Loopy Pro Manual

[[NOTE: This is an attempt to convert the HTML manual on LoopyPro.com to a searchable PDF. The conversion didn't go well and many of the images and some of the text was lost including parts of the ToC; if you suspect something is missing, consult the online manual. But there's still a lot here. You can search easier than on the website and print out sections. This is taken from the version current January 16, 2025.]]



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Welcome to Loopy Pro!

Note: This manual is still being written, but is steadily growing.

Be sure to go through the in-app tour (in the Help menu, top right button), and check out some of

the fantastic tutorials already being released, and Max Yar's excellent Loopy Pro course.

At its heart, Loopy Pro is a live-looper – it lets you record and layer pieces of sound which play in loops, to perform and construct musical arrangements on the fly. But it goes a lot further, and includes a variety of tools to customise your workflow so you can use Loopy Pro for a lot more than just live-looping.

Loopy Pro is:

A live looper

A sampler

A clip launcher

A musical scratchpad

A sequencer and arranger

A mixer

An Audio Unit host, supporting effects, synths, and MIDI sequencers An infinitely customisable control surface

And there's a lot more still to come.

This guide will take you through the fundamental concepts behind Loopy Pro, starting with clips and the colour system, then effects and audio inputs, the actions system, widgets and the clock.

You'll be introduced to the basics of live looping and the variety of ways it works in Loopy Pro, with concepts like pre-set vs free looping, Retrospective Record, Intro and Tail recording, and Overdubbing, and you'll be introduced to the gestures system for on-screen interaction. For those who work with pre-made audio, rather than recording it live – or those who want to work with a

combination of pre-recorded and live-recorded samples, this guide will also describe the many ways to bring audio into Loopy Pro.

Loopy Pro's powerful mixer – where much of the project setup takes place – will be examined in detail, and each section and function described: colours, effects, audio inputs, MIDI and buses/ sends. Then we will explore the Canvas, and how to set up almost any on-screen layout and control scheme you can imagine.

Song structure and sectioning, and the various ways this can be realised in Loopy Pro will be described, with Play Groups and the various configurations that can be applied. We will also explore the various Play actions that can be setup, for an additional level of customisation and flexibility.

We'll go through Loopy Pro's Actions system, and examine how it allows you to control every aspect of your project – with on-screen controls, or via a MIDI controller, or through Follow Actions. And we'll follow with an examination of the MIDI Learn and MIDI Control system, and how to setup external MIDI controllers to control your Loopy Pro projects.

We'll take a look at the sequencer, which has a DAW-like timeline for sequencing clip playback as well as driving a fully-automated live-looping session.

Finally, after a quick discussion of running Loopy Pro as an AUv3, hosted within another app, we'll finish by taking a look at each settings screen.

But first, some Loopy Pro fundamentals:

1.1. CLIPS

Clips in Loopy Pro hold individual pieces of audio. They come in two flavours: loops and one shots.

Loops usually appear as circles in Loopy Pro, and play their audio in a seamless loop. They are usually multiples of a bar in length. This is the building block of live-looping.

One shots, represented as squares or rectangles, play once and are usually shorter pieces of audio, like a drum hit, a vocal line, or a sound effect.

Clips of both kinds can be recorded live within Loopy Pro, from the microphone, or any audio hardware plugged into the device, or from an AUv3 Audio Unit, like a synthesiser. You can even resample clips, which means recording some of Loopy Pro's output back into a clip.

Clips can also be imported into Loopy Pro from outside: you can drag and drop from another app, like the Files app, straight onto a clip. You can import a clip from Files right from within Loopy Pro, or from Loopy Pro's own Media manager. You can copy and paste audio from another app, or another device, or you can AirDrop from another device into Loopy Pro. You can also copy audio files over USB into Loopy Pro's Documents folder, and open them from Loopy

Pro's Media manager.

Both imported clips and recorded ones can be time-scaled; when importing a clip, Loopy Pro will attempt to automatically identify the source audio's tempo, and can optionally adjust the audio to match your current project.

Loops can be grouped together into sections, which can start and stop together, or play one at a time. Loops can be configured to play and stop with a count-in/count-out, which will wait until a given point in the timeline before starting or stopping, or they can play and stop immediately. Both loops and one shots can be configured to play only while holding, or to toggle with each tap – one shots will retrigger from the start, in this mode.

1.2. COLOURS

In Loopy Pro, clips – both loops and one shots – are organised into colours. Colours provide a visual distinction between different kinds of clips in your project, but they also perform a larger role.

Colours in Loopy Pro behave similarly to tracks in a traditional DAW. Each colour has a channel strip in the mixer, with controls for volume, balance, mute, and solo, and you can apply insert effects and sends to the output of each colour. You can also specify a different output channel for each colour, if you are using an audio interface. And you can assign different audio inputs to different colours.

Colours aggregate the output of clips, and provide effects and audio routing. They're like tracks in a traditional DAW.

Colours can also perform an additional role: customisation of behaviour. Clip Settings, which define how a clip plays and records, can be defined at three levels: Globally, at the colour level, and at the individual clip level. You can override the global clip settings by changing some settings at the colour level – and then all clips of that colour will take on those settings.

With Loopy Pro's flexible and powerful actions system, colours can do even more, and play a role in sectioning.

You can add as many colours as you like, either in the mixer or in the colours editor.

1.3. CONFIGURATION

Most configuration in Loopy Pro can be defined at three levels:

- 1. Globally
- 2. At the Colour level 3. At the Clip Level

This follows a hierarchy: all clips will use the global configuration, unless this configuration has been overridden for the clip's colour. In turn, that colour configuration may be overridden at the

level of the clips themselves.

You can also define settings for playback and recording at the level of individual actions, so you can nominate a particular on-screen control or a MIDI controller button to, for example, trigger a retrospective record, or start a loop recording which will automatically begin overdubbing or mute afterwards.

This allows for a very flexible configuration scheme, where you can, for example: Change Log

1.4.

Designate a particular colour for Retrospective Recording,

Nominate a single clip to be un-quantised and un-phase-locked,

Use a particular button on a MIDI controller to perform a pre-set loop recording, while using free recording as default, or

Configure an on-screen button to play a loop once and then stop.

EFFECTS

Loopy Pro has a growing range of built-in audio effects, including a fully-featured stereo parametric equaliser, filters like low-pass and band-pass, reverb and dynamics, and also supports AUv3 Audio Unit effects.

Effects can be applied in a range of places. They can be applied as insert effects to colours, to audio inputs, and to the master output. They can be applied either pre- or post-fader, so that volume changes occur before or after an effect is applied.

Effects can be chained together, and the same effect can be applied to multiple tracks simultaneously, using Loopy Pro's sophisticated automatic grouping and instancing features.

Loopy Pro also supports buses and sends: you can create a bus channel, which acts as an aggregator of multiple audio tracks, then apply effects to this bus. Then you can create sends from other channels, which allow you to determine how much of each channel is sent to that bus. This allows you to create sophisticated and expressive effects which are applied on top of each channel.

Once you have added effects using the mixer, effects will appear on the main screen of Loopy Pro in the bottom bar.

1.5. AUDIO INPUTS

Loopy Pro allows you to record live audio from a range of sources. You can record from your iPad or iPhone's built-in microphone, with an echo cancellation system to reduce echo and feedback from your speakers. If you have a USB audio interface, you can record audio from any

number of its channels, including directing different channels to different colours.

You can also use AUv3 Audio Unit synthesisers and other generators within Loopy Pro, with sophisticated support for MIDI controllers and AUv3 Audio Unit MIDI sequencers.

All audio inputs appear within Loopy Pro's mixer as a channel strip. You can apply insert and send effects to any audio input, and configure each audio input to monitor through specified output channels, or even monitor through the target colour groups and associated effects, so that you can record the dry, un-effected signal while hearing the wet signal with effects applied.

Once you have added Audio Unit audio inputs using the mixer, they will appear on the main screen of Loopy Pro in the bottom bar.

1.6. MIDI SOURCES

Loopy Pro supports receiving MIDI from MIDI controller hardware, network and Bluetooth MIDI sources, and AUv3 Audio Unit MIDI generators, such as sequencers.

You can use MIDI to drive AUv3 Audio Unit synthesisers, and to control Loopy Pro's own actions via MIDI.

Like audio inputs, MIDI sources appear and can be configured in Loopy Pro's mixer. You can also chain MIDI sources together, to apply MIDI filters such as arpeggiators or chord generators.

In the future, as described on the Loopy Pro roadmap, you'll also be able to record MIDI loops right within Loopy Pro, and use them to control AUv3 Audio Unit and external synths.

1.7. ACTIONS

Loopy Pro provides a powerful actions system for controlling every aspect of your project. Actions include controls for clip playback and recording, and audio parameters like volume, balance, pitch and speed. There are actions to adjust effect parameters and sends, play and stop the master clock, adjust input gain and enable/disable inputs, change tempo, and much more.

Loopy Pro's actions can be controlled in a range of ways.

You can use MIDI Learn to easily make bindings between a MIDI controller and an action that corresponds to an on-screen object, such as a clip or a fader. You can make more sophisticated bindings to MIDI controllers manually using the MIDI Control screen.

You can attach actions to on-screen gestures, and to Follow Actions which occur in response to certain events, like clip playback or recording.

And you can control actions from on-screen controls that you can create called widgets.

1.8. WIDGETS

Widgets in Loopy Pro are on-screen elements that you can create, arrange and configure to suit your workflow. There are buttons, sliders, dials, X-Y pads, text labels and even a clip slicer control, with more widget types to come.

Widgets work closely with Loopy Pro's actions system: once you create a widget, you configure it to perform one or more actions. For example, a button widget could turn on a row of clips. A dial could adjust the levels of a few clips, or the amount of a send. An X-Y pad could control a number of effect parameters.

With widgets, you can create project layouts that work almost any way you can imagine.

1.9. ECHO CANCELLATION

When you're using Loopy Pro with no attached audio interface or headphones, Loopy Pro will by default enable its echo cancellation system. This is designed to reduce the amount of sound coming from your speakers that gets recorded. Without this, due to the proximity of the speaker and the microphone, it is very difficult to record loops without capturing all the audio currently being played.

Loopy Pro's echo cancellation system requires a brief calibration, which involves emitting a series of chirps, and then performing some processing in order to determine the properties of your device's acoustic feedback path. When you move your device around substantially – such as placing it down on a table – it's recommended that you recalibrate the echo cancellation system to take into account the changed acoustic environment.

You can perform calibration at any time by opening the mixer and tapping the microphone icon at the top of the hardware input channel strip, then tapping "Calibrate".

You can also disable echo cancellation in the same place.

ECHO CANCELLATION CAVEATS

Disabling echo cancellation may be necessary if you wish to use a Bluetooth headset such as the AirPods, or if you are experiencing difficulties with audio level drops using screen recording.

Echo cancellation requires a built-in feature of iOS called "Measurement Mode", which has a number of unfortunate quirks, including preventing the use of Bluetooth audio devices and dropping the device output audio level.

By disabling echo cancellation, you will also disable Measurement Mode, which will resolve these issues, at the cost of losing the echo cancellation functionality. I have been in discussions with the team at Apple and hope that these shortcomings will be resolved in time.

2. THE CLOCK

The clock in Loopy can be found at the top right, and controls both your session's tempo, and the

quantisation interval for certain actions, like recording loops – the "Master" cycle length.

TEMPO

You can adjust the tempo of your session by dragging the tempo jog wheel right or left, or tapping in the middle to enter a tempo using the keyboard. Your project's audio will be time-scaled dynamically to fit the new tempo.

You can also tap out a tempo by tapping on the "Tap" button at the top left of the clock controls. You can also synchronise the clock with other hardware and apps, using either MIDI Clock Sync or

Ableton Link, and you can modify any clock parameters using actions and MIDI control.

Once you have audio content loaded within a project, you will see white bars on the tempo jog wheel which correspond to the native tempos for the loaded audio. The jog wheel will snap to these points, making it easy to return to the original, un-time-scaled audio at any point.

TEMPO CORRECTION

If your tempo has been set by the first recorded loop, sometimes it may be incorrectly guessed as double or half the actual tempo. You can use the $\div \times$ tempo correction control to the right of the tempo jog wheel to halve or multiply the tempo without time-scaling the loops.

RESET TEMPO

You can reset the tempo to an "unset" state at any point. This will put Loopy Pro into a state ready to assign the tempo from the next loop which is recorded.

DETECTION RANGE

When the tempo is currently unset, you can provide minimum and maximum bounds for detection of tempo, when tempo is set by recording the first loop. This can help if a loop is detected at double or half the desired tempo.

ROUND TO CLOSEST BPM

When the tempo is currently unset, turn this setting on to round the tempo set by recording the first loop to the nearest whole number BPM. This can be useful when planning to export the recorded clips for further use within a DAW environment that may require whole-number tempo values.

MASTER CYCLE LENGTH

In many traditional live-loopers, the first loop sets the length of subsequent loops. Loopy Pro provides additional flexibility, and allows you to dynamically set this "Master" length. If you are using Count In and Count Out for your record configuration – Loopy Pro's default setup – it's this which determines the length of your loops.

You can change this length via the clock controls by tapping the buttons beside the "Bars" indicator. Jump straight to a length by tapping the numbers, or vary the current length using the mathematical operators: *Double, Halve, Add 1, Subtract 1*.

You can also modify this length using actions and MIDI control. TIME SIGNATURE

You can set a wide range of time signatures in Loopy Pro by tapping the time signature button at the bottom right of the clock controls – by default, this will read "4/4", indicating four quarter notes per bar.

If you enable the "Update Tempo" switch on this screen, Loopy Pro will keep the duration of each bar constant, while updating the tempo to fit the number of beats you have selected into that duration.

ADDITIONAL CLOCK SETTINGS

Tap on the gear icon to access additional clock settings.

PAUSE CLOCK WHEN IDLE

This is the same as the setting in the global Clip Settings. When no clips are playing, the clock will be paused.

PERFORM COUNT-IN

Performs a one-measure count-in when the playback is started via the transport's play button.

RESET PLAYHEAD ON STOP

This determines whether the playhead is reset to the beginning when the transport stops. It can be set independently for the main screen and the Sequencer.

METRONOME

Loopy Pro has a built-in metronome, both audio and on- screen flash, which you turn on and off using the metronome and flash buttons at the bottom left of the clock screen.

The metronome has four different sounds: A woodblock, high-hat, beeps, and clicks. You can adjust its volume, and if you have an audio interface, you can assign the output channels it is sent to, so that you can separate the metronome from other outputs.

You can also configure when the metronome is enabled: always, or only when a loop is counting-in to begin recording.

3. GETTING STARTED WITH LIVE LOOPING

Loopy Pro is many things, but at its core it's a live looper. Live looping is a form of live music production where a track is built up in layers, in real time. In a performance, it allows the audience to witness a song being built from scratch, often from nothing more than the performer's voice, augmented by effects.

In the studio, looping provides a fun and creative way to experiment with musical ideas and can be an invaluable songwriting aid.

3.1. THE FIRST LOOP

In most live looping environments, the first loop sets the tempo, and forms the basis for the rest of the session. Loopy Pro provides a number of ways to begin a session, but by default it will wait for your first loop.

START AND STOP RECORD

To record your first loop, you tap on one of the empty loops. Loopy Pro begins recording as soon as you release your finger, and will continue recording until you tap again – recording will finish when you release your finger.

