

*Synido*

# *TempoPAD*<sup>Z-1</sup>

USER MANUAL

Follow us for the latest news:

 Synido.com    @synidotech    @Synido\_Official

关注我们，最新资讯、活动一网打尽：



哔哩哔哩  
Synido森林岛



小红书  
Synido森林岛



微信公众号  
Synido森林岛

**MIDI Controller**

# **CONTENTS** 目录

**P1** / FOREWORD

**P2** / PACKING LIST

**P3** / PANEL DESCRIPTION

**P5** / OPERATING GUIDE

**P17** / COMPANION SOFTWARE INSTRUCTIONS

**P46** / PRODUCT SPECIFICATION

**P47** / APPENDIX

**P49** / 欢迎

**P50** / 包装清单

**P51** / 面板说明

**P53** / 使用说明

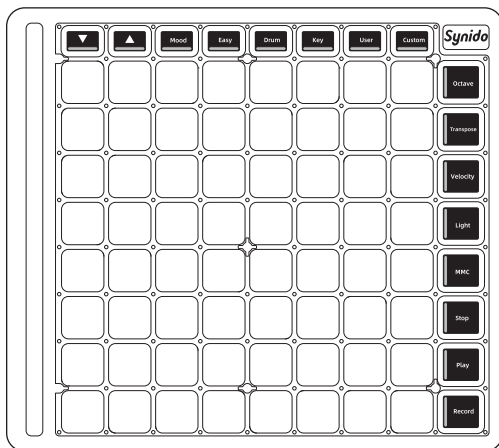
**P65** / 配套软件说明

**P95** / 产品规格

**P96** / 附录

## FOREWORD

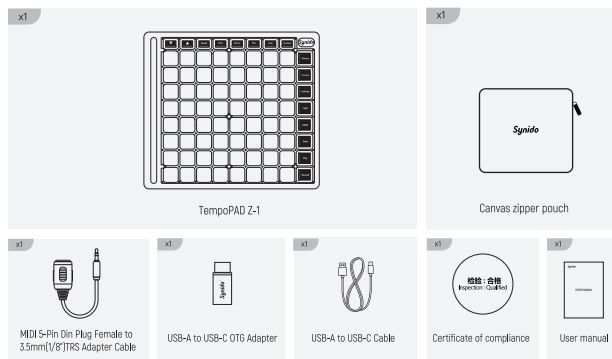
Thank you for choosing our Synido TempoPAD Z-1 product. The TempoPAD Z-1 is an 8x8 grid matrix MIDI controller designed for connecting to computer or mobile DAW software for tasks such as note recording, editing, and light performance. As a professional-grade performance control device, the TempoPAD Z-1 offers precise trigger response, vibrant RGB light color display, flexible programming functions, and seamless compatibility with a wide range of DAW software, catering to the needs of both music creators and performers. Additionally, it introduces the Easy program mode developed by Synido, allowing users to independently edit playback audio clips and create light patterns with an intuitive interface, making it ideal for beginners to hone their performance skills. The built-in ambient light strip dynamically responds to the rhythm, enhancing the visual appeal of performances. Whether you're a professional music producer or an enthusiast, the TempoPAD Z-1 is a versatile tool for learning, creating, and performing. It's important to note that this device solely outputs MIDI commands and doesn't generate audio signals, requiring users to have some basic music knowledge for optimal use.



## Product Features:

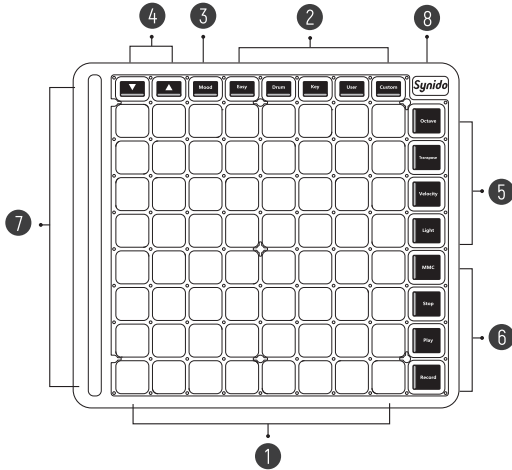
- 8x8 grid matrix with 64 RGB backlit velocity-sensitive pads, allowing free assignment of notes, CC, and PC messages in Custom mode.
- Strip-shaped ambient light strip with a dedicated on/off buttons, supporting 4 display modes: Marquee Mode, Rhythm Mode, Note Dance Mode, and Diffusion Mode.
- Five working modes: Easy Mode, Drum Mode, Key Mode, User Mode, and Custom Mode.
- 3 transport control buttons: Stop, Play, Record, with support for one-touch MMC command switching.
- Octave/Transpose function available in Key Mode, (+ and -) both press to reset.
- Support for velocity curve adjustment and brightness control of the lights.
- Official software support for audio editing and light drawing functions, independent performing the lightshow.
- Compatibility with market-standard light project files and support for controlling mainstream drum pad simulators on Android devices.
- Multiple connectors for easy connection to various devices such as computers, phones, and tablets, including a 1/8" TRS [3.5mm] standard MIDI output jack.

## PACKING LIST



## PANEL DESCRIPTION

### Front Panel:



**1. Pad Workspace:** This area features an 8x8 layout with 64 silicone pads equipped with velocity sensitivity and RGB light display, enabling the transmission of MIDI commands upon striking the pads.

**2. Mode Selection Area:** The main control system offers 5 selectable working modes: Easy Mode, Drum Mode, Key Mode, User Mode, and Custom Mode.

**3. Mood Light Mode Switch:** The Mood button on the left side toggles through 4 ambient light display modes: Marquee Mode, Rhythm Mode, Note dance Mode, and Diffusion Mode. Each mode is represented by different backlight colors upon successive presses.

**4. Parameter Adjustment:** The  $\nabla$   $\blacktriangle$  directional buttons function as  $-/+$  controls, allowing adjustment and control over Octave, Transpose, Velocity curve, and Light brightness in Area 4.

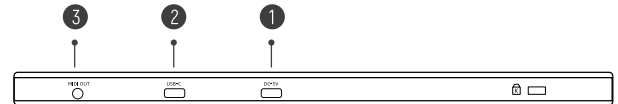
**5. Function Control Buttons:** Four function options -- Octave, Transpose, Velocity curve, and Light brightness -- can be selected and controlled using the  $\nabla$   $\blacktriangle$  directional buttons. Light brightness in Area 4.

**6. Transport Control Buttons:** Three transport control buttons send transport control commands, which can be either CC or MMC commands. The MMC button switches to MMC command status with a single press, allowing editing of CC command parameters through the device's companion control software.

**7. Ambient Light:** The ambient light reacts to ambient sounds through a pickup hole, with four display modes available. The Mood button toggles through these modes, and there's a separate physical toggle switch on the side to turn the ambient light display on or off.

**8. Brand Logo Light:** The Synido brand logo light defaults to an illuminated state with a purple light. It can be turned off by a combination key press or by holding the Light and MMC buttons for 2 seconds.

### Interface Panel:



**1. DC-5V:** Power supply interface, providing power only without data exchange.

**2. USB-C Port:** Connect this port to your computer using a USB-A to USB-C cable. The computer's USB port powers the TempoPAD Z-1 and exchanges data with your computer.

**3. MIDI OUT:** 3.5mm socket for standard MIDI protocol signal output, requiring a TRS - 5PIN DIN adapter cable.

## 1. Connection Method

Use with mainstream DAW host software.

- ① Use the provided USB-A to USB-C cable to directly connect the product to your computer.
- ② Open your DAW host software, such as Ableton Live, Cubase, FL Studio, Logic Pro, etc.
- ③ Navigate to the Preferences, Options, or Device Setup section in your DAW host software and select Synido TempoPAD Z-1 as both input and output devices.
- ④ Your TempoPAD Z-1 is now ready to communicate with your DAW host software.

Channel (CH) Explanation: Drum Mode and Key Mode are on CH1, User Mode is on CH3 [channels cannot be modified]; Custom Mode defaults to CH1, and channels can be customized.

Use with Synido's official companion software.

See the "Companion Software Instructions" section in this manual for details.

## 2. Drum Mode

The Drum Rack, consisting of 16 blocks, is assigned to the 4x4 arrangement of pads, totaling 64 drum blocks. The 4 groups of drum blocks are distinguished by 4 different colors: purple, orange, light blue, and dark blue. When Drum Mode is activated by pressing the "Drum" button, the pads corresponding to the drum blocks will have constant backlighting in their respective colors and trigger red lights upon striking. The drum blocks are triggered instantaneously via MIDI NOTE commands, and the note information cannot be changed in this mode. The mapping of note information to the pad area is as shown in the figure below:

64	65	66	67	96	97	98	99
60	61	62	63	92	93	94	95
56	57	58	59	88	89	90	91
52	53	54	55	84	85	86	87
48	49	50	51	80	81	82	83
44	45	46	47	76	77	78	79
40	41	42	43	72	73	74	75
36	37	38	39	68	69	70	71

Note:

Due to the different definitions of Middle C in piano rolls in different DAW software, the sent note information may not match what is displayed in the DAW software.

## Note Lookup Table :

MIDI Number	Note Name	MIDI Number	Note Name	MIDI Number	Note Name	MIDI Number	Note 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

## 3. Key Mode

An 8x8 pad grid matrix arranged similarly to a piano keyboard with four octaves of black and white keys, which can be played as a keyboard. Supports vertical octave stacking, with the lowest octave at the bottom and the highest octave at the top, covering the range of C2-C6 notes.

Each group consists of 12 complete octave notes plus one C note, totaling 13 notes assigned to the 8x2 area, with the remaining 3 keys inactive. When this mode is activated, all playable notes are illuminated with orange lights, and the C note is illuminated with purple light, while the remaining keys remain unlit. Triggering results in green lights, and the keys are triggered instantaneously via MIDI NOTE commands. Only one of the same octave notes will be triggered and illuminate the green trigger light simultaneously. Note information cannot be changed in this mode. The mapping of note information to the pad area is as shown in the figure below:

	73	75		78	80	82	
72	74	76	77	79	81	83	84
	61	63		66	68	70	
60	62	64	65	67	69	71	72
	49	51		54	56	58	
48	50	52	53	55	57	59	60
	37	39		42	44	46	
36	38	40	41	43	45	47	48

Note:

Due to the different definitions of Middle C in piano rolls in different DAW software, the sent note information may not match what is displayed in the DAW software.

#### 4. User Mode

User Mode adopts the same note layout as Drum Mode, which can receive MIDI Note signals and illuminate the pad lights based on the note and velocity information. The note information determines the position of the illuminated pads, while the velocity information determines the color of the lights. It can output 127 different RGB light colors. The device is defined on MIDI channel 3 / CH3, and only when MIDI Note signals are sent to the device on CH3, corresponding light effects will be displayed. In User Mode, full velocity triggering is used, where any velocity level sends the maximum velocity value. Note information cannot be changed in this mode. The mapping of note information to the pad area is as shown in the figure below:

64	65	66	67	96 C7	97	98	99	100
60 C4	61	62	63	92	93	94	95	101
56	57	58	59	88	89	90	91	102
52	53	54	55	84 C6	85	86	87	103
48 C3	49	50	51	80	81	82	83	104
44	45	46	47	76	77	78	79	105
40	41	42	43	72 C5	73	74	75	106
36 C2	37	38	39	68	69	70	71	107

Function Control Buttons

Note:

To map the lighting project paging function in Ableton Live, follow these steps:  
 Open the Ableton Live mapping function and select the buttons and lighting paging modules to be mapped in the software, usually the Page module of the Audio and Light tracks; Hold down the "Record" button on the hardware device for 2-3 seconds, then simultaneously press the "Octave" button. At this point, the "Note/Control" in the MIDI mapping column displays "Notes E6:B6" and the "Channel" displays "3", indicating successful paging mapping, allowing for paging operation of audio/light using side buttons.

#### 5.Mobile Device Lighting Project Hidden Mode

Synido TempoPAD Z-1 is compatible with popular drum pad simulator APPs on Android mobile devices: Super Lights and Unipad. Long-press the User button for 3 seconds. When the User button displays a green backlight, it enters Hidden Mode 1, which can be connected and used with Super Lights and Unipad on Android smartphones.

When in Hidden Mode 1, long-press the User button for 3 seconds. When the User button displays a blue backlight, it enters Hidden Mode 2, which can be connected and used with Super Lights and Unipad on Android tablets. To return to the regular User mode, long-press the User button for 3 seconds until the User button displays a yellow backlight.

Note: When connecting to a mobile device, enable the "USB debugging" function in the device settings; Mobile devices do not support connections with the Apple iOS version of Super Lights software.

Super Lights Version Support(Android): V1.0 / V1.1 / V1.57

Unipad Version Support(Android): V3.11 / V3.24 / V3.42 / V4.0

#### 6.Easy Mode

Easy Mode requires the use of Synido TempoPAD Z-1 companion software. Within the software, audio editing, slicing, and light drawing can be performed. Custom-designed audio and light effects can be assigned to the 8x8 layout of 64 pads, triggering a playback of audio and lights upon striking the pads. The principle of Easy Mode is the same as other modes, only sending commands. The software executes the commands to play the corresponding audio, and the sound is emitted through the computer device. Light synchronization is displayed on the silicone pads of Synido TempoPAD Z-1 in the form of RGB backlighting. This mode allows for independent audio and light performances without the need for a DAW host software. For detailed operating instructions, refer to the "Companion Software Instructions" section of this manual, specifically the Easy Mode section.

