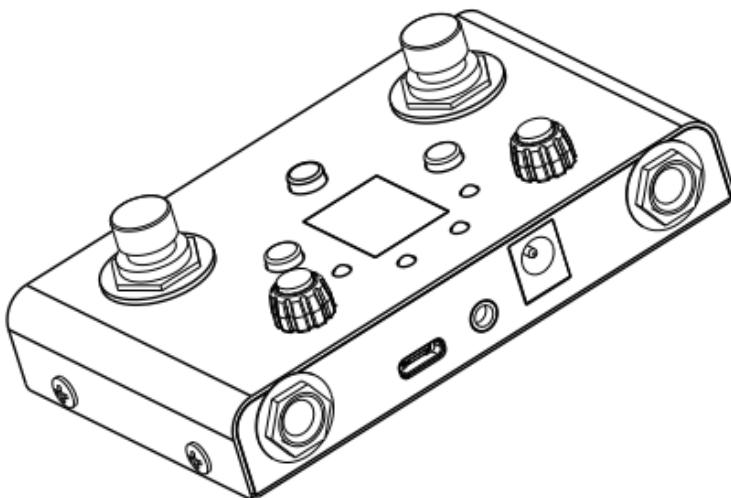


# User Manual

## LOST TEMPO V2

Drum & Looper Effect Pedal



Product Information

## EN Preface

Thank you for purchasing our Drum & Looper Effect Pedal. This is an audio workstation that integrates multiple functional modules such as drum, looper, tuner, etc., it will bring a richer expression to your performance and practice! Here is the introduction of this practical and easy-to-operate effect pedal.

## EN Attentions

### ■ The power supply:

Please use 9V(+/-10%) adapter (negative inside and positive outside), otherwise it may cause equipment damage. Please unplug the power when not in use or during thunderstorm weather.

### ■ The connection:

Be sure to turn off the power of related equipment before connecting or disconnecting the device.

### ■ The electrical interference:

The electromagnetic wave of radio, television and other equipment may cause interference to the use of equipment, so please try to stay away from radio, television and other equipment.

### ■ The location:

To avoid deformation, discoloration, or other serious damage, do not expose this unit to the following conditions:

- a. Heat sources
- b. Magnetic fields
- c. Sunlight
- d. High temperature or moist district
- e. Excessively dusty or dirty locations
- f. Strong vibrations or shocks

### I.Drum

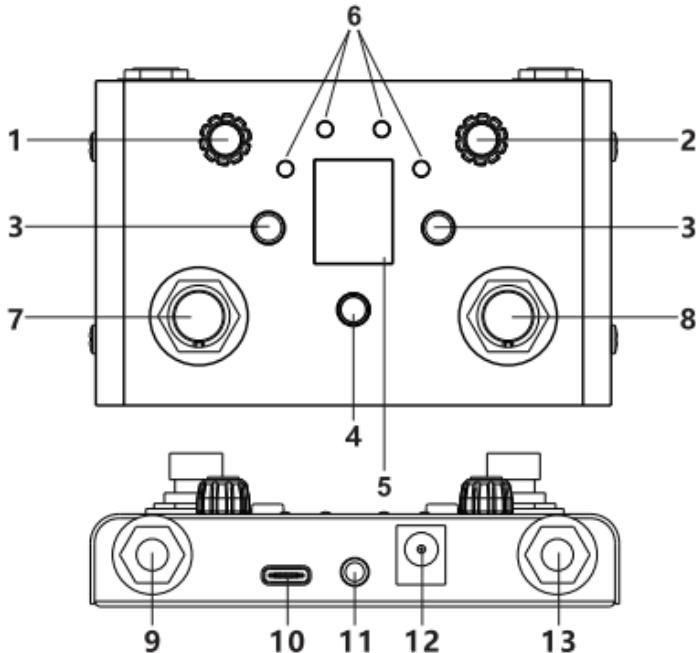
- It contains 30 types of drums, support customizing drum, editing drum and saving drum by APP in real time,etc.
- It contains common types of rhythm, 4/4, 3/4, 6/8, etc., which can be customized and edited.
- You can use the TAP button to change the speed of DRUM, you also can use the left or right button to fine-tuning the value of speed. You can use Footswitch to play/stop the DRUM, it's convenient and understandability to operate.