Note that recording triggers upon *release*, rather than press, in order to achieve better touch and timing accuracy: touches on a touchscreen can often be missed if one's fingertips are too damp or too dry. So: when you're ready to begin recording, place a finger on the screen. Then *release* to begin. Ditto when finishing: place your finger on the screen head of time, then *release* to finish.

You can change this setting to *on press*, if you choose, by opening Clip Settings, then Gestures at the bottom, and turning on the switch beside "Record On Press".

AUTOMATIC LOOP DETECTION

By default, Loopy Pro's automatic loop detection will be enabled. This can discover loops in the recorded audio and tighten the first loop for you automatically, without needing to worry about starting or ending record on the beat. For the best results, the input level should be strong. If you have problems with the auto loop detection, check Loopy's mixer to make sure that your input level is sufficient.

If you find that the detected loops are not the correct tempo, you can revise the detection range from the clock controls.

If you set an approximate tempo and loop length before recording, and enable the "Auto-End Detected Loop" setting in Clip Settings, Loopy will automatically stop recording when it detects a loop and begin playing, for a seamless automated start.

But as you gain experience with looping, you may choose to disable automatic loop detection and coordinate the record start and stop timing yourself. You can turn off automatic loop detection in Clip Settings, by turning off the switch beside "Auto Loop Detection".

TIMING

Without automatic loop detection on, the time that you start and stop recording the first loop is very important. You begin recording on the first beat – the "1" – and then finish recording at the end of the last beat; the final "1". For example, if you have a one-bar loop as your first loop – "1, 2, 3, 4" – you'd trigger record start on the first "1", and end on the "1" after the end: "1, 2, 3, 4, 1". Loopy Pro will then begin playing back your loop immediately.

STARTING WITH A PRE-SET TEMPO

You can also set the tempo and loop length prior to recording your first loop, and optionally use a metronome to keep you in time.

3.2. PRE-SET OR FREE LOOPS

Loopy Pro provides a variety of ways to record loops.

PRE-SET

With a pre-set length configuration, Loopy Pro will count in to the next cycle, then record for a set length and stop recording automatically. This works well if you know in advance how long you want your loops to be, and allows you to record hands-free without needing a foot controller.

This is the default configuration in Loopy Pro, and mimics the behaviour of many hardware loopers.

There are a number of ways to configure loops to use a pre-set length. From Clip Settings, turn on "Auto Count Out", and set "Count In Quantization" and "Count Out Quantization":

Select *Master* use the clock's master cycle length, which can be adjusted dynamically and is initially set by the first recorded loop.

Select *Custom* to define a custom quantisation interval.

You can use a combination of Count In and Count Out settings, to change Loopy Pro's behaviour. For example:

Set "Count In Quantization" to *Custom* and *1 Bar* to perform a 1 bar count-in, regardless of the master length, and then set "Count Out Quantization" to *Master*, to record for the master cycle length.

Set "Count In Quantization" to *Master* and "Count Out Quantization" to *2 Bars* to sync the beginning of a loop with the master cycle length, and record for 2 bars.

You can also define these settings at the Colour and at the Clip level, as well as for individual actions for triggering via a widget or a MIDI controller.

Finally, you can also pre-set the length of an individual clip in that clip's detail screen, which will automatically stop recording after the given length.

FREE

Loopy Pro also supports free looping. Upon starting a recording, Loopy Pro will continue recording indefinitely, until you trigger record end. The length of the loop will be – by default – quantised to the closest number of bars.

This allows you ignore any length restrictions, and determine the duration of each loop as you go.

To enable free looping, turn off the "Auto Count Out" setting from Clip Settings. You can also define this setting at the Colour and at the Clip level, as well as for individual actions for triggering via a widget or a MIDI controller.

You can optionally quantise the beginning and end of recording by setting the "Count In Quantization" and "Count Out Quantization" settings. This will cause Loopy Pro to count-in or count- out to sync with the given interval:

None: Start/Stop recording immediately, regardless of position in the cycle *Master*: Start/Stop recording in sync with the master cycle length, which can be adjusted dynamically and is initially set by the first recorded loop. *Custom*: Define a custom quantisation interval

3.3. RETROSPECTIVE RECORDING

Retrospective Recording allows you to simply play, and then trigger a recording *afterwards*, when you have something you'd like to capture. This allows for a wonderfully free and creative workflow.

To enable Retrospective Record, open Clip Settings and turn on the switch beside "Retrospective Recording". You can also define this setting at the Colour and at the Clip level, as well as for individual actions for triggering via a widget or a MIDI controller.

The duration of loops recorded via Retrospective Record is set by the master clock cycle, which can be changed on-screen or via an action, either from a button on-screen, or a MIDI controller.

Set "Retrospective Quantization" to determine how recording behaves:

Immediate: Recording will capture the immediately-preceding audio, irrespective of the current position in the current clock cycle.

Quantized: Recording will capture the whole preceding clock cycle, in sync with the cycle. If, for example, the current cycle is 2 bars and you trigger Retrospective Record at bar 1, beat 3 - i.e. shortly after the beginning of the cycle – Loopy Pro will record up to the end of the preceding bar; it will not capture the audio from the end of the last bar to the current position.

With Loopy Pro's very customisable configuration system, you can designate individual colours

or even individual loops to use Retrospective Record, while keeping the other loops in normal record mode. Or, you can nominate a particular on-screen button or MIDI controller button to initiate Retrospective Record.

3.4. INTRO AND TAIL

Loops in Loopy Pro can have attached intro and tail/outro sections, which play before the loop begins, and after it ends, respectively. Tail sections can also be mixed into the loop, after the first cycle has been played.

You can enable "Record Intro" and "Record Tail" in Clip Settings, and these additional layers will be automatically recorded.

Intro recording: When beginning a recording count-in – a value for "Count In Quantization" is required for tail recording – Loopy Pro will begin listening, and will start recording the intro section when the audio level crosses a threshold, up to the end of the count-in duration.

Intro sections are particularly useful for representing anacruses/up-beats: part of a musical phrase that precedes the first beat.

Tail recording: After ending a loop recording, Loopy Pro will continue to record for a little while. Recording will stop when Loopy Pro detects the end of a decay, when the audio level is no longer decreasing. You can also tap to end tail recording immediately.

Tail sections allow you to capture the end of a reverb, or a natural acoustic decay, without it being cut-off at the end of the loop, for much more natural-sounding loops.

You can also designate regions of imported audio to be an intro or outro, in the import screen, or after import on the clip detail screen.

3.5. OVERDUBBING

After a loop has been recorded, you can record additional layers on top of the same loop. This is *overdubbing* and you can use it to, for example, add harmony lines to a melody, or augment a beatbox loop with additional sounds.

While a loop is overdubbing, it will continue to add new layers for as long as recording continues.

There are a number of ways to trigger overdubbing. By default, you can 2-finger-tap a loop to immediately begin overdubbing, and tap again to end (*you can change this gesture*, *if you like*, *in Clip Settings*, *to something like a swipe or tap*). You can also trigger overdubbing via a "Record" action, from a button on-screen or a MIDI controller.

To automatically begin overdubbing after the first loop has been recorded, you can also set the "After Recording" setting in Clip Settings to "Overdub". This setting can be assigned at the

global level, for individual colours, or individual clips.

3.6. GESTURES

Loopy Pro has a number of built-in gestures which you can perform on-screen. You can configure these however you like, either at the global level, per-colour, or per-clip.

Here are the default gestures:

Tap: Toggle a loop playing, or begin playing a one-shot. If the clip is empty, toggle record. Record will trigger upon *release* by default, in order to achieve better touch and timing accuracy, but this can be changed to on *press* if required from Clip Settings.

Two-Finger Tap: Toggle overdub on a clip

Swipe down/left/right: Clear a clip's contents. Perform a long swipe to clear immediately, bypassing the confirmation popover.

Swipe up: Show the clip detail screen.

Two-finger rotation/twist: Offset a loop

One-finger circle around loop perimeter: Instant volume adjust Hold-and-drag to another clip: Merge

You can bind any actions to gestures, to create very custom interfaces. Available actions for binding are: tap, two-finger-tap, swipe (any direction), swipe up, swipe down, swipe left, swipe right, long swipe (any direction), long swipe up, long swipe down, long swipe left, long swipe right, long press.

3.7. MIXING LIVE AND PRE-RECORDED LOOPS

Loopy Pro can be used as a live-looper, a clip-launcher, or a combination of the two. You can import pre-recorded audio to clips, and then play them alongside live-looped content.

With Loopy Pro's high-quality live time-stretching, you can import pre-recorded loops, then reset the clock tempo, putting Loopy Pro in a state ready to take the tempo from the next recorded loop.

The next loop that you record will behave like the first loop of the session. The tempo and master cycle length will be derived from that loop, and all other audio content in the project will be instantly and automatically time-scaled to fit that new tempo.

This is an incredibly powerful way to run a traditional live-looping performance while also augmenting it with pre-recorded content – all without requiring a pre-set tempo.

4. IMPORTING AUDIO

Loopy Pro can load content into projects in almost any audio format, with time and pitch

adjustments to fit. There are a wide range of ways you can load content into Loopy Pro:

DRAG AND DROP

You can drag-and-drop one or more files from any compatible app, such as Files, with its built-in support for services like Dropbox and Google Drive, and USB hard drive and network file server support.

By opening up Loopy and Files side-by-side using the iOS multitasking controls, you can simply drag audio files onto each loop, one at a time, or in a batch.

"OPEN IN"

From any app that supports sharing, you can select Loopy Pro as the sharing target, and the audio will be loaded into Loopy Pro's Media manager, ready for importing.

AIRDROP

From a Mac or anther iOS device, you can AirDrop one or more audio files to your device running Loopy Pro, and then select Loopy Pro as the target. The audio will be loaded into Loopy Pro's Media manager, ready for importing.

FILES

Loopy Pro's Documents folder is visible within the iOS Files app. You can copy and move audio files into this folder, and the audio will appear within Loopy Pro's Media manager.

USB TRANSFER

Loopy Pro's Documents folder is also available as a destination for copying files via a USB cable, using the macOS Finder, or a third-party app like iExplorer or iFunbox.

CLIPBOARD

Loopy Pro can load audio files from the clipboard, copied either as files or using Audio Copy. You can find copied audio within Loopy's Media manager.

4.1. MEDIA MANAGER

Loopy Pro has its own media management system, accessed either by tapping the folder button at the top left of the screen, then "Media", or by selecting the import button from the clip detail screen.

You can organise audio into folders, and import new audio from the document picker, or your music library (*Note: Apple Music library is not supported, due to Apple's DRM restrictions*).

You can preview audio files by tapping the play buttons, or tap on the filename to open the import screen.

IMPORT SCREEN

Once you have selected a file for import, the waveform is visible, with trim handles for selecting a subregion of the audio file. Drag these handles left or right, and pinch to zoom in the waveform area.

By default, if your project has a tempo set already, Loopy Pro will attempt to detect the tempo of the audio, and will apply time-stretching on import to fit the audio to your project's tempo. You can specify the original tempo of the audio in this screen, and Loopy Pro will calculate the required time stretching parameters. Swipe left or right on the tempo jog wheel, or tap in the middle to type in a tempo.

You can also adjust the pitch of the imported audio, to fit the key of your project.

If you have selected a subregion of the audio file using the trim handles, Loopy Pro will offer to import the audio preceding and/or following the selected audio as intro or tail regions, which will play before and after the loop starts/stops.

Tap "Import", and Loopy Pro will prompt for a target track, if you have opened the Media manager from the folder menu. If you are importing directly from the clip detail screen, the audio will be imported to the clip immediately.

After import, you can adjust the original tempo and further trim the audio, in the clip detail screen.

5. THE MIXER: ROUTING CENTRAL

Loopy Pro's powerful mixer gives you control over your project's audio inputs, effects and outputs. In its simple form, you can adjust levels and balance, mute and solo for each colour in your project. In its extended form, you can add hardware and AUv3 Audio Unit audio inputs, specify output channels for each colour and each audio input, configure audio input monitoring, and add built-in and AUv3 Audio Unit effects, buses and sends, and MIDI inputs.

Open the mixer by tapping the button from the main screen.

Loopy Pro's mixer in extended mode

SIMPLE VS EXTENDED MODE

When you first open the mixer, it will be displayed in its simple form, with just the faders and lower controls visible. You will see your canvas above, with your loops and one-shots visible.

Tap the button to put the mixer into extended mode. The mixer will grow, and the extended controls will become visible. Tap to retract the mixer again into simple mode.

5.1. CHANNEL STRIPS

The basic building-block in the mixer is the channel strip, a column in the mixer representing a single channel:

An audio input, such as a hardware input, or an AUv3 Audio Unit A MIDI source, such as a MIDI keyboard an AUv3 Audio Unit MIDI sequencer A colour, aggregating one or more clips

A bus

The master output

Each channel strip has a fader and level meter, and may have balance and mute/solo controls. Audio inputs and colour channels have controls for sends, destinations, and pre- and post-fader effects.

To adjust levels, balance or send amount, tap and swipe on that control. For finer control, tap and then move your finger away from the control: the control area will expand the further away you move from the original control location, giving you more control over fine adjustment.

Tap the icon at the top of each channel strip to access settings and controls for that channel, and long press to replace or delete.

You can also reorder channel strips as you choose, by pressing on the icon at the top, then dragging left or right (or swiping up to remove that channel strip).

5.2. COLOURS

In Loopy Pro, colours aggregate the output from clips, and behave like tracks in a traditional DAW. Each colour appears as a channel strip in the mixer, and has its own fader, balance, mute and solo, as well as sends, destinations, and effects.

If you have an audio interface, colours can be rounded to any output channel.

Colours also act as audio destinations in their own right: by specifying a colour in the "destinations" section for any channel strip, clips of that colour will be able to record audio from that source. This includes both hardware and AUv3 Audio Unit audio inputs, but may also include colours themselves, allowing you to resample the output from one or more colours back into a new clip.

Add new colours by tapping the button, then selecting "Add Color". You can also add new colours in the colours editor, then easily assign the new colour to clips.

5.3. AUDIO INPUTS

Loopy Pro can receive audio from the built-in microphone, an attached audio interface (with support for multi-channel input), or an AUv3 Audio Unit.

Each audio input appears as a channel strip in the mixer, and has its own fader, balance, mute

and solo, as well as sends, destinations, and effects.

In the "Destinations" section for an audio input's channel strip, an audio input can be routed to any number of colours, and the clips of that colour will record from that audio input. You can also specify the audio output channels through which you want to monitor that audio input.

Audio inputs can also be monitored through their destination colours' signal paths. When enabled, this allows the audio input to be heard through the colours' effect chain, but recorded without any of those effects applied — "monitor wet, record dry". This can be setup with the "Monitor Through" setting for that particular audio input, accessed by tapping the icon at the top of the mixer channel strip.

Add new audio inputs by tapping the button, then selecting "Add Hardware Input" or "Add Audio Unit Input".

5.3.1. HARDWARE INPUTS

The default project in Loopy Pro has a single hardware audio input. If you are using Loopy Pro on a device without any equipment plugged in, this will be the built-in microphone. With an audio interface, this will be one of the available input channels provided by the audio interface.