#### 7.Custom Mode

In Custom Mode, the MIDI information type and data, as well as static/triggered light color changes for the 8x8 pad area of Synido TempoPAD Z-1, can be adjusted using the companion software. MIDI information types can be selected as NOTE note information, CC control adjustment information, PC preset switching information, and Channel CH settings. CC information trigger types can be instant/switching, and pad light static/trigger color selection. The area for transport control buttons only contains CC information, which can be modified for CC information parameters. When sending MMC information, the red light is illuminated, and when sending CC information, the blue light is illuminated. Initial preset values are listed below:

Area	NOTE	CC	PC	Color	Channel	Trigger Type
8*8 Pad	36-99	36-99	36-99	Red	1	Momentary
Transport Control Buttons	/	24-26	/	Blue	1	Momentary

For detailed parameter adjustment operations, refer to the "Companion Software Instructions" section of this manual, specifically the Custom Mode section.

## 8. Function Control Buttons

**Octave:** Adjusts the octave. Pressing it triggers a constant green light, indicating the current octave adjustment function is selected. Pressing the ▲/▼ buttons adjusts the octave range of the current device's working mode. Pressing ▲ increases the octave, with each press increasing by one octave. The ▲ button displays different backlight colors based on the value, with a maximum increase of +3 octaves (In Drum Mode, because the maximum MIDI data value exceeds 127, only 2 octaves can be added at most). Pressing ▼ decreases the octave, with each press decreasing by one octave. The ▼ button also displays different backlight colors based on the value, with a maximum decrease of -3 octaves. Pressing both ▲/▼ buttons simultaneously resets to zero.

**Transpose:** Adjusts the semitone transposition. Pressing it triggers a constant green light, indicating the current semitone transposition function is selected. Pressing the ▲/▼ buttons adjusts the pitch range of the current device's working mode. Pressing ▲ increases the semitone, with each press increasing by one semitone. The ▲ button displays different backlight colors based on the value, with a maximum increase of +6 semitones. Pressing ▼ decreases the semitone, with each press decreasing by one semitone. The ▼ button also displays different backlight colors based on the value, with a maximum decrease of -6 semitones. Pressing both ▲/▼ buttons simultaneously resets to zero.

**Velocity:** Adjusts the velocity sensitivity. Pressing it triggers a constant green light, indicating the current velocity adjustment function is selected. Pressing the ▲/▼ buttons adjusts the sensitivity curve of the current device. Each press of the ▲ button increases the velocity sensitivity curve towards a harder direction, with different backlight colors based on the value. Each press of the ▼ button decreases the velocity sensitivity curve towards a softer direction, with different backlight colors based on the value. Pressing both ▲/▼ buttons simultaneously resets to zero. Refer to the table below for detailed velocity curve explanations:

Value	Velocity Curve	Explanation
2	FULL Constant velocity feedback	Full: Ignore actual playing dynamics, and the pad always sends a fixed maximum velocity value of 127 regardless of how hard or soft you hit it.
1	EXP Exponential velocity feedback	EXP: Firm, suitable for players who prefer to hit the pads with greater force to achieve higher velocity values.
0	LIN Linear velocity feedback	LIN: Velocity and MIDI values have a linear relationship, suitable for most music and performers.
-1	LOG Logarithmic velocity feedback	LOG: Soft, suitable for players who prefer to hit the pads with less force to achieve higher velocity values with gentle taps.

**Light:** Adjusts the brightness. Pressing it triggers a constant green light, indicating the brightness adjustment function is selected. Pressing the ▲/▼ buttons adjusts the brightness of the RGB backlight. Pressing ▲ increases the brightness, with each press increasing by one level. The ▲ button displays a constant orange light, with higher values resulting in brighter lights, up to a maximum increase of +3 levels. Pressing ▼ decreases the brightness, with each press decreasing by one level. The ▼ button displays a constant orange light, with lower values resulting in brighter lights, up to a maximum decrease of -3 levels. Pressing both ▲/▼ buttons simultaneously resets to zero.

### ▲/▼ Button Backlight Color Correspondence Table:

Button	Value	Backlight color	color	Octave	Transpose	Velocity
▲	6	Red	Red		6	
	5	Purple	Purple		5	
	4	Pink	Pink		4	
	3	Green	Green	3	3	
	2	Orange	Orange	2	2	2
	1	Yellow	Yellow	1	1	1
▼+▲	0	White	White	0	0	0
▼	-1	Yellow	Yellow	-1	-1	-1
	-2	Orange	Orange	-2	-2	
	-3	Green	Green	-3	-3	
	-4	Pink	Pink		-4	
	-5	Purple	Purple		-5	
	-6	Red	Red		-6	



## 9. Transport Control Buttons

3 transport control buttons: Stop, Play, and Record. They default to sending CC information, which can be switched to MMC information with the MMC button. When sending CC information, the blue light is illuminated, and when sending MMC information, the red light is illuminated. CC information encoding, trigger type (instant/switching), and channel value can be modified using Synido's companion software. Refer to the "Companion Software Instructions" section of this manual, specifically the Custom Mode section, for detailed parameter adjustment operations. The default parameters are as shown in the figure below:

Transport Buttons	Stop	Play	Record	Channel	Trigger Type
CC Number	24	25	26	1	Instant

If the device sends MMC events, the MMC receive function must be enabled in the DAW software; If the device sends CC events, mapping relationships must be adjusted in the computer DAW software to control the corresponding functions. Without assigning functions in the host software, the buttons cannot control.

## 10. Mode Function Overview

The various functions supported by each operating mode of TempoPAD Z-1 are shown in the table below:

	Octave	Transpose	Velocity	Light	MMC	Stop	Play	Record	Mood
Easy	×	×	×	×	×	×	×	×	✓
Drum	✓	×	✓	✓	✓	✓	✓	✓	✓
Key	✓	✓	✓	✓	✓	✓	✓	✓	✓
User	×	×	×	×	×	×	×	×	✓
Custom	×	×	✓	✓	✓	✓	✓	✓	✓

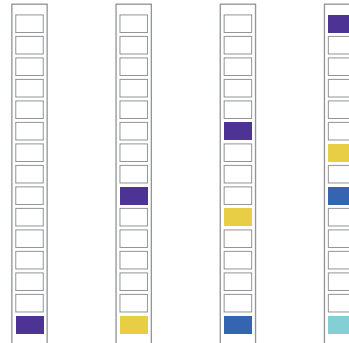
## 11. Ambient Pickup Light

The ambient pickup light has four display modes, toggled through the "Mood" button. The backlight of the button displays four colors, corresponding to different ambient light modes. The mode and backlight color correspondence are as follows:

Red - Marquee Mode  
 Green - Rhythm Mode  
 Blue - Note Dance Mode  
 Yellow - Diffusion Mode

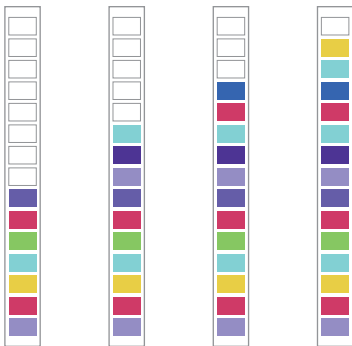
### • Marquee Mode

Individual blocks flow from bottom to top in a fixed color sequence, and a block is triggered after a certain fixed decibel sound is picked up.



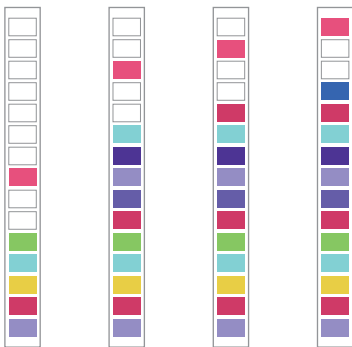
### • Rhythm Mode

Lights correspond to sound levels, with higher lights being illuminated for louder sounds and lower lights for softer ones. The color of individual blocks remains fixed.



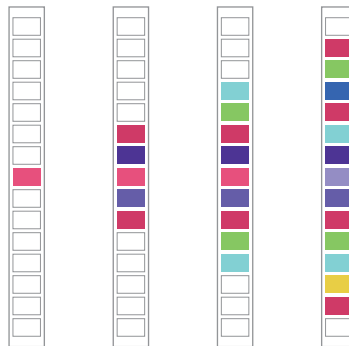
• **Note Dance Mode**

Based on the Rhythm Mode, the topmost block will jump with changes in overall light height.



• **Diffusion Mode**

Lights rhythmically diffuse from the center upwards and downwards, with the diffusion range increasing with louder sounds.



Note: The colors shown in the ambient light illustrations are for reference only; actual effects may vary.

## 1. Software Download and Installation

Synido TempoPAD Z-1 comes with companion software that allows for independent audio and lighting performances, featuring audio editing and lighting design capabilities. Additionally, it can be used to write or read parameter settings from the TempoPAD Z-1 and send various MIDI commands.

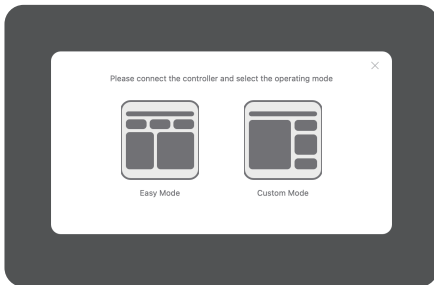
The download link for the companion software is <https://www.synido.com/pages/downloads>

After downloading, please run the program and proceed with the installation.

Note: There will be slight differences in the functional operation of the Windows and Mac versions. The following content is mainly explained on the Mac system. Subsequent software will also be continuously iteratively upgraded and updated. The paper version of the manual may not be updated in time. You can view the electronic documentation instructions through the Menu Bar "Help" "Open User Guide" option on the user manual.

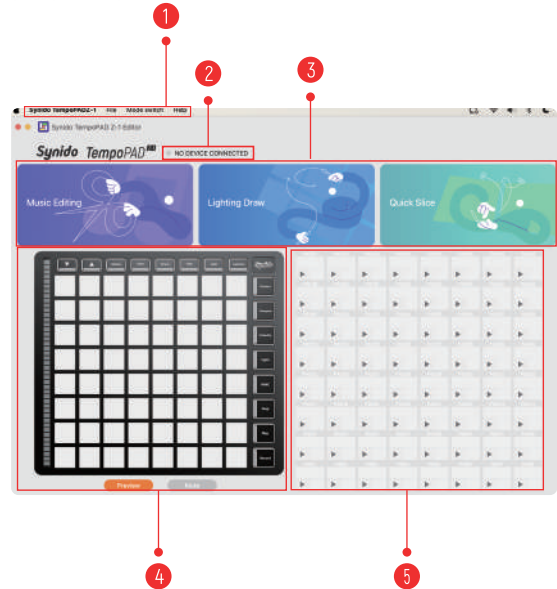
## 2. Software Launch

The Synido TempoPAD Z-1 companion software contains programs for two operational modes: Easy Mode and Custom Mode. After launching the software, users can select the desired mode to load the corresponding program.



## 3. Easy Mode

### 1. Software Interface



- 1 Menu Bar
- 2 Device Connection Status Indicator
- 3 Audio/Lighting Editing Module
- 4 Preview Display Area
- 5 Drum Pad Audio/Lighting Allocation Area

## 2. Device occupation (WINDOWS system only)

The connection status of the device is displayed at the lower right corner ( ② ) of the software. Only when "Connected" is displayed, the software can write or read the configuration on the TempoPAD Z-1;

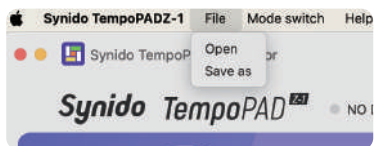
If "Connected" is displayed here, it means the software and TempoPAD Z-1 is connected, and the software can transfer the configuration with the device;

If "Not Connected" is displayed here, it may be because the device is not normally connected to the computer, or DAW is occupying the device at this time; You need to exit the DAW or other programs that are occupying the TempoPAD Z-1, and sometimes you need to reconnect the device.

## 3. Device File Save/Open

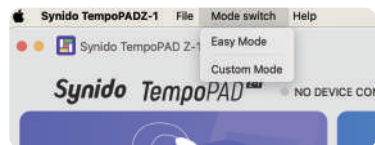
The audio/lighting information set in the "Drum Pad Audio/Lighting Allocation Area" can be saved using the "Save As" option. The saved file format is ".eas". Both user-saved and shared ".eas" format files can be directly opened and read in Easy Mode. The audio/lighting information from the ".eas" format file will overwrite the content in the "Drum Pad Audio/Lighting Allocation Area".

Note: Information edited in the current file cannot be directly saved back to the original file and must be saved with a new name.

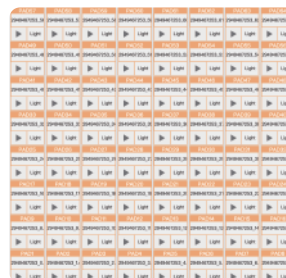


## 4. Mode Switching

Once the working mode (Easy Mode/Custom Mode) is selected, the corresponding interface is loaded. If you need to switch to another working mode, you can do so in the "Mode Switch" option in the menu bar.



## 5. Drum Pad Audio/Lighting Allocation Area



This area consists of an 8x8 grid matrix, comprising a total of 64 blocks, with a 1:1 correspondence to the positions of the TempoPAD Z-1 silicone drum pads. Regardless of which module is loaded in the "Audio/Lighting Editing Module", this area's interface remains fixed, and information can be edited, inherited, and saved in any module.



Each individual block contains four parts: ① Drum pad position information; ② Audio storage unit; ③ Lighting storage unit; ④ Play button.

① Drum pad position information: PAD1 - PAD64, arranged from bottom to top in ascending order, corresponding to the positions of the TempoPAD Z-1 silicone drum pads. When audio or lighting information is stored in a block, the background is displayed in orange. If there is no audio or lighting information stored in the block, the background is displayed in gray.

② Audio storage unit: Drag audio files from the "Audio List" in the "Audio Editing" or "Quick Slice" module to this unit for storage. Successfully stored files will display the audio file names in this unit. If the file name is too long, hovering the mouse over it will display the full name in a scrolling manner.

