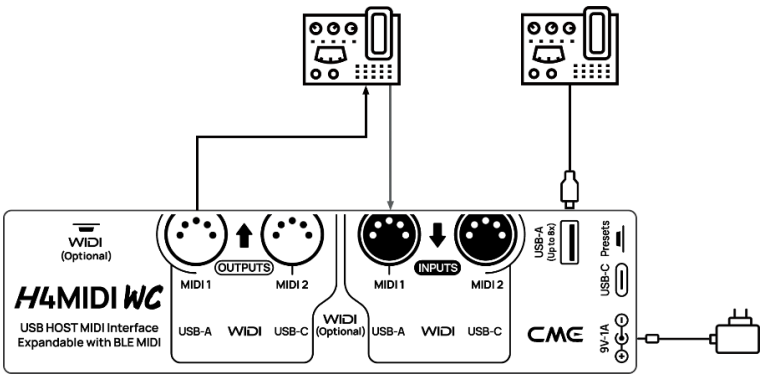
WIDI INPUT/OUTPUT Indicators

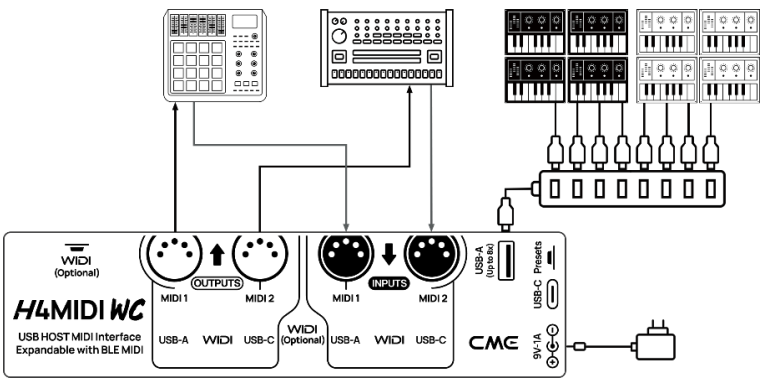
- When WIDI Core receives MIDI messages, the green WIDI INPUT indicator will flash accordingly.

- When WIDI Core sends MIDI messages, the green WIDI OUTPUT indicator will flash accordingly.

WIRED MIDI CONNECTION

- Use H4MIDI WC to connect external USB MIDI devices to your MIDI Devices

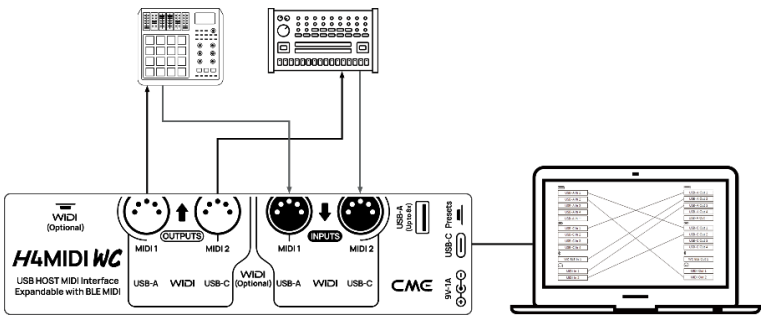




1. Connect a USB or 9V DC power source to the device.
2. Use your own USB cable to connect your plug-and-play USB MIDI device to the USB-A port of H4MIDI WC. If you want to connect multiple USB MIDI devices at the same time, please use a USB Hub.
3. Use a MIDI cable to connect the MIDI IN port of the H4MIDI WC to the MIDI Out or Thru port of other MIDI devices, and connect the MIDI OUT port of the H4MIDI WC to the MIDI IN port of other MIDI devices.
4. When the power is on, the LED indicator of H4MIDI WC will light up, and you can now send and receive MIDI messages between the connected USB MIDI device and MIDI device according to the preset signal routing and parameter settings.

Note： H4MIDI WC has no power switch, you just need to power it on to start working.

- **Use H4MIDI WC to connect external MIDI devices to your computer**

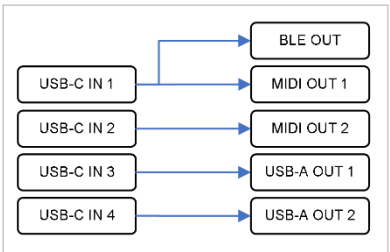


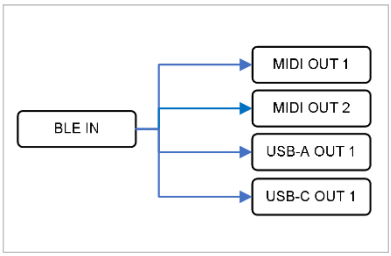
1. Use the provided USB cable to connect the H4MIDI WC to the USB port of your computer. Multiple H4MIDI WCs can be connected to a computer via a USB Hub.

