Vboard 49

USER MANUAL

Contents

Introduction

Thank you for purchsing the **MiDiPLUS** Vboard 49, a folding MIDI Keyboard features full size keyboard with velocity sensitive, 2 knobs, 3 buttons and touch pad. Built-in rechargeable battery and Bluetooth MIDI connectivity. Please read this manual before you start using, to help you quickly understand the basic operations and features of Vboard 49.

Package included:

- Vboard 49
- USB cable
- User manual
- Cubase LE Registration paper
- Pasters

Important Notes:

Charging note:

1. Vboard 49 built-in rechargeble battery for Bluetooth MIDI connection.
2. The screen will blink and the Vboard 49 will turn off after 3 minutes when the battery is low power.
3. Continual use of the Vboard 49 while the battery is low power may impair its performance and can decrease the life-span of the battery. Please connect and charge the Vboard 49 with a suitable power supply immediately.
4. While the Vboard 49 charging, three flashing indicators will appear at the bottom of the screen. The three indicators will stop flashing once the Vboard 49 is fully charged.
5. In order to save the batery power, the Vboard 49 will automatically turn off the power after 30 minutes of no operation.

Maintenance note:

1. Please use dry and soft rag to wipe the Vboard 49 when cleaning. Do not use paint thinners, organic solvents, detergents or other wipes soaked in aggressive chemicals so as not to discolor the panel or keyboard.
2. Please unplug the usb cable and turn off the Vboard 49 when the keyboard will not be used for long period of time or during a thunderstorm.
3. Avoid using Vboard 49 near water or wet places, such as bathtub, pool, or similar places.
4. Please do not place the Vboard 49 in an unstable place to avoid acciedental falling.
5. Please do not place heavy objects on the Vboard 49.
6. Please avoid placing Vboard 49 with poor air circulation.
7. Please do not open inside of Vboard 49, avoid any metal falling may causing fire or electric shock
8. Avoid spilling any liquid on the Vboard 49.
9. Avoid using Vboard 49 in case of thunder or lightning
10. Please do not expose Vboard 49 to scorchingsun
11. Please do not use Vboard 49 when there is gas leakage nearby

1. Overview

1.1 The Top Panel
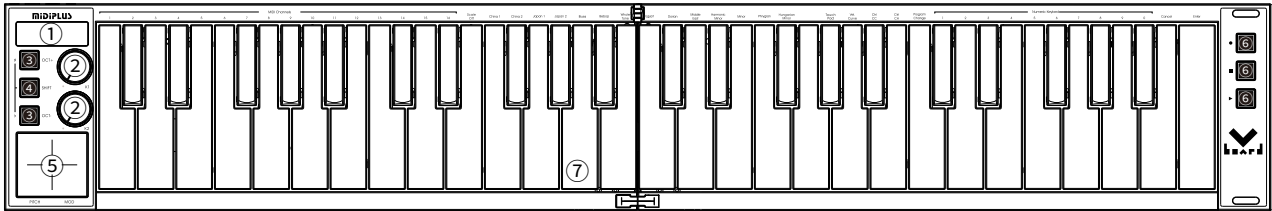
① **Screen:** Provides real time feedback of controller.

② **Knobs:** Control DAW or software instrument parameters.

③ **Transpose/Octave buttons:** Activate keyboard's Transpose or Octave control.

④ **SHIFT button:** Swtich the secondary function of the keyboard or controller.

⑤ **Touch Pad:** Control the Pitch bend /Modulation or use as XY Pad.

⑥ **Transport buttons:** Control the transport of DAW or software instrument parameters.

⑦ **Keyboard:** Trigger notes on/off, also can be used as shortcuts to access edit more parameters.

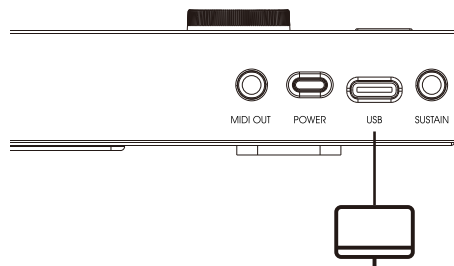## 1.2 The Rear Panel
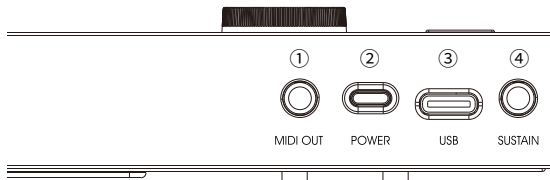
① **MIDI OUT:** Connect to MIDI device or modular

② **POWER:** Turn on/Off the power

③ **USB:** Charging the battery or connect to computer as a USB MIDI device

④ **SUSTAIN:** Connect to a sustain pedal

2. Guide

2.1 Ready To Use

Use with computer: Connect Vboard 49 to your PC or Mac using the included USB cable and turn on the power. Vboard 49 is a class-compliant USB device, so its driver are automatically installed when connecting to a computer.
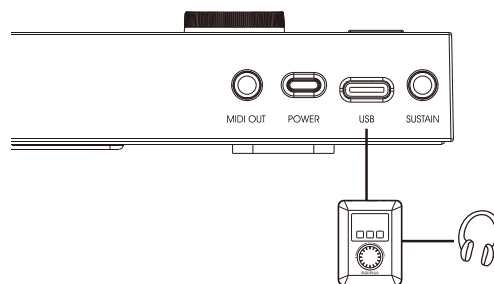
Use with **MiDiPLUS** miniEngine series sound engine: Connect Vboard 49 to the USB Host of miniEngine using the included USB cable and turn on the Vboard 49, connect your speaker or headphone to miniEngine and turn on the miniEngine.
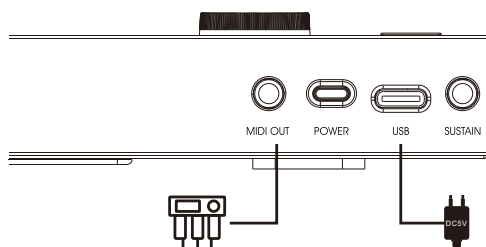
Use with external MIDI device: Use a 3.5mm TRS to MIDI DIN adapter(not included) plug into the MIDI OUT of Vboard 49, then connect to the MIDI IN of external MIDI device throught a 5 pin MIDI cable, turn on the power of Vboard 49. Please see 6.4 MIDI DIN to 3.5mm TRS Adapter for more details.
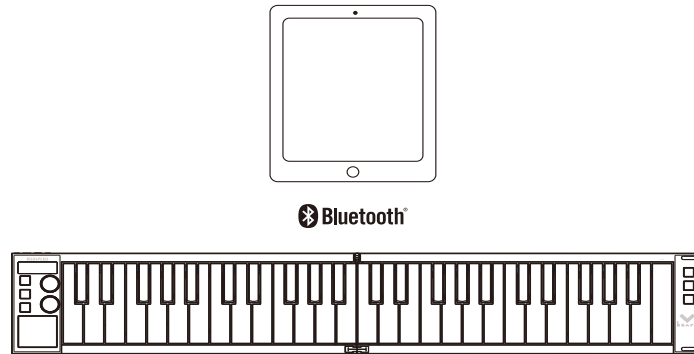
Connect to iOS device: Turn on the Vboard 49 power button and switch on bluetooth on the iOS device, then open the app which support Bluetooth MIDI and connect Vboard 49 in setup menu. Please refer to 5. Bluetooth MIDI Connect (iOS) for detailed operation steps.