### II.Lopper

- 4 loops can be stored, the total recording time is up to 11 minutes.
- The recording time of single loop is up to 5 minutes.
- Each loop support unlimited overdub.
- Each loop can undo and redo last layer audio unlimited times.
- Support using USB cable to export/import WAV audio files from computer.
- One footswitch to control all LOOP functions: record, play, stop, overdub, undo, redo, etc.

### III.Tuner

- High precision tuner.
- For note names with sharp/flat signs, the system defaults only to use # (sharp sign) to indicate.



### **1. LOOP knob and LOOP indicator**

- LOOP knob: Adjust the playback volume of LOOP.
- LOOP indicator: See Table 1 below.

### **2. DRUM knob and DRUM indicator**

- DRUM knob: Adjust the DRUM volume.
- DRUM indicator: Please look the introduction of DRUM indicator in following "Function Module".

### **3. Left and right buttons**

- Click the left/right button to select drums, a total of 30 drums. When the speed value is displayed on the display screen, you can use the button to fine-tune the speed. But you can't fine-tune the speed if the LOOP already have music, you can't fine-tune the speed when recording either.
- Hold the left/right button to select a loop, a total of 4 loops.

- Click the left and right buttons at the same time to turn on the Ready-record function, the current LED will be flashing fast, and the LOOP recording will start automatically after playing your instrument.
- Hold the left and right buttons at the same time to enter the TUNER mode.

#### **4. The TAP button**

- If the DRUM indicator is off, you can click the TAP button to start the SYNC function. Meanwhile, the speed value will be displayed on the display screen. After each operation, the value will only be displayed for 5 seconds. SYNC function means the drum is waiting to play with the loop synchronously.
- You can use the TAP button to tapping the speed of DRUM, the speed value is displayed in real time on the display screen, and the flashing speed of DRUM-indicator corresponds to the current speed value.
- When the drum stopping, you can hold the TAP button to close the SYNC function and exit the speed-displaying interface automatically.
- You can click the TAP button to preview the drum speed value on the current LOOP.

#### **5. The display screen**

- When the LOOP stopping, the number of DRUM type is displayed: d01-d30; sometime the speed value 040-240 will be displayed on the display screen .
- In the state of the LOOP playing, recording, and overdubbing, the progress of the LOOP will be displaying, when the progress bar has gone a round, the audio has been played once.
- In the TUNER mode, show the note name.

#### **6.4 LED**

- In the LOOP mode, 4 LED represent 4 loops.
- Ready-Record function off: LED of the current LOOP lighting up.
- Ready-Record function on: LED of the current LOOP flashing fast.
- Ready to play the next loop: the LED of the selected LOOP flashing slowly.
- In the TUNER mode: show the pitch.

**7. LOOP footswitch:** Control the record, playback, stop, delete, overdub, undo, redo and other functions of the LOOP.

**8. DRUM footswitch:** Click the footswitch to play/stop the DRUM, Click twice to stop the LOOP and DRUM at the same time.