③ Lighting storage unit: Drag lighting files from the "Lighting List" in the "Lighting Design" module to this unit for storage, or use the "Apply Globally" function for unified storage. Successfully stored files will display the lighting file names in this unit. If the file name is too long, hovering the mouse over it will display the full name in a scrolling manner.

④ Play button: Default black icon. When audio or lighting files are present in a block, clicking this icon will momentarily change the background to orange. The audio and lighting files in this block will then be played, and the lighting will be displayed in the "Preview Display Area". If the device is connected and set to Easy mode, the lighting will synchronize and display on the device's silicone drum pads. Striking the TempoPAD Z-1 silicone drum pad will trigger the playback of the corresponding audio/lighting files in the block.

#### • Moving/Swapping Audio File Positions

Select a block's "Audio Storage Unit" with the left mouse button, then drag it to another block's range. Release the left mouse button, and the audio file from the first block will move to the second block. If the second block already contains an audio file, the audio files in both blocks will be exchanged.

#### • Moving/Swapping Lighting File Positions

Select a block's "Lighting Storage Unit" with the left mouse button, then drag it to another block's range. Release the left mouse button, and the lighting file from the first block will move to the second block. If the second block already contains a lighting file, the lighting files in both blocks will be exchanged.

#### • Moving/Swapping Audio/Lighting Files Positions

Select a block's "Drum Pad Position Information" (PAD1 - 64) with the left mouse button, then drag it to another block's range. Release the left mouse button, and the audio and lighting files from the first block will move to the second block. If the second block already contains audio and lighting files, the audio and lighting files in both blocks will be exchanged.

Hover the mouse over a block, then right-click to open a menu and select "Delete [PAD number] Audio".

For example, to delete the audio file in block PAD57, right-click anywhere within the PAD57 block and select "Delete [PAD57] Audio" from the pop-up menu.



#### • Deleting Audio Files

Hover the mouse over a block, then right-click to open a menu and select "Delete [PAD number] Audio".

For example, to delete the audio file in block PAD57, right-click anywhere within the PAD57 block and select "Delete [PAD57] Audio" from the pop-up menu.

#### • Deleting Lighting Files

Hover the mouse over a block, then right-click to open a menu and select "Delete [PAD number] Light".

For example, to delete the lighting file in block PAD57, right-click anywhere within the PAD57 block and select "Delete [PAD57] Light" from the pop-up menu.

#### • Deleting Audio/Lighting Files Universally

Hover the mouse over a block, then right-click to open a menu and select "Delete [PAD number] PAD" to delete both audio and lighting files within the selected PAD area.

For example, to delete all audio and lighting files in block PAD57, right-click anywhere within the PAD57 block and select "Delete [PAD57] PAD" from the pop-up menu.

#### • Deleting All Audio Files in the Entire Area

Move the mouse cursor to any position within the "Drum Pad Audio/Lighting Allocation Area", right-click, and select "Delete all Audio" from the pop-up menu. This action will delete all audio files within the 64 blocks.

#### • Deleting All Lighting Files in the Entire Area

Move the mouse cursor to any position within the "Drum Pad Audio/Lighting Allocation Area", right-click, and select "Delete all Light" from the pop-up menu. This action will delete all lighting files within the 64 blocks.

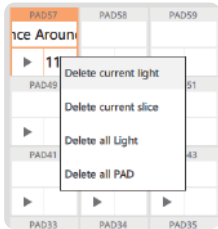
- **Deleting All Audio/Lighting Files in the Entire Area**

Move the mouse cursor to any position within the "Drum Pad Audio/Lighting Allocation Area", right-click, and select "Delete all PAD" from the pop-up menu. This action will delete both audio and lighting files within the 64 blocks.

**The operation for Windows system version slightly differs from the Mac system. Below are the operations for Windows:**

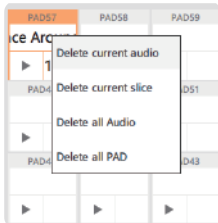
Right-clicking in the "Lighting Storage Unit" area provides the following options:

- "Delete current light": Deletes the current PAD lighting file.
- "Delete current slice": Deletes the current PAD lighting and audio files.
- "Delete all light": Deletes all lighting files in the 64 PADS.
- "Delete all PAD": Deletes all lighting and audio files in the 64 PADS.



Right-clicking in the "Audio Storage Unit" area provides the following options:

- "Delete current audio": Deletes the current PAD audio file.
- "Delete current slice": Deletes the current PAD lighting and audio files.
- "Delete all Audio": Deletes all audio files in the 64 PADS.
- "Delete all PAD": Deletes all lighting and audio files in the 64 PADS.



## 6. Preview Display Area

The style of the "Preview Display Area" in the Easy mode main interface is identical to the physical layout of the Synido TempoPAD Z-1. Lighting files played within the "Drum Pad Audio/Lighting Allocation Area" will be displayed in this area. There are two setting modules available for operation: "Preview" and "Mute", which respectively control the on/off of lighting display and audio sound. By default, "Preview" is enabled and "Mute" is disabled. When enabled, the background of the setting module is orange.



## 7. Audio/Lighting Editing Module

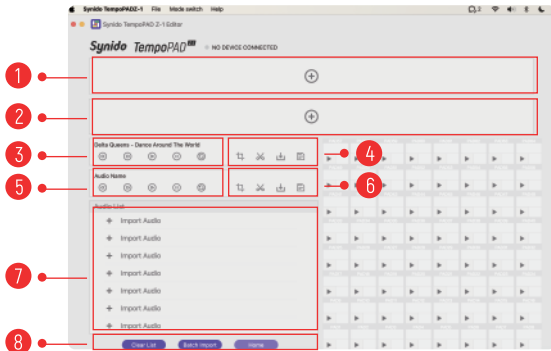
The audio/lighting editing module consists of three functional modules: Music Editing, Lighting Drawing, and Quick Slice. The meanings of each functional module are as follows:



- Music Editing:** Allows for free editing of audio files, assigning them to the drum pads.
- Lighting Drawing:** Enables drawing of lighting effects, assigning them to the drum pads.
- Quick Slice:** Allows for rapid slicing of audio, dividing it evenly based on the defined number of slices, and assigning them to the drum pads.

## A.Audio Editing Module

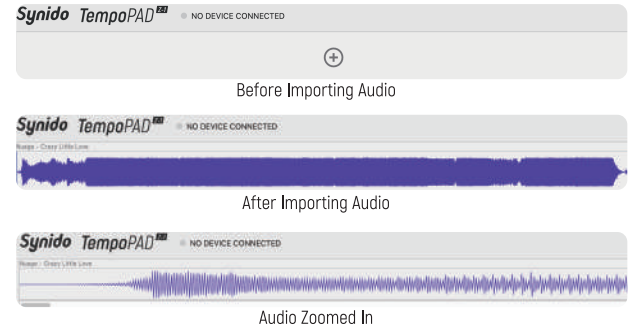
### a.Software Interface



- 1 Track 1 Editing Area
- 2 Track 2 Editing Area
- 3 Track 1 Transport Control Area
- 4 Track 1 Audio Quick Edit Area
- 5 Track 2 Transport Control Area
- 6 Track 2 Audio Quick Edit Area
- 7 Audio List
- 8 Batch Functions and Return to Main Menu

### b.Software Interface Track Editing Area

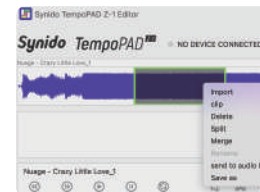
- Audio File Import/Zoom



Clicking the "+" button in the "Track Editing Area" with the left mouse button will open the file explorer, allowing selection and import of the required audio files. The supported audio formats include MP3, WAV, and WMA. After importing, the waveform graph will be displayed, and the top of the track will show the audio file name. You can zoom in and out of the waveform graph using the mouse scroll wheel. When zoomed in, control sliders will appear at the bottom of the track to control the display area.

- Audio Editing

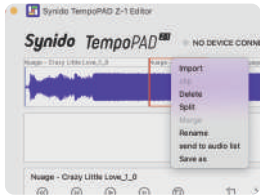
Press and hold the left mouse button on the waveform graph area in the "Track Editing Area" to move left or right. A green-bordered rectangle will appear on the waveform graph, indicating the current selection for editing. Right-clicking will open a menu, from which you can select "Clip". The edited audio segment will be separated from the current audio and a new file name suffix will be generated at the top of the track.



- **Audio Deletion**

Click the top file name area of a specific audio segment in the "Track Editing Area" with the left mouse button. The selected audio segment will be highlighted with a red border. Right-clicking will open a menu, from which you can select "Delete" to remove the chosen audio segment from the current audio.

To deselect: Clicking anywhere outside the "Track Editing Area" with the left mouse button will remove the selection, and the red border will disappear.



- **Audio Splitting**

After audio import, a blue vertical line will appear at the starting point on the far left, representing the audio playback progress bar. Clicking anywhere on the waveform graph with the left mouse button will move the playback progress bar to that position. Audio splitting will use the playback progress bar as the dividing line. Right-clicking will open a menu, from which you can select "Split". The audio segment where the playback progress bar is located will be split into two separate segments.



- **Audio Merging**

Use the combination key "Ctrl + Left Mouse Button" to select adjacent audio segments in the "Track Editing Area". Right-clicking will open a menu, from which you can select "Merge". The selected audio segments will be merged into one.

Note: Left-clicking must be on the top file name area of the audio segment to select.



- **Audio Renaming**

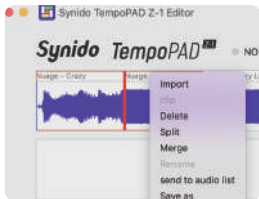
Click the top file name area of a specific audio segment in the "Track Editing Area" with the left mouse button. The selected audio segment will be highlighted with a red border. Right-clicking will open a menu, from which you can select "Rename" to rename the selected audio segment.



- **Save Audio to Audio List**

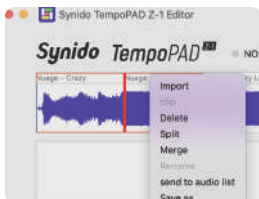
Click the top file name area of a specific audio segment in the "Track Editing Area" with the left mouse button. The selected audio segment will be highlighted with a red border. Right-clicking will open a menu, from which you can select "send to audio list" to store the selected audio segment in the "Audio List" below.



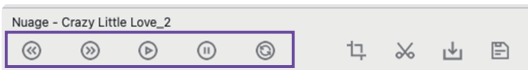


- **Save Audio As**

Click the top file name area of a specific audio segment in the "Track Editing Area" with the left mouse button. The selected audio segment will be highlighted with a red border. Right-clicking will open a menu, from which you can select "Save as" to open the file manager and customize the name and location for saving on your computer.



### c.Track Transport Control Area



- **Rewind**

Clicking or long-pressing will move the playback progress bar in the "Track" area backward. Clicking shows a black "Rewind" icon, and long-pressing shows a purple icon.

- **Fast Forward**

Clicking or long-pressing will move the playback progress bar in the "Track" area forward. Clicking shows a black "Fast Forward" icon, and long-pressing shows a purple icon.

- **Play**

Clicking will play the audio in the "Track" area. Clicking shows a purple "Play" icon. Forward and backward operations can also be performed during audio playback.

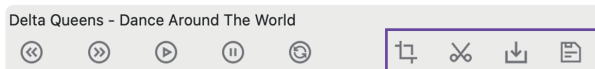
- **Pause**

Clicking will pause the audio currently playing in the "Track" area. Clicking shows a black "Pause" icon, and the "Play" icon changes to gray.

- **Loop**

After enabling the loop function, the audio segment where the playback progress bar is located will automatically restart after playing to the end. Clicking shows a purple "Loop" icon.

### d.Track Audio Quick Edit Area



- **Audio Editing**

- **Audio Splitting**

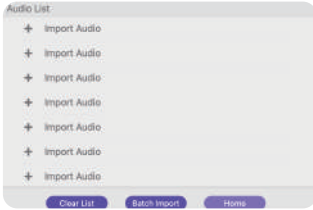
- **Save Audio to Audio List**

- **Save Audio As**

The usage is the same as described in section "b) Software Interface Track Editing Area". However, it's important to note that the audio files in "Save Audio to Audio List" and "Save Audio As" are the audio segments where the playback progress bar is located, not the audio selected with a red box. The name of the audio segment where the playback progress bar is located will also be displayed above the "Track 1 Transport Control Area".

### e.Audio List

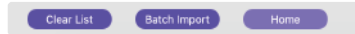
During the audio editing process, audio files saved in "Save Audio to Audio List" will automatically be stored here. You can also import files from your local folders by clicking the "+" on the left side. Imported audio files can be selected with a left-click, and selected files will be displayed in orange font. You can drag the selected files to the 8x8 grid matrix in the "Track Audio and Lighting Allocation Area" for distribution. Selected files can also be played, deleted, or renamed through the right-click menu. During playback, clicking anywhere outside the "Audio List" will cancel playback.



### e.Batch Functions and Return to Main Menu

- **Clear List**

Clicking "Clear List" will remove all audio files currently saved in the audio list. However, audio files that have already been assigned to the 8x8 grid matrix in the "Track Audio and Lighting Allocation Area" will remain in the matrix.



- **Batch Import**

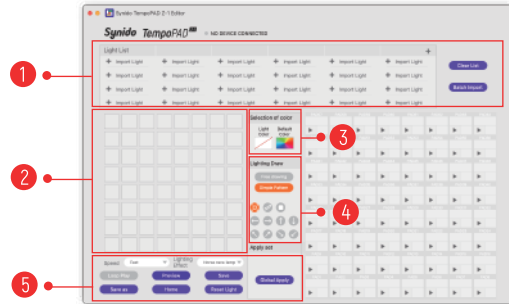
Clicking "Batch Import" will open the file manager, allowing you to select multiple audio files to import into the audio list.

- **Return to Main Menu**

Clicking "Home" will return you to the main interface of the Easy mode.

