

# **WIDI JACK**

## **OWNER'S MANUAL V09B**

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 BluetoothMIDL.com.

Please visit www.bluetoothmidi.com and download the free WIDI App. It includes iOS and Android versions and is the setting center for all new WIDI products (excluding old WIDI Bud, including WIDI Bud Pro). You can get the following value-added services through it:

- Upgrade the firmware of WIDI products at any time to get the latest features.
- Customize the device name for WIDI products and store the user settings.
- Set up a one-to-multi group connection.

**Note**: iOS and macOS have different Bluetooth MIDI connection methods, so the iOS version of WIDI App cannot be used on macOS computers.

# IMPORTANT INFORMATION

#### WARNING

Improper connection may cause damage to the device.

### COPYRIGHT



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#### 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 abuses 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 a proof of purchase as a condition of receiving warranty service. Your proof of purchase is the delivery or sales receipt, showing the date of purchase of this product. To obtain service, call or visit the authorized dealer or distributor of CME where you purchased this product. CME will fulfil 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.
- 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

## CONNECTION

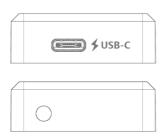
WIDI Jack is a wireless Bluetooth MIDI interface. It adds Bluetooth MIDI (transmitting and receiving) to MIDI devices with different MIDI connectors, such as: synthesizers, MIDI controllers, MIDI interfaces, keytars, electric wind instruments, v-accordions, electronic drums, electric pianos, electronic portable keyboards, audio interfaces, digital mixers, etc. At the same time, WIDI Jack can also connect devices and computers with a built-in BLE MIDI feature, such as: standard Bluetooth MIDI controllers, iPhones, iPads, Mac computers, Android mobile phones, PC computers, etc.

The WIDI Jack interface has two 2.5mm mini TRS MIDI sockets and a USB-C power supply socket (no data function), as well as an on/off switch and a slide switch:





- The mini TRS socket marked with ▲ at the bottom of the interface is to be connected to the MIDI OUT of MIDI device through an optional accessory cable. This to obtain power supply and receive MIDI information from the device. Next it will be converted into Bluetooth MIDI messages and sent to other devices.
- The mini TRS socket marked with ▼ at the bottom of the interface is to be connected to the MIDI IN of MIDI device through an optional accessory cable. Next it will send the received Bluetooth messages to the connected MIDI device.





- The socket marked with **/**USB-C connects a standard 5 volts USB power source (for example: charger, power bank, computer USB socket, etc.). Therewith it supplies power to the WIDI Jack. This is only necessary if the MIDI OUT socket of the MIDI device does not supply power or when the WIDI Jack is only connected to MIDI IN where MIDI power is not available.
- The push switch on the right side of the interface is used for the following quick operations (please confirm that the product firmware has been upgraded to the latest version). The following operations are based on Bluetooth firmware v0.1.0.0 or higher:
  - When the WIDI Jack is NOT powered on, press and hold the button. Power on the WIDI Jack until the green LED light flashes slowly for 3 times. Then release the button. The interface will manually reset to the factory default.
  - When the WIDI Jack is powered on, press and hold the button for 3 seconds and then release it. The interface will be manually set to "force peripheral" mode. If the WIDI Jack was connected to other BLE MIDI devices, this connection will be terminated by following this procedure.





• The slide switch on the back of the WIDI Jack can be used to switch the input / output polarity of the mini TRS jack to adapt to the two different TRS to 5-pin DIN MIDI cable specifications. Namely Type-A or Type-B (the optional TRS to 5-pin DIN cable from CME is Type-B). With this switch feature WIDI Jack can be applied to most TRS MIDI specifications in the market.

**Note 1**: To determine whether your MIDI device is Type-A or Type-B, please check the manual of your MIDI device or consult the manufacturer.

**Note 2**: If you find that MIDI messages CANNOT be sent or received between the WIDI Jack and the connected MIDI device, try changing this switch to a mode that matches the polarity of the TRS to 5-pin DIN MIDI cable.

 There is a magnet inside the back of the WIDI jack, which can be easily attached to the device with the magnet patch accessory.

**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 Jack Cable Options

Model	Description	Image
25DIN5	2.5mm mini TRS Jack to 5-pin DIN male cable (Type-B)	
25TRS35	2.5mm mini TRS Jack to 3.5mm (1/8") TRS Jack cable	25



25TRS25	2.5mm mini TRS Jack to 2.5mm mini TRS Jack cable	25
25DIN6mini	2.5mm mini TRS Jack to 6-pin mini DIN male cable	
25TRS635	2.5mm mini TRS Jack to 6.35mm (1/4") TRS cable	

#### WIDI Jack LED indicator

Video instruction: <a href="https://youtu.be/BvPyvInH9sA">https://youtu.be/BvPyvInH9sA</a>

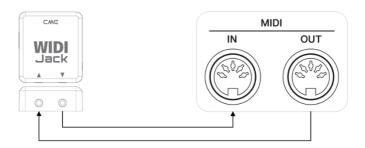
- When the power is supplied normally, the LED light will be lit.
- Blue LED flashes slowly: the device starts normally and waits for connection.
- Blue LED light stays on constantly: the device has been successfully connected.
- Blue LED flashes quickly: the device is connected and is receiving or sending 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).



