

Synido

TempoPAD^{C16}

USER MANUAL

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MIDI Controller

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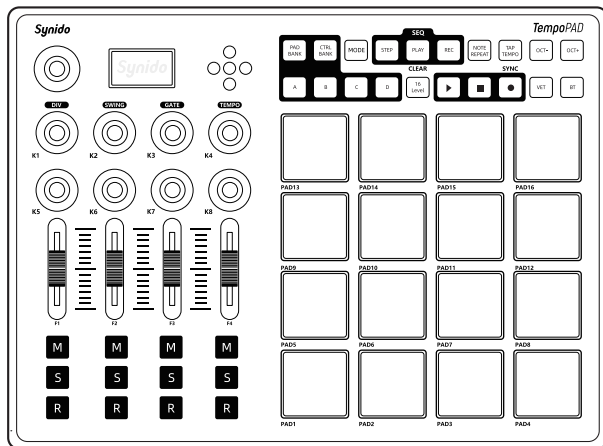
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FOREWORD

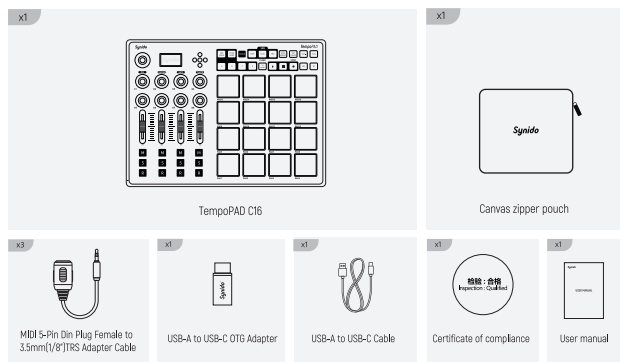
Thank you for choosing the Synido TempoPAD C16 product. The TempoPAD C16 is a MIDI protocol-based input control device that allows you to connect to computer or mobile DAW software for recording and editing notes. As a professional-grade MIDI controller, the TempoPAD C16 offers a diverse range of trigger units, high-precision hit response, and vibrant RGB lighting displays. With a built-in MIDI control editing system, all control module MIDI signal types and parameters can be customized directly on the hardware, without needing configuration software. Its comprehensive DAW software compatibility meets the functional needs of music creators and performers. Additionally, it features a 16-step sequencer with 16 tracks, enhancing its entertainment value. Whether you are a professional music producer or an enthusiast, it will be a great aid in your learning, creation, and performance. It is important to note that this device outputs only MIDI commands and does not produce audio signals; users should possess some basic music knowledge to use it effectively.



Product Features:

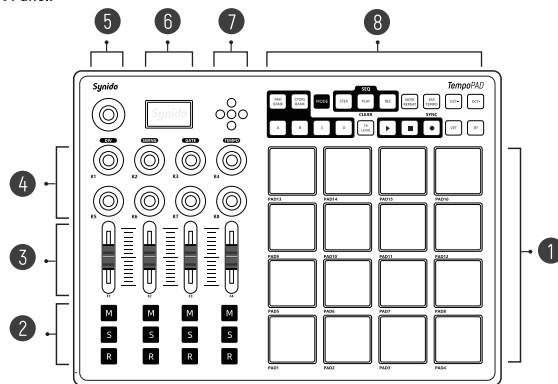
- 16 RGB backlit velocity/pressure-sensitive pads, with three working modes: Key mode, Custom mode, and Dark mode; in Custom mode, notes, CC controls, and PC program information can be freely assigned.
- Key mode supports octave switching and one-click reset.
- 8 assignable endless encoders, organized into 4 groups for a total of 32 controllers, used for sending CC and pitch bend information.
- 4 assignable faders, organized into 4 groups for a total of 16 controllers, used for sending CC, PC, and pitch bend information.
- 12 assignable buttons, organized into 4 groups for a total of 48 controllers, used for sending CC and PC information.
- 3 transport control buttons: play, stop, record; supports MMC command transmission.
- Supports velocity curve adjustment and 16 Level velocity layering function.
- Supports MIDI Clock SYNC for external BPM synchronization.
- Built-in controller parameter editing system with an OLED display for visualizing hardware function parameters.
- Built-in 16-track 16-step sequencer with note repeat function.
- Supports BLE wireless Bluetooth MIDI connection, with a built-in 3000mAh high-capacity battery.
- USB-C connection interface for easy connection to computers, smartphones, tablets, and other devices, featuring 1/8" TRS (3.5mm) type-A MIDI In, MIDI Out, and MIDI Thru standard MIDI transmission interfaces.

PACKING LIST



PANEL DESCRIPTION

Front Panel:



1. Pad Working Area:

The 4x4 layout features 16 silicone pads with velocity/pressure sensitivity and RGB lighting, allowing you to strike the pads to send MIDI information. In Custom mode, the pads can be grouped into A/B/C/D for a total of 64 command triggers.

2. Assignable Buttons:

There are 12 assignable buttons with trigger feedback. Pressing a button sends MIDI commands; the buttons do not have silk-printed content (M for Mute, S for Solo, R for Record), which must be mapped in the DAW software. These buttons can also be grouped into A/B/C/D, enabling 48 command triggers.

3. Assignable Faders:

Four assignable faders can be pushed to send MIDI commands. The faders can be grouped into A/B/C/D for a total of 16 command triggers.

4. Assignable Knobs:

Eight 360° endless knobs allow you to send MIDI commands by rotating them. The knobs can be grouped into A/B/C/D, enabling 32 command triggers. K1-K4 knobs feature Note Repeat and Sequencer quick configuration functions (Sequencer only supports tempo speed adjustment), achievable through key combinations. Please refer to the relevant sections in this manual for more details.

5. Main Control Knob:

The 360° stepless knob with tactile feedback can be pressed in conjunction with other function buttons to adjust parameters for the pads, assignable buttons, faders, knobs, transport control buttons, Note Repeat, Sequencer, and fixed velocity values for VEL.

6. Display

The OLED display shows the TempoPAD's functions and parameter information, defaulting to the Synido brand logo. It updates with operations; if idle, the display remains unchanged.

7. Directional Navigation Buttons

The layout includes four directional navigation buttons: "↑ Up," "↓ Down," "← Left," "→ Right," which can be used to select parameter configuration options.

In addition, the "←Left" and "→Right" buttons have additional functions:

When the Sequencer is turned on, long press the "←Left" button + 16 PADs to trigger the PAD signal immediately.

When Note Repeat is turned on, long press the "→Right" button + any 16 PADs to turn off the note repeat function of a certain PAD, so that it can be triggered in the normal form in the note repeat mode.

For detailed function introduction, please refer to the Sequencer and Note Repeat chapters in this manual

8. Function Control Buttons

Press the PAD BANK button with A/B/C/D to cycle through the four pad groups.

Press the CTRL BANK button with A/B/C/D to cycle through the control groups (8 assignable knobs + 4 assignable faders + 12 assignable buttons, totaling one CTRL group).

The MODE button switches between three pad working modes; in Night mode, it must be activated from Custom mode by long-pressing the MODE button.

The STEP button toggles the sequencer function.

The PLAY button starts the sequencer.

The REC button records the sequencer.

Long-press STEP + any PAD (PAD1 - PAD16) to switch to the selected PAD's sequencer step editing interface.

Long-press PLAY to delete the current PAD track step information in the sequencer.

Long-press the main control knob + PLAY to delete **all** step information across the 16 PAD tracks in the sequencer.

Press the main control knob + STEP to enter the sequencer TEMPO speed adjustment interface or long-press STEP + turn the TEMPO knob for quick setup.

The NOTE REPEAT button toggles the note repeat function.

The TAP TEMPO button determines the note repeat/sequencer tempo by tapping.

While NOTE REPEAT/sequencer is active, long-press TAP TEMPO until its backlight stays on to activate MIDI Clock external sync; press TAP TEMPO again to deactivate.

OCT- / OCT+ modifies the pitch range in KEY mode.

The 16 LEVEL button toggles the 16 LEVEL function.

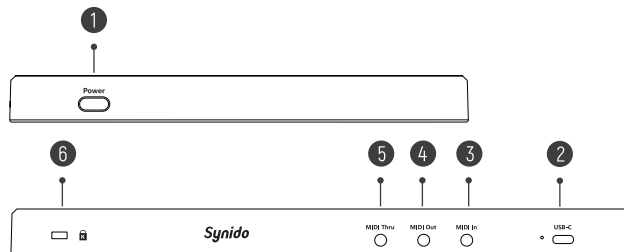
Long-press 16 LEVEL + any PAD (PAD1 - PAD16) to switch to the selected PAD's note velocity layering.

The three transport control buttons (play, stop, record) can send transport control commands. Commands are sent as CC or MMC information; you can edit these commands through the device's settings or accompanying software.

The VEL button cycles through the PAD's velocity curves.

The BT button toggles BLE MIDI Bluetooth functionality.

Back panel:



1.Power: The main power switch turns the device on/off.

2.USB-C Interface: 2.Connect this USB port to your computer using a USB-A to USB-C cable. The computer's USB port provides power and data exchange with the TempoPAD C16. The indicator light next to it lights up red when charging and lights up green when fully charged.

3.MIDI In: 3.5mm jack for standard MIDI input; requires TRS to 5-PIN DIN MIDI adapter (Type A).

4.MIDI Out: 3.5mm jack for standard MIDI output; requires TRS to 5-PIN DIN MIDI adapter (Type A). When there is a signal input to the MIDI In interface, the MIDI signal received by MIDI In and the MIDI signal generated by the local device will be output from the MIDI Out interface together.

5.MIDI Thru: 5.3.5mm jack for standard MIDI output to replicate incoming MIDI signals; requires TRS to 5-PIN DIN MIDI adapter (Type A).

6.Lock Slot: You can use this slot to secure the TempoPAD C16 to a table or other surfaces.

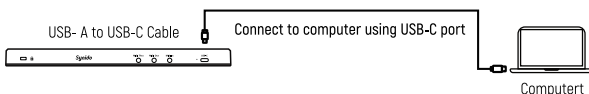
OPERATING GUIDE

1.Connection Method

1.1 Wired Connection

Use with mainstream DAW host software.

- 1 Turn on the TempoPAD C16 by toggling the Power switch on the left side. When the device has sufficient battery, the LED display and some control buttons will light up.
- 2 Use the included USB-A to USB-C cable to connect the device directly to your computer.



- 3 Open your DAW software, such as Ableton Live, Cubase, FL Studio, or Logic Pro.
- 4 In your DAW software, navigate to Preferences, Options, or Device Setup, and select Synido TempoPAD C16 as both the input and output device.

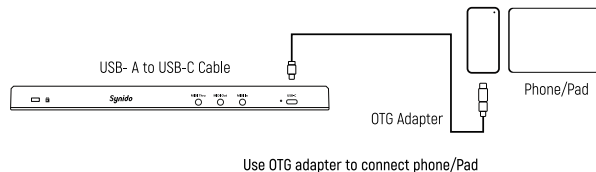
Your TempoPAD C16 can now communicate with your DAW software.

Using with Mobile Devices (Phone/Tablet)

- 1 Turn on the TempoPAD C16 by toggling the Power switch on the left side. When the device has sufficient battery, the LED display and some control buttons will light up.
- 2 Connect the included USB-A to USB-C cable and USB-A to USB-C OTG adapter together.
- 3 Connect the end with the OTG adapter to your phone/tablet and the other end to the TempoPAD C16 device.

Note:

- 1 This method is also applicable for connecting to a computer's USB-C interface.
- 2 For Apple iOS devices, users must purchase a Lightning to OTG adapter due to regulations.
- 3 Due to power output limitations of Apple mobile devices, using the TempoPAD C16 with an Apple iOS phone/tablet may result in issues caused by insufficient power supply. Please ensure the TempoPAD C16 is adequately charged before use.



1.2 Wireless BLE Bluetooth Connection

Using with Windows Computer

- 1 Before connecting, download and install MIDI Berry and Loop MIDI software on your computer.



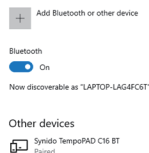
MIDI Berry



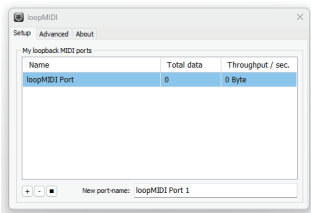
Loop MIDI

- 2 Turn on the TempoPAD C16 by toggling the Power switch on the left side. When the device has sufficient battery, the LED display and some control buttons will light up.
- 3 Press the BT button in the function key area; the button will light up red, indicating that the TempoPAD C16's Bluetooth function is activated and the device is in pairing mode.
- 4 On your computer, enable Bluetooth to pair the devices: Go to Settings >>> Bluetooth & other devices >>> Turn on Bluetooth >>> Add Bluetooth or other device >>> Bluetooth >>> Click on "Synido TempoPAD C16 BT" in the search list. The computer interface will show that "Synido TempoPAD C16 BT" is paired, and the BT button will continue to display a red backlight.

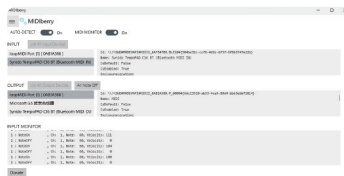
Bluetooth & other devices



- Open the Loop MIDI software; in the Setup interface, the New port-name input field allows you to customize the interface name, which defaults to "loopMIDI Port." Click the "+" on the left side of the input field to display interface information in the Ports list.



- Open the MIDI Berry software; select "Synido TempoPAD C16 BT" in the INPUT list and "loopMIDI Port" in the OUTPUT list. The BT button on the TempoPAD C16 will now show a blue backlight, indicating a successful BLE Bluetooth connection. When you hit the pads, the INPUT MONITOR list will display data; if no data appears, please repeat the steps above.

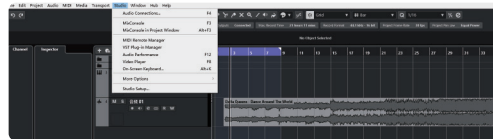


- Open your DAW software, such as Ableton Live, FL Studio, or Logic Pro.
- In your DAW software, navigate to Preferences, Options, or Device Setup, and select "loopMIDI Port" as both the input and output device.

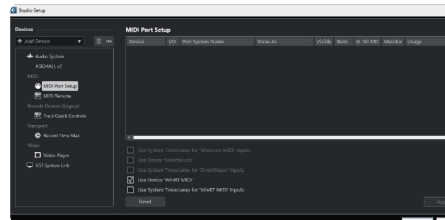
Your TempoPAD C16 can now communicate with your DAW software.

Note: Cubase software features WinRT MIDI functionality, allowing BLE wireless Bluetooth MIDI control without needing to download and configure MIDI Berry and Loop MIDI software. Follow these steps:

- Open Cubase and navigate to Studio >> Studio Setup.

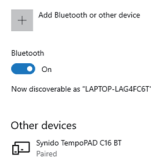


- In the Studio Setup window, check the box for "Use Device WinRT MIDI."

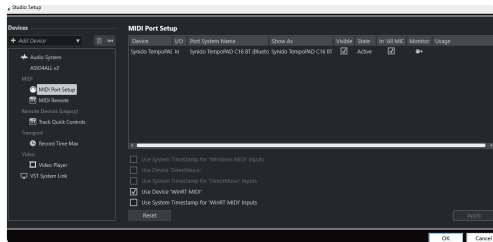


- Turn on the TempoPAD C16 by toggling the Power switch on the left side. When the device has sufficient battery, the LED display and some control buttons will light up.
- Press the BT button in the function key area; the button will light up red, indicating the Bluetooth function is active and the device is discoverable.
- Enable Bluetooth on your computer for pairing: Go to Settings >>> Bluetooth & other devices >>> Turn on Bluetooth >>> Add Bluetooth or other device >>> Bluetooth >>> Click "Synido TempoPAD C16 BT" in the search list. The computer will display that "Synido TempoPAD C16 BT" is paired, and the BT button will remain red.

Bluetooth & other devices



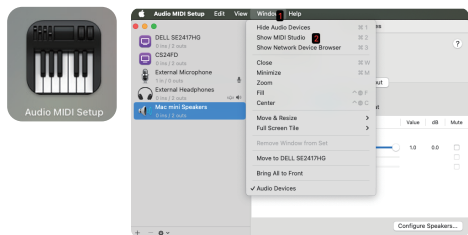
- ⑥ In Cubase's working interface, the input device will update to show "Synido TempoPAD C16 BT," status as "Active." The BT button will now display a blue backlight, indicating a successful BLE Bluetooth connection.