2.2 Screen

This screen provides real time feedback of controller status, the screen displays and functional interpretation are as follow(for more display details about the scales please refer to chapter 6.2 Scales).

| Display	Description
c01	MIDI Channel 1
5hF	In the Setting Mode
MMc	MMC(MIDI Machine Control) mode
cc	CC mode
UhE	Pitch/Modulation mode
HY	XY Pad mode
rE5	Factory resetting

2.3 Transpose and Octave
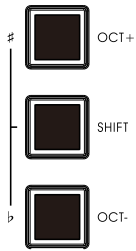
Pressing the OCT+ or OCT- button to shift the octave range of keyboard, Pressing the OCT+ and OCT- buttons simultaneously will quickly reset the octave shift.

Hold down the SHIFT button then pressing the OCT+ or OCT- button to transpose, hold down the SHIFT button then pressing the OCT+ and OCT- buttons simultaneously will quickly reset the transpose.

2.4 Knobs

Vboard 49 has 2 assignable knobs, the default control functions of each knob are as follows:
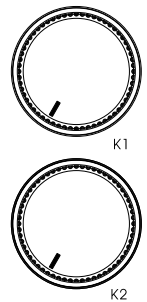
Knob	Function	MIDI CC Number
K1	Undefined	CC12
K2	Undefined	CC13

2.5 SHIFT Button

Hold down the SHIFT button to access the secondary function of the keyboard or controller.

2.6 Touch Pad
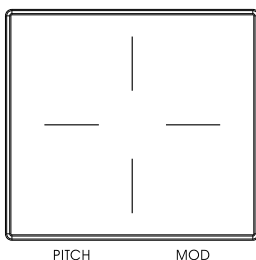
The Touch Pad allows you to control the Pitch bend and Modulation. By default, touch the left side to control Pitch bend and touch the right side to control Modulation. Hold down the SHIFT button then pressing the key labeled with "Touch Pad" to switch to XY Pad mode, when in XY Pad mode, the axis X is assigned to CC71 and axis Y is assigned to CC74.

2.7 Transport Buttons

Vboard 49 has 3 transport control buttons with two mode: MMC(default) and CC mode, please refer to 2.9.1 Change The transport Buttons mode to change these two mode.

Button	MMC mode	MIDI CC mode
●	Record	CC14
■	Stop	CC15
▶	Play	CC16

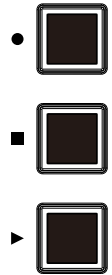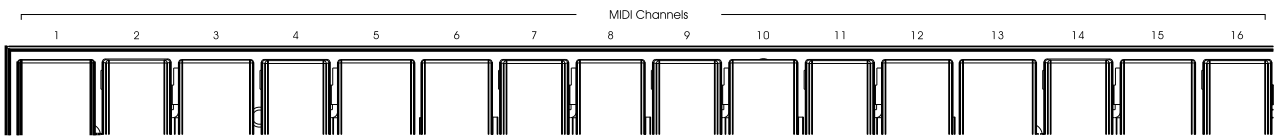## 2.8 Keyboard

Vboard 49 has 49 velocity sensitive keys for playing and sending note on/off messages. These keys also can be used as shortcuts to access edit more parameters when hold down the SHIFT button.

MIDI Channels: Setting the MIDI Channel of keyboard, the range between 1 and 16, the default is 1.

Scale: Selecting the build in Smart Scale, when a scale is selected, the scale notes will be mapped on the white keys.
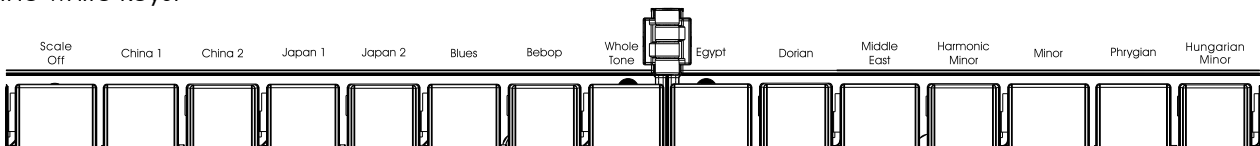
Touch Pad: Switch the Touch Pad mode between Pitch/Modulation mode and XY Pad mode.
Vel. Curve: Switch the keyboard velocity sensitive, the velocity value is fixed at 100 when the velocity sensitive is disabled.
Ctrl CC: Setting the CC Number of each controller, including K1/k2 knobs and 3 transport buttons(CC mode), the range between 0 and 127.
Ctrl CH: Setting the MIDI Channel of each controller, including K1/k2 knobs and 3 transport buttons(CC mode), the range between 0 and 16, the default is 0(the control channel will follow the MIDI Channel).
Program Change: Sending the Program change message, the range between 0 and 127.
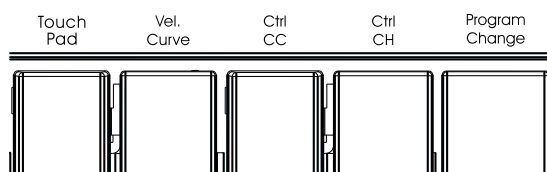
Numeric Keybed: Use these keys to enter the numeric, press **Enter** to confirm, and press **Cancel** to clear.