#### Add WIDI Jack Bluetooth MIDI function for standard MIDI devices

Video instruction: https://youtu.be/MN4myXp544A

- 1. Plug the 2.5mm mini TRS Jack of the WIDI Jack optional cable into the mini TRS Jack socket of the interface box.
- 2. Plug the other end of the WIDI Jack optional cable into the MIDI OUT and MIDI IN sockets of the MIDI device.



**Note 1**: The above picture shows the connection of the 5-pin DIN MIDI socket, and the connection method for other MIDI socket specifications is similar.

**Note 2**: If the MIDI device only has a MIDI OUT socket, there is no need to connect the other cable.

**Note 3**: If the MIDI OUT socket of the MIDI device cannot provide  $3.3v\sim5v$  power supply, or you want to connect only the MIDI IN of the device, please use a general USB Type-C cable to connect to a standard 5v USB power supply.

## Connect two WIDI Jacks

Video instruction: <a href="https://youtu.be/4QQIZ\_J8GOY">https://youtu.be/4QQIZ\_J8GOY</a>

1. Turn the power on of both MIDI devices equipped with WIDI Jack.



2. The two WIDI Jacks will be connected automatically, and the blue LED will change from slow flashing to constant light (when MIDI data is transmitting, the LED will flash accordingly).

#### Connect WIDI Jack with Bluetooth MIDI device

Video instruction: https://youtu.be/4SdHf6MmAhs

- 1. Turn on both the MIDI devices plugged with WIDI Jack as well as the Bluetooth MIDI devices.
- WIDI Jack will automatically connect with the built-in Bluetooth MIDI module of the MIDI device, and the blue LED will change from slow flashing to constant light (when MIDI data is transmitting, the LED will flash accordingly).

**Note**: If WIDI Jack cannot automatically pair with another Bluetooth MIDI device, it may be caused by a compatibility issue. Please contact CME through BluetoothMIDI.com for technical support.

## Connect WIDI Jack with macOS X

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

- Turn on the power of the MIDI device with the WIDI Jack 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 [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 Jack that appears under the device name list, and click [Connect]. The WIDI Jack's Bluetooth icon will appear in the MIDI studio window, indicating the successful connection. Please note, the MIDI studio can now be minimized to run in the background. If no music software is running, macOS will automatically disconnect the Bluetooth MIDI connection after a period to optimize resource usage. That is why it is recommended to keep MIDI studio running and minimize the view of the window.

#### Connect WIDI Jack with iOS device

Video instruction: https://youtu.be/wfxU\_X8H5lc

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

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

- 2. Turn on the power of the MIDI device with the WIDI Jack 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 midimittr App, click the [Device] menu at the bottom right of the screen, find the WIDI Jack that appears under the list, click [Not Connected], and click [Pair] on the Bluetooth pairing request pop-up window, the status of WIDI Jack 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 midimittr and keep it running in the background.
- Open the music app that can accept external MIDI input and select WIDI Jack as the MIDI input device on the settings page, you can 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, you can create fixed pairs between your WIDI devices via WIDI Groups. Another option is to terminate Bluetooth on your iOS device when working with WIDI devices.

#### Connect WIDI Jack with Windows 10

First, the Windows version of 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 Jack 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 Bluetooth 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: <a href="https://youtu.be/JyJTulS-q40">https://youtu.be/JyJTulS-q40</a>

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

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

- 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 Bluetooth 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", 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, we have developed WIDI UHOST as a 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 <a href="https://www.cme-pro.com/widi-uhost">www.cme-pro.com/widi-uhost</a> for details.

#### Connect WIDI Jack with Android device

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: <a href="https://youtu.be/PYwtlg4cN2k">https://youtu.be/PYwtlg4cN2k</a>

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 Jack 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 Jack that appears in the list, and click [WIDI Jack], 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.
- Open the music app that accepts an external MIDI input and select WIDI Jack as the MIDI input device on the settings page, then you can start using it.

## Group connection with multiple WIDI devices

WIDI Jack supports group connection from Bluetooth firmware version v0.1.0.0 and higher. Group connections will allow two-way data transmission of 1-to-4 MIDI Thru and 4-to-1 MIDI merge. And it supports simultaneous use of multiple groups.

