DOREMiDi
www.doremidi.cn

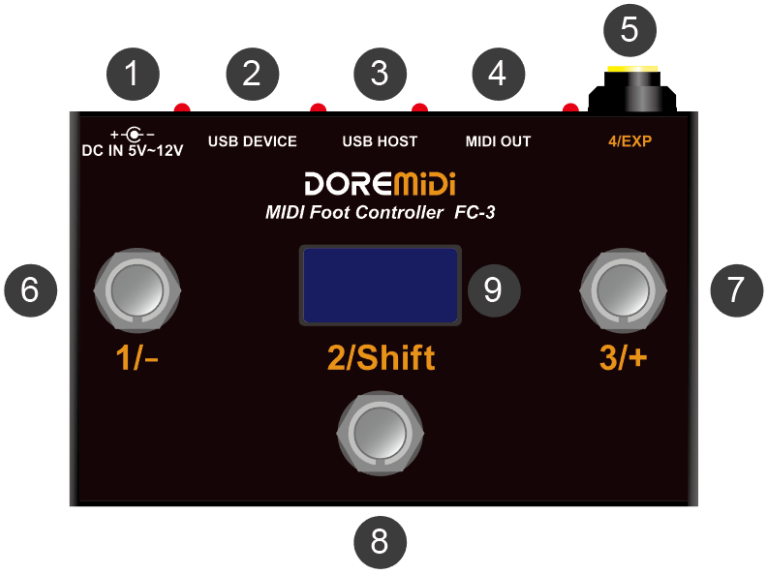
MIDI Foot Controller (FC-3)

Instructions

1. Introduction

MIDI Foot Controller (FC-3) is a MIDI controller designed by DOREMiDi that can be used for foot control. FC-3 has a variety of MIDI output interfaces, which can be connected to computers, USB MIDI instruments, and MIDI DIN devices. FC-3 has 3 programmable switch pedals and 1 expression pedal interface, all pedals can be customized with MIDI messages, and each pedal can be configured with 16 groups of MIDI. The FC-3 has a display that clearly shows the MIDI messages currently being played.

2. Appearance



❶ DC IN: Product power supply interface, use DC plug to supply power to the product, power supply voltage 5V~12V. (Ring-positive power supply)

❷ USB DEVICE: USB device interface, use a USB cable to connect to the computer, you can also supply power to the FC-3 through this interface.

❸ USB HOST: USB host interface, use a USB cable to connect a device with a USB MIDI interface.

❹ MIDI OUT: MIDI DIN output interface, use a 5-pin MIDI cable to connect devices with MIDI IN.

❺ 4/EXP: Pedal Number: 4, Expression pedal interface, connect the analog expression pedal through 6.35mm TRS cable.

❻❼❽1/-, 2/Shift, 3/+: Pedal Number: 1~3, Switch Pedal, output MIDI messages by stepping on it.

❾ Display: OLED display, showing the working content of FC-3.

3. Product Parameters

Name	Description
Model	FC-3
Size (L x W x H)	115*82*53mm
Weight	240g

Consumption	30mA@5V，20mA@9V
USB HOST Output Power	Maximum 2A@5V, depends on the input power of DC IN
USB HOST Compatibility	Compatible with USB class compliant MIDI devices Compatible with some known not USB class compliant MIDI devices
MIDI Compatibility	Compatible with all musical instruments with MIDI standard interface, compatible with all MIDI type messages
USB DEVICE Interface	USB class compliant, plug and play
DC In Interface	Powered by DC interface, 5V~12VDC

4. Steps for usage

1) Power supply: Use a 5V~12V DC power supply to supply power to the product through the "DC IN", and the indicator lights up after power is supplied.

2) Configure the pedal's MIDI messages:

   Connect the computer via USB DEVICE to configure the MIDI messages of the pedals. For the configuration method, see 4. MIDI message configuration;

   If not configured, default parameters are used:

Padal Name	MIDIChannel	MIDI Status	Value	Remark
1/-	1	PC	One click plus 1	
2/Shift	1	CC#64	Press to send 127, release to send 0	Sustain pedal
3/+	1	PC	One click minus 1	
4/EXP	1	CC#11	0~127	