**9. 1/4" MONO audio input jack.**

**10. TYPE-C jack, support power supply and USB data transmission.**

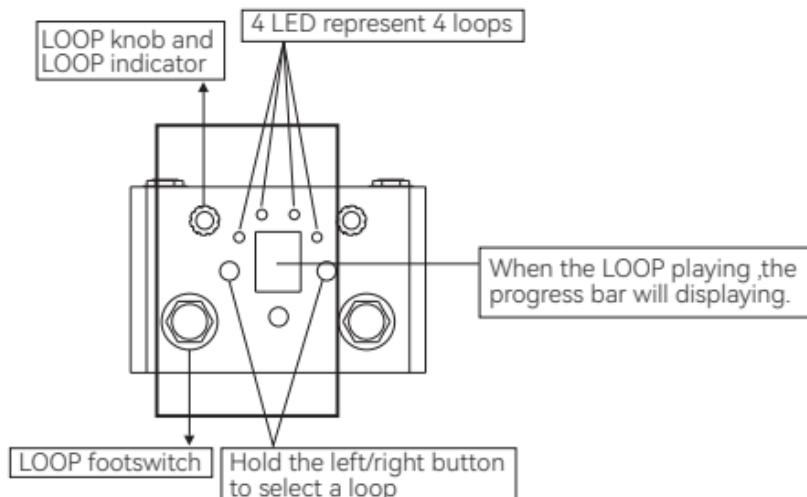
**11. Earphone output jack.**

**12. Power jack, please use 9V DC adapter (negative inside and positive outside).**

**13. 1/4" MONO audio output jack.**

## EN Function Module

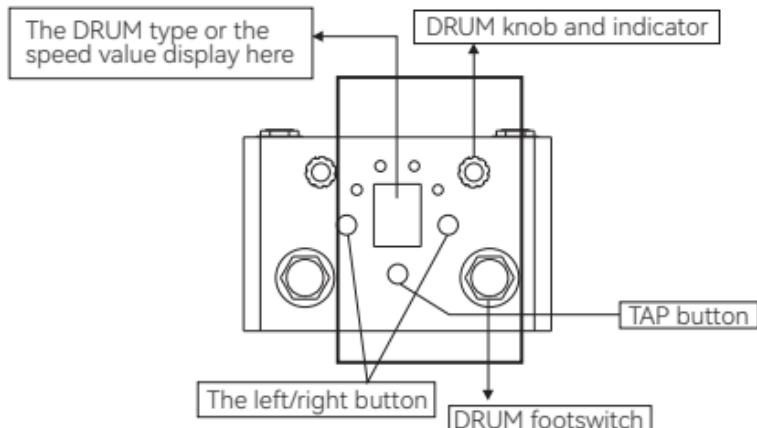
### I. Function of the LOOP module



Operation (the LOOP footswitch)	Function/state	LOOP indicator
Power on(no data)	Empty	None
Power on(with data)	Stop	Green flash slowly
Click footswitch(no data)	Record	Red light up
Click footswitch when recording/overdubbing	Play	Green light up,flash once each cycle
Click footswitch when playing	Overdub	Red light up,flash once each cycle
Hold footswitch when playing/recording/overdubbing	Undo/redo(last layer)	Red flash fast
Doubel click footswitch when playing/recording/overdubbing	Stop	Green flash slowly
Hold footswitch when stopping	Delete	None
Click footswitch when recording first layer with drum	Recording is going to end	Red flash fast

**Table 1**

## II.Function of DRUM module



## 1. DRUM indicator:

- **Turning off:** DRUM stopping.
- **Red flashing:** DRUM stopping, SYNC function is turning on, the drum is waiting to play with the LOOP synchronously, the flashing speed is the speed of the drum.
- **Green flashing:** DRUM is playing, when the first beat of each DRUM cycle, the indicator flash yellow once.

## 2.DRUM footswitch:

- Click the footswitch to play/stop the DRUM.
- Click twice to stop the LOOP and DRUM at the same time.

**3.The display screen:** The number of DRUM type d01-d30 is displayed on the screen; when you using the TAP button, you can preview the speed value here. Attention: d01-d30 is the DRUM types, 040-240 is the speed.

**4.TAP button:** you can use it to preview the DURM speed or tapping the speed you want, and you can use it to turn on/off the SYNC too.

Tap-Button using tips: Within the speed of 40-240, double-click the Tap Button to get a new speed, each double-click can get a new speed once. Look at the picture below:

The number of clicking	1	2	3	4	5	6	7	8
The times of speed value successfully obtained	↑	↑	↑	↑	1	2	3	4

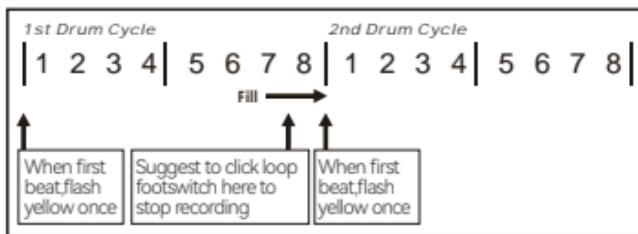
**5.Left and right button:** Click the left/right button to select the DRUM; When the speed value is displayed on the display screen, you can use the button to fine-tune the speed. But you can't fine-tune the speed if the LOOP already have music, you can't fine-tune the speed when recording either.

