

FLAMMA

FF03

LOOP & DRUM

Owner's manual

Content

Precautions	01
Features	02
Panel Overview	03-06
Operation & Settings	07-16
Main Interface	07
Looper Setup	08
Looper Operation	09-13
Drummer Setup	14
Drummer Operation	15-16
DrumMachine & LooperSync Mode	17-18
Computer Data Management	19-20
Connecting to Computer via USB	19
Data Import	19
Data Export	20
Data Deletion	20
Specifications	21-22

Precautions

Please read this document carefully before using this product

Power Supply

Use the designated power adapter to connect this product. This product requires a 9V 200mA power adapter with an internal negative and external positive configuration. Using the wrong power supply may cause a short circuit and damage the device. Disconnect the power when the product is not in use for a long time.

It is recommended to use isolated power supply for the device, sharing power with another devices might cause unexpected noise.

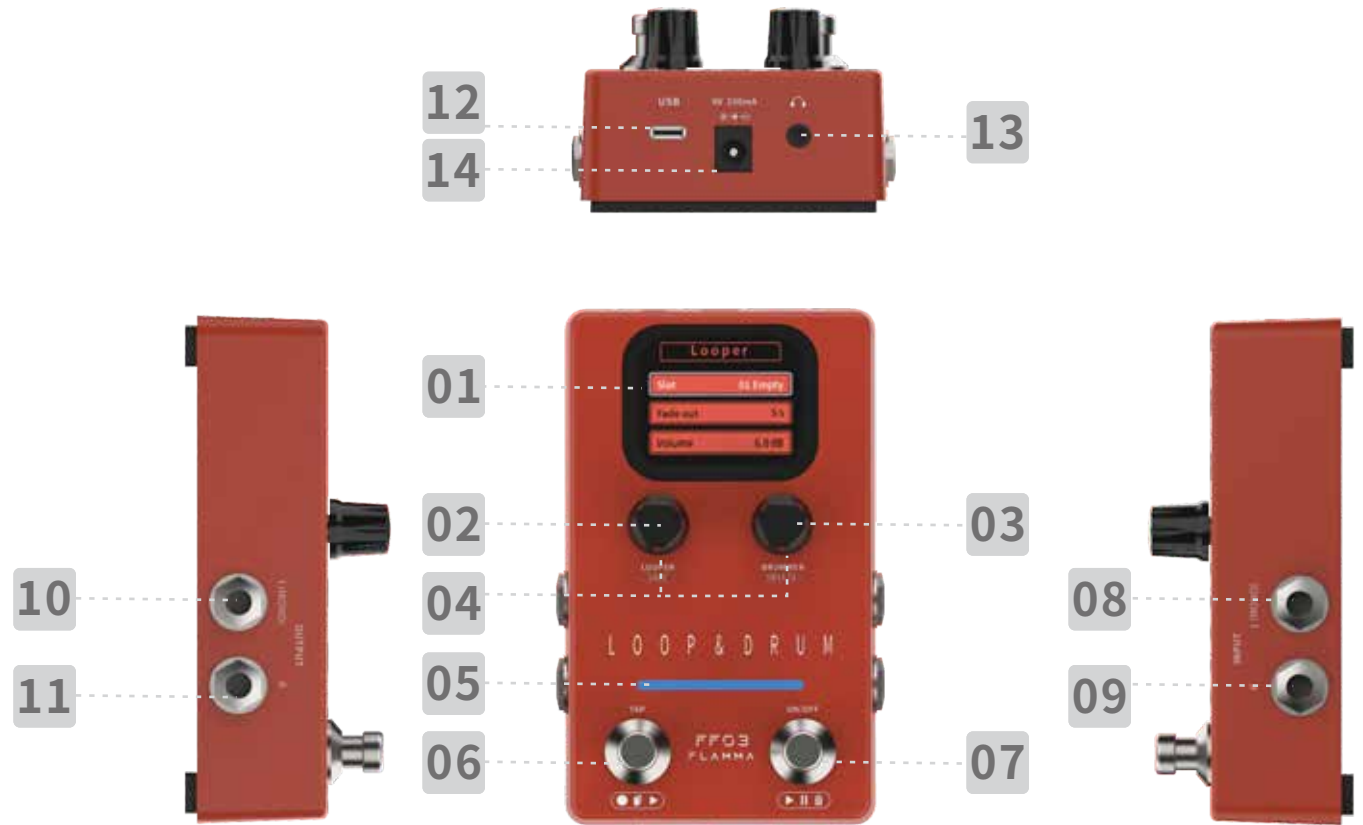
Safety Precautions

1. Please read this manual carefully.
2. Keep this manual for future reference.
3. Pay attention to all warnings.
4. Follow the instructions in the manual.
5. Do not place the device near water or in a humid environment.
6. Clean with a dry cloth.
7. Keep away from radios, televisions, or other devices that generate magnetic fields to avoid interference.
8. Do not operate switches and controls forcibly.
9. Do not allow paper scraps, metal objects, or other items to fall into the machine.
10. Do not drop or subject the machine to impact or excessive pressure.

Features

- 44.1kHz / 16-bit high-quality audio.
- Independent Looper & Drum Machine modules.
- Multi-color LED status indicators.
- 40 memory slots, up to 160 minutes total.
- Undo/Redo function lets you remove or restore your last overdub with ease.
- Fade Out feature ensures smooth, professional endings for loops and drum patterns.
- 11 music styles, each with 11 drum patterns, plus 11 metronome rhythms.
- Tap Tempo & count-in for precise looping.
- 1/8" stereo headphone output.
- USB connectivity for easy import, export, and management of audio files.

Panel Overview



01

Screen

Displays functional status information.

02

LOOPER Knob

- Press to switch to the Looper interface.
