

WIDI UHOST

OWNER'S MANUAL V02

Please read this manual completely before using this product. The pictures in the manual are for illustration purposes only. They may differ from the actual product. For more technical support content and videos, please visit the [BluetoothMIDI.com](https://www.cme.com/BluetoothMIDI.com) page.

IMPORTANT INFORMATION

- **WARNING**

Improper connection may cause damage to the device.

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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 a 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.
- This product contains magnets. Please do not place this product close to devices that are susceptible to magnetic interference, such as credit cards, medical equipment, computer hard drives, etc.
- 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.

UNSUPPORTED PRODUCT

When using WIDI Uhost as a USB host, it supports most plug-and-play “class compliant” standard USB MIDI devices. It is important to understand that USB devices that need special drivers or are created as combined devices, will not be compatible with WIDI Uhost. If your USB MIDI device falls into the following conditions, it is not compatible with WIDI Uhost:

1. USB devices that require the installation of special drivers are not supported.
2. "Combined Device Class" products are not supported. For example: Audio + MIDI USB device.
3. USB devices that include USB hub functions are not supported.
4. USB devices with multiple MIDI ports will only function on the first USB MIDI port.

Some USB MIDI devices have two modes of operation and can be set to operate in Class Compliant mode even if this is not the default. The Class Compliant mode might be called “generic driver”, the other mode may be called something like “advanced driver”. Consult the device manual to see if the mode can be set for Class Compliant.

CONNECTION

WIDI Uhost is a 3-in-1 wireless Bluetooth USB MIDI interface, which can transmit 16 channels of MIDI messages in bi-directions simultaneously:

1. It can be used as a standalone USB host to add Bluetooth MIDI function to class compliant USB MIDI devices, 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.
2. It can be used as a USB device to add Bluetooth MIDI function to a computer or smart mobile device with USB socket, and the MIDI device with a USB Host socket. Its compatible operating systems include: Windows, macOS, iOS, Android, Linux, ChromeOS.
3. It can be used as a Bluetooth MIDI central or peripheral to directly connect devices and computers with a built-in BLE MIDI feature, such as: Bluetooth MIDI controllers, iPhones, iPads, Mac computers, Android mobile phones, PC computers, etc.



The WIDI Uhost has two USB Type-C sockets and a push switch.

- ◆ The USB-C socket marked with USB Host/Device on the left is a data port, which can be automatically switched in the role of USB host or device:
 - When connecting a class compliant USB MIDI device, WIDI Uhost will automatically switch to the host role that can work as standalone device without computer, and convert USB MIDI data into Bluetooth MIDI data (and vice versa). When WIDI Uhost runs in this mode, it needs to be powered by external 5V USB power to the USB-C socket on the right side, and it can supply up to 500 mA of buss power to the attached USB device.
 - When connecting a computer USB port or a USB MIDI device with USB Host port, WIDI Uhost will automatically switch to a USB device and convert the USB MIDI data into Bluetooth MIDI data (and vice versa). When WIDI Uhost runs in this mode, it can be powered by the USB bus power.
- ◆ The USB-C socket marked with USB Power on the right is the power supply port. You can use a general USB Type-C charging cable to connect to a standard USB power source with 5 volts (for example: charger, power bank, computer USB socket, etc.). While using the external USB power, it can supply maximum 500 mA of buss power specified by the USB 2.0 standard to the attached USB device.

Note: Do not use a power supply higher than 5 volts, otherwise it may cause damage to WIDI Uhost or the attached USB device.

- ◆ The push button on the right side of the interface is used for specific operations (please confirm that the WIDI Uhost firmware has been upgraded to the latest version). The following operations are based on firmware v0137 or higher:

- When the WIDI Uhost is not powered on, press and hold the button and then power on the WIDI Uhost, after the green LED light flashes 3 times please release it, then the interface will be manually switched to the factory default.
- When the WIDI Uhost is powered on, press and hold the button for 3 seconds and then release it, the Bluetooth role of the interface will be manually set to "Force Peripheral" mode. If WIDI Uhost has been connected to other BLE MIDI devices before, this operation will disconnect all connections.
- ◆ There is a magnet inside the back of WIDI Uhost, which can be easily pasted on the device with the attached magnet patch.