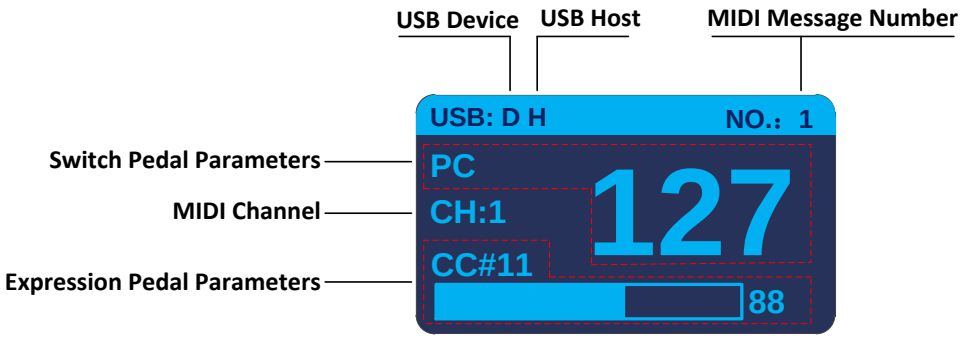
3) Connect MIDI device/computer: Connect an external MIDI device/computer via USB DEVICE/USB HOST/MIDI OUT.

4) Connect the expression pedal: Connect an analog expression pedal via a 6.35 TRS cable.

5) Output MIDI messages: By pressing the footswitch/expression pedal, the configured MIDI messages can be output.

   The FC-3 can be configured with up to 16 sets of independent MIDI messages. Hold down "Shift" and click "-"/"+" to switch to select different MIDI message numbers.

6) Screen display description:



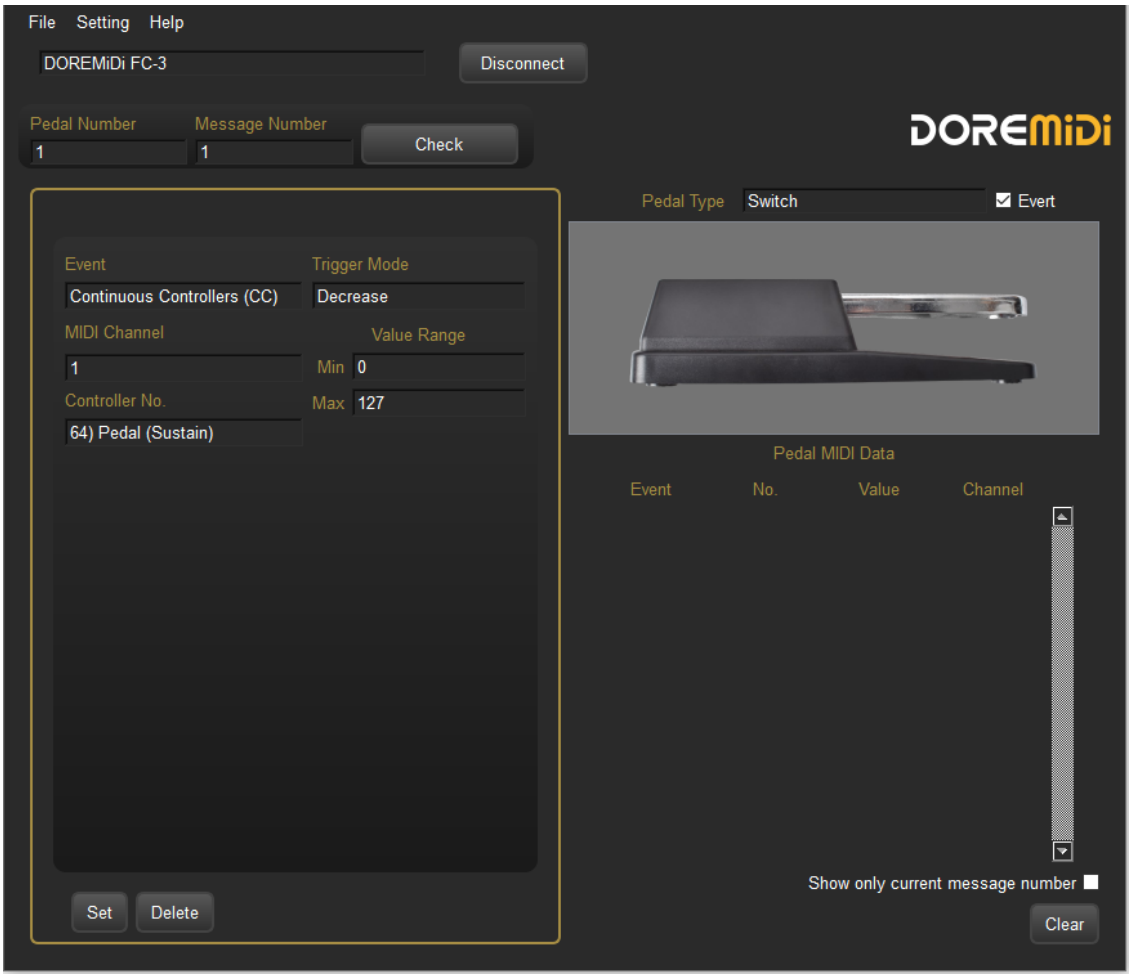
- USB connection status: After the USB device is connected, it will display "D", and after the USB HOST is connected, it will display "H".