- Press in Looper or Setting interface to toggle between selected parameters.
- Rotate in Looper or Setting interface to adjust the value of the currently selected parameter.
- Press and hold for 1 second in Looper interface to save Looper data.

03

DRUMMER Knob

- Press to switch to the Drummer interface.
- Press in Drummer interface to toggle between selected parameters.
- Rotate in Drummer interface to adjust the value of the currently selected parameter.
- Rotate in Tap Tempo interface to adjust BPM value.
- Press and hold for 1 second in Looper interface to delete saved Looper data.

04

Simultaneously Press LOOPER + DRUMMER Knobs

- Press in Looper or Drummer interface to return to the main interface.
- Press in main interface to switch to Setting interface; press again to return to main interface.

05

LED Indicator

- In Drummer interface: indicates beat type and tempo of the currently selected drum pattern.
- In other interfaces: indicates Looper operation status.

06

Left Footswitch

- Step to execute Looper recording/overdubbing/playback.
- In Drummer interface: step twice or more to activate Tap Tempo function.

07

Right Footswitch

- Step to execute Looper playback/stop.
- In stopped state: step and hold for 1 second to clear track (unsaved temporary track data).
- In playback state: step and hold for 1 second to execute Undo/Redo function.

08

INPUT L (MONO) Jack

1/4" unbalanced left channel input (connect here for mono input; connect both L/R jacks for stereo input).

09

INPUT R Jack

¼" unbalanced right channel input.

10

OUTPUT L (MONO) Jack

¼" unbalanced left channel output (connect here for mono output; connect both L/R jacks for stereo output).

11

OUTPUT R Jack

¼" unbalanced right channel output.

12

Type-C USB Port

Connect to computer to import/export/delete Looper data.

13

Headphone Jack

⅛" stereo headphone output.

14

DC Power Jack

Power adapter interface (9V 200mA, center-negative).

Note: It is recommended to power this product with an independent power supply. Non-isolated power sources (such as daisy-chaining cables or non-isolated multi-pedal supplies) may introduce ground loop noise.

Operation & Settings

Main Interface



1

Looper Slot

Displays the current Looper preset location.