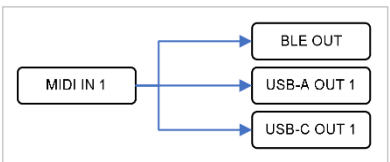
2. Use a MIDI cable to connect the MIDI IN port of the H4MIDI WC to the MIDI Out or Thru of other MIDI devices, and connect the MIDI OUT port of the H4MIDI WC to the MIDI IN of other MIDI devices.

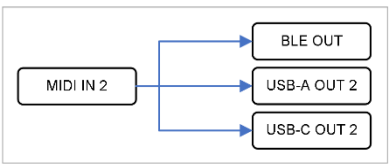
3. When the power is on, the LED indicator of H4MIDI WC will light up and the computer will automatically detect the device. Open the music software, set the MIDI input and output ports to H4MIDI WC on the MIDI settings page, and get started. See the manual of your software for further details.

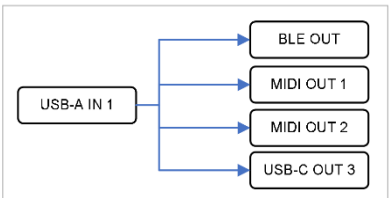
- **H4MIDI WC Initial signal flow chart**

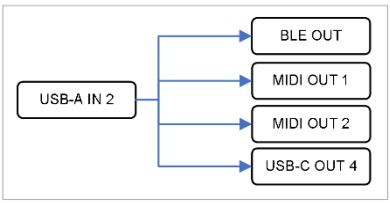


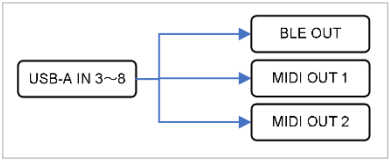












Note: The BLE MIDI part is only effective after the WIDI Core module is installed.

Note: The above signal routing can be customized by using the free HxMIDI TOOLS software, please refer to the [Software Settings] section of this manual for details.

USB MIDI CONNECTION SYSTEM REQUIREMENTS

Windows：

- Any PC computer with a USB port.
- Operating System: Windows XP (SP3) / Vista (SP1) / 7 / 8 / 10 / 11 or later.

Mac OS X:

- Any Apple Mac computer with a USB port.
- Operating System: Mac OS X 10.6 or later.

iOS：

- Any iPad, iPhone, iPod Touch. To connect to models with a Lightning port, you need to purchase the Apple Camera Connection Kit or

Lightning to USB Camera Adapter separately.

- Operating system: Apple iOS 5.1 or later.

Android：

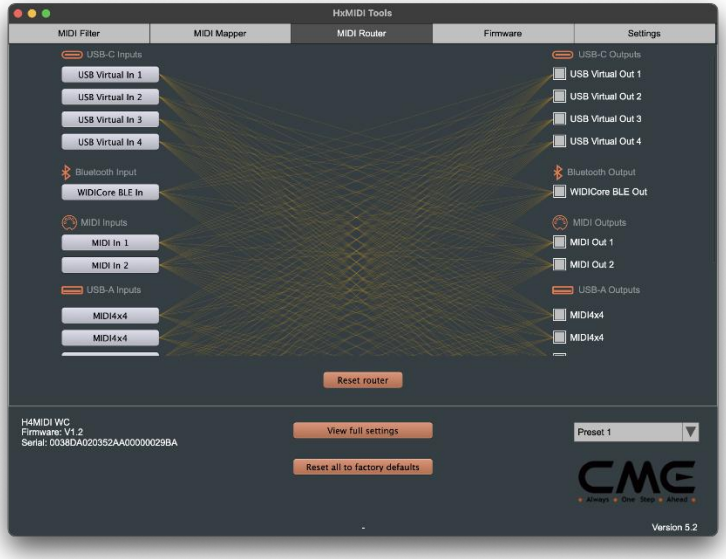
- Any tablet and phone with a USB data port. You may need to purchase a USB OTG cable separately.
- Operating system: Google Android 5 or later.

SOFTWARE SETTINGS

Please visit: www.cme-pro.com/support/ to download the free HxMIDI Tools software (compatible with macOS X, Windows 7 - 64bit or higher, iOS, Android) and the user manual. You can use it to upgrade the firmware of your H4MIDI WC at any time to get the latest advanced features. At the same time, you can also perform a variety of flexible settings. All router, mapper and filter settings will be automatically saved to the internal memory of the device.

1. MIDI Router Settings

The router is used to view and change the signal flow of MIDI Messages in your H4MIDI Wc hardware.



2. MIDI Mapper Settings

The mapper is used to reassign (remap) the selected input data of the connected device so that it can be output according to custom rules that are defined by you.

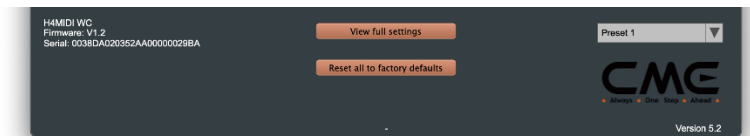
3. MIDI Filter settings

The Filter is used to block certain types of MIDI messages in a selected input or output.