Note: Do not place this product close to devices that are susceptible to magnetic interference, such as credit cards, medical equipment, computer hard drives, etc.

● **WIDI Uhost optional cable accessories**

Model	Description	Image
USB-B OTG WIDI cable pack I	USB-B 2.0 to USB-C OTG cable (For connecting USB MIDI device with USB-B socket)	
	USB-A 2.0 to USB-C cable (For connecting computer or USB power)	
USB micro-B OTG WIDI cable pack II	USB micro-B 2.0 to USB-C OTG cable (For connecting USB MIDI device with USB micro-B socket)	

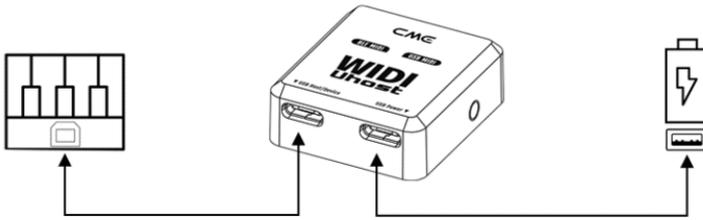
	USB-A 2.0 to USB-C cable (For connecting computer or USB power)	
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● WIDI Uhost LED indicator

- ◆ The left LED is the Bluetooth indicator
 - When the power is supplied normally, the LED light will be lit.
 - Blue LED flashes slowly: the device starts normally and waits for connection.
 - Blue LED light stays on constantly: the device has been successfully connected.
 - Blue LED flashes quickly: the device is connected and is receiving or sending MIDI messages.
 - Light blue (turquoise) LED: as in the central mode, the device has been connected to other peripheral devices.
 - Green LED: The device is in firmware upgrader mode. Please use the iOS or Android WIDI App to upgrade the firmware (Please find the App download link on [BluetoothMIDI.com](https://www.bluetoothmidi.com)).
- ◆ The right LED is the USB indicator
 - When the power supply is normal, the LED light will be lit.
 - The green LED stays on constantly: the USB host or device is connected and detected successfully.

● Use WIDI Uhost as the USB Host to connect class compliant USB MIDI devices

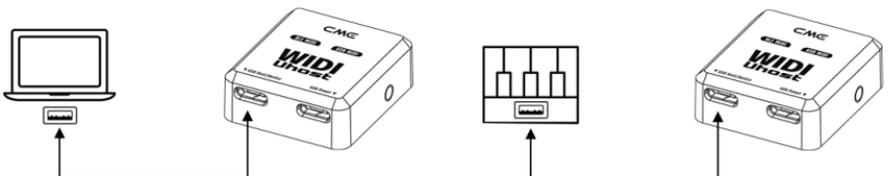


1. Plug the USB-B or micro-B connector of optional OTG cable into USB socket of the USB MIDI device, and then plug the USB-C connector into USB Host/Device socket on the left side of the WIDI Uhost.
2. Plug the USB-C connector of optional USB power cable into USB Power socket on the right side of WIDI Uhost, and then plug the USB-A connector into USB socket of the USB power supply.
3. When the right LED turns green and stays on constantly, it means that the USB MIDI device has been detected successfully by WIDI Uhost and can send and receive Bluetooth MIDI messages through it.

Note 1: The above picture shows the connection of the USB-B socket. The connection method of other USB sockets is same.

Note 2: WIDI Uhost does not have a power switch, it can start to work just by connecting the power.