2

Looper Status

Shows the current operational and data status of the Looper.

3

Drum Tempo

Indicates the current playback speed (BPM) of the drum machine.

4

Drum Pattern

Displays the style category of the currently selected drum machine.

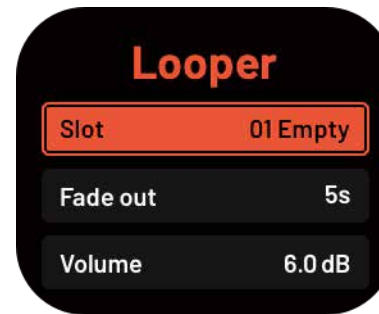
In Main Interface Mode

- Rotate the LOOPER Knob to switch between Looper preset slots (Slot 1-40).
- Rotate the DRUMMER Knob to cycle through the 11 available rhythm patterns within the current drum machine style.

Looper Setup

Press the LOOPER knob to enter the Looper setup menu.

In this interface, press or rotate the LOOPER knob to configure related parameters.



Slot

Selects the Looper preset slot (1-40). Empty indicates no audio data in the current slot, with the LED bar off; Stored indicates saved audio data in the slot, with the LED bar blinking slowly.

Fade Out

Enables or disables the fade-out function. Off disables the function, while 1s~5s enables it and sets the fade-out duration.

Volume

Adjusts the Looper playback volume. Range: $-\infty$ to 6 dB. Default: 0 dB (1:1 ratio).

After configuration, press both LOOPER + DRUMMER knobs simultaneously to return to the main interface.

Looper Operation

Looper Module Operations (Available in Main Interface & Looper Setup Interface)

Recording

1. Select an empty preset slot (marked as Empty).
2. Step on the Left Footswitch to begin recording the first track.
 - The LED bar will slowly scroll in red.
 - The Looper status on the main interface will display REC.

Overdub & Playback

- During recording, press the Left Footswitch to begin playback of the first Looper track while simultaneously starting overdub.
- The LED bar will scroll in purple.
- The Looper status on the main interface will display DUB.
- During recording, pressing the Right Footswitch will only play back the first Looper track without overdubbing.
- The LED bar will scroll in blue.
- The Looper status will display PLAY.
- While in DUB (overdub) mode, pressing either footswitch will stop overdubbing and switch to playback of the Looper track.
- In a non-empty track state, repeatedly pressing the Left Footswitch will toggle between DUB (overdub) and PLAY modes.

Undo/Redo Track

When two or more Looper tracks have been recorded, press and hold the Right Footswitch for 1 second during playback to activate the Undo function. The LED bar will briefly flash yellow rapidly, the last recorded track will be erased, and the Looper status on the main interface will display UNDO.

Press and hold the Right Footswitch for 1 second again to activate the Redo function. The LED bar will again briefly flash yellow rapidly, the erased track will be restored to playback, and the Looper status will display REDO.

Stop

- During playback, press the Right Footswitch to execute STOP. The Looper track will cease playback, the LED bar will slowly pulse white, and the Looper status on the main interface will display STOP.
- If the Fade Out function is enabled, pressing the Right Footswitch during playback will activate it. The Looper's playback volume will fade out naturally to complete silence before stopping. During this process, the Looper status on the main interface will display a blinking PLAY indicator, switching to STOP only after the track has completely silenced.
- During playback, quickly pressing the Right Footswitch twice will execute an immediate STOP, bypassing the fade-out effect.

Delete Track

To delete a track, use either of the following methods:

- **During playback:** Double-press and hold the Right Footswitch for 1 second.
- **During stop:** Press and hold the Right Footswitch for 1 second.

The LED bar will flash red rapidly and then turn off, indicating the track has been successfully deleted. The main interface will display EMPTY, confirming no audio data exists in the current preset slot.

Note: This method only deletes unsaved temporary track data in the current Looper slot. It cannot delete previously saved tracks.