## B.Lighting Drawing Module

### a.Software Interface



- 1 Lighting List and Batch Functions
- 2 Lighting Drawing Area
- 3 Lighting Color Selection
- 4 Drawing Mode Selection
- 5 Function Selection

### b.Lighting Color Selection

There are two modes for selecting the lighting drawing pen color: "Custom Color" mode and "Default Color" mode.

In "Custom" mode, you can define the lighting drawing pen color as desired. Clicking on the "Light Color" module will disable the "Default Color" mode, and a system pop-up window will appear. Choose your desired pen color from the pop-up page.

In "Default Color" mode, the lighting drawing pen color cannot be changed. Clicking on the "Default Color" module will disable the "Custom" mode. There are seven default colors available: yellow, orange, green, blue, purple, pink, and red. During lighting drawing, the colors will be displayed sequentially based on the number of grid squares the drawing passes through.

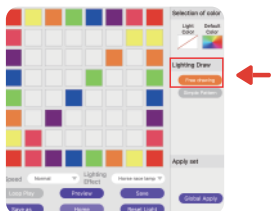


### c. Drawing Mode Selection

#### 1. Free Drawing

In Free Drawing mode, you can freely move the mouse to draw any pattern in the Lighting Drawing Area. The pen color is defined according to the "Lighting Color Selection" section. The procedure is as follows: Click the "Free Drawing" module with the left mouse button to select this mode. The module icon will be displayed with an orange background, indicating the current selection of "Free Drawing" mode. Press and hold the left mouse button while moving the cursor in the Lighting Drawing Area. The cursor will simulate a pen, and the grid squares passed by the pen will be filled with color.

Note: Clicking on a grid square will not fill it with color; you need to move the cursor within the square.



#### 2. Simple Pattern

In Simple Patterns mode, you cannot freely move the mouse to draw patterns in the Lighting Drawing Area. Instead, you can only use the 11 preset lighting patterns, including 3 fixed style patterns and 8 combinable style patterns.



**Light Diffusion:** When the color selection is in "Custom" mode, the light will spread out from the center of the triggered drum pad square in all directions.

When the color selection is in "Default Color" mode, the light will spread out sequentially from the center to all directions using the colors defined in the "Default Color" mode.



**Wave:** When the color selection is in "Custom Color" mode, the light will scroll from the bottom left corner to the top right corner of the 8x8 matrix.

When the color selection is in "Default Color" mode, the light will scroll from the bottom left corner to the top right corner using the colors defined in the "Default Color" mode.



**Single Color Light:** Only available in "Custom Color" mode, the light will instantly illuminate the triggered drum pad square with the defined single color. Speed and lighting effects are not applicable in Single Color Light mode.



The 8 combinable style patterns are displayed as straight-line patterns in different directions. The directions include: left, right, up, down, upper-left diagonal, upper-right diagonal, lower-left diagonal, and lower-right diagonal. You can freely combine these 8 patterns.

When the color selection is in "Custom Color" mode, the light will display straight lines in the selected direction using the defined single color.

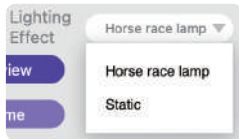
When the color selection is in "Default Color" mode, the light will display straight lines using the colors defined in the "Default Color" mode.



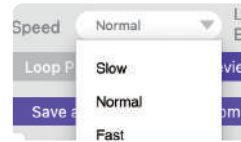
#### d. Lighting Effect Settings

In the lighting effect settings, you can define the display mode and speed of the lighting patterns drawn in "Free Drawing" and "Simple Patterns" modes.

- Horse race lamp:** The light will move according to the motion trajectory drawn with the pen in "Free Drawing" mode or the predefined motion method in "Simple Patterns" mode.
- Static:** The light will remain static according to the shapes drawn in "Free Drawing" mode or the predefined motion direction in "Simple Patterns" mode.



The speed selection only applies to the "Horse race lamp" mode, offering three speeds: Slow, Normal, and fast, representing the speed of the light movement.



#### e. Function Selection

In the lighting effect settings, you can define the display mode and speed of the lighting patterns drawn in "Free Drawing" and "Simple Patterns" modes.

- Loop Play:** By default, this function is disabled. Clicking to enable it will turn the background orange. When loop playback is activated, the lighting patterns defined in "Free Drawing" or "Simple Patterns" will play repeatedly in the Lighting Drawing Area. If connected to Synido TempoPAD Z-1, the patterns will also be displayed on the device. Disabling "Loop Playback" will turn off the lighting. Saved lighting files will also be in loop format.
- Preview:** Clicking on the "Preview" function will play the lighting patterns defined in "Free Drawing" or "Simple Patterns" in the Lighting Drawing Area. If connected to Synido TempoPAD Z-1, the patterns will also be displayed on the device.
- Save:** Clicking on the "Save" function will store the lighting patterns defined in "Free Drawing" or "Simple Patterns" to the "Lighting List".
- Save as:** Clicking on the "Save as" function will open a file manager window, allowing you to customize the name and location to save the lighting patterns defined in "Free Drawing" or "Simple Patterns" to your local machine.
- Return to Main Page:** Clicking on the "Home" function will return you to the main interface of the Easy mode.
- Reset Light:** Clicking on the "Reset Light" function will clear the current drawing in Free Drawing mode.
- Global Application:** Clicking on the "Global Apply" function will assign the lighting patterns defined in "Free Drawing" or "Simple Patterns" to the 8x8 grid matrix of 64 blocks in the "Track Audio and Lighting Allocation Area".



## f. Lighting List and Batch Functions

The lighting files saved during the lighting drawing process will automatically be stored here. You can also import files from your local folders by clicking the "+" on the left side. Imported lighting files can be selected with a left-click, and selected files will be displayed in orange font. You can drag the selected files to the 8x8 grid matrix in the "Track Audio and Lighting Allocation Area" for distribution. Selected files can also be played, deleted, or renamed through the right-click menu. During playback, clicking anywhere outside the "Lighting List" will cancel playback.



### • Clear List

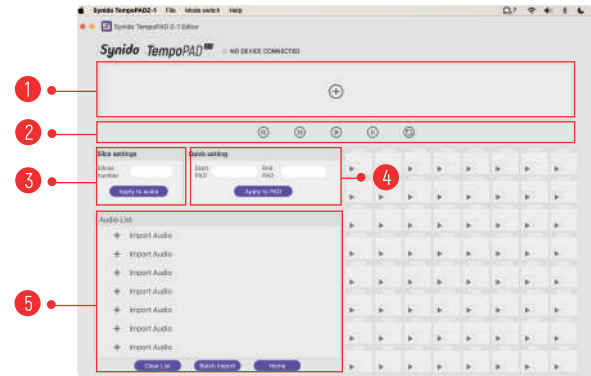
Clicking "Clear List" will remove all lighting files currently saved in the lighting list. However, lighting files that have already been assigned to the 8x8 grid matrix in the "Track Audio and Lighting Allocation Area" will remain in the matrix.

### • Batch Import

Clicking "Batch Import" will open the file manager, allowing you to select multiple lighting files to import into the lighting list.

## C. Quick Slicing Module

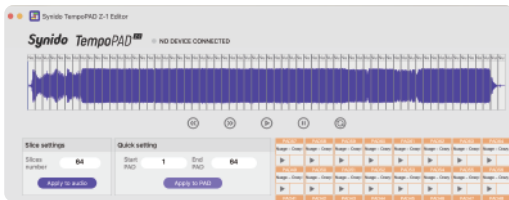
### a. Software Interface



- 1 Track Editing Console
- 2 Track Transport Control Area
- 3 Audio Slicing Definition Area
- 4 Shortcut Settings Area for Slicing
- 5 Audio List and Batch Functions

### b. Audio Quick Slicing

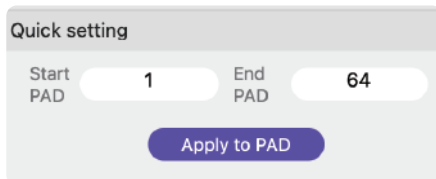
Audio imported into the "Track Editing Console" will be sliced into corresponding audio segments according to the defined number of slices, which can be set within the range of "2 - 64". The specific procedure is as follows: Left-click on the "Number of Slices" input box, enter the desired number of slices, and then click "Apply to Audio". At this point, the waveform in the "Track Editing Console" has been divided into the corresponding number of segments. After slicing, you can also input a value to make changes and re-slice.



### c. Quick Application to PAD

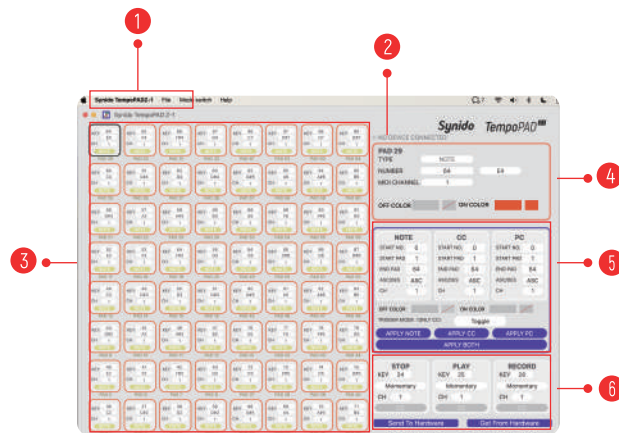
After audio slicing is complete, you can quickly assign the sliced audio segments to the 64 blocks of the 8x8 grid matrix in the "Drum Pad Audio and Lighting Allocation Area". You can customize the range of PAD blocks to be assigned based on the number of slices. The range is arranged in order of PAD positions from PAD1 to PAD64, with "Start" being the starting position number of the PAD and "End" being the ending position number of the PAD. After defining the range, click "Apply to PAD". At this point, the sliced audio segments will be stored in the defined PAD blocks in sequence.

Example: If the audio is sliced into 50 parts, with the "Start" PAD position defined as 1 and the "End" PAD position defined as 34, the first 34 audio segments in chronological order will be assigned to PAD1 - PAD34. If the "Start" PAD position is defined as 1 and the "End" PAD position is defined as 64, all 50 audio segments in chronological order will be assigned to PAD1 - PAD50, and PAD51 - PAD64 will be empty.



## 4. Custom Mode

### 1. Software Interface



- 1 Menu Bar.
- 2 Device Connection Status Indicator.
- 3 PAD Information Display Area.
- 4 Parameter Editing Area.
- 5 Quick Layout Area.
- 6 Transport Button Area.

## 2. File Save/Open

The configured PAD MIDI parameter information can be saved using the file save option, with files saved in ".csm" format. Both user-saved and received ".csm" format files can be directly opened and read in Custom mode, and the parameter information inside the ".csm" format file will be overwritten to the "PAD Information Display Area".

Note: Information edited and modified in the current file cannot be directly saved to the original file. It needs to be renamed and saved again.



The menu bar functions include: Open, Save As, Send to Hardware, Get from Hardware, Restore Default Values;

**Open:** Load a parameter configuration file.

**Save as:** Save the current parameter configuration as a new preset file, saved with a ".csm" suffix.

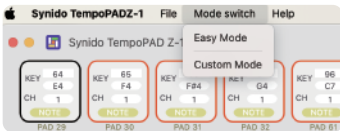
**Send To Hardware:** Send the current parameter configuration to the TempoPAD Z-1.

**Get From Hardware:** Retrieve parameter configuration from the TempoPAD Z-1.

**Restore The Default:** Restore the default parameter configuration to factory settings.

## 3. Mode Switching

After selecting the working mode (Easy mode/Custom mode), the corresponding interface for the selected mode will be loaded. If you need to use the other working mode, you can switch modes using the "Mode Switch" option in the menu bar.



## 4. PAD Information Display Area

1. MIDI event information inside the PAD is for display purposes only and cannot be directly modified.

2. MIDI event types are displayed in different colors: NOTE information - yellow, CC information - green, PC information - blue.

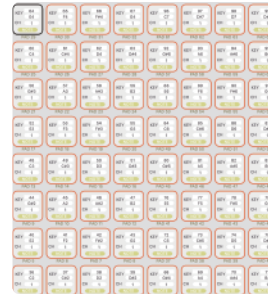
3. NOTE information includes: NOTE code, corresponding note name, channel information.

4. CC information includes: CC code, trigger type, channel information.

5. PC information includes: PC code, channel information.

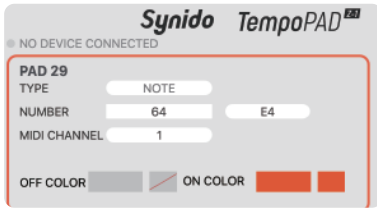
6. The border color of the PAD represents the trigger backlight color (ON color) currently set for the drum pad.

7. When a PAD is selected, the border color is black.



## 5. Parameter Editing Area

Left-clicking on any PAD in the "PAD Information Display Area" allows for parameter editing of the selected PAD. The "Parameter Editing Area" will display the selected PAD position number "PAD1 - PAD64".



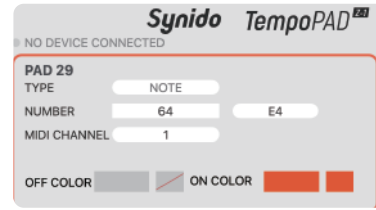
[1]. **Signal Type:** Three types of MIDI signals can be selected via a dropdown menu: NOTE, CC, PC.

[2]. **Number:** MIDI information encoding can be entered with values ranging from 0 to 127. When selecting NOTE information input, the corresponding note name will be displayed on the right. Clicking on the note name box will display all notes from C-1 to C9 for selection, and the encoding on the left will change accordingly.



[3]. **MIDI Channel:** Selection of MIDI information channel, ranging from 1 to 16.

[4]. **Trigger Type:** When selecting CC information input, you can choose whether the trigger type is "Momentary" or "Toggle". In "Momentary" mode: when a key is pressed, an event with a value of 127 is sent, and when the key is released, an event with a value of 0 is sent. In "Toggle" mode: every time a key is pressed and released, events with values of 127 (on) and 0 (off) are alternately sent.