2.9 Operation Examples

2.9.1 Change The Transport Buttons Mode

1. Hold down the **SHIFT** button, the screen will display "5hF"
2. Press the transport button you want to change, ▶ for instance, the screen will display "cc"
3. Release the **SHIFT** button, the ▶ button is changed to CC mode sucessfully, you can use the same way to change the others transport buttons mode

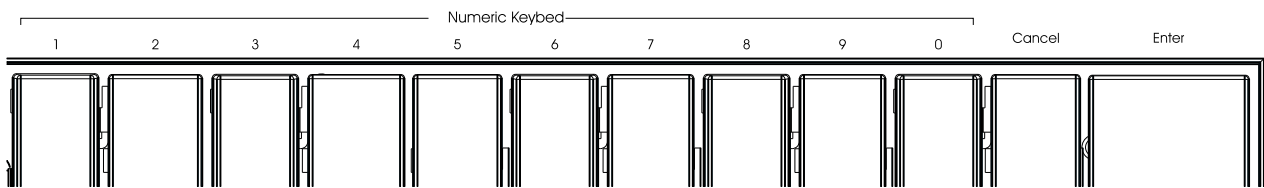### 2.9.2 Change The transport Buttons CC Number

1. Hold down the **SHIFT** button, the screen will display "5hF"
2. Press the key labeled "**Ctrl CC**", the screen will display "cc"
3. Press the transport button you want to assign, ● for instance, the screen will display " I4"
4. Press the **Numeric keybed** keys labeled "**5**", "**3**" one by one, the screen will display "053"
5. Press the key labeled "**Enter**"
6. Release the **SHIFT** button, the ● button's CC Number is changed to CC53 sucessfully, you can use the same way to change the CC number of other buttons.

2.9.3 Change The knob's CC Number

1. Hold down the **SHIFT** button, the screen will display "5hF"
2. Press the key labeled "**Ctrl CC**", the screen will display "cc"
3. Turn the knob you want to assign, K1 for instance, the screen will display "0 I2"
4. Press the **Numeric keybed** keys labeled "**5**", "**2**" one by one, the screen will display "052"
5. Press the key labeled "**Enter**"
6. Release the **SHIFT** button, the K1 knob's CC Number is changed to CC52 sucessfully, you can use the same way to change the CC number of K2 knob.

2.9.4 Changing The Controller Channel

1. Hold down the **SHIFT** button, the screen will display "5hF"
2. Press the key labeled "**Ctrl CH**", the screen display "ch"
3. Press or turn the controller(knobs or transport buttons) you want to assign, K2 for instance, the screen will display "0 13"
4. Press the **Numeric keybed** keys labeled "**1**", "**0**" one by one, the screen will display "0 10"
5. Press the key labeled "**Enter**"
6. Release the **SHIFT** button, the K2 knob's control channel is changed to channel 10 sucessfully, you can use the same way to change the other controller's control channel.

2.9.5 Sending The Program Change Message

1. Hold down the **SHIFT** button, the screen will display "5hF"
2. Press the key labeled "**Program Change**", the screen will display a number("000" by default)
3. Press the the **Numeric keybed** keys labeled "**8**" for instance, the screen displays "008"
5. Press the key labeled "**Enter**"
6. Release the **SHIFT** button to finish sending the Program Change message.

3. Factory Reset

At some point you may wish to reset your device back to factory settings. To perform a factory reset on your Vboard 49, please follow these steps:
1. Turn off the power of Vboard 49,
2. Hold down the "**OCT+**" and "**OCT-**" buttons simultaneously, then turn on the power,
3. Release the "**OCT+**" and "**OCT-**" buttons when the screen displays "rE5".

Note: Performing a factory reset will clear all your changes to the keyboard. Please operates carefully.

4. Daw Settings

Vboard 49 has 3 transport buttons with two mode: MMC(default) and CC mode, they can be used to control the transport of most popular DAWs.

4.1 Steinberg Cubase/Nuendo Pro (MMC)

1. Go to menu: **Transport** > **Project Synchronization Setup...**
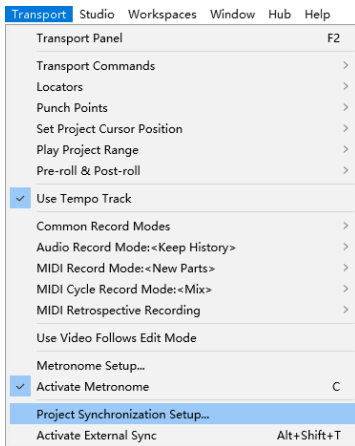
2. Select the **Machine Control** and enable MMC Slave Active, set the **MIDI Input** and **MIDI Output** as **Vboard 49**, then set the **MMC Device ID** as 116
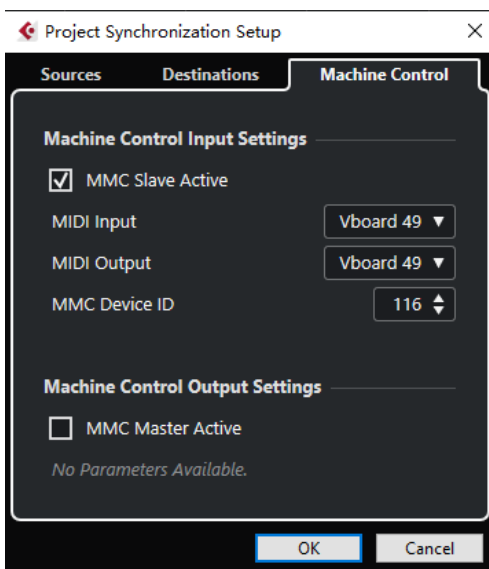
3. Click on **OK** to finish setup

Note: Cubase LE/AI/Elements does not support MMC.

4.2 FL Studio (MMC)

1. Go to menu: **Options** > **MIDI settings** (keyboard shortcut F10)
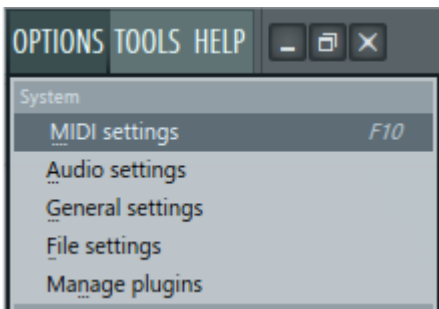
2. In the Input tab, find and **Enable** Vboard 49, then close the window to finish setup
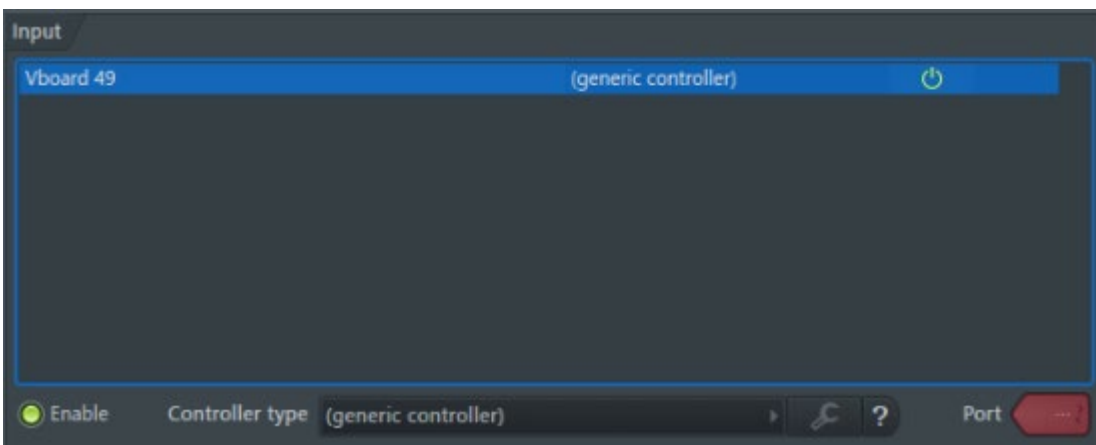
4.3 Studio One (MMC)