- Use WIDI Uhost as the USB device to connect computer or a MIDI device with USB Host socket



1. Plug the USB-A connector of optional USB power cable into USB-A socket of the computer (compatible operating systems include: Windows, macOS, iOS, Android, Linux, ChromeOS) or the USB-A Host socket of USB MIDI device, and then plug the USB-C connector into USB Host/Device socket on the left side of WIDI Uhost.
2. When the right LED turns green and stays on constantly, it means that computer or USB Host has detected WIDI Uhost as a USB MIDI device successfully, and can send and receive Bluetooth MIDI messages through it.

Note 1: *WIDI Uhost does not have a power switch, it can start to work just by connecting the power.*

Note 2: *Please go to the computer DAW software or MIDI device setting page and select WIDI Uhost as the USB MIDI input and output device.*

● Connect two WIDI Uhosts via Bluetooth

1. Turn the power on of both MIDI devices equipped with WIDI Uhost.
2. The two WIDI Uhosts units will pair via Bluetooth automatically, and the blue LED will change from slow flashing to constant light (when there is MIDI data sending, the LED light will flash dynamically).

● Connect WIDI Uhost with Bluetooth MIDI device

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

1. Turn on both the MIDI devices plugged with WIDI Uhost as well as the Bluetooth MIDI devices.
2. WIDI Uhost will automatically pair with the Bluetooth MIDI device, and the blue LED will change from slow flashing to constant light (when there is MIDI data sending, the LED light will flash dynamically)

Note: If WIDI Uhost cannot automatically pair with another Bluetooth MIDI device, it may be caused by a compatibility issue. In that case, please contact CME for technical support.

- **Connect WIDI Uhost with macOS X via Bluetooth**

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

1. Turn on the power of the MIDI device with the WIDI Uhost plugged in, and confirm that the blue LED flashes slowly.
2. Click the [Apple icon] on the upper left corner of the screen, click the [System Preferences] menu, click the [Bluetooth icon], and click [Turn Bluetooth On], then exit the Bluetooth settings window.
3. Click the [Go] menu at the top of the screen, click [Utilities], and click the [Audio MIDI Setup]

Note: If you don't see the MIDI Studio window, click the [Window] menu at the top of the screen and click [Show MIDI Studio].

4. Click the [Bluetooth icon] at the upper right of the MIDI studio window, find the WIDI Uhost that appears under the device name list, and click [Connect]. The WIDI Uhost 's Bluetooth icon will appear in the MIDI studio window, indicating successful connection. You can exit all setting windows then.

- **Connect WIDI Uhost with iOS device via Bluetooth**

Video instruction: <https://youtu.be/5SWkeu2lyBq>

1. Go to the Apple AppStore to search and download the free application [midimitt].

Note: *If the App you are using already has a Bluetooth MIDI connection function, please directly connect to the WIDI Uhost on the MIDI setting page in the App.*

2. Turn on the power of the MIDI device with the WIDI Uhost plugged in, and confirm that the blue LED flashes slowly.
3. Click the [Settings] icon to open the settings page, click [Bluetooth] to enter the Bluetooth setting page, and slide the Bluetooth switch to turn on the Bluetooth functionality.
4. Open the midimitr App, click the [Device] menu at the bottom right of the screen, find the WIDI Uhost that appears under the list, click [Not Connected], and click [Pair] on the Bluetooth pairing request pop-up window, the status of WIDI Uhost in the list will be updated to [Connected], indicating that the connection is successful. Then you can press the Home button of the iOS device to minimize midimitr and keep it running in the background.
5. Open the music app that can accept external MIDI input, and select WIDI Uhost as the MIDI input device on the settings page, you can start using it.

● **Connect WIDI Uhost with Windows 10 via Bluetooth**

First, the music software must integrate Microsoft's latest UWP API to use the Bluetooth class compliant MIDI driver that comes with Windows 10. Most music software has not yet integrated this API for various reasons. As far as we know, only Cakewalk by Bandlab currently integrates this API, so it can directly connect to WIDI Uhost or other standard Bluetooth MIDI devices.

