FLAMMA

FF20

LOOPER & DRUM PEDAL

Owner's manual

Content

Precautions

Please read carefully before use.

Power Supply

Please use the correct AC power outlet to connect the power adapter. Use a 9V 300mA power adapter with a center-negative, outer-positive configuration. Using the wrong power supply may result in equipment damage, fire, or other issues. Please unplug the power supply when not in use or during thunderstorms.

Connections

Before connecting or disconnecting equipment, always turn off the power and other devices to avoid malfunctions and damage to other equipment. Additionally, please disconnect all cables and power cords before moving the device.

Placement

To prevent deformation, discoloration, and other serious damage, avoid the following situations:

- Direct sunlight
- Near heat sources
- Magnetic fields
- High temperature and humidity
- Dusty or unclean environments
- High humidity
- Strong vibrations or shaking

Electrical Interference

When using this device, make sure it is kept away from radios and televisions to avoid interference.

Cleaning

When cleaning the device, use a dry, soft cloth or a slightly dampened cloth.
Do not use abrasive cleaning powders, alcohol, paint thinners, wax, solvents, cleaning agents, or chemicals for wiping.

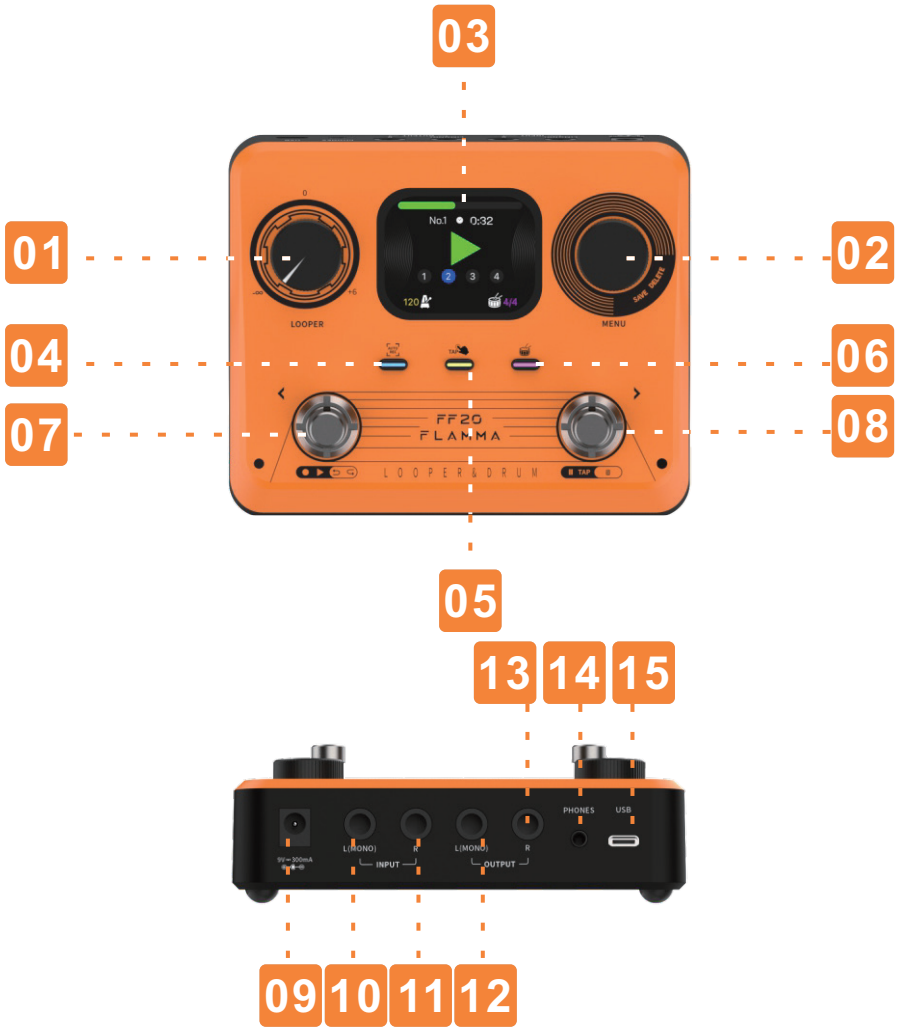
Operation

Do not forcefully operate the switches or control elements.
Do not allow paper scraps, metal objects, or other items to fall into the device.
Do not drop or subject the device to impact or excessive pressure.

Product Features

- Dual-pedal drum machine phrase loop block
- Supports 300 minutes of stereo audio recording
- 11 drum machine styles, each with 20 rhythm patterns
- 100 storage locations in total
- TIME STRETCH pitch and speed adjustment function
- AUTO RECORD automatic recording function
- Supports headphone connection for silent practice
- Dedicated computer software for managing audio files
- 2-inch square screen for clear status display

Panel Description



01

LOOPER Volume Knob

Adjusts the LOOPER playback volume. When centered, the volume is equivalent to the direct output. The maximum value is +6dB, and the minimum value is infinite (LOOPER playback mute).

02

MENU Encoder

Responsible for screen menu navigation, value adjustment, etc. Long press to store the looped phrase.

03

2-inch Square Screen

Displays status interface information.

04

AUTO REC Button (with light)

The switch for the AUTO REC automatic recording detection function. The button light indicates whether the function is on or off. Press and hold this button while rotating the MENU encoder to quickly adjust the trigger threshold for automatic recording detection.

05

TAP Button (with light)

Press continuously to set the tempo, and the flashing rate indicates the current speed. Long press this button to enter the BPM adjustment interface, or press and hold while rotating the MENU encoder to quickly adjust the BPM speed value.

06

DRUM Button (with light)

Short press this button to make the drum machine enter standby mode, indicated by a flashing button light. When recording a loop, the drum machine will start simultaneously. In loop playback mode, short press the button to toggle the drum machine. When the button light is steady, the drum machine is active. Long press to enter the drum machine detail adjustment interface, where you can choose the drum machine style, rhythm speed, volume, etc.

07

Left Footswitch

In loop mode, short press to execute "record, play, and overdub." Long press to execute "cancel, undo, and redo." Press both left and right footswitches simultaneously to enter storage location switching mode. In storage location switching mode, press to switch locations (decrease).

08

Right Footswitch

When the loop is empty, continuous pressing of the right footswitch will perform "tap tempo." In playback mode, short press to "stop." In pause mode, long press to "clear temporary data." Long press + long press MENU encoder to "delete all data." Press both left and right footswitches simultaneously to enter storage location switching mode. In storage location switching mode, press to switch locations (increase).

09 **Power Input**

Connect a 9V power adapter with a minimum of 300mA, center-negative and outer-positive. It is recommended to use the original power adapter for independent power supply to avoid unnecessary crosstalk noise.

10 **Left Input Jack**

6.35mm mono (TS) jack for the left input in stereo use scenarios (mono input for mono use).

11 **Right Input Jack**

6.35mm mono (TS) jack for the right input in stereo use scenarios.

12 **Left Output Jack**

6.35mm mono (TS) jack for the left output in stereo use scenarios (mono output for mono use).

13 **Right Output Jack**

6.35mm mono (TS) jack for the right output in stereo use scenarios.