4. View full settings & Reset all to factory defaults

The View Full settings button is used to view the filter, mapper, and router settings for each port of the current device - in one convenient overview.

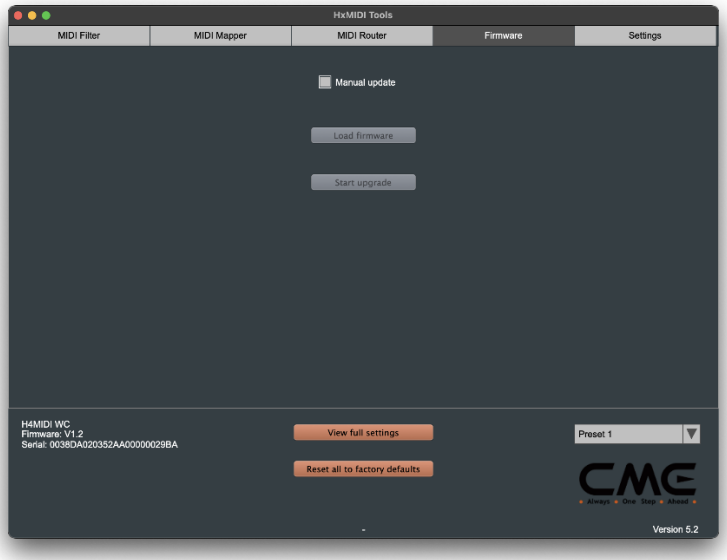
The Reset all to factory defaults button is used to reset all parameters of the unit to the default state when the product leaves the factory.



5. Firmware Upgrade

When your computer is connected to the internet, the software automatically detects whether the currently connected H4MIDI WC hardware is running the latest firmware and requests an update if necessary. If the firmware cannot be updated automatically, you can manually update it on the Firmware page.

Note: It is recommended to restart H4MIDI WC every time after upgrading to a new firmware version.

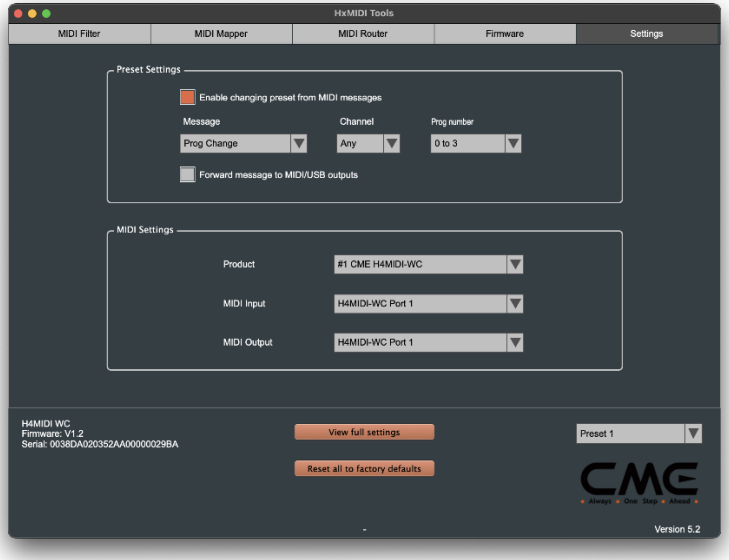


6. Settings

The Settings page is used to select the CME USB Host MIDI hardware device model and port to be set up and operated by the software. When a new device is connected to your computer, use the [Rescan MIDI] button to

rescan the newly connected CME USB Host MIDI hardware device so that it appears in the drop-down boxes for Product and Ports. If you have multiple CME USB Host MIDI hardware devices connected at the same time, please select the product and port you want to set up here.

You can also enable remote switching of user presets via MIDI note, program change, or control change message in the Presets settings area.

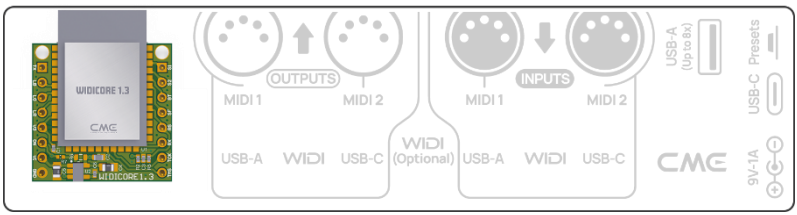


EXTENDING BLUETOOTH MIDI

H4MIDI WC can be equipped with CME's WIDI Core module to expand the bi-directional Bluetooth MIDI function with 1-in-1-out of 16 MIDI channels.