Of course, there are some alternative solutions for MIDI transmission between the Windows 10 Bluetooth MIDI driver and music software through virtual MIDI port driver, such as Korg BLE MIDI driver. Starting from the

firmware version v0.1.3.7, WIDI is fully compatible with the Korg BLE MIDI Windows 10 driver. It can support multiple WIDIs connected to Windows 10 computers at the same time with two-way MIDI data transmission. The operations are as follows:

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

1. Please visit Korg official website to download the BLE MIDI Windows driver.
<https://www.korg.com/us/support/download/driver/0/530/2886/>
2. After decompressing the driver files with the decompression software, click the exe file to install the driver (you can check whether the installation is successful in the sound, video, and game controller list of the device manager).
3. Please use the WIDI App to upgrade the firmware of the WIDI device to v0.1.3.7 or later (for upgrade steps, please refer to the relevant instructions and videos on BluetoothMIDI.com). At the same time, please set the upgraded WIDI BLE role to "Forced Peripheral" to avoid automatic connection when multiple WIDIs are used at the same time. If necessary, you can rename each WIDI after the upgrade, so that you can distinguish between different WIDI devices when you use them at the same time.
4. Please make sure that the Windows 10 and the Bluetooth driver of your computer has been upgraded to the latest version (the computer needs to be equipped with Bluetooth 4.0/5.0 capability).
5. Plug a WIDI into the MIDI device, turn on the power to start the WIDI. Click "Start" - "Settings" - "Devices" on Windows 10, 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 device name listed in the device list, and then click "Connect".
7. If you see "Your device is ready to go", please click "Done" to close the window (after connecting, you can see WIDI in the Bluetooth list of the device manager).
8. Please follow steps 5 to 7 to connect other WIDI devices to Windows 10.
9. Open the music software, in the MIDI settings window, you should be able to see the WIDI device name appearing in the list (Korg BLE MIDI driver will automatically detect the WIDI Bluetooth connection and associate it with the music software). Just select the desired WIDI as the MIDI input and output device.

In addition, CME WIDI Uhost and WIDI Bud Pro are both professional hardware solution for Windows users, that meets the requirements of professional users for ultra-low latency and long-distance control to the greatest extent. Please visit <https://www.cme-pro.com/widi-bud-pro/> for details.

● **Connect WIDI Uhost with Android device via Bluetooth**

Like the case of Windows, the Android Music App must integrate the universal Bluetooth MIDI driver of Android's OS to communicate with the Bluetooth MIDI device directly. Most music apps haven't integrated this functionality for various reasons. Therefore, you need to use specific apps dedicated to connecting Bluetooth MIDI devices as a bridge.

Video instruction: <https://youtu.be/OP1obVXHXYc>

1. Go to the PlayStore to search and download the free application [MIDI BLE Connect].



2. Turn on the power of the MIDI device with the WIDI Uhost plugged in, and confirm that the blue LED flashes slowly.
3. Turn on the Bluetooth function of the Android device.
4. Open the MIDI BLE Connect App, click [Bluetooth Scan], find the WIDI Uhost that appears in the list, and click [WIDI Uhost], it will show that the connection is created successfully. At the same time, the Android system will send a Bluetooth pairing request notification. Please click on the notification and accept the pairing request. After this you can press the Home button on the Android device to minimize the MIDI BLE Connect App and keep it running in the background.
5. Open the music app that accepts an external MIDI input, and select WIDI Uhost as the MIDI input device on the settings page, then you can start using it.

● **Group connection with multiple WIDI devices via Bluetooth**

WIDI Uhost supports group connection via Bluetooth from firmware version v0137 and higher. Group connections will allow two-way data transmission of 1-to-4 MIDI split and 4-to-1 MIDI merge. And it supports simultaneous use of multiple groups.

Video instruction: <https://youtu.be/ButmNRj8XIs>

1. Go to the iOS Appstore or Google Playstore to search for and download the free application WIDI App.



(Version 1.3.10 or higher)

2. Upgrade WIDI Uhost to the latest firmware. Then keep only one WIDI product powered on.

Note: Please remember to avoid having multiple WIDIs powered on at the same time. Otherwise, they will be automatically paired one to one. This will cause the WIDI App to fail in finding the WIDI you want to connect to as they are already occupied.