14 **PHONES Headphone Jack**

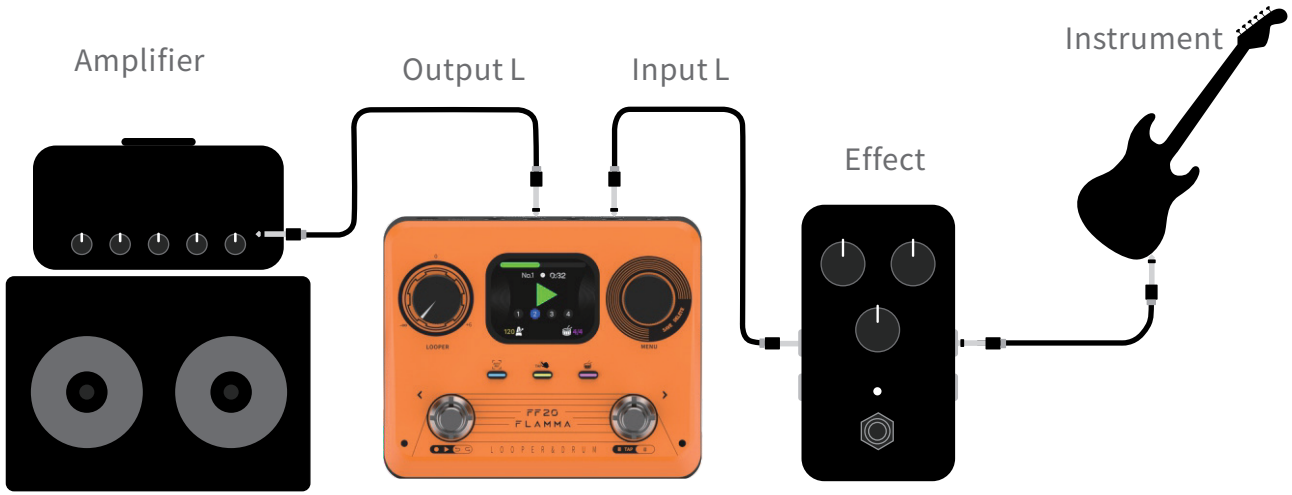
3.5mm TRS three-conductor headphone jack.

15 **USB Interface**

USB Type-C interface for connecting to a computer for data import/export and firmware updates.