- Installing WIDI Core to H4MIDI WC

1. Remove all external connections from the H4MIDI WC.
2. Use a screwdriver to remove the two fixing screws under the label on the bottom of the H4MIDI WC and open the outer shell.
3. Wash your hands with running water to release static electricity, and then take out WIDI Core from the package.
4. Insert the WIDI Core into the expansion socket of H4MIDI WC horizontally and slowly from the top of the H4MIDI WC mainboard at a vertical 90-degree angle according to the direction shown in the figure below.



5. Attach the mainboard of the H4MIDI WC back to the case and fasten it with screws.

Note 1: The product package also includes the "H4MIDI WC Optional Bluetooth MIDI Module Installation Guide" for reference.

Note 2: Wrong insertion direction or position, improper plugging and unplugging, live operate with power-on, static electricity, etc., may cause WIDI Core and H4MIDI WC to not work properly, or even damage the hardware!

- Upgrade the Bluetooth firmware for the WIDI Core module

1. Please go to the Apple App store, Google Play store, or CME official website support page to search for the CME WIDI APP and install it.

Your iOS or Android device needs to support the Bluetooth Low Energy 4.0 feature (or higher).

2. Open the WIDI app and the WIDI Core name will appear in the device list. Click the name of the device to enter the firmware upgrade page. Then tap [Start] and [Upgrade], and the app will perform a firmware update (during the upgrade process, please keep your screen on until the update is completed).
3. After the upgrade is complete, exit the WIDI App and restart H4MIDI WC

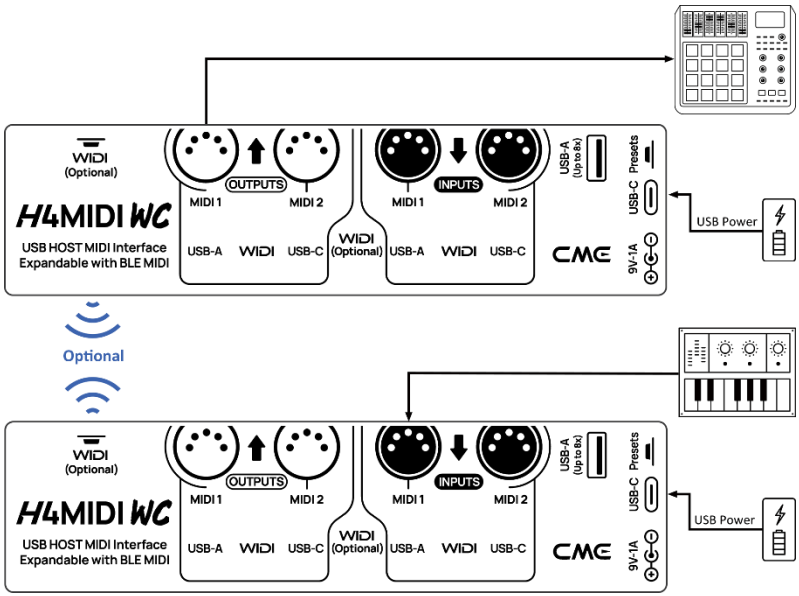
BLE MIDI CONNECTION

(OPTIONAL WIDI CORE EXPANSION MODULE INSTALLED)

Note: All WIDI products use the same Bluetooth connection method. Therefore, the following video instructions use WIDI Master as an example.

- **Establish a Bluetooth MIDI connection between two H4MIDI WC interfaces with WIDI Core installed**

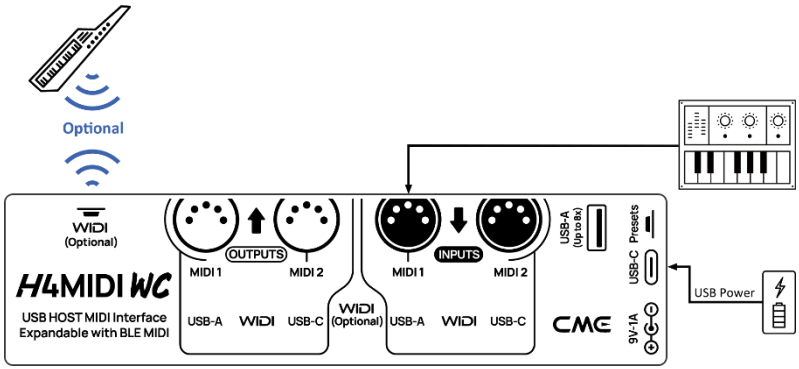
  Video instruction: https://youtu.be/BhIx2vabt7c



1. Power on both H4MIDI WCs with WIDI Core installed.
2. The two H4MIDI WCs pair automatically. The WIDI (Optional) dark blue LED light will change from slow flashing to solid light (the LED light of one of the H4MIDI WCs that automatically acts as Bluetooth central will be turquoise). If there is MIDI data to send, the LEDs of both devices flash dynamically during data transfer.

