Circa User's Guide
Audio Damage, Inc.
Release 1.1

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Credits

Software Design and Construction, Documentation
- Chris Randall
- Adam Schabtach

Field Testing
- Stephen Boyd
- Anders Göran
- Steve Hamann
- David Henkel
- Christian Puffer
- Kent Williams

Made Possible By
- Elle
- Tracie

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System Requirements

The following table summarizes the operating system requirements and formats provided for Circa. Circa is a 64-bit plugin.

Operating System	Minimum Version	Formats
macOS	10.13	AAX, AudioUnit, CLAP, VST3; Intel and Apple Silicon
Windows	10.0	AAX, CLAP, VST3
Ubuntu	18.0	CLAP, LV2, VST3
iOS (separate purchase)	iOS 12	AUv3

Demonstration Version

We encourage you to download and try the demonstration version of Circa before purchasing it. The demo version of Circa is the same as the regular version, but has the following limitations:

- Presets cannot be saved, nor can parameter values or other settings. This includes the information usually stored by your host DAW. If you save a DAW session with an instance of the demo version of Circa, Circa will revert to its default state when you reload the session.
- Circa will cease to emit audio altogether 20 minutes after you add it to your DAW session. You can remove it and add it again, but it will revert to its default state.

Introduction

Thank you for purchasing Circa, our creative, multi-channel looping instrument, carefully designed to encourage experimentation and improvisation. With six independent looping layers, one-button operation, sophisticated MIDI mapping, and built-in effects, Circa combines precision and playfulness to inspire your music-making. Appropriate for capturing spontaneous performances, crafting complex rhythmic patterns, or creating evolving textures, Circa offers a musical, hands-on workflow with sophisticated capabilities at your fingertips. This manual guides you through Circa's features and possibilities, from basic recording techniques to detailed parameter descriptions, helping you quickly master the plugin and unlock its full creative potential.

Circa Versus Enso

If you've been following our activities (thank you!), you may be wondering about the relationship between Circa and our other loop-oriented plugin, Enso. First, Circa is not a replacement for Enso. Enso's development will continue along its own path, as will Circa's. Enso was originally conceived to replicate a specific tape-based delay system used by Brian Eno and Robert Fripp, starting in the 1970s with the album *Discreet Music*. Our inspiration for Circa, on the other hand, came from contemporary, digital looping devices, ranging from simple guitar pedals to BOSS's sophisticated RC-505mkII Loop Station[1] and various loop-based instruments shared within the generous community of Monome Norns users.

Perhaps the most significant distinction is that Enso employs a single buffer in which it records, plays, and overdubs audio. Circa, on the other hand, has six such buffers which operate independently or in synchrony. Enso has more tools for varying the speed at which it records and plays and possesses the unusual ability to record and play at different speeds simultaneously. Circa's transport controls for individual layers are simpler but provide the ability to automatically adjust recording durations to keep the layers in sync. Enso has tape-like effects for altering the audio it contains. Circa's effects are more mix-oriented, applying to some or all the layers as desired.

Both tools have their uses, and we would be delighted if you'd take advantage of our demo versions to try both. If you're an Enso user who's used multiple instances of Enso and wished for a smoother way to use them together, Circa may be what you've been wishing for.

Nomenclature

Circa is equally at home on desktop computers, laptops, and tablets. We kept touch-oriented operation firmly in mind while designing and developing Circa. By convention, "clicking" means making an onscreen gesture by pressing the button on a mechanical device such as a mouse, while "tapping" means making a similar gesture with your finger. For brevity we're prone to simply saying clicking in this manual, but you can always interpret us to mean tapping as well.

What's New in Version 1.1

Version 1.1 introduces several new features:

- The Gesture Recorder records and plays back your manipulations of Circa's controls. Similar to how Circa records audio, you can record, loop, overdub and play your interactions, augmenting your host's automation features. Gestures can be triggered with MIDI for hands-free recall.
- The play positions of layers are now a continuous modulation target.
- Play volume is lowered while scrubbing the position in the waveform display. Yes, it was too loud before. Sorry about that.

In addition, we've made a number of enhancements and fixed a number of defects, large and small, most notably several involving the start and end markers in the waveform display. See the change-log file included with the installer if you're curious about the details.

[1] Product name is a trademark of Roland Corporation.

Installation

Circa uses our custom plugin manager application for installation. Launch it as usual on your operating system of choice and you'll be presented with a window like this:

Near the top of the window, beneath the large word CIRCA, you'll see the version number of the software carried by the installer. This is distinct from the version of the plugin manager itself, which is shown in the upper right and usually not of much interest.