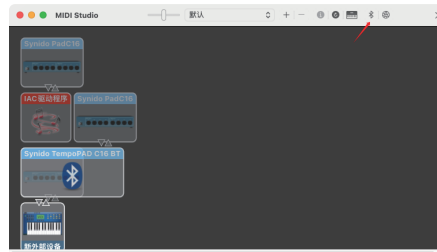
Your TempoPAD C16 can now communicate with Cubase software.

BLE Bluetooth MIDI Connection for Mac Computers

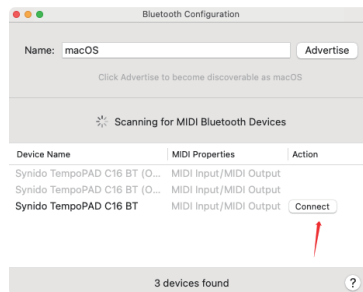
- ① Turn on the TempoPAD C16 by toggling the Power switch on the left side. When the device has sufficient battery, the LED display and some control buttons will light up.
- ② Press the BT button in the function key area; the button will light up red, indicating the Bluetooth function is active and the device is discoverable.
- ③ Open the "Audio MIDI Setup" application on your Mac, then click on MIDI Studio in the top left corner.



- ④ In the MIDI Studio window, click the Bluetooth icon in the upper right corner.



- ⑤ In the newly opened Bluetooth configuration window, select the "Connect" option for the device named "Synido TempoPAD C16 BT." The BT button will display a blue backlight, indicating a successful BLE Bluetooth connection.



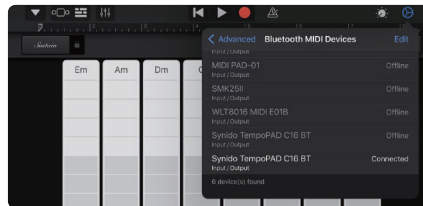
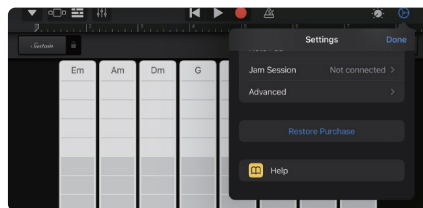
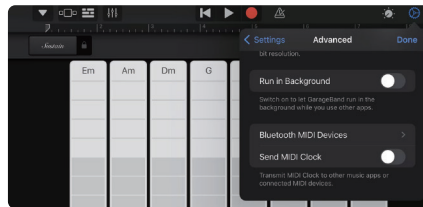
- ⑥ Open your DAW software, such as Ableton Live, FL Studio, or Logic Pro.
 - ⑦ In your DAW software, navigate to Preferences, Options, or Device Setup, and select "Synido TempoPAD C16 BT" as both the input and output device.
- Your TempoPAD C16 can now communicate with your DAW software.

BLE Bluetooth MIDI Connection for Android Phones/Tablets

- ① Turn on the TempoPAD C16 by toggling the Power switch on the left side. When the device has sufficient battery, the LED display and some control buttons will light up.
- ② Press the BT button in the function key area; the button will light up red, indicating the Bluetooth function is active and the device is discoverable.
- ③ Enable Bluetooth on your phone/pad.
- ④ Using the "POP Piano" app as another example: After opening the app, click on the piano icon in the upper left corner.



- ⑤ In the new interface that pops up, select "Synido TempoPAD C16 BT" from the device list. The device will be successfully connected, and the BT button will display a blue backlight, indicating a successful BLE Bluetooth connection. Click on "Free Play" to start playing.



BLE Bluetooth MIDI Connection for iPhones/iPads

- ① Turn on the TempoPAD C16 by toggling the Power switch on the left side. When the device has sufficient battery, the LED display and some control buttons will light up.
- ② Press the BT button in the function key area; the button will light up red, indicating the Bluetooth function is active and the device is discoverable.
- ③ Enable Bluetooth on your iPhone/iPad.
- ④ Using the "GarageBand" app as an example: Open GarageBand and select "Keyboard" or "Drums" from the track categories.
- ⑤ Click on the settings icon in the upper right corner of the new interface, then select Advanced >> Bluetooth MIDI Devices >> Synido TempoPAD C16 BT. The app will display "Connected." The BT button will now show a blue backlight, indicating a successful BLE Bluetooth connection.

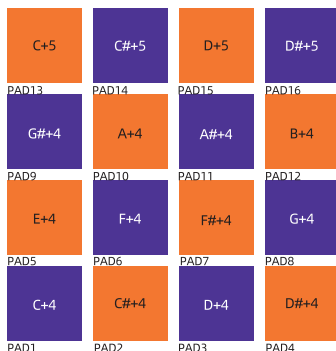
2.PADS

The Synido TempoPAD C16 features three working modes: KEYBOARD mode, CUSTOM mode, and DARK mode.

Press the MODE button to switch between modes. The color of the MODE button backlight indicates the current mode: red for KEYBOARD mode, green for CUSTOM mode, and yellow for DARK mode [DARK mode requires holding the MODE button while in CUSTOM mode].

KEYBOARD Mode (MODE button red): Enter KEYBOARD mode by pressing the MODE button, which will light up red. In this mode, the 4x4 pad grid simulates the arrangement of piano keys, allowing for keyboard play. It supports vertical octave stacking, with the lowest octave at the bottom and the highest at the top. The default note range is C4-C5, which can be changed by using the octave up/down buttons [OCT- / OCT+].

In this mode, the 16 pads display orange and purple lights, triggering red lights upon activation via MIDI NOTE commands, which cannot be customized. The layout of the NOTE information corresponding to the device's pad area is shown in the diagram below:



Note: Since the definition of middle C varies between different DAW software, the note names sent may not match exactly with what is displayed in the DAW.

CUSTOM Mode (MODE button green): In this mode, pads can send NOTE/CC/PC commands as set by you, and you can customize the colors triggered by the pads. You can save four custom function groups and quickly switch between them using the PAD BANK and A/B/C/D buttons. The A/B/C/D indicator lights show red, green, blue, and yellow, respectively.

Press the MODE button to enter CUSTOM mode, indicated by a steady green light on the MODE button. In CUSTOM mode, you can set parameters for any of the PADS [PAD1-PAD16] either directly on the device (by holding the main control knob while pressing the desired PAD, then rotating the main control knob along with the directional navigation buttons) or using the Synido TempoPAD C16 official configuration software to store the settings on the device. This allows you to modify the MIDI information types and data values, as well as the backlight colors for the 4x4 pad area. The MIDI information types you can choose from include NOTE information, CC control adjustment information, and PC preset switching information. You can also set the channel [CH] and the trigger type for CC information (instant/switch), along with the selection of backlight colors.

The default PAD sends NOTE information as shown below:

BANK	NOTE Number	NOTE	Channel	PAD Trigger Light Color
A	36-51	C2-D#3	1	Red
B	52-67	E3-G4	1	Green
C	68-83	G#4-B5	1	Blue
D	84-99	C6-D#7	1	Yellow

The default triggering colors for the PAD BANK groups are as follows:

Selecting PAD BANK A triggers a red light.

Selecting PAD BANK B triggers a green light.

Selecting PAD BANK C triggers a blue light.

Selecting PAD BANK D triggers a yellow light.

The device allows for 16 different backlight colors to be set through direct configuration, which include: Red, Orange, Yellow, Green, Cyan, Blue, Purple, Light Purple, Light Red, Wine Red, Indigo Purple, Light Pink, Pink, Light Blue, Chartreuse, Light Green

PAD parameter setting interface: There are three MIDI message types for the pads: NOTE, CC, and PC.

The editing interface of the screen when PAD selects to send NOTE message

Type: **Note**

NO: 036

Trigger: /

Color: Red

Channel : 01

Note: C2

Channel: Note signal is sent to Channel, range 1-16
 NO.: Note signal encoding Number, range 0-127
 Note: Note Name
 Trigger: N/A
 Color: PAD trigger backlight color

The editing interface of the screen when PAD selects to send CC message

Type: **CC**

NO: 036

Trigger: Momentary

Color: Red

Channel : 01

Note: /

Channel: CC signal is sent to Channel, range 1-16
 NO.: CC signal encoding Number, range 0-127
 Note: N/A
 Trigger: Momentary trigger and Toggle trigger
 Color: PAD trigger backlight color

The editing interface of the screen when PAD selects to send PC message

Type: **PC**

NO: 036

Trigger: /

Color: Red

Channel : 01

Note: /

Channel: PC signal is sent to Channel, range 1-16
 NO.: PC signal encoding Number, range 0-127
 Note: N/A
 Trigger: N/A
 Color: PAD trigger backlight color

For specific setup instructions using the official Synido TempoPAD C16 software, please refer to the software usage section of this manual.

DARK MODE (MODE button yellow): In CUSTOM mode, long-pressing the MODE button will activate DARK mode, illuminating all pad backlights. The A/B/C/D pad parameters remain inherited from CUSTOM mode. In this mode, the backlights stay lit, but do not illuminate upon triggering, maintaining the custom colors set in CUSTOM mode.

Note quick lookup table:

MIDI Number	Mote Name	MIDI Number	Mote Name	MIDI Number	Mote Name	MIDI Number	Mote Name
0	C-1	32	G#+1	64	E+4	96	C+7
1	C#-1	33	A+1	65	F+4	97	C#+7
2	D-1	34	A#+1	66	F#+4	98	D+7
3	D#-1	35	B+1	67	G+4	99	D#+7
4	E-1	36	C+2	68	G#+4	100	E+7
5	F-1	37	C#+2	69	A+4	101	F+7
6	F#-1	38	D+2	70	A#+4	102	F#+7
7	G-1	39	D#+2	71	B+4	103	G+7
8	G#-1	40	E+2	72	C+5	104	G#+7
9	A-1	41	F+2	73	C#+5	105	A+7
10	A#-1	42	F#+2	74	D+5	106	A#+7
11	B-1	43	G+2	75	D#+5	107	B+7
12	C0	44	G#+2	76	E+5	108	C+8
13	C#0	45	A+2	77	F+5	109	C#+8
14	D0	46	A#+2	78	F#+5	110	D+8
15	D#0	47	B+2	79	G+5	111	D#+8
16	E0	48	C+3	80	G#+5	112	E+8
17	F0	49	C#+3	81	A+5	113	F+8
18	F#0	50	D+3	82	A#+5	114	F#+8
19	G0	51	D#+3	83	B+5	115	G+8
20	G#0	52	E+3	84	C+6	116	G#+8
21	A0	53	F+3	85	C#+6	117	A+8
22	A#0	54	F#+3	86	D+6	118	A#+8
23	B0	55	G+3	87	D#+6	119	B+8
24	C+1	56	G#+3	88	E+6	120	C+9
25	C#+1	57	A+3	89	F+6	121	C#+9
26	D+1	58	A#+3	90	F#+6	122	D+9
27	D#+1	59	B+3	91	G+6	123	D#+9
28	E+1	60	C+4	92	G#+6	124	E+9
29	F+1	61	C#+4	93	A+6	125	F+9
30	F#+1	62	D+4	94	A#+6	126	F#+9
31	G+1	63	D#+4	95	B+6	127	G+9

Note: Since the definition of middle C varies between different DAW software, the note names sent may not match exactly with what is displayed in the DAW.

3.Assignable Knobs

The Synido TempoPAD C16 features 8 customizable 360° infinite knobs that can send CC, Pitch Bend messages. The KNOB BANK has four groups (A/B/C/D) that can be configured for a total of 32 different parameter settings. You can set parameters directly on the device by holding the main control knob while rotating one of the K1-K8 knobs you wish to configure, and using the main control knob along with the directional navigation buttons for selection. Alternatively, you can complete the settings in the Synido TempoPAD C16 official software and save them on the device. You can quickly switch groups by selecting the CTRL BANK and using the A/B/C/D buttons (8 assignable knobs + 4 assignable faders + 12 assignable buttons, forming a complete CTRL BANK control group). The A/B/C/D buttons light up in red, green, blue, and yellow, respectively.

By default, the knobs send CC messages as shown in the accompanying image.

	Knob	Knob1	Knob2	Knob3	Knob4	Knob5	Knob6	Knob7	Knob8
BANK A	Knob	Knob1	Knob2	Knob3	Knob4	Knob5	Knob6	Knob7	Knob8
	CC Number#	CC#01	CC#02	CC#03	CC#04	CC#05	CC#06	CC#07	CC#08
	Channel	1	1	1	1	1	1	1	1
	Min Value	0	0	0	0	0	0	0	0
	Max Value	127	127	127	127	127	127	127	127
BANK B	Knob	Knob1	Knob2	Knob3	Knob4	Knob5	Knob6	Knob7	Knob8
	CC Number#	CC#09	CC#10	CC#11	CC#12	CC#13	CC#14	CC#15	CC#16
	Channel	1	1	1	1	1	1	1	1
	Min Value	0	0	0	0	0	0	0	0
	Max Value	127	127	127	127	127	127	127	127
BANK C	Knob	Knob1	Knob2	Knob3	Knob4	Knob5	Knob6	Knob7	Knob8
	CC Number#	CC#17	CC#18	CC#19	CC#20	CC#21	CC#22	CC#23	CC#24
	Channel	1	1	1	1	1	1	1	1
	Min Value	0	0	0	0	0	0	0	0
	Max Value	127	127	127	127	127	127	127	127
BANK D	Knob	Knob1	Knob2	Knob3	Knob4	Knob5	Knob6	Knob7	Knob8
	CC Number#	CC#25	CC#26	CC#27	CC#28	CC#29	CC#30	CC#31	CC#32
	Channel	1	1	1	1	1	1	1	1
	Min Value	0	0	0	0	0	0	0	0
	Max Value	127	127	127	127	127	127	127	127

Knobs K1 - K4 are parameter knobs that include functions for NOTE REPEAT and the SEQ sequencer, allowing you to adjust DIV note duration, SWING, GATE length, and TEMPO. Note that the SEQ sequencer only supports adjusting the TEMPO. For detailed operational instructions, please refer to the sections on NOTE REPEAT and the Sequencer in this manual.

KONB parameter setting interface: There are two MIDI message types for the Knobs: CC and Pitch bend.

The editing interface of the screen when KONB selects to send CC message

K1

Type: CC

No. : 001

CH: 01 Min: 000 Max: 127

NO. : CC signal encoding Number, range 0-127
 CH : CC signal is sent to Channel, range 1-16
 Min : Minimum value of the parameter range sent by CC signal
 Max : Maximum value of the parameter range sent by CC signal

The editing interface of the screen when KONB selects to send PITCH BEND message

K1

Type: PITCH BEND

CH : 01

LSB : Min: 000 Max: 127
MSB : Min: 000 Max: 127

CH : pitch bend signal is sent to Channel, range 1-16
 LSB Min : Minimum value of the least significant bit range of the pitch bend signal
 LSB Max : Maximum value of the least significant bit range of the pitch bend signal
 MSB Min : Minimum value of the most significant bit range of the pitch bend signal
 MSB Max : Minimum value of the most significant bit range of the pitch bend signal

4.Assignable Faders

The Synido TempoPAD C16 features four customizable faders that can send CC, PC, and Pitch Bend messages. The Fader BANK includes four groups (A/B/C/D), allowing for a total of 16 different parameter settings. You can configure parameters directly on the device by holding the main control knob while moving one of the F1-F4 faders you wish to set, and using the main control knob along with the directional navigation buttons to select the fader parameters or using the Synido TempoPAD C16 official configuration software to store the settings on the device. You can quickly switch groups by selecting the CTRL BANK and using the A/B/C/D buttons (8 assignable knobs + 4 assignable faders + 12 assignable buttons, forming a complete CTRL BANK control group). The A/B/C/D buttons light up in red, green, blue, and yellow, respectively.

By default, the faders send CC messages as shown in the accompanying image.

BANK A	Fader	Fader 1	Fader 2	Fader 3	Fader 4
	CC Number#	CC#33	CC#34	CC#35	CC#36
	Channel	1	1	1	1
	Min Value	0	0	0	0
	Max Value	127	127	127	127
BANK B	Fader	Fader 1	Fader 2	Fader 3	Fader 4
	CC Number#	CC#37	CC#38	CC#39	CC#40
	Channel	1	1	1	1
	Min Value	0	0	0	0
	Max Value	127	127	127	127
BANK C	Fader	Fader 1	Fader 2	Fader 3	Fader 4
	CC Number#	CC#41	CC#42	CC#43	CC#44
	Channel	1	1	1	1
	Min Value	0	0	0	0
	Max Value	127	127	127	127
BANK D	Fader	Fader 1	Fader 2	Fader 3	Fader 4
	CC Number#	CC#45	CC#46	CC#47	CC#48
	Channel	1	1	1	1
	Min Value	0	0	0	0
	Max Value	127	127	127	127

Fader parameter setting interface: There are three MIDI message types for the fader: CC, PC, and PITCH BEND.