1. Go to menu: **Studio One** > **Options...**(keyboard shortcut: Ctrl+,)
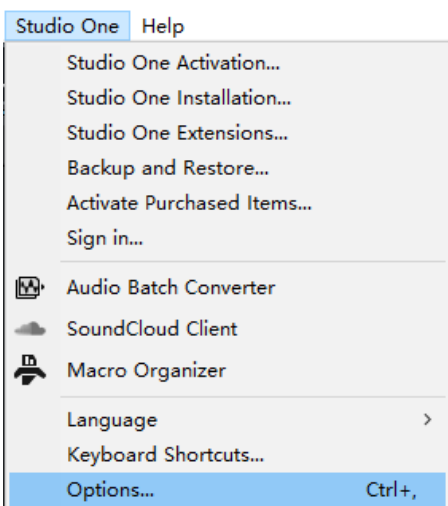
2. Select the **External Devices**
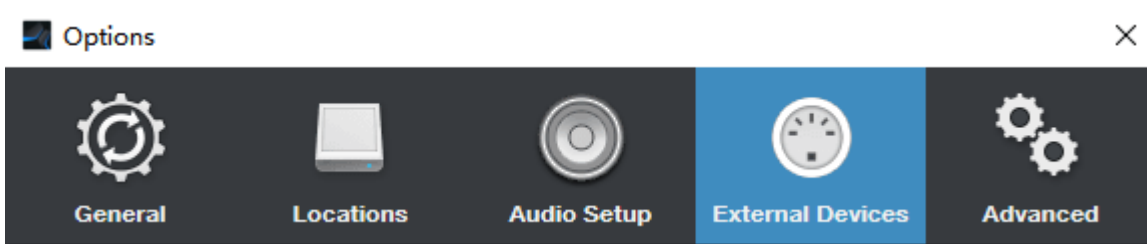
3. Then click on **Add...**
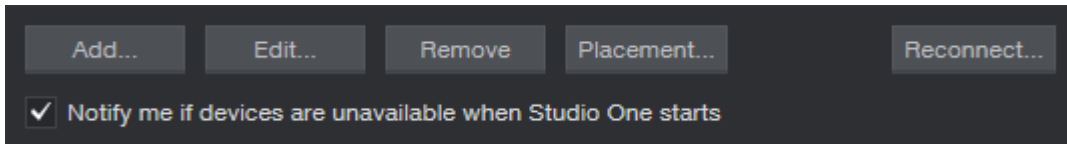
4. Select **New Keyboard**
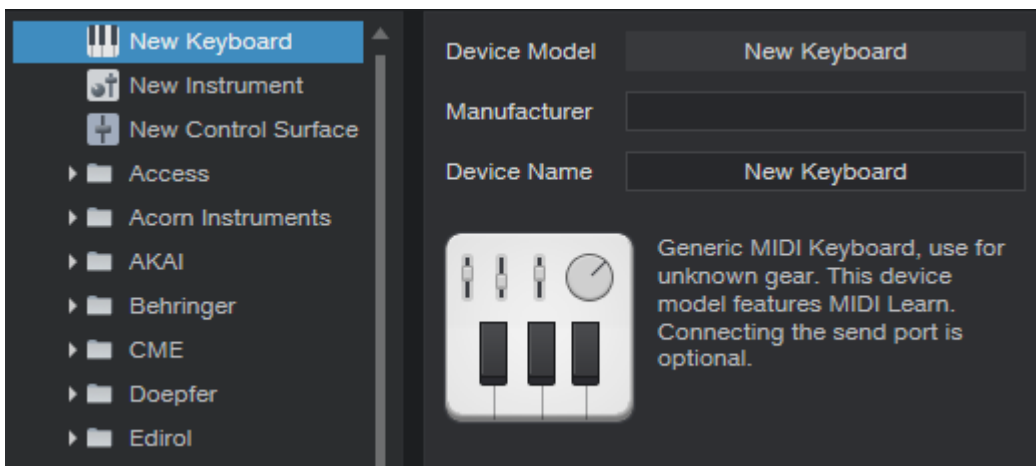
5. Set both **Receive From** and **Send To** as **Vboard 49**
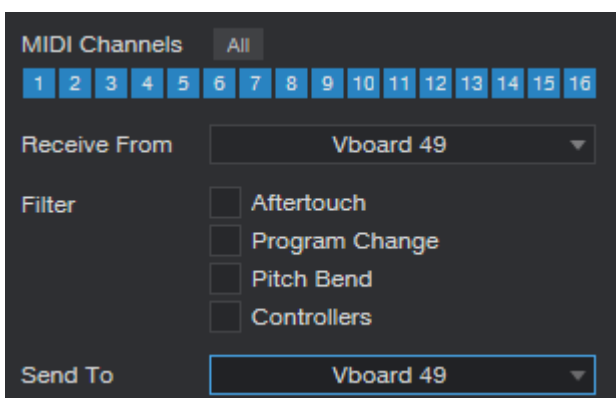
6. Click on OK to finish this part
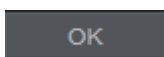
* Step 7 and 8 applies to Studio One 3 and earlier version