[5]. **OFF Color:** The backlight color when the drum PAD is in a static untriggered state. Left-clicking on the small color block on the left opens the RGB color editor to adjust the backlight color in the static state. Left-clicking on the small color block on the right will turn off the backlight of the drum PAD in the static state.

[6]. **ON Color:** The backlight color when the drum PAD is triggered. Left-clicking on the small color block on the left opens the RGB color editor to adjust the backlight color when the drum PAD is triggered. Left-clicking on the small color block on the right will turn off the backlight of the drum PAD when triggered.

## 6. Quick Layout Area

PAD quick layout allows for unified settings of NOTE, CC, PC information, and backlight colors for Synido TempoPAD Z-1.





(1).START NO: The starting encoding information for MIDI information, with values ranging from 0 to 127.

(2).START PAD / END PAD: The "Start PAD" and "End PAD" represent the range of the PAD applied to the drum PAD, corresponding to the starting PAD position number and ending PAD position number, respectively.

(3).ASC / DES: In "Ascending" mode, the starting code will increase by one within the range set by "Start PAD / End PAD". In "Descending" mode, the starting code will decrease by one within the range set by "Start PAD / End PAD".

(4).APPLY NOTE : Only applies the NOTE and color editing settings.

(5).APPLY CC : Applies only CC, color editing, and trigger type settings.

(6).APPLY PC : Only applies the PC and color editing settings.

(7).APPLY BOTH: Applies NOTE, CC, PC, color editing, and trigger type settings simultaneously. If conflicts occur with the set PAD positions, settings will be prioritized based on PC information > CC information > NOTE information.

## 7.Firmware upgrade

Connect the device, until the software displays "Connected";

Click Help Menu → About, and click firmware update in the dialog box opened;



## PRODUCT SPECIFICATION

**Product Model:** TempoPAD Z-1

**Power Consumption:** 2.5W

**Color:** Black + Purple

**Product Weight:** 815g

**Material:** Plastic + Silica Gel

**Product Size:** 261.5\*234.6\*19.7mm

## CUSTOMER SUPPORT

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

or scan the QR code 

or email us at [cs@synido.com](mailto:cs@synido.com)

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



**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.

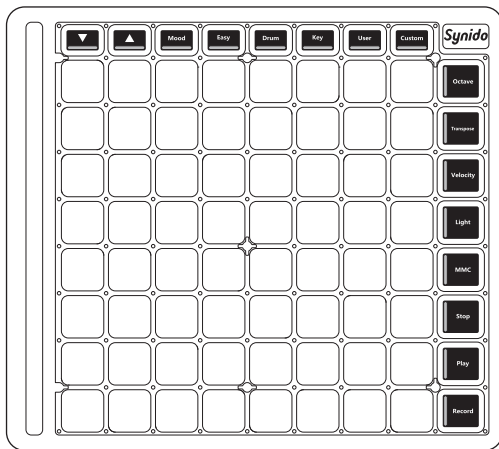
**Toggle:** When the full operation of pressing + releasing is completed, the ON and OFF events will be sent alternately; For example, it can be used as a switch. Each time you tap a pad, it alternately sends commands with values of 127 and 0. Set 127 as ON and 0 as OFF at the receiving end, the control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

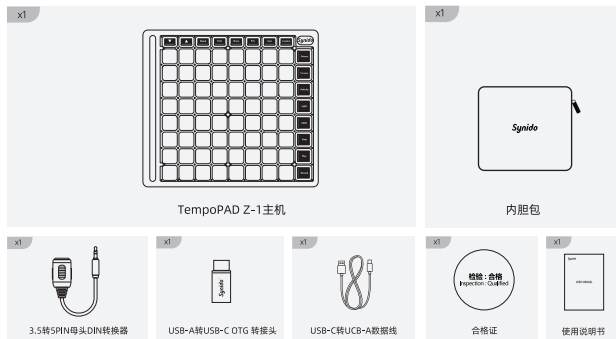
欢迎您选购本公司Synido TempoPAD Z-1产品。TempoPAD Z-1 是一款8x8的网格矩阵MIDI控制器，使用它连接电脑或移动端的DAW软件可以进行音符录制与编辑，灯光演奏等。作为一款专业级演奏控制设备，TempoPAD Z-1提供高精度的触发响应，丰富的RGB灯光色彩展示，灵活便捷的编程功能，以及全面的DAW软件兼容适配，满足了音乐创作者和演奏者的功能需求。此外内置Synido研发的Easy程序模式，配合官方定制软件可独立进行音频剪辑播放与灯光绘制，其简单易懂的软件界面，可帮忙新手用户练习演奏技巧。内置氛围灯条可随灯光节奏舞动跳跃，使得演奏效果更加炫彩夺目。无论您是专业音乐制作人还是兴趣爱好者，它都将是您学习、创作、演奏上的好帮手。值得特别提醒的是这款设备仅输出MIDI指令而不会产生声音信号，用户需要具备一些相关音乐知识才能合理使用它。



## 产品特点：

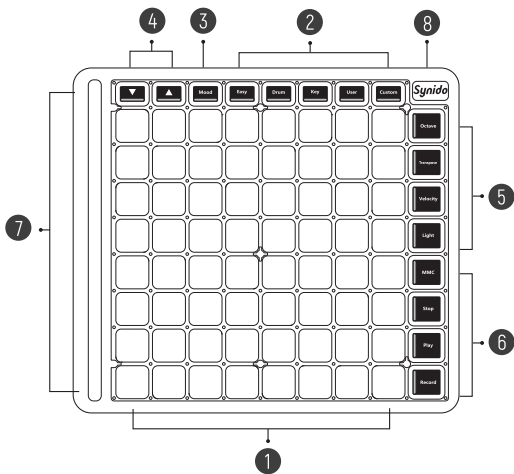
- 8x8网格矩阵，64个带RGB背光力度感应打击垫，Custom模式下可自由分配音符、CC和PC信息。
- 条状型氛围灯带，带有独立实体开/关按键，支持4种显示模式：跑马灯模式、律动模式、音符跳动模式、扩散模式。
- 5种工作模式：Easy简易模式、Drum鼓机模式、Key琴键模式、User用户模式、Custom自定义模式。
- 3个走带控制按键，停止、播放、录制，支持一键切换MMC指令。
- 琴键模式下支持八度/半音移调功能，可一键复位。
- 支持力度曲线与灯光明暗度调节。
- 配套官方软件支持音频剪辑与灯光绘制功能，可独立完成灯光乐曲演奏。
- 兼容市面相同布局设计的灯光工程文件，支持安卓设备端主流打击垫模拟器控制。
- 多个接口，易于电脑、手机、平板等多种设备连接，具备1/8" TRS (3.5mm) 传统MIDI输出。

## 包装清单



## 面板说明

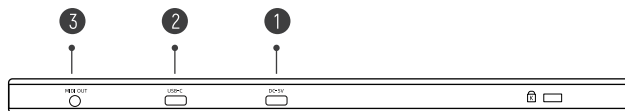
前面板:



- 1. 打击垫工作区域:** 8\*8布局64个硅胶打击垫, 带有力度感应与RGB灯光显示, 敲击打击垫以发送MIDI指令。
- 2. 使用模式选择区域:** 主控制系统带有5种工作模式可供选择, 分别为: Easy 简易模式、Drum 鼓机模式、Key 琴键模式、User 用户模式、Custom 自定义模式。
- 3. 氛围灯模式切换:** Mood 按键为左侧方氛围灯模式切换, 依次按压以显示不同的背光颜色对应不同的模式状态, 氛围灯显示模式共有4种, 分别为: 跑马灯模式、律动模式、音符跳动模式、扩散模式。

- 4. 参数调节:** ▼▲方向键为-/+按钮, 可对区域4中的Octave八度、Transpose半音移调、Velocity力度曲线、Light灯光亮度进行调节控制。
- 5. 功能控制按键:** 共有4种功能可供选择, 分别为Octave八度、Transpose半音移调、Velocity力度曲线、Light灯光亮度, 搭配▼▲方向按钮以实现调节控制。
- 6. 走带控制按键:** 3个走带控制按键, 可以发送走带控制指令。指令以CC指令或MMC指令发送。MMC按键可一键切换至MMC指令状态, 您可以通过本机配套的控制软件编辑CC指令参数。
- 7. 氛围灯:** 氛围灯通过拾音孔可对周围环境音做出反应, 氛围灯总共有4种显示模式, 搭配“Mood”按键进行切换, 侧方有独立的实体开关拨动按键, 可开启与关闭氛围灯显示。
- 8. 品牌Logo灯:** Synido品牌Logo灯, 默认为开启状态, 亮紫色灯光, 可通过组合按键关闭, 同时长按Light与MMC按键2秒。

接口面板:



- 1. DC-5V:** 电源供电接口, 此接口仅提供电力但不交换数据;
- 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 Z-1 提供电力并与您的计算机交换数据;
- 3. MIDI OUT:** 3.5mm 插座, 以标准MIDI协议输出信号, 需要TRS - 5PIN DIN转接线;

## 使用说明

### 1. 连接方式:

#### 搭配主流DAW宿主软件进行使用

- ① 使用附带的USB-A TO USB-C线，将产品直接连接电脑。
- ② 打开您的DAW软件。如Ableton Live、Cubase、FL Studio、Logic Pro等。
- ③ 打开 DAW宿主软件中的 Preferences、Options 或 Device Setup选项，选择Synido TempoPAD Z-1作为输入与输出设备。
- ④ 您的TempoPAD Z-1现在即可与您的DAW宿主软件进行通信。

CH通道说明：Drum鼓机模式、Key琴键模式为CH1通道，User模式为CH3通道，通道不可修改；Custom默认为CH1通道，通道可自定义调整。

#### 搭配Synido官方配套软件进行使用

详情见本说明书文档中的《配套软件说明》部分。

### 2. Drum鼓机模式

由16个区块组成的Drum Rack鼓机会被分配到结构为4x4组合的打击垫上，一共有4个这样的打击垫组合用于配置合计64个鼓机区块。4组鼓机采用4种不同颜色进行区分，分别为紫色、橙色、浅蓝与深蓝，按压“Drum”按钮开启鼓机模式后，打击垫将按所对应颜色灯光常亮，触发亮红色灯光，鼓机通过MIDI NOTE音符指令进行瞬时触发，此模式下音符信息不可更改。设备打击垫区域NOTE音符信息对应编号如下图所示：

64	65	66	67	96	97	98	99
60	61	62	63	92	93	94	95
56	57	58	59	88	89	90	91
52	53	54	55	84	85	86	87
48	49	50	51	80	81	82	83
44	45	46	47	76	77	78	79
40	41	42	43	72	73	74	75
36	37	38	39	68	69	70	71

#### 注意:

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

## 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

## 3. Key琴键模式

8x8打击垫网格矩阵，模拟钢琴的四个八度音符黑白琴键排列，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，覆盖的音符范围为C2-C6。

每一组为12个完整八度音符加一个C音符，总共13个音符分配至8x2的区域，每组剩余的3个按键不工作。此模式开启后所有可触发工作的音符以橙色灯光显示常亮，C音符以紫色灯光显示常亮，剩余按键不亮灯。触发亮绿色灯光，琴键通过MIDI NOTE音符指令进行瞬时触发，相同音阶的音符只触发一个会同时点亮绿色触发灯光。此模式下音符信息不可更改。设备打击垫区域NOTE音符信息对应编号如下图所示：

	73	75		78	80	82	
72	74	76	77	79	81	83	84
	61	63		66	68	70	
60	62	64	65	67	69	71	72
	49	51		54	56	58	
48	50	52	53	55	57	59	60
	37	39		42	44	46	
36	38	40	41	43	45	47	48

### 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。

## 4. User用户模式

User用户模式采用鼓机Drum模式相同的音符布局，可接收MIDI Note 信号，并根据Note信号对应的音符信息和力度信息亮起打击垫灯光，音符信息决定了打击垫点亮灯光的位置，力度信息决定了灯光的颜色，可输出127种RGB灯光颜色，设备定义位于MIDI通道3 / CH3，只有MIDI Note信号以CH3发送给到设备，设备才可有相应的灯光效果反应。User模式下采用全力触发，任何力度大小都发送最大力度值。此模式下音符信息不可更改。设备打击垫区域NOTE音符信息对应编号如下图所示：

64	65	66	67	96 C7	97	98	99	100	功能 按键
60 C4	61	62	63	92	93	94	95	101	
56	57	58	59	88	89	90	91	102	
52	53	54	55	84 C6	85	86	87	103	
48 C3	49	50	51	80	81	82	83	104	
44	45	46	47	76	77	78	79	105	
40	41	42	43	72 C5	73	74	75	106	
36 C2	37	38	39	68	69	70	71	107	

注：需要在Ableton Live中映射灯光工程翻页功能时，可按以下方式进行操作：  
打开Ableton Live映射功能，软件中选择需要映射的按键与灯光翻页模块，通常为Audio与Light轨的Page模块；硬件设备中按住“Record”按键2-3秒后，同时再按下“Octave”按键，此时MIDI映射栏中“音符/控制”显示为“Notes E6:B6”，“通道”显示为“3”；代表翻页映射成功，可在侧列按键对音频/灯光进行翻页操作。

## 5.移动设备灯光工程隐藏模式

Synido TempoPAD Z-1兼容安卓移动设备端主流的打击垫模拟器APP软件：Super Lights与Unipad，长按User按键3秒，待User按键显示绿色背光时，此时进入隐藏模式①，可与安卓手机端的Super Lights与Unipad进行连接使用。隐藏模式①状态时，长按User按键3秒，待User按键显示蓝色背光时，此时进入隐藏模式②，可与安卓平板端的Super Lights与Unipad进行连接使用。此模式下长按User按键3秒，待User按键显示黄色背光时，已返回至常规User模式。