The editing interface of the screen when Fader selects to send CC message

F1
Type: CC
CH: 01 Min: 000 Max: 127

NO.: CC signal encoding Number, range 0-127
 CH: CC signal is sent to Channel, range 1-16
 Min: Minimum value of the parameter range sent by CC signal
 Max: Maximum value of the parameter range sent by CC signal

The editing interface of the screen when Fader selects to send PC message

F1
Type: PC
CH: 01 Min: 000 Max: 127

NO.: N/A
 CH: PC signal is sent to Channel, range 1-16
 Min: Minimum value of the encoding range sent by the PC signal
 Max: Maximum value of the encoding range sent by the PC signal

The editing interface of the screen when Fader selects to send PITCH BEND message

F1
Type: PITCH BEND
MSB: Min: 000 Max: 127

CH: pitch bend signal is sent to Channel, range 1-16
 MSB Min: Minimum value of the most significant bit range of the pitch bend signal
 MSB Max: Maximum value of the most significant bit range of the pitch bend signal

5.Button

The Synido TempoPAD C16 features 12 assignable buttons with trigger feedback. Pressing a button can send CC and PC messages. These buttons do not have printed labels for M (Mute), S (Solo), or R (Record) functions, which must be mapped in the DAW software to be enabled. The Button BANK includes four groups (A/B/C/D), allowing for 48 different parameter settings. You can configure these on the device by holding the main control knob while pressing one of the M/S/R buttons you wish to set, and using the main control knob along with the directional navigation buttons to adjust the parameters or using the Synido TempoPAD C16 official configuration software to store the settings on the device. You can quickly switch groups by selecting the CTRL BANK and using the A/B/C/D buttons (8 assignable knobs + 4 assignable faders + 12 assignable buttons, forming a complete CTRL BANK control group). The A/B/C/D buttons light up in red, green, blue, and yellow, respectively.

By default, the buttons send CC messages as shown in the accompanying image:

BANK A	button	F1(M)	F1(S)	F1(R)	button	F3(M)	F3(S)	F3(R)
	CC Number#:	CC#49	CC#50	CC#51	CC Number#:	CC#55	CC#56	CC#57
	button	F2(M)	F2(S)	F2(R)	button	F4(M)	F4(S)	F4(R)
BANK B	CC Number#:	CC#52	CC#53	CC#54	CC Number#:	CC#58	CC#59	CC#60
	button	F1(M)	F1(S)	F1(R)	button	F3(M)	F3(S)	F3(R)
	CC Number#:	CC#61	CC#62	CC#63	CC Number#:	CC#67	CC#68	CC#69
BANK C	button	F2(M)	F2(S)	F2(R)	button	F4(M)	F4(S)	F4(R)
	CC Number#:	CC#64	CC#65	CC#66	CC Number#:	CC#70	CC#71	CC#72
	button	F1(M)	F1(S)	F1(R)	button	F3(M)	F3(S)	F3(R)
BANK D	CC Number#:	CC#73	CC#74	CC#75	CC Number#:	CC#79	CC#80	CC#81
	button	F2(M)	F2(S)	F2(R)	button	F4(M)	F4(S)	F4(R)
	CC Number#:	CC#76	CC#77	CC#78	CC Number#:	CC#82	CC#83	CC#84
BANK D	button	F1(M)	F1(S)	F1(R)	button	F3(M)	F3(S)	F3(R)
	CC Number#:	CC#85	CC#86	CC#87	CC Number#:	CC#91	CC#92	CC#93
	button	F2(M)	F2(S)	F2(R)	button	F4(M)	F4(S)	F4(R)
BANK D	CC Number#:	CC#88	CC#89	CC#90	CC Number#:	CC#94	CC#95	CC#96

The default CC trigger type set to "toggle," all on channel CH1.

Button parameter setting interface: There are two MIDI message types for the button, CC and PC.

The editing interface of the screen when Button selects to send CC message

M F1

Type: CC

Channel : 01

NO: 049

Trigger: Toggle

Channel : N/A

NO.: PC signal is sent to Channel, range 1-16

Trigger: Minimum value of the encoding range sent by the PC signal

The editing interface of the screen when Button selects to send PC message

M F1

Type: PC

Channel : 01

NO: 049

Trigger: /

Channel : PC signal is sent to Channel, range 1-16

NO.: PC signal encoding Number, range 0-127

Trigger: N/A

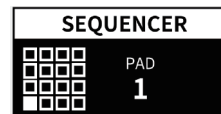
6.Sequencer

The TempoPAD C16 features a 16-track, 16-step sequencer. Press the STEP button to activate the sequencer, which will light up in red. The signal data for the 16 pads comes from the KEYBOARD MODE or selected PAD BANK of CUSTOM MODE (the sequencer will not function if the PAD BANK contains non-NOTE signal data). When activated, the sequencer defaults to the note step interface for PAD1; the 16 pads become a 16-step trajectory for PAD1's note. Triggering any of the pads will illuminate them in yellow, indicating the current step is active; re-triggering will turn off the light, indicating the step is inactive.

The color layout for the different PAD tracks is shown in the accompanying image.

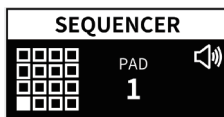


Switch Track Editing Interface: Long press the STEP button + any pad to switch to the step sequencer interface for the note associated with PAD1-PAD16. The 16 pads correspond to 16 tracks, each track's sequencer steps can be edited, and all 16 tracks can be played simultaneously. If a track contains step information, the PAD icon on the OLED display will be filled, making it easy to see which PAD tracks are active.



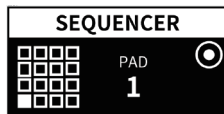
The display screen when the PAD1 track is selected and notes are placed in the track

Play Sequencer: Press the PLAY button to start the step sequencer playback. The PLAY button will light up with a steady red light. At this point, the purple running light will jump and move along the step sequence of PAD1-PAD16. When the running light passes over a PAD with a color, it will trigger the NOTE signal data of the current PAD.



Display interface when playing the sequencer

For recording notes: the REC function allows you to capture step data. Press the REC button, which will flash red to indicate that recording is active. When recording, the pads will not light up, but pressing them will trigger a purple light and output NOTE signals; once any PAD is triggered, the PLAY button will light up, with both PLAY and REC buttons illuminated in red. The moving light will be hidden but still functional. After exiting the REC function, the interface will return to the sequencer display.



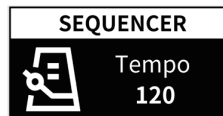
Display screen when recording sequencer

Turn on the REC note recording indicator marquee: When in REC recording mode, the purple indicator light is off by default, but you can also turn it on; long press the main control knob + STEP button to enter the sequencer configuration interface, then turn the main control knob to adjust the Marquee option from OFF to ON. or using the Synido TempoPAD C16 official configuration software to store the settings on the device.



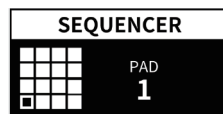
Display screen when configuring sequencer parameters

Modify the sequencer speed: You can modify the sequencer playback speed (BPM) using a combination of buttons (STEP + TEMPO knob) or by repeatedly pressing the TAP TEMPO button. To use the combination, hold the STEP button while turning the TEMPO knob. The BPM speed can be adjusted within the range of 20 - 240 BPM.



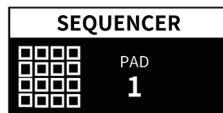
Display interface when quickly changing the sequencer BPM speed

Clear Individual PAD Track Step Information: The PLAY button includes an additional CLEAR function; long press the PLAY button to clear the note steps in the current PAD track.



Example: When all tracks contain notes, the display screen will appear after the step information of the PAD1 track is cleared.

Clear All PAD Track Step Information: Long press the main control knob while pressing the PLAY button to clear all note steps across the 16 PAD tracks.



Display screen after clearing all PAD track step information

TAP TEMPO Button: This button is used to set the BPM tempo. When the sequencer is in PLAY mode, the LED below this button will flash, with the flashing speed representing the tempo. Pressing it repeatedly will allow the device to detect the tempo, and the light will flash according to the speed of your presses, completing the setting. You can also turn on the SYNC function by long pressing the TAP TEMPO button until it lights up red. At this time, the sequencer will ignore the local BPM beat speed and run according to the BPM speed of the MIDI Clock sender.

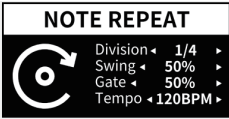
Jam in sequencer: You can still play in sequencer after the sequencer function is turned on. This function also allows you to know the enabled sounds in a certain PAD track. The notes played in time will not be recorded into the sequencer step, and will not affect the notes in the sequencer workflow. You can use a combination of keys to achieve this function. The detailed operation method is: After the sequencer is turned on, press and hold the “← left” button of the directional navigation without releasing it. At this time, the 16 PADs are displayed with orange backlights. Randomly tapping the PAD will trigger the NOTE message in time.

Note: The SEQ sequencer function only responds to note events. If one or more pads in the designated PAD BANK send CC or PC events, the sequencer will not activate.

7.NOTE REPEAT

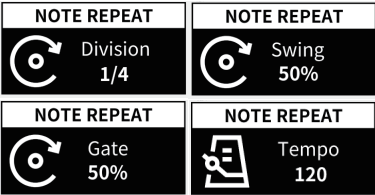
The TempoPAD C16 features a NOTE REPEAT function. When activated, the device will repeatedly send note information according to the set DIV note value, SWING amount, GATE length, and TEMPO speed. You can configure this on the device by holding the main control knob while pressing the NOTE REPEAT button. The OLED display will enter the parameter editing interface, allowing you to rotate K1 - K4 to set the parameters. In addition, NOTE REPEAT also supports turning off the note repeat function of certain PADs. The PADs with the note repeat function turned off will send a single NOTE signal in the form of normal triggering.

Display screen when configuring note repeat parameters



- ① **DIV Note Values:** 1/4 (quarter note), 1/4T (quarter note triplet), 1/8 (eighth note), 1/8T (eighth note triplet), 1/16 (sixteenth note), 1/16T (sixteenth note triplet), 1/32 (thirty-second note), 1/32T (thirty-second note triplet).
- ② **SWING Amount:** 50% [off], 55%, 57%, 59%, 61%, 64%, 67%, 70%, 73%, 76%.
- ③ **GATE Length:** 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%
- ④ **TEMPO Speed:** 20 - 240

Quick Parameter Configuration Method: Hold the NOTE REPEAT button while rotating K1 - K4 to set the NOTE REPEAT parameters.



TAP TEMPO Button: This button is also used to set the tempo. If the NOTE REPEAT function is active, the LED under this button will flash, with the flashing speed representing the tempo. Pressing it repeatedly will allow the device to detect the tempo, and the light will flash according to your pressing speed, completing the setting. You can also turn on the SYNC function by long pressing the TAP TEMPO button until it lights up red. At this time, the NOTE REPEAT will ignore the local BPM beat speed and run according to the BPM speed of the MIDI Clock sender.

Turn off/on some PAD note repeat: After turning on the NOTE REPEAT function, it is turned on globally by default, that is, tapping all 16 PADs will send NOTE note signals repeatedly. If you want to turn off the note repeat function of some PADs and send a single NOTE note signal in a normal triggering form (a single tap trigger sends a NOTE signal), you can use a combination of keys to achieve this function. The detailed operation method is: after the note repeat is turned on, long press the direction navigation “→right” key without releasing it. At this time, the 16 PADs are displayed with purple backlights. Pressing any PAD will turn off its backlight. The PAD with the backlight turned off has the note repeat function turned off. You can also use the same operation method to turn on the PAD with the note repeat turned off.

Note: The NOTE REPEAT function only affects note events. When the designated PAD sends CC or PC events, the NOTE REPEAT function will not work.

8.TAP TEMPO: Tempo Measurement and SYNC Functionality

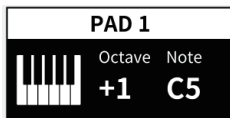
The TempoPAD C16 features a BPM tempo measurement function. When the sequencer and note repeat functions are active, you can set the tempo by repeatedly pressing the TAP TEMPO button. The LED below this button will flash, with the flashing speed indicating the tempo, which ranges from 20 to 240 BPM. By pressing the button multiple times, the device will detect the tempo, and the light will flash in sync with your presses, completing the setting.

The device also supports the SYNC function for tempo synchronization (Acts as a receiving device only, does not send MIDI Clock signals) : Long press the TAP TEMPO button until the backlight turns solid red, indicating that the SYNC function is activated. At this point, the device can receive external MIDI clock synchronization signals. The TempoPAD C16 will ignore its own TEMPO settings and operate the sequencer (SEQ) and note repeat (NOTE REPEAT) functions according to the primary MIDI clock BPM. Pressing the button again will deactivate the tempo synchronization function.

9.Octave Adjustment Buttons [OCT- / OCT+]

In KEYBOARD mode, the TempoPAD C16 supports octave adjustment. The OCT+ button increases the octave, while the OCT- button decreases it. Pressing the octave up/down buttons will change the range by up to four octaves, covering the notes from C0 to C8. Additionally, pressing both octave buttons (in quick succession) will restore the default initial value.

Octave octave adjustment screen interface



Note: Because different DAW software may define Middle C differently in their piano roll, the note information sent may not align with what is displayed in the DAW software.

10.Transport Control Buttons

The TempoPAD C16 includes three backlit transport control buttons: Play, Stop, and Record. Pressing these buttons can send CC or MMC events. You can configure these settings directly on the device (hold the main control knob while pressing the desired transport button, then rotate the main control knob along with the directional navigation buttons to set the parameters for the selected button) or complete the settings in the official Synido TempoPAD C16 software and save them to the device.

By default, pressing the buttons will send CC events, as shown in the table below:

Transport Buttons	Play	STOP	Record
CC Number#	97	98	99
Channel	1	1	1
Trigger Type	Momentary	Momentary	Momentary

The display editing interface when the transport button selects to send CC message

PLAY	STOP	RECORD
Type: CC Channel : 01 NO: 097 Trigger: Momentary	Type: CC Channel : 01 NO: 098 Trigger: Momentary	Type: CC Channel : 01 NO: 099 Trigger: Momentary

Channel: CC signal is sent to Channel, range 1-16

NO.: CC signal encoding Number, range 0-127

Trigger: Trigger type: Momentary trigger and Toggle trigger

If the device sends MMC events, the MMC receive function must be enabled in the DAW software.

If the device sends CC events, you must adjust the mapping in the DAW software to control the corresponding functions. If functions are not assigned in the host software, the buttons will not operate as intended.

The display editing interface when the transport button selects to send MMC message

PLAY	STOP	RECORD
Type: MMC Channel : / NO: / Trigger: /	Type: MMC Channel : / NO: / Trigger: /	Type: MMC Channel : / NO: / Trigger: /

Channel: N/A

NO.: N/A

Trigger: N/A

Tip: MMC commands can be used in DAW software that supports MMC functionality without the need for mapping, such as Cubase, FL Studio, Studio One, Pro Tools, Logic Pro X, Reaper, and GarageBand.

11.16 Level Strength Layering

The 16-Level velocity layering function allows the velocity value of a single pad's NOTE to be subdivided into 16 levels. This feature provides a more nuanced representation of the same sound's response at different velocities. The image below shows a detailed distribution of velocities when the function is activated. If the parameters on the pad are not NOTE signals, this function will not operate. By default, the velocity layering is set for the NOTE value in PAD1, and you can switch it using the combination of the 16 Level button and any of the PAD1 - PAD16 buttons.

104	112	120	127
PAD13	PAD14	PAD15	PAD16
72	80	88	96
PAD9	PAD10	PAD11	PAD12
40	48	56	64
PAD5	PAD6	PAD7	PAD8
8	16	24	32
PAD1	PAD2	PAD3	PAD4

Velocity value assignment in 16 Level mode

12.Pad Velocity Curve

The TempoPAD C16 offers four velocity curves to accommodate different playing styles: Fixed Velocity, Soft, Medium, and Hard. The velocity curve affects the strength of the strikes on the pads and the feedback of the output note velocities. You can switch between different velocity curves by pressing the VEL button, with the backlight indicating the current velocity curve type:

Fixed Velocity - White: In this mode, regardless of how hard you strike, the pad always outputs a fixed velocity. The default output velocity is 127. You can set this on the device (hold the main control knob while pressing the VEL button, then rotate the main control knob to adjust the fixed velocity value) or complete the settings in the official Synido TempoPAD C16 software and save them to the device.