- Switch pedal parameters: display the MIDI message type (PC/CC/NOTE) of the switch pedal, and display the value after the pedal is pressed.
- Expression pedal parameters: display the MIDI message type (CC/NOTE/PBend/CPress) of the expression pedal, and display the value after the pedal is pressed.
- MIDI message serial number: FC-3 can be configured with 1~16 independent MIDI message groups. Hold down "Shift" and click "-"/"+" to switch to select different MIDI message sequence numbers.

(Note: CC: Continue Control, PC: Program Change, PBend: Pitch Bend, CPress: MIDI Channel Pressure)

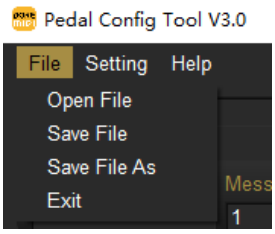
5. Configure pedal MIDI messages

Users can use “Pedal Config Tool” software to configure the MIDI messages triggered by the pedal. Please connect the product to the computer, and then use “Pedal Config Tool” to connect the product and set the MIDI messages. This software supports Windows7 and above systems, MacOS 13.0 and above.Software link:
https://www.doremidi.club/download/Product/PedalConfigTool/Pedal_Config_Tool.zip
(Note: ① If the software download link is invalid, please go to the DOREMiDi official website to download: www.doremidi.cn. ② The software functions may be updated, please refer to the instructions after downloading the software.)



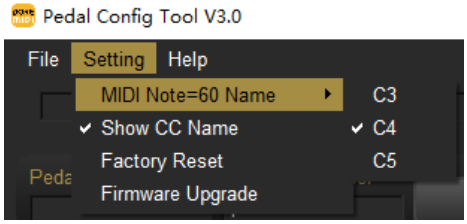
1) Navigation Bar

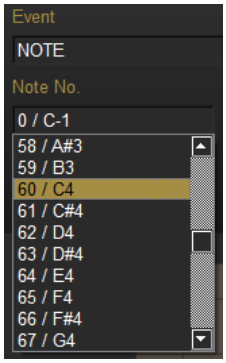
a. File



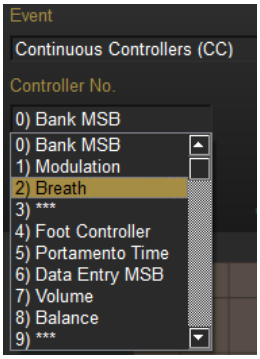
- Save File: save all the configuration information of the current page as a file, which can be used next time.
- Save File As: Save the file as another file, save all the configuration information of the current page as another file.
- Open File: open and import the configuration file.

b. Setting

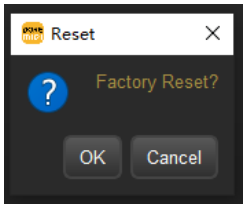




- MIDI Note = 60 Name: set the note when MIDI Note = 60, used to display the name of the note.
- Show CC Name: When turned on, when the pedal is set to Continue Controller (CC), the name of the CC controller can be displayed. The CC controller name is defined according to the MIDI standard document, where "***" is an undefined name.

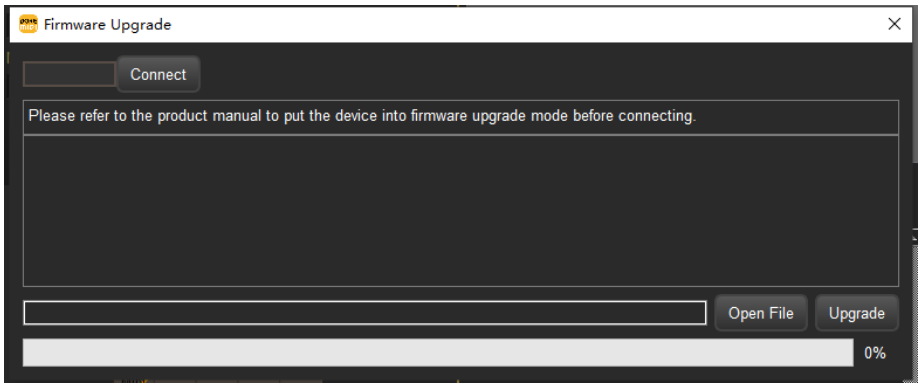


- Factory Reset: When the software is connected to the product, click "Factory Reset" to clear all product configurations.