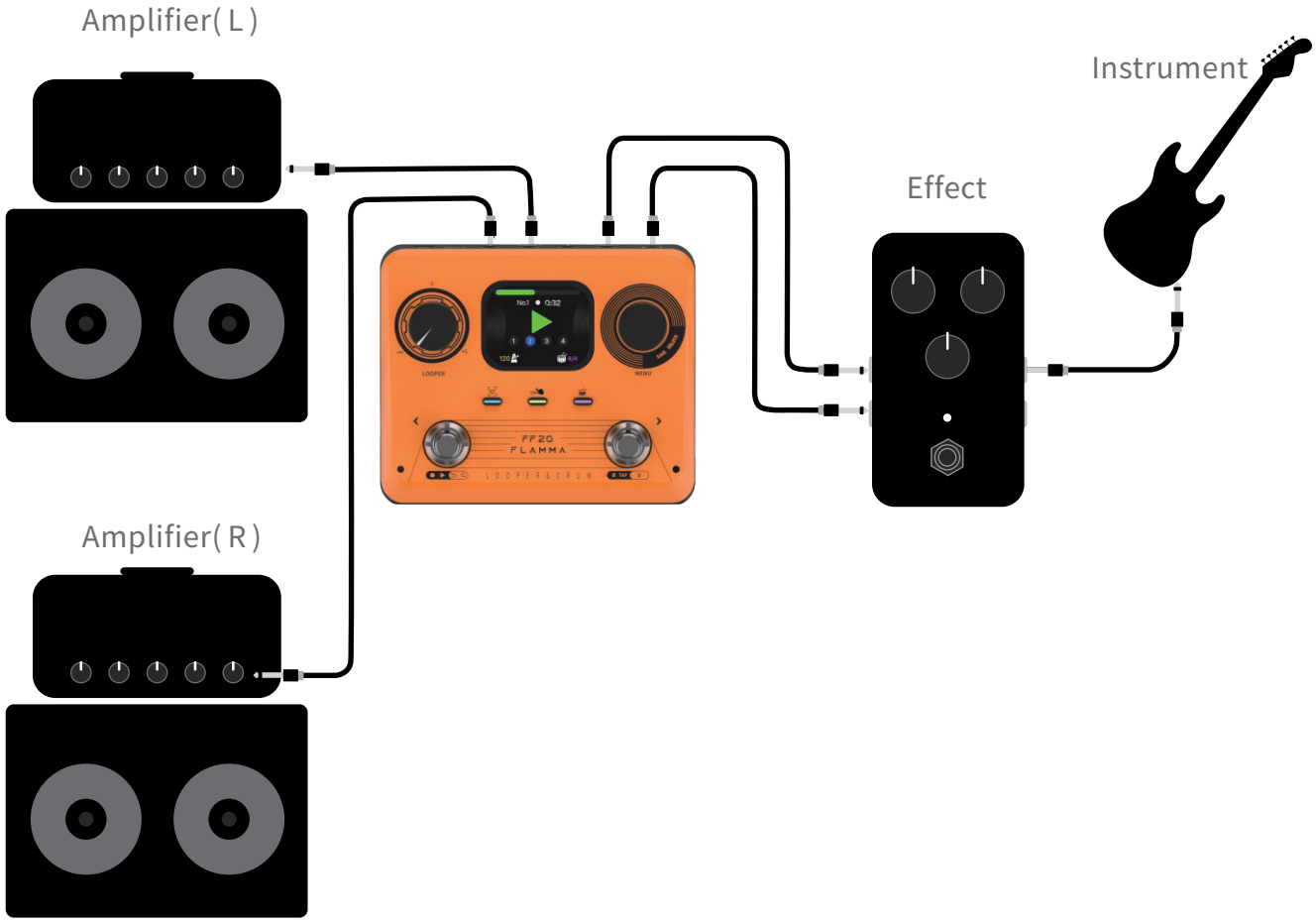
Device Connections

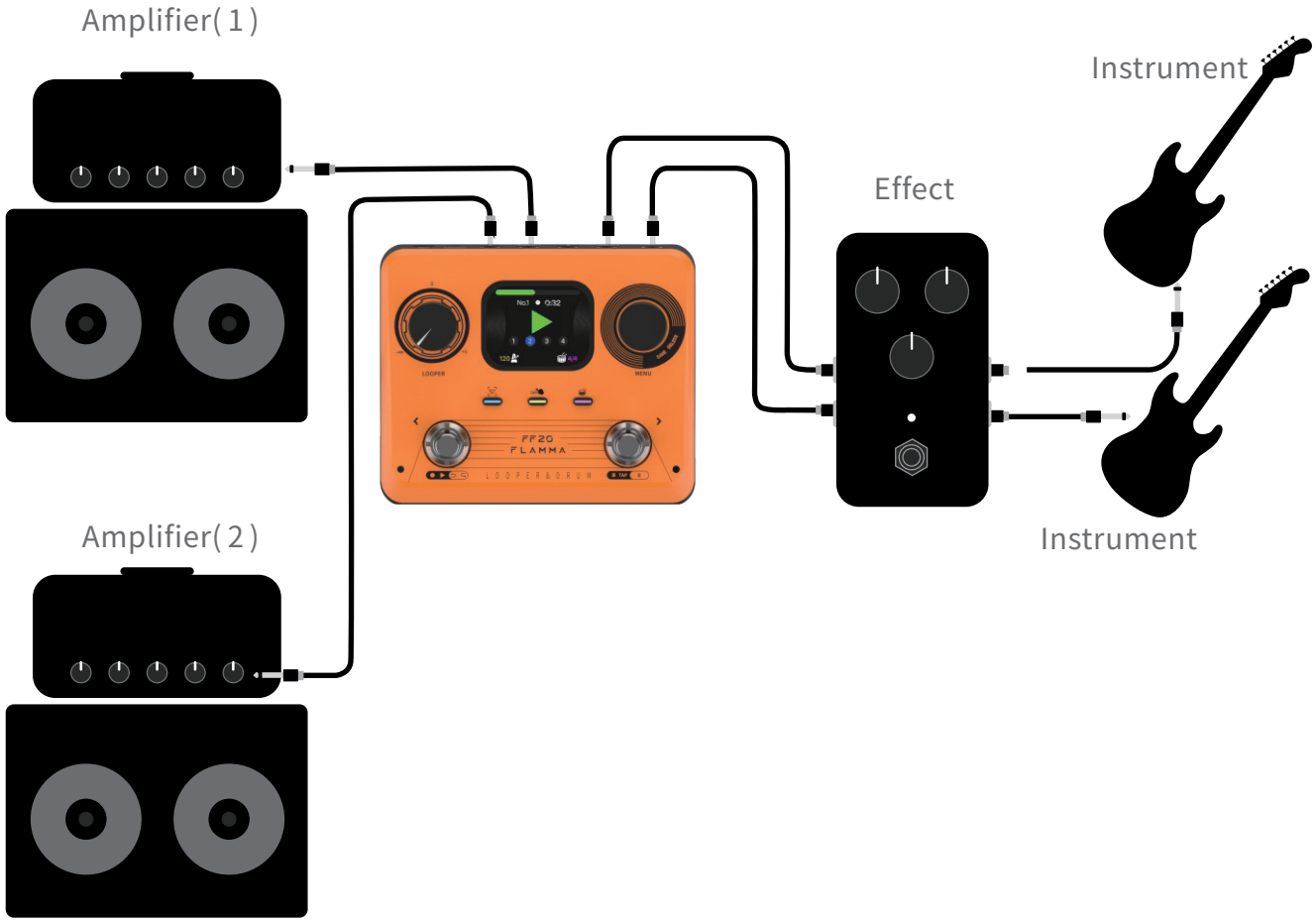
1.Mono Connection



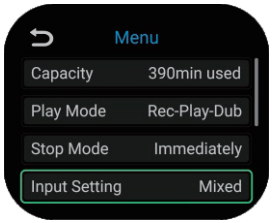
Note: To avoid having sound in only one channel when using headphones or exporting audio in a mono input scenario, you can go to the "Menu" and change the "Input Setting" to "Mixed." As shown in the image on the right:

2.Stereo /Balanced Connection

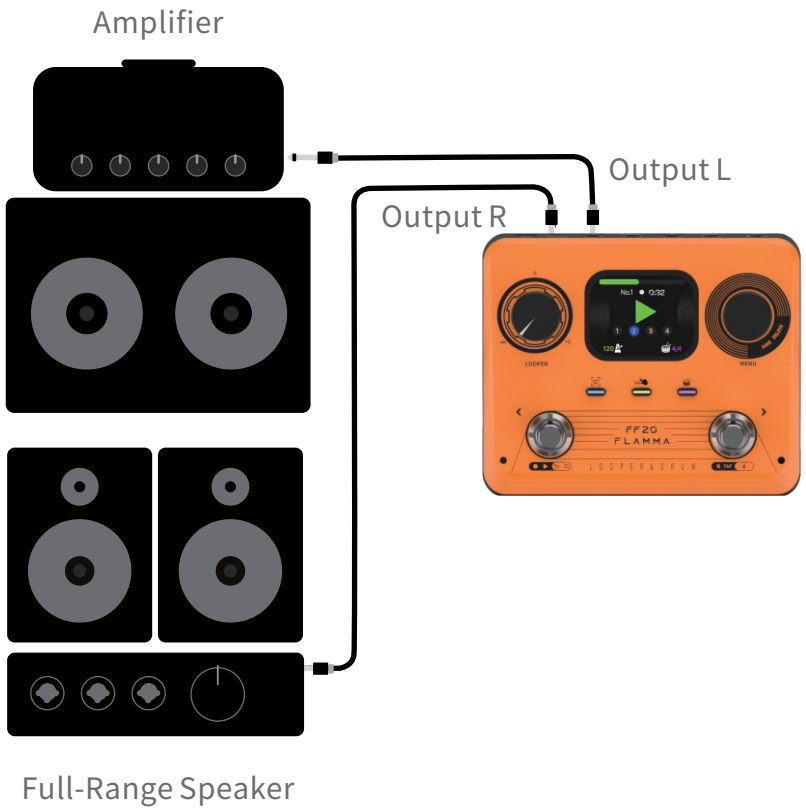



Amplifier(1)
Instrument
Effect
Amplifier(2)
Instrument

Note: In a stereo/balanced connection scenario, make sure the "Input Setting" option in the Menu is set to "Stereo." As shown in the image on the right:

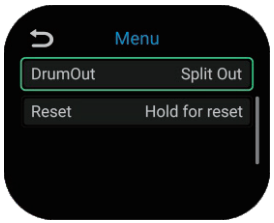


3.Single Output for Drum Machine and Instrument



Note:

1.This connection method allows both the guitar and the drum machine to output to their respective amplification platforms, ensuring the preservation of their individual tones. In the "Menu" menu, set "DrumOut" to "Split." As shown in the image on the right:



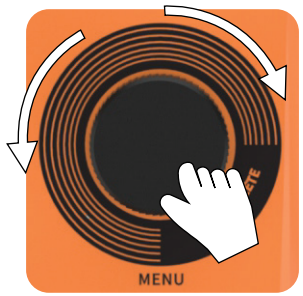
2.After selecting this mode, the guitar signal (direct + recorded playback) will be output through the left output, while the drum machine signal will be output through the right output.

1.Basic Operations

1.1 Select a Storage Location

There are two ways to select a storage location:

a. Select by rotating the MENU knob



b. Use footswitches to select

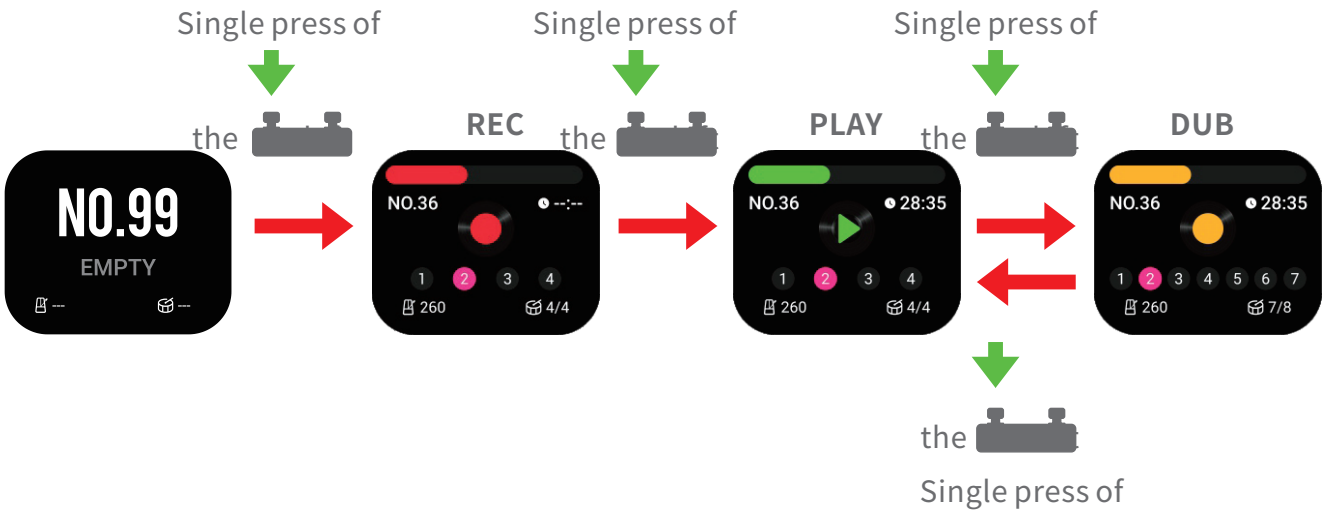
Press both footswitches simultaneously to enter position selection mode.