Soft - Blue: Suitable for players who tend to strike the pads with lighter force; a light tap will yield higher velocity values.

Medium - Green: The velocity correlates linearly with MIDI values, suitable for most musical styles and performers.

Hard - Red: Designed for players who strike the pads with more force; a strong hit is needed to achieve higher velocity values.

13.MIDI Bluetooth

The TempoPAD C16 supports BLE (Bluetooth Low Energy) MIDI functionality. Unlike classic Bluetooth, it cannot be discovered or connected using traditional Bluetooth methods. For detailed connection methods with various devices, please refer to the "Wireless BLE Bluetooth Connection" section of this manual.

By default, the BLE Bluetooth is turned off. Press the BT button; the BT button will light up in red, indicating that the TempoPAD C16's Bluetooth functionality is now on, and the device is in a discoverable pairing state. Once successfully connected, the BT button will display a solid Bluetooth light. Long pressing the button will turn off the BLE Bluetooth function, and the BT button will not light up.

COMPANION SOFTWARE INSTRUCTIONS

1. Software Download and Installation

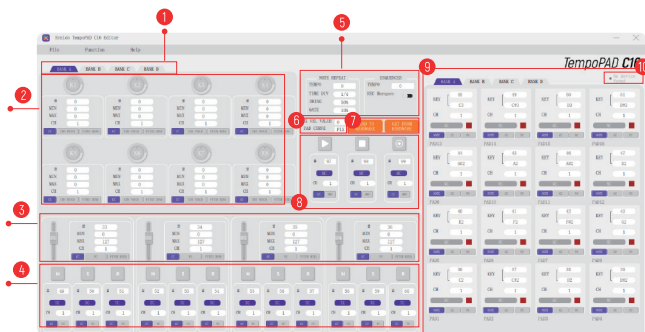
The Synido TempoPAD C16 comes with companion software, which is used to write or read parameter settings on the device and to send various MIDI commands.

You can download the software from the following link:

<https://www.synido.com/pages/downloads>

Once the download is complete, run the program to begin the installation process.

2. Software Interface



- 1 Menu Bar
- 2 Custom Knob Settings Area
- 3 Custom Fader Settings Area
- 4 Custom Button Settings Area
- 5 Note Repeat and Sequencer Settings Area
- 6 Fixed Velocity Value and Velocity Curve Settings Area
- 7 Send/Retrieve Settings from Hardware
- 8 Transport Control Buttons Settings Area
- 9 Pad Settings Area
- 10 Connection Status Indicator

3. Device Occupancy (Applicable to Windows Systems Only)

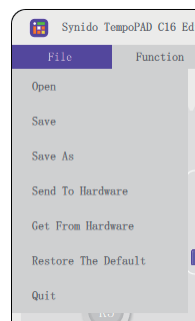
The connection status of the device is displayed in the upper-right corner of the software interface (area 10). The software can only write or read the TempoPAD's parameter settings when the device is shown as "Connected."

If "Connected" is displayed, it means the software and the TempoPAD are properly connected, and configuration can be transferred between them.

If "Not Connected" is displayed, it could be due to the device not being correctly connected to the computer, or another program (such as a DAW) occupying the device. In this case, you need to exit the DAW or any other program using the MIDI device, and sometimes you may need to reconnect the device.

4. Menu Bar

The menu bar offers the following functions: Open, Save, Save As, Send to Hardware, Get from Hardware, Restore The Default, Quit.



Open: Load a parameter configuration file.

Save: Save the current parameter settings in the existing preset file. If no preset file is available, a dialog will open to save it as a new file with the ".stm" extension.

Save As: Save the current parameter settings as a new preset file.

Send to Hardware: Send the current parameter settings to the TempoPAD.

Retrieve from Hardware: Retrieve the parameter settings from the TempoPAD.

Restore Defaults: Reset the device to the factory default settings.

Exit: Close the control panel.

5.Assignable Knob Settings



Click the storage tab (same as the assignable knobs section) to switch to the group you want to edit (8 assignable knobs + 4 assignable faders + 12 assignable buttons, forming one CTRL BANK control group).

Click the tab to select the event type. Available types are CC (Control Change), or Pitch Bend.

Enter the minimum and maximum values to determine the knob's control range.
Select the event's channel: 1-16.

6.Assignable Fader Settings

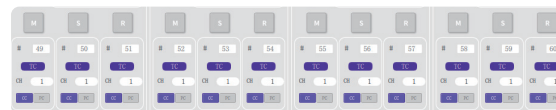


Click the storage tab (same as the assignable knobs section) to switch to the group you want to edit (8 assignable knobs + 4 assignable faders + 12 assignable buttons, forming one CTRL BANK control group).

Click the tab to select the event type. Available types are CC, PC (Program Change), or Pitch Bend.

Enter the minimum and maximum values to determine the fader's control range.
Select the event's channel: 1-16.

7.Assignable Button Settings



Click the storage tab (same as the assignable knobs section) to switch to the group you want to edit (8 assignable knobs + 4 assignable faders + 12 assignable buttons, forming one CTRL BANK control group).

Click the tab to select the event type. Available types are CC or PC.

For CC, there are two trigger type options:

MC (Momentary Control): Sends an "instant" trigger.

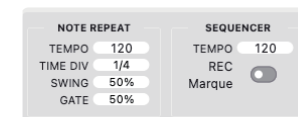
TC (Toggle Control): Sends a "toggle" trigger.

Select the event's channel: 1-16.

Tip: In Momentary mode, pressing a button sends an event with a value of 127, and releasing the button sends an event with a value of 0.

In Toggle mode, each press and release sends alternating values of 127 and 0.

8. Note Repeat and Sequencer Parameter Settings



The NOTE REPEAT function has four adjustable parameters:

TEMPO (BPM): 20 - 240

TIME DIV (Note Value): Options include 1/4 (quarter note), 1/4T (quarter note triplet), 1/8 (eighth note), 1/8T (eighth note triplet), 1/16 (sixteenth note), 1/16T (sixteenth note triplet), 1/32 (thirty-second note), 1/32T (thirty-second note triplet).

SWING: Options include 50% (off), 55%, 57%, 59%, 61%, 64%, 67%, 70%, 73%, 76%.

GATE (Note Length): Options include 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%.

The SEQUENCER can only set the TEMPO parameter and Turn on/off the REC marquee.

9. Velocity Curve and Parameter Management



PAD CURVE: The velocity curve can be set to:

EXP (Exponential): Hard feedback, suitable for players who hit pads with significant force.

LIN (Linear): Linear relationship between velocity and MIDI value, suitable for most musicians.

LOG (Logarithmic): Soft feedback, suitable for players who use lighter hits.

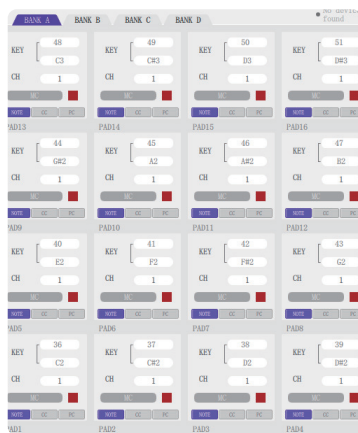
FIX (Fixed): Outputs a fixed velocity value regardless of how hard the pad is hit.

FIX VEL VALUE: Adjustable fixed velocity range: 0 - 127.

Send to Hardware: Sends current parameter settings to the TempoPAD.

Get from Hardware: Gets parameter settings from the TempoPAD.

10. PAD Settings



Click the storage tab to switch between groups A, B, C, and D.

Click the color block to open the RGB color editor and adjust the pad backlight color.

Click to select the channel for event transmission.

Click the pad label to choose event types: NOTE, CC, or PC.

For NOTE events, enter a number in the key field or click the note name to adjust pitch (instant/toggle functions are not available).

For CC events, enter the event number.

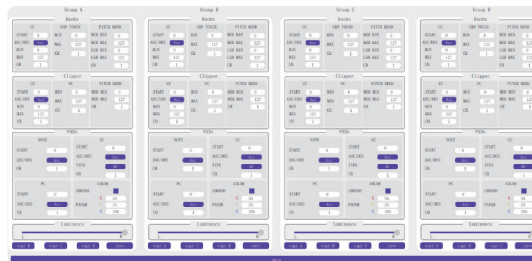
For PC events, enter the event number; toggle/instant functions are unavailable, sending one PC event per pad press.

Tip: In Momentary mode, pressing a button sends a value of 127, and releasing it sends a value of 0.

In Toggle mode, each press and release alternates between sending 127 and 0.

11. Quick Layout

The quick layout feature allows for rapid configuration of functions on the panel. Click the Function menu to open the window. Fill in the parameters, check the boxes, and click "Apply" to quickly layout parameters on the panel.



Knobs: Quickly set CC values, size ranges, channels, pitch bend coarse and fine adjustment ranges, and pitch bend channels.

Faders: Quickly set CC values, size ranges, channels, touch ranges, touch channels, pitch bend coarse adjustment ranges, and pitch bend channels.

Pads: Quickly set CC, NOTE, PC values, as well as RGB light colors and brightness.

1. **Starting Value:** MIDI information starting encoding range: 0 - 127.
2. **Ascending/Descending:** In Ascending, the starting encoding will increment; in Descending, it will decrement.
3. **Min/Max:** Range for CC event parameters.
4. **Trigger Type:** MC (Momentary Control) or TC (Toggle Control).

12. Firmware upgrade

Connect the device until the software shows "Connected."

Click the Help menu and select "About," then click "Firmware Update" in the dialog box.

Warning: Ensure a stable internet connection before upgrading, and avoid other operations during the process. Upgrade failures may render the product inoperable. For guidance, check the "Firmware Upgrade" section in the Syndio website FAQ or contact customer service for assistance.

PRODUCT SPECIFICATION

Product Model: TempoPAD C16 **Power Consumption:** 300mA

Color: Green **Product Weight:** 940g

Material: Plastic + Silica Gel **Product Size:** 290*213*42mm

Battery capacity: 3000mAh [Fully charged, it can standby for 5 hours]

MIDI Connector: TRS (Type A) MIDI In / Out / Thru

CUSTOMER SUPPORT

For more FAQ, visit Support Center: [Syndio.com/support](https://syndio.com/support)

or scan the QR code 

or email us at cs@syndio.com

WORKING TIME: 9:00 - 18:00 (MONDAY TO FRIDAY, GMT+8)



APPENDIX

MIDI Event Interpretation:

Event: A MIDI command.

Channel: There are 16 channels in MIDI protocol, and most MIDI events contain channel information. Users can set on the receiving device to hear only the events from a certain channel. For example, device A only receives events from channel 1, and device B only receives events from channel 2. Then on the sending device, the user can send channel 1 events to control device A, and send channel 2 events to control device B.

CC Event: Controller Change event. A CC event contains the following information: channel number, CC number, and event value. MIDI protocol defines some specific CC numbering functions, for example, CC#7 event is the main volume event, and CC # 64 is the piano pedal event; Some CC commands are not defined functions, so users can define them as wish. See the appendix for the definition of CC events;

CC event can be a single command: for example, press a PAD and send a command of CC # 64 at value 127, and the receiving device will execute the action of opening the piano pedal after receiving the command; It can also be continual commands, such as rotating a knob to send events of CC # 7 with a value from 0 to 127. After receiving the command, the system will adjust the volume from the minimum to the maximum.

PC Event: Program Change event. It is also a kind of control command containing channel information and event numbers. It usually used for voice change.

Momentary: When a key (button) is pressed, an ON event is sent, and when a key (button) is released, an OFF event is sent; For example, when a pad is used to imitate the function of the piano keys, the "Note ON" command is sent when the pad is pressed, and the "Note OFF" command is sent when the pad is released.

Toggle: When the full operation of pressing + releasing is completed, the ON and OFF events will be sent alternately; For example, it can be used as a switch. Each time you tap a pad, it alternately sends commands with values of 127 and 0. Set 127 as ON and 0 as OFF at the receiving end, the control effect can be achieved.

CC Default Event List:

CC 0 (BankSel MSB)	CC 43 (Expr LSB)	CC 86 (Control 86)
CC 1 (Modulation)	CC 44 (Control 44)	CC 87 (Control 87)
CC 2 (Breath)	CC 45 (Control 45)	CC 88 (Control 88)
CC 3 (Control 3)	CC 46 (Control 46)	CC 89 (Control 89)
CC 4 (Foot)	CC 47 (Control 47)	CC 90 (Control 90)
CC 5 (Portamento)	CC 48 (Control 48)	CC 91 (ExtEff 1 Depth)
CC 6 (DataEnt MSB)	CC 49 (Control 49)	CC 92 (ExtEff 2 Depth)
CC 7 (Main Volume)	CC 50 (Control 50)	CC 93 (ExtEff 3 Depth)
CC 8 (Balance)	CC 51 (Control 51)	CC 94 (ExtEff 4 Depth)
CC 9 (Control 9)	CC 52 (Control 52)	CC 95 (ExtEff 5 Depth)
CC 10 (Pan)	CC 53 (Control 53)	CC 96 (Data Incr)
CC 11 (Expression)	CC 54 (Control 54)	CC 97 (Data Decr)
CC 12 (Control 12)	CC 55 (Control 55)	CC 98 (NRPN LSB)
CC 13 (Control 13)	CC 56 (Control 56)	CC 99 (NRPN MSB)
CC 14 (Control 14)	CC 57 (Control 57)	CC 100 (RPN LSB)
CC 15 (Control 15)	CC 58 (Control 58)	CC 101 (RPN MSB)
CC 16 (Gen Purp 1)	CC 59 (Control 59)	CC 102 (Control 102)
CC 17 (Gen Purp 2)	CC 60 (Control 60)	CC 103 (Control 103)
CC 18 (Gen Purp 3)	CC 61 (Control 61)	CC 104 (Control 104)
CC 19 (Gen Purp 4)	CC 62 (Control 62)	CC 105 (Control 105)
CC 20 (Control 20)	CC 63 (Control 63)	CC 106 (Control 106)
CC 21 (Control 21)	CC 64 (Sustain)	CC 107 (Control 107)
CC 22 (Control 22)	CC 65 (Porta On/Off)	CC 108 (Control 108)
CC 23 (Control 23)	CC 66 (Sostenuto)	CC 109 (Control 109)
CC 24 (Control 24)	CC 67 (Soft Pedal)	CC 110 (Control 110)
CC 25 (Control 25)	CC 68 (Legato FS)	CC 111 (Control 111)
CC 26 (Control 26)	CC 69 (Hold 2)	CC 112 (Control 112)
CC 27 (Control 27)	CC 70 (Sound Var)	CC 113 (Control 113)
CC 28 (Control 28)	CC 71 (Harmonic)	CC 114 (Control 114)
CC 29 (Control 29)	CC 72 (Release Time)	CC 115 (Control 115)
CC 30 (Control 30)	CC 73 (Attack Time)	CC 116 (Control 116)
CC 31 (Control 31)	CC 74 (Brightness)	CC 117 (Control 117)
CC 32 (BankSel LSB)	CC 75 (Control 75)	CC 118 (Control 118)
CC 33 (Modulation LSB)	CC 76 (Control 76)	CC 119 (Control 119)
CC 34 (Breath LSB)	CC 77 (Control 77)	CC 120 (AllSndOff)
CC 35 (Control 35)	CC 78 (Control 78)	CC 121 (Reset Ctrl)
CC 36 (Foot LSB)	CC 79 (Control 79)	CC 122 (Local Ctrl)
CC 37 (Porta LSB)	CC 80 (Gen Purp 5)	CC 123 (AllNoteOff)
CC 38 (DataEnt LSB)	CC 81 (Gen Purp 6)	CC 124 (Omni Mode Off)
CC 39 (Main Volume LSR)	CC 82 (Gen Purp 7)	CC 125 (Omni Mode On)
CC 40 (Balance LSB)	CC 83 (Gen Purp 8)	CC 126 (Mono Mode On)
CC 41 (Control 41)	CC 84 (Porta Ctrl)	CC 127 (Poly Mode On)
CC 42 (Pan LSB)	CC 85 (Control 85)	

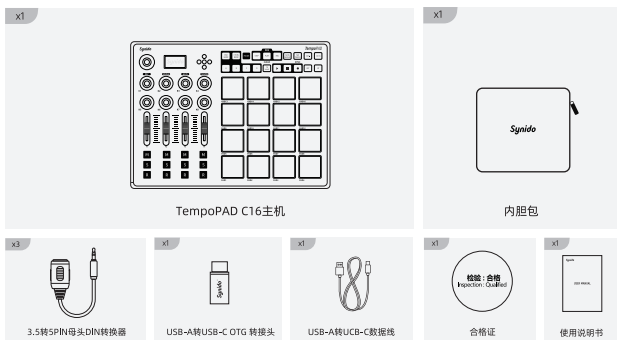
欢迎

The diagram illustrates the components and layout of the SynBio system. On the left, the 'SynBio' logo is shown above a grid of components. The components are organized into four columns: 'CPU', 'MEMO', 'DATA', and 'TEMPD'. Each column contains a circular component (K1, K2, K3, K4, K5, K6, K7, K8) and a rectangular component (M, S, R). The 'CPU' column has a single 'CPU' component. The 'MEMO' column has a 'MEMO' component. The 'DATA' column has a 'DATA' component. The 'TEMPD' column has a 'TEMPD' component. On the right, the 'TempoPAD' interface is shown, featuring a grid of 16 square pads (PAD1 to PAD16) and a control panel with buttons for 'PAD1' through 'PAD16', 'CPU', 'MEMO', 'DATA', and 'TEMPD'. The control panel also includes a 'PAD1' button, a 'PAD2' button, a 'PAD3' button, a 'PAD4' button, a 'PAD5' button, a 'PAD6' button, a 'PAD7' button, a 'PAD8' button, a 'PAD9' button, a 'PAD10' button, a 'PAD11' button, a 'PAD12' button, a 'PAD13' button, a 'PAD14' button, a 'PAD15' button, and a 'PAD16' button. The control panel also includes a 'CPU' button, a 'MEMO' button, a 'DATA' button, and a 'TEMPD' button. The control panel also includes a 'PAD1' button, a 'PAD2' button, a 'PAD3' button, a 'PAD4' button, a 'PAD5' button, a 'PAD6' button, a 'PAD7' button, a 'PAD8' button, a 'PAD9' button, a 'PAD10' button, a 'PAD11' button, a 'PAD12' button, a 'PAD13' button, a 'PAD14' button, a 'PAD15' button, and a 'PAD16' button.