Tap the mic icon at the top of the channel strip to configure the hardware input: you can select the input channel to use for this input, set the hardware gain (*if made available by the system; not all devices support hardware gain*), configure the channels through which to monitor the audio source, and enable or disable monitoring.

You can have as many hardware audio sources as you like, including multiple instances of the same channel, so you can configure different effect chains on each one.

5.3.2. AUDIO UNIT INPUTS

Loopy Pro supports hosting AUv3 Audio Unit instruments and generators, like synthesisers and other virtual instruments, which can be downloaded and installed from the App Store.

AUDIO UNIT USER INTERFACE

Tap the icon at the top of an Audio Unit's channel strip or on the bottom bar to display its user interface: This is displayed in a moveable and resizable window. Tap or double-tap the titlebar to toggle fullscreen, and to close the window. Drag the bottom right handle to change the size of the window.

ON-SCREEN KEYBOARD

Model D and Koala Sampler AUv3 Audio Units

In the Audio Unit's window, tap the button to show Loopy Pro's onscreen keyboard.

Keys tapped towards the upper side play at a lower velocity than when tapped towards the lower side. Tap to toggle hold of the current notes. Tap to toggle position lock – when unlocked, you can pinch and zoom to navigate around the keyboard. Tap to expand the keyboard to fill the

window, and tap to hide the keyboard.

MIDI

Loopy Pro can drive MIDI-capable Audio Units from a variety of MIDI sources: Connected MIDI hardware, such as a USB or Bluetooth MIDI keyboard or sequencer, or a loaded AUv3 Audio Unit MIDI sequencer. You can add MIDI sources either though the mixer, or though the Audio Unit's settings: Tap to open the settings for the Audio Unit from the toolbar of its window. Tap "MIDI Sources" to access the list of sources for that Audio Unit, then tap "Add MIDI Source" to select a MIDI source. You can also tap to connect to Bluetooth MIDI devices here.

PRESETS

Loopy Pro supports both factory and user presets for Audio Units. Tap to open the presets screen, where you can select from the provided factory presets, if available, and create new user presets. Long-press a user preset to rename it, and swipe left to delete.

BOTTOM BAR VISIBILITY

Audio Units will appear on the bottom bar on Loopy Pro's main screen by default, for easy access. If you wish to hide an Audio Unit from this bar, tap to toggle visibility.

IDLE MODE

By default, Audio Units which are muted will enter "Idle" mode, where they consume little processing resources. With Idle mode, you can have many different Audio Units loaded, without over-taxing your device's processor. Tap the ON button, or mute it from the mixer or an action to put the Audio Unit into Idle mode. Tap IDLE or unmute the Audio Unit from the mixer or an action to re-activate it.

If you wish the Audio Unit to remain active when muted, you can disable Idle mode by long-pressing on the IDLE button, then turning off the switch beside "Enable Idle Mode" on the popover that appears.

5.4. EFFECTS

Loopy Pro has a growing collection of built-in effects, and also supports AUv3 Audio Unit effects

Loopy Pro has a growing collection of built-in effects, and also supports AUv3 Audio Unit effects which can be downloaded and installed from the App Store.

Tap the + button in the *Effects* section of a channel strip to choose and add an effect. The effect's icon will appear on the channel strip. Tap to open the effect's configuration, or double-tap to toggle the effect.

You can also move effects around by holding and dragging between sections on the same

channel strip, or to different channel strips entirely.

To remove an effect, hold and drag it out of the *Effects* section, or long-press and tap "Delete". **SENDS VS INSERTS**

Loopy Pro supports both insert and send effects. *Insert* effects are applied upon individual channels and affect the audio *in situ*. *Send* effects are applied on a side channel, and their output is overlaid on top of the original channel's output.

Insert effects can be applied to an audio source, and the affected audio will be recorded into clips. They can also be applied to colours, and will affect all output audio of the colour. Typical effects frequently used as inserts include filters and equalisers, distortion, chorus, limiters and compressors.

Send effects are applied on the output of a bus, to which channels (both audio sources and colours) may send a certain amount of their audio, set by a dial. The affected audio is heard on top of the original audio stream coming from the original channels. Often reverbs and delays are used as sends.

PRE VS POST FADER

Effects can be placed in *pre*– and *post*-fader positions. This describes the effect's position in the signal flow, relative to the volume fader.

Pre-fader effects are applied before the volume fader is applied to the channel: they process the full-volume audio, and then that affected audio is passed into the volume fader.

Post-fader effects are applied *after* the volume fader: they act on the audio after the volume has been applied, and that affected audio is sent to the output as-is.

Whether you place an effect in the pre- or post-fader position depends on the effect in question. Distortion effects, for example, can behave quite differently with quiet audio versus full-volume audio, and you may want to place these in a pre-fader position to maintain tone at various volume levels. With reverb and delay effects, on the other hand, you may want these to ring out when adjusting the volume, rather than having their output reduced by the fader along with the rest of the channel's audio, so these may be best placed in a post-fader position.

A performance consideration with pre- and post-fader positions: When you are using the same effect on more than one channel, it's more efficient to place this effect in the post-fader position for all of the channels. This gives Loopy Pro the opportunity to internally group the channels together and use a single internal instance for the effect. In the pre-fader position, Loopy Pro must use separate internal instances for each channel.

EFFECT INSTANCES

You can use multiple instances of any effect, and each instance will be treated entirely separately, with its own configuration and interface.

You can also use the *same* instance of an effect on multiple channels simultaneously, and the effect, with a single configuration and single interface, will be applied to each channel. This is achieved within Loopy Pro by a combination of intelligent internal routing – where channels are grouped together and a single effect instance applied to the group – and internal handling of multiple hidden instances.

Where Loopy Pro is unable to group channels together into a single signal path, it will create multiple, hidden instances of an effect, and automatically synchronise the state across all hidden instances, so that the effect appears as a single instance.

See also the performance consideration note above, concerning pre- and post-fader positions. IDLE EFFECTS

By default, effects which are disabled or have no input signal enter "Idle" mode, where they consume little processing resources. With Idle mode, you can have many different Audio Units loaded, without over-taxing your device's processor. Tap the on button, or disable the effect on the bottom bar of the main screen or with an action to put the Audio Unit into Idle mode. Tap IDLE or enable the effect from the bottom bar or an action to re-activate it.

If you wish the Audio Unit to remain active when disabled, you can disable Idle mode by long-pressing on the IDLE button, then turning off the switch beside "Enable Idle Mode" on the popover that appears.

EFFECT TAILS

When you turn an effect off, Loopy Pro will detect if there is a tail/decay – as with a reverb or a delay, for instance.

When a tail is present, Loopy Pro will perform a smooth transition to avoid cutting off the tail: When you disable the effect, Loopy Pro will mute the effect's input, then overlay the remaining tail on top of the dry, un-affected audio until the effect output becomes silent.

When this transition is happening, you will see the effect bar button/action flashing. Tap again to cancel this transition and immediately silence the tail.

BOTTOM BAR VISIBILITY

Effects will appear on the bottom bar on Loopy Pro's main screen by default, for easy access. If you wish to hide an effect from this bar, tap from the effect's configuration screen to toggle visibility.

5.4.1. BUILT-IN EFFECTS

Loopy Pro has a growing number of built-in effects. Here's a list of the currently-provided effects, and some corresponding notes – see the roadmap for a list of other effects which will be coming soon.

Reverb – A simple reverb plugin (Apple's own AUReverb2), with a number of presets provided: Small Room, Medium Room, Large Room, Medium Hall, Large Hall, Plate, Medium Chamber,

Large Chamber, Cathedral, Large Room 2, Medium Hall 2, Medium Hall 3, and Large Hall 2. **Equalizer** – A sophisticated parametric stereo EQ, with support for eight filter types: Peak, Band Shelf, Low-Pass, High-Pass, Band-Pass, Low Shelf, High Shelf and Notch. You can combine any number of these, and apply them to both audio channels, or just the left or right. To add a filter, begin dragging on the frequency response line; a peak filter will be created by default, and will follow your finger to allow you to shape the frequency response. Tap the circular handles for each filter to change the type, channel and parameters. All parameters can be controlled via actions; you can specify which parameters are available for control by tapping the "Parameters" item in the popover for each handle.

Filters: Low-Pass, High-Pass, Band-Pass, Low Shelf, High Shelf – Single filters, based on the Equaliser.

Dynamics – A combined compressor/limiter module (Apple's AUDynamicsProcessor).

5.4.2. AUDIO UNIT EFFECTS

Loopy Pro supports hosting AUv3 Audio Unit effects, which can be downloaded and installed from the App Store.

AUDIO UNIT USER INTERFACE

Tap the icon of an effect, or tap the corresponding button on the bottom bar to display its user interface: This is displayed in a moveable and resizable window. Tap or double-tap the titlebar to toggle fullscreen, and to close the window. Drag the bottom right handle to change the size of the window.

PRESETS

Loopy Pro supports both factory and user presets for Audio Units. Tap to open the presets screen, where you can select from the provided factory presets, if available, and create new user presets. Long-press a user preset to rename it, and swipe left to delete.

ON-SCREEN KEYBOARD

Some Audio Unit effects may support MIDI input. Where MIDI is supported, a button is shown in the toolbar of the Audio Unit window. Tap to show Loopy Pro's onscreen keyboard.

Keys tapped towards the upper side play at a lower velocity than when tapped towards the lower side. Tap to toggle hold of the current notes. Tap to toggle position lock – when unlocked, you can pinch and zoom to navigate around the keyboard. Tap to expand the keyboard to fill the window, and tap to hide the keyboard.

MIDI

Loopy Pro can drive MIDI-capable Audio Units from a variety of MIDI sources: Connected

MIDI hardware, such as a USB or Bluetooth MIDI keyboard or sequencer, or a loaded AUv3 Audio Unit MIDI sequencer. You can add MIDI sources either though the mixer, or though the Audio Unit's settings: Tap to open the settings for the Audio Unit from the toolbar of its window. Tap "MIDI Sources" to access the list of sources for that Audio Unit, then tap "Add MIDI Source" to select a MIDI source. You can also tap to connect to Bluetooth MIDI devices here.

5.5. MIDI

Loopy Pro supports full MIDI routing: you can send MIDI from a connected MIDI controller to one or more AUv3 Audio Unit synthesisers/virtual instruments, or drive an Audio Unit synthesiser from an Audio Unit MIDI sequencer. You can also send MIDI out to connected MIDI devices.

Add new MIDI sources by tapping the button, then selecting "Add MIDI".

In the *Destinations* section on a MIDI channel strip, tap the + button to add a new destination – this will display a list of the loaded AUv3 Audio Units that can accept MIDI, as well as a list of the MIDI destinations available to the system.

Tap a destination to open its settings.

Here, you can specify a particular MIDI channel or Audio Unit cable that the destination should receive. You can also restrict the range of MIDI notes which will be received; currently-playing notes will be visible on the on-screen keyboard.

You can also specify a transposition which be applied to MIDI sent to this destination.

Different destinations of the same MIDI source can have different settings here, allowing you to split a MIDI keyboard out to different Audio Units, for instance.

5.6. BUSES AND SENDS

Use buses in Loopy Pro to implement effect sends, or to configure custom routing, such as sending the same colour channel to multiple audio interface channels at the same time.

You can add a new bus by either tapping the button, then selecting "Add Bus", or by adding a new send by tapping the + button within the *Sends* area of a channel strip, and tapping "New Bus".

Once a bus has been created, you can create any number of sends from channel strips to this bus, by tapping the + button within the *Sends* area of a channel strip.

Sends appear as dials which you can adjust by swiping horizontally – make finer controls by moving your finger vertically away from the dial. You can also use actions to adjust sends from widgets or a MIDI controller.

Long press on a send dial to configure its position:

Before All Effects – the audio from a channel strip will be sent to the bus before any effects or faders are applied.

Before Fader – audio will be sent at full-volume, before the fader is applied, and after any prefader effects. This is the default.

After Fader – audio will be sent immediately after the fader, and before any post-fader effects. After All Effects – audio will be sent at the end of the channel strip's signal processing chain, after fader and all effects are applied.

Remove a send by long pressing and then tapping "Delete".

5.7. THE CLIP MIXER

In addition to changing the levels of whole colour groups, you can also adjust the levels of individual clips using the Clip Mixer. This can be useful for gain staging imported content, for instance, prior to applying the colour channel levels.

With the mixer in its simple mode, tap the button to toggle the Clip Mixer.

You can also enter the Clip Mixer while the main mixer is hidden by long-pressing on the button on the main screen. Tap it again to hide the Clip Mixer, or keep holding the button to switch to momentary mode, and the Clip Mixer will hide when you release the button, for quick changes.

With the Clip Mixer visible, swipe up or down on any clip to adjust the volume. While sliding, move your finger away horizontally to make finer changes. Swipe left or right to adjust the balance. Double-tap on a clip to set the volume back to 0 dB.

You can adjust multiple clips simultaneously by dragging a rectangle from any empty space over the clips you would like to adjust. Then swipe on any clip to adjust the group.

With the Clip Mixer hidden, you can also quickly adjust the gain of a single loop by dragging your finger in a circle around the perimeter of a loop; a momentary radial fader will appear. Move your finger around clockwise to increase the volume, and anti-clockwise to decrease. Let go to hide the fader.

6. THE BOTTOM BAR

The bottom bar on the main screen displays all the effects and audio inputs that you have added to your project.

You can enable and disable modules by tapping in the main area of each button, and you can expand the module's interface by tapping the icon – or double-tapping anywhere on the button.

You can also long press on these buttons to switch this behaviour around, so that a tap in the

main area opens the module's interface, and a tap on the $_{ON}/_{OFF}$ button or double-tap will toggle the module.

CONDENSED MODE

As you add more effects and inputs, the bottom bar will expand upwards to fit the new items. You can switch the bar to *condensed mode* by swiping down on any of the buttons – each button will collapse down to a smaller form factor. Swipe up again to switch back to normal mode.

HIDING EFFECTS AND INPUTS

You can also reduce the number of items that appear in the bottom bar by hiding items. Open an effect or source's interface by tapping the icon, then tap the icon to toggle hide.

MAKING MORE ROOM

The buttons at the far left and right of the bottom bar can also be hidden by swiping them off the edge of the screen. Bring them back in by tapping the bar handle, or swiping them back in.

7. CLIP DETAIL

Open the clip detail screen by swiping up on a clip from the main screen, or from the canvas editor by tapping on a clip.

Here you can halve the length of the clip by tapping DIVIDE, and double it using EXTEND OF MULTIPLY; Extend will pad with silence, and Multiply will repeat the clip's

contents.

You can import audio to the clip by tapping, and export the clip's audio by tapping, and you can change the colour of the clip with the top right colour selector.

You can also rename the clip, by scrolling up to the edit field. The clip name will appear on the clip in the main screen.

If the clip is empty, you can define a pre-set length here, and the clip will automatically record for the set length.

TRIMMING, ORIGINAL TEMPO AND INTRO/OUTRO

Adjust the start and end points of a clip using the start and end handles on the clip's waveform, and pinch to zoom in and out. The handles will initially snap to beat boundaries; hover for a moment to disable snapping. If your clip is not Phase Locked (see below), then you can tap and drag the playhead around to change the playback position.

If the audio has been imported, you can set the original tempo by either dragging the jog wheel, tapping the \div or \times buttons, or tapping in the middle of the jog wheel and typing in the tempo.