- Firmware Upgrade: Firmware upgrade, operate the DOREMiDi product to enter the upgrade mode, then connect to the computer, and use the firmware upgrade function of this software to upgrade the product's firmware.

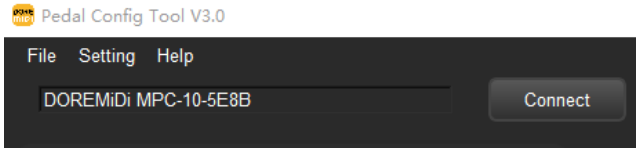
(Note: ①Please pay attention to the official website for the launch of new firmware: www.doremidi.cn ②The operation upgrade mode of different products may be different, please refer to the product manual. ③On Windows PC, if the software cannot recognize the device, please install the USB driver (this driver is only applicable to Windows system): https://www.doremidi.club/download/Product/Upgrade/Virtual_COM_Port_Driver_V1.5.0.zip)



2) Main interface

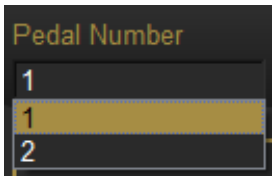
a. Connecting the device

When the DOREMiDi pedal is connected to the computer, you can select the pedal device to connect, named "DOREMiDi ***", click "Connect" to connect the product and get the number of pedals.



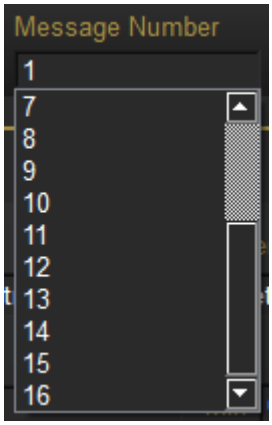
b. Pedal Number

The pedal number will be displayed when the product is connected to the configuration software "Pedal Config Tool". The number of pedals is determined by the product. If the product is connected to a dual-switch pedal, the pedal number will increase.



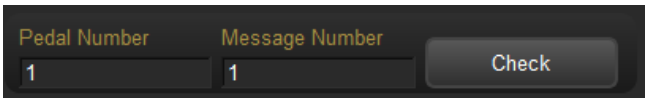
c. Message Number

MIDI message number, select the MIDI message number that needs to be configured for the current pedal. Each pedal number supports up to 16 independent MIDI messages. Through this parameter, one pedal can be configured to trigger multiple MIDI messages.



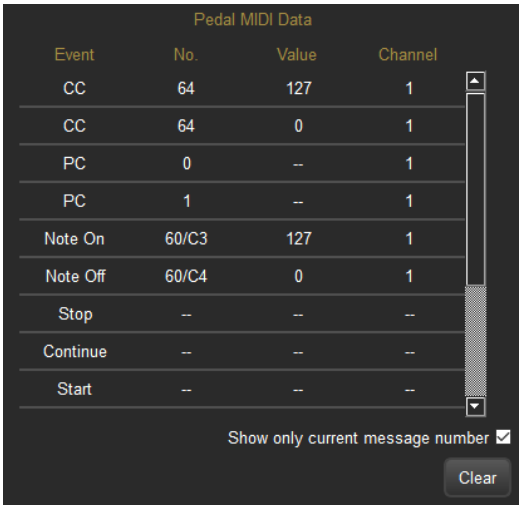
d. Check

Check the pedal interface. Click "Check" to check the MIDI message content configured by the current pedal number and MIDI message number. After the product is connected to the pedal, the pedal type can be identified.