产品特点:

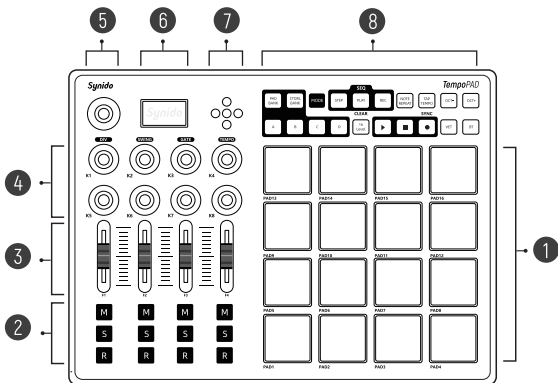
- 产品特点:

包装清单



面板说明

前面板:



1. **打击垫工作区域**: 4*4布局16个硅胶打击垫, 带有力度/压力感应与RGB灯光显示, 敲击打击垫以发送MIDI信息。打击垫在Custom自定义模式下有A/B/C/D 四个自定义分组, 可实现64种指令触发。

2. **可分配按键**: 12个可分配按键, 带有触发反馈结构, 按下按键以发送MIDI指令, 按键自身不带有丝印内容M (Mute) 静音/S (Solo) 独奏/ R (Record) 录制功能, 需在DAW软件中映射后启用。按键有A/B/C/D 四个自定义分组, 可实现48种指令触发。

3. **可分配推子**: 4个可分配按钮, 推动推子以发送MIDI指令。推子有A/B/C/D 四个自定义分组, 可实现16种指令触发。

4. **可分配旋钮**: 8个360°无极旋钮, 旋转旋钮以发送MIDI指令, 旋钮有A/B/C/D 四个自定义分组, 可实现32种指令触发。K1-K4旋钮带有Note Repeat音符重复与Sequencer音序器快速配置调节功能 (Sequencer音序器仅支持Tempo速度调节), 可通过组合按键进行实现, 详情见本说明书中Note Repeat音符重复与Sequencer音序器功能介绍章节内容。

5. **主控旋钮**: 360°无极带刻度反馈旋钮, 可通过按压配合其它功能按键, 旋转对打击垫、可分配按键、可分配推子、可分配旋钮、走带控制按钮、Note Repeat音符重复、Sequencer音序器, VEL的固定力度值进行功能参数设置。

6. **显示屏**: OLED液晶显示屏, 可以显示TempoPAD的功能及参数信息, 默认显示Synido品牌型号LOGO, 以操作为节点更新显示, 若无操作则显示不变。

7. **方向导航按键**: 按布局方向依次分为“上”、“下”、“左”、“右”4个方向导航按键, 对功能参数进行配置时, 可通导航按键对参数配置选项进行选择。

此外方向“左”键与“右”键带有附加功能:

音序器Sequencer开启时, 长按“左”键 + 16个PAD, 可即时触发PAD信号。

音符重复Note Repeat开启时, 长按“右”键 + 任一16个PAD, 可关闭某个PAD的音符重复功能, 使其在音符重复模式下以常规形式触发。

详细介绍可查看本说明书中的音序器Sequencer与音符重复Note Repeat章节内容

8.功能控制按键: 按下PAD BANK 按键, 结合A/B/C/D按键, 可依次切换四个打击垫分组;

按下CTRL BANK 按键, 结合A/B/C/D按键, 可依次切换四个控制分组 (8个可分配旋钮 + 4个可分配推子 + 12个可分配按键, 整体为一个CTRL控制组别);

按MODE键可切换三种打击垫的工作模式, 其中黑夜模式需在设备当前为Custom自定义模式下, 长按MODE按键后切换;

按STEP键可开启/关闭音序器功能;

按PLAY键可播放音序器;

按REC键可录制音序器;

长按STEP键 + 任一PAD (PAD1 - PAD16) 切换至所选择PAD音轨内的音序步位编辑界面;

长按PLAY键可删除音序器内当前PAD音轨内的步位信息;

长按主控制旋钮 + PLAY键, 可删除音序器内所有16个PAD音轨内的步位信息;

按压主控制旋钮+STEP键可进入音序器TEMPO速度调节界面, 或长按STEP键+旋转TEMPO旋钮快速设置;

按NOTE REPEAT键可开启/关闭音符重复功能;

按TAP TEMPO键可通过敲击确定NOTE REPEAT 音符重复/ Sequencer音序器的节拍速度;

开启NOTE REPEAT 音符重复/ Sequencer音序器时, 长按TAP TEMPO键, 待其背光灯常亮时

激活MIDI Clock外部时钟同步SYNC功能, 再次按下TAP TEMPO键可关闭此功能;

按OCT- / OCT+ 可在KEY琴键模式下修改打击垫区域内的音域八度范围;

按16 LEVEL键可开启/关闭16 LEVEL功能;

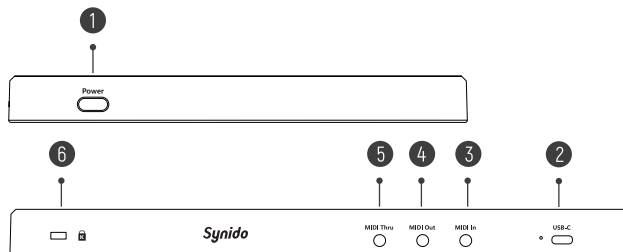
长按16 LEVEL键 + 任一PAD (PAD1 - PAD16) 切换至所选择PAD的NOTE键值力度分层;

3个走带控制按键, 分别为播放、停止、录制, 可以发送走带控制指令。指令以CC或MMC信息发送, 您可以通过本机功能设置或配套的控制软件编辑这些指令;

按VEL键可依次切换PAD的力度曲线;

按BT键可开启关闭BLE MIDI蓝牙功能;

接口面板:



1. Power: 主电源开关, 拨动此开关可开启/关闭主设备电源。

2. USB-C 接口: 使用 USB-A TO USB-C 线缆将此 USB 端口连接到您的电脑。电脑的 USB 端口会为 TempoPAD C16 提供电力并与您的计算机交换数据; 充电时旁边指示灯亮红色灯光, 满电时亮绿色灯光。

3. MIDI In: 3.5mm插座, 以标准MIDI协议输入信号, 需要TRS - 5PIN DIN MIDI转接线 (A型)。

4. MIDI Out: 3.5mm插座, 以标准MIDI协议输出信号, 需要TRS - 5PIN DIN MIDI转接线 (A型)。当MIDI In接口有信号输入时, 会将MIDI In接收到的MIDI信号与本机设备产生的MIDI信号一同从MIDI Out接口输出。

5. MIDI Thru: 3.5mm插座, 以标准MIDI协议复制输出接收到的MIDI In信号, 需要TRS - 5PIN DIN MIDI转接线 (A型)。

6. 锁孔: 您可以使用此锁槽将TempoPAD C16固定在桌子或其它表面上。

使用说明

1. 连接方式:

1.1 有线连接

搭配主流电脑端DAW宿主软件进行使用

① 向上拨动TempoPAD C16左侧部位的Power主电源开关, 使产品处于开机状态, TempoPAD C16内置电源在有充足电量的情况下, LED显示屏界面与部分控制按钮灯光将点亮。

② 使用附带的USB-A TO USB-C线, 将产品直接连接电脑。



③ 打开您的DAW宿主软件, 如Ableton Live, Cubase、FL Studio、Logic Pro等。

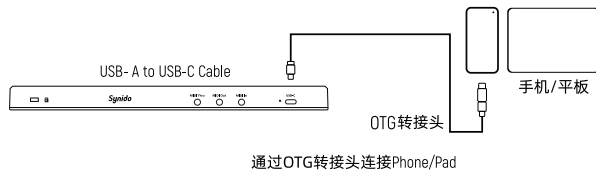
④ 打开 DAW宿主软件中的 Preferences、Options 或 Device Setup选项, 选择SynidoTempoPAD C16作为输入与输出设备。

您的TempoPAD C16现在即可与您的DAW宿主软件进行通信。

搭配移动端手机/平板进行使用

① 向上拨动TempoPAD C16左侧部位的Power主电源开关, 使产品处于开机状态, TempoPAD C16内置电源在有充足电量的情况下, LED显示屏界面与部分控制按钮灯光将点亮。

② 使用附带的USB-A TO USB-C线、USB-A TO USB-C OTG转接头, 将此两个部件连接至一起。



③ 将带有OTG转接头一端连接至手机/平板, 另一端连接至TempoPAD C16设备。

注意: 1.此方式也适用于电脑端USB-C接口连接。

2.Apple IOS端Lightning接口OTG转接头, 因法规缘由, 需用户自行购买。

3.因Apple移动设备端输出功率限制, 连接Apple IOS手机/平板使用时可能会出现因供电不足导致的异常情况, 使用前请确保TempoPAD C16自身电量充足。

1.2 无线BLE蓝牙连接

BLE蓝牙MIDI连接Windows端电脑进行使用

① 电脑端需提前下载安装MIDI Berry与Loop MIDI软件。



MIDI Berry Loop MIDI

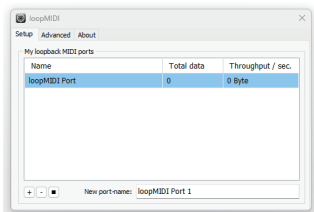
② 向上拨动TempoPAD C16左侧部位的Power主电源开关, 使产品处于开机状态, TempoPAD C16内置电源在有充足电量的情况下, LED显示屏界面与部分控制按钮灯光将点亮。

③ 按下功能按键区域的BT按键, 此时BT按键以红色背光灯形式呈现, 代表TempoPAD C16蓝牙功能已开启, 设备处于可搜寻待配对连接状态。

④ 将电脑端蓝牙开启进行配对连接, 设置>>>蓝牙与其他设备>> 蓝牙 “开” >>添加设备>>蓝牙>>单击搜索列表中的 “Synido TempoPAD C16 BT”, 电脑界面显示Synido TempoPAD C16 BT “已配对”, 此时BT按键仍以红色背光灯形式呈现。



- ⑤ 双击打开Loop MIDI软件，Setup界面底部New port-name输入栏可自定义修改接口名称，默认为“loopMIDI Port”，单击输入栏最左侧的“+”，此时Ports列表中将显示接口信息。

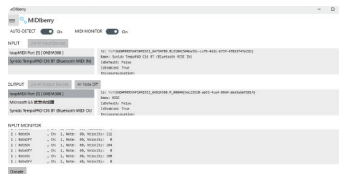


- ⑥ 双击打开MIDI Berry软件，在INPUT列表中选择“Synido TempoPAD C16 BT”，在OUTPUT列表中选择“loopMIDI Port”，此时TempoPAD C16的BT按键将以蓝色背光灯形式呈现，代表BLE蓝牙已连接成功，敲击打击垫PAD，INPUT MONITOR列表中将有数据显示；若无数据显示请按上叙步骤重新操作。

- ⑦ 打开您的DAW宿主软件，如Ableton Live、FL Studio、Logic Pro等。

- ⑧ 打开 DAW宿主软件中的 Preferences、Options 或 Device Setup选项，选择“loopMIDI Port”作为输入与输出设备。

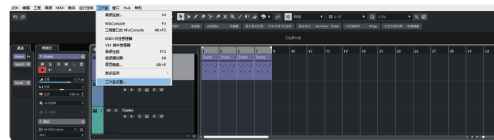
您的TempoPAD C16现在即可与您的DAW宿主软件进行通信。



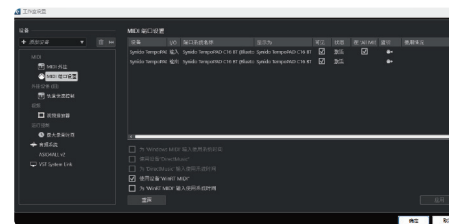
注意：Cubase软件带有WinRT MIDI功能，无需下载配置MIDI Berry 与Loop MIDI软件也可实现BLE无线蓝牙MIDI控制。

具体操作步骤如下：

- ① 双击打开Cubase软件，依次点击 工作室 >> 工作室设置。



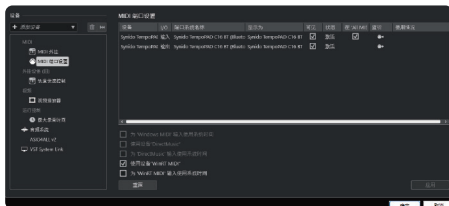
- ② 在工作室设置界面中勾选“使用设备WinRT MIDI”。



- ③ 向上拨动TempoPAD C16左侧部位的Power主电源开关，使产品处于开机状态，TempoPAD C16内置电源在有充足电量的情况下，LED显示屏界面与部分控制按钮灯光将点亮。
- ④ 按下功能按键区域的BT按键，此时BT按键以红色背光灯形式呈现，代表TempoPAD C16蓝牙功能已开启，设备处于可搜寻待配对连接状态。
- ⑤ 将电脑端蓝牙开启进行配对连接，设置>>蓝牙与其他设备>> 蓝牙 “开” >>添加设备>>蓝牙>>单击搜索列表中的“Synido TempoPAD C16 BT”，电脑界面显示Synido TempoPAD C16 BT “已配对”，此时BT按键仍以红色背光灯形式呈现。



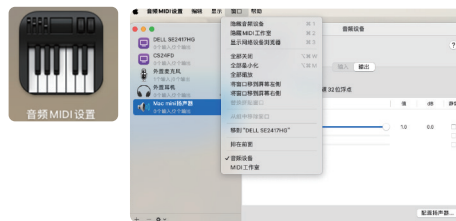
- ⑥ Cubase软件工作界面设置中将更新显示“Synido TempoPAD C16 BT”的输入/输出设备，状态为“激活”。此时TempoPAD C16的BT按键将以蓝色背光灯形式呈现，代表BLE蓝牙已连接成功



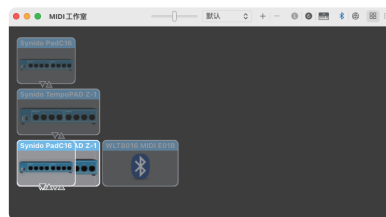
您的TempoPAD C16现在即可与您的Cubase软件进行通信。

BLE蓝牙MIDI连接Mac端电脑使用

- ① 向上拨动TempoPAD C16左侧部位的Power主电源开关，使产品处于开机状态，TempoPAD C16内置电源在有充足电量的情况下，LED显示屏界面与部分控制按钮灯光将点亮。
- ② 按下功能按键区域的BT按键，此时BT按键以红色背光灯形式呈现，代表TempoPAD C16蓝牙功能已开启，设备处于可搜寻待配对连接状态。
- ③ 打开Mac电脑端的“音频MIDI设置”程序软件，依次点击桌面左上角的窗口 >> MIDI工作室。