The clip will be time-stretched to fit your project's tempo. If this is the first clip of your project, then your project's tempo will be adjusted instead.

As you move the start and end points using the waveform handles, Loopy Pro will suggest a tempo that corresponds to a whole number of bars. Tap the suggestion to apply that as the clip's original tempo.

If you inset the start or end point inwards, you can assign the preceding or following audio to be an intro or outro, respectively. These sections will play before or after the loop is started/stopped.

PARAMETERS

You can also adjust the clip's parameters: volume, balance, pitch, playback speed and rate, and overdub feedback.

Each of these parameters can also be defined at the colour level, and the parameters combine between levels. You can – for example – gain-stage each clip, but still modify the overall level and balance of all clips of the same colour (remember: colours are like tracks in a traditional DAW).

You can adjust any of these parameters via the Adjust Parameter action, for control with a MIDI controller, an on-screen widget or a Follow Action.

SPEED AND RATE

The "Speed" parameter determines how fast the track plays back, while keeping the pitch constant. When you adjust the speed, Loopy Pro will perform a high-quality time-stretch operation in the background, while playing the clip using a live time-stretch operation. When the time-stretch processing is complete, Loopy Pro will switch the new audio over.

The "Rate" parameter also determines how fast the clip plays, but the pitch of the clip will vary as you change the rate, just like tape or vinyl. You can use the rate parameter to reverse the track, by setting a negative rate, or tapping "Reverse".

Like the other parameters, speed and rate are applied in addition to the settings at the colour-level – for example, if you specify a playback rate of 2.0x at the colour level, and 0.5x at the level of a particular clip, the clip will be played at 2.0 times 0.5: 1.0x.

When you adjust the playback speed or rate of a clip, Phase Lock (see below) will automatically be disabled, and the clip may go out of time with the rest of the project, as it's playing at a different speed. You can turn on Phase Lock again and the clip will jump back to a synchronised position. You can also use the Phase Align action to perform this change, controlled by a MIDI controller, on- screen widget or Follow Action.

OVERDUB FEEDBACK

Also known as "Decay", this parameter defines how much of the current audio of a clip is carried

over into the next overdub layer, while overdubbing.

Set to 0% to enter "replace" mode, where all existing loop audio is replaced by new audio. Set to 100%, the default, to mix all existing layers with new layers.

PHASE LOCK

Here, you can set a loop to be either *phase locked* or *free*. A phase locked loop will lock its playback position to the main timeline, even when it is not playing. When you start a phase locked loop playing, it will begin playing at a position determined by the overall timeline. A free loop, on the other hand, will always play from the start, regardless of the current timeline position.

LOOP/PLAY ONCE

You can define whether a loop will play continuously (*Loop*), or play once and stop (*Play Once*). This setting can also be defined for an individual action, for triggering by an on-screen button or a MIDI controller.

PLAYBACK AND RECORDING SETTINGS

You can override the clip settings, by turning on the switch beside "Playback Settings" or "Recording Settings" override. You can also open either the global- or colour-level clip settings from here, for convenience.

FOLLOW ACTIONS AND GESTURES

Set up clip Follow Actions in conjunction with Loopy Pro's powerful actions system to perform actions when certain clip events occur, and to implement sidechaining with the Amplitude Envelope follow action.

You can also configure clip gestures here, which will override the global- and colour-level settings. You can configure the actions which are performed when you tap, two-finger tap, long press, or swipe or long swipe in any direction.

8. THE CANVAS

Loopy Pro's canvas allows you to create your own project layout, with any number of loops, one shots, buttons, dials, sliders and other controls. With a rich system of actions, you can set up onscreen widgets to control every aspect of the session, on a variable-size canvas that can also be split over multiple different pages.

To access Loopy Pro's canvas editor, tap the button from the main screen. The grid will appear by default, accessed by the

button on the bottom toolbar.

On the grid, you can move and scale elements; select multiple elements at a time by dragging a rectangle from any blank space, and then move them as a group.

Copy elements by selecting them, then tapping "Copy"; paste them by tapping in a blank space, and then tapping "Paste". You can copy and paste between projects, and even between different devices using iOS's Universal Clipboard feature.

You can add rows or columns to the canvas by tapping the , etc. buttons, and remove them and their contents by tapping the buttons.

Along the bottom of the canvas are the elements which can be added. Tap an element to add it to the canvas. The following sections describe the elements that can be added to the canvas, and their configuration.

8.1. CLIPS: LOOPS AND ONE SHOTS

Add clips – loops and one shots – to the canvas by tapping or .

Clips can be any size; loops will appear as rectangles if they are a non-square aspect.

Once a clip has been added, tap it to open the clip's detail screen.

You can also assign colours and group clips.

8.2. WIDGETS

Widgets are controls that you can add to your project layout, and configure to perform any number of actions to control the session. This allows for a very deep level of configurability and customisation – you can essentially make your own user interfaces using widgets.

Each widget type has a large number of action triggers associated with it; a button, for example, has *Press*, *Release*, *Toggle*, *Double-Tap*, *Long Press*, *Two-Finger Tap*, *Swipe*, and so on. A dial also has a *Value Change* trigger, in addition to *Press*, *Release*, *Double-Tap and Two-Finger Tap*. Each on-screen element, therefore, can trigger a large number of different actions depending on gesture, providing for very space-efficient control schemes.

You can define a single action per trigger, or a number of actions which can be performed in a sequence.

You can also trigger widgets via a MIDI controller, so you can mirror your on-screen layout on a MIDI controller of your choice. You can even trigger widgets from other widgets, to create complex functionality, and even libraries of functions.

FAC Transient, Discord4 and AU3FX:Push Audio Units

Widgets can have labels (with support for emoji), as well as different colours.

Widgets can have labels (with support for emoji), as well as different colours.

The remainder of this section will describe the different types of widgets currently available; more widget types will be coming soon (see the roadmap for details). See also the available actions which can be triggered from widgets.

8.2.1. BUTTONS

Buttons perform actions on press or release, as well as supporting a number of other gestures.

Create a button on the canvas with the toolbar button in the canvas editor.

You can configure a button to, for example, enable an effect on press, and disable it on release, or set a send to 100% on press, and gradually ramp it back to 0% on release. Or you could set up a number of buttons to act as scene launchers, each set to trigger a particular set of clips. A button could perform a cross-fade between one set of clips and another, with a configured interval. Or you could set a button to load the next project in a set.

Buttons provide the following triggers:

Press

Release

Hold/Release - for boolean actions

Toggle – for boolean actions

Double-Tap – note that double-tap actions will delay other taps, as the widget waits to see if any tap is a double-tap.

Long Press

Two-Finger Tap

Swipe (any direction)

Swipe Up

Swipe Down

Swipe Left

Swipe Right

Long Swipe (any direction)

Long Swipe (Up)

Long Swipe (Down)

Long Swipe (Left)

Long Swipe (Right)

8.2.2. SLIDERS AND DIALS

Slider and dial widgets perform *continuous value actions* as their values are adjusted, and their visual state updates to reflect the underlying action values.

Adjust a slider or dial's value by dragging up and down, or left and right for horizontal sliders. For finer control, move your finger away from the dial.

Create dials on the canvas with the and sliders with the and buttons.

Dials provide the following triggers:

toolbar button,

Value Change

Press

Release

Double-Tap – note that double-tap actions will delay other taps, as the widget waits to see if any tap is a double-tap.

Two-Finger Tap

8.2.3. X-Y PADS

X-Y Pads give two-dimensional control over a pair of continuous value actions.

Create an X-Y pad by tapping the button on the canvas editor toolbar.

Loopy Pro provides a configuration screen to map an X-Y pad to a loaded effect. Once you add an X-Y pad, its configuration allows you to choose an effect, and then select which parameters of the effect are controlled by each axis.

You can configure an X-Y pad to operate in two modes: *Always On*, or *Hold*. In *Hold* mode, the effect will be enabled on touch, and disabled upon release. You can tap the unlock the pad temporarily.

button on the pad to lock or

You can also customise an X-Y pad's actions to perform any continuous action you like. You could, for example, use an X-Y pad to send a pair of MIDI CC messages to some external MIDI gear, or an AUv3 Audio Unit.

In custom mode, X-Y pads provide the following triggers:

X-Value Change Y-Value Change Press Release Hold/Release - for boolean actions

8.2.4. THE CLIP SLICER

The Clip Slicer/Button Grid is a special widget type – the first of many to come – that provides an interface for a specialised clip function.

Create a Clip Slicer/Button Grid by tapping the button on the canvas editor toolbar.

Configure the Clip Slicer with an individual clip, and it will allow you to play individual slices of the clip using the pads, either divided by transients in the clip, or divided evenly across the clip.

You can configure the Clip Slicer for various sizes, from 4 pads up to 24; turn on or off *Hold to Play*, and customise the quantisation, so that segment playback is synchronised with the timeline.

You can also put the button grid into custom mode, and completely customise the behaviour of each pad. Each pad offers *Press*, *Release*, and *Hold/Release* triggers.

8.2.5. RADIO BUTTONS AND STEPPED DIALS

Radio Buttons and Stepped Dials are both versions of "List" widgets, which allow you to specify a number of different elements, each with associated actions, and switch between them.

8.2.6. LABELS

Labels allow you to add text to your project's canvas. You can change the font size, weight and colour, and longer content will word-wrap, and scroll if the label widget is smaller than the text, which means you can also use labels for longer passages, such as lyrics or set lists.

Add a label to the canvas by tapping the button on the canvas editor toolbar.

By default, labels are non-interactive and can be overlapped on top of other canvas elements without interfering with their function. But you can also add actions to label widgets, just like buttons.

Label widgets provide the same set of triggers as button widgets:

Press

Release

Hold/Release – for boolean actions

Toggle – for boolean actions

Double-Tap – note that double-tap actions will delay other taps, as the widget waits to see if any tap is a double-tap.

Long Press

Two-Finger Tap

Swipe (any direction)

Swipe Up

Swipe Down
Swipe Left
Swipe Right
Long Swipe (any direction)
Long Swipe (Up)
Long Swipe (Down)
Long Swipe (Left)
Long Swipe (Right)

8.2.7. TUTORIAL

Tutorial widgets allow you to create your own tutorial content. These can be displayed by default the first time a project is loaded, and can be chained together to create a multi-step walk-through of the project.

8.3. PAGES

You can create any number of separate pages for your project, and switch between them using the page selector on the main screen, or via an action, from a button or MIDI controller.

When in the canvas editor (button), you can create a new page by tapping the on the page selector, or long press to determine how the new page should be

created:

Copy, to copy the current page elements to the new page.

Copy With Content, to copy the current page elements, including clip content, to the new page. *Blank Page* to create a blank page.

After you make a selection, new pages will be created the same way until you make a different selection.

Long press on a page label in the selector to delete the page, or to rename it – you can use a single letter or number, or an emoji, to represent the page.

Reorder pages by pressing then dragging.

Pages can behave purely as an extension of the canvas, or as actual content containers. With page actions, you can switch all loops on a page on or off, or solo an individual page, to behave like scenes of clips.

8.4. ASSIGNING COLOURS

Assign colours to clips using the Colour Editor by tapping the button on the editor toolbar.

Select a colour from the colour swatch at the bottom, and then tap or drag your finger over tracks

to assign that colour.

You can add new colours by tapping the

the mixer. Loopy Pro will add new colours in an order that attempts to maintain the maximum visual distinction between colours, and will keep them ordered by hue.

Colours which have been assigned to clips will be displayed with a grey bar above the colour swatch; empty colours have no grey bar.

Long press on a colour swatch to delete that colour.

COLOUR SETTINGS

Tap on the selected colour swatch to edit the settings for that colour – you can access the same screen by opening the menu at the top right of the screen and tapping "Color Groups".

Here, you can rename the colour and, just like the clip detail screen, edit the colour's parameters: volume, balance, pitch and speed. You can override the global clip settings, by turning on the switch beside "Playback Settings" or "Recording Settings" override.

You can also set up clip Follow Actions in conjunction with Loopy Pro's powerful actions system to perform actions when certain clip events occur, and to implement sidechaining with the Amplitude Envelope follow action.

And you can configure clip gestures here, which will override the global settings. You can configure the actions which are performed when you tap, two-finger tap, long press, or swipe or long swipe in any direction.

9. CREATING SONG SECTIONS

Loopy Pro provides a number of different ways to define groups of clips, for near limitless customisability in defining song structure.

PLAY GROUPS

Play Groups are the most straightforward grouping mechanism.

Create and configure Play Groups by opening the canvas editor by tapping the from the main screen, then tapping the button to open the Play Groups editor. Here, you can drag loops together, or drag a rectangle around a set of loops, in order to create groups.

Tap a loop that's in a Play Group to open the settings for that group. You can configure a group so that starting or stopping any loop in the group will start or stop all the other loops, or so that only one loop in the group will play at a time.

You can make groups mutually exclusive with each other, so that starting one group will stop the

others.

ACTIONS

You can also create your own completely custom groupings by using actions.

For example, to create a clip/scene launcher layout where loops in rows play together, you could create a column of button widgets, each bound to a solo action, with the clips in each row targeted, and "All Loops" set as the Solo Context. You can see this configuration in the "8×8 Scenes" sample project provided with Loopy Pro.

Scene launcher action configuration

You can also create button widgets bound to the play action, with an arbitrary selection of clips, to create any kind of sectioning you wish.

FOLLOW ACTIONS

You can also use clip play/stop Follow Actions to trigger play/stop actions on other clips whenever a clip is started or stopped.

10. ACTIONS

Loopy Pro's powerful actions system provides for endless customisation of project layouts, and deep control via MIDI controllers.

Everything in Loopy Pro can be accessed via actions, which you can attach to on-screen widgets, like buttons and dials, or bind to triggers on a MIDI controller. You can assign actions to gestures, or to Follow Actions.

Actions include controls for clip playback and recording, and audio parameters like volume, balance, pitch and speed. There are actions to adjust effect parameters and sends, play and stop the master clock, adjust input gain and enable/disable inputs, change tempo, and much more.

With actions and widgets, you can essentially make your own audio production apps within Loopy Pro – effortlessly – and with a MIDI controller you can build your own looping setups, to suit your individual style.

Copying/Duplication Actions. Long-press on an action to Duplicate or Copy the action. After copying an action, long press on a target's section header to paste the copied action.

Re-ordering actions. Wherever actions are found, there is a *Reorder* button that allows you to change action order by dragging.

ACTION TIMING/SEQUENCE

For *impulse* action types, an additional circle button control is shown to the left of each action.

Tapping this will display the timing/sequence controls for the action.

After Last – perform the action after the previous one has completed. This includes waiting for any count-in for playback/record actions, for instance.

With Last – perform the action at the same time as the previous one (do not wait). Next Trigger – perform the action the next time the trigger occurs (e.g. the next button press).

Use the Delay/Quantization slider to set when the action occurs. *Delay* will cause the action to occur after the given delay; *Quantization* will cause the action to occur in sync with intervals of the given quantum. Use Quantization to perform an action on the beat, for instance. Note that, for example, an action with Quantisation set to 1 beat, which is invoked on a beat boundary already, will have no delay at all.

10.1. ACTION TYPES

Actions come in a number of different types, and are suited to different purposes:

Impulse actions are triggered once and have no state; they are used for things like clearing a clip, initiating a parameter value change, or triggering a scene.