3. Establish a Bluetooth MIDI connection between a music device with built-in Bluetooth MIDI and a H4MIDI WC with WIDI Core installed

Video instruction: https://youtu.be/7x5iMbzfd0o

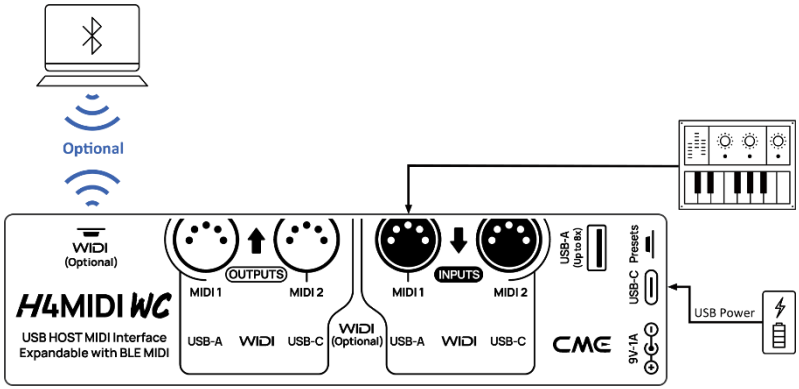


1. Power on the MIDI device with built-in Bluetooth MIDI and the H4MIDI WC with WIDI Core installed.
2. The WIDI Core will automatically pair with the built-in Bluetooth MIDI of another MIDI device, and its dark blue LED light will change from slow flashing to a solid turquoise. If MIDI data is transmitted, the LED light will flash dynamically during data transfer.

Note: If the WIDI Core cannot pair automatically with another MIDI device, there may be a compatibility issue, please go to BluetoothMIDI.com contact CME for technical support. Also check if your mobile device, another WIDI device or your operating system is not obstructing the automatic connection process. Make sure all other Bluetooth MIDI devices are turned off and/or the WIDI Core is removed from the general Bluetooth device list of your mobile device or operating system. You can use the group auto-learn feature to create a fixed pairing as explained later in this manual.

- **Establish a Bluetooth MIDI connection between macOS X and H4MIDI WC with WIDI Core installed**

  Video instruction: https://youtu.be/bKcTfR-d46A



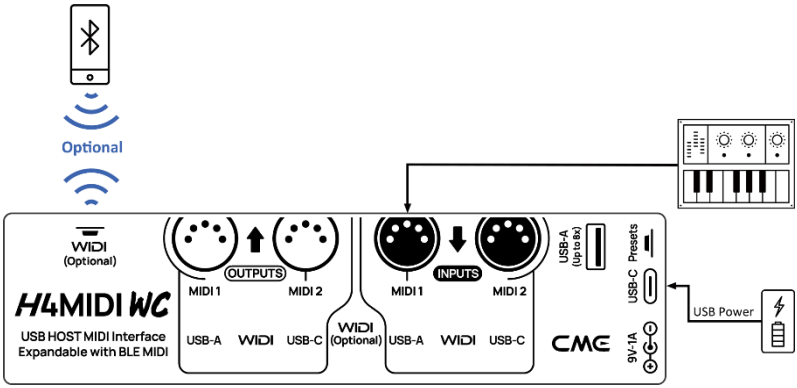
1. Power on the H4MIDI WC with WIDI Core installed and confirm that the dark blue LED is blinking slowly.
2. Click the [Apple icon] in the upper left corner of the Apple computer screen, click the [System Preferences] menu, click the [Bluetooth icon], and click [Turn on Bluetooth], then exit the Bluetooth settings window.
3. Click the [Go] menu at the top of the Apple computer screen, click [Utilities], and click [Audio MIDI Setup].

Note: If you do not see the MIDI Studio window, click the [Window] menu at the top of the Apple computer screen and click [Show MIDI Studio].

4. Click the [Bluetooth icon] on the upper right of the MIDI Studio window, find the WIDI Core that appears under the device name list, click [Connect], the Bluetooth icon of the WIDI Core will appear in the MIDI Studio window, indicating that the connection is successful. All setup windows can now be exited.

5. Establish Bluetooth MIDI connection between iOS device and H4MIDI WC with WIDI Core installed

Video instruction: https://youtu.be/5SWkeu2lyBg



1. Go to the App store to search for and download the free app [midimittr].

Note: If the App you are using already has a Bluetooth MIDI connection function, please connect WIDI Core directly in the MIDI settings page in the App.

2. Power on the H4MIDI WC with WIDI Core installed and confirm that the dark blue LED is blinking slowly.
3. Click the [Settings] icon to open the setting page, click [Bluetooth] to enter the Bluetooth setting page, and slide the Bluetooth switch to enable the Bluetooth function.
4. Open the midimittr App, click the [Device] menu at the bottom right of the screen, find the WIDI Core that appears in the list, click [Not Connected], and click [Pair] on the Bluetooth pairing request pop-up window, the status of WIDI Core in the list will be updated to [Connected], indicating that the connection is successful. At this point midimittr can be minimized and kept running in the background by pressing the iOS device's home button.