7. Click on **Add...**
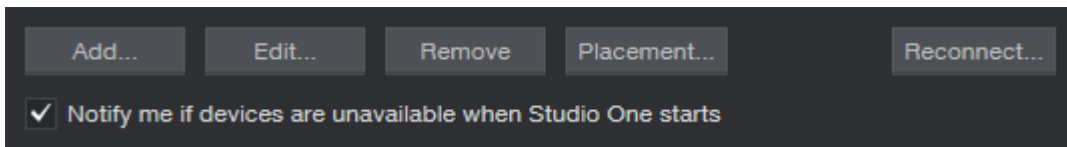
8. Find the **PreSonus** folder in the list and select **MMC**, set both **Receive From** and **Send To Vboard 49**, then click on **OK** to finish setup.
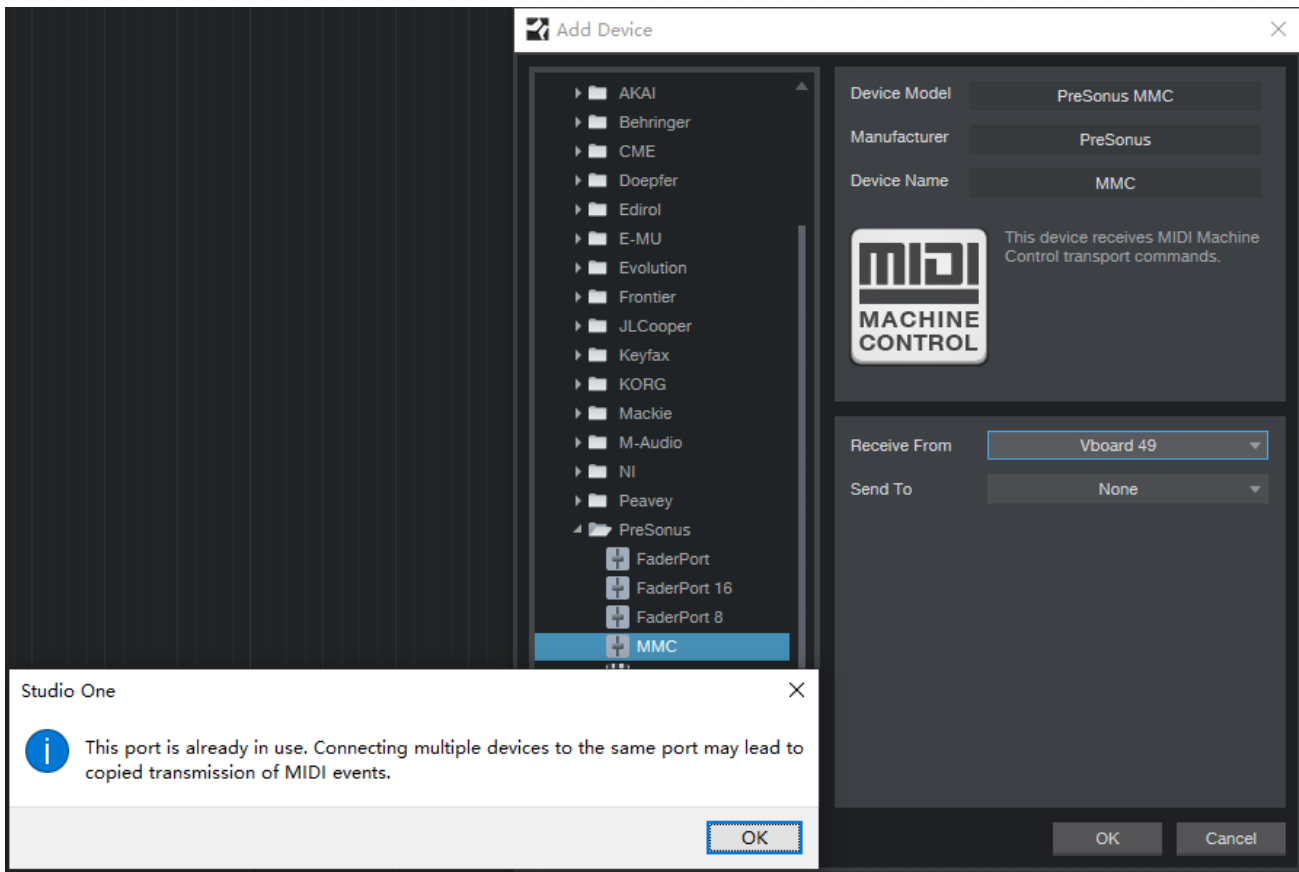
* Step 9 and 10 applies to Studio One 4 and later version

9. Go to menu: **Studio One** > **Options...**(keyboard shortcut: Ctrl+,)
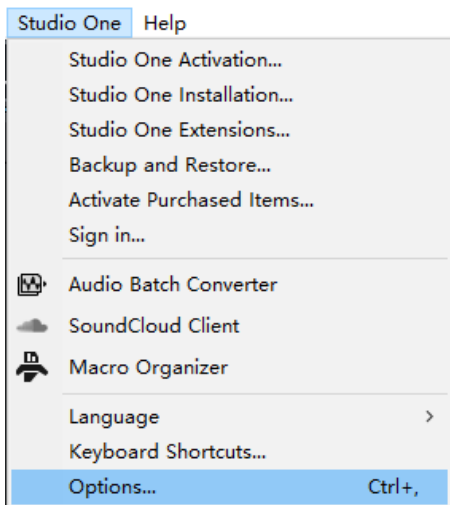
10. Select the **Advanced** and select the **Synchronization**, enable the **Sync to External Devices,** set **MIDI Machine Control** is **Vboard 49**, then click on **OK** to finish setup.
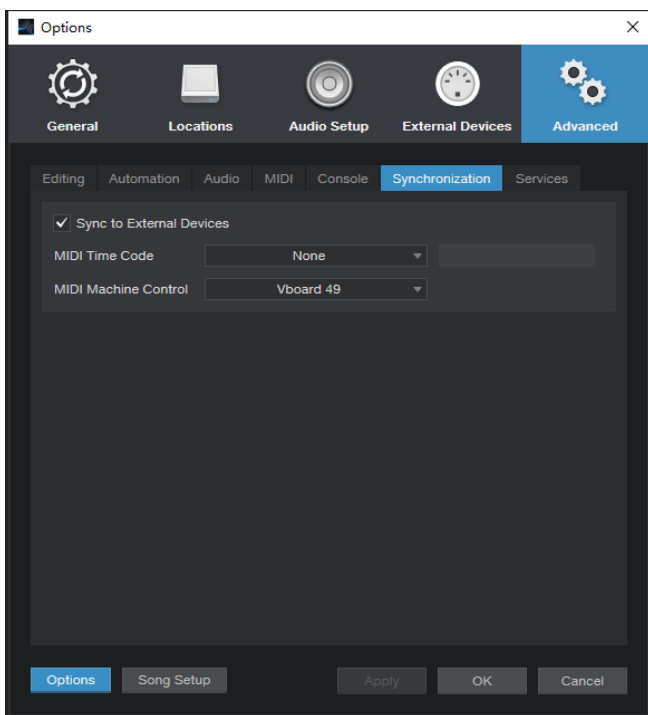
4.4 Pro Tools (MMC)

1. Go to menu: **Setup** > **Peripherals...**

Setup	Window	Marketplace	Help
Hardware...			
Playback Engine...			
Disk Allocation...			
Peripherals...			
I/O...			
Video Sync Offset...			
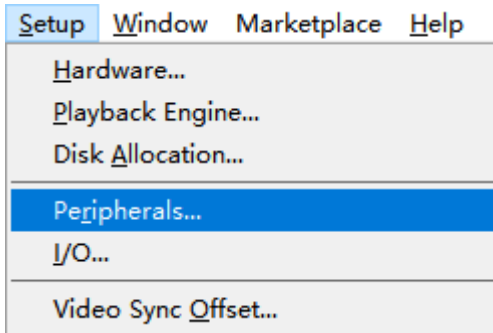
2.In the pop-up window, click on the **Machine Controllers** tab, find the **MIDI Machine Control Remote (Slave)** and click it, set the ID as 116, then close the window to finish setup.