Boolean actions have an on/off state; they're used for things like enabling/disabling an effect, or toggling mute for a channel.

Continuous actions have a numeric value; they're used for an effect parameter, or a volume fader, or a send knob.

Depending on the control, different actions will be available. A dial widget will allow you to bind *continuous* actions to it, and a button's *Press* action, or a MIDI Controller Program Change trigger will only allow you to bind *Impulse* actions, while a button's *Hold/Release* trigger will accept *boolean* actions.

The remainder of this section will describe all the actions currently available within Loopy Pro. This list is likely to grow as Loopy Pro develops further.

10.2. CLIP ACTIONS

Actions that operate on clips.

CLIP SELECTION

Loopy Pro provides a set of "Select" actions which control on-screen selection of clips. Selected clips appear on-screen with a white dot, and can then be used as an action target, allowing you to use the same action on whatever clip is selected. There are actions to select the next and previous tracks, in left-to-right, top-to-bottom order, as well as actions to select tracks to the left, or right, above, and below.

TARGETS

The following targets are supported by clip actions:

One or more specific clips

Next Tapped Clip – Loopy Pro will prompt you to tap a clip on-screen when triggering the action Last Tapped Clip – The last clip which was tapped on-screen, or selected via "Next Tapped Clip"

Selected Clip – The clip which is selected (see "Clip Selection" above)

All Clips – Every clip in the project

Specific Color – All the clips in a specific color

Next Selected Color – Prompts you to select a colour on-screen when triggering the action; action will then affect all clips in that colour

Last Selected Color - The last colour that was selected

Colour of Selected Clip – All the clips that have the same colour as the selected clip (see "Clip Selection" above)

Color of Next Tapped Clip – Prompts you to select a clip on screen when triggering the action; action will then affect all clips with the same colour

Color of Last Tapped Clip – All clips of the same colour as the last clip that was tapped onscreen or selected via "Next Tapped Clip"

Following is a list of all clip actions:

PLAY/STOP

Start or stop a clip playing. Parameters:

Action – whether to toggle playback on/off, depending on current state; always play, or always stop

Quantization – how to synchronise start/stop with the master timeline: Default, None, Master (synchronise with the master clock's cycle), Loop (synchronise with a specific loop, context-dependent), Custom.

Fade In/Out – whether to apply a volume ramp in or out

Respect Play Groups – when acting on a clip that's a member of a Play Group, whether to perform Play Group logic

Loop vs Play Once – when acting on a loop, whether to start the loop playing continuously, or play through once, then stop

Record If Empty – if a clip is empty when the action is triggered, whether to begin recording Record Setup – If Record If Empty enabled, defines the recording configuration

SOLO

Stop other clips playing when a clip is started, with a configurable context defining which other clips will be stopped.

Parameters:

Action – whether to toggle solo, depending on current state; always solo, or always un-solo Solo Context – the context that defines the other clips that will be stopped as part of the solo: Color, or

All Loops. You can specify a list of clips, colours or play groups which are excluded from this operation.

Quantization – how to synchronise start/stop with the master timeline: Default, None, Master (synchronise with the master clock's cycle), Loop (synchronise with a specific loop, context-dependent), Custom.

Fade In/Out – whether to apply a volume ramp in or out

MUTE

Silence a clip's audio output; clip may continue playing, but silently. Parameters:

Action – whether to toggle mute, depending on current state; always mute, or always un- mute Ramp – duration over which to mute/unmute; a fade will be applied over this duration

RECORD

button to the right – these will automatically appear in

Start or stop recording a clip.

Parameters:

Action – whether to toggle recording, depending on current state; always start recording, or always stop recording

Use Default Settings – whether to use the settings defined at the applicable level (clip, colour, or global), or override these settings

If Clip Has Audio – what to do if the clip is already recorded: Do Nothing, Toggle Playback, Play If Stopped/Overdub If Playing, Overdub, Rerecord)

Other settings – see the record section in Clip Settings for details.

ADJUST PARAMETER

Adjust volume, balance, pitch, speed, rate, overdub feedback or input gain for one or more clips.

Parameters:

Parameter – the parameter to adjust

Action – if trigger is *impulse*, whether to assign a specific value, or nudge the value by some amount

Value – if trigger is *impulse*, the value to assign/nudge

Ramp – if trigger is *impulse*, duration over which to apply the change. A smooth ramp will be applied.

Minimum Value – if trigger is *continuous*, the minimum value to assign, at the lower end of the controller's range

Maximum Value – if trigger is continuous, the maximum value to assign, at the upper end of the

controller's range

Controller Input Start – if trigger is continuous, the incoming controller value to treat as the lower end of the range. Incoming values outside this range will be clipped to the given bounds. Controller Input End – if trigger is continuous, the incoming controller value to treat as the upper end of the range.

ADJUST PLAYHEAD

Move through the clip, either continuously via a continuous input like a slider, jump to a specific position or nudge back/forward through the clip.

CLEAR CLIP

Clear all audio content from a clip. Parameters:

If Recording – What to do if the clip is currently recording: Stop Recording only, or Clear Clip.

MERGE/MOVE

Copy or move the audio content from one clip to another, mixing audio with the destination clip Parameters:

Clear Source After Merge – Whether to clear the source clip once merge has completed (i.e. move, rather than copy)

Play Target – Whether to start the target clip playing, if it is stopped

MULTIPLY CLIP LENGTH

Extend the length of the clip by a factor of two. Parameters:

Pad with Silence – whether to extend the clip by padding with silence, instead of repeating the clip's audio

DIVIDE CLIP LENGTH

Truncate the length of the clip by a factor of two.

SHOW DETAIL SCREEN

Open the clip's detail screen. **SELECT**

Select a clip (see "Clip Selection" above).

PHASE ALIGN CLIP

Re-set the clip playback position to be synchronized with other clips in the project. This is particularly useful when using a playback rate or speed adjustment as an effect, as changing playback speed/rate will make a loop go out of time.

You can specify:

Set Phase Lock – whether Phase Lock will be turned on for the clip

Phase Quantum – if *Set Phase Lock* is disabled, specify a custom time quantum to sync to. For example, set "Whole Loop Duration" to sync with a time period equal to the length of this clip, so that it's in sync with all other clips of the same length. Or, set it to 1 Bar, to sync to just 1 Bar intervals. The shorter the interval, the less travel the clip may need to perform to reach a synchronised position.

Transition – whether, and how, to perform a smooth transition to the new playback position. "None" will disable any transition, so that the clip jumps to the new position instantly. "Constant Pitch Speed Up/Slow Down" will speed up or slow down the clip over the specified duration, while keeping pitch constant. "Variable Pitch Speed Up/Slow Down" will speed up or slow down the playback rate, with a variable pitch like a type/vinyl effect. Reset Rate – whether to reset the playback rate to a final value

Final Playback Rate – the final speed/rate to assign

REVERSE CLIP

Quickly toggle reverse for the clip.

PEEL/REPLACE LAYERS

Remove the top overdub layers of a clip, or replace them. This behaves a little like undo/redo for a particular clip.

CANCEL COUNT INS/OUTS

Acting on all clips in the project, this special action aborts any pending count ins or outs.

10.3. COLOR ACTIONS

Actions that operate on colours.

PLAY/STOP

See Clip Play/Stop, above. **SOLO**

See Clip Solo, above. Note that this action operates on the clips of this colour, and starts/stops the clips as required. This is a different action from Mixer Solo below, which operates on the mixer channel strip.

MIXER SOLO

Solo or unsolo the colour channel in the mixer. Parameters:

Action – Whether to solo/un-solo based on current state; always solo, or always un-solo MUTE

Mute the output of a colour. Parameters:

Action – Whether to mute/unmute based on current state; always mute, or always unmute **ADJUST PARAMETER**

See Clip Adjust Parameter, above.

10.4. EFFECT ACTIONS # ENABLE/DISABLE EFFECT

Toggles the effect on or off. When off, the effect is bypassed. Parameters:

Action – Whether to enable/disable based on current state (toggle); always enable, or always disable.

ADJUST EFFECT PARAMETER

Adjust a parameter value. Parameters:

Target – the effect parameter to adjust

Action – if trigger is *impulse*, whether to assign a specific value, or nudge the value by some amount

Value – if trigger is *impulse*, the value to assign/nudge

Ramp – if trigger is *impulse*, duration over which to apply the change. A smooth ramp will be applied.

Minimum Value – if trigger is *continuous*, the minimum value to assign, at the lower end of the controller's range

Maximum Value – if trigger is continuous, the maximum value to assign, at the upper end of the controller's range

Controller Input Start – if trigger is continuous, the incoming controller value to treat as the lower end of the range. Incoming values outside this range will be clipped to the given bounds. Controller Input End – if trigger is continuous, the incoming controller value to treat as the upper end of the range.

SELECT EFFECT PRESET

Load a saved preset for an effect. Presets can be provided by the effect manufacturer, or user presets you create.

OPEN EFFECT INTERFACE

Show the user interface for the effect. If the effect is built-in or AUv3, opens a window to reveal the effect. If the effect is an Inter-App Audio app, switches to that app.

Parameters:

Action – Whether to show/hide UI based on current state (toggle); show, or hide. Note that "hide" only applies to non-IAA effects.

10.5. AUDIO/MIDI SOURCE ACTIONS # MUTE/UNMUTE

Mutes or unmutes the source, with an optional ramp for a smooth fade in/out. Parameters:

Action – whether to toggle mute on/off, depending on current state; always mute, or always unmute

Mute Position – where to apply the mute: *Post-Fader*, at the end of the signal chain (default), or *Input*, at the very start of the signal chain before any effects are applied. This can be useful to enable pre-fader effects to move into idle mode when muted.

Invert Value – whether to invert the displayed state (e.g. show a button lit up when unmuted, rather than muted)

Ramp – duration over which to apply a smooth fade

SOLO

Soloes the source, muting all other channels. Parameters:

Action – whether to toggle solo on/off, depending on current state; always solo, or always unsolo

Context – the solo context: Audio/MIDI Inputs Only, which will cause only other inputs to be muted while solo is active (default), or All Channels, which will cause all channels, including buses and color groups, to mute.

ADJUST PARAMETER

Adjust gain, input gain or balance. Parameters:

Parameter – the parameter to adjust

Action – if trigger is *impulse*, whether to assign a specific value, or nudge the value by some amount

Value – if trigger is *impulse*, the value to assign/nudge

Ramp – if trigger is *impulse*, duration over which to apply the change. A smooth ramp will be applied.

Minimum Value – if trigger is *continuous*, the minimum value to assign, at the lower end of the controller's range

Maximum Value – if trigger is *continuous*, the maximum value to assign, at the upper end of the controller's range

Controller Input Start – if trigger is continuous, the incoming controller value to treat as the lower end of the range. Incoming values outside this range will be clipped to the given bounds. Controller Input End – if trigger is continuous, the incoming controller value to treat as the upper end of the range.

OPEN AUDIO UNIT INTERFACE

Show or hide an Audio Unit plugin window.

ADJUST AUDIO UNIT PARAMETER

Adjust a parameter for an Audio Unit plugin. Parameters:

Parameter – the parameter to adjust

Action – if trigger is *impulse*, whether to assign a specific value, or nudge the value by some amount

Value – if trigger is *impulse*, the value to assign/nudge

Ramp – if trigger is *impulse*, duration over which to apply the change. A smooth ramp will be applied.

Minimum Value – if trigger is *continuous*, the minimum value to assign, at the lower end of the controller's range

Maximum Value – if trigger is continuous, the maximum value to assign, at the upper end of the controller's range

Controller Input Start – if trigger is continuous, the incoming controller value to treat as the lower end of the range. Incoming values outside this range will be clipped to the given bounds. Controller Input End – if trigger is continuous, the incoming controller value to treat as the upper end of the range.

SELECT AUDIO UNIT PRESET

Activate a preset for an Audio Unit plugin.

10.6. BUS ACTIONS # MUTE/UNMUTE

Mutes or unmutes the bus, with an optional ramp for a smooth fade in/out. Parameters:

Action – whether to toggle mute on/off, depending on current state; always mute, or always unmute

Invert Value – whether to invert the displayed state (e.g. show a button lit up when unmuted, rather than muted)

Ramp – duration over which to apply a smooth fade **SOLO**

Soloes the bus, muting all other channels. Parameters:

Action – whether to toggle solo on/off, depending on current state; always solo, or always unsolo

Context – the solo context: Buses Only, which will cause only other buses to be muted while solo is active (default), or All Channels, which will cause all channels, including audio sources and color groups, to mute.

ADJUST PARAMETER

Adjust gain or balance. Parameters:

Parameter – the parameter to adjust

Action – if trigger is impulse, whether to assign a specific value, or nudge the value by some

amount

Value – if trigger is *impulse*, the value to assign/nudge

Ramp – if trigger is *impulse*, duration over which to apply the change. A smooth ramp will be applied.

Minimum Value – if trigger is *continuous*, the minimum value to assign, at the lower end of the controller's range

Maximum Value – if trigger is *continuous*, the maximum value to assign, at the upper end of the controller's range

Controller Input Start – if trigger is continuous, the incoming controller value to treat as the lower end of the range. Incoming values outside this range will be clipped to the given bounds. Controller Input End – if trigger is continuous, the incoming controller value to treat as the upper end of the range.

10.7. WIDGET ACTIONS # TRIGGER WIDGET

Activate a widget's functions. Parameters:

Action: The specific action of the widget to perform (e.g. Value Change, Press, Release, Double-Tap, etc.)

Adjustment: For Value Change actions, the kind of adjustment to make: Assign, Toggle, or Nudge Value, or for *continuous* controls, Adjust Continuously

Ramp – if trigger is *impulse* and action is Value Change, duration over which to apply the change. A smooth ramp will be applied.

Minimum Value – if trigger is *continuous*, the minimum value to assign, at the lower end of the controller's range

Maximum Value – if trigger is continuous, the maximum value to assign, at the upper end of the controller's range

Controller Input Start – if trigger is *continuous*, the incoming controller value to treat as the lower end of the range. Incoming values outside this range will be clipped to the given bounds.

Controller Input End – if trigger is *continuous*, the incoming controller value to treat as the upper end of the range.

10.8. PAGE ACTIONS # SWITCH PAGE

Switch to another page. Parameters:

Action – The kind of switch to perform:

Show: Show the page, without playing or stopping anything

Switch: Stop playing the current page, switch and start playing the new one Solo: Toggle solo of the page: stops playing all loops from other pages Start: Start playing loops in the page Stop: Stop playing loops in the page

Target – The page to act on: Next Page, Previous Page, or a specific page.

Quantization – How to synchronise start/stop with the master timeline: None, Master

(synchronise with the master clock's cycle), Loop (synchronise with a specific loop, context-dependent), Custom.

COPY PAGE

Copy the layout and optionally content of the current page to a new page. Parameters:

Source – The copy source: Current Page, Next Page, Previous Page, or a specific page. Copy Clip Content – Whether to copy contents of the clips to the new page.

10.9. SESSION ACTIONS # TOGGLE CLOCK PAUSE

Pause or unpause the timeline. Parameters:

Reset Timeline After Pause – Whether to move the playhead back to zero after pausing (on by default).

Perform Count-In – When unpausing from the start of the timeline, whether to perform a count-in with metronome prior to playback.