5. Open the music app that can accept external MIDI input and select WIDI Core as the MIDI input device on the settings page to start using it.

Note: iOS 16 (and higher) offers automatic pairing with WIDI devices. After confirming the connection for the first time between your iOS device and WIDI device, it will automatically reconnect every time you start your WIDI device or Bluetooth on your iOS device. This is a great feature, as from now on, you will no longer have to manually pair each time. That said, it can bring confusion for those who use WIDI App to only update their WIDI device and not use an iOS device for Bluetooth MIDI. The new auto-pairing can lead to unwanted pairing with your iOS device. To avoid this, please terminate Bluetooth on your iOS device or forget the existing pairing. You can create fixed pairs between your WIDI devices via WIDI Groups.

- Establish a Bluetooth MIDI connection between Windows 10/11 computer and H4MIDI WC with WIDI Core installed

First, the music software must integrate Microsoft's latest UWP API interface program to use the Bluetooth MIDI universal driver that comes with Windows 10/11. Most music software has not integrated this API for various reasons. As far as we know, only Cakewalk by Bandlab and Steinberg Cubase 12 or higher integrates this API, so it can connect directly to H4MIDI WC with WIDI Core installed or other standard Bluetooth MIDI devices.

Of course, there are alternative solutions for MIDI data transfer between “Windows 10/11 Generic Bluetooth MIDI Drivers” and your music software via a software virtual MIDI interface driver, such as using the “Korg BLE MIDI driver”. WIDI products are fully compatible with the Korg BLE MIDI Windows 10/11 driver, which can support multiple WIDIs to connect to

Windows 10/11 computers at the same time and perform bi-directional MIDI data transmission. The specific setup procedure is as follows:

Video instruction: https://youtu.be/JyJTulS-g4o

1. Please visit the Korg official website to download the BLE MIDI Windows driver.

   www.korg.com/us/support/download/driver/0/530/2886/

2. After decompressing the driver file with the decompression software, click the exe file to install the driver (you can check whether the installation is successful in the list of sound, video and game controllers in the device manager after installation).

3. Please use the WIDI App to set the BLE role of WIDI Core as "Force Peripheral" to avoid automatic connection with each other when multiple WIDI devices are used at the same time. If necessary, each WIDI device can be renamed (rename to take effect after restarting), which is convenient for distinguishing different WIDI devices when using them at the same time.

4. Please make sure your Windows 10/11 and the computer's Bluetooth driver have been upgraded to the latest version (the computer needs to be equipped with Bluetooth Low Energy 4.0 or 5.0).

5. Power on the H4MIDI WC with WIDI Core installed and start. Click Windows [Start] - [Settings] - [Devices], open the [Bluetooth and other devices] window, turn on the Bluetooth switch, and click [Add Bluetooth or other devices].

6. After entering the Add Device window, click [Bluetooth], click the WIDI Core device name listed in the device list, and then click [Connect].

7. If it says, "Your device is ready", click [Finished] to close the window (you will be able to see the WIDI Core in the Bluetooth list in Device Manager after connecting).

8. Follow steps 5 to 7 to connect other WIDI devices to Windows 10/11.

Note: The above steps are just to pair the WIDI Core with Windows Bluetooth, and the connection status of the WIDI will change to [Not Connected] after briefly displaying [Connected]. Only when you open the music software in the next step, the connection status of your WIDI Core will automatically change to [Connected].

9. Open the music software, in the MIDI settings window, you should see the WIDI Core device name appearing in the list (the Korg BLE MIDI driver will automatically discover the WIDI Bluetooth connection and associate it with the music software). Just select the WIDI Core as the MIDI input and output device.

Note: If you do not see the WIDI Core device name in the MIDI settings window of your music software, please visit the Windows Connection Troubleshooting section of the WIDI Product Quick Guide on the CME website support page to see the solution, or email the support@cme-pro.com for assistance.

In addition, we have developed WIDI Bud Pro and WIDI Uhost professional hardware solutions for Windows users, which can best meet the demanding requirements of professional users for ultra-low latency and long-distance wireless control. Please visit the relevant product webpage for details (www.cme-pro.com/widi-premium-bluetooth-midi/).

- **Establish Bluetooth MIDI connection between Android device and H4MIDI WC with WIDI Core installed**

Like the Windows situation, the music app must integrate the general Bluetooth MIDI driver of the Android operating system to connect with the

Bluetooth MIDI device. Most music apps have not implemented this feature for various reasons. Therefore, you need to use some apps specially designed to connect Bluetooth MIDI devices as a bridge.