### III. Instruction of DRUM+LOOP

The DRUM will save the type and speed automatically in the current LOOP. But it's not real-time saving, it will save 12 seconds later, after every time you change the speed or type.

If DRUM is stopping, then you recording the first layer loop, after finish recording, DRUM will intelligently generate a suitable drum speed, based on the length of the music and the rhythmic beats of DRUM. However, in this case, only the matching of the sampling time between the two can be satisfied, it cannot automatically generate a perfect drum speed.

When you recording the first layer loop with the DRUM, you need to notice the DRUM cycle, the LOOP will fill in the cycle base on DRUM. Let's use 8-beats DRUM as an example, look at the picture below.



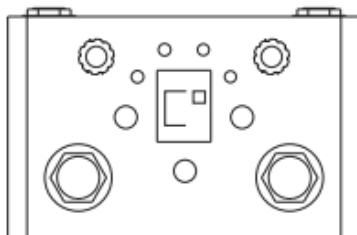
When you play the DRUM, I suggest you notice to the DRUM indicator. When the first beat of each DRUM cycle, DRUM indicator flash yellow once. It is recommended that you play the DRUM first, tune the drum you are satisfied with, and then record the first layer loop with DRUM. You will get a better experience by following this step.

If there's music in current LOOP, you can't fine-tune the speed, you can't Tap tempo in free speed, when you Tap tempo, the DRUM will generate a speed, this speed is near to your Tapping-tempo, also is adaptive for the loop-music.

Therefore, if the music time of current loop is too short, and the DRUM cycle time is too long. It's possible that the DRUM speed is too fast, so you can't change the speed. The effective speed of DRUM is 40-240.

#### IV. TUNER module

- Hold the left and right buttons at the same time to enter the TUNER mode. In this mode, the output is muted.
- The standard A's frequency is 440Hz (Do not support modification).
- When tuning the string, the note name will be displayed on the screen, and the 4 LED will show the pitch.
- For note names with sharp/flat signs, the system defaults only to use # (sharp sign) to indicate, for example, "C#" is displayed on the screen as "  ".



- When tuning the string, the two LED in the middle lighting up at the same time to indicate that the pitch of the string is close to the pitch of the note name on the screen. The two LED on the left lighting up at the same time to indicate that the pitch is lower than the note on the screen. The two LED on the right lighting up at the same time to indicate that the pitch is higher than the note name on the screen.

## EN Technical parameter

Input	Standard 1/4"jack-MONO/TS
Output	Standard 1/4"jack-MONO/TS
Output 2	Earphone output 1/8"jack
LOOP recording capacity	11 minutes
Single LOOP position recording capacity	5 minutes
Quantity of LOOP storage position	4
LOOP Sampling rate	44.1KHz/24bit 
Power supply 1	DC9V≥300mA
Power supply 2	USB 5V≥300mA
Working current	90mA(DC 9V),125mA(USB 5V)
Input impedance	1M ohm
Output impedance	100 ohm
USB connection Type	Type-C
Accessory	USB cableX1

Disclaimer:Specifications are subject to change without notice.

- 1. Please scan the code to download the software.

**Attention:**

If your phone is ISO, you can download "**Cubesuite**" from APP STORE.



If your phone is Android, you can use the phone browser to scan the code.

- 2. You can go to company website, seek out the "**Cubesuite**", then download it to your computer.

**● 3. Wireless BT connection tips:** In order to avoid product by third party misoperation, the Wireless BT open connection time of this product is within 30 seconds after starting product. Customers who need to operate the APP should use APP to connect Looper Drum as soon as possible after starting product. The wireless BT function only supports mobile app communication and external pedal communication, BT music is not supported.

**● 4. APP using tips:** Download the Cubesuite, run the APP and click the "Scan nearby devices", then select the product to enter the operation interface. Now you can use APP to edit the 30 Drums.

**NOTE:**

The mobile APP can be used to manage the 30 Drums, use to edit, save, share, import/export, backup, and so on. It can also support OTA Upgrade and Restore the 30 factory drums rhythm.

The computer software is only used to manage 4 LOOP music.

## EN FCC Warning Statement

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### FCC Radiation Exposure Statement

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located for operating in conjunction with any other antenna or transmitter.