- ④ 在MIDI工作室界面中点击右上角的蓝牙图标。



- ⑤ 在新弹出的蓝牙配置界面中，选择设备名称为“SynidoTempoPAD C16 BT”的“连接”选项。此时TempoPAD C16的BT按键将以蓝色背光灯形式呈现，代表BLE蓝牙已连接成功。



- ⑥ 打开您的DAW宿主软件，如Ableton Live、FL Studio、Logic Pro等。
- ⑦ 打开 DAW宿主软件中的 Preferences、Options 或 Device Setup选项，选择“Synido TempoPAD C16 BT”作为输入与输出设备。

您的TempoPAD C16现在即可与您的DAW宿主软件进行通信。

BLE蓝牙MIDI连接安卓端手机/平板进行使用

- ① 向上拨动TempoPAD C16左侧部位的Power主电源开关，使产品处于开机状态，TempoPAD C16内置电源在有充足电量的情况下，LED显示屏界面与部分控制按钮灯光将点亮。
- ② 按下功能按键区域的BT按键，此时BT按键以红色背光灯形式呈现，代表TempoPAD C16蓝牙功能已开启，设备处于可搜寻待配对连接状态。
- ③ 在手机/平板设置中开启蓝牙功能。
- ④ 以《完美钢琴》APP为例：打开《完美钢琴》前需提前下载《钢琴教练》APP

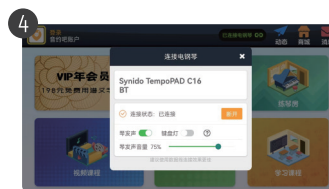
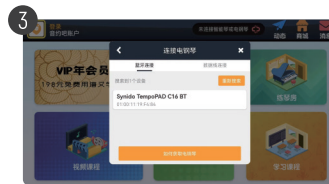
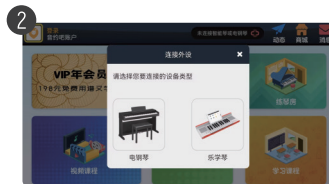


完美钢琴

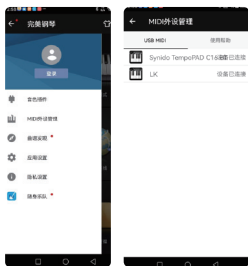


钢琴教练

- ⑤ 点击《钢琴教练》APP主界面右上方“未连接智能琴或电钢琴”选项，在弹出的新界面中选择设备类型中选择电钢琴，再点击蓝牙连接中的“Synido TempoPAD C16 BT”设备，此时软件界面显示“已连接电钢琴”。TempoPAD C16的BT按键将以蓝色背光灯形式呈现，代表BLE蓝牙已连接成功。



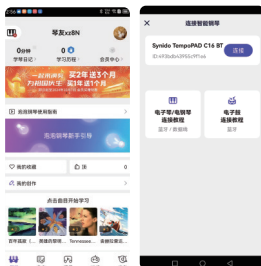
- ⑥ 请勿关闭《钢琴教练》APP，将其置于后台运行，打开《完美钢琴》APP左上角设置，在“MIDI外设管理”选项中显示USB MIDI “Synido TempoPAD C16 BT” 设备已连接，此时已连接成功。



- ④ 以《泡泡钢琴》APP为例：打开《泡泡钢琴》APP后，点击软件界面左上角的钢琴图标。

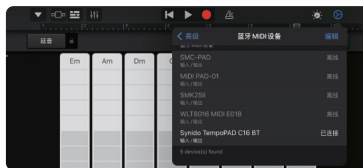
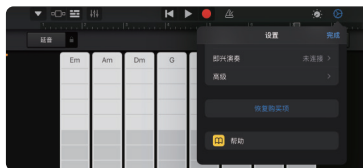


- ⑤ 在新弹跳的软件界面设备列表中选择“Synido TempoPAD C16 BT”，此时设备已连接成功，TempoPAD C16的BT按键将以蓝色背光灯形式呈现，代表BLE蓝牙已连接成功。点击“自由演奏”选项即可正常演奏了。



BLE蓝牙MIDI连接苹果IOS端手机/平板进行使用

- ① 向上拨动TempoPAD C16左侧部位的Power主电源开关，使产品处于开机状态，TempoPAD C16内置电源在有充足电量的情况下，LED显示屏界面与部分控制按钮灯光将点亮。
- ② 按下功能按键区域的BT按键，此时BT按键以红色背光灯形式呈现，代表TempoPAD C16蓝牙功能已开启，设备处于可搜寻待配对连接状态。
- ③ 在手机/平板设置中开启蓝牙功能。
- ④ 以《库乐队》APP为例：打开《库乐队》APP后，选择音轨类别中的“键盘”或“鼓”选项。
- ⑤ 点击新界面右上角的设置图标，依次选择 高级 >> 蓝牙MIDI设备 >> Synido TempoPAD C16 BT。此时软件界面显示“已连接”。TempoPAD C16的BT按键将以蓝色背光灯形式呈现，代表BLE蓝牙已连接成功。



2.打击垫

Synido TempoPAD C16的打击垫有三种工作模式：KEYBOARD琴键模式、CUSTOM自定义模式、DARK黑夜模式。

按下MODE按键可以切换模式。MODE按键背光的颜色表示当前所在的模式：红色代表KEYBOARD琴键模式，绿色代表CUSTOM自定义模式，黄色代表DARK黑夜模式（黑夜模式需在设备当前为CUSTOM自定义模式下，长按MODE按键切换）。

琴键模式（MODE按键为红色）：点击MODE按键进入KEYBOARD琴键模式，MODE按键以红色灯光显示常亮，KEYBOARD琴键模式下，4x4打击垫网格矩阵模拟钢琴音符黑白琴键排列，可以充当键盘用于弹奏。支持垂直的八度堆叠，最低的音阶位于底部，最高的音阶位于顶部，默认情况下覆盖的音符范围为C4-C5，可通过八度增/减按键（OCT- / OCT+）往上及往下变更4个八度。

此模式开启后16个打击垫以橙色及紫色灯光显示常亮，灯光颜色布局于下图所示，触发亮红色灯光，琴键通过MIDI NOTE音符指令进行瞬时触发，此模式下音符信息不可自定义更改。设备打击垫区域NOTE音符信息对应布局如下图所示：



注意：因为不同DAW软件中钢琴卷帘所标记定义的中央C不同，因此发送的音符名信息会与DAW软件中显示不一致。

自定义模式（MODE按键为绿色）：此模式下PAD可以按您的设定发送NOTE/CC/PC指令，PAD触发的颜色也可以按照您的喜好自定义。您可以保存4个自定义功能组，并通过选中PAD BANK后结合A/B/C/D按键快速切换分组。A/B/C/D指示灯按键分别以红色/绿色/蓝色/黄色背光灯常亮显示。

点击MODE按键进入CUSTOM自定义模式，MODE按键以绿色灯光显示常亮，CUSTOM自定义模式下，可通过在本机上设置（按住主控制旋钮的同时，按下需要设置的PAD1-PAD16中的某一个PAD，旋转主控制旋钮搭配方向导航按键对选中的PAD参数进行设置）或在Synido TempoPAD C16官方配置软件中设置完成后存储到本机，对4x4打击垫区域进行MIDI信息类型与数据值、触发灯光颜色变更。MIDI信息类型可选择为NOTE音符信息、CC控制调整信息、PC预设切换信息，通道CH设置，CC信息触发类型：即时/切换，触发背光颜色选择。

默认情况下，PAD发送NOTE信息如下图所示：

BANK组别	NOTE编码	NOTE音名	CH通道	触发背光颜色
A	36-51	C2-D#3	1	红色
B	52-67	E3-G4	1	绿色
C	68-83	G#4-B5	1	蓝色
D	84-99	C6-D#7	1	黄色

默认触发时以PAD BANK A/B/C/D四组分组指示灯光颜色作为显示：选择分组为PAD BANK A时即时触发红色灯光，选择分组为PAD BANK B时即时触发绿色灯光，选择分组为PAD BANK C时即时触发蓝色灯光，选择分组为PAD BANK D时即时触发黄色灯光。

通过本机设置的方式仅有16种触发背光颜色可供选择，分别为：Red红色、Orange橘色、Yello黄色、Green绿色、Cyan青色、Blue蓝色、Purple紫色、Light purple浅紫、Light red浅红、Wine red酒红、Indigo 靛紫、Light purple浅紫、pink浅粉、pink深粉、Light blue浅蓝、Chartreuse浅黄绿、Light green浅绿

PAD参数设置界面:

打击垫有三种MIDI信息类型可供选择，分别为NOTE、CC、PC。

PAD选择发送NOTE信息时显示屏编辑界面

PAD 01

Type: Note

Channel : 01

NO: 036

Note: C2

Trigger: /

Color: Red

Channel: Note信号发送Channel通道，范围 1-16
NO.: Note信号编码Number，范围0-127
Note: 音符音高
Trigger: 无功能
Color: PAD触发背光颜色

PAD选择发送CC信息时显示屏编辑界面

PAD 01

Type: CC

Channel : 01

NO: 036

Note: /

Trigger: Momentary

Color: Red

Channel: CC信号发送Channel通道，范围 1-16
NO.: CC信号编码Number，范围0-127
Note: 无功能
Trigger: 触发类型，Momentary即时触发与Toggle切换触发
Color: PAD触发背光颜色

PAD选择发送PC信息时显示屏编辑界面

PAD 01

Type: PC

Channel : 01

NO: 036

Note: /

Trigger: /

Color: Red

Channel: PC信号发送Channel通道，范围 1-16
NO.: PC信号编码Number，范围0-127
Note: 无功能
Trigger: 无功能
Color: PAD触发背光颜色

Synido TempoPAD C16官方软件具体设定方法请详见本说明书文档中配置软件的使用说明部分。

黑夜模式 (MODE按键为黄色)： 在CUSTOM自定义模式下，长按MODE按键（按键背光变为黄色）将点亮所有PAD背光，A/B/C/D四组打击垫PAD的信号参数继承自CUSTOM自定义模式；禁止状态下PAD背光灯常亮，触发则不亮灯，常亮背光灯颜色与CUSTOM自定义模式下设置的触发背光颜色一致。

音符速查表：

音符编号	音符音高	音符编号	音符音高	音符编号	音符音高	音符编号	音符音高
0	C-1	32	G#+1	64	E+4	96	C+7
1	C#-1	33	A-1	65	F+4	97	C#+7
2	D-1	34	A#+1	66	F#+4	98	D+7
3	D#-1	35	B+1	67	G+4	99	D#+7
4	E-1	36	C+2	68	G#+4	100	E+7
5	F-1	37	C#+2	69	A+4	101	F+7
6	F#-1	38	D+2	70	A#+4	102	F#+7
7	G-1	39	D#+2	71	B+4	103	G+7
8	G#-1	40	E+2	72	C+5	104	G#+7
9	A-1	41	F+2	73	C#+5	105	A+7
10	A#-1	42	F#+2	74	D+5	106	A#+7
11	B-1	43	G+2	75	D#+5	107	B+7
12	C0	44	G#+2	76	E+5	108	C+8
13	C#0	45	A+2	77	F+5	109	C#+8
14	D0	46	A#+2	78	F#+5	110	D+8
15	D#0	47	B+2	79	G+5	111	D#+8
16	E0	48	C+3	80	G#+5	112	E+8
17	F0	49	C#+3	81	A+5	113	F+8
18	F#0	50	D+3	82	A#+5	114	F#+8
19	G0	51	D#+3	83	B+5	115	G+8
20	G#0	52	E+3	84	C+6	116	G#+8
21	A0	53	F+3	85	C#+6	117	A+8
22	A#0	54	F#+3	86	D+6	118	A#+8
23	B0	55	G+3	87	D#+6	119	B+8
24	C+1	56	G#+3	88	E+6	120	C+9
25	C#+1	57	A+3	89	F+6	121	C#+9
26	D+1	58	A#+3	90	F#+6	122	D+9
27	D#+1	59	B+3	91	G+6	123	D#+9
28	E+1	60	C+4	92	G#+6	124	E+9
29	F+1	61	C#+4	93	A+6	125	F+9
30	F#+1	62	D+4	94	A#+6	126	F#+9
31	G+1	63	D#+4	95	B+6	127	G+9

注意： 因为不同DAW软件中钢琴卷帘所标记定义的中央C不同，因此发送的音符名信息会与DAW软件中显示不一致。

3.可分配旋钮Knobs

8个可自定义功能分配的360°无极旋钮，可发送CC、PC、Pitch Bend弯音信息，KNOB BANK有A/B/C/D四组可设置32种不同的参数信息，您可在本机上设置（按住主控制旋钮的同时，旋转需要设置的K1-K8中的某一个KNOB，旋转主控制旋钮搭配方向导航键对选中的KNOB参数进行设置）或在Synido TempoPAD C16官方软件中设置完成后存储到本机。并通过选中CTRL BANK后结合A/B/C/D按键快速切换分组（8个可分配旋钮+4个可分配推子+12个可分配按键，整体为一个CTRL BANK控制组别）。A/B/C/D按键分别以红色/绿色/蓝色/黄色背光灯常亮显示。

默认情况下，KNOB发送CC信息如下图所示：

BANK A	旋钮	Knob1	Knob2	Knob3	Knob4	Knob5	Knob6	Knob7	Knob8
	事件编号	CC#01	CC#02	CC#03	CC#04	CC#05	CC#06	CC#07	CC#08
	通道	1	1	1	1	1	1	1	1
	最小值	0	0	0	0	0	0	0	0
	最大值	127	127	127	127	127	127	127	127
BANK B	旋钮	Knob1	Knob2	Knob3	Knob4	Knob5	Knob6	Knob7	Knob8
	事件编号	CC#09	CC#10	CC#11	CC#12	CC#13	CC#14	CC#15	CC#16
	通道	1	1	1	1	1	1	1	1
	最小值	0	0	0	0	0	0	0	0
	最大值	127	127	127	127	127	127	127	127
BANK C	旋钮	Knob1	Knob2	Knob3	Knob4	Knob5	Knob6	Knob7	Knob8
	事件编号	CC#17	CC#18	CC#19	CC#20	CC#21	CC#22	CC#23	CC#24
	通道	1	1	1	1	1	1	1	1
	最小值	0	0	0	0	0	0	0	0
	最大值	127	127	127	127	127	127	127	127
BANK D	旋钮	Knob1	Knob2	Knob3	Knob4	Knob5	Knob6	Knob7	Knob8
	事件编号	CC#25	CC#26	CC#27	CC#28	CC#29	CC#30	CC#31	CC#32
	通道	1	1	1	1	1	1	1	1
	最小值	0	0	0	0	0	0	0	0
	最大值	127	127	127	127	127	127	127	127

旋钮中的K1 - K4 为参数旋钮，带有NOTE REPAET 音符重复与SEQ音序器的参数调节功能，分别可调整DIV音符时值、SWING音符摇摆、GATE音符长短、TEMPO节拍速度，其中SEQ音序器仅支持TEMPO节拍速度的调节。详细操作方式可查阅本说明书中NOTE REPEAT 音符重复与Sequencer音序器的介绍章节内容。

旋钮参数设置界面：

旋钮有两种MIDI信息类型可供选择，分别为CC、PITCH BEND（弯音）

旋钮选择发送PC信息时显示屏编辑界面

K1

Type: CC

No.: 001

CH: 01 Min: 000 Max: 127

NO.: CC信号发送Number，范围 0-127

CH: CC信号发送Channel通道，范围 1-16

Min: CC信号发送的参数范围最小值

Max: CC信号发送的参数范围最大值

旋钮选择发送弯音信息时显示屏编辑界面

K1

Type: PITCH BEND

CH: 01

LSB : Min: 000 Max: 127

MSB : Min: 000 Max: 127

CH: 弯音信号发送Channel通道，范围 1-16

LSB Min: 弯音信号的最低有效位范围最小值

LSB Max: 弯音信号的最低有效位范围最大值

MSB Min: 弯音信号的最高有效位范围最小值

MSB Max: 弯音信号的最高有效位范围最大值

4.可分配推子Fader

4个可自定义功能分配推子，可发送CC、PC、PitchBend弯音信息，Fader BANK有A/B/C/D四组可设置16种不同的参数信息，您可在本机上设置（按住主控制旋钮的同时，推动需要设置的F1-F4中的某一个推子Fader，旋转主控制旋钮搭配方向导航按键对选中的Fader参数进行设置）或在Synido TempoPAD C16官方软件中设置完成后存储到本机。并通过选中CTRL BANK后结合A/B/C/D按键快速切换分组（8个可分配旋钮 + 4个可分配推子 + 12个可分配按键，整体为一个CTRL BANK控制组别）。A/B/C/D按键分别以红色/绿色/蓝色/黄色背光灯常亮显示。