Under the heading FORMATS are large buttons corresponding to the plugin formats which can be installed: AAX, AU, CLAP, LV2 and/or VST3, depending on the operating system. If the plugin is already present on your system in one or more formats (i.e. if you're upgrading from a previous version), the corresponding button is drawn in blue. When possible, the version number of the existing plugin is also shown.

Click a button to select the format for installation. A yellow outline appears around the button to indicate that its format will be installed. In the above screenshot, VST3 and CLAP are installed, AAX is not installed, and VST3 is selected for installation. The older instance of the VST3 plugin will be overwritten by the version contained in the plugin manager. Clicking a button a second time removes the yellow outline, and the corresponding format will not be installed. Clicking the SELECT ALL button selects all available formats for installation.

No changes to your system's storage device take place until you click the INSTALL button near the lower-right corner of the window. Click that button and you'll receive visual confirmation that the formats you've selected have been installed. (Yes, it happens quickly.) On Windows and Linux, if you hold down the Shift key on your keyboard, the INSTALL button's label switches to UNINSTALL, and clicking it will remove the selected formats from your system[2]. Once you're installed and/or removed the formats you need, simply close the application in the usual manner for your operating system. You're done. There is no license code or other authorization necessary; we'd rather assume we can trust you than burden you with an onerous DRM system.

[2] Blame Apple, not us, for the lack of this feature on macOS. On macOS just manually delete the plugin(s) from your plugin folder(s).

You'll find some handy buttons under the EXTRAS heading, all of which are pretty self-explanatory:

EULA – presents the End-User License Agreement for our products. By clicking the INSTALL button you're implicitly agreeing to these terms, but we expect that you'll find them reasonable should you take the time to read them.

MANUAL – opens the current version of this user manual, in PDF form, in your web browser.

WEBSITE – opens the product's web page in your browser.

SUPPORT – displays information for contacting us, either via our Discord presence or through email.

Operation

Circa appears in your DAW or other host like any other plugin, so we assume that you know the basics of working with plugins in general. Circa processes audio but also receives MIDI. DAWs differ in their handling of routing MIDI to audio plugins; you may have to consult your DAW's documentation for guidance. Bear in mind that you don't have to worry about MIDI routing if you don't intend to control Circa with a hardware MIDI device (and you certainly don't need to worry about MIDI routing during your initial explorations).

Circa can be used either as a track insert or an auxiliary channel as a send/return effect. Which configuration you use is up to your personal preferences, but here are a couple of things to consider. If you're using only one sound source with Circa, e.g. one software synthesizer or one input on your audio interface, using Circa as a track insert is probably easiest. On the other hand, if you anticipate routing a number of signals to Circa within a given project, or sending more than one signal at once, then putting it on an auxiliary channel and using your DAW's channel-send controls is probably the way to go.

Multiple Outputs

Circa can combine all of its outputs on a single stereo pair or route them to six independent outputs, and an additional output for monitoring. This lets you process some or all of Circa's layers separately, allowing you to use your choice of effects, EQ, and so on for individual processing. If you haven't worked with a multi-output plugin in your DAW of choice previously you may have to consult the DAW's documentation. Each host seems to have its own idiosyncratic way of handling plugins with multiple outputs, and some are less obvious than others.

Main View

As you've seen by now, Circa looks like this:

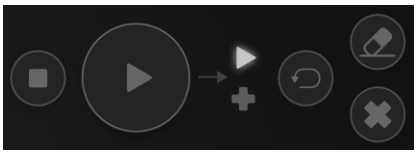
The upper half of Circa's window has four different views, or sets of controls, indicated by the names across the top center: layers, speeds, positions, and settings. The lower half of the window has three views: modulations, effects, and levels. Click or tap the names to switch between the views. We'll describe each view in turn.

Layers View

Circa's main view is the Layers view, as shown above. It's the view that you're likely to use most. Across the top are six circles representing the six layers. Each circle displays a small representation of the audio recorded in the layer with a radial line showing the current play position within the layer. Naturally, if no audio has yet been recorded in a layer its circle is empty.

Clicking or tapping on one of these six circles selects the corresponding layer. The current layer responds to the other controls in the Layers view. In other words, first you choose a layer by clicking on one of the six circles, then you do things with that layer by manipulating the other controls in the Layers view.

To the right of the six circles, you'll find controls for recording, erasing, and playing the layer. From left to right, the controls are:



Stop button: clicking this button stops the layer if it's recording, playing, or overdubbing.