Press the left footswitch to

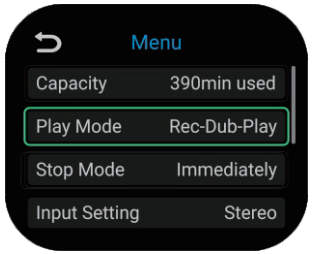
Press the right footswitch to

1.2 Basic Loop Operation

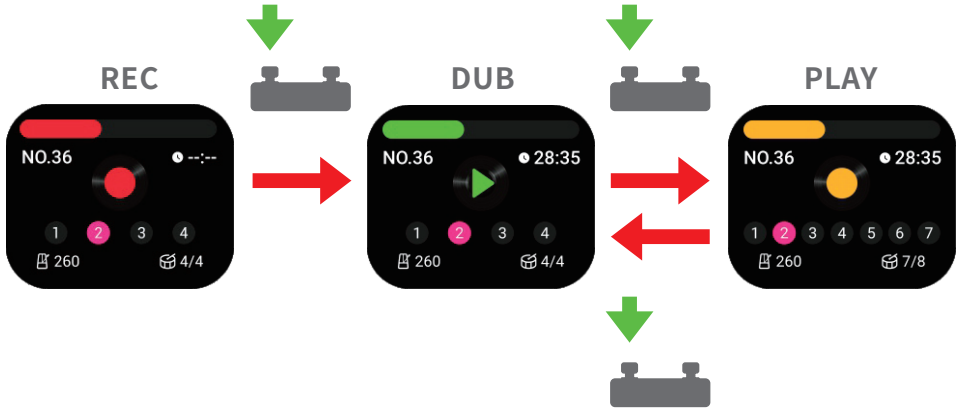
Recording, Playback, and Overdubbing:



The operation sequence of "Record-Play-Dub" can be selected as "Record-Dub-Play" in the "MENU" settings menu:



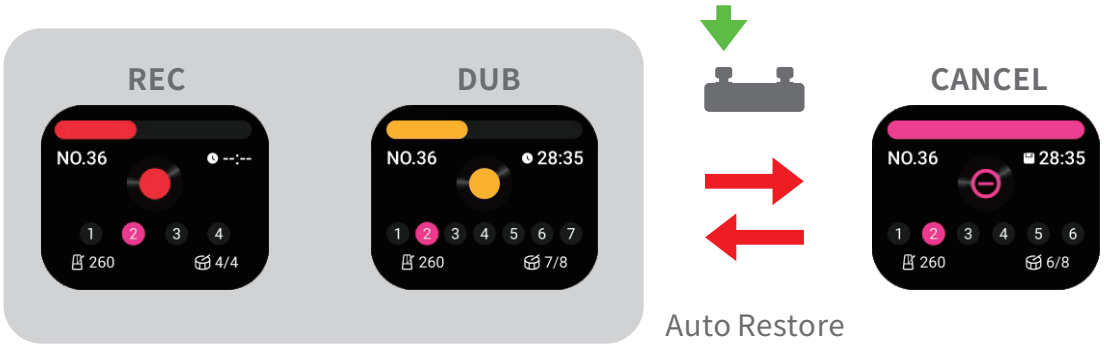
Sequence Mode Selection



This mode facilitates starting the second layer of overdubbing immediately after finishing the first layer of recording.

1.3 Cancel operation

In recording or overdubbing mode, press and hold the left footswitch to cancel unwanted content and immediately start recording/overdubbing again.

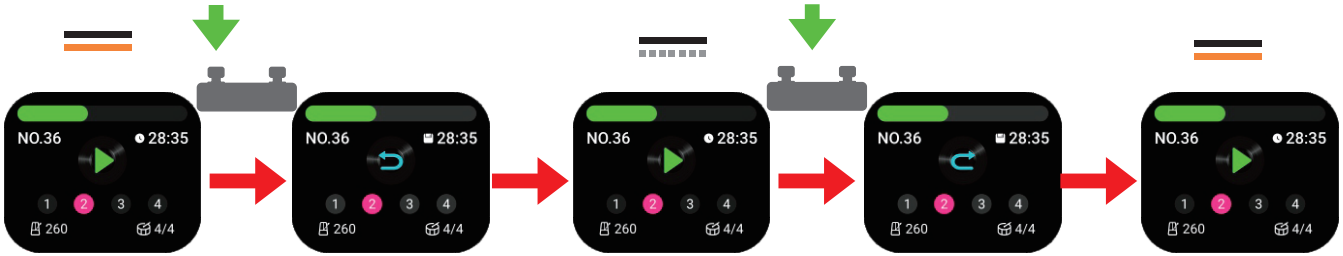


1.4 Undo, Redo

When there are more than two layers of recording, the "Undo" operation can temporarily erase the last layer of content.

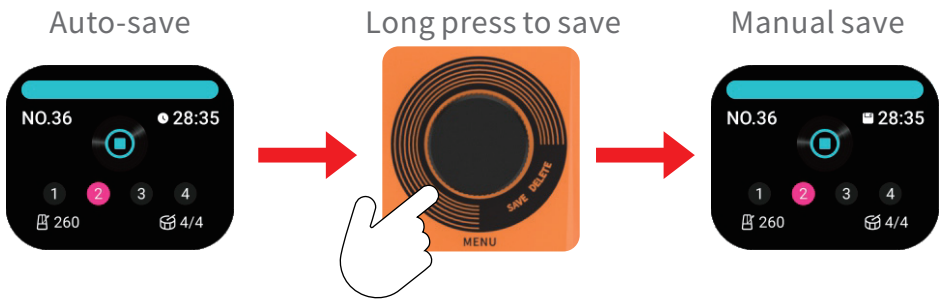
Long press to undo the most recent layer of content.

Long press to restore the most recent layer of content.



1.5 Saving Operations

The files recorded by this device are divided into two types: automatic temporary storage and manual saving. Recording operations at any position do not require interrupting the performance to execute a save. The device will automatically temporarily store the data to the current storage location. In other words, you do not need to worry about losing recorded data because it was not saved; it will automatically temporarily store all of your recordings.
Manual saving is more like merging the recording files into a new audio file and adding an extra layer of security to this data. The manual saving operation is as follows:



After performing a manual save, the temporary storage icon will change to the saved icon.

The following are the differences between manual save and automatic temporary storage:

Differen ces	Automatic Temporary Storage	Manual Save
1	Cleared by long pressing right foot switch (Clear)	Requires long pressing right foot switch + long pressing MENU to delete (Delete)
2	After overdubbing, there are two files, which can be undone or restored	Merged into a new file, the process is irreversible
3	Cannot overdub directly after TimeStretch speed change	TimeStretch speed change followed by manual save allows continued overdubbing
4	Automatically stored content cannot be previewed or exported via computer software	Content saved manually can be previewed and exported via computer software
5	Two layers of automatic temporary storage content will occupy more space	Manual save merges the original two layers into one, saving sp

2. Basic Drum Machine Operations

1.Drum Machine Interface

Long press the 'DRUM' button on the panel to enter the drum machine interface.

The interface provides 11 drum machine styles, each with 20 selectable rhythms, along with controls for volume and BPM speed adjustment. Use the Menu knob to select an item, and press the Menu knob to change the value within the item.

2.Drum Machine Play/Stop

There are two ways to execute play and stop for the drum machine:

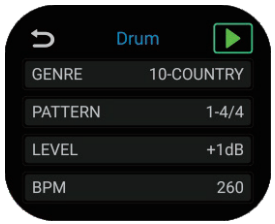
a. Main Interface via TAP Footswitch Operation

In an empty space, press the right footswitch repeatedly to set the tempo, and the drum machine will start running.

Once the drum machine is running, press the right footswitch again after the effective duration of the tempo setting to stop it.

b. Drum Machine Interface via Footswitch Operation

After long pressing the 'DRUM' button to enter the drum machine interface, press the right footswitch to play/stop the drum machine.



Note: In this interface, you can also select and press the play icon using the MENU knob to execute play/stop for the drum machine.

c. Button Operation

If recording content has already been saved and there is a tempo value, you can turn the drum machine on/off by briefly pressing the 'DRUM' button on the panel.

3.Quick Drum Machine Volume Adjustment

During use, if you need to adjust the drum machine volume, you can quickly adjust it by holding down the 'DRUM' button and rotating the 'MENU' knob, without needing to enter the drum machine interface.