默认情况下，推子Fader发送CC信息如下图所示：

BANK A	推子	Fader 1	Fader 2	Fader 3	Fader 4
	事件编号	CC#33	CC#34	CC#35	CC#36
	通道	1	1	1	1
	最小值	0	0	0	0
	最大值	127	127	127	127
BANK B	推子	Fader 1	Fader 2	Fader 3	Fader 4
	事件编号	CC#37	CC#38	CC#39	CC#40
	通道	1	1	1	1
	最小值	0	0	0	0
	最大值	127	127	127	127
BANK C	推子	Fader 1	Fader 2	Fader 3	Fader 4
	事件编号	CC#41	CC#42	CC#43	CC#44
	通道	1	1	1	1
	最小值	0	0	0	0
	最大值	127	127	127	127
BANK D	推子	Fader 1	Fader 2	Fader 3	Fader 4
	事件编号	CC#45	CC#46	CC#47	CC#48
	通道	1	1	1	1
	最小值	0	0	0	0
	最大值	127	127	127	127

推子参数设置界面：

推子有三种MIDI信息类型可供选择，分别为CC、PC、PITCH BEND（弯音）

推子选择发送CC信息时显示屏编辑界面

F1

Type: CC

No. : 033

CH: 01 Min: 000 Max: 127

NO.: CC信号发送Number，范围 0-127
CH: CC信号发送Channel通道，范围 1-16
Min: CC信号发送的参数范围最小值
Max: CC信号发送的参数范围最大值

推子选择发送PC信息时显示屏编辑界面

F1

Type: PC

No. : /

CH: 01 Min: 000 Max: 127

NO.: 无功能
CH: PC信号发送Channel通道，范围 1-16
Min: PC信号发送的参数范围最小值
Max: PC信号发送的参数范围最大值

推子选择发送弯音信息时显示屏编辑界面

F1

Type: PITCH BEND

CH: 01

MSB Min: 000 Max: 127

NO.: 弯音信号发送Channel通道，范围 1-16
MSB Min: 弯音信号的最高有效位范围最小值
MSB Max: 弯音信号的最高有效位范围最大值

5.可分配按键Button

12个可分配按键，带有触发反馈结构，按下按键可发送CC、PC信息，按键自身不带有丝印内容M (Mute) 静音/ S (Solo) 独奏/ R (Record) 录制功能，需在DAW软件中映射后启用。Button BANK有A/B/C/D四组可设置48种不同的参数信息，您可在本机上设置（按住主控制旋钮的同时，按下需要设置的M/S/R按键中的某一个按键，旋转主控制旋钮搭配方向导航按键对选中的按键参数进行设置）或在Synido TempoPAD C16官方软件中设置完成后存储到本机。并通过选中CTRL BANK后结合A/B/C/D按键快速切换分组（8个可分配旋钮 + 4个可分配推子 + 12个可分配按键，整体为一个CTRL BANK控制组别）。A/B/C/D按键分别以红色/绿色/蓝色/黄色背光灯常亮显示。

默认情况下，按键Button发送CC信息如下图所示：

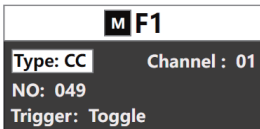
BANK A	按键	F1(M)	F1(S)	F1(R)	按键	F3(M)	F3(S)	F3(R)
	事件编号	CC#49	CC#50	CC#51	事件编号	CC#55	CC#56	CC#57
	按键	F2(M)	F2(S)	F2(R)	按键	F4(M)	F4(S)	F4(R)
	事件编号	CC#52	CC#53	CC#54	事件编号	CC#58	CC#59	CC#60
BANK B	按键	F1(M)	F1(S)	F1(R)	按键	F3(M)	F3(S)	F3(R)
	事件编号	CC#61	CC#62	CC#63	事件编号	CC#67	CC#68	CC#69
	按键	F2(M)	F2(S)	F2(R)	按键	F4(M)	F4(S)	F4(R)
	事件编号	CC#64	CC#65	CC#66	事件编号	CC#70	CC#71	CC#72
BANK C	按键	F1(M)	F1(S)	F1(R)	按键	F3(M)	F3(S)	F3(R)
	事件编号	CC#73	CC#74	CC#75	事件编号	CC#79	CC#80	CC#81
	按键	F2(M)	F2(S)	F2(R)	按键	F4(M)	F4(S)	F4(R)
	事件编号	CC#76	CC#77	CC#78	事件编号	CC#82	CC#83	CC#84
BANK D	按键	F1(M)	F1(S)	F1(R)	按键	F3(M)	F3(S)	F3(R)
	事件编号	CC#85	CC#86	CC#87	事件编号	CC#91	CC#92	CC#93
	按键	F2(M)	F2(S)	F2(R)	按键	F4(M)	F4(S)	F4(R)
	事件编号	CC#88	CC#89	CC#90	事件编号	CC#94	CC#95	CC#96

默认CC触发类型为“切换”，通道都为CH1

按键参数设置界面：

按键有两种MIDI信息类型可供选择，分别为CC、PC

推子选择发送CC信息时显示屏编辑界面

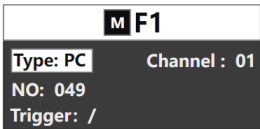


Channel: CC信号发送Channel通道，范围1-16

NO.: CC信号编码Number，范围0-127

Trigger: 触发类型，Momentary即时触发与Toggle切换触发

推子选择发送PC信息时显示屏编辑界面



Channel: PC信号发送Channel通道，范围1-16

NO.: PC信号编码Number，范围0-127

Trigger: 无功能

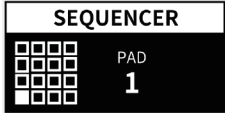
6.Sequencer音序器

TempoPAD C16 带有一个16轨的16步进式音序器，点击STEP按键可打开音序器功能，STEP按键以红色灯光显示常亮，16个打击垫信号数据来自于KEYBOARD MODE琴键模式或CUSTOM MODE自定义模式下PAD BANK所选择的组别（若PAD BANK内含有非NOTE信号数据时，音序器不可工作）。打开音序器后默认进入PAD1所处音符步进音序界面；此时PAD1-PAD16 之间的16个垫子变为PAD1所处音符的16步进轨迹，敲击触发PAD1-PAD16任意一个垫子或多个垫子（不会发出NOTE信号），被触发的垫子变为黄色灯常亮，表示当前步位被开启；再次触发灯光熄灭，表示当前步位被关闭。

不同PAD音轨步位灯光显示颜色布局如下图所示：



切换音轨编辑界面：长按按键STEP + 任意打击垫，可切换至PAD1-PAD16所处音符的步进音序界面。16个PAD相当于16条音轨，每条音轨的音序部位都可编辑，16条音轨可同时进行播放。某一音轨中若有存放步位信息，则OLED显示屏中的PAD图标位置会被填充，用以清晰知道有哪些PAD音轨被启用。



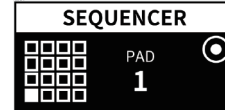
选择PAD1音轨时且音轨中放入音符时显示屏界面

播放音序器：按下PLAY按键打开步进音序播放，PLAY按键常亮红色灯光；此时紫色跑灯将沿着PAD1-PAD16步进轨迹循环跳跃移动，紫色跑灯所经过带有灯光颜色的PAD时会发出当前PAD的NOTE信号数据。



播放音序器时显示屏界面

REC音符录制：此外也可通过REC音序器录制功能进行音序步位录制，点击REC按键，按键闪烁红色灯光，表示录入功能已打开，录制时打击垫不亮灯，敲击触发亮紫色灯光，并按常规输出NOTE音符；一旦检测到任一PAD被触发，PLAY播放按键将点亮，PLAY与REC按键此时同时常亮红色灯光。此时的跑灯为隐藏状态不亮灯，但仍在工作。退出REC录制功能后，打击垫界面将返回音序器跑灯界面显示。



录制音序器时显示屏界面

开启REC音符录制指示跑灯：REC录制状态时，紫色指示跑灯为默认关闭状态，你也可以将其开启；通过长按主控制旋钮 + STEP按键进入音序器配置界面，再拧动主控制旋钮，将Marquee选项的OFF调整为ON。或在Synido TempoPAD C16官方软件中开启后存储到本机。



音序器参数配置时显示屏界面

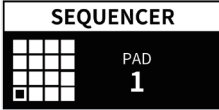
修改音序器速度：通过组合按键（STEP+TEMPO旋钮）或反复按下TAP TEMPO按键可对音序器播放速度BPM进行修改，组合按键的操作方式为：长按STEP按键的同时拧动TEMPO旋钮。BPM速度允许的调整范围为：20 - 240 BPM。



快速修改音序器BPM速度时显示屏界面

清除单个PAD音轨步位信息：PLAY按键带有附加CLEAR清除功能，可长按PLAY按键清除当前所处PAD音轨内的音符步位。

示例：所有音轨中都存放音符步位情况下，清除PAD1音轨步位信息后显示屏界面



清除所有PAD音轨步位信息：长按主控制旋钮的同时，按下PLAY按键，可清除16个PAD音轨内的所有音符步位。

清除所有PAD音轨步位信息后显示屏界面



TAP TEMPO按键：该按键用于设置BPM节拍速度。如果音序器功能处于PLAY播放状态，该按键下面的LED灯会闪烁，闪烁的快慢代表了节拍速度。连续按下多次设备会测速，灯光跟随用户按键的速度闪亮，即完成设置。您也可以通过长按TAP TEMPO按键，待TAP TEMPO按键常亮红色灯光时，开启SYNC节奏同步功能，此时音序器将忽略本机BPM节拍速度，跟随MIDI Clock发送端的BPM速度进行运行。

音序器内即时演奏：音序器功能开启后你仍可以进行即时演奏，此功能也可便于你知悉某个PAD音轨内所启用的声音，并且及时演奏的音符不会录入到音序器步位中，对音序器 workflow 内的音符不产生影响。你可通过组合按键实现此功能，详细操作方式为：音序器开启后，长按住方向导航“<左”键不松手，此时16个PAD以橙色背光灯显示常亮，随意敲击PAD将会及时触发NOTE信息。

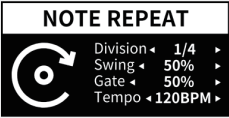
注意：SEQ音序器功能仅对音符事件生效，当设定的PAD BANK分组中有一个或多个PAD发送CC或PC事件时，音序器无法开启。

7.NOTE REPEAT音符重复

TempoPAD C16具备音符重复功能。开启音符重复功能，设备将按照既定的DIV音符时值、SWING摇摆量、GATE音符长度和TEMPO节拍速度重复发送音符信息；您可在本机上设置（按住主控制旋钮的同时，按下NOTE REPEAT按键，OLED显示屏将进入参数编辑界面，旋转K1 - K4相应的参数旋钮对音符重复NOTE REPEAT进行设置）或在Synido TempoPAD C16官方软件中设置完成后存储到本机。

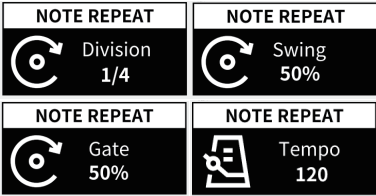
此外NOTE REPEAT还支持关闭某些PAD的音符重复功能，被关闭音符重复功能的PAD将以正常触发形式单次发送NOTE信号。

音符重复参数配置时显示屏界面



- ① DIV音符时值：1/4（四分音符）、1/4T（四分音符三连音）、1/8（八分音符）、1/8T（八分音符三连音）、1/16（十六分音符）、1/16T（十六分音符三连音）、1/32（三十二分音符）、1/32T（三十二分音符三连音）
- ② SWING 摇摆量：50%（关闭）、55%、57%、59%、61%、64%、67%、70%、73%、76%
- ③ GATE音符长短：10%、20%、30%、40%、50%、60%、70%、80%、90%、100%
- ④ TEMPO节拍速度：20 - 240

参数快速配置方法：长按住NOTE REPEAT按键的同时，旋转K1 - K4相应的参数旋钮可对音符重复NOTE REPEAT进行设置。



TAP TEMPO按钮：该按钮用于设置节拍速度。如果音符重复（NOTE REPEAT）功能处于打开状态，该按键下面的LED灯会闪烁，闪烁的快慢代表了节拍速度。连续按下多次设备会测速，灯光跟随用户按键的速度闪亮，即完成设置。您也可以通过长按TAP TEMPO按键，待TAP TEMPO按键常亮红色灯光时，开启SYNC节奏同步功能，此时音符重复将忽略本机BPM节拍速度，跟随MIDI Clock发送端的BPM速度进行运行。

关闭/打开部分PAD音符重复：开启NOTE REPEAT功能后默认为全局开启的状态，即敲击16个PAD都会重复发送NOTE音符信号，若此时你想关闭某些PAD的音符重复功能，使其按正常触发形式单次发送NOTE音符信号（敲击触发一次发送一个NOTE信号），你可通过组合按键实现此功能，详细操作方式为：音符重复开启后，长按住方向导航“→右”键不松手，此时16个PAD以紫色背光灯显示常亮，随意按下某个PAD将会关闭其背光灯，背光灯关闭的PAD即关闭了音符重复功能。你也可以使用相同的操作方式将关闭音符重复的PAD打开。

注意：NOTE REPEAT功能仅对音符事件生效，当设定PAD发送CC或PC事件时，NOTE REPEAT功能不起作用。

8.TAP TEMPO点击测速与SYNC速度同步

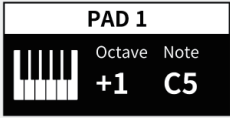
TempoPAD C16具有节奏测速设置BPM功能，在开启音序器及音符重复功能时，通过反复按压TAP TEMPO按键进行测速设定。该按键下面的LED灯会闪烁，闪烁的快慢代表了节拍速度，速度范围为20 - 240。连续按下多次设备会测速，灯光跟随用户按键的速度闪亮，即完成设置。

同时也支持SYNC节奏同步功能：（仅作为接收设备，不发送MIDI Clock信号）长按TAP TEMPO按键，待此按键的背光灯显示为红色常亮时，代表SYNC节奏同步功能已开启，此时可以接收外部MIDI 时钟同步信息，TempoPAD C16将忽略本机设置的TEMPO值，按主MIDI时钟BPM节奏运行音序器SEQ与音符重复NOTE REPEAT功能；再次按压可关闭节奏同步功能。

9.八度调节按键（OCT- / OCT+）

KEYBOARD琴键模式下支持Octave八度调节功能，OCT + 为八度递增按键，OCT - 为八度递减按键，按压八度增/减按键可往上及往下变更4个八度，覆盖的音符范围为C0 - C8，同时按压（短暂的先后顺序）八度增/减按键可恢复默认初始值。

Octave八度调节时显示屏界面显示



注意：因为不同DAW软件中钢琴卷帘所标记定义的中央C不同，因此发送的音符信息会与DAW软件中显示不一致。

10.走带控制按键

TempoPAD C16具有3个带背光的走带控制按钮：播放、停止、录制按钮，按下可以发送CC或者MMC事件。您可在本机上设置（按住主控制旋钮的同时，按下需要设置的走带按键，旋转主控制旋钮搭配方向导航按键对选中的按键参数进行设置）或在Synido TempoPAD C16官方软件中设置完成后存储到本机。

默认情况下，按下按钮发送CC事件，见下表：

走带按键	播放	停止	录制
CC编码#	97	98	99
通道	1	1	1
触发类型	即时	即时	即时

走带按键选择发送CC信息时显示屏编辑界面

PLAY

Type: CCChannel : 01

NO: 097

Trigger: Momentary

STOP

Type: CCChannel : 01

NO: 098

Trigger: Momentary

RECORD

Type: CCChannel : 01

NO: 099

Trigger: Momentary

Channel: CC信号发送Channel通道，范围 1-16
NO.: CC信号编码Number，范围0-127
Trigger: 触发类型，Momentary即时触发与Toggle切换触发

如果设备发送的是MMC事件，需要在DAW软件中打开MMC接收功能；
如果设备发送的是CC事件，必须在电脑DAW软件中调整映射关系来实现相应功能的控制。
未在宿主软件中指派功能的情况下，按键无法实现控制。