UNDO

Undo the last action.

REDO

Redo the last undo step

TAP TEMPO

Update the tempo by tapping out a new one (for impulse triggers only). ADJUST TEMPO

Modify the current tempo. Parameters:

Action – if trigger is *impulse*, whether to assign a specific value, or nudge the value by some amount

Value – if trigger is *impulse*, the value to assign/nudge

Ramp – if trigger is *impulse*, duration over which to apply the change. A smooth ramp will be applied.

Minimum Value – if trigger is *continuous*, the minimum value to assign, at the lower end of the controller's range

Maximum Value – if trigger is continuous, the maximum value to assign, at the upper end of the controller's range

Controller Input Start – if trigger is continuous, the incoming controller value to treat as the lower end of the range. Incoming values outside this range will be clipped to the given bounds. Controller Input End – if trigger is continuous, the incoming controller value to treat as the upper

end of the range.

RESET CLOCK

Stop playback, reset the tempo and master length to an unset state. The next recorded loop will define the tempo and master length.

SET MASTER LENGTH

Assign the clock master length. Parameters:

Action – double, halve, or set a specific value. START NEW PROJECT

Begin a new project. Parameters:

Confirm – whether to confirm first (if enabled, a second activation of the action will confirm).

Save first – whether to save the current project before starting the new one.

Template – if you have defined any project templates, the one to use for the new project.

LOAD PROJECT

Load a project, with an optional cross-project transition. Parameters:

Confirm – whether to confirm first (if enabled, a second activation of the action will confirm). Save first – whether to save the current project before starting the new one. Quantization – how to synchronise the project load relative to the current timeline. Crossfade – The duration of crossfade from the current project to the new one.

Effect Tails – Whether to blend audio from the current project with the new one, until effect tails (e.g. reverb or delay) go silent.

Start Clock – Whether to start the clock of the new project running.

Load Audio Units First – Whether to wait for audio units in the new project to load before beginning a transition.

Copy Levels – Whether to copy the currently-assigned mixer levels from the current project to the new one.

Project – The target project:

The next project in the same folder as the current project. The next project in the current set list. A specific project

ADJUST MASTER VOLUME

Modify the main output volume. Parameters:

Action – if trigger is *impulse*, whether to assign a specific value, or nudge the value by some amount

Value – if trigger is *impulse*, the value to assign/nudge

Ramp – if trigger is impulse, duration over which to apply the change. A smooth ramp will be

applied.

Minimum Value – if trigger is *continuous*, the minimum value to assign, at the lower end of the controller's range

Maximum Value – if trigger is continuous, the maximum value to assign, at the upper end of the controller's range

Controller Input Start – if trigger is continuous, the incoming controller value to treat as the lower end of the range. Incoming values outside this range will be clipped to the given bounds. Controller Input End – if trigger is continuous, the incoming controller value to treat as the upper end of the range.

TOGGLE METRONOME

Turn on/off the metronome. Parameters:

Action – Whether to toggle the metronome based on current state; turn metronome on, or turn it off.

Sound – Whether to enable metronome sound

Flash – Whether to enable screen flash

ADJUST METRONOME VOLUME

Modify the volume of the metronome. Parameters:

Action – if trigger is *impulse*, whether to assign a specific value, or nudge the value by some amount

Value – if trigger is *impulse*, the value to assign/nudge

Ramp – if trigger is *impulse*, duration over which to apply the change. A smooth ramp will be applied.

Minimum Value – if trigger is *continuous*, the minimum value to assign, at the lower end of the controller's range

Maximum Value – if trigger is continuous, the maximum value to assign, at the upper end of the controller's range

Controller Input Start – if trigger is continuous, the incoming controller value to treat as the lower end of the range. Incoming values outside this range will be clipped to the given bounds. Controller Input End – if trigger is continuous, the incoming controller value to treat as the upper end of the range.

10.10. MIDI ACTIONS # SEND MIDI MESSAGE

Send some MIDI to a MIDI target. Parameters:

Target – The target of the message: A connected MIDI device, an AUv3, another app running in the background, or a network MIDI destination.

Message – The message to send: A PC, CC, Note, Pitch Bend or a Custom message (e.g. SysEx

message). The Custom message is a series of MIDI bytes in hexadecimal format. In a custom message, XX can be use as a placeholder for the value of the widget (such as a dial, slider or knob) that is sending the message. When configuring, tap "Send" to immediately send the message, for testing purposes.

10.11. CONTROLLER ACTIONS # SELECT CONTROLLER PROFILE

Switch to, toggle, or enable/disable a particular control profile. Parameters:

Action – whether to enable a single profile from a list (radio style); toggle a control profile on/off, enable or disable a profile, or step forward or backward through profiles in a list. *Target* – the control profile to target, if applicable

List – a set of control profiles to act upon, if applicable

10.12. FOLLOW ACTIONS

Use clip and colour Follow Actions to perform actions when certain clip events occur. For example, you can configure a clip to turn on an effect when it begins recording, and turn off the effect again upon record end. Or you can make a clip start another clip playing when it starts. You can even make chains of clips that start each other playing in turn, one after another.

You can define Follow Actions at the clip level, from the clip detail screen, the colour level, from the colour settings screen, and the global Clip Settings.

The following events are defined for Follow Actions:

Load Project Begin Record

Finish Record

Begin Initial Record Finish Initial Record Begin Overdub Finish Overdub Play

Stop

Clear, and a special follow action: Amplitude Envelope

AMPLITUDE ENVELOPE FOLLOW

Loopy Pro provides a special Follow Action – *Amplitude Envelope* – which allows you to specify *continuous value* actions which map to the current clip volume as a clip plays.

You use this to implement sidechaining, where a parameter is controlled by an amplitude envelope. For example, you could configure an Amplitude Envelope on a colour representing your drum loops to drive the volume fader on a different colour for synth pads, for a sidechain compression effect.

11. CONTROLLING LOOPY PRO

Loopy Pro can be controlled via on-screen widgets, or an external MIDI controller, via its flexible actions system.

Loopy Pro has built-in support for a number of popular controllers, including the Launchpad, the Akai APC40 mk2, and the MIDI Fighter Twister, and can be effortlessly set up to work with any other MIDI controller, via MIDI Learn.

11.1. MIDI LEARN

With MIDI Learn, you can program Loopy Pro to respond to incoming messages from a connected MIDI Controller, either connected wirelessly over Bluetooth, or via a USB interface connected to your device.

There are two ways to configure how Loopy Pro responds to incoming MIDI: via MIDI Learn itself, or via Loopy Pro's Control Settings screen.

MIDI Learn provides a simple, immediate way to attach an action to an on-screen element. Open up

MIDI Learn by either selecting "MIDI Learn" from the top-right menu, or by tapping the the canvas editor.

In MIDI Learn mode, hotspots are shown with a shaded background: tap one of these elements to open the MIDI Learn panel for that item.

The panel displays settings relevant to the given action, and may provide a list of alternative actions by tapping the top-left "Actions" button.

icon on

While the MIDI Learn panel is active, Loopy Pro is listening for incoming MIDI messages from any connected device (tap to connect any Bluetooth hardware you may have). Pressing a button or moving a knob on your MIDI controller will cause Loopy Pro to select that as the trigger for the shown action, thus creating a *binding* between the action and the incoming trigger.

11.2. TRIGGERS

A trigger is an incoming MIDI message which can be bound to one or more actions. You can customise the trigger by tapping on the bottom trigger panel, shown with a shaded background.

IMPULSE TRIGGERS

For impulse action types (as opposed to continuous actions that you might map to a dial), you

can configure Loopy Pro to respond to:

On state (e.g. a Note On, or value 127 CC),
Off state (e.g. Note Off, on a zero CC),
Either On or Off: Useful for MIDI controllers that only support toggle buttons, rather than momentary ones
Hold
Double Tap

HOLD AND DOUBLE TAP

Hold and Double Tap triggers are special cases, as Loopy Pro must wait a short interval after the initial incoming message to evaluate the gesture. By default, if you bind a Hold or Double Tap to a button in addition to a separate On or Off binding, Loopy Pro will trigger the other bindings in addition to the Hold or Double Tap.

If you would prefer Loopy Pro to only perform the *On* or *Off* action if a *Hold* or *Double Tap* is not detected, then you can enable the "Defer Other Actions" setting for the *Hold* or *Double Tap* binding. When this is enabled, *On* or *Off* bindings will be delayed until the *Hold/Double Tap* timeout interval is reached (for time-sensitive actions like toggle record, the time of the action will actually correspond to the initial *On* message).

CONTINUOUS TRIGGERS

For continuous action types (such as a parameter adjustment), you can specify an incoming CC as *Absolute* or *Relative*; Loopy Pro will automatically detect this when you move the relevant controller knob. Loopy Pro currently recognizes two relative MIDI conventions: 127/1 and 64-centered (used by the MIDI Fighter Twister). In the 127/1 convention, 127 is fine decrement (with adjustment being increasingly coarse as the values approach 65) and 1 is fine increment (with adjustment being increasingly coarse as values approach 63). In 64-centered style, 65 is the finest decrement and 63 is the finest increment.

For most continuous actions, you can also specify two ranges: A minimum and maximum value for the action (e.g. from $-\infty$ dB to 0 dB), and a sub-range of the controller input. The former is used to limit the range of values of the parameter, while the latter can be used to allocate a sub-range of the available incoming values from the controller – to, for example, use the first half of a slider's throw to adjust one parameter, and the second half of the throw to affect a different parameter.

11.3. BINDINGS #

A *binding* is a mapping between an incoming MIDI event or keyboard trigger and one or more actions that are performed when that trigger is received. Bindings are created when you MIDI Learn or manually create a binding in Control Settings.

Hotspots with *bound* actions in MIDI Learn are shown with a lighter shaded background. You can also view a complete list of bindings in the Control Settings screen, accessible from the main

top- right menu in Loopy Pro.

See Control Settings for more details on editing bindings.

11.4. PROFILES

Loopy Pro control profiles are collections of action bindings. There are two kinds of profiles: project profiles, and global profiles.

Project profiles allow you to store bindings that are saved within a project. You can reference specific project objects like clips and widgets, and references are persistent.

Global profiles exist outside of your projects, and are always available regardless of which project is loaded. You can have multiple global profiles and switch between them, either manually or via an action. Specific clips and widgets referenced from actions within a global profile are identified by their order on-screen, so rearranging your project canvas may result in the targets of some actions changing.

11.5. MIDI STATE FEEDBACK

By default, for most connected MIDI controllers, Loopy Pro will send MIDI feedback for any currently-bound actions.

For example, if you have a CC bound to a clip's Play/Pause state, then whenever that state changes Loopy Pro will send the same CC back to the MIDI controller, with a value corresponding to the current clip state. Similarly, if you have a CC set to control an AUv3 effect parameter, for example, then whenever that parameter changes, Loopy Pro will send that CC back to the MIDI controller with the corresponding value.

This allows compatible hardware to display the current state of Loopy Pro.

If this is not desired, this can be disabled by opening up Control Settings, tapping the device name, and turning off the switch beside "Feedback Enabled".

11.6. SPECIAL HARDWARE SUPPORT

Loopy Pro supports any controller capable of communicating via MIDI. However, there is enhanced support for certain controllers, to implement special features like RGB lighting.

This list is growing – see the Loopy Pro roadmap for details, or to request support for your hardware.

Akai APC40 Mk2 Launchpad Pro Mk2 and Mk3 Launchpad X Launchpad Mini Mk3 MIDI Fighter Twister

12. THE SEQUENCER

Loopy Pro's Sequencer allows you to sequence each clip in your session, either by entering sequences by hand, or recording them using the sequence recorder. These sequences can be played back, or exported to a multi-track or stereo audio file.

You can also automate a live-looping session by sequencing your clips, and using the sequencer to trigger record and playback.

Open the Sequencer by tapping the button in the bottom-left navigation area.

Each row in the Sequencer represents an individual clip on the main canvas of Loopy Pro. You can reorder these rows by tapping and holding in the left area, and dragging up or down.

Zoom in or out by pinching in the main area to expand or contract the number of bars visible. Pinch to zoom vertically in the left row header area to grow or shrink each row.

When a sequence exists, a new seq button appears on the top toolbar. Tap this to enable or disable the sequence.

12.1. CREATING A SEQUENCE

CREATING SEQUENCES MANUALLY

Create segments on the sequencer by tapping in the main area. Press and hold a segment from the middle then drag left or right to move it in the timeline. Drag from the end to expand the segment along the timeline, and drag from the start to contract it forwards. Tap a segment to select it, and to copy or delete it.

Segments will snap to the grid determined by the current zoom level. Zoom in – by pinching with two fingers in the main area – to zoom in and decrease the grid snap size. When zoomed all the way in, no snap-to-grid is applied.

Tap in the bottom right of the screen to toggle selection mode; when active, you can tap and drag over segments to select them as a group.

USING THE SEQUENCE RECORDER

You can also record sequences as you perform in Loopy Pro. Tap the button on the top toolbar to open the Session Recording pop-up, then tap "Record Sequence", to enable sequence recording.

Tap "Start Recording" to begin; Loopy Pro will count in for 4 beats, then begin recording. Any clips that are recorded, or played or muted, will be recorded to the sequencer timeline as segments.

Tap again to stop recording.

12.2. AUTOMATING SESSIONS

You can use Loopy Pro's sequencer to automate full performances, with recording actions and play/mute driven by the sequence.

When you have created a sequence, you can clear the audio out of sequenced clips – either via a swipe gesture on the clips on the main screen, or by double-tapping the waveform in the row header in the sequencer, and tapping "Clear" or "Clear All" – then an "Arm" option will be displayed in the row header.

Tap "Arm" to open the Arm Recording settings pop-up.

Arm Recording Options

Turn on the switch beside "Arm Recording" to arm the clip. When the playhead reaches the first segment within the timeline, the clip will begin recording, for the length defined by the "Loop Length" slider.

If the segment is positioned at the very beginning of the timeline, additional options are presented, to determine how the session will begin.

Count-In will cause Loopy Pro to perform a 1, 2 or 4 bar count-in with a metronome. This requires you to set the tempo in advance, and use in-ear monitors/etc to hear the metronome. **Immediate Start** will cause Loopy Pro to begin recording immediately, as soon as you initiate playback; if no tempo has been set in advance, stop recording by tapping the playback button (or bound controller), or by toggling recording on the clip by tapping it, or using a controller. **Detect Loop** will use Loopy Pro's automatic loop detection to detect the loop, and automatically end recording on time. Set a tempo first (or set the detection range) to give Loopy Pro a hint about the loop tempo for increased accuracy. As soon as playback begins, Loopy Pro will begin recording, and automatically end recording on the beat when a loop is detected.

12.3. TIMELINE LOOPING

You can create looping regions on the sequencer timeline by tapping the icon at the bottom right, or by tapping the timeline marker and tapping "Loop From Here". Drag the start and ends of the loop marker in the timeline header to adjust the start and end, or drag from the middle to move the loop region backwards and forwards in time.

During playback, when the playhead enters the loop region, Loopy Pro will loop through the defined region continually, until you tap the play/pause button which shows the symbol (or activate the controller bound to the Clock Pause action), whereupon playback will continue past the loop region when it is next reached.