注：连接移动设备时，需在设备设置选项中开启“USB调试”功能；移动设备不支持Apple IOS 版本Super Lights软件连接。

Super Lights版本（安卓系统）支持：V1.0、V1.1、V1.57  
Unipad 版本（安卓系统）支持：V3.11、V3.24、V3.42、V4.0

## 6.Easy简易模式

Easy简易模式需搭配Synido TempoPAD Z-1配套软件进行使用，软件内可进行音频剪辑切片与灯光绘制，自定义设计的音频与灯光可赋予至8\*8布局的64个打击垫中，敲击打击垫将播放音频与灯光，Easy模式与其它模式原理相同，仅发送指令，软件执行指令后播放对应音频，声音通过计算机设备发出。灯光同步以PGB背光的形式显示于SynidoTempoPAD Z-1的硅胶打击垫上，此模式特点在于脱离DAW宿主软件完成独立的音频灯光演奏。详细操作方法见本说明书文档中的《配套软件说明》Easy模式部分。

## 7.Custom自定义模式

Custom自定义模式下，可通过Synido TempoPAD Z-1配套软件对8x8打击垫区域进行MIDI信息类型与数据、静止/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，以及通道CH设置、CC信息触发类型：即时/切换、打击垫灯光静止/触发颜色选择。走带按键区域仅有CC信息，可修改CC信息参数，发送MMC信息时亮红灯，发送CC信息时亮蓝灯。初始预设值见下方列表：

区域	NOTE	CC	PC	颜色	通道	触发类型
8*8打击垫	36-99	36-99	36-99	红色	1	即时
走带按键	/	24-26	/	蓝灯	1	即时

详细参数调整操作方法见本说明书文档中的《配套软件说明》中Custom模式部分。

## 8. 功能控制按键

**Octave:** 八度调节，按下后触发常亮绿色灯，代表当前八度调节功能被选中，点按▲/▼参数调节按键可对当前设备工作模式的NOTE音符八度范围进行增/减。点按▲后可增加八度，每点按一下▲按键，增加一个八度；“▲”根据数值对应不同的按键背光颜色，最多可增加+3个八度。（鼓机模式下因为最大MIDI数据值超过127，最多只可增加2个八度）点按▼后可增加八度，每点按一下▼按键，减小一个八度；“▼”根据数值对应不同的按键背光颜色。最多可减小-3个八度，同时按下▲/▼按键可归零。

**Transpose:** 半音移调，按下后触发常亮绿色灯，代表当前半音移调功能被选中，点按▲/▼参数调节按键可对当前设备工作模式的NOTE音符音域进行增/减调节。点按▲后可增加半音，每点按一下▲按键，增加一个半音；“▲”根据数值对应不同的按键背光颜色，最多可增加+6个半音。点按▼后可减少半音，每点按一下▼按键，减小一个半音；“▼”根据数值对应不同的按键背光颜色。最多可减小-6个半音，同时按下▲/▼按键可归零。

**Velocity:** 力度调节，按下后触发常亮绿色灯，代表当前力度调节功能被选中，点按▲/▼参数调节按键可对当前设备的力度感应灵敏度曲线进行调节。每点按一下▲按键，力度感应曲线往强硬方向移动；根据数值对应不同的按键背光颜色。每点按一下▼按键，力度感应曲线往柔软方向移动；“▼”根据数值对应不同的按键背光颜色。同时按下▲/▼按键可归零。详细力度曲线说明可见下表。

数值	力度曲线	说明
2	FULL 全力度反馈	忽略实际演奏力度，无论您敲击的强弱如何，打击垫始终以固定最大力度值127发送音符信息。
1	EXP指数型力度反馈	强硬，适用于习惯用较大力度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
0	LIN线性型力度反馈	力度与MIDI值呈线性关系，适用于大部分音乐和表演者
-1	LOG对数型力度反馈	柔软，适用于习惯用较小力度敲击打击垫的演奏者，轻敲PAD就可以得到较高的力度值

**Light:** 亮度调节，按下后触发常亮绿色灯，代表亮度调节功能被选中，点按▲/▼参数调节按键可对打击垫RGB背光明暗度进行增/减调节。点按▲后可增加背光亮度，每点按一下▲按键，增加一个亮度；“▲”按键常亮橙色灯，数值越大灯光越明亮，最多可增加+3个亮度。点按▼后可减少背光亮度，每点按一下▼按键，减小一个亮度；“▼”按键常亮橙色灯，数值越小灯光越明亮，最多可减小-3个亮度。同时按下▲/▼按键可归零。

参数调节按键▲/▼背光颜色对应数值表：

按键	数值	背光颜色	颜色名	Octave八度调节	Transpose半音移调	Velocity力度调节
▲	6	红	红			6
	5	紫	紫			5
	4	粉	粉			4
	3	浅绿	浅绿	3		3
	2	橙	橙	2		2
	1	黄	黄	1		1
▼+▲	0	白	白	0		0
▼	-1	黄	黄		-1	-1
	-2	橙	橙		-2	-2
	-3	浅绿	浅绿		-3	-3
	-4	粉	粉			-4
	-5	紫	紫			-5
	-6	红	红			-6



## 9. 走带控制按键

3个走带控制按键，分别为Stop停止、Play播放、Record录制，默认发送CC信息，可通过MMC按键一键切换至MMC信息；发送CC信息时触发亮蓝光，发送MMC信息时触发亮红灯。可通过Synido配套软件修改CC信息编码、触发类型：即时/切换、通道值，详细参数调整操作方法见本说明书文档中的《配套软件说明》中Custom模式部分。默认参数如下图所示：

走带按键	Stop	Play	Record	通道	触发类型
CC编码	24	25	26	1	即时

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。

## 10. 模式功能一览2

TempoPAD Z-1各工作模式所支持的功能不同，详细情况如下表所示：

	Octave	Transpose	Velocity	Light	MMC	Stop	Play	Record	Mood
Easy	×	×	×	×	×	×	×	×	√
Drum	√	×	√	√	√	√	√	√	√
Key	√	√	√	√	√	√	√	√	√
User	×	×	×	×	×	×	×	×	√
Custom	×	×	√	√	√	√	√	√	√

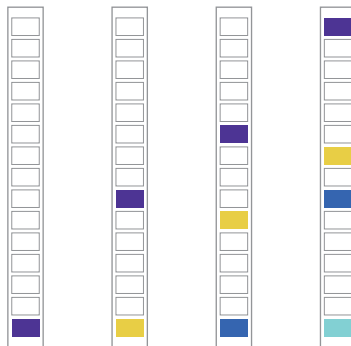
## 11. 拾音氛围灯

拾音氛围灯有四种显示模式，通过“Mood”按键进行模式切换，按键背光有四种颜色显示，分别对应不同的氛围灯模式，模式与按键背光颜色对应关系为：

- 红色 —— 跑马灯模式
- 绿色 —— 律动模式
- 蓝色 —— 音符跳动模式
- 黄色 —— 扩散模式

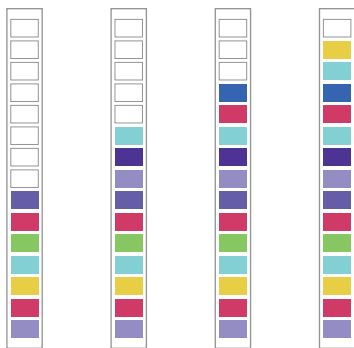
### • 跑马灯模式

单个色块以固定的颜色顺序依次从底部往顶部流动，大于某个固定分贝的声音拾取后将发送一个色块。



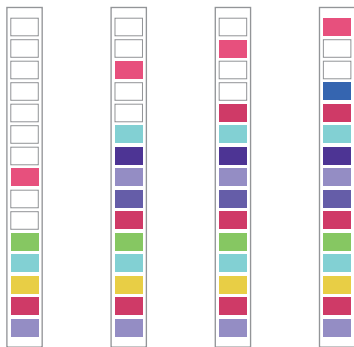
### • 律动模式

根据声音大小，点亮对应高度灯光，声音越大，点亮灯的高度越高，反之亦然，单个色块的颜色固定。



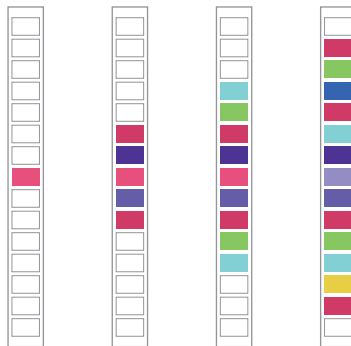
• 音符跳动模式

律动模式基础上，最顶部的灯色块会随整体灯光高低变化跳动。



• 扩散模式

从中间往上下两侧律动扩散灯光，声音越大，扩散范围越广。



注：氛围灯图示颜色仅供参考，实际效果以实物为准

## 配套软件说明

### 一.软件下载与安装

Synido TempoPAD Z-1提供一个配套软件，可用来进行独立的灯光音频演奏，带有音频剪辑与灯光绘制功能；也可用来写入或读取TempoPAD Z-1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；

注意：Windows与Mac版本的软件功能操作会存在轻微差异，以下内容主要以Mac系统进行说明，后续软件也将进行不断地迭代升级更新，纸质版本说明书可能会出现更新不及时的情况，您可通过软件端菜单栏“帮助”“打开用户指南”选项查看电子文档说明书。

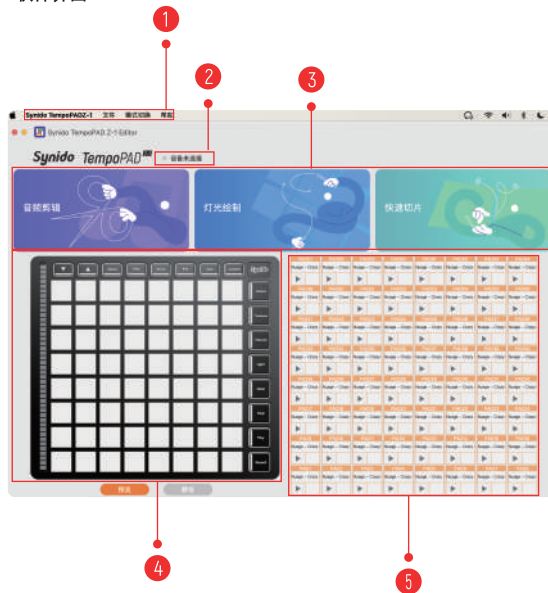
### 二.软件启动

Synido TempoPAD Z-1配套软件含有两个工作模式的使用程序，Easy简易模式与Custom自定义模式，用户开启软件后完成模式选择将载入相应的使用模式程序。



### 三.Easy简易模式

#### 1.软件界面



- 1 菜单栏；
- 2 设备连接状态提示；
- 3 音频/灯光编辑模块；
- 4 预览显示区域；
- 5 打击垫音频/灯光分配区域；

## 2.软件界面设备占用（适用于WINDOWS系统）

设备的连接状态显示在软件的右下角（②处），只有显示已连接时，软件才可以写入或读取TempoPAD Z-1的参数配置；

如果此处显示“已连接”表示此时软件和TempoPAD Z-1连接正常，软件可以和设备传输配置；

## 3.设备文件保存/打开

打击垫音频/灯光分配区域”已设置好的音频/灯光信息，可通过文件保存选项进行存储，存储的文件为.eas后缀格式。用户自行存储或接收分享的.eas格式文件都可在Easy模式下直接打开读取，.eas格式文件内的音频/灯光信息将赋予覆盖至“打击垫音频/灯光分配区域”。

注意：在当前文件进行编辑修改的信息无法直接存储至原文件，需重新命名保存。

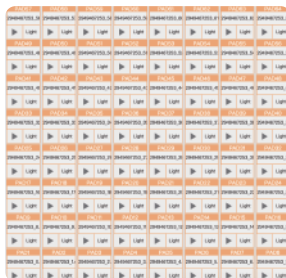


## 4.模式切换

工作模式（Easy模式/Custom模式）选择完成后，已载入对应工作模式界面，若需使用另一工作模式，可在菜单栏“模式切换”选项中进行模式切换。



## 5.打击垫音频灯光分配区域



8\*8网格矩阵，共有64个区块组成，1:1比例对应TempoPAD Z-1硅胶打击垫位置，无论载入“音频/灯光编辑模块”中的任一模块，此区域界面都为固定显示，信息可在任一模块中编辑继承保存。

单个区块含有4个部分，分别为：打击垫位号信息、音频储存单位、灯光储存单位、播放按键。



①打击垫位号信息：PAD1 - PAD64，由底部到顶部从小到大依次排列，位号对应TempoPAD Z-1硅胶打击垫位置。区块中存储有音频或灯光信息时，背景为橙色显示；区块中未有音频或灯光信息存储时，背景为灰色显示。

②音频储存单位：可从“音频剪辑” / “快速切片”模块的“音频列表”中拖拽音频文件至此单位中存储。存储成功的文件将在此单位内将显示音频文件名称，文件名过长的，鼠标停留在此处会滚动播放文件名。

③灯光储存单位：可从“灯光绘制”模块的“灯光列表”中拖拽灯光文件至此单位中存储，或“全局应用”功能统一存储。存储成功的文件将在此单位内将显示灯光文件名称，文件名过长的，鼠标停留在此处会滚动播放文件名。

④播放按键：默认为黑色图标，当区块中含有音频或灯光文件时，单击此图标，背景会瞬时变为橙色，此区块内的音频与灯光文件会进行播放，灯光将会显示在“预览显示区域”，若已连接设备并将设备设置至Easy模式，灯光将同步在设备硅胶打击垫中进行显示。敲击TempoPAD Z-1硅胶打击垫，将会触发播放对应打击垫位号区块内的音频/灯光文件。

#### • 音频文件位置移动/交换

鼠标左键选中某一区块A“音频储存单位”，长按将其拖拽至另一处区块B范围内，此时松开鼠标左键，区块A的音频文件将会移动至区块B中；若区块B中原本也储存有音频文件，此时区块A与区块B的音频文件将进行互换。