e. Pedal MIDI Data

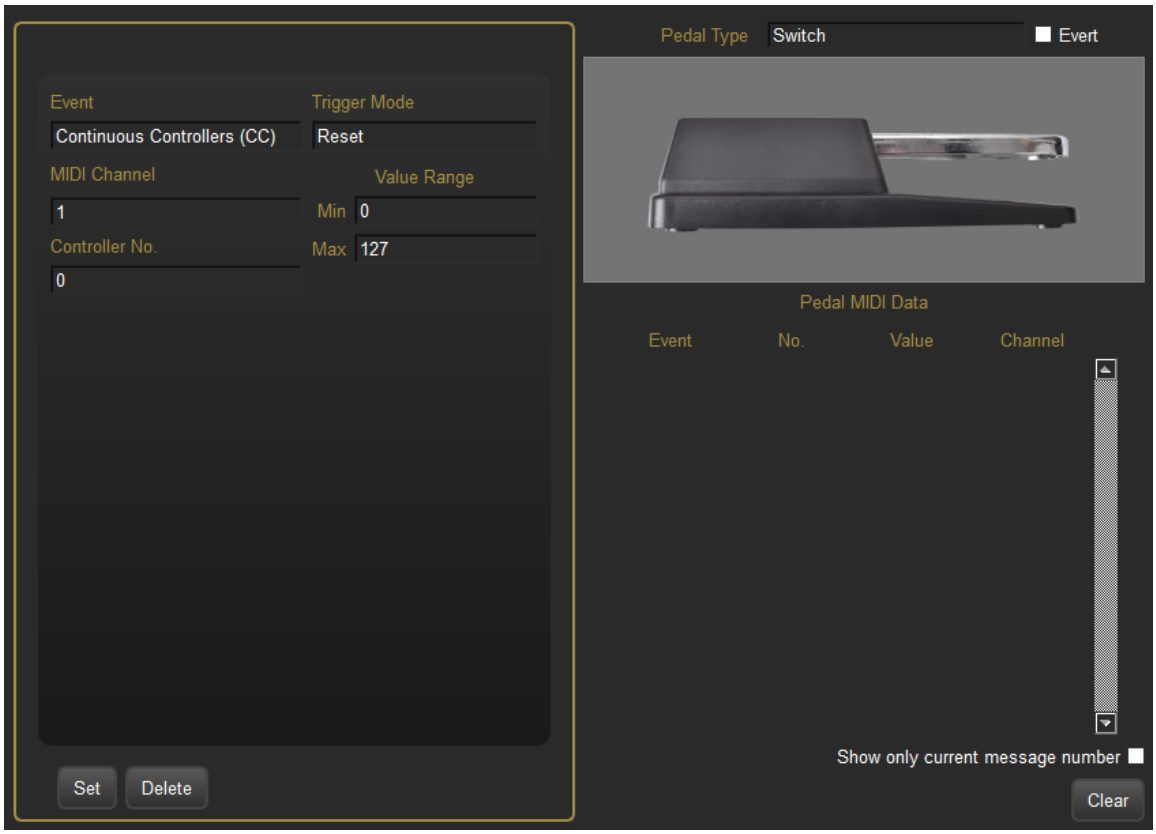
Display the MIDI data content generated by the current pedal. It is displayed in decimal. Click "Show only current message number" to display only the MIDI data of the current MIDI message number (Message Number). Click "Clear" to clear the display.



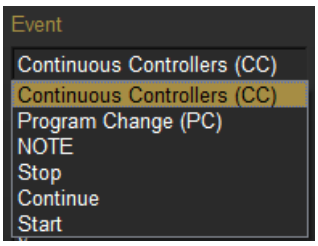
f. Pedal Type

This software supports configuration of expression pedal, switch pedal, hi-hat pedal. Switch pedal supports sustain pedal, double switch pedal, etc. After the product is connected to the pedal, click "Check" to identify the pedal type. If the pedal is not connected, you can also directly select the pedal type and configure the MIDI message. **(Note: FC-3 does not currently support connecting a hi-hat pedal.)**

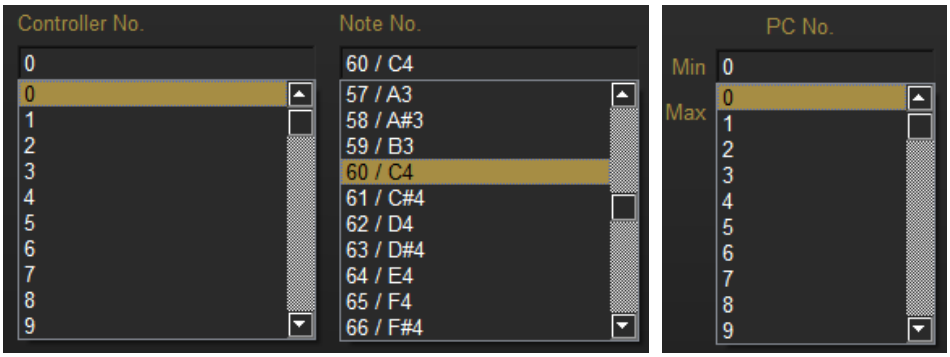
3) Configuring the switch pedal



- **Event:** MIDI message event, set the event type of MIDI message, the switch type pedal supports Continue Controller (CC)/ Program Change / Note / Stop/ Continue / Start.