Video instruction: https://youtu.be/0P1obVXHXYc

1. Download and install the free app [MIDI BLE Connect]:

   https://www.cme-pro.com/wp-content/uploads/2021/02/MIDI-BLE-Connect_v1.1.apk

2. Power on the H4MIDI WC with WIDI Core installed and confirm that the dark blue LED is blinking slowly.
3. Turn on the Bluetooth function of the Android device.
4. Open the MIDI BLE Connect App, click [Bluetooth Scan], find the WIDI Core that appears in the list, click [WIDI Core], it will show that the connection is successful. At the same time, the Android system will issue a Bluetooth pairing request notification, please click on the notification and accept the pairing request. At this point, you can press the home button of the Android device to minimize the MIDI BLE Connect App and keep it running in the background.
5. Open the music app that can accept external MIDI input and select WIDI Core as the MIDI input device on the settings page to start using it.

- Group connection with multiple WIDI devices

You can group multiple WIDI devices to achieve bi-directional data transmission up to [1-to-4 MIDI Thru] and [4-to-1 MIDI merge], and multiple groups are supported to use at the same time.

Note: If you want to connect other brands of Bluetooth MIDI devices in the group at the same time, please refer to the description of the "Group Auto-Learn" function below.

Video instruction: https://youtu.be/ButmNRj8Xls

1. Open the WIDI app.
2. Power on a H4MIDI WC with WIDI Core installed.

Note: *Please remember to avoid having multiple WIDI devices powered on at the same time, otherwise they will be automatically paired one-to-one, which will cause the WIDI App to fail to discover the WIDI Core you want to connect to.*

3. Set the Bluetooth role of this WIDI Core to the "Force Peripheral" role and rename it.

Note: *Click the device name to rename the WIDI Core. The new name requires a restart of the device to take effect.*

4. Repeat the above steps to set up all H4MIDI WCs with WIDI Core installed (or other WIDI devices) to be added to the group.
5. After all WIDI Cores of the H4MIDI WC (or other WIDI devices) have been set to "Force Peripheral" roles, they can be powered on at the same time.
6. Click the Group menu, and then click Create New Group.
7. Enter a name for the group.
8. Drag and drop the corresponding WIDI Cores to the central and peripheral positions.

9. Click "Download Group" and the settings will be saved in the WIDI Core that is the central. Next, these WIDI Cores will restart and automatically connect to the same group.

Note 1: Even if you turn off the H4MIDI WC with WIDI Core installed, all group settings will still be stored in the memory of the WIDI Core central. When powered on again, they will automatically connect in the same group.

Note 2: If you want to delete the group connection settings, please use the WIDI App to connect the WIDI Core that is the central and click [Remove group settings].

Note 3: If you use an iOS 16 (and later) device for group setup, please turn off the Bluetooth switch on the iOS device after setup or forget the existing WIDI pairing to release the Bluetooth occupation caused by automatic reconnection.

- Group Auto-Learn

The Group Auto-Learn function allows you to establish up to [1-to-4 MIDI Thru] and [4-to-1 MIDI merge] group connections between WIDI series products and other brands of Bluetooth MIDI devices. When you enable "Group Auto-Learn" for a WIDI device you want to operate as the central device of the group, the device will automatically scan and connect to all available BLE MIDI devices.

Video instruction: https://youtu.be/tvGNiZVvwbQ

1. Set all WIDI devices as "Force Peripheral" to avoid automatic pairing of WIDI devices with each other.
2. Enable "Group Auto-Learn" for the central WIDI device of your choice. Close the WIDI application. The WIDI LED light will slowly flash dark blue.

Note: If you use an iOS 16 (and later) device for Group Auto-Learn setup, please turn off the Bluetooth switch on the iOS device after setup or forget the existing WIDI pairing to release the Bluetooth occupation caused by automatic reconnection.

3. Turn on up to 4 BLE MIDI peripherals (including WIDI) to automatically connect with the WIDI central device.
4. When all peripheral devices are connected (The turquoise LED of the central and the LED of the peripherals are both on constantly. If there is real-time data such as MIDI clock being sent, the LED light will flash quickly), press the button on the WIDI central device to store the group in its memory. The WIDI central LED light is green when pressed and turquoise when released.

Note: iOS, Windows 10/11 and Android are not eligible for WIDI groups. For macOS, click "Advertise" in MIDI Studio's Bluetooth configuration.

TECHNICAL SPECIFICATIONS

technology	USB host and client, all compliant with USB MIDI class (plug and play)
Connectors	1x USB-A (Host), 1x USB-C (Client） 2x 5-pins DIN MIDI inputs, 2x 5-pins DIN MIDI outputs 1x DC power socket (External 9V-1A DC adapter not included)
Extensions	Optional WIDICore - Premium Bluetooth MIDI
Indicator Lights	11x LED lights (WIDI LED indicators will only light up when the WIDI Core expansion module is installed)
Button	1x button for presets and other functions 1x button for optional WIDI (only takes effect after the WIDI