You can use timeline looping in combination with sequence recording, to progressively record a sequence over several cycles. Timeline loops are also useful for marking a freeform part of a

performance which may be of indeterminate length.

Tap the loop region in the timeline header to disable or delete the loop region, or tap to toggle between enabled or disabled state.

13. MANAGING PROJECTS

Loopy Pro projects are flexible, customizable environments where you can combine and control multiple audio clips, effects, and inputs. They are central to how you organize your music and live performances. Projects are file bundles that contain the layout, audio and MIDI bindings.

Loopy Pro creates new projects in the Loopy Pro folder on your device. You can move projects to other folders and accessible media using the iOS File browser. Loopy Pro can run and save projects that are outside the Loopy Pro folder, but you must open them from outside of Loopy Pro as its browser is restricted to what is found in the Loopy Pro folder.

SAVING PROJECTS

Because you often want to make temporary changes to a project, Loopy Pro does not auto-save the project. To make changes to your project permanent, you save the project.

Loopy Pro features an auto-save-like function that allows you to leave and return to a project, preserving its exact state. While you're working, the app continuously saves your progress within its Workspace project. When you create or open a new project, the Workspace is cleared. Before switching projects, Loopy Pro will prompt you to either save or discard your changes, ensuring your work is protected before the Workspace is reset.

13.1. PROJECT MANAGER

ACCESSING THE PROJECT MANAGER

The folder icon in the upper-left toolbar provides access to the project manager and a list of recently opened projects.

RECENT PROJECTS LIST

Press and hold the folder icon to pop down a list of recently opened projects. You can also save your project or create a new one from the list.

PROJECT MANAGER

Tap the folder icon to pop up the project save panel. Features:

New Project Save

Duplicate Project: Create a copy of the current project as a new project. The original project remains unchanged and stays in the state it was last saved. This works similarly to "Save As."

Export: Export the current project or the project's clips as audio

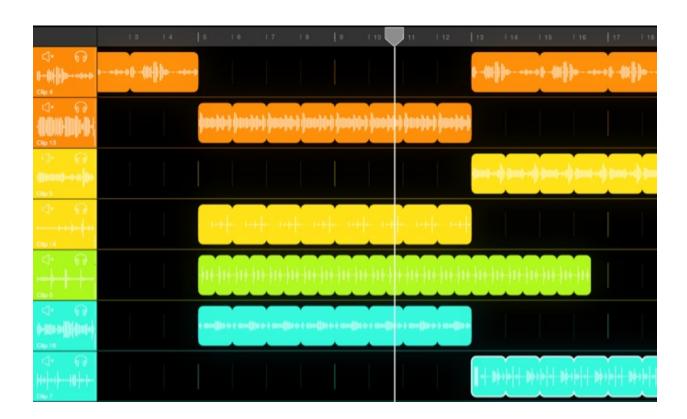
Pencil icon (Rename): Tap the project's name to rename it. This action only changes the name and doesn't create a copy of the project.

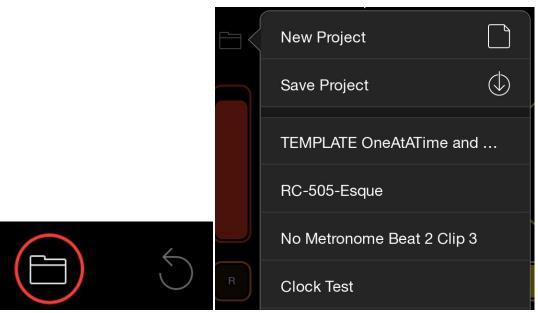
Make Template Star: Activate the star at the upper-right to make the project a template or deactivate it to remove the project from the template list.

Save Points: Tap to see and manage the project's save points. See Save Points [link to section] **Browse options**: Projects, Recordings, Media.

THE BROWSER

In the save panel, tap Projects, Recordings or Media to switch to the browser appropriate to the selected item. The browser





to the browser appropriate to the selected item. The browser

lets you find, reorganize, and rename files and folders. Mostly, you see the same files and folders that you would see in the iOS Files app but there are some additional features.

Tap the Edit button to move or reorganize the files and folders.

PROJECT BROWSER

There are a few items that don't correspond to items you can see in Files.

Set Lists: Tap the Set Lists item to see, create and edit Set Lists.

Recently Deleted: When you delete a project using the project browser, Loopy moves the projects here where they can be restored. Any project that remains for 30 days is deleted at that time.

Audio Unit Extension Folder: Due to an iOS limitation, the Loopy Pro AUv3's files are not visible in the Files app, and the AUv3 version cannot access projects from the standalone app. Instead, the AUv3 can only see projects stored in the Audio Unit Extension folder. Use the project browser to move files into this folder to make them visible to the Loopy Pro AUv3.

RECORDINGS BROWSER

The recordings browser lists session recordings. Press the play button to preview the session recording or long-press to see and hear the session's individual files.

13.2. EXPORTING

The recordings browser displaying the files of a recording session.

Tapping the project manager's Export button gives you the option to export the project or the project's audio files. The standard iOS Share Sheet is presented for picking the destination.

When exporting a project, save points are not exported. Use the iOS Files app to move or copy projects if you want to preserve the save points. Exporting audio files, exports the audio from all loops and one-shots. To export a mix from the sequencer, go to the Sequencer view and tap its share icon.

EXPORTING INDIVIDUAL OR SELECTED CLIPS

To export the audio from selected clips and one-shots, enter Loopy Pro's layout edit mode, drag a selection rectangle around the desired clips, and then choose "Export" from the popup menu that appears.

To export the audio from an individual clip, show the clip details and tap on the Export (share) icon.

13.3. SAVE POINTS

When "Use Save Points" is enabled in the System Settings panel, Loopy Pro automatically creates a recallable snapshot of your project as a Save Point. Restoring a Save Point brings the project back to the exact state it was in at the time of saving. Since Save Points include all project audio, they can increase the file size. Save Points are especially useful when making changes you might want to undo later. You can delete unnecessary Save Points as needed.

To access Save Points, open the project save panel and tap "Save Points." This will bring up the Save Point browser, where you can restore or delete Save Points.

13.4. TEMPLATES

Templates are projects that serve as starting points for new projects. A project is made a template by tapping the project save panel's star icon. When a new project is made from a template, a copy of the template is opened.

When there is only one template, new projects are automatically made with the template. If there is more than one template, you are presented with a list of available templates when you create a new project.

Using Loopy's default template instead of your own. If you want to use Loopy Pro's default project instead of your template, long-press New Project in the project browser. It will let you choose the built-in Default factory project template.

When a new project is started from a template, a copy of the original project is made and given a new name.

TIP! When saving a project to be used as a template, delete any unnecessary audio clips.

13.5. SET LISTS

Use Set Lists in Loopy Pro along with the Load Project action – connected to a button on-screen,

a controller, or a follow action, for example – to chain projects together, with a seamless transition between them.

Manage Set Lists from within the Projects section. Tap "Create Set List" to begin; "Add Project" to begin adding projects to the list. Drag the handles at the left to change the order.

Then, you can select this Set List in the configuration for the Load Project action, under the "Next Project In Set List" option.

14. SESSION RECORDING

Session recording has two different ways of capturing a performance: audio or sequence recording. Audio session recording captures the performance as audio files. A sequence recording captures the performance as events in the sequencer.

Audio session recording can capture everything that passes through Loopy Pro's mixer including solos and other audio not contained in loops or one-shots. Sequencer recording creates a sequence of audio recorded or played into clips but doesn't capture audio that you don't record into clips.

RECORD AUDIO

To record and audio session, tap on the REC button and tap on Configuration to select what gets recorded. Tap Start Recording to start recording. Tap the REC button again to end the recording.

The session's audio is captured to files in a uniquely named folder that ends ".lprecording". Each session is recorded in its own folder. Loopy's project window let's you listen to a preview mix of session recordings. The actual files are accessible via Files app. They are found in the Loopy Pro folder.

Lossless Recording On/Off: By default, Loopy Pro saves session recordings as compressed (AAC/mp4) audio files. Turn Lossless Recording on to record uncompressed audio.

Capture options:

Combined Inputs/Outputs – a stereo mix that captures all inputs and outputs to one file. Combined Outputs – the output to all external destinations as a stereo mix. If the mixer has output going to multiple channels, all the channels will be mixed together — included any destinations that share duplicate signals.

Individual Outputs – the output of each mixer destination as a separate file Combined Inputs – each source's input is captured to a combined stereo mix.

Individual Inputs – each individual source input saved to its own file. Hardware input, audio units and IAA apps are all sources.

Individual Color Groups – each color group's output is saved to a separate file.

Individual Buses – each bus channel's output is saved to a separate file.

Audio from loops and one-shots recorded during the session is included in the relevant output file, but the individual clips are not saved as individual files. A project's clips can be exported by separately if desired.

A session recording will often include several files. You can preview and browse session recordings and their files in the Project Manager's recordings browser.

RECORD SEQUENCE

Use this to capture clip-based performances. The performance is recorded as events on the sequencer timeline.

15. USING LOOPY AS AN AUV3 AUDIO UNIT

The Loopy Pro AUv3 can be loaded as an audio instrument, music effect (an audio effect that can receive MIDI input) or a MIDI processor. As an AUv3, Loopy Pro can be run as a multi-bus audio unit with multiple inputs (when run as an effect) and outputs. It can run as a MIDI processor for those times where you want to use Loopy Pro just as a MIDI controller.

PROJECTS

The Loopy Pro AU project browser sees other Loopy Pro AU projects. Due to a quirk of how iOS handles AUv3 file storage, these files aren't visible in normal file browsers. The standalone app's project browser provides access to the AUv3's projects. These appear in a folder called Audio Unit Extension folder (which is only visible to Loopy Pro). You can move projects into and out of the Audio Unit Extension folder using the Loopy Pro project browser.

STANDALONE AND AU PROJECT COMPATIBILITY

i(Pad)OS does not allow Audio Units to load other audio units. When moving standalone projects into the audio unit extension folder, you should remove any Audio Unit instruments and effects from the project.

STATE SAVING OPTIONS

In the Loopy Pro AU, System Settings panel, there is a State Saving option. The *Whole Project* option will save all of the project's data (including its audio) as part of the AU's state. *Project Reference Only* saves only a reference to the project file found in the Audio Unit Extension folder. This option uses less memory and storage than the Whole Project option, but you must remember to save the project itself when you make changes that you want to keep.

EXPOSED AU PARAMETERS

You can expose the elements of AU projects to the host as AUv3 parameters so that they can be manipulated with whatever tools the host provides for accessing AUv3 parameters. These will

appear to the host as Parameter 1 through Parameter 128. To expose elements of your project as AU parameters, choose Exposed AU Parameters in the Control Settings panel.

16. SETTINGS

16.1. CLIP SETTINGS

The Clip Settings screen allows you to set the global configuration for clips – these can then be overridden at the colour, clip, and action level, if necessary.

Clip Settings are divided into four sections: Playback settings, recording settings, audio settings, and gestures.

The following will describe each setting in detail.

PLAYBACK SETTINGS

The following settings define how clips play and stop. These can be overridden for particular colours and individual clips, as well as for individual playback actions.

PLAY/STOP QUANTIZATION

Configure the synchronisation intervals at which loop play and stop events occur. *None*: Play and stop loops immediately, with no delay. *Master*: Play and stop loops in sync with the current clock master cycle. *Loop*: Play and stop loops in sync with the top of the specific loop. This is context-dependent – when stopping a loop, for example, it will stop at the end of the loop being stopped. When starting a loop playing, it will sync with the longest currently-playing loop, if there is one – if not, it will start immediately. *Custom*: Define a custom sync interval. *Default value*: *Loop*

PHASE LOCK LOOPS

Keep loops synced with the timeline, even when they're not playing. When Phase Lock is on, the position indicator of stopped loops will continue to move around the loop; when the loop is started again, it will start from that position, rather than from the start of the loop. Note that if you turn off Phase Lock, then Play/Stop Quantization determines how loops will be synchronised with each other, as this dictates the start synchronisation. *Default value: On*

TIME FITTING

Determine whether and how clips are fit to the project's tempo.

None – Clips won't follow the project tempo at all. They will play at whatever their original tempo is.

Time Stretch – Clips will be time-stretched to follow the tempo, keeping the pitch constant while adjusting the speed. When the tempo changes, Loopy Pro will perform a high-quality time-stretch operation in the background, while playing the clip using a live time-stretch operation.

When the time-stretch processing is complete, Loopy Pro will switch the new audio over.

Fast Time Stretch – As above, clips are time-stretched, but the live time-stretch operation (performed while Loopy Pro is processing the audio in the background) is less CPU- intensive, at the cost of fidelity.

Varispeed – Clips will alter their playback rate to follow the tempo, with tape-style variable-pitch playback.

Time-Fit One-Shots – Whether to perform time-stretching on one-shots while changing the tempo.

Never: Keep one-shots at original playback speed. *Always*: Always update one-shot speed to match tempo.

Auto: Decide based on length of one-shot – only one-shots longer than 4 beats will be time-stretched. This is the default.

ONE-SHOT QUANTIZATION

Configure the synchronisation intervals at which one-shot playback begins. *None*: Play one-shots immediately. *Master*: Synchronise one shots with the clock master cycle. *Custom*: Define a custom sync interval. *Default value*: *None*

HOLD TO PLAY ONE-SHOTS

Whether to only play one-shots while holding. When this setting is on, releasing a one-shot will stop playback. *Default value: On*

FADE IN/FADE OUT

The interval over which to fade in and out clip playback, rather than starting and stopping immediately. Set it to any duration, or:

Microfade – No fade in/out, but Loopy Pro will perform a very short microfade to avoid clicks when starting and stopping. This is the default.

Hard Zero – Disable even the microfade. You may hear clicks on start/stop if the clip does not already have appropriate audio boundaries. This is a reasonable setting if you don't want to introduce additional smoothing on playback, which may interfere with initial transients.

LOOP BOUNDARY CROSSFADE

The amount of audio to blend across loop boundaries. When recording loops, Loopy Pro will begin recording a little early, and end recording a little late, and use this additional audio to blend smoothly across the loop boundary. Set this to longer values to create a very smooth, long fade (good for drones, for instance), or shorter values to create a shorter transition. *Default value:* 50ms

RECORD IF EMPTY

Whether to begin recording empty clips when triggered. If you disable this setting, tapping a clip

or triggering it via an action/MIDI will have no effect. With this setting on, tapping an empty clip will begin recording. *Default value: On*

PAUSE CLOCK WHEN IDLE

If you stop all loops playing in a session, the clock will be paused until you start a loop playing again. *Default value: Off*

SECOND QUANTIZATION

When you activate an action a second time during a quantisation count-in or out, then if this setting is enabled Loopy Pro will begin a second-level 1-bar quantisation interval. If this setting is off, then the quantisation will just be cancelled, and the action performed immediately. During the second-level count-in, the action can be activated again to cancel this second count-in, and perform the action immediately. *Default value: Off*

RECORDING SETTINGS

The following settings define how clips record. These can be overridden for particular colours and individual clips, and can be customised for individual record actions.