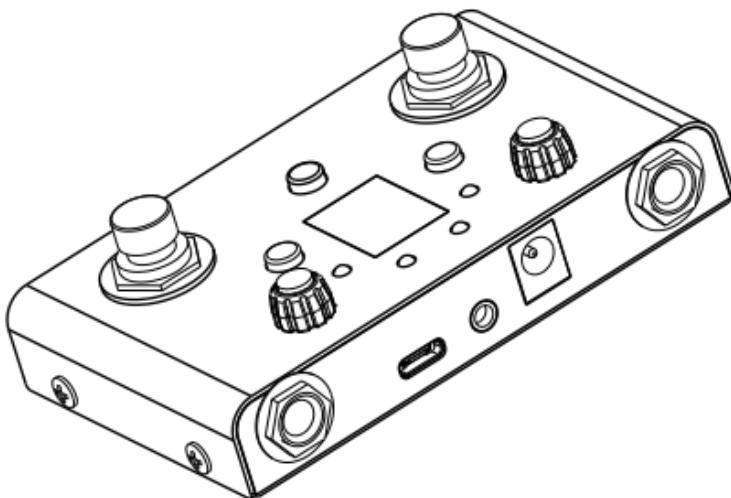
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

# 用户说明书

## LOST TEMPO V2

鼓机+乐句循环效果器



产品信息

## CN 前言

感谢您购买此款鼓机 + 乐句循环效果器。这是一款集节奏鼓机、循环录音、校音器等多种功能模块为一体的音频工作站，为您的表演和练习带来更丰富的体现！接下来为您介绍这款实用且操作便捷的效果器。

## CN 注意事项

### ■ 电源供应：

请使用正确的电源适配器，适配器使用内负外正的9V电源，否则可能会导致设备损坏。在不需要使用本设备或雷雨天气时请拔下电源。

### ■ 连接：

当连接或断开设备前，请先关闭其他相关设备。

### ■ 电器干扰：

收音机、电视机等电磁波可能会对设备使用造成干扰，因此请尽量远离收音机和电视机等设备。

### ■ 放置场所：

为防止变形、变色和其他方面等对产品造成损坏，请避免以下情况：

- a. 热源
- b. 磁场
- c. 阳光直射
- d. 高温潮湿
- e. 多尘或不洁地方
- f. 强烈震荡或摇晃

## 一、鼓机

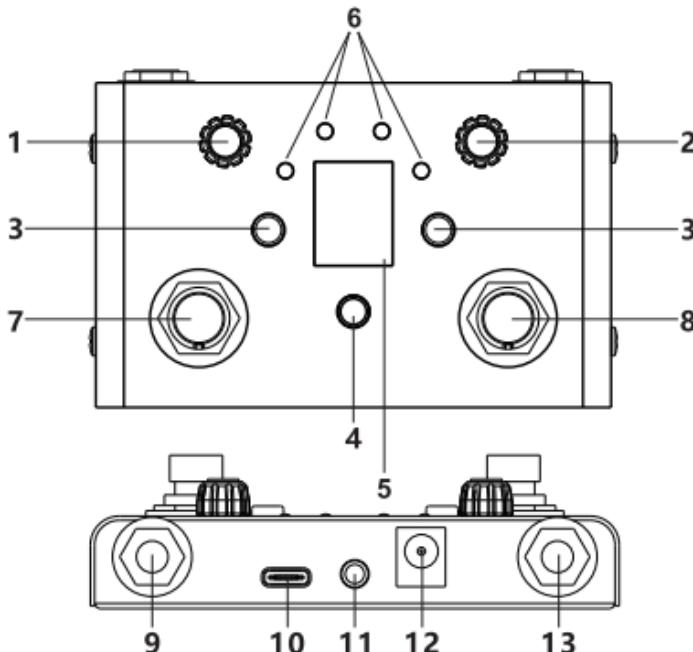
- 内含30个鼓，支持APP自定义鼓、编辑鼓、保存鼓等等。
- 包含常用节拍类型，4/4、3/4、6/8拍等等，可自定义编辑。
- 支持TAP打拍定义鼓速度，也支持数值微调速度；一键开/关鼓机，操作便捷易懂。