Synchronization	Machine Control	MIDI Controllers	Ethernet Controllers	Mic Preamps	Satellites	VENUE

MIDI Machine Control (Master)

☐ Enable none ▼ ID Preroll: frames

MIDI Machine Control Remote (Slave)

☑ Enable ID 116
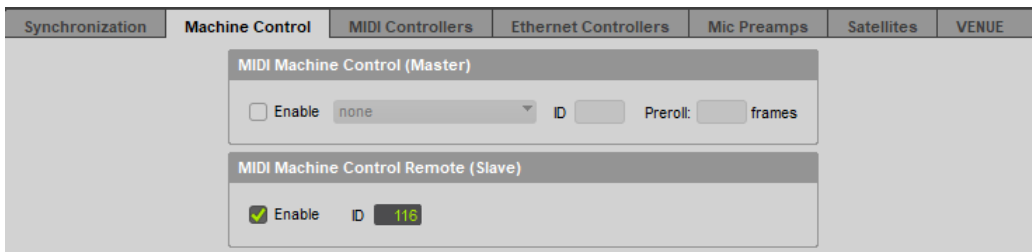
4.5 Logic Pro X (MMC)

1. Go to menu: **Control Surfaces** > **MIDI...**

Logic Pro X	File	Edit	Track	Navigate	Record	Mix	View	Window	8	Hel
About Logic Pro X										
Preferences ▶			General...							
Control Surfaces ▶			Audio...							
Key Commands ▶			Recording...							
			MIDI...							

2. Select the **Sync** window, find the **MIDI sync Project Settings...** and click on it
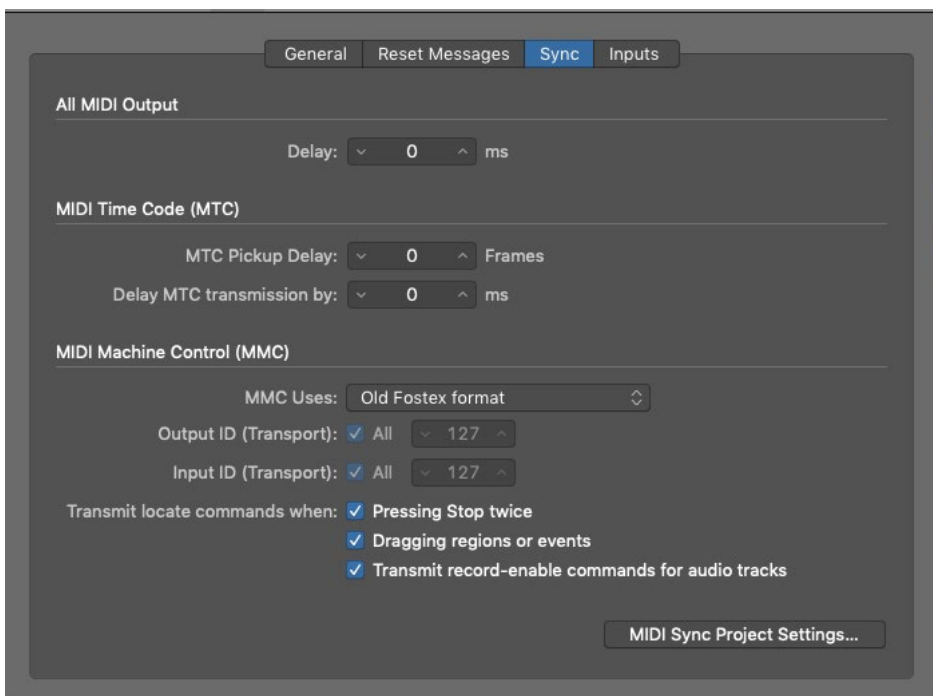
3. Enable the **Listen to MIDI Machine Control (MMC) Input** , then close the window to finish setup.
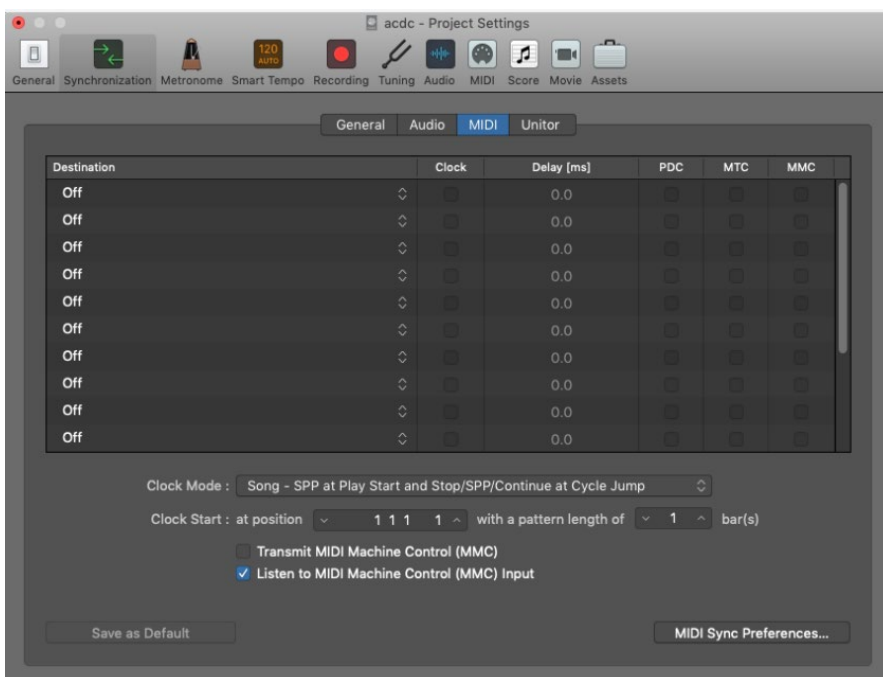
4.6 Reaper (MMC)