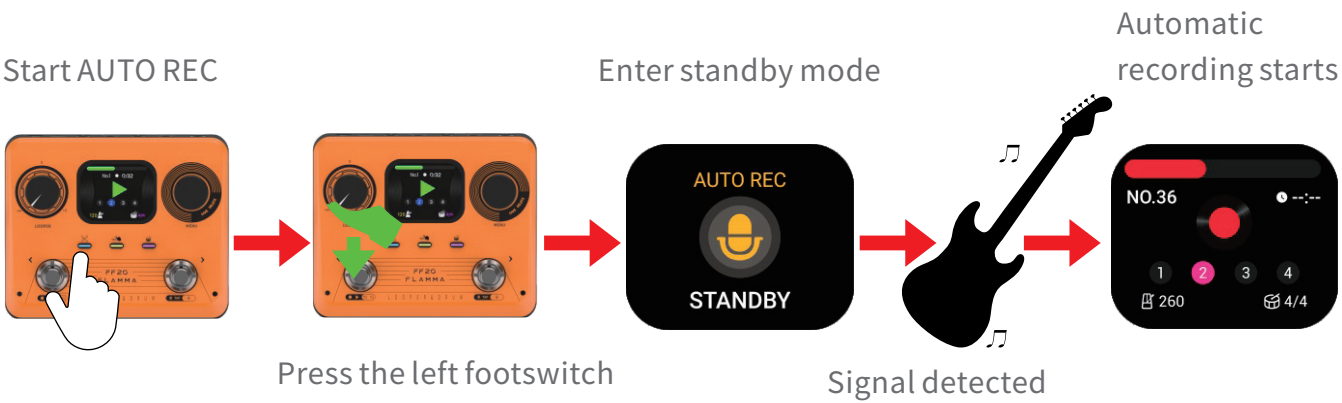
2. Rotating the MENU Knob

1. Press and Hold

Note: In order to quickly and easily adjust the balance between different volumes, both the drum machine volume and phrase loop volume are global parameters and are not saved with the storage location.

3. Auto Rec Input Signal Detection and Automatic Recording Function

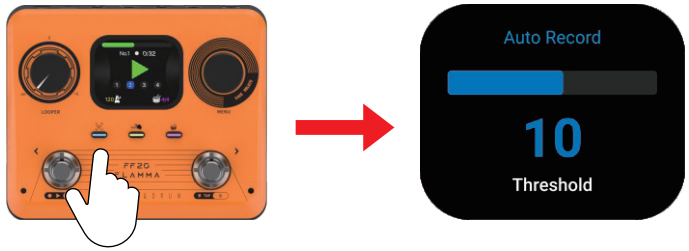
Auto Rec automatically starts recording by detecting the input signal. Compared to manual recording, it avoids issues where the operation and performance timing do not synchronize, preventing off-beat recording. This function can be activated with just one button press:



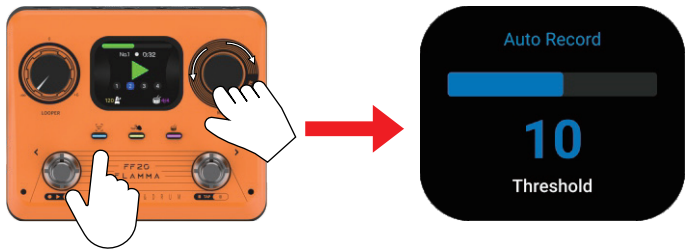
In standby mode, if you want to cancel recording, press the left footswitch again or press the Auto Rec button to turn off the function.

1.Auto Rec Trigger Threshold Settings

The factory default trigger threshold for this function may not be suitable for the signal strength of your device. If the threshold is set too low, it may trigger recording unintentionally; if set too high, it may be difficult or impossible to trigger recording. Please adjust the threshold appropriately using the following two methods:

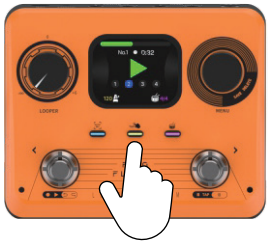


Method 1: Long press the AUTO REC button to enter the threshold adjustment interface, and rotate the MENU knob to adjust the threshold (manual exit).



Method 2: Press and hold the AUTO REC button while rotating the MENU knob to quickly adjust the threshold (temporary display of the interface).

The factory default trigger threshold for this function may not be suitable for the signal strength of your device. If the threshold is set too low, it may trigger recording unintentionally; if set too high, it may be difficult or impossible to trigger recording. Please adjust the threshold appropriately using the following two methods:



Method 1:Press the TAP button continuously

Method 2:Long press the TAP button and rotate the MENU knob to adjust the tempo.

Method 3:

a、Assigning Default Tempo via Drum Machine Operation:

b、Long press the DRUM button to enter the drum machine interface.

b. Short press the DRUM button to set the drum machine to standby mode.

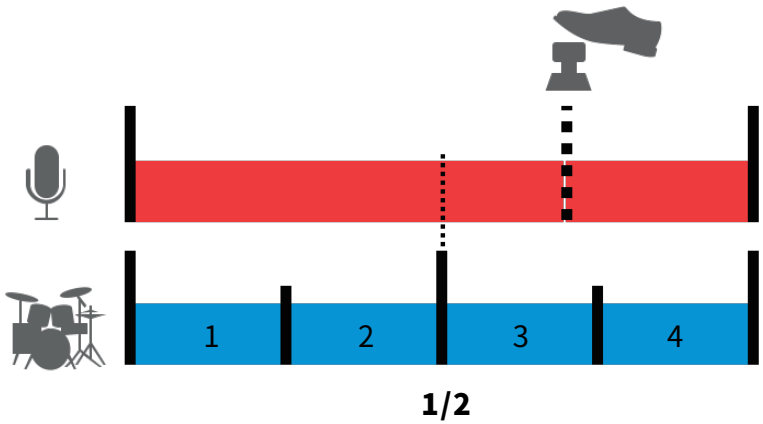
Note: If the drum machine is run first in an empty location before recording, the pre-count will not occur in this scenario.

4. Drum Machine and Loop End Alignment Processing

Strictly speaking, this function does not have a dedicated switch. Its activation condition is similar to that of pre-count recording: when recording in a storage location with an assigned tempo (including tapping the footswitch to set the tempo), at the end of the recording, alignment with the selected drum machine rhythm will be applied based on half a measure (adding or trimming as needed).

For example, in 4/4 time, if the recording reaches the third beat and does not complete the fourth beat, pressing the footswitch will cause the LOOPER to continue recording until the current measure ends, then restart from the beginning, ensuring that the length of the loop aligns with the drum machine's rhythm.

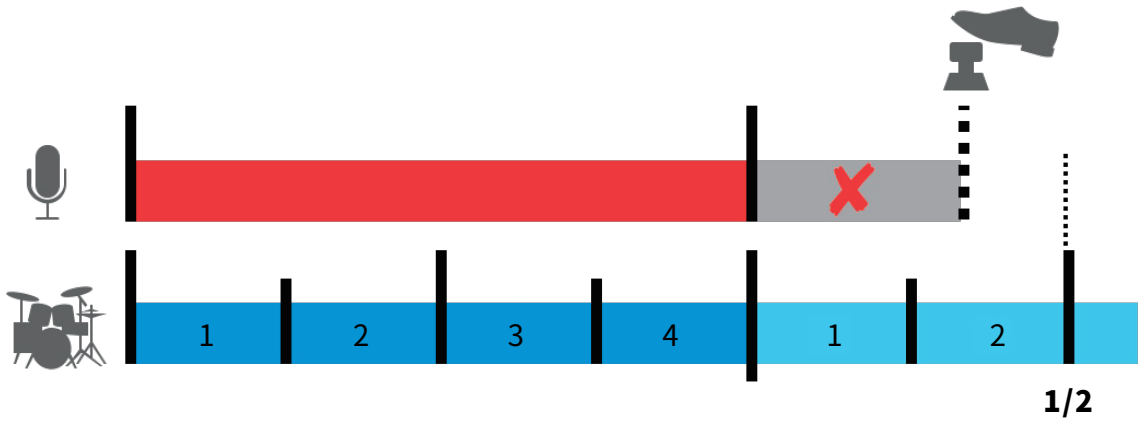
Record a complete



1/2

If the footswitch press is delayed and does not reach half of the next measure, the excess content will be discarded, and playback will immediately restart from the beginning.