## 二、乐句循环录音

- 4个LOOP歌曲储存位置，总录音时长不超过11分钟。
- 单个储存位置最大录音时长为5分钟。
- 每一首歌可以实现无限叠加音轨录音。
- 每一首歌可无限次数重做或撤销最后一次叠加录制的音轨。
- 支持电脑USB导出/导入WAV格式标准音频文件。
- 一个踩钉控制所有的录音功能：录音、播放、停止、叠加、撤销、重做、删除等等。

## 三、校音器

- 高灵敏度调音器。
- 音高符号标记仅带#（升号）。



## 1. LOOP旋钮和LOOP状态灯

- **LOOP旋钮**: 调整LOOP播放音量。
- **LOOP状态灯功能介绍**: 请看下表1。

## 2. DRUM旋钮和DRUM状态灯

- **DRUM旋钮**: 调整DRUM播放音量。
- **DRUM状态灯功能介绍**: 请看后面“功能模块介绍”。

## 3. 左右按键

- 短按左/右按键选择鼓，一共30个可供选择；在速度数值显示出来时，短按左/右按键可用于微调鼓速度（在当前LOOP位置已有音频时或者录音进行时候，不支持微调速度）。
- 长按左/右按键选择LOOP，一共4个LOOP。
- 同时短按一次左右按键开启“预备录音”功能，对应的LOOP位置的灯快闪，即弹奏后自动启动LOOP录音。
- 同时长按左右键进入调音模式。

## 4.TAP按键

- 在DRUM状态灯熄灭时，短按一次可开启SYNC，也会在显示屏上显示出速度值，每次操作完毕后数值只持续显示5秒。SYNC开启后，LOOP开始播放时，鼓也会自动开启。
- 短按多次可Tapping 自定义速度，速度值会在显示屏上实时显示，DRUM状态灯闪烁的速度与当前的速度值相对应。
- 在鼓停止播放时，长按TAP按键可关闭SYNC，并且自动退出速度显示界面，恢复到鼓类型编号显示界面。
- 短按一次TAP按键，在5秒内可预览目前LOOP位置上的鼓速度值。

## 5.显示屏

- LOOP暂停播放时显示鼓类型编号d01-d30，或显示速度值040-240。
- LOOP播放、录音、叠加状态下，显示LOOP进度，走完一圈表示播完一遍。
- TUNER模式下，显示音名。

## 6.4个LED灯

- LOOP模式下，4个灯代表4个LOOP储存位置。
- 预备录音功能关闭时：对应的LOOP位置的灯常亮。
- 预备录音功能开启时：对应的LOOP位置的灯快闪。
- 准备播放下一个LOOP：选中的LOOP位置的灯慢闪。
- TUNER模式下：显示音准。