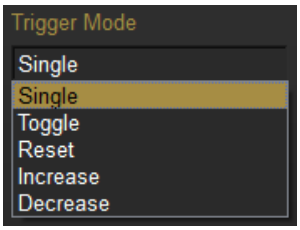


- **MIDI Channel:** Set the MIDI channel of MIDI message, you can choose 1~16 MIDI channels. When the MIDI event is Stop/Continue/Start, you don't need to set the MIDI channel.
- **Controller No.:** When the Event is configured as CC controller, you can select the CC controller number through "Controller No."
- **Note No.:** When the Event is configured as note (NOTE), you can select the note number through "Note No."
- **PC No.:** When the Event is configured as Program Change, you can select the sound number through "PC No."



- **Value Range:** You can set the minimum value (Min) and maximum value (Max) of the MIDI value range. When Event is CC/NOTE/PC, the maximum MIDI value is 127. When Event is Stop/Continue/Start, there is no MIDI value.

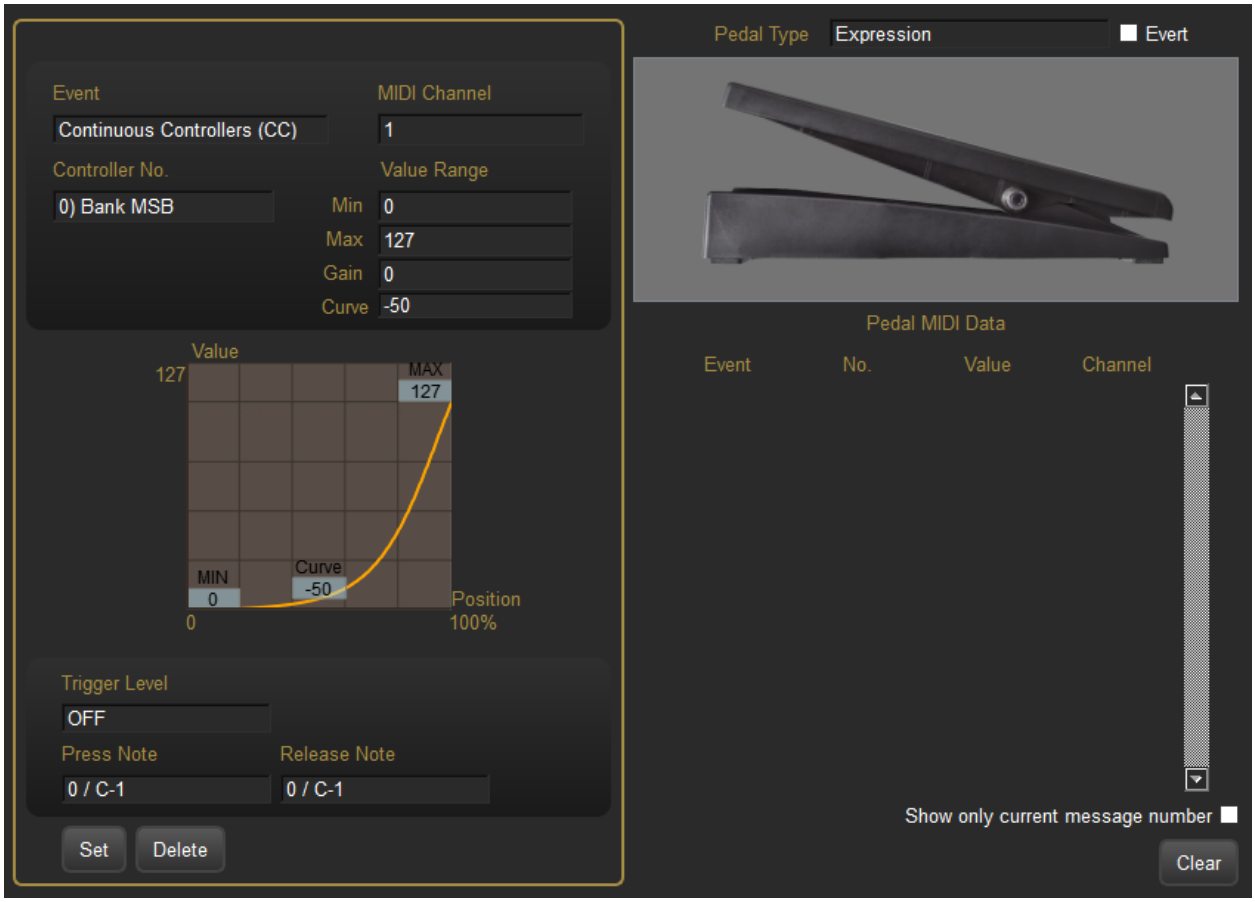
- **Trigger Mode:** configure the mode of the switch pedal triggering MIDI messages, the following modes can be configured:



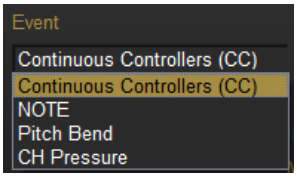
Trigger Mode	Description
Single	Each time the pedal is pressed and released, only the Min value is sent once.
Toggle	Each time the pedal is pressed and released, the Min and Max values are sent alternately.
Reset	When the pedal is pressed, the Max value is sent, and when it is released, the Min value is sent.
Increase	Each time the pedal is pressed and released, the value will increase from Min to Max
Decrease	Each time the pedal is pressed and released, the value will decrease from Min to Max

4) Configuring the Expression Pedal

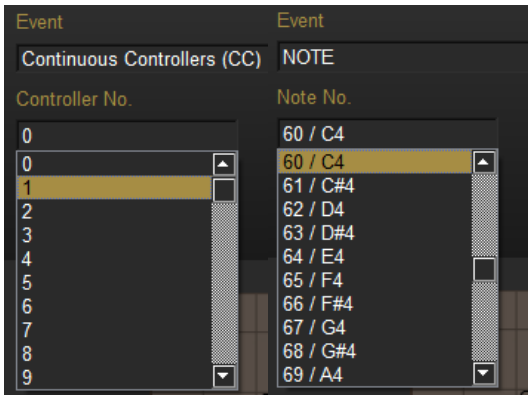
The 4/EXP port of the FC-3 supports connecting an expression pedal, as shown in the figure:



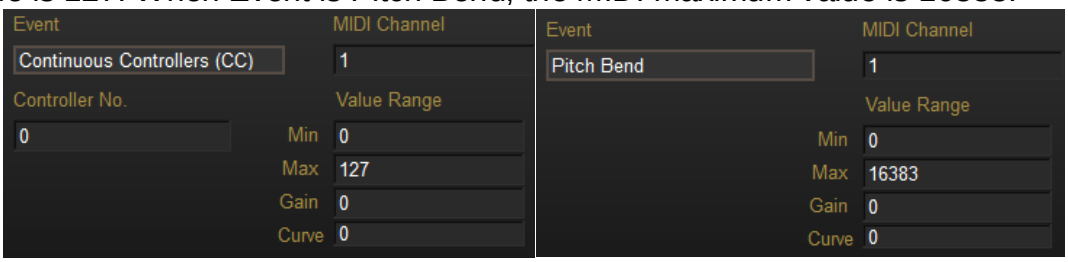
- **Event:** MIDI message event, set the event type of MIDI message. The expression pedal supports the configuration of Continue Controller (CC)/ NOTE/Pitch Bend/Channel Pressure.



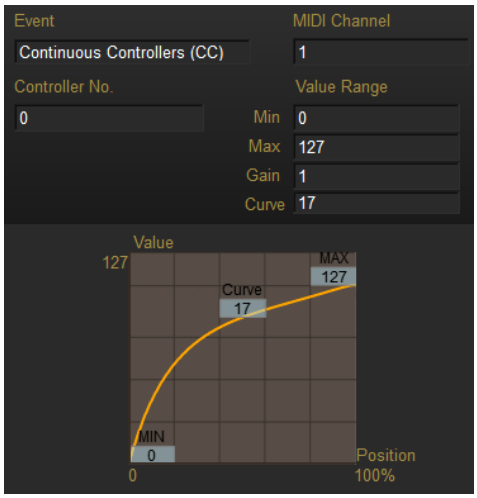
- **MIDI Channel:** set the MIDI channel of MIDI message, and you can choose 1~16 MIDI channels.
- **Controller No.:** When Event is configured as CC controller, you can select the number of CC controller through "Controller No."
- **Note No.:** When Event is configured as NOTE, you can select the note number through "Note No."