3. Set your WIDI Uhost as "Force Peripheral" role and rename it.

Note 1: After the BLE role is set as "Force Peripheral", the setting will be automatically saved in the WIDI Uhost.

Note 2: Click the WIDI Uhost device name to be renamed. The new name will be effective once restarted.

4. Repeat the above steps to set all WIDIs to be added to the group.
5. After all WIDIs are set to the "Force Peripheral" role, they can be powered on at the same time.
6. Click the "Group" menu, and then click "Create New Group" (or [+] icon on Android).
7. Enter the name of the group.
8. Drag and drop the WIDI products to the central and peripheral positions.
9. Click "Download Group". The setting will be saved in all WIDI products. From here on, these WIDIs will be restarted and automatically connect as the same group by default.

Note 1: Even if you power off the WIDI products, all the group setting status will still be remembered. When you power them on again, they will be automatically connected in the same group.

Note 2: If you want to forget the group connection settings, please use the WIDI App to connect to the WIDI with "Central" role and click "Reset Default Connections". Again, only power on this central device to allow the pairing with WIDI App. If you power on multiple group devices they will automatically connect as a group. This will make it impossible for the WIDI App to make to connection as they will already be occupied.

SPECIFICATION

Technology	USB 2.0, Bluetooth 5, MIDI over Bluetooth Low Energy-Compliant
Connectors	USB Type-C host/ device (Optional USB cables to connect various USB MIDI devices)
Compatible devices	USB 2.0 Class Compliant MIDI devices, Computers or MIDI devices with USB host port, standard Bluetooth MIDI controllers
Compatible OS (Bluetooth)	iOS 8 or later, OSX Yosemite or later, Android 8 or later, Win 10 v1909 or later
Compatible OS (USB)	Windows, macOS, iOS, Android, Linux, ChromeOS.

Latency	As low as 3 ms (test with two WIDI Uhosts on BLE 5)
Range	20 meters without obstruction
Firmware upgrade	By air using WIDI App (iOS/Android)
Power supply	5v via USB, 500mA for attached USB 2.0 device
Power Consumption	37 mW
Size	34 mm (W) x 38 mm (H) x 14 mm (D)
Weight	18.6g

Specifications are subject to change without notice.

FAQ

- **The LED of WIDI Uhost is not lit.**
 - Is the WIDI Uhost connected to the correct USB power?
 - Please check whether the USB power supply or the USB power bank has sufficient power (please choose a power bank that can charge low-current devices), or the connected USB Host device is turned on?
 - Please check whether the USB cable works normally?
- **WIDI Uhost cannot receive or send MIDI messages.**
 - Please check whether you connected the USB Host/Device socket on the left of WIDI Uhost with correct cable, and whether the Bluetooth MIDI has been successfully connected?

- **When WIDI Uhost runs as the host, it cannot provide power to the connected class compliant USB devices.**
 - Please check whether the USB power supply is correctly connected to the USB Power socket on the right of WIDI Uhost?
 - Please check whether the connected USB device complies with the USB 2.0 specification (power consumption does not exceed 500mA)?
- **Can WIDI Uhost connect wirelessly with other BLE MIDI devices?**
 - If the BLE MIDI device complies with the standard BLE MIDI specification, it can be connected automatically. If the WIDI Uhost cannot automatically connect, it may be a compatibility issue. Please contact CME for technical support through BluetoothMIDI.com.
- **The wireless connection distance is very short, or the latency is large, or the signal is intermittent.**
 - WIDI Uhost uses the Bluetooth standard for wireless transmission. When the signal is strongly interfered or obstructed, the transmission distance and response time will be affected by objects in the environment, such as metals, trees, reinforced concrete walls, or environments with more electromagnetic waves.

CONTACT

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