**7LOOP踩钉：**控制LOOP模块的录音、播放、停止、删除、叠加、撤销、重做等功能。

**8.DRUM踩钉：**单踩DRUM踩钉可播放/停止鼓机，双踩DRUM踩钉可同时停止LOOP和鼓。

**9. 1/4”单声道音频输入接口。**

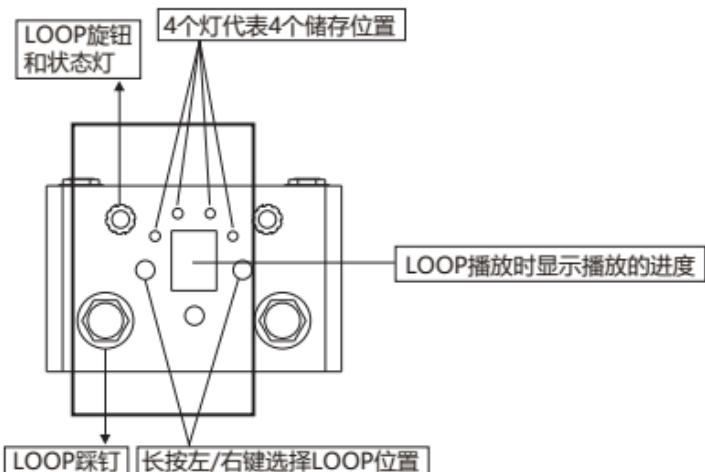
**10.TYPE-C接口，支持供电以及USB数据传输。**

**11. 耳机输出接口。**

**12. 电源接口，使用9V直流变压器（外正内负）。**

**13. 1/4”单声道音频输出接口。**

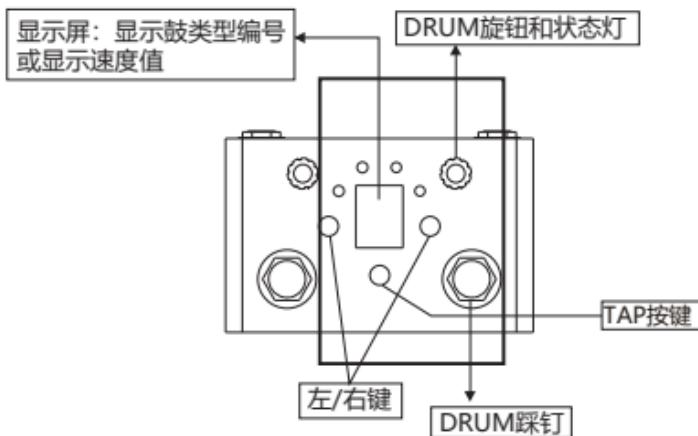
## 一. LOOP模块的功能操作



操作(LOOP 踩钉)	功能/状态	LOOP状态灯
开机(无数据时)	存储空	熄灭 (没有显示)
开机(有数据时)	停止	绿灯慢闪
单踩脚钉(无数据时)	录音	红灯亮
在录音 / 叠加状态下, 单踩脚钉	播放	绿灯亮, 一个循环闪1次
在播放状态下单踩脚钉	叠加	红灯亮, 一个循环闪1次
在录音 / 播放 / 叠加状态下, 长踩脚钉	撤销/重做 (最后一次录音数据)	红灯快闪
在录音 / 播放 / 叠加状态下, 双踩脚钉	停止	绿灯慢闪
在停止状态下, 长踩脚钉	删除数据	熄灭 (没有显示)
鼓开启后录第一轨时, 单踩脚钉	录音即将结束	红灯快闪

(表1)

## 二.DRUM模块的功能介绍



### 1.DRUM状态灯:

- **熄灭:** 鼓停止播放。
- **红灯闪烁:** 鼓停止播放, SYNC同步功能已开启, LOOP开始播放时鼓也会自动开启, 灯闪烁的速度就是鼓的播放速度。
- **绿灯闪烁:** 鼓正在播放, 每次鼓循环的第一拍, 状态灯会黄色闪一次。

### 2.DRUM踩钉:

- 单踩DRUM踩钉可播放/停止鼓机。
- 双踩DRUM踩钉可同时停止LOOP和鼓。

**3.显示屏:** 显示鼓类型编号: d01-d30, 在操作TAP按键时候会显示速度值。请注意: 显示屏上显示"01-d30"时, 为鼓节奏型编号, 当显示屏上显示"040-240"时, 为速度值。

**4.TAP按键:** 可用于预览当前LOOP位置的鼓速度值, 或者用于TAP打拍获取您心目中的速度, 也可用于开启/关闭SYNC功能(请参考第4页对TAP按键的介绍)。

打点设速功能指南: 在40-240拍每分钟的速度范围内连续短按两次TAP按键即可完成设速, 每按两次TAP按键即可获取一次速度值, 如下图所示:

TAP按键打拍次数	1	2	3	4	5	6	7	8
速度值成功获取次数	↑	↑	↑	↑				
	1	2	3	4				

**5.左右按键：**短按左/右按键选择鼓，一共30个可供选择；在速度数值显示出来时，短按左/右按键可用于微调鼓速度（在当前LOOP位置已有音频时或者录音进行时候，不支持微调速度）。

### 三.DRUM+LOOP模块的操作指南

在任意一个LOOP储存位置下，无论该位置下有没有音频，DRUM都会自动保存节奏型和速度。在操作DRUM完成后，维持节奏型和速度不变，12秒后机器会自动保存。但是，一旦节奏型或者速度被修改，机器会再完成一次“12秒后保存”。