Discard unnecessary



5. TIME STRETCH Original Pitch Speed Change

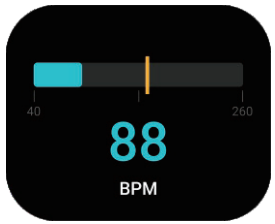
The TIME STRETCH feature allows you to change the speed of recorded or imported audio without altering its pitch. If you feel that a segment of background audio could better match the performance of a phrase by being faster or slower, you don't need to re-record or re-import it; simply use the speed change function to get the desired result. It can also be used for transcribing, where you import or record audio you want to practice, slow it down, and practice repeatedly until you can play it at the original speed.

1.Here's how to use the speed change function

Record or import a segment of audio, and the device will automatically adapt to the current BPM speed value. Changing this speed value will activate the speed change function.

Press the TAP button while rotating the MENU knob to quickly change the speed.

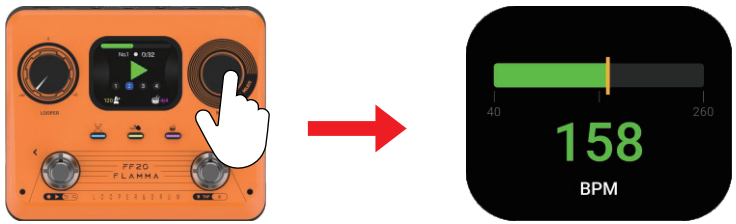
RED: Accelerate



CYAN: Decelerate

You can also directly press the TAP button repeatedly to change the speed, or long press the TAP button to enter the BPM adjustment interface and rotate the MENU knob to adjust.

Before manually saving, the change is reversible. In the BPM adjustment interface, press the MENU button to return to the original speed.

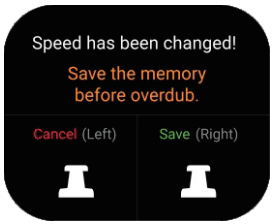


Press the MENU button to restore the original speed

GREEN: Original

Note: After changing the speed, you must manually save before continuing overdubbing.

After changing the speed, overdubbing will prompt this page indicating that you need to save before proceeding.



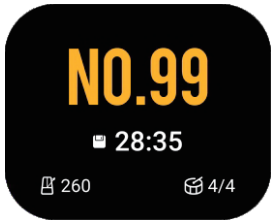
6. Position Jump During Performance

This device supports switching between different storage positions during performance. In running mode (playing or overdubbing), use the footswitch to switch storage positions. The target position's content determines the running state after the jump.

With this feature, you can pre-record or import song sections into different positions and call them during performance or create new song sections in real-time from scratch. Each storage position can be paired with different drum patterns, speeds, and even complex time signatures, meeting various recording needs.

This feature, along with our temporary storage mechanism, ensures you don’ t need to pause to save, making it designed specifically for live performance.

- While the loop is running (playing or overdubbing), press both footswitches simultaneously to enter storage switch mode.



Decrease one

Increase one

- Use the left or right footswitch to select the target position.
- After the switch operation stops, the target position will be confirmed in 3 seconds.
- Once the original position's audio finishes, it will jump to the new position and continue playing.

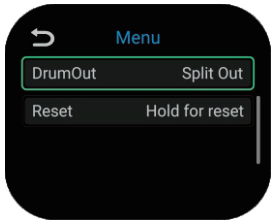
After selecting the target position, you can press the left or right footswitch to force a jump or cancel the jump during the preparation phase.
Below are the usage conditions and status descriptions for position jumps during performance:

Scenario	Starting Position State	Target Position State	Action After Jump
1	Empty or Stopped	Empty or Stopped	Empty or Stopped
2	Recording	Empty or Stopped	Discard starting position data, target position remains empty or stopped
3	Playing or Overdubbing	Empty	Automatically start recording after jump
4	Playing or Overdubbing	Stopped	Automatically start playing after jump

Note: The stop state indicates that the storage slot already contains data.

7. MENU Settings

Press the MENU knob on the main or looper interface to enter the settings menu. Rotate the MENU knob to scroll through menu items, and press the MENU knob to select an item for adjustment.



1.Capacity

Displays the total storage usage time of the device. This time is not the sum of individual storage slot durations. For example, some slots may contain two layers of tracks (one of which could be in a temporary state for undo/redo), meaning the storage time for such a slot actually takes up double the length.

This secondary menu is for display purposes only, with no operational content.

2.Play Mode

As mentioned earlier, the device offers two operation sequences:

1.Rec-Play-Dub

2.Rec-Dub-Play

Mode 2 is suitable when you want to start overdubbing the second layer immediately after finishing the first layer of recording. In Mode 1, you must wait for a full cycle to complete before you can start overdubbing.

3.Stop Mode

The device offers four stop modes, which define how the right footswitch stops the loop playback when pressed during operation. The four modes are:

1.Immediately: Stops immediately, the default stop mode.

2.Oneshot: The loop continues to play until the audio ends, then automatically stops. Pressing the right footswitch again will stop immediately.

3.FadeOut (short): A 4-second fade-out stop. Pressing the right footswitch again during the fade-out will stop immediately.

4.FadeOut (long): A 12-second fade-out stop. Pressing the right footswitch again during the fade-out will stop immediately.

4.Input Setting

The device supports stereo looper recording. This setting determines whether the recorded audio and direct signal are presented as independent left and right channels or as a mixed

format. You can choose according to your input scenario:

- Stereo: For connecting stereo devices (requires left and right channels to be separate), such as stereo audio devices, keyboards, stereo effects, etc.
- Mixed: For mixed input mode, suitable for stereo preview in mono input scenarios (such as maintaining headphone monitoring or exporting audio in stereo) and for multi-instrument input scenarios, such as using both guitar and bass together.

5.DrumOut

The drum machine output mode is set to mixed output (Mixed) by default, which combines the drum machine, looper, and direct signal to both left and right channels. The independent output (Split out) option separates these signals based on the scenario, with the left channel outputting the direct signal and looper, and the right channel outputting the drum machine. This feature is useful for routing different content to the corresponding amplification equipment.

6.Reset

This operation clears all data from the device and restores it to factory settings, including recorded and imported audio data, drum machine settings, and menu configurations. Rotate the MENU knob to this option, press and hold the MENU button for about 1 second to reset the data and automatically return to the "00" position.

Usage Scenarios

This device can be used individually as a LOOPER or drum machine, or both simultaneously, ensuring they stay in sync. The following scenarios describe the correct way to operate the product:

Scenario 1: Using the Looper Alone

Ensure the drum machine is not actively turned on before or after recording.

Scenario 2: Using the Drum Machine Alone

1.Continuously press the right footswitch to set the tempo and turn on the drum machine. After the drum machine runs for a while, press the right footswitch again to stop it.

2.Or directly enter the drum machine interface and use the right footswitch to turn the drum machine on/off.

Scenario 3: Using the Drum Machine and Looper Simultaneously

1.Record the Looper First, Then Add the Drum Machine

a. Select the desired drum machine rhythm on an empty position.

b. Play and record the Looper.

c. During Looper playback, the tempo will automatically adjust based on the selected rhythm.

d. Press the drum machine button to start the drum machine, which will play in sync with the LOOPER.

Note:

1.This method requires the performance to match the time signature of the selected drum machine rhythm; otherwise, the Looper and drum machine may not align.

2.Tempo matching for the drum machine works for loops with a single or even-numbered bars; it may not match correctly for odd-numbered bars greater than one.

3.There is a chance of unexpected tempo values occurring. If you experience double or half-speed issues, please re-record.

4.Pre-beat Recording

a. Set the tempo by pressing the TAP button or adjusting the BPM on an empty position.

b. After starting the Looper recording, the pre-beat will be triggered according to the selected drum machine time signature.

c. Recording will automatically start after the pre-beat ends.

d. Complete the first layer of recording by following the TAP button's flashing frequency.

e. During Looper playback, you can add the drum machine at any time to keep them synchronized.