1. Go to menu: **Options** > **Preferences...** (keyboard shortcut: Ctrl + P)

Options	Actions	Help

✓	Record mode: normal	
	Record mode: time selection auto punch	
	Record mode: auto-punch selected items	
	New recording that overlaps existing media items	>
✓	Auto-crossfade media items when editing	Alt+X
	Trim content behind media items when editing	
✓	Always trim content behind razor edits	
✓	Show all takes in lanes (when room)	Ctrl+L
	Take lane behavior	>
	Show overlapping media items in lanes (when room)	
	Ripple edit per-track	
	Ripple edit all tracks	
✓	Item grouping enabled	Alt+Shift+G
✓	Loop points linked to time selection	
	Snap/grid	>
	Locking	>
	Envelope points	>
	Automation items	>
	Metronome enabled	
	Metronome/pre-roll settings...	
	Solo in front	
	Pre-fader track metering	
	Show FX inserts in TCP (when size permits)	
	Show sends in TCP (when size permits)	
	Peaks display mode	>
✓	Automatically scroll view during playback	
	Continuous scrolling	
	Smooth seeking (seeks at end of measure)	
✓	Chase MIDI note-ons in project playback	
	External Timecode Synchronization	>
	Show REAPER resource path in explorer/finder...	
	Customize menus/toolbars...	
	Themes	>
	Layouts	>
	Preferences...	Ctrl+P

2. In the Preferences window, click on the **MIDI Devices** tab, find and right click on the the **Vboard 49** from the Device list, select **Enable input** and **Enable input for control messages**, then close the window to finish setup.
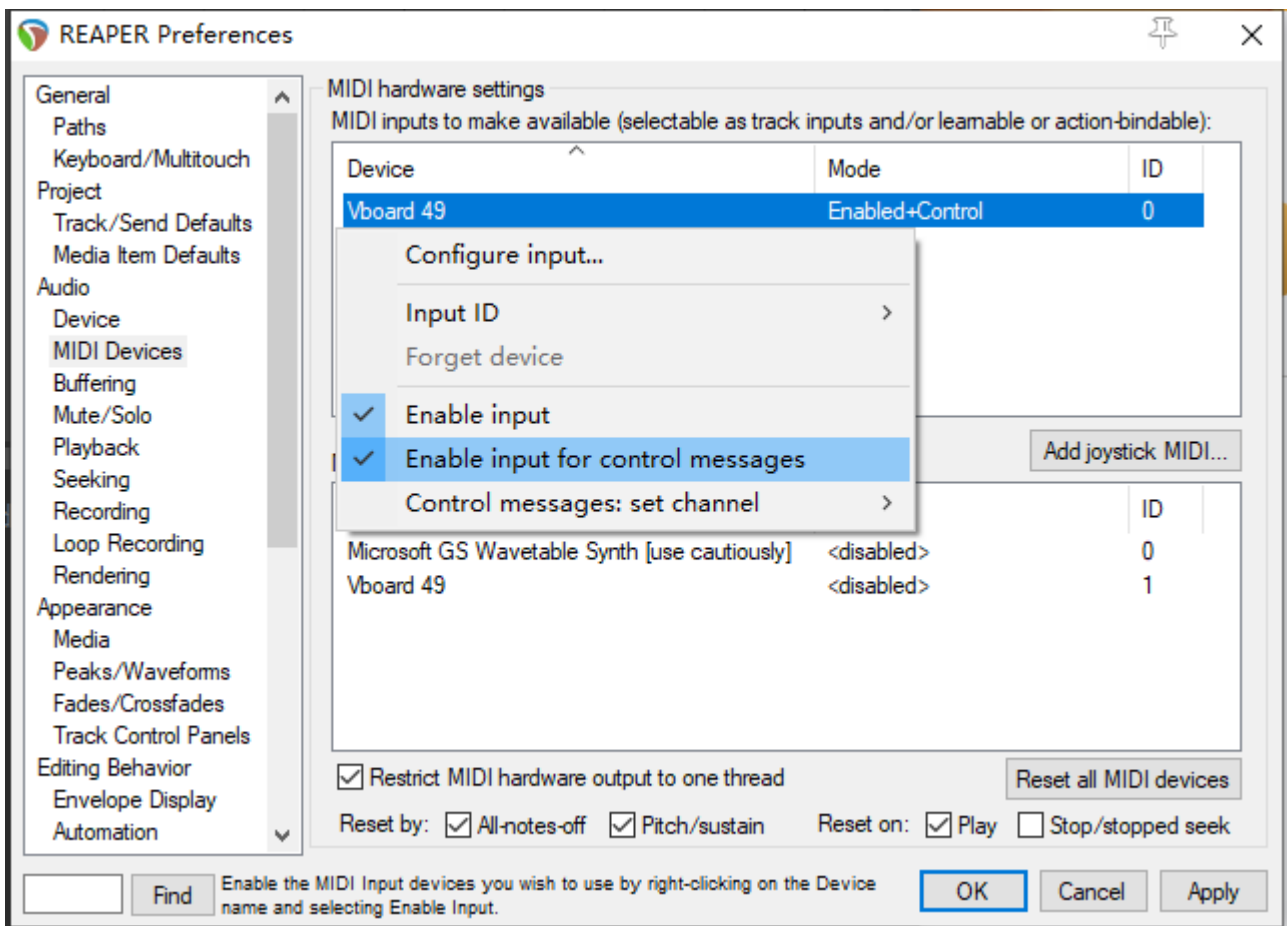
5. Bluetooth MIDI Connect (iOS)

1. Turn on the Bluetooth on your iOS device,

2. Open the App whitch support Bluetooth MIDI, take GarageBand as an example:

3. After selected a instrument, click sitting in the upper right corner,
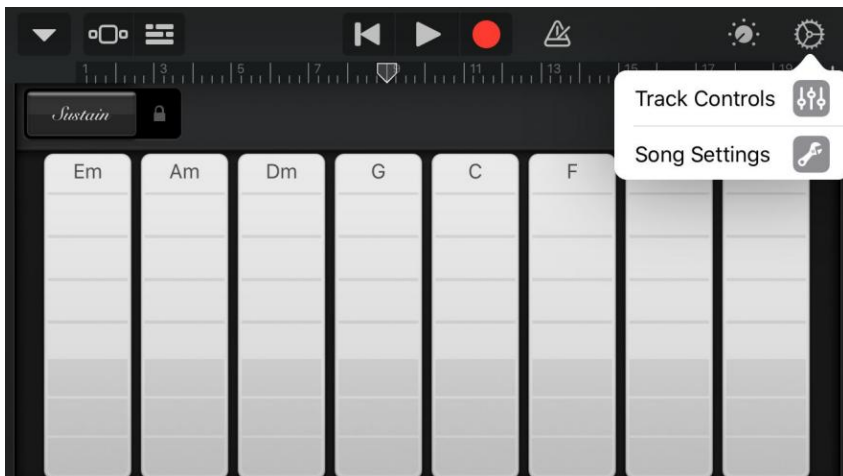
4. Tap on the Advanced menu