#### • 灯光文件位置移动/交换

鼠标左键选中某一区块A“灯光储存单位”，长按将其拖拽至另一处区块B范围内，此时松开鼠标左键，区块A的灯光文件将会移动至区块B中；若区块B中原本也储存有灯光文件，此时区块A与区块B的灯光文件将进行互换。

#### • 音频/灯光文件统一位置移动/交换

鼠标左键选中某一区块A“打击垫位号信息”（PAD1 - 64），长按将其拖拽至另一处区块B范围内，此时松开鼠标左键，区块A的音频与灯光文件将会移动至区块B中；若区块B中原本也储存有音频与灯光文件，此时区块A与区块B的音频与灯光文件将进行互换。

#### • 音频文件删除

鼠标移动至某一区块范围内，右键弹窗选择删除当前PAD切片音频。

例：若需删除PAD57区块内的音频文件，鼠标移动至PAD57区块内任意位置，单击鼠标右键，选择弹窗内的“删除【PAD57】切片音频”选项，PAD57区块内的音频文件将被删除。



#### • 灯光文件删除

鼠标移动至某一区块范围内，右键弹窗选择删除当前PAD切片灯光。

例：若需删除PAD57区块内的灯光文件，鼠标移动至PAD57区块内任意位置，单击鼠标右键，选择弹窗内的“删除【PAD57】切片灯光”选项，PAD57区块内的灯光文件将被删除。将被删除。

#### • 音频/灯光文件统一删除

鼠标移动至某一区块范围内，右键弹窗选择删除当前PAD切片。

例：若需删除PAD57区块内的音频与灯光文件，鼠标移动至PAD57区块内任意位置，单击鼠标右键，选择弹窗内的“删除【PAD57】切片”选项，PAD57区块内的音频与灯光文件都将被删除。

#### • 全区域音频文件删除

鼠标移动至“打击垫音频灯光分配区域”内任意位置，右键弹窗选择“删除所有切片音源”，64个区块内的音频文件都将被删除。

#### • 全区域灯光文件删除

鼠标移动至“打击垫音频灯光分配区域”内任意位置，右键弹窗选择“删除所有切片灯光”，64个区块内的灯文件都将被删除。

## • 全区域音频/灯光文件删除

鼠标移动至“打击垫音频灯光分配区域”内任意位置，右键弹窗选择“删除所有切片”，64个区块内的音频与灯光文件都将被删除。

Windows系统版本操作与Mac系统略有区别。

以下为Windows版本操作方式

将鼠标移动至“灯光储存单位”位置，右键弹窗可选择：

“删除当前灯光”，表示删除当前PAD灯光文件。

“删除当前切片”，表示删除当前PAD灯光与音频文件。

“删除所有切片灯光”，表示删除64个PAD内所有灯光文件。

“删除所有切片PAD”，表示删除64个PAD内所有灯光与音频文件。



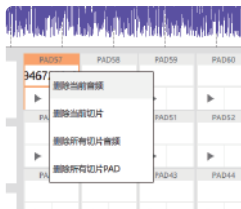
将鼠标移动至“音频储存单位”位置，右键弹窗可选择：

“删除当前音频”，表示删除当前PAD音频文件。

“删除当前切片”，表示删除当前PAD灯光与音频文件。

“删除所有切片音频”，表示删除64个PAD内所有音频文件。

“删除所有切片PAD”，表示删除64个PAD内所有灯光与音频文件。



## 6. 预览显示区域

Easy模式主界面中的“预览显示区域”样式与Synido TempoPAD Z-1 实体布局相同，“打击垫音频灯光分配区域”内播放的灯光文件将会显示在此区域内。有两个设置模块可供操作，“预览”与“静音”，它们分别为灯光显示与音频声音的开/关控制。默认情况下“预览”为开启状态，“静音”为关闭状态。开启状态时，设置模块的背景为橙色。



## 7. 音频/灯光编辑模块

音频/灯光编辑含有三个功能模块，分别为：音频剪辑、灯光绘制、快速切片，各个功能模块的含义如下。



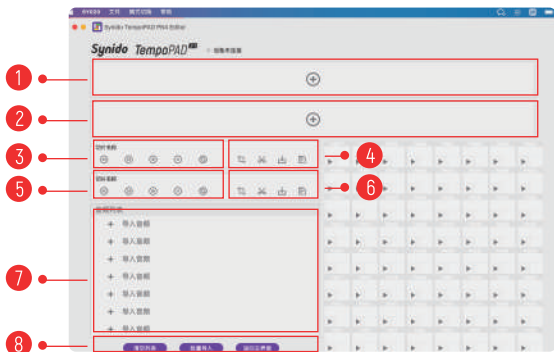
**音频剪辑：**音频文件自由编辑，赋予至打击垫中。

**灯光绘制：**灯光绘制，赋予至打击垫中。

**快速切片：**音频快速切片，按切片定义数量，平均分割，赋予至打击垫中。

### A. 音频剪辑模块

#### a. 软件界面

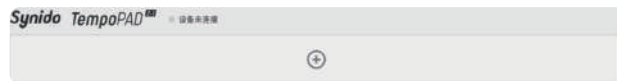


- 1 音轨Track 1编辑台；
- 2 音轨Track 2编辑台；
- 3 音轨Track 1走带控制区域；
- 4 音轨Track 1音频快捷剪辑区域；
- 5 音轨Track 2走带控制区域；
- 6 音轨Track 2音频快捷剪辑区域；
- 7 音频列表；
- 8 批量功能与返回主菜单；

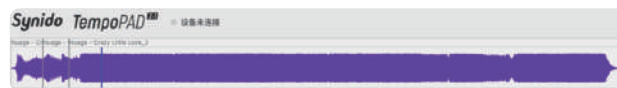
#### b. 软件界面音轨Track编辑台

##### • 音频文件导入/缩放

鼠标左键点击“音轨Track编辑台”中的“+”按键，会弹窗文件管理器，选择所需要的音频文件进行导入即可，音频支持MP3、WAV、WMA格式文件。导入后会显示其音频波形图，音轨顶部会显示其音频文件名称，可通过鼠标滚轮上下滑动对波形图进行放大和缩小，放大后音轨底部会显示左右滑动条对显示区域进行控制。



导入音频前



导入音频后



音频放大后

### • 音频剪辑

长按鼠标左键在“音轨Track编辑台”中的音频波形图区域内，进行左右移动拉取，此时波形图上会显示绿色边框矩形，此矩形区域为当前所选择需要进行剪辑的音频部分，点击鼠标右键，会弹窗操作选项，选择“剪辑”后，所剪辑的音频区域将从当前音频中剥离，形成一份独立的音频片段。音轨顶部也会自动生成新的文件名称后缀。



### • 音频删除

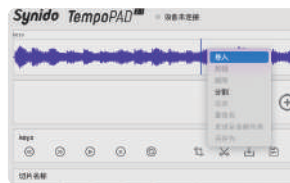
鼠标左键点击“音轨Track编辑台”中某一音频片段顶部文件名区域，此时被选中的音频片段以红色边框进行显示，点击鼠标右键，会弹窗操作选项，选择“删除”后，所选中的音频片段将从当前音频中被删除。

取消选中：鼠标左键点击“音轨Track编辑台”以外的任意区域，可取消选中状态，红色边框消失。



### • 音频分割

音频导入完成后，最左侧起点位置会出现一条蓝色竖线，此为音频播放进度条，鼠标左键单击波形图任一位置时会将播放进度条变更至此处。音频分割会将播放进度条作为分割线。点击鼠标右键，会弹窗操作选项，选择“分割”后，播放进度条所处的音频片段，会以此进度条分割线分割为两段独立的音频片段。

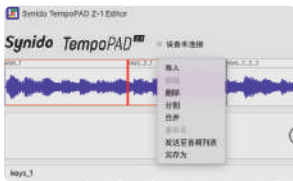


### • 音频合并

使用组合按键“Ctrl + 鼠标左键”在“音轨Track编辑台”中选中临近的多个音频片段，点击鼠标右键，会弹窗操作选项，选择“合并”后，所选中的多个音频片段将合并为一个音频片段。

注：鼠标左键需点击音频片段顶部文件名区域，才可选中。





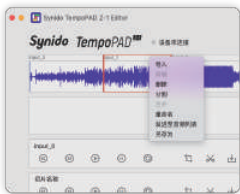
### • 音频重命名

鼠标左键点击“音轨Track编辑台”中某一音频片段顶部文件名区域，此时被选中的音频片段以红色边框进行显示，点击鼠标右键，会弹出操作选项，选择“重命名”后，可对选中的音频片段重新进行命名。



### • 音频保存至音频列表

鼠标左键点击“音轨Track编辑台”中某一音频片段顶部文件名区域，此时被选中的音频片段以红色边框进行显示，点击鼠标右键，会弹出操作选项，选择“发送至音频列表”后，所选中的音频片段将存储至下方“音频列表”区域栏中。

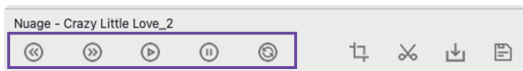


### • 音频另存为

鼠标左键点击“音轨Track编辑台”中某一音频片段顶部文件名区域，此时被选中的音频片段以红色边框进行显示，点击鼠标右键，会弹出操作选项，选择“另存为”后，会弹出文件管理器，根据文件管理器提示自定义名称与位置存储至本机。



### c. 软件界面音轨Track走带控制区域



#### • 后退

单击或长按可对音轨Track区域中的播放进度条往后移动，单击时“后退”Icon图标显示黑色，长按时显示紫色。

#### • 前进

单击或长按可对音轨Track区域中的播放进度条往前移动，单击时“前进”Icon图标显示黑色，长按时显示紫色。

#### • 播放

单击可播放音轨Track区域中的音频，单击时“播放”Icon图标常显示紫色，音频播放过程中也可进行后退/前进操作。

- 暂停

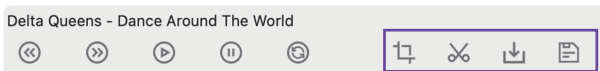
单击可暂停音轨Track区域中正在播放的音频，单击时“暂停”Icon图标显示黑色，“播放”Icon图标切换为灰色。

- 循环

启动循环功能后，音轨Track区域中播放进度所处的音频片段在播放结束后将自动重新开始播放。单击时“循环”Icon图标常显示紫色。

#### d. 软件界面音轨Track音频快捷剪辑区域

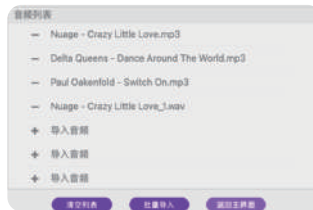
- 音频剪辑
- 音频分割
- 音频保存至音频列表
- 音频另存为



此区域分别包含以上4种功能操作，使用方式与“b软件界面音轨Track编辑台”中描述内容相同，需要注意的是，“保存至音频列表”与“音频另存为”中的音频文件为播放进度条所处的音频片段，非红色框选中的音频。播放进度条所处的音频片段名称会同步显示至“音轨Track 1走带控制区域”的上方。

#### e. 音频列表

音频剪辑操作过程中“音频保存至音频列表”的音频文件将自动存储至此处，也可通过点击单排左侧“+”从本机文件夹中导入。导入完成的音频文件可鼠标左键选中，选中的文件会显示橙色字体，长按拖拽至“打击垫音频灯光分配区域”的8\*8网格矩阵中进行分配。被选中的文件也可通过鼠标右键弹窗进行播放、删除、重命名的操作。播放过程中点击“音频列表”以外任意区域可取消播放。



#### f. 批量功能与返回主菜单

- 清空列表

单击“清空列表”选项，可清除当前所有音频列表中保存的音频文件，已被分配至“打击垫音频灯光分配区域”的8\*8网格矩阵的音频文件，仍存储在网格矩阵中。



- 批量导入

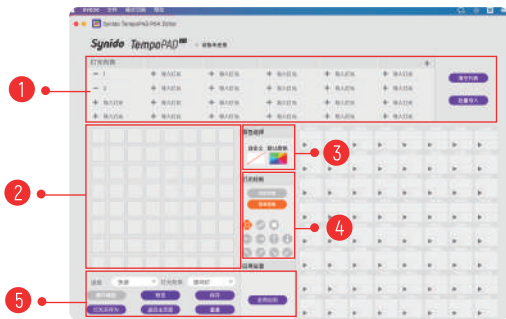
单击“批量导入”选项，会弹出文件管理器，根据文件管理器提示多选需要导入的音频文件，可批量导入至“音频列表”中。

- 返回主界面

单击“返回主界面”选项，会返回至Easy模式主界面。

## B.灯光绘制模块

### a.软件界面



- 1 灯光列表与批量功能;
- 2 灯光绘制区域;
- 3 灯光颜色选择;
- 4 绘制方式选择;
- 5 功能选择;

### b.灯光颜色选择

灯光绘制画笔颜色有两个模式可供选择，“自定义”模式与“默认颜色”模式。

“自定义”模式可任意定义灯光绘制画笔颜色，单击“自定义”模块，“默认颜色”模式会处于禁止状态，系统弹窗颜色选择器，根据弹窗页面选择自己所需的画笔颜色即可。

“默认颜色”模式的灯光绘制画笔颜色不可进行更改，单击“默认颜色”模块，“自定义”模式会处于禁止状态，默认有7个颜色：黄、橙、绿、蓝、紫、粉、红，灯光绘制的过程中，根据绘制轨迹经过的方格数量，按顺序依次进行显示。



### c.绘制方式选择

#### 1.自由绘制

自由绘制状态下，可随意拖动鼠标画笔在“灯光绘制区域”内进行任意的图案绘制，绘制画笔颜色根据前文“b)灯光颜色选择”进行定义。具体操作程序为：鼠标左键单击“自由绘制”模块，此模块图标会以橙色背景显示，代表当前选择的为“自由绘制”模式，鼠标光标移至“灯光绘制区域”内长按鼠标左键进行滑动，此时鼠标光标将被模拟为一支画笔，画笔经过的8\*8矩阵的方格将被填充颜色。