走带按键选择发送MMC信息时显示屏编辑界面

PLAY

Type: MMCChannel : /

NO: /

Trigger: /

STOP

Type: MMCChannel : /

NO: /

Trigger: /

RECORD

Type: MMCChannel : /

NO: /

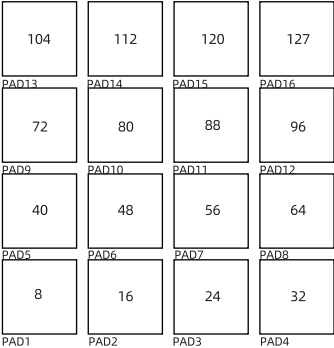
Trigger: /

Channel: 无功能
NO.: 无功能
Trigger: 无功能

科普：MMC指令可在支持MMC功能的DAW软件中，在不需要映射的情况下实现走带控制，例如：Cubase、FL Studio、Studio one、Pro Tools、Logic Pro X、Reaper、库乐队

11.16 Level力度分层

16 Level力度分层功能可将一个打击垫的NOTE值力度细分为16个等级，该功能可以更加细腻的去展示同一个声音在不同力度时的反馈，下图示为功能开启后详细的力度分布，若打击垫中的参数为非NOTE信号，则不工作。默认为PAD1中的NOTE值力度分层，可通过组合按键16 Level 与PAD1 -PAD16任一PAD进行切换。



16 Level力度分布

12. 打击垫力度曲线

TempoPAD C16有四种力度曲线以适应不同的演奏习惯，分别是固定力度、柔软、中等、强硬。力度曲线将影响敲击PAD强弱与输出音符力度的反馈，按VEL按键依次切换不同的力度曲线，按键的背光指示当前的力度曲线类型：

固定力度-白色：在该模式下无论您敲击的强弱如何，打击垫始终输出固定力度。默认的输出力度为127，您可在本机上设置（按住主控制旋钮的同时，按下VEL按键，旋转主控制旋钮对固定力度值进行设置）或在Synido TempoPAD C16官方软件中设置完成后存储到本机；

柔软-蓝色：适用于习惯用较小力气敲击打击垫的演奏者，轻敲PAD就可以得到较高的力度值；

中等-绿色：力度与MIDI值呈线性关系，适用于大部分音乐和表演者；

强硬-红色：适用于习惯用较大力气敲击打击垫的演奏者，需要较强的敲击才能得到较大的力度值。

13. MIDI蓝牙

TempoPAD C16支持BLE低功耗MIDI蓝牙功能，与经典蓝牙不同，无法通过传统蓝牙形式进行搜寻连接通讯，与各设备端详细的连接方式，请查阅本说明书中《无线BLE蓝牙连接》章节内容。

默认情况下BLE 蓝牙为关闭状态，按下BT按键，此时BT按键以红色背光灯常亮形式呈现，代表TempoPAD C16蓝牙功能已开启，设备处于可搜寻待配对连接状态。连接成功后BT按键以蓝光背光灯常亮形式呈现。长按可关闭BLE蓝牙功能，此时BT按键不亮灯。

配套软件说明

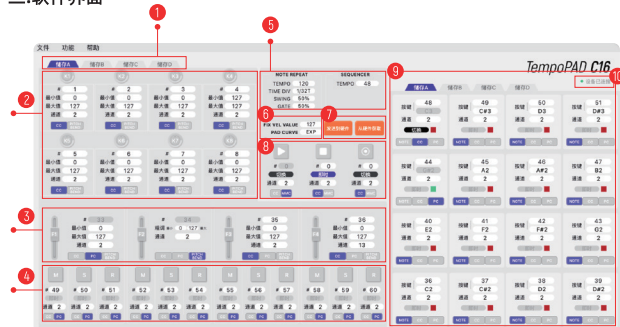
一. 软件下载与安装

Synido TempoPAD C16提供有一个配套软件，用来写入或读取TempoPAD C16中的参数设置，实现各种MIDI命令的发送；

配套软件的下载地址为：<https://www.synido.cn/support/downloads>

下载后请运行程序，执行安装；

二. 软件界面



- 1 菜单栏；
- 2 自定义旋钮设置区域；
- 3 自定义推子设置区域；
- 4 自定义按键设置区域；
- 5 音符重复与音量器设置区域；
- 6 固定力度值与力度曲线设置区域；
- 7 发送/获取硬件上的设置
- 8 走带按键设置区；
- 9 打击垫设置区；
- 10 连接状态指示；

1.设备占用（仅适用于WINDOWS系统）

设备的连接状态显示在软件的右上角（⑩处），只有显示已连接时，软件才可以写入或读取TempoPAD的参数配置；如果此处显示“已连接”表示此时软件和TempoPAD连接正常，软件可以和设备传输配置；

如果此处显示“未连接”可能是因为设备没有正常连接到电脑，或者有DAW此时正在占用设备；您需要退出DAW，或其他正在占用此MIDI设备的程序，有时还需要重新连接设备。

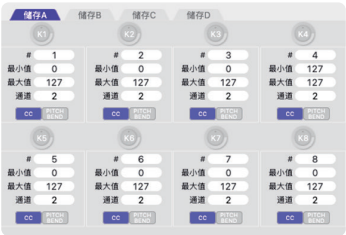
2.菜单栏

菜单栏的功能有：打开、保存、另存为、发送到硬件、从硬件获取、恢复默认值和退出。



- 打开：读取一个参数配置文件；
- 保存：将当前的参数配置保存在当前预设文件中，如当前无预设文件将会打开对话框保存到新的文件中，文件以stm后缀保存；
- 另存为：将当前参数配置保存成新的存预设文件；
- 发送到硬件：将当前参数配置发送到TempoPAD；
- 从硬件获取：从TempoPAD上获取参数配置；
- 恢复默认值：恢复出厂设置默认的参数配置；
- 退出：退出控制面板

3.可分配旋钮设置



- 点击储存标签切换想要编辑的组（8个可分配旋钮 + 4个可分配推子 + 12个可分配按键，整体为一个CTRL BANK控制组别）；
- 点击标签选择事件类型，可选的类型有：CC、或弯音事件；
- 输入最小值、最大值确定旋钮的控制范围；
- 选择事件的通道：1 - 16

4.可分配推子设置



- 点击《可分配旋钮设置》储存标签切换想要编辑的组（8个可分配旋钮 + 4个可分配推子 + 12个可分配按键，整体为一个CTRL BANK控制组别）；
- 点击标签选择事件类型，可选的类型有：CC、PC或弯音事件；
- 输入最小值、最大值确定推子的控制范围；
- 选择事件的通道：1 - 16

5.可分配按键设置



点击《可分配旋钮设置》储存标签切换想要编辑的组（8个可分配旋钮 + 4个可分配推子 + 12个可分配按键，整体为一个CTRL BANK控制组别）；

点击标签选择事件类型，可选的类型有：CC、PC事件；

CC有两种触发类型选项：

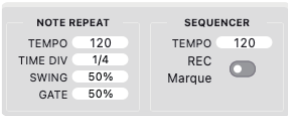
MC为Momentary Control的缩写，代表“即时”触发；

TC为Toggle Control的缩写，代表“切换”触发

选择事件的通道：1 - 16

提示：即时模式下：按下一个按键时发送值为127的事件，松开琴键时发送值0的事件；切换功能模式下：每完成一次按下并离开按键的操作时，交替发送值为127和0的事件

6.音符重复与音序器参数设置



NOTE REPEAT共有四种参数选项可供设置，分别为：

TEMPO节拍速度：20 - 240

TIME DIV音符时值：1/4（四分音符）、1/4T（四分音符三连音）、1/8（八分音符）、1/8T（八分音符三连音）、1/16（十六分音符）、1/16T（十六分音符三连音）、1/32（三十二分音符）、1/32T（三十二分音符三连音）

SWING 摇摆量：50%（关闭）、55%、57%、59%、61%、64%、67%、70%、73%、76%

GATE音符长短：10%、20%、30%、40%、50%、60%、70%、80%、90%、100%

SEQUENCER音序器仅可设置TEMPO节拍速度参数与打开/关闭REC录制中跑灯。

7.力度曲线与参数获取/发送



PAD CURVE打击垫力度曲线，可选择力度感应类型为：

EXP指数型力度反馈，强硬，适用于习惯用较大力气敲击打击垫的演奏者，需要较强的敲击才能得到较大的力度值

LOG对数型力度反馈，柔软，适用于习惯用较小力气敲击打击垫的演奏者，轻敲PAD就可以得到较高的力度值

FIX固定力度，忽略实际演奏力度，无论您敲击的强弱如何，打击垫始终以固定力度值发送音符信息。

FIX VEL VALUE可修改固定力度值参数，设置范围为 0 - 127

发送到硬件：将当前参数配置发送到TempoPAD；

从硬件获取：从TempoPAD上获取参数配置；

8.PAD设置



点击存储标签切换ABCD四个分组；

点击小色块打开RGB颜色编辑器，调整PAD的背光颜色；

点击通道选择事件发送的通道；

点击PAD的标签选择事件类型：可选的类型有：NOTE音符、CC、和PC；

如果选择NOTE音符事件，在按键栏中输入数字，或点击音名调整音符的音高；在音符事件中无法选择即时/切换功能；

如果选择CC事件，在按键栏中输入事件编号；

如果选择PC事件，在按键栏中输入事件编号；PC事件模式中，切换/即时功能不可用，每次按压PAD发送一次PC事件；

提示：即时模式下：按下一个按键时发送值为127的事件，松开琴键时发送值0的事件；切换功能模式下：每完成一次按下并离开按键的操作时，交替发送值为127和0的事件

9.快速布局

快速布局可以让你以一定的规律快速的将某些功能布局到面板上，点击菜单栏中的快速布局打开窗口。在窗口中填写相应的参数，并勾选后，点击右侧的应用即可将参数快速布局到面板。



旋钮：快速设置CC值、大小范围、通道、弯音粗调、精调范围及弯音通道

推子：快速设置CC值、大小范围、通道、触后范围、触后通道、弯音粗调范围及弯音通道

打击垫：快速设置CC、NOTE、PC值 及RGB灯光颜色以及灯光亮度

- 1.起始编码：MIDI信息起始的编码信息，输入范围为0 - 127。
- 2.升序 / 降序：“升序”时起始编码将依次递增一位；“降序”时起始编码将依次递减一位。
- 3.最小/最大：CC事件参数的最小值到最大值范围
- 4.触发类型：MC即时触发、TC切换触发

10.固件升级

先连接设备，直到软件显示“已连接”状态；

点击帮助菜单关于，在打开的对话空中点击firmware update；

警告：

升级前请保证当前所处网络状况良好，升级过程中保持网络畅通，勿进行其它操作。升级故障或将导致产品无法工作，可在Synidio官网FAQ板块查看“固件升级”操作指引，或联系官方客服进行解决。

产品规格

产品型号: TempoPAD C16	产品尺寸: 290.1*213*42mm
产品颜色: 绿色	产品材质: 塑料+硅胶
整机功耗: 300mA	产品重量: 940g
电池容量: 3000mAh (满电状态下待机5小时)	MIDI接口: TRS (Type A) MIDI In / Out / Thru

售后服务

若您有任何售后服务需求，微信扫描下方二维码，联系官方客服：

Synidio小助手
工作时间：
10:00-19:00(周一至周五)



MIDI事件解释：

事件：即一条MIDI指令。

通道：在MIDI协议中有16个通道，绝大多数MIDI事件包含通道信息。用户可以在接收设备上设置仅接收某个通道的事件，如A设备仅接收通道1事件，B设备仅接收通道2事件。然后当用户可以在发送设备上发送通道1事件来控制A设备，发送通道2事件来控制B设备。

CC事件：即控制器变化事件（Controller Change）。一个CC事件包含以下几个信息：通道号、CC编号、事件值。MIDI协议定义了一些特定的CC编号功能，如CC#7号事件为主音量事件，CC#64是延音踏板事件；有些CC指令未被指派功能，即用户可以自行定义。CC事件的定义详见附录；

CC事件可以是单独一条指令：比如按下某PAD上发送一条CC#64号，值127的指令，接收端接收到指令后执行打开延音踏板动作；也可以是连续的多条指令，比如旋转一个旋钮，发送CC#7号，值从0发送到127的事件，系统收到指令后，将音量从最小调整至最大。

PC事件：即程序变更事件（Program Change）。也是控制命令的一种。包含通道信息和事件编号。通常用来表示音色更换。

即时按键：当按下下一个按键（按钮）时发送开启事件，松开琴键（按钮）时发送关闭事件；比如用打击垫模仿琴键的功能时，按下打击垫时发送“音符开启”指令，当离开打击垫时发送“音符关闭”指令。

切换按键：每完成一次按下并离开按键操作时，交替发送开启和关闭事件；比如可以作为开关使用：每敲击一次PAD交替发送值127和0的指令，在接收端设定127为开，0为关闭，达成控制效果。

CC默认事件列表：

CC 0 (BankSel MSB)	CC 43 (Expr LSB)	CC 86 (Control 86)
CC 1 (Modulation)	CC 44 (Control 44)	CC 87 (Control 87)
CC 2 (Breath)	CC 45 (Control 45)	CC 88 (Control 88)
CC 3 (Control 3)	CC 46 (Control 46)	CC 89 (Control 89)
CC 4 (Foot)	CC 47 (Control 47)	CC 90 (Control 90)
CC 5 (Portamento)	CC 48 (Control 48)	CC 91 (ExtEff 1 Depth)
CC 6 (DataEnt MSB)	CC 49 (Control 49)	CC 92 (ExtEff 2 Depth)
CC 7 (Main Volume)	CC 50 (Control 50)	CC 93 (ExtEff 3 Depth)
CC 8 (Balance)	CC 51 (Control 51)	CC 94 (ExtEff 4 Depth)
CC 9 (Control 9)	CC 52 (Control 52)	CC 95 (ExtEff 5 Depth)
CC 10 (Pan)	CC 53 (Control 53)	CC 96 (Data Incr)
CC 11 (Expression)	CC 54 (Control 54)	CC 97 (Data Decr)
CC 12 (Control 12)	CC 55 (Control 55)	CC 98 (NRPN LSB)
CC 13 (Control 13)	CC 56 (Control 56)	CC 99 (NRPN MSB)
CC 14 (Control 14)	CC 57 (Control 57)	CC 100 (RPN LSB)
CC 15 (Control 15)	CC 58 (Control 58)	CC 101 (RPN MSB)
CC 16 (Gen Purp 1)	CC 59 (Control 59)	CC 102 (Control 102)
CC 17 (Gen Purp 2)	CC 60 (Control 60)	CC 103 (Control 103)
CC 18 (Gen Purp 3)	CC 61 (Control 61)	CC 104 (Control 104)
CC 19 (Gen Purp 4)	CC 62 (Control 62)	CC 105 (Control 105)
CC 20 (Control 20)	CC 63 (Control 63)	CC 106 (Control 106)
CC 21 (Control 21)	CC 64 (Sustain)	CC 107 (Control 107)
CC 22 (Control 22)	CC 65 (Porta On/Off)	CC 108 (Control 108)
CC 23 (Control 23)	CC 66 (Sostenuto)	CC 109 (Control 109)
CC 24 (Control 24)	CC 67 (Soft Pedal)	CC 110 (Control 110)
CC 25 (Control 25)	CC 68 (Legato FS)	CC 111 (Control 111)
CC 26 (Control 26)	CC 69 (Hold 2)	CC 112 (Control 112)
CC 27 (Control 27)	CC 70 (Sound Var)	CC 113 (Control 113)
CC 28 (Control 28)	CC 71 (Harmonic)	CC 114 (Control 114)
CC 29 (Control 29)	CC 72 (Release Time)	CC 115 (Control 115)
CC 30 (Control 30)	CC 73 (Attack Time)	CC 116 (Control 116)
CC 31 (Control 31)	CC 74 (Brightness)	CC 117 (Control 117)
CC 32 (BankSel LSB)	CC 75 (Control 75)	CC 118 (Control 118)
CC 33 (Modulation LSB)	CC 76 (Control 76)	CC 119 (Control 119)
CC 34 (Breath LSB)	CC 77 (Control 77)	CC 120 (AllSndOff)
CC 35 (Control 35)	CC 78 (Control 78)	CC 121 (Reset Ctrl)
CC 36 (Foot LSB)	CC 79 (Control 79)	CC 122 (Local Ctrl)
CC 37 (Porta LSB)	CC 80 (Gen Purp 5)	CC 123 (AllNoteOff)
CC 38 (DataEnt LSB)	CC 81 (Gen Purp 6)	CC 124 (Omni Mode Off)
CC 39 (Main Volume LSR)	CC 82 (Gen Purp 7)	CC 125 (Omni Mode On)
CC 40 (Balance LSB)	CC 83 (Gen Purp 8)	CC 126 (Mono Mode On)
CC 41 (Control 41)	CC 84 (Porta Ctrl)	CC 127 (Poly Mode On)
CC 42 (Pan LSB)	CC 85 (Control 85)	