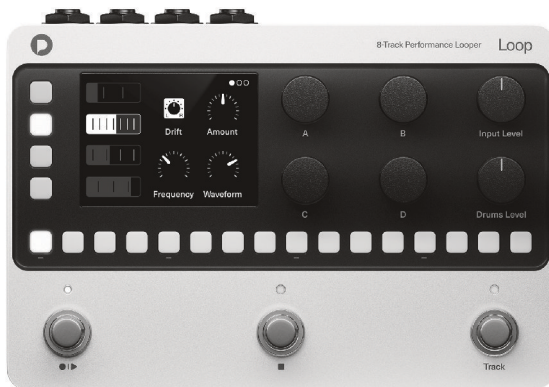


Loop

8-Track Performance Looper



Reference

1. Loop Reference

1.1

Definitions

Effect: An effect is a utility that shapes, adds movement, and affects the sound character. For example, a reverb emulates a room space and the ambiance it adds. Each of the four looper tracks can be assigned its own effect.

Input: The audio inputs at the rear of the device. These can be configured with the input settings and parameters. Only a selected loop will receive live audio.

Kit: A kit is a collection of sample sounds applied to drum tracks, one sample per track. A kit can be loaded to all 4 drum tracks.

Loop: Our 4+4 track looper and drum sequencer pedal. A loop is also an audio take recorded to play on repeat.

MIDI: MIDI, Musical Instrument Digital Interface, is a protocol used to communicate between audio devices. Loop pedal accepts MIDI In and sends MIDI out either using the TRS or USB ports. MIDI control can be used to adjust parameters, change patterns (CC), and change scenes (PC).

Pattern: The sequence created for all drum tracks. Patterns and their steps are managed using the 16 step pads.

Rhythm: A predefined collection of patterns sequenced together in a genre style. When selected, these rhythms are applied to the sequence in each track and help to create an instant, preset rhythm.

Sample: An audio sample loaded from the microSD card or recorded in and used in the drum and percussion sounds for drum tracks. Samples can also be recorded as audio loops, 1 per looper track.

Scene: A scene is a structural element that consists of all parameters, patterns and recordings. Scenes are used to organise and build complete arrangements.

Tempo: The clock controls the Loop pedal and sets the speed of the sequencer in beats per minute (BPM) within a range of 40-280. An external MIDI clock can also be used to control the tempo.

Track: Loop has 8 audio tracks. 4 tracks consist of 16 drum steps that can be sequenced into a pattern. 4 loop tracks are used to record and play audio loops. Each track is managed and controlled individually but they all play and work together.

View: A view is reflected by the user interface controls and displayed functions. Switch between the startup Main view and the Looper view. Main view is the entry point to Drum view when editing the drum tracks.

1.2

Control Overview

① **Track Selection**, Tap.

Select one of the four drum or one of the four looper tracks depending on the view. Change view with {Track}.

② **Multi-functional Pads**. Tap

Depending on the selected view, the 16 pads select patterns, edit drum steps or show the loop beats per bar.

③ **Input Level**.

Sets the level of the incoming audio.

④ **Drums Level**.

Sets the volume level of the drums.

⑤ **Play / Record**. Tap or Hold

Start or enable drums in drum view.
Record / Play / Overdub in the looper.

⑥ **Stop**. Tap or Hold

Mute or stop drums in drum view, stop the looper or stop transport in the looper view.

⑦ **Track**. Tap or Hold

Hold to Switch between Looper or Main + Drum views. Cue the next drum pattern or select next loop track.

⑧ **Display**.

OLED Display.

⑨ **A**. Push / Turn

Context sensitive control.
Tap to save pattern as a Rhythm.

⑩ **B**. Push / Turn

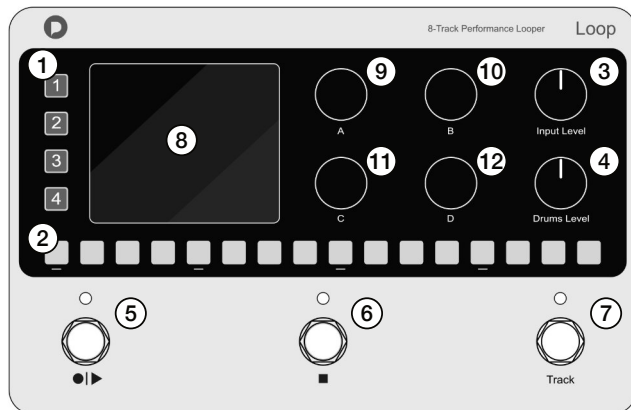
Context sensitive control.

⑪ **C & Settings**. Push / Turn

Context sensitive control.
Main view, Tap for Tempo or Out Level and Hold for system settings.

⑫ **D & Scene Menu**. Push / Turn

Context sensitive control.
Main view, Hold for scene options.



Context sensitive values and settings will be shown on the display to match the respective knob position.

1. Loop Reference

1.3

Controls

The behavior of the controls will depend on the currently active view. Loop starts up in Main view. There are 4 push/turn encoders and 2 fixed range rotary knobs.

Pay special attention to whether a button is tapped or held, especially the footswitches. The control behaviour is different depending on tap or hold.

Function	Control	Main or Drum View	Looper View
Track	Buttons 1-4	Press to open or select a drum track. Tracks are numbered 1-4, top to bottom. Only one track can be selected at a time.	Press to open or select a looper track. Tracks are numbered 1-4, top to bottom. Only one track can be selected at a time.
Steps	Pad buttons	The drum pattern is sequenced using the 16 step pads. The step pads also select and manage each of the 16 patterns.	The 16 pads show the loop progress as a visual aid to the loop position and timing.
►/● Play/Rec	Foot Switch	Tap to start or unmute drums or to cue the next scene. Hold to toggle the pattern chain. Start mode located in the system settings will determine how the loop and drums will actually play.	Tap to record, play or overdub. Hold to undo or redo. Start mode located in the system settings will determine how the loop and drums will actually play.
■ Stop	Foot Switch	Tap stop to mute drums and also stop the transport if no loop is running. Subsequent tap fully stops the playback. Hold stop to open the sample recorder.	Tap to stop the selected loop. If the track is empty or already stopped it will stop the transport. Hold to erase the selected track loop.
Track	Foot Switch	Cue the next drum pattern. Hold to toggle between the initial looper view and the main scene/drum view.	Select next loop track. Hold to toggle between the initial looper view and the main scene/drum view.
A	Push Encoder	Control is context sensitive. The parameter to control will be displayed in position on the current screen page. In Main view, tap to save a rhythm.	Control is context sensitive. The parameter to control will be displayed in position on the current screen page.
B	Push Encoder	Control is context sensitive. The parameter to control will be displayed in position on the current screen page.	Control is context sensitive. The parameter to control will be displayed in position on the current screen page.
C	Push Encoder	Control is context sensitive. The parameter to control will be displayed in position on the current screen page. In Main view; Hold to access the main settings menu, Tap to toggle between the tempo and out level.	Control is context sensitive. The parameter to control will be displayed in position on the current screen page.
D	Push Encoder	Control is context sensitive. The parameter to control will be displayed in position on the current screen page. Hold to access the scene options menu.	Control is context sensitive. The parameter to control will be displayed in position on the current screen page.
Input Level	Knob	Adjusts the audio input level in any mode.	Adjusts the audio input level in any mode. Sets the audio input level for recording.
Drum Level	Knob	Adjusts the drum audio level in any mode.	Adjusts the drum input level in any mode.

In Looper or Drum view (not main), Tap any A-D push encoder to cycle through and change the display page.

1.4

Effects

Each of the four looper tracks can be assigned an inline effect. The effect slot can also be set to Off.

An effect for each track can be selected from the library of nearly 100 effects.

Effect	Type	Parameter B	Parameter C	Parameter D
Off		-	-	-
Drift	Panning	Amount	Frequency	Waveform
Synced	Panning	Amount	Time Base	Waveform
Saturator	Waveshaper	Amount	Tone	Level
Overdrive	Waveshaper	Amount	Tone	Level
DiodeClipper	Waveshaper	Amount	Tone	Level
Asymmetric	Waveshaper	Amount	Tone	Level
WavShaper	Waveshaper	Amount	Tone	Level
WavShaper+	Waveshaper	Amount	Tone	Level
Fuzz	Waveshaper	Amount	Tone	Level
Exciter	Waveshaper	Amount	Tone	Level
Bitcrush	Waveshaper	Amount	Tone	Level
Rectifier	Waveshaper	Amount	Tone	Level
Redux	Waveshaper	Amount	Tone	Level
Redux+	Waveshaper	Amount	Tone	Level
Highpass	Filter	Frequency	Resonance	-
Lowpass	Filter	Frequency	Resonance	-
Bandpass	Filter	Frequency	Resonance	-
Lowshelf	Filter	Frequency	Gain	-
Highshelf	Filter	Frequency	Gain	-
Formant	Filter	Vowel	Resonance	-
Equalizer	Filter	Low Gain	Mid Gain	High Gain
Loft	Reverb	Decay time	Filter Gain	-
Wash	Reverb	Decay time	Filter Gain	-
Soda	Reverb	Decay time	Filter Gain	-
Pretty	Reverb	Decay time	Predelay	-
Blur	Reverb	Filter Freq	Filter Gain	-
Can	Reverb	Filter Freq	Filter Gain	-
Deskjob	Reverb	Decay time	Diffusion	-
The Egg	Reverb	Filter Freq	Filter Gain	-
Tiny Space	Reverb	Decay time	Diffusion	-
Ambiente	Reverb	Decay time	Filter Gain	-
Focus	Reverb	Decay time	Predelay	-
Phone	Reverb	Decay time	Predelay	-
Slap	Reverb	Decay time	Predelay	-
Club	Reverb	Decay time	Filter Gain	-
Garage	Reverb	Decay time	Tone	-
Laterz	Reverb	Decay time	Filter Gain	-
Metallix	Reverb	Decay time	Filter Gain	-
Slo Room	Reverb	Decay time	Tone	-

1. Loop Reference

Effect	Type	Parameter B	Parameter C	Parameter D
Spiky	Reverb	Decay time	Tone	-
Twang	Reverb	Decay time	Filter Gain	-
Big up	Reverb	Decay time	Tone	-
Black	Reverb	Decay time	Filter Freq	-
Dysfunction	Reverb	Decay time	Filter Freq	-
Mellow	Reverb	Decay time	Tone	-
Texture	Reverb	Decay time	Filter Freq	-
Twinlights	Reverb	Decay time	Tone	-
Magneto	Delay	Time 1	Time 2	-
Shimmy	Delay	Time 1	Time 2	-
Slapback	Delay	Feedback	Filter Freq	-
Streets	Delay	Time 1	Feedback	-
Void	Delay	Time 1	Time 2	-
Caspian	Delay	Time 2	Filter Freq	-
Ghost Town	Delay	Time 1	Time 2	-
Dancer	Delay	Time 1	Feedback	-
Traveller	Delay	Time 1	Time 2	-
Clean	Delay	Time 1	Time 2	-
dOb	Delay	Time 1	Time 2	-
Spacetime	Delay	Time 1	Time 2	-
Butterfly	Delay	Time 1	Time 2	-
Copy	Delay	Time 1	Feedback	-
Monono	Delay	Time 1	Feedback	-
By The Sea	Delay	Time 1	Feedback	-
Drunk	Delay	Time 1	Feedback	-
Moddo	Delay	Time 1	Feedback	-
Dream	Delay	Time 1	Feedback	-
Question	Delay	Time 1	Time 2	-
Slowmo	Delay	Time 1	Feedback	-
Waves	Delay	Time 1	Time 2	-
Pacman	Delay	Feedback	Filter Freq	-
Seasick	Delay	Time 1	Feedback	-
Timeless	Delay	Feedback	Filter Freq	-
Depth	Modulation	Mod Depth	Mod Freq	-
LED	Modulation	Mod Depth	Feedback	-
Psy	Modulation	Mod Depth	Mod Freq	-
River	Modulation	Mod Depth	Mod Freq	-
Teen	Modulation	Mod Depth	Mod Freq	-
Warmth	Modulation	Mod Depth	Mod Freq	-
Reel	Modulation	Mod Depth	Mod Freq	-
F Stop	Modulation	Mod Depth	Mod Freq	-
Flangus	Modulation	Mod Depth	Feedback	-
Hungry	Modulation	Mod Depth	Feedback	-
Overtones	Modulation	Mod Freq	Feedback	-
Pottery	Modulation	Mod Depth	Mod Freq	-

Effect	Type	Parameter B	Parameter C	Parameter D
Robotron	Modulation	Mod Depth	Mod Freq	-
Water	Modulation	Mod Depth	Feedback	-
Vintage	Modulation	Mod Depth	Mod Freq	-
Uau	Modulation	Mod Depth	Mod Freq	-
Passenger	Modulation	Mod Depth	Mod Freq	-
Choruz	Modulation	Mod Freq	Feedback	-
Easy	Modulation	Mod Freq	Feedback	-
Rain	Modulation	Mod Freq	Feedback	-
Sloqburn	Modulation	Mod Freq	Feedback	-
Tape	Modulation	Mod Freq	Feedback	-
Warble	Modulation	Mod Freq	Feedback	-
Chirp	Modulation	Mod Depth	Mod Freq	-
Oil	Modulation	Mod Depth	Mod Freq	-
Unsynced	Modulation	Amount	Frequency	Waveform
Synced	Modulation	Amount	Time Base	Waveform

1. Loop Reference

1.5

Rhythms & Kits

Rhythms can be changed to try out different patterns with the same kit, or a Rhythm can remain in place while experimenting with other kits. These combinations and the ability to manually edit patterns offer almost endless options yet keep the workflow quick and straightforward.

Kits can be loaded to all four tracks simultaneously from Main View. Experiment with different Rhythms on the same kit, or different kits with the same Rhythm.

Rhythm Genre	No of Beats
2-Step	8
Break Beat	8
Breaks	64
Click	4
Drum & Bass	16
Dub & Reggae	21
Electro	8
Electronica	16
Exotic	13
Garage Rock	9
Glitch	16
Hip hop	10
House	16
Jazz	16
Kit A	16
Pop Rock	15
Post Rock	16
Punk	16
Techno	8
Trap	6
Weird	50

Kit Type	No of Kits
808	8
909	8
Ambivox	10
Artificial	15
ASMR	10
Birch	15
Bones	10
Big Beat	7
Braintrap	10
Chipbinet	14
Chiptune	10
Classic	7
Corrupt	10
Drum & Bass	10
Drum Bundle	15
Dub & Reggae	10
Dubstep	10
Foley	15
Fractured	10
Garage	10
Glitch	15
Hip hop	11
House	10
IDM	80
Industrial	10
Jazz	10
LoFi	10
Maelstrm	10
Mangled	10
Melodic HiFi	10
Melodic LoFi	9
Minimal	10
Moment	13
Noise	10
Organic	20
Pop Rock	11
Riddim	8
Substnc	10
Tabla	15
Techno	10
Toybox	9
Trap	10

1.6

MIDI CC

CC operates over a range of 0-127, with the CC reference numbers used to assign a Loop destination.

Connecting a MIDI CC Controller

1. Ensure that Main view is active.
2. Hold (C) to open the settings main menu. Turn (C) to navigate and tap to select an option or submenu.
3. Select 'MIDI' and open its submenu of options.
4. Set 'CC In' to the port of the connected controller. Jack, USB or USB & Jack.
5. Set 'CC In Channel' to the same channel as the CC controller or 'Omni' to listen to all channels.
6. Set up the external CC control to match the Loop destination number for each target parameter.
7. It is also possible to control the transport and clock from an external controller. Loop can also be configured to send or receive transport and clock messages in the MIDI settings.

Pattern Changes by MIDI CC

A CC controller can be used to change between patterns. These are controlled using CC numbers 96-111 for pattern 1-16 and any value received on the respective CC number will trigger a pattern change. The new pattern will start when the previous pattern's longest track completes. The pattern chain must be off on Loop when using CC for pattern changes otherwise the message is ignored.

Some Loop parameters represent an option list. These will divide the 0-127 range between available options.

Length - CC Per Track.

Length changes only work on an empty track loop. Requests above 4 Bars are rejected if the input is stereo.

Option	CC Value
Free	0-7
One Bar	8-23
Two Bars	24-39
Three Bars	40-55
Four Bars	56-71
Five Bars	72-87
Six Bars	88-103
Seven Bars	104-119
Eight Bars	120-127

Input - CC Per Track.

Switching between a stereo or mono input is only possible when the track loop is empty.

Option	CC Value
Left	0-21
Right	22-63
Mono Mix	64-105
Stereo	106-127

Play Mode - CC Per Track.

Requests to change Play Mode from MIDI CC are ignored if Loop is recording or overdub recording.

Option	CC Value
Backwards	0-31
Ping-Pong	32-95
Forwards	96-127

Varispeed - CC Per Track.

Requests to change varispeed will only operate with an empty, fixed length loop. Varispeed on/off is determined based on length and recording states.

Option	CC Value
Off	0-63
On	64-127

1. Loop Reference

1.7 MIDI CC Reference

CC operates over a range of 0-127, with the numbers below used to assign a Loop destination from an external device. If a parameter does not exist, for example FX Mix, the incoming CC message is ignored.

Loop responds to program change, PC messages to switch scenes and control change, CC messages to change patterns. These apply globally. Clock and transport can be controlled internally or with an external controller.

Looper Track Parameters

Parameter	Track 1	Track 2	Track 3	Track 4
Effect	50	61	72	83
Effect Parameter 1	51	62	73	84
Effect Parameter 2	52	63	74	85
Effect Parameter 3	53	64	75	86
FX Mix	54	65	76	87
Volume	55	66	77	88
Pan	56	67	78	89
Length	57	68	79	90
Input	58	69	80	91
Play Mode	59	70	81	92
Varispeed	60	71	82	93

Drum Track Parameters

Parameter	Track 1	Track 2	Track 3	Track 4
Drum Track Volume	112	113	114	115

Global Parameters

Parameter	Global
Drum Volume	94
Input Level	95
Output Level	116

Pattern Change

Pattern	Pattern Select	Pattern	Pattern Select
1	96	9	104
2	97	10	105
3	98	11	106
4	99	12	107
5	100	13	108
6	101	14	109
7	102	15	110
8	103	16	111

1.8 MIDI PC

PC or Program Change messages can be used to change scenes on Loop. Up to the first 128 scenes can be selected over MIDI.

It is important to check the alignment of PC numbers with Loop and the external controller. Loop operates over a PC range of 0-127 representing Scenes 1-128. A value of 0 will select scene number 1. Some controllers may operate over a range of 1-128 so it is good to check the sending device PC message format.

It is good practice to order scenes when using PC changes and also to use different MIDI channels for PC and CC messaging with Loop.

If a scene change is initiated over MIDI PC, any unsaved scene edits will prompt the 'Switch or Stay' request. This needs to be acknowledged on the Loop device.

Scene	Loop PC Position	General Comments
Scene 1	0	Some other devices start PC position at 1
Scene 2-127	Scene 1-126	
Scene 128	Scene 127	Some other devices end PC position at 128

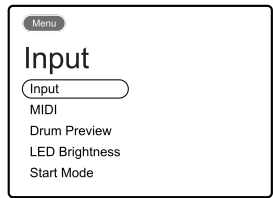
1. Loop Reference

1.9

System Menu

The system settings contain all of the global options. Settings covers the input, MIDI, settings and interface options plus the firmware updates.

Access to the settings is enabled by holding knob (C) in the Main view. Turn (C) to navigate and tap to enter a submenu or select an option.



Settings Menu
Hold (C)
in Main View

Input

Option	Range	Description
Mode	Instrument	Sets the input ready for an instrument input e.g. a guitar.
	Line	Sets the input ready for a line input e.g. a synth.
Channels	Mono	Sets the 'Stereo Input' source to accept a mono TS signal.
	Stereo	Sets the 'Stereo Input' source to accept a stereo TRS signal.
	Left	Sets the sample recorder to record the left mono input
Recorder	Right	Sets the sample recorder to record the right mono input
	Mono Mix	Sets the sample recorder to record the left/right mono sum
Expression Pedal	Drums Level	Expression pedal is assigned to drums level
	Input Level	Expression pedal input is assigned to control input level.
	Out Level	Expression pedal input is assigned to Main audio out level.
	D1Volume	Expression pedal input is assigned to drum track 1 volume
	D2Volume	Expression pedal input is assigned to drum track 2 volume
	D3Volume	Expression pedal input is assigned to drum track 3 volume
	D4Volume	Expression pedal input is assigned to drum track 4 volume
	L1Effect	Expression pedal input is assigned to looper effect selection
	L1Param1	Expression pedal input is assigned to track 1 effect parameter 1
	L1Param2	Expression pedal input is assigned to track 1 effect parameter 2
	L1Param3	Expression pedal input is assigned to track 1 effect parameter 3
	L1Mix	Expression pedal input is assigned to track 1 Mix
	L1Gain	Expression pedal input is assigned to track 1 Gain
	L1Pan	Expression pedal input is assigned to track 1 Pan
	L1Length	Expression pedal input is assigned to track 1 Length
	L1Input	Expression pedal input is assigned to track 1 Input
	L1PlayMode	Expression pedal input is assigned to track 1 PlayMode
	L1Varispeed	Expression pedal input is assigned to track 1 varispeed
	Looper destinations above are repeated for tracks 2, 3, 4	
Back	Command to back up to the main menu level in the structure.	

MIDI

Option	Range	Description
Clock In	Internal	Time based functions e.g. tempo, use the internal clock.
	Jack	Time based functions use an external clock connected to the MIDI jack input. Tempo displays 'Ext' if clock is recognised.
	USB	Time based functions use an external clock input connected to the USB. Tempo displays 'Ext' if clock is recognised.
Transport In *	Off	External transport functions e.g. play are off and ignored.
	Jack	Transport functions e.g. play, are controlled from an external device connected to the MIDI jack input.
	USB	Transport functions e.g. play, are controlled from an external device input connected to the USB.
PC In	Off	External program change functions are off and ignored.
	Jack	Program change messages to change scenes are accepted from an external MIDI device connected to the jack input.
	USB	Program change messages to change scenes are accepted from an external MIDI device connected to the USB input.
	USB & Jack	Program change messages are accepted from an external MIDI device connected to the jack input and the USB input.
PC In Channel	Omni	Accepts PC messages on all 16 MIDI Channels
	1-16	Sets the MIDI Channel to receive PC messages
CC In	Off	External control change functions are off and ignored.
	Jack	Control change messages for mapped parameters and to change the pattern are accepted from an external device on the jack input.
	USB	Control change messages for mapped parameters and to change the pattern are accepted from an external device on the USB input.
	USB & Jack	Control change messages are accepted from an external device on the MIDI jack & USB inputs.
CC In Channel	Omni	Accepts CC messages on all 16 MIDI Channels
	1-16	Sets the MIDI Channel to receive CC messages
Clock Out	Off	Internal clock is not transmitted out.
	Jack	Internal clock is transmitted out from the MIDI jack output.
	USB	Internal clock is transmitted out from the USB output.
	USB & Jack	Internal clock is transmitted on the MIDI jack & USB output.
Transport Out	Off	The internal transport controls are not transmitted out.
	Jack	The internal transport play/stop controls are transmitted out from the MIDI jack output.
	USB	The internal transport play/stop controls are transmitted out from the USB output.
	USB & Jack	The internal transport play/stop controls are transmitted on the MIDI jack and USB output.
Back		Command to back up to the main menu level in the structure.

* Incoming MIDI Start does not trigger the pre-roll count-in if set to On. MIDI Clock Out continues during the count-in when enabled. Transport Out sends MIDI Start when the count-in ends and recording begins.

1. Loop Reference

Drum Preview

Option	Range	Description
Drum Preview	Off	Audio preview is muted when changing knobs or selecting pattern steps.
	Stopped	Audio is previewed when selecting tracks or changing preview enabled parameters if playback is stopped.
	Playback	Audio is previewed when selecting tracks or changing preview enabled parameters only when playing.
	Always	Audio is previewed when selecting tracks or changing preview enabled parameters both when playing or stopped.
Back		Command to back up to the main menu level in the structure.

LED Brightness

Option	Range	Description
LED Brightness	High	Brightest setting for LEDs.
	Medium	Medium LED brightness.
	Low	Lowest setting for LEDs.

Start Mode

Option	Range	Description
Start Mode	All	All recorded loop and drums tracks will start playing when local {Play/Rec} is activated from a fully stopped state. This mode operates in all views.
	Selected	When a recorded loop is selected in looper view, only the selected loop will start. Starting from Main or Drums view, only drums will start.
	Selected + Drums	When a recorded loop is selected in looper view, the selected loop will start along with the drums. Starting from Main or Drums view, only drums will start.

Looper Pre-roll

Option	Range	Description
Looper Pre-roll	On	Adds a 4 beat count-in when starting a new recording using {Play/Rec} from a stopped state. Pre-roll is only applied to a new recording on an empty loop.
	Off	No count-in is applied. This is the default.

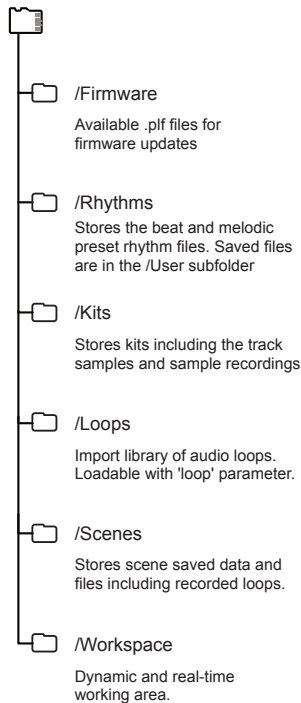
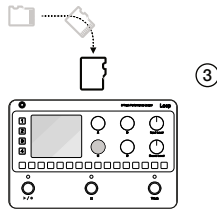
Firmware

Option	Range	Description
Update Firmware	Command	Initiates the selection of a firmware file from the microSD card in order to update the firmware version.
Version	Indicator Only	Information of current firmware version.
Build	Indicator Only	Build version of current firmware version.

1.10 SD card

Loop uses a microSD card for workspace purposes, firmware updates, recordings as well as storage for the Loop assets such as Rhythms, Kits, Scenes and Loops.

Insert Pins down



Backing up the microSD Card

1. Ensure the current scene is saved.
2. Power Off Loop.
3. Remove the microSD card from Loop.
4. Install the microSD Card into a PC or Mac using a card reader.
5. Copy all files from the microSD to a safe storage location on the PC/Mac drive or a remote drive.
6. Ensure the original file and folder structure remains intact.
7. Return the microSD card to the Loop device. Insert with the card pins facing down.
8. Power Up Loop.

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