Trigger button: this button is Circa's most important control. It does different things depending on what the layer is currently doing. If the layer is empty, click this button to start recording. When the recording is complete, click it again to switch to playing or overdubbing the layer, depending on the state of the Post-Record switch described next.
If the layer is not empty, click this button to start playing the layer if it's stopped, or to switch between overdubbing and playing. The important thing to remember is that the symbol inside the Trigger button tells you what is going to happen when you click the button. Circa uses the ISO-standard symbols with which you're undoubtedly familiar: a circle for record, a right-pointing triangle for play, etc.

The Trigger button (and the audio display below it, which we'll get to shortly) change color to reflect the layer's current operating mode or state, as follows:

Grey: idle or empty
White: playing
Red: recording
Cyan: overdubbing
Yellow: waiting to begin recording; used in two of the trigger modes described below

So, putting together the symbols and the colors, the Trigger button shows you both what is happening now and what will happen after you press it again, as shown here:

Appearance					
Current State	Idle or empty	Waiting to record	Recording	Playing	Overdubbing
State After Click	Recording	depends on Post-Record setting	Playing	Overdubbing	Playing

Post-Record switch: this switch chooses what happens when you click the Trigger button the second time, that is, after you've completed recording in an empty layer. It has two settings: Play and Overdub; the brighter symbol indicates the active setting. Click either of the symbols to toggle back and forth between the two settings.

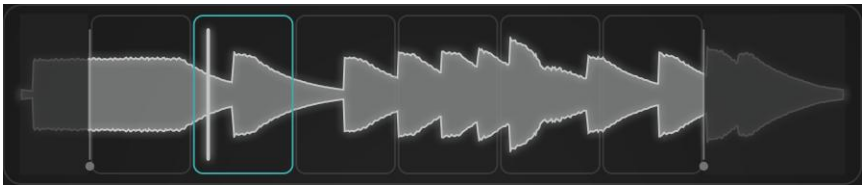
Undo button: click this button to undo the effect of the most recent recording or overdubbing. If you click it after the first recording, the audio is erased but the length of the recording is preserved. If you click it while overdubbing, the audio you added since clicking the Trigger button (that is, since you switched from playing to overdubbing) is removed. Clicking the Undo button again reverses whatever happened in response to your first click. In other words, it's an undo/redo button.

Erase button: clicking and holding the upper button on the far right silences the audio traversed by the play head. Use it to selectively remove parts of the layer's recording.

Delete button: clicking the button with the X symbol erases the entire layer's audio but leaves the length of the layer intact.

Waveform Display

The rectangular region beneath the six layer circles shows a graphical depiction of the audio in the layer (or nothing at all if the layer is empty). A vertical line moves across the waveform display as the layer plays, overdubs, or records, indicating the current play/record position. Clicking and dragging within the waveform when the layer is playing moves the play position allowing you to "scrub" the audio somewhat in the manner of an open-reel tape deck or a turntable.



The small dots at the bottom of the waveform display, and the vertical lines above them, represent the start and end positions of the layer. After the first recording within a layer these positions are set to the far left and right edges of the display, indicating that the entire layer will play over and over again. Click and drag the small dots to move the position markers inward. The left marker determines where the layer will start playing; the right marker sets where playback will jump back to the start marker. In other words, playback (and overdubbing) loops between these position markers.

The slices knob to the right of the waveform, when turned up from its default setting of zero, visually divides the waveform display into equal-sized regions. Rectangles appear on top of the waveform to indicate the slices. When two or more slices are present, clicking or tapping within a slice's rectangle moves the play position to the beginning of the slice. Note that the slices are non-destructive and don't affect the audio in any manner.

You can add a text label to the waveform display to remind you of the layer's purpose or contents; see the Settings View section later in this manual.

Although the waveform display and the layer circles show a single audio waveform, Circa records and plays in stereo.

Speed Control

The wide rectangle at the bottom of the Layers view is Circa's speed control. Clicking and/or dragging in this rectangle changes the speed at which Circa plays the layer. Circa has a speed range of -2 to +2, where +1 represents the default speed. Negative values mean that Circa plays backwards relative to the original direction of recording. Like a turntable or tape recorder, changing Circa's speed also changes the perceived pitch of the audio it's playing. So, for example, a speed of -1/2 means that Circa plays at half speed, backwards, and an octave below the audio as it was originally recorded, assuming that you recorded it with a speed of +1.

On the first recording in an empty layer, Circa implicitly records with positive speeds. It doesn't know in advance how long you're going to record, so it can't start recording at the end of the buffer since the size of the buffer isn't known in advance. If the speed setting is negative while you're recording, once the recording is finished Circa will begin playing backwards. Strictly speaking this is something of a contradiction since Circa should play in the same direction that it moved while recording, but it's more fun if it works as described here because you hear your loop backwards immediately after recording it.