	Core extension module is installed).
Compatible devices	Devices with plug-and-play USB MIDI socket, or standard MIDI sockets (including 5V and 3.3V compatibility) Computers and USB MIDI host devices which supports USB MIDI plug-and-play
Compatible OS	macOS, iOS, Windows, Android, Linux and Chrome OS
MIDI Messages	All messages in the MIDI standard, including notes, controllers, clocks, sysex, MIDI timecode, MPE
Wired transmission	Close to Zero Latency and Zero Jitter
powered by	USB-C socket. Powered via standard 5V USB bus or charger DC 9V-1A Socket (5.5mm x 2.1mm), polarity is positive outside and negative inside The USB-A socket provides power to connected devices*. * The maximum output current is 1A.
Configuration & firmware upgrades	Configurable/Upgradable via USB-C port using HxMIDI Tool software (Win/Mac/iOS & Android tablets through USB cable)
Power consumption	318 mW
Size	140mm (L) x 38mm (W) x 33mm (H) 5.51 in (L) x 1.50 in (W) x 1.30 in (H)
Weight	102 g / 3.6 oz
WIDI Core (optional)	
Technology	Bluetooth 5 (Bluetooth Low Energy MIDI), bi-directional 16 MIDI channels
Compatible devices	WIDI Master, WIDI Jack, WIDI Uhost, WIDI Bud Pro, WIDI Core, WIDI BUD, standard Bluetooth MIDI controller. Mac/iPhone/iPad/iPod Touch/Vision Pro, Windows 10/11 computer, Android mobile device (all with Bluetooth Low Energy 4.0 or higher)
Compatible OS	macOS Yosemite or higher, iOS 8 or higher, Windows 10/11 or

(BLE MIDI)	higher, Android 8 or higher
Wireless transmission Latency	As low as 3 ms (Test results of two H4MIDI WC with WIDI Core installed based on Bluetooth 5 connection)
Range	20 meters / 65.6 feet (without obstruction)
Firmware upgrades	Wireless upgrade via Bluetooth using the WIDI App for iOS or Android
Weight	4.4 g / 0.16 oz

Specifications subject to change without notice.

FREQUENTLY ASKED QUESTIONS

- **The LED light of H4MIDI WC does not light up.**

- Please check whether the USB socket of the computer is powered, or the power adapter is powered.
- Please check if the USB power cable, or the polarity of the DC power supply is wrong.
- When using a USB power bank, please choose a power bank with Low Current Charging mode (for Bluetooth earbuds or smart bracelets, etc.) and does not have an automatic power-saving function.

- **H4MIDI WC does not recognize the connected USB device.**

- H4MIDI WC can only recognize plug-and-play USB MIDI class-compliant standard devices. It cannot recognize other USB MIDI devices that require drivers to be installed on the computer or general USB devices (such as USB flash drives, mice, etc.).

- When the total number of connected device ports exceeds 8, H4MIDI WC will not recognize the excess ports.
- When H4MIDI WC is powered by DC, if the total power consumption of the connected devices exceeds 1A, please use a powered USB hub or independent power supply to power the external devices.

- **The computer does not receive MIDI messages when playing a MIDI keyboard.**

- Please check if the H4MIDI WC is correctly selected as the MIDI input device in your music software.
- Please check if you ever configure custom MIDI routing or filtering through the HxMIDI Tools software. You can try to press and hold the button for 5 seconds in the power-on state and then release it to reset the interface to the factory default state.

- **The external sound module is not responding to MIDI messages played by the computer.**

- Please check if the H4MIDI WC is correctly selected as the MIDI output device in your music software.
- Please check if you ever set up custom MIDI routing or filtering through the HxMIDI Tools software. You can try to press and hold the button for 5 seconds in the power-on state and then release it to reset the interface to the factory default state.

- **The sound module connected to the interface has long or disordered notes.**

- This problem is most likely caused by MIDI loopbacks. Please check if you have set up custom MIDI routing via the HxMIDI Tools software.

You can try to press and hold the button for 5 seconds in the power-on state and then release it to reset the interface to the factory default state.

- **Can't find a Bluetooth device.**

- Please make sure that the WIDI Core expansion module has been correctly inserted into the internal slot of H4MIDI WC and the WIDI indicator is flashing slowly.
- If the WIDI indicator is on, it means that it has been automatically connected to a Bluetooth MIDI device. Please turn off other Bluetooth MIDI devices that do not need to be connected and try again.

- **The H4MIDI WC cannot send and receive MIDI messages through the expanded WIDI Core.**

- Please check if the WIDI Core Bluetooth is selected as the MIDI Input and Output device in the DAW software.
- Please check if the Bluetooth MIDI connection has been established successfully.
- Please check if the MIDI cable between H4MIDI WC and external MIDI device is connected correctly.

- **The wireless connection distance of the WIDI Core module of the H4MIDI WC is very short, the latency is high, or the signal is intermittent.**

- WIDI Core adopts Bluetooth standard for wireless signal transmission. When the signal is strongly interfered or blocked, the transmission distance and response time will be affected. This can be caused by trees, reinforced concrete walls, or environments with many other

electromagnetic waves. Please try to avoid these sources of interference

CONTACT

e-mail:support@cme-pro.com

Web page:www.cme-pro.com