5.Record the Looper Following the Drum Machine

a. Use the right footswitch or enter the drum machine interface to start the drum machine on an empty position.

b. Press the left footswitch to start recording the Looper. The drum machine will immediately start from the beginning to ensure it syncs with the Looper.

c. Play along with the drum machine's rhythm to complete the first layer of recording.

Now that you've learned all the functional operations of the device, you're ready to start your creative journey!

FLAMMA FF20 Management Software

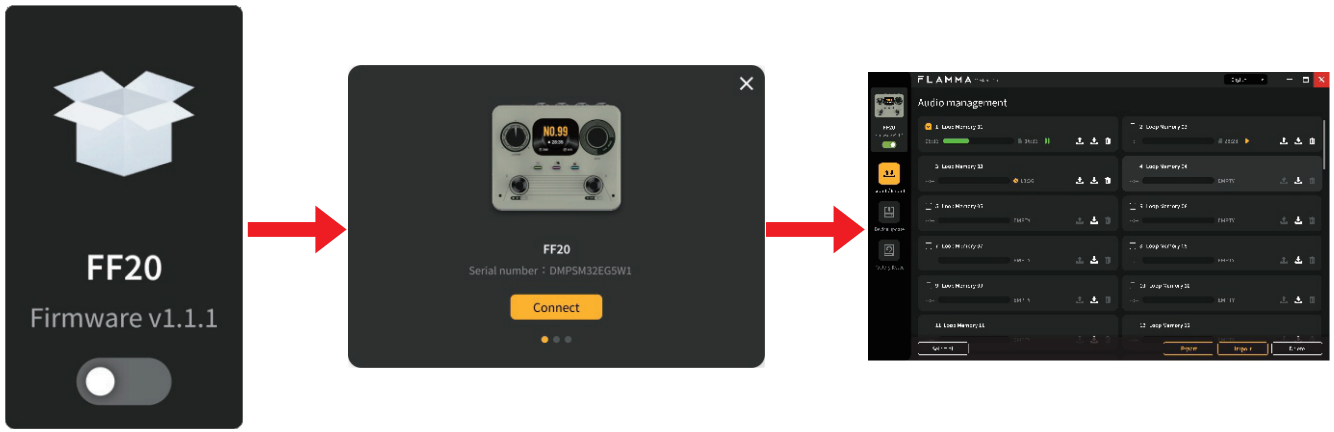
This product comes with dedicated computer software, which allows you to import and export audio, update firmware, and perform other functions via the software.
Visit the official website at www.flammainnovation.com to download and install the software from the specified download area.

1. System Requirements

Win: Windows 10 or higher
Mac: macOS 10.15 or higher

2. Connection

1.Use the included USB data cable to connect the device to the computer.
2.Open the software on the computer and click the connection switch in the upper left corner.
3.Select "FF20" from the device list and click connect.
4.When "Connected" is displayed in the upper left corner, the connection is successful.

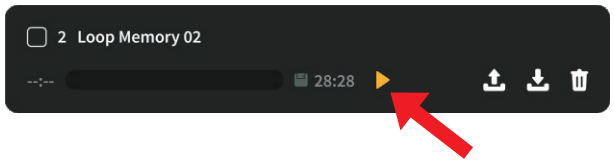


After successfully connecting to the computer, the device will be unable to operate, and the device screen will display the connection status.

Function Overview

1. Audio Preview

After connecting to the computer software, the device enters connection mode, and both operations and audio output are disabled. You can use the play button on the software interface to preview the audio content on the device to confirm the operation target.

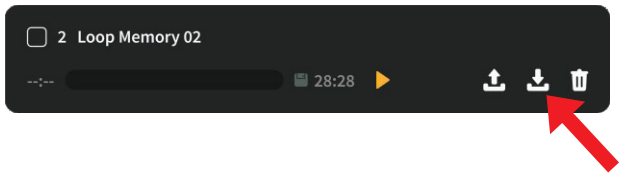


2. Import and Export

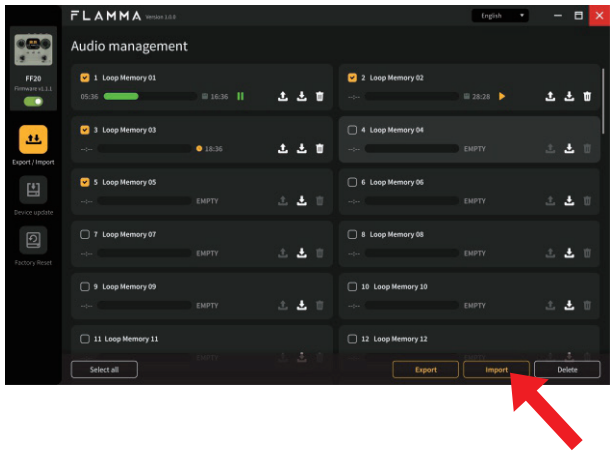
The core function of this software is the import and export of audio data. You can export the audio content recorded on the device to your computer for storage or sharing, or import acquired audio files into the device.

3. Import

Click the import icon at the storage location to perform a single import:

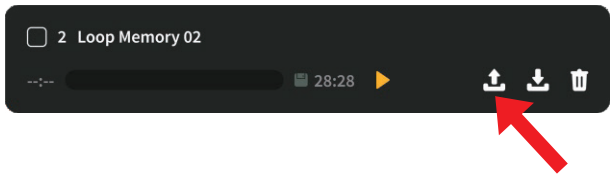


Or import individually or in bulk by selecting the target location:

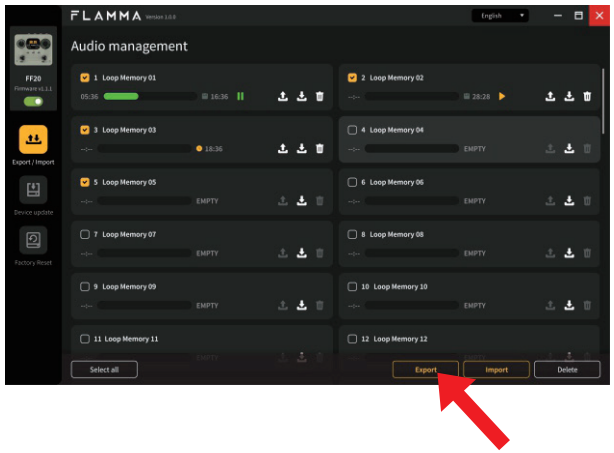


4. Export

Click the export icon at the storage location to perform a single export:



Or export individually or in bulk by selecting the target



Note: Only manually saved audio data can be exported or previewed. Temporarily stored data cannot be exported or previewed.

5. Format Description

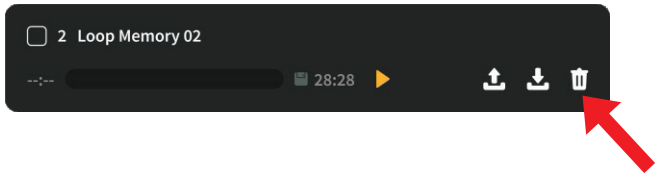
This device supports importing common audio formats and can even automatically extract audio content from video formats. The supported formats include, but are not limited to, the following:

Import Audio Format	Import Video Format	Export Format
wav,flac,ape,mp3 m4a,aac,ogg...	mp4,mov,wma avi,mpeg	wav Stereo

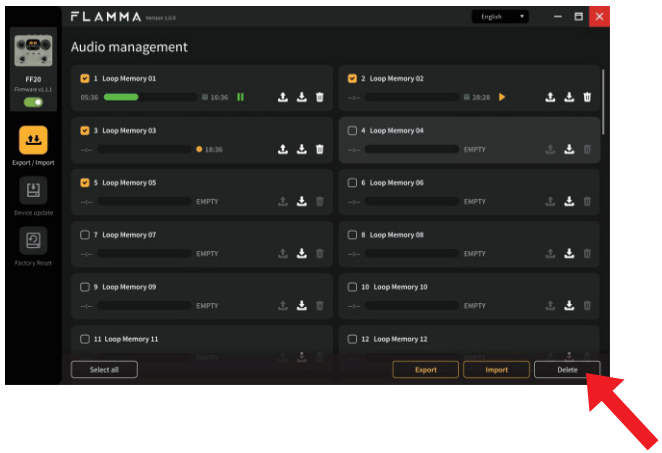
Single Location Import Length	Import Sample Rate
30 mins	Unlimited