Save/Delete Looper Data

To save Looper data

- 1.Ensure the Looper is in STOP status.
- 2.Press and hold the LOOPER Knob for 1 second.
- 3.Release when the Saved icon appears, confirming the data in the current slot has been saved.

After saving

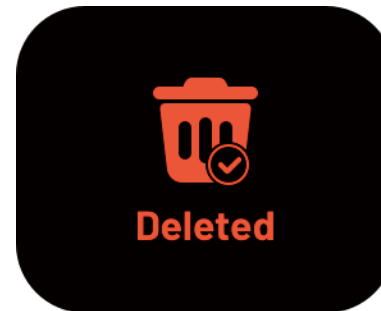
- In the Looper setup interface, the slot status will show Stored, indicating saved audio data is present.
- On the main interface, the Looper status remains STOP, with the LED bar pulsing slowly in white.



Note: The Undo/Redo function will be unavailable after saving unless new overdubs are recorded.

To delete saved Looper data

1. Select a slot marked Stored.
2. Press and hold the DRUMMER Knob for 1 second.
3. Release when the Deleted icon appears, confirming the Looper data in the current slot has been erased.



After deletion

- In the Looper setup interface, the slot status will revert to Empty, indicating no audio data is present.

Drummer Setup

Press the DRUMMER knob to enter the Drum Machine setup menu.
In this interface, press or rotate the DRUMMER knob to configure the relevant parameters.



Style

Select a drum machine style. Includes 11 drum kit styles plus a metronome module.

Tempo

Switch between the 11 rhythm patterns available for the selected drum style or metronome module.

Volume

Adjust the drum machine playback volume. Range: 0–100. Default: 100 (1:1 ratio).

After configuration, press both LOOPER + DRUMMER knobs simultaneously to return to the main interface.

Drummer Operation

Drum Machine Operations (Available in DRUMMER Setup Interface)

Playback/Stop

- Press the Right Footswitch to start or stop the drum machine.
- During playback, the LED bar flashes in red/blue according to the time signature and BPM of the selected rhythm pattern.
- When stopped, the LED bar flashes in white at the current BPM rate.

Drum Machine BPM Setting

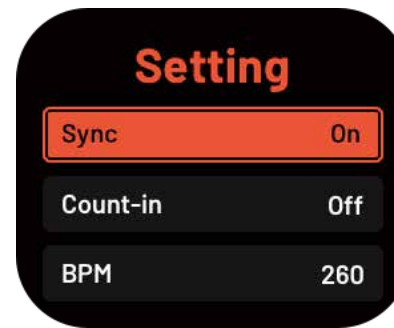
- Quickly press the Left Footswitch twice or more to activate Tap Tempo setting. The screen will temporarily display the current BPM value.
- In the BPM interface, you may also rotate the DRUMMER Knob to fine-tune the BPM value precisely.
- If no operation is performed in the BPM interface for 5 seconds, the system will automatically exit and return to the drum machine setup interface.



Note: The LOOPER setup interface and DRUMMER setup interface can be switched between by pressing the LOOPER knob or DRUMMER knob respectively.

Drum Machine & Looper Sync Mode

In Sync Mode, the Looper and drum machine operate synchronously, with quantization ensuring the Looper track length aligns with the drum pattern segments. While on the Main Interface, simultaneously press the LOOPER + DRUMMER knobs to enter the Settings interface. In this interface, press or rotate the LOOPER Knob to configure the relevant parameters.



Sync

Enables/disables synchronization between the drum machine and Looper.

Count-in

Turns the count-in metronome on/off. Allows selection of 1-bar or 2-bar duration.

BPM

Adjusts the playback speed of the drum machine (synchronized with the Tap Tempo function in the drum machine setup interface).

After configuration, simultaneously press the LOOPER + DRUMMER knobs to return to the main interface.

When Sync Mode is enabled

Pressing the Left Footswitch to record or the Right Footswitch to play will activate the corresponding Looper function, while the drum machine simultaneously starts playback from the beginning.