	Settings	Done
Note Pad		>
Jam Session	Not connected	>
Advanced		>
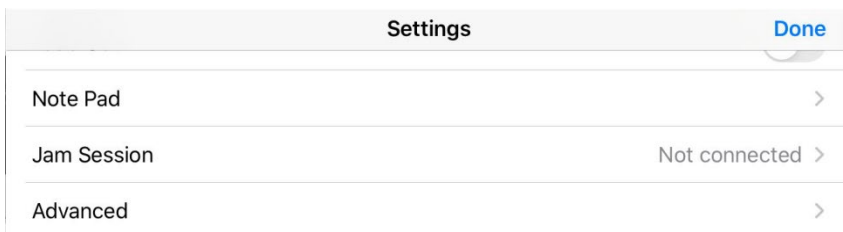
5. Tap on the Bluetooth MIDI Devices

Bluetooth MIDI Devices	>
Send MIDI Clock	
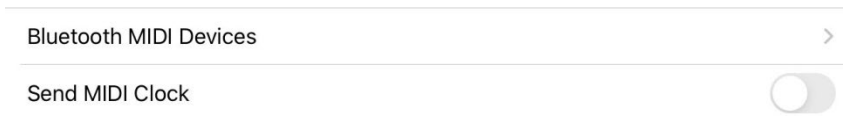
6. Find "Vboard 49" in the list and tap to connect

‹ Advanced	Bluetooth MIDI Devices	Edit
BLUETOOTH MIDI DEVICES		
Wind Input / Output		Offline
Wind Input / Output		Offline
Vboard 49 Input / Output		Not Connected

6. Appendix

6.1 Specifications

Model	Vboard 49
Keyboard	49 notes keyboard with velocity sensitive
Maximum Polyphony	64
Screen	Nixie tube
Buttons	1 Power Switch, 2 Octave buttons, 1 SHIFT button, 3 Transport control
Knobs	2 Knobs
Connectors	USB port, MIDI OUT and Sustain pedal input
Dimensions	Folding: 390 x 126 x 48 (mm) Unfolding: 775 x 126 x 24 (mm)
Net Weight	1.0 kg

6.2 Scales

Display	Scale	Degree Formula
oFF	-	-
cn1	China1	C, D, E, G, A
cn2	China2	C, bE, F, G, bB
JP1	Japan1	C, bD, F, G, bB
JP2	Japan2	C, D, bE, G, bA
bLU	Blues	C, bE, F, #F, G, bB
boP	BeBop	C, D, E, F, G, A, bB, B
Lht	Whole Tone	C, D, E, #F, #G, bB
EGY	Egypt	C, bD, bE, E, G, bA, bB
dor	Dorian	C, D, bE, F, G, A, bB
ΠiE	Middle East	C, bD, E, F, G, bA, B
hΠi	Harmonic Minor	C, D, bE, F, G, bA, B
ΠIn	Minor	C, D, bE, F, G, bA, bB
Phr	Phrygian	C, bD, bE, F, G, bA, bB
hUn	Hung Min	C, D, bE, #F, G, bA, B

6.3 MIDI CC List

CC Number	Purpose	CC Number	Purpose
0	Bank Select MSB	66	Sostenuto On/Off
1	Modulation	67	Soft Pedal On/Off
2	Breath Controller	68	Legato Footswitch
3	Undefined	69	Hold 2
4	Foot Controller	70	Sound Variation
5	Portamento Time	71	Timbre/Harmonic Intens
6	Data Entry MSB	72	Release Time
7	Main Volume	73	Attack Time
8	Balance	74	Brightness
9	Undefined	75 ~ 79	Undefined
10	Pan	80 ~ 83	General Purpose Controller 5 ~ 8
11	Expression Controller	84	Portamento Control
12 ~ 13	Effect Controller 1 ~ 2	85 ~ 90	Undefined
14 ~ 15	Undefined	91	Reverb Send Level
16 ~ 19	General Purpose Controller 1 ~ 4	92	Effects 2 Depth
20 ~ 31	Undefined	93	Chorus Send Level
32	Bank Select LSB	94	Effects 4 Depth
33	Modulation LSB	95	Effects 5 Depth
34	Breath Controller LSB	96	Data Increment
35	Undefined	97	Data Decrement
36	Foot Controller LSB	98	NRPN LSB
37	Portamento LSB	99	NRPN MSB
38	Data Entry LSB	100	RPN LSB
39	Main Volume LSB	101	RPN MSB
40	Balance LSB	102 ~ 119	Undefined
41	Undefined	120	All Sound Off
42	Pan LSB	121	Reset All Controllers
43	Expression Controller LSB	122	Local Control On/Off
44 ~ 45	Effect Controller LSB 1 ~ 2	123	All Notes Off
46 ~ 47	Undefined	124	Omni Mode Off
49 ~ 52	General Purpose Controller LSB 1 ~ 4	125	Omni Mode On
53 ~ 63	Undefined	126	Mono Mode On
64	Sustain	127	Poly Mode On
65	Portamento On/Off		

6.4 MIDI DIN to 3.5mm TRS Adapter

Vboard 49 features a 3.5mm mini jack MIDI OUT, if you want to connect to the standard 5 pin MIDI IN, you need to use a MIDI DIN to 3.5mm TRS adapter, please note that there are 3 most common type adapter, make sure you are using the Type A, the MIDI-pin arrangement as below:
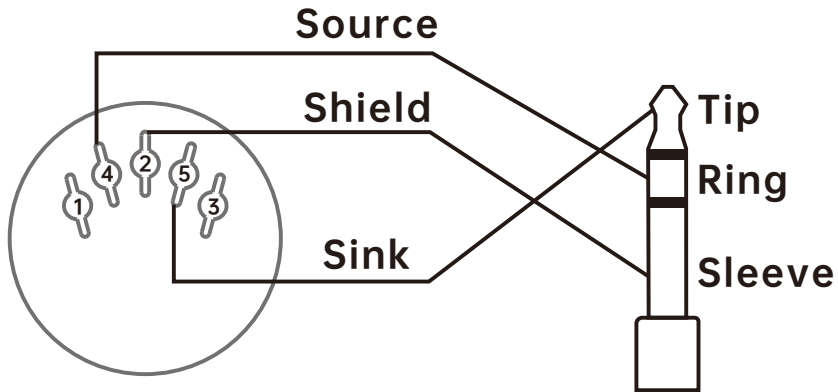
MIDI 4 (Source) > TRS Ring
MIDI 2 (Shield) > TRS Sleeve
MIDI 5 (Sink) > TRS Tip

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