Video instruction: <a href="https://youtu.be/ButmNRj8Xls">https://youtu.be/ButmNRj8Xls</a>

1. Open the WIDI App.



(Version 1.2.19 or higher)

2. Upgrade WIDI Jack to the latest Bluetooth firmware. Then keep only one WIDI Jack powered on.



**Note**: Please remember to avoid having multiple WIDI Jacks 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 Jack you want to connect to as they are already occupied.

3. Set your WIDI Jack 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 Jack.

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

- 4. Repeat the above steps to set all WIDI Jacks to be added to the group.
- 5. After all WIDI Jacks 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".
- 7. Enter the name of the group.
- 8. Drag and drop the WIDI Jack to the central and peripheral positions.
- 9. Click "Download Group". The setting will be saved in all WIDI Jacks. From here on, these WIDI Jacks will be restarted and automatically connect as the same group by default.

**Note 1**: Even if you power off the WIDI Jack, 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 Jack 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.

#### Group Auto-learn

WIDI Master supports Group Auto-learn from Bluetooth firmware version v0.1.6.6. Enable "Group Auto Learn" for the WIDI Central device to automatically scan for all available BLE MIDI devices (including WIDI and other brands).

Video instruction: <a href="https://youtu.be/tvGNiZVvwbQ">https://youtu.be/tvGNiZVvwbQ</a>

- 1. Set all WIDI devices to "Forced Peripheral" to avoid auto-pairing between WIDI devices.
- 2. Enable "Group Auto Learn" for the central WIDI device. Close WIDI app. WIDI LED will flash blue slowly.
- 3. Turn on up to 4 BLE MIDI peripherals (including WIDI) for automatic pairing with the WIDI Central device.
- 4. When everything is connected, press the button on the WIDI Central device to store the group in its memory. The WIDI LED is green when pressed and turns turquoise when released.

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



# **SPECIFICATION**

Technology	Bluetooth 5, MIDI over Bluetooth Low Energy-Compliant
Connectors	2.5mm mini TRS Jack MIDI input and output (optional MIDI cables with different plugs to connect to different MIDI devices)
Compatible devices	MIDI devices with 5-pin DIN OUT, WIDI Jack, WIDI BUD, Bluetooth MIDI controllers. Mac, iPhone/iPad/iPod Touch with Bluetooth 4.0 or later
Compatible OS	iOS 8 or later, OSX Yosemite or later
Latency	As low as 3 ms (test with two WIDI Jacks on BLE 5)
Range	20 meters without obstruction
Firmware upgrade	By air using WIDI App (iOS/Android)
Power supply	Powered via MIDI OUT or USB, compatible with 5V and 3.3V
Power	
Consumption	37 mW
Size	34 mm (L) x 38 mm (W) x 14 mm (H)
Weight	18.6g

Specifications are subject to change without notice.



# FAQ

- The LED of the main adapter of WIDI Jack is not lit.
- Is the main adapter connected to the MIDI OUT jack of the MIDI device?
- Has the MIDI device been turned on?
- When using a USB power supply, please check whether the USB power is turned on or whether the USB power bank has sufficient power (please choose a power bank with Low Power charging mode for smartwatches, Bluetooth headphones such as AirPods, and fitness trackers).
- WIDI Jack cannot receive or send MIDI messages.
- Try sliding the switch on the back of the WIDI Jack to adjust it to the TRS
   MIDI mode that matches the polarity of the selected cable.
- When I only use MIDI IN, can I only connect the optional cable of the WIDI Jack to the MIDI IN socket of the device?
- Yes. But it needs to be connected to an external USB (5v) power supply or power bank.
- Can WIDI Jack 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 Jack cannot automatically connect, it may be a compatibility issue. Please contact CME for technical support through <u>BluetoothMIDI.com</u>.
- The connection between WIDI Jack to iOS or macOS is unstable or with noticeable latency.

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- In most cases this issue occurs after updating the Bluetooth firmware of your WIDI device, or after upgrading your operating system. This can cause conflicts between the previous Bluetooth connection cache and the upgraded version. To solve this, open the Bluetooth settings page of your iOS or macOS device, forget or remove the previous WIDI pairing and restart Bluetooth. Now establish a new connection with your WIDI device.
- The wireless connection distance is very short, or the latency is large, or the signal is intermittent.
- WIDI Jack 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
  trees, reinforced concrete walls, or environments with more
  electromagnetic waves.

# CONTACT

Email: info@cme-pro.com

Website: BluetoothMIDI.com

# **COMPLIANCE**

#### **FCC Statement**

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and



(2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Contains MIC: 211-240611 Contains IC: 25657-BLEM205

Contains FCC ID: 2ABRUBDLEM205