Pressing the Right Footswitch to execute STOP during playback will halt both the Looper and the drum machine simultaneously.

With Sync Mode active, when performing the first track recording on an Empty preset slot, pressing the Left Footswitch for overdubbing or the Right Footswitch for playback will trigger quantized alignment of the track based on a half-measure threshold. Using 4/4 time as an example:

- 1.If the footswitch is pressed on the 3rd beat of the 4th measure (exceeding the half-measure threshold), the Looper will delay until the 4th measure is complete before executing overdub or playback. The total Looper track length will be 4 full measures.
- 2.If the footswitch is pressed on the 1st beat of the 4th measure (within the half-measure threshold), the Looper will truncate the excess content in the 4th measure and immediately execute overdub or playback. The total Looper track length will be 3 full measures.

When the Count-in function is enabled, pressing the Left Footswitch to initiate first-track recording will trigger the drum machine to play a 1-bar or 2-bar count-in (the time signature of the count-in depends on the rhythm pattern of the currently selected drum kit or metronome). The Looper will begin recording only after the count-in playback is completed.

Computer Data Management

Connecting to Computer via USB

1. Use a USB cable to connect the FF03's USB port to your computer. Once connected, the FF03 will be temporarily unavailable for operation, and the screen will display "Device Connected" to indicate a successful link.
2. On Windows: Open "This PC";
On macOS: Open "Finder".
Locate and open the removable disk named "FF03".
3. Inside the disk, find and open the "WAVE" folder. The subfolders W01 to W40 inside correspond to the 40 Looper storage slots on the FF03 device.

Data Import

1. Open the subfolder corresponding to the desired Looper storage slot within the "WAVE" directory. If the subfolder is empty, it indicates no track data exists in that Looper slot.
2. Drag and drop or copy audio files (only 44.1kHz / 16-bit WAV stereo files are supported) into the target Looper slot's subfolder.
o After importing, rename the audio file to "RECXX", where "XX" corresponds to the Looper slot number (e.g., rename to "REC01" for slot W01).
3. Disconnect the USB cable to resume normal screen display. The imported slot will now show as containing data when selected.

Note: The Undo/Redo function will be unavailable for imported data unless new overdubs are recorded.

Data Export

1. Navigate to the "WAVE" folder and open the subfolder containing the audio data you wish to export.
2. Drag and copy the audio file(s) from the subfolder to your desired location on the computer to complete the export process.

Data Deletion

1. Open the subfolder containing existing audio data within the "WAVE" directory.
2. Delete the audio file(s) inside the subfolder to complete data removal.
3. After disconnecting the USB cable, the corresponding Looper slot will display as "Empty".

Notes

- 1. If an imported audio file exceeds 4 minutes in duration, the FF03 will truncate and loop only the first 4 minutes during playback. Content beyond 4 minutes will be permanently removed.**
- 2. Imported files that do not meet the format requirements (44.1kHz/16-bit WAV stereo) or are not renamed correctly (RECXX) will be automatically deleted, and the import will be invalidated.**

Specifications

Specifications	
Item	Description
Storage Slots	40
Max Recording Duration	4 minutes per slot
Max Overdub Count	Unlimited
Sample Rate	44.1kHz
Bit Depth	16 bit
Import/Export File Format	WAV (Stereo)
Drum Patterns	121 drum rhythms + 11 metronome patterns
Dynamic Range	+5.74dBu
Frequency Response	20Hz~20kHz
Input	2 x ¼" Unbalanced Mono (Impedance: 2 MΩ)
Output	2 x ¼" Unbalanced Mono (Impedance: 470 Ω)
Headphone Jack	1 x ⅛" Unbalanced Stereo

Item	Description
USB	1 x Type-C USB Port
Operating Voltage	9V DC (Center Negative) (Do not use adapters exceeding 9V or with reversed polarity)
Operating Current	200mA
Dimensions	78.6*125*49mm
Weight	215g
Accessories	Power Adapter, USB Cable