本机的DRUM具备辅助对齐音乐的功能，在未开鼓机时进行LOOP的第一轨录音，录音完毕后，本机会根据DRUM的节奏型和LOOP音频的录音时长，智能生成一个合适LOOP音频的鼓速度。但是此情况下，只能满足两者采样时长的匹配，并未能智能获取到最理想的鼓速度。

本机也具备智能填充拍数的功能。在播放鼓机时候开启LOOP的第一轨录音，需要遵循鼓机采样的拍数。当您单踩LOOP踩钉结束录音时，会继续录音直至DRUM采样循环结束，LOOP会根据DRUM采样循环的周期性，自动填充节拍数。以2小节8拍的鼓节奏型采样为例，请看下图所示：



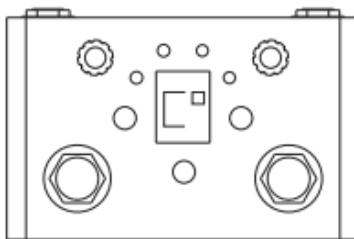
建议用户操作时，请注意观察DRUM状态灯，每次鼓采样循环的第一拍，状态灯固定为黄色。而且建议用户先播放鼓机，调整出满意的鼓声，再开启LOOP的第一层录音，会获得更好的体验感。

如果当前LOOP储存位置上有音频，则不能微调鼓速度，Tap按键无法打拍自由定义鼓速度，当您用TAP按键打拍时，机器会智能生成一个跟实际打拍速度最接近的，也合适LOOP音频的速度。

因此，如果当前储存位置下的LOOP音频太短，但是匹配的DRUM采样时长较长的话，有可能会出现速度过快而且无法改变的情况（本机有效速度为40-240拍/分）。

#### 四.校音模块

- 同时长按左右按键进入校音模式，该模式下输出为静音。
- 基准A音的频率默认为440Hz（不支持修改）。
- 在调校琴弦时，显示屏上显示音名，4个LED灯显示音准。
- 对于带升/降号的音名，系统默认只用#（升号）来表示，例如“C#”在显示屏上显示方式为“”。



- 在调校琴弦时，中间两个灯同时亮起表示弦的音高接近显示屏上的音名音高，左边两个灯同时亮起表示低于显示屏上的音名音高，右边两个灯同时亮起表示高于显示屏上的音名音高。

## CN 技术参数

输入	标准1/4" 单声道接口/TS
输出	标准1/4" 单声道接口/TS
输出2	标准1/8" 耳机输出接口
LOOP总录音时长	可达11分钟
LOOP单个储存位置录音时长	可达5分钟
LOOP储存位置	4个
LOOP采样率	44.1KHz/24bit
电源供给1	DC9V≥300mA电源适配器 (内负外正)
电源供给2	USB 5V≥300mA电源适配器
工作电流	90mA(DC 9V)、125mA(USB 5V)
输入阻抗	1M ohm
输出阻抗	100 ohm
USB连接类型	Type-C
附件	USB数据线X1
修订	20240822

★免责声明:参数更新恕不另行通知。

- 1. 请扫以下二维码进行提示下载软件：

**注意：** IOS 系统也可进入 APP STORE 搜索“**Cubesuite**”进行下载，Android 系统可通过手机浏览器进行扫码提示下载。



- 2. 电脑软件可进入公司官网“[www.m-wave.com](http://www.m-wave.com)”首页，点击 Download，寻找Software栏目中的“**CubeSuite**”软件安装包进行下载即可。

**● 3. 无线BT连接指南：**为了避免产品在使用过程中被第三者误操作，本产品的无线BT开放连接时间为开机后的30秒内，请有需要操作APP的客户在产品开机后尽快用APP先行连接产品即可。无线 BT 功能仅支持手机 app 通讯和外接踏板通讯，不支持 BT 音乐播放。

**● 4. 鼓机APP连接步骤：**下载**Cubesuite**，打开软件后点击“扫描附近设备”，找到目前的产品，点击进入操作界面。即可用APP对产品的30个鼓节奏型进行编辑。

#### **注意：**

手机 APP 可用于管理 30 个鼓组，编辑、保存、分享、导入/导出、备份，等等功能，还可支持固件升级和恢复出厂鼓节奏型等等功能。

电脑软件仅用于管理 4 个LOOP 音频。