The switch to the left of the speed control labeled quant, as in quantization, causes the speed to jump to one of the values marked on the control, e.g. 1, -1/2, etc. This keeps the relative speeds (and perceived pitches) of Circa's layers in multiples of two so that the layers stay in sync (and in octaves).

Double-clicking the speed control sets the speed to its default value of +1.

The knob to the right of the speed control labeled Damping imparts a variable amount of drag or sluggishness to the layer's response to speed changes. With zero damping, the speed changes instantly when you click in the speed control. Turning up the damping adds audible pitch slewing when the playback speed changes, reminiscent of the effects of the mechanical inertia of turntables or tape players.

The small triangle at the top of the speed control indicates Circa's current speed. This indicator shows you how much the playback speed lags behind the setting of the speed control with non-zero values of damping.

Drag and Drop

Once you've recorded some audio in a layer, you can copy it to another layer by dragging its circle onto one of the other circles. You can also export a layer from Circa into your host DAW or into a file on your computer's file system by dragging a layer circle onto the appropriate destination. It works the other way, too: dragging an audio clip or file into one of Circa's circles imports the audio into that layer.

Master Input Controls

The Master Input section has controls for adjusting the level of signals entering the plugin and for listening to the input signals at the output.

Input knob: Adjusts the level of the signal as it enters the plugin.

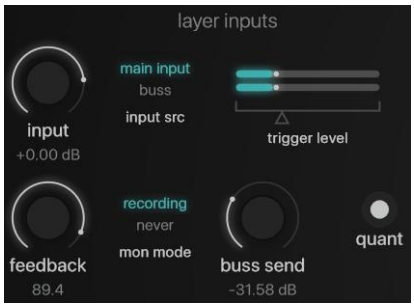
Monitor knob: Adjusts the loudness of the signal passed through the plugin to the output.

Mon Out switch: chooses whether the signal passed through the plugin goes to the main output buss or the cue buss.

Layer Input Controls

The Layer Inputs section contains controls for adjusting and routing the signals arriving at the individual layers for recording. The controls reflect the sections of the current layer, chosen by clicking one of the three circular layer displays at the top of the window.

Input knob: Adjusts the level of the signal before it is recorded in the layer.



Input Src switch: Circa has an internal signal path for recording signals from one or more layers into another layer. To record signals from this path, set the Input Src switch to buss. To record the signals received from the plugin's host, choose Main Input.

Trigger Level slider: The horizontal meters display the level of the signal recorded by the layer. The Trigger Level slider beneath them sets the level at which a layer will start recording, if its Trigger mode is set to Audio. For instance, if there is a bit of noise in your input signal, set the Trigger Level slider above the level of this noise so that the layer won't start recording until you start playing your instrument.

Feedback knob: Sets the amount of signal which is retained in the layer during overdubbing. If the Feedback is set below its maximum level of 0dB, the signal present in the layer will fade out during overdubbing. Putting it at its minimum setting will cause any existing material to be completely erased while overdubbing.

Mon(itor) Mode switch: Chooses whether the signal at the layer's input will be heard when the layer is recording or not heard at all.

Buss Send knob: Adds an adjustable amount of the layer's output to the internal signal path. This knob is like an aux send knob on a mixer or in a DAW: the signals from one or more layers are added together with the Buss Send knob, and the summed signal becomes available to any/all layers whose Input Src switch is set to Buss.

You may be wondering about the relationship between the Feedback knob and the Buss Send knob, since the latter, in conjunction with the Input Src switch, creates feedback paths within Circa. Despite the nomenclature, they serve very different roles and are not related. The Feedback knob adjusts a signal within the layer: the signal that is played and re-recorded (fed back) when overdubbing new material on the layer. The Buss Send knob, on the other hand, controls a signal sent from the layer to other layers.

Signal Flow

Having just described the Levels pane controls in some detail, let’s tie the signal-flow room together. Signals entering Circa first encounter the Input knob in the Master Input section; turning this knob attenuates or boosts the signal. (Often you won't need to touch it since presumably you have other ways of controlling the level of the signal before it reaches Circa, but this knob can be handy for quick tweaks.) Next the signal travels straight to one of Circa's outputs so that you can hear what is going into Circa if you're using it as a track insert. Which output it goes to--either the

main output or the cue output--depends on the Mon Out switch. The Monitor knob controls the loudness of the monitor output.

Each of Circa's layers receive either the input signal or a signal from Circa's internal routing buss, depending on the state of the Input Src switch in the Layer Inputs section. This signal can be boosted or cut with the Input knob. The horizontal meters show the relative level of