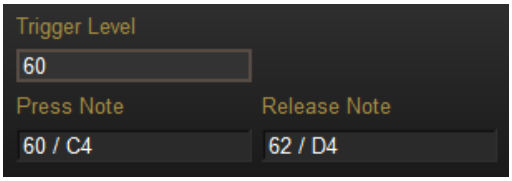
- **Value Range:** You can set the minimum value (Min) and maximum value (Max) of the MIDI value range. When Event is CC/NOTE/Channel Pressure, the MIDI maximum value is 127. When Event is Pitch Bend, the MIDI maximum value is 16383.



- **Gain:** Set the gain of the MIDI value, the default is 0, and you can set the gain to ±50, corresponding to the pedal position of ±50%.
- **Curve:** Set the curve of the MIDI value. After setting, the MIDI value will generate the MIDI value according to the curve through the position of the expression pedal. Drag the curve to change Curve/Max/Min.



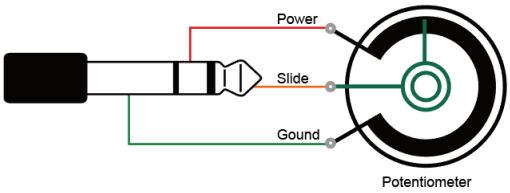
- **Trigger Level:** You can set the expression pedal to trigger the MIDI Note value. When the MIDI value reaches the trigger level, it can trigger Press Note and Release Note. It can be set to OFF, 1~127. When Event is a note (NOTE), the trigger level is not available.
- **Press Note:** When the MIDI value rises to the Trigger Level, the product will send a Press Note note.
- **Release Note:** When the MIDI value drops to the Trigger Level, the product will send a Release Note note.



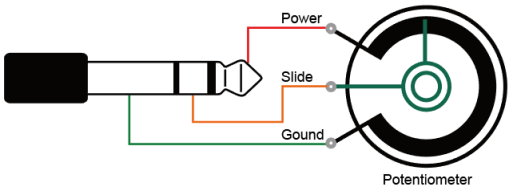
6. Types of Expression Pedal Supported

The FC-3 supports 6.35mm TRS plug, which can be connected to a positive-polarity or a reverse-polarity expression pedal. The pedal plug is shown in the picture:

Expression Pedal (Positive Polarity)



Expression Pedal (Reverse Polarity)



7. Precautions

1) This product contains a circuit board.
2) Rain or immersion in water will cause the product to malfunction.
3) Do not heat, press, or damage internal components.
4) Non-professional maintenance personnel shall not disassemble the product.
5) If the product is disassembled or damaged by improper use, the warranty is not available.

8. Questions & Answers

1) Question: Incorrect pedal type detected on configuration software.

   Answer: Please make sure that the pedal has been connected to the FC-3 normally; if it is an expression pedal, please try to place the pedal in the middle range, and then click "CHECK" to detect.

2) Question: The USB cannot connect to the computer.

   Answer: After confirming the connection, whether the USB indicator is on; confirm whether the computer has a MIDI driver. Generally speaking, the computer comes with a MIDI driver. If it is found that the computer does not have a MIDI driver, you need to install the MIDI driver. Installation method:

   https://windowsreport.com/install-midi-drivers-pc/

3) Question: Can the USB HOST interface supply power to USB MIDI instruments?

   Answer: It can supply power, but pay attention to whether the power input power of "DC IN" can meet the working requirements of USB MIDI instruments.

4) Question: The USB HOST interface does not work.

   Answer: Please follow the steps below:

- Make sure the power indicator of "DC IN" is on.
- Confirm that the instrument can work normally and that the USB interface of the instrument has MIDI function (for example, the connection can recognize the MIDI device).
- Try to supply power to the product through “DC IN” first, and then connect to the instrument through “USB HOST” to see if the indicator light of “USB HOST” lights up;

  If the "USB HOST" indicator is still not on, or the MIDI message cannot be transmitted after it is on, please contact customer service to solve it.

5) Question: The MIDI OUT connector does not work.

   Answer: Please follow the steps below:

- Make sure that the "MIDI OUT" of the product is connected to the "MIDI IN" of the instrument.
- When MIDI OUT has MIDI message output, the indicator light will flash.

If the problem is not resolved, please contact customer service.

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