6. Delete

To perform a single deletion, click the delete icon at the storage location:

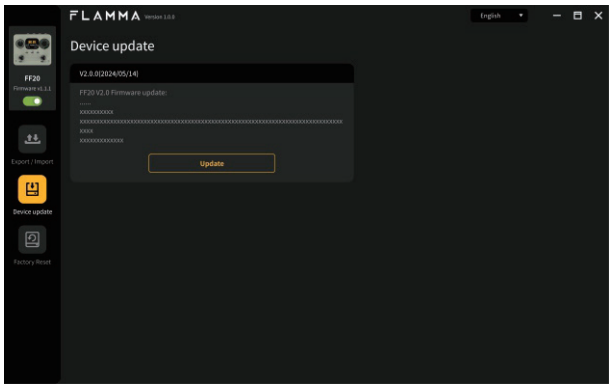


Or delete individually or in bulk by selecting the target location:



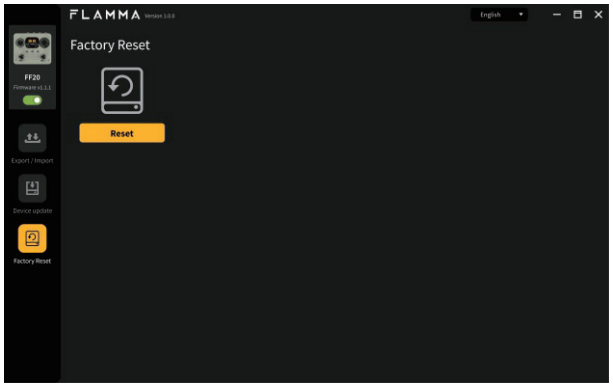
7. Device Update

When the official firmware update is released, you can download the latest software to update the device's firmware. Ensure that the device is connected and follow the instructions step by step.



Note: During the update process, please ensure that the power cable and data cable remain securely connected to avoid any unforeseen issues.

8.Data Reset



This operation is the same as the "RESET" on the device. After resetting, the data in the device will be cleared and restored to the factory settings, including recorded and imported audio data, drum machine settings, and menu settings, etc.

Drum Machine Rhythm List

(GENRE)	(PATTERN)	(TIME SIG)
1、POP	1	4/4
	2	4/4
	3	4/4
	4	4/4
	5	4/4
	6	4/4
	7	4/4
	8	4/4
	9	4/4
	10	4/4
	11	4/4
	12	4/4
	13	4/4
	14	4/4
	15	4/4
	16	3/4
	17	3/4
	18	3/4
	19	6/8
	20	6/8

(GENRE)	(PATTERN)	(TIME SIG)
2、FUNK	1	4/4
	2	4/4
	3	4/4
	4	4/4
	5	4/4
	6	4/4
	7	4/4
	8	4/4
	9	4/4
	10	4/4
	11	4/4
	12	4/4
	13	4/4
	14	4/4
	15	4/4
	16	4/4
	17	4/4
	18	4/4
	19	3/4
	20	6/8

(GENRE)	(PATTERN)	(TIME SIG)
3、BLUES	1	4/4
	2	4/4
	3	4/4
	4	4/4
	5	4/4
	6	4/4
	7	4/4
	8	4/4
	9	4/4
	10	4/4
	11	4/4
	12	4/4
	13	4/4
	14	4/4
	15	4/4
	16	4/4
	17	6/8
	18	6/8
	19	6/8
	20	6/8

(GENRE)	(PATTERN)	(TIME SIG)
4、ROCK	1	4/4
	2	4/4
	3	4/4
	4	4/4
	5	4/4
	6	4/4
	7	4/4
	8	4/4
	9	4/4
	10	4/4
	11	4/4
	12	4/4
	13	4/4
	14	4/4
	15	4/4
	16	4/4
	17	4/4
	18	3/4
	19	6/8
	20	6/8

(GENRE)	(PATTERN)	(TIME SIG)
5、METAL	1	4/4
	2	4/4
	3	4/4
	4	4/4
	5	4/4
	6	4/4
	7	4/4
	8	4/4
	9	4/4
	10	4/4
	11	4/4
	12	4/4
	13	4/4
	14	4/4
	15	4/4
	16	4/4
	17	3/4
	18	3/4
	19	6/8
	20	6/8

(GENRE)	(PATTERN)	(TIME SIG)
6、JAZZ	1	4/4
	2	4/4
	3	4/4
	4	4/4
	5	4/4
	6	4/4
	7	4/4
	8	4/4
	9	4/4
	10	4/4
	11	4/4
	12	4/4
	13	4/4
	14	4/4
	15	4/4
	16	4/4
	17	4/4
	18	4/4
	19	4/4
	20	2/4

(GENRE)	(PATTERN)	(TIME SIG)
7、FUSION	1	4/4
	2	4/4
	3	4/4
	4	4/4
	5	4/4
	6	4/4
	7	4/4
	8	4/4
	9	4/4
	10	4/4
	11	4/4
	12	4/4
	13	4/4
	14	4/4
	15	4/4
	16	4/4
	17	3/4
	18	5/4
	19	7/8
	20	7/8

(GENRE)	(PATTERN)	(TIME SIG)
8、PUNK	1	4/4
	2	4/4
	3	4/4
	4	4/4
	5	4/4
	6	4/4
	7	4/4
	8	4/4
	9	4/4
	10	4/4
	11	4/4
	12	4/4
	13	4/4
	14	4/4
	15	4/4
	16	4/4
	17	4/4
	18	4/4
	19	3/4
	20	3/4

(GENRE)	(PATTERN)	(TIME SIG)
9、LATIN	1	4/4
	2	4/4
	3	4/4
	4	4/4
	5	4/4
	6	4/4
	7	4/4
	8	4/4
	9	4/4
	10	4/4
	11	4/4
	12	4/4
	13	4/4
	14	4/4
	15	4/4
	16	4/4
	17	4/4
	18	3/4
	19	6/8
	20	6/8

(GENRE)	(PATTERN)	(TIME SIG)
10、COUNTRY	1	4/4
	2	4/4
	3	4/4
	4	4/4
	5	4/4
	6	4/4
	7	4/4
	8	4/4
	9	4/4
	10	4/4
	11	4/4
	12	4/4
	13	4/4
	14	4/4
	15	4/4
	16	3/4
	17	3/4
	18	6/8
	19	6/8
	20	6/8

(GENRE)	(PATTERN)	(TIME SIG)
11、REGGAE	1	4/4
	2	4/4
	3	4/4
	4	4/4
	5	4/4
	6	4/4
	7	4/4
	8	4/4
	9	4/4
	10	4/4
	11	4/4
	12	4/4
	13	4/4
	14	4/4
	15	4/4
	16	4/4
	17	4/4
	18	4/4
	19	4/4
	20	2/4

Technical Specifications

Input:	2 x 1/4"mono input jacks (Impedance: 2.2 Mohm)
Output:	2 x 1/4"mono output jacks (Impedance: 120 ohm)
Headphone Jack:	1 x 1/8" stereo jack (Impedance: 32 ohm)
Storage Locations:	100
Total Recording Duration:	300 minutes (stereo)
Sampling Rate/Sample Depth:	44.1kHz/24bit
Supported File Formats for Import:	Including but not limited to: wav, flac, ape, mp3, m4a, aac, ogg, mp4, mov, wma, avi, mpeg
Export File Format:	wav
Power Requirements:	9V DC, center negative, outer positive, 300mA (It is recommended to use the original power adapter for independent power supply to avoid unnecessary crosstalk noise)
Dimensions:	135.5mm (L) x 109.6mm (W) x 46.2mm (H)
Weight:	250g
Accessories:	Adapter, USB-C to USB-A data cable, Quick Start Guide