注：鼠标单击方格无法填充颜色，需在此方格中移动光标。



## 2.简单图案

简单图案状态下，不可拖动鼠标画笔在“灯光绘制区域”内进行图案绘制，仅可使用预置的11种灯光图案，含有3种固定样式图案与8种可组合样式图案；3种固定样式图案分别为：灯光扩散、波浪、单色灯。



**灯光扩散：**颜色选择为“自定义”模式时，灯光将以自定义的单一颜色，以敲击触发的打击垫方格为中心，向四周蔓延扩散。

颜色选择为“默认颜色”模式时，灯光将以“默认颜色”中定义的7种颜色，以敲击触发的打击垫方格为中心，依次向四周蔓延扩散。



**波浪：**颜色选择为“自定义”模式时，灯光将以自定义的单一颜色，从8\*8矩阵左下角向右上角方向进行滚动。

颜色选择为“默认颜色”模式时，灯光将以“默认颜色”中定义的7种颜色依次排列，从8\*8矩阵左下角向右上角方向进行滚动。



**单色灯：**单色灯只可选择灯光为“自定义”模式，灯光将以自定义的单一颜色，以敲击触发的打击垫方格瞬时点亮。单色灯模式时灯光速度与灯光效果不起作用，不可选。



8种可组合样式图案，他们以直线型的图案进行显示，仅方向不同；8种图案的方向分别为：向左、向右、向上、向下、左上斜角、右上斜角、左下斜角、右下斜角。8种图案可进行多选自由搭配。

颜色选择为“自定义”模式时，灯光将以自定义的单一颜色，以敲击触发的打击垫方格为中心，按选择的一个或多个方向直线显示灯光。

颜色选择为“默认颜色”模式时，灯光将以“默认颜色”中定义的7种颜色依次排列，以敲击触发的打击垫方格为中心，按选择的一个或多个方向直线显示灯光



#### d.灯光效果设置

灯光效果设置中可对“自由绘制”与“简单图案”的灯光图形进行显示方式与速度的定义。

**1.跑马灯：**灯光将以“自由绘制”中画笔绘制的运动轨迹，或“简单图案”中所预置定义的运动方式进行跑动展示。

**2.静态：**灯光将以“自由绘制”中绘制的图形，或“简单图案”中所预置定义的运动方向进行静态展示。

速度选择仅作用于“跑马灯”模式，有三种速度可供选择，分别为：缓慢、中等、快速，它们代表灯光运动的速度。



#### e.功能选择

**1.循环播放：**默认为关闭，鼠标左键单击开启后背景为橙色，开启后打开预览功能灯光将在“灯光绘制区域”中循环进行播放显示，若接入Synido TempoPAD Z-1，也将同步展示于设备中，此时关闭“循环播放”可关闭灯光。保存后的灯光文件也将为循环形式。

**2.预览：**鼠标左键单击“预览”功能后，“自由绘制”或“简单图案”中定义的灯光图案将在“灯光绘制区域”中进行播放显示，若接入Synido TempoPAD Z-1，也将同步展示于设备中。

**3.保存：**鼠标左键单击“保存”功能后，“自由绘制”或“简单图案”中定义的灯光图案将会存储至“灯光列表”中。

**4.灯光另存为：**鼠标左键单击“灯光另存为”功能后，会弹出文件管理器，根据文件管理器提示自定义名称与位置，将“自由绘制”或“简单图案”中定义的灯光图案当前存储至本机。

**5.返回主页面：**鼠标左键单击“返回主页面”功能后，会返回至Easy模式主界面。

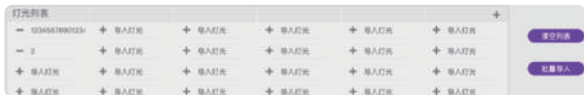
**6.重置：**鼠标左键单击“重置”功能后，当前自由绘制完成的图案将被清空。

**7.全局应用：**鼠标左键单击“全局应用”功能后，“自由绘制”或“简单图案”中定义的灯光图案将赋予分配至“打击垫音频灯光分配区域”的8\*8网格矩阵的64个区块方格中。



#### f.灯光列表与批量功能

灯光绘制操作过程中“保存”的灯光文件将自动存储至此处，也可通过点击单排左侧“+”从本机文件夹中导入。导入完成的灯光文件可鼠标左键选中，选中的文件会显示橙色字体，长按拖拽至“打击垫音频灯光分配区域”的8\*8网格矩阵中进行分配。被选中的文件也可通过鼠标右键弹窗进行播放、删除、重命名的操作。播放过程中点击“灯光列表”以外任意区域可取消播放。



### • 清空列表

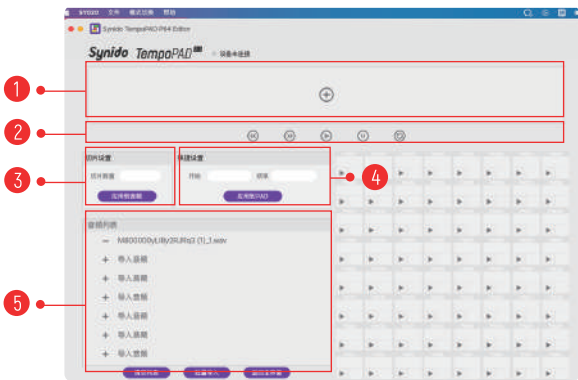
单击“清空列表”选项，可清除当前所有音频列表中保存的灯光文件，已被分配至“打击垫音频灯光分配区域”的8\*8网格矩阵的灯光文件，仍储存在网格矩阵中。

### • 批量导入

单击“批量导入”选项，会弹窗文件管理器，根据文件管理器提示多选需要导入的灯光文件，可批量导入至“灯光列表”中。

## C. 快速切片模块

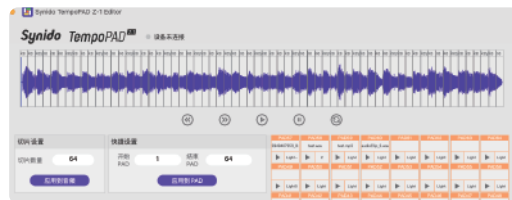
### a. 软件界面



- ① 音轨Track 编辑台；
- ② 音轨Track 走带控制区域；
- ③ 音频切片定义区域；
- ④ 切片快捷设置区域；
- ⑤ 音频列表与批量功能；

### b. 音频快速切片

“音轨Track 编辑台”中导入的音频将按定义的切片数量等分进行切割，分割为对应数量的音频片段，可定义的切片数量数值为“2 - 64”区间内。具体操作程序为：鼠标左键单击“切片数量”输入框，在框中输入想切片的数量值，然后单击“应用到音频”，此时“音轨Track 编辑台”中的波形图已被等分切割为对应的数量；此时切割完成后也可输入数值进行更改，重新切割。



### c. 快速应用至PAD

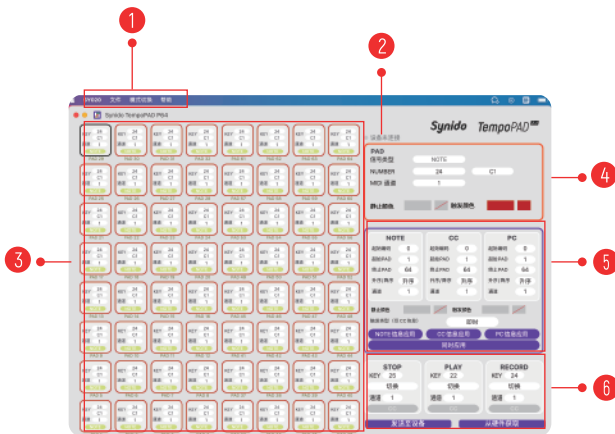
音频切片完成后，可快速将切片音频片段赋予分配至“打击垫音频灯光分配区域”的8\*8网格矩阵的64个区块方格中，根据切片数量可自定义需要赋予分配的PAD区块范围，范围以PAD1 - PAD64位置号顺序进行排列，“开始”为起始位置号的PAD，“结束”为结束位置号的PAD，定义完成后单击“应用到PAD”，此时等分切割的音频片段将按顺序依次存储至定义的PAD中。



例：已将音频切割为50份，“开始”PAD位置定义为1，“结束”PAD位置定义为34，此时音频片段中按时间轴顺序前34份音频片段将被依次分配至PAD1 - PAD34中。若“开始”PAD位置定义为1，“结束”PAD位置定义为64，此时音频片段中按时间轴顺序所有的50份音频片段将被依次分配至PAD1 - PAD50中，PAD51 - PAD64为空白。

### 三.自定义模式

#### 1.软件界面



- ① 菜单栏;
- ② 设备连接状态提示;
- ③ PAD信息展示区域;
- ④ 参数编辑区域;
- ⑤ 快速布局区域;
- ⑥ 走带按键区域;

#### 2.文件保存/打开

已设置好的PAD MIDI参数信息，可通过文件保存选项进行存储，存储的文件为.csm后缀格式。用户自行存储或接收分享的.csm格式文件都可在Custom模式下直接打开读取，.csm格式文件内的参数信息将赋予覆盖至“PAD信息展示区域”。

注意：在当前文件进行编辑修改的信息无法直接存储至原文件，需重新命名保存。



菜单栏的功能有：打开、另存为、发送到硬件、从硬件获取、恢复默认值；

打开：读取一个参数配置文件。

另存为：将当前参数配置保存成新的预设定文件，文件以.csm后缀保存。

发送到硬件：将当前参数配置发送到TempoPAD Z-1

从硬件获取：从TempoPAD Z-1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。

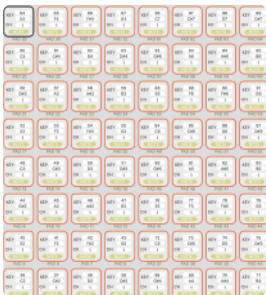
### 3. 模式切换

工作模式（Easy模式/Custom模式）选择完成后，已载入对应工作模式界面，若需使用另一工作模式，可在菜单栏“模式切换”选项中进行模式切换。



### 4. PAD信息显示区域

1. PAD内的MIDI事件信息只做展示，不可直接进行参数修改。
2. MIDI事件类型以不同的颜色标签进行展示，标签颜色对应关系分别为：  
NOTE信息 — 黄色，CC信息 — 绿色，PC信息 — 蓝色。
3. NOTE信息内含有：NOTE编码、对应音符名、通道信息。
4. CC信息内含有：CC编码、触发类型、通道信息。
5. PC信息内含有：PC编码、通道信息。
6. PAD边框颜色代表当前打击垫被设置的触发背光颜色（触发颜色）。
7. PAD被选中时边框颜色为黑色。



### 5. 参数编辑区域

鼠标左键单击“PAD信息显示区域”中任一PAD，可对当前选择的PAD进行参数编辑，“参数编辑区域”顶部会同步显示选中的PAD位置号“PAD1 - PAD64”。



(1).信号类型：三种MIDI信号可通过下拉选框进行选择，NOTE、CC、PC。

(2).Number：MIDI信息编码可输入0 - 127的参数值；选择NOTE信息输入时，右侧会同步显示NOTE编码对应的音符名。单击音符名框，将弹窗C-1 至C9所有音符供选择，选择完成后左侧编码也将随之发生变化。



(3).MIDI通道：MIDI信息通道选择，选择范围为1 - 16。

(4).触发类型：选择CC信息输入时，可选择其触发类型为“即时”或“切换”，“即时”功能模式下：按下下一个按键时发送为127开启的事件，松开按键时发送值为0关闭的事件；“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开启和值为0关闭的事件。





(5).**静止颜色**：打击垫PAD静止未触发状态时常亮的背光颜色，鼠标左键单击左侧小色块打开RGB颜色编辑器，调整PAD静止状态下的背光颜色。鼠标左键单击右侧小色块可关闭打击垫PAD静止状态下的背光灯。

(6).**触发颜色**：打击垫PAD触发状态时点亮的背光颜色，鼠标左键单击左侧小色块打开RGB颜色编辑器，调整PAD触发状态下的背光颜色。鼠标左键单击右侧小色块可关闭打击垫PAD触发状态下的背光灯。

## 6.快速布局区域

PAD快速布局可统一进行Synido TempoPAD Z-1打击垫NOTE、CC、PC信息与背光颜色的设置。



(1).起始编码：MIDI信息起始的编码信息，输入范围为0 - 127。

(2).起始PAD / 终止PAD：“起始PAD”与“终止PAD”为作用于打击垫PAD的范围，分别为开始的PAD位置号与结束的PAD位置号。

(3).升序 / 降序：“升序”时起始编码将在“起始PAD / 终止PAD”设置的PAD作用范围内，依次递增一位；“降序”时起始编码将在“起始PAD / 终止PAD”设置的PAD作用范围内，依次递减一位。

(4).NOTE信息应用：只应用NOTE与颜色编辑栏设置参数信息。

(5).CC信息应用：只应用CC、颜色编辑与触发类型栏设置参数信息。

(6).PC信息应用：只应用PC与颜色编辑栏设置参数信息。

(7).同时应用：NOTE、CC、PC、颜色编辑与触发类型栏设置参数信息同时进行应用，若设置的PAD位置出现冲突，将按PC信息 > CC信息 > NOTE信息的优先级进行设置。

## 7.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，在打开的对话框中点击“固件升级”；



## 产品规格

产品型号: TempoPADZ-1	产品尺寸: 261.5*234.6*19.7mm
产品颜色: 黑+紫	产品材质: 塑料+硅胶
整机功耗: 2.5W	产品重量: 815g

## 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：

Synido小助手 

工作时间：

10:00-19:00(周一至周五)



## 附录

### 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)	