RETROSPECTIVE RECORDING

When this setting is on, Loopy Pro is continually recording into a buffer, set by the current clock master cycle length. When you trigger recording, this buffer is instantly copied to the triggered clip, allowing you to capture a loop after the fact. The audio that will be recorded depends on the Retrospective Quantization setting. *Default value: Off*

RETROSPECTIVE QUANTIZATION

The quantisation interval to use when triggering Retrospective Recording. *Immediate*: Capture the immediately-preceding audio, regardless of position in the current cycle. *Quantized*: Capture the last cycle, aligned with the clock master cycle. If recording is triggered shortly before the start of a cycle boundary, Loopy Pro will capture the *current* cycle, continuing recording the live audio until the cycle is complete. *Default value: Quantized*

AUTO COUNT OUT

When this setting is enabled, loops will record for the *Count Out Quantization* interval, and then stop recording automatically. This allows you to record loops of a pre-defined length without needing to manually end recording. If you disable this setting, clips will continue recording indefinitely, until you stop recording, and Loopy Pro will select an appropriate quantised length for the clip, if *Length Quantization* is enabled. See Pre-Set or Free Loops for further discussion. *Default value: On*

COUNT IN QUANTIZATION

The synchronisation interval for beginning loop recordings. *None*: Start recording loops immediately. *Master*: Wait until the beginning of the next clock master cycle to begin recording.

Custom: Define a custom sync interval. Default value: Master

COUNT OUT QUANTIZATION

The synchronisation interval for ending loop recordings. *None*: Stop recording loops immediately. *Master*: Wait until the beginning of the next clock master cycle to stop recording. *Custom*: Define a custom sync interval. *Default value*: *Master*

LENGTH QUANTIZATION

Whether to constrain loop lengths to multiples or subdivisions of a bar. *Default value: On PAD LOOP LENGTH*

When recording a new loop and ending record before the set quantisation interval, whether to extend the loop with silence to the full interval. *Default value: Off.*

LOOP AUDIO THRESHOLD RECORDING

When on, loops will wait for the input level to cross the defined audio threshold before recording starts. You can use this facility to "arm" a loop in advance, which will only start recording when you begin playing. *Default value: Off*

ONE-SHOT AUDIO THRESHOLD RECORDING

When on, one-shots will wait for the input level to cross the defined audio threshold before recording starts. *Default value: On*

AUDIO THRESHOLD

The audio threshold to use for Audio Threshold Recording. RECORD INTRO

When enabled, Loopy Pro will begin listening immediately upon starting a record count-in. If the audio level crosses the threshold, recording will begin immediately, and the audio will be recorded to a special "intro" section of the loop, which will play back when starting the loop playing. This setting requires *Count In Quantization* to be enabled. See *Intro and Tail* for further discussion. *Default value: Off*

RECORD TAIL

When enabled, Loopy Pro will continue recording for a short time after loop recording ends. Recording will continue until Loopy Pro detects that the audio level has dropped off. The audio will be recorded to a special "tail" section of the loop, which will play back in the second and latter repeats of a loop, and when the loop is stopped. See *Intro and Tail* for further discussion. *Default value: Off*

SIMULTANEOUS RECORDING

When enabled, you can record multiple loops at the same time. If disabled, when you start additional loops recording while a loop is already being recorded, the additional loops will enter a record queue, and each loop will be recorded one after another. *Default value:* Off

AFTER RECORDING

Configure how a loop behaves after its initial recording has completed. *Play*: Loop will begin playback immediately after recording. *Stop*: Loop will be silent after recording. *Overdub*: Initially begin overdubbing, for recording additional layers. *Default value*: *Play*

PHASE PRESERVATION

Whether to rotate new loops so that the start point is aligned with the current musical phase. If you disable this setting, Loopy Pro will perform no adjustment, so the start of the loop will be the point at which you began recording, which may not be what you expect. *Default value: On*

WAIT FOR PLAYBACK

With this setting enabled, when the clock is paused and you start a loop recording, Loopy Pro will not begin recording until you unpause the clock. If this setting is disabled, Loopy Pro will automatically unpause the clock and begin playing when you start recording. *Default value: Off*

AUTO LOOP DETECTION

When enabled, Loopy Pro will automatically detect and trim the first loop of a session, allowing you to create tight, well-timed loops without having to be precise with the record start and end timing. See *Automatic Loop Detection* for more discussion. *Default value: Off*

AUTO-END DETECTED LOOP

With this setting enabled, Loopy Pro can automatically detect a loop of the given length, end recording and begin playback, allowing you to record the first loop of a session entirely handsfree. You must first set either the master cycle length or a clip's pre-set length, and it's recommended that you also set a rough tempo to assist accurate detection. *Default value: Off*

AUDIO SETTINGS

Set the default output channels for clips here. This can be overridden at the colour level.

GESTURES

Configure the on-screen gestures for interacting with clips here. You can assign your own actions for *Tap*, *Two-Finger Tap*, *Swipe*, *Swipe Up*, *Swipe Down*, *Swipe Left*, *Swipe Right* and *Long Swipe*. These gestures can be overridden at the colour and clip levels.

FOLLOW ACTIONS

Set up Follow Actions here, in conjunction with Loopy Pro's powerful actions system to perform actions when certain events occur, like clip playback, recording, or upon project load.

16.2. COLOUR GROUPS

The Color Groups screen allows you to add, remove, and configure colours in Loopy Pro.

Here, you can provide a name for colours – which appear as tracks in the Mixer, as well as elsewhere – and set the volume, balance, pitch and playback speed of clips within each colour.

You can specify custom playback and record settings per colour.

16.3. CONTROL SETTINGS

This area of Loopy Pro is where you can customise the behaviour of your controllers, as an

alternative to MIDI Learn, OSC

Here, you can enable Loopy Pro's OSC server, allowing you to control Loopy Pro from other OSC- compatible software and devices.

Use the OSC Actions Directory to look up OSC addresses for actions, and enable feedback for individual addresses (requires a TCP OSC connection).

When using OSC, you can use the provided OSC addresses as listed in the directory, or you can use your own addresses and make bindings within Loopy Pro using the (uh, *increasingly inaccurately-named*) MIDI Learn feature.

ENABLE NETWORK MIDI

If you wish to connect to Loopy Pro via MIDI over network, enable this here. This is disabled by default in Loopy Pro 1.1 and onwards due to an ongoing iOS MIDI bug, where network MIDI interferes with MIDI connections.

MIDI DEVICES

All MIDI devices connected to Loopy Pro appear in this section. Tap to configure the device.

Device Type – Tell Loopy Pro if you want this device to be treated as one of the supported controllers, like the MIDI Fighter Twister. Note that Loopy Pro will automatically identify many supported devices, like the Akai APC40 mk2 and the Launchpad, via a MIDI Universal Device Inquiry exchange. Only those supported controllers that do not respond to MIDI Universal Device Inquiry will be shown here.

Feedback Enabled – Whether to send feedback for bound actions to this device, such as playback state, or parameter values. This is on by default; if your device behaves unexpectedly, this can be disabled.

Use MIDI Timestamps – By default, Loopy Pro will perform actions at the time a MIDI message is received. This generally gives the best response, but if you are experiencing timing issues, you can enable this setting to force Loopy Pro to use the MIDI timestamps provided by the device

instead.

CURRENT PROJECT

Edit the control profiles for your currently-loaded project here.

Project profiles allow you to store bindings that are saved within a project. You can reference specific project objects like clips and widgets, and references are persistent.

You can also edit the global Follow Actions here. See *Editing Bindings* below for further discussion.

GLOBAL PROFILES

Edit global profiles here.

Global profiles exist outside of your projects, and are always available regardless of which project is loaded. You can have multiple global profiles and switch between them, either manually or via an action. Specific clips and widgets referenced from actions within a global profile are identified by their order on-screen, so rearranging your project canvas may result in the targets of some actions changing.

See Editing Bindings below for further discussion. EDITING BINDINGS

There are two primary ways to edit bindings in Loopy Pro: Here, in Control Settings, or via MIDI Learn.

MIDI Learn provides a fast, simple interface, allowing single actions to be bound quickly.

In Control Settings, you have more control over creating custom bindings, with the ability to chain multiple actions together in custom sequences, with support for doing something different with successive button presses, or performing a timed sequence of actions, or combinations of both.

Tap a control profile, either in Current Project or Global Profiles, to open the profile editor. Here, the bindings that are saved to the profile are shown, along with controls to rename the profile, duplicate it, or export it.

Tap "Add New Binding" to create a new binding. You will be presented with a directory of possible actions to perform. Select one, and configure it, then tap "Save" to store the action to your new binding. Loopy Pro will then listen for incoming MIDI/OSC messages – when it receives one, it will bind the action to this message. You can also manually select the trigger by tapping in the "Trigger" field.

You can add multiple actions by tapping "Add Action" – for example, you can have a dial adjust multiple parameters simultaneously, perhaps changing different parameters at different sections of the control's value range. Or, you can have a button push perform multiple different things,

such as enabling an audio source before beginning a loop recording.

16.4. SYNCHRONIZATION

The Synchronization menu gives you access to all the settings for synchronizing Loopy Pro with other applications and devices. Loopy Pro can use both Ableton Link and MIDI Clock and can be used to bridge Ableton Link and apps or hardware that use MIDI Clock.

ABLETON LINK

Options:

Sync Start/Stop: Start and Stop with the Ableton Link clock

Act As Master: This option is a custom Loopy Pro option used when you need Loopy Pro to behave like a master device when using Ableton Link. When this option is on, Loopy Pro ignores other apps' tempo changes and starts playback immediately without waiting for the Ableton Link clock to begin a new cycle.

UNDERSTANDING ABLETON LINK

Ableton Link is designed for cooperative behavior unlike MIDI Clock. With normal Ableton Link behavior, no app or device is the master. It operates entirely cooperatively. Link maintains the clock not an individual client. Any client can change the tempo or start/stop the clock. Link shares precise tempo information, beat information and bar boundaries.

With Link, any client can change the tempo and the other clients change also. Normally, when a client starts, it starts at the beginning of Link's next clock cycle. This makes it easy for all clients to start and stop on bar boundaries. When you press play, there is usually a short wait until Link reaches the next bar boundary.

KEY MIDI CLOCK DIFFERENCES

With MIDI Clock, one app or device is the clock master. All the clients follow the clock sent by the master. MIDI Clock does not have precise tempo or bar boundaries. It is just a a series of pulses. Each clock client calculates the tempo from the received pulses. There is no notion of bar boundaries, so you need to take care to start your apps and hardware at the beginning of a measure to keep their measures aligned.

ACT AS MASTER

Loopy Pro's *Act as Master* option allows Loopy Pro to act somewhat like a MIDI clock master for situations where you want Loopy Pro to start immediately and need Loopy Pro to always control the tempo. When this mode is on, any link clients set to start/stop automatically are likely to start one measure after Loopy does since they need wait for the beginning of the Ableton Link clock's next cycle.

When this option is on, Loopy Pro is not behaving like a normal Ableton Link client and may

have surprising impact if you aren't aware of how Ableton Link normally works.

MIDI CLOCK SETTINGS

Loopy Pro can send and receive MIDI Clock. When sending MIDI Clock, it also sends MIDI SPP (Song Position Pointer) messages so that clock clients can keep their songs and sequences aligned with Loopy Pro's timeline.

START VS. CONTINUE

Loopy Pro sends MIDI Clock Start messages when you press the transport play button. If you are recording a first loop that sets the tempo, Loopy Pro sends a MIDI Clock Continue message and a MIDI Song Position Pointer message that indicates the length of the first loop.

MIDI CLOCK SOURCES

If you want Loopy Pro to follow another app or device's MIDI Clock, choose it from this list. Be aware that when an audio application like Loopy Pro follows MIDI Clock, it must constantly adjust the audio (time-stretching) to keep it synchronized. This can impact audio quality and increases CPU usage. Generally, you want Loopy Pro to be the MIDI Clock source rather than a client.

Options:

Offset: Use the Offset slider to achieve tighter sync.

Sync Start/Stop: Turn this option to have Loopy's transport started and stopped by MIDI Clock Start, Stop and Continue messages

MIDI CLOCK DESTINATIONS

Select any apps or devices here to which you want Loopy Pro to send MIDI Clock. An offset slider, let's you offset the clock to achieve the tightest possible synchronization.

16.5. CLOCK SETTINGS

The Clock Settings panel gives you access to useful options related to Loopy Pro's clock and transport. This panel is also displayed when you press the clock panel's gear wheel icon. See The Clock for details.

16.6. SYSTEM SETTINGS

Choose System Settings from the main menu to access the System Settings panel.

PLAY IN BACKGROUND

When this option is on, Loopy Pro is fully-operation when it is in the background. When it is off, Loopy Pro stops processing audio when it is not the foreground app. When Play in Background

is off, Loopy Pro needs to re-activate plugins when it comes back to the foreground which can take time.

ORIENTATION LOCK

When orientation lock is on, rotating your iPad or iPhone will not change the orientation of the current layout in this sense: whatever is in the upper-left will remain in the upper-left after rotation; whatever was in the lower-right will remain in the lower right.

SAMPLE RATE

Choose from available sample rates. Generally, changing the sample rate changes the sample rate of the attached audio interface if there is one. Some interfaces do not respond to host requests to set the sample rate.

BUFFER DURATION

This setting sets the OS's audio buffer length. The audio system has a buffer that collects audio to be processed. The larger the buffer is, the greater the latency. The smaller the buffer is, the higher the computational demand. Small buffers can make it hard for the device to keep up with the processing demand which can lead to audio crackling.

FILE FORMAT

The choices are uncompressed 16, 24 or 32-bit files or AAC compressed files.

USE SAVE POINTS

Turn this option on to use Save Points which are recallable project snapshots created when you choose Save Project. See Save Points.

AUTO MUTE AUDIO SOURCES

When this option is on, disconnecting your audio interface automatically mutes audio sources that might cause feedback.

ENABLE NETWORK MIDI

When this is on, a Network MIDI Session is made active. This option is off by default as we have found that when Network MIDI is on, it can reduce stability and can interfere with MIDI operation. When you turn it on, Loopy Pro will ask you to re-consider.

MULTIROUTE AUDIO

Multiroute Audio is an OS feature originally intended to allow you to use the wired headphones while also using an audio interface for output. Its behavior is somewhat unpredictable and out of the audio host's control. Bluetooth audio devices and AirPlay are not supported in this mode.

Some people report that they can send output to multiple attached audio devices when Multiroute

is on, but we have found it somewhat unpredictable and generally recommend that it be left off.

We have sometimes found that turning it on and then off can fix audio connectivity problems.

ACCESSIBILITY - SHOW COLOR LABELS ON CLIPS

When this option is on, Loopy Pro will show text indicating the color of the project's clips.

17. FREQUENTLY ASKED QUESTIONS

Why can't I use my AirPods/other Bluetooth audio gear?

This is a quirk of Measurement Mode, a feature that Loopy Pro's echo cancellation requires. If you turn off echo cancellation, Loopy Pro will also turn off Measurement Mode, allowing access to your Bluetooth hardware. Open the mixer, tap the microphone icon at the top of the hardware input channel strip, then turn off the switch beside "Echo Cancellation".

Why does the speaker go quiet when I start screen recording?

Another Measurement Mode quirk, I'm afraid. See immediately above for instructions to disable echo cancellation. Note: you will lose the benefits of echo cancellation, so it's important that if you plan to record from the mic that you use headphones, or external audio gear.

Where can I find answers to other questions I have?

The Loopy Pro Wiki is a good source for information and includes answers to many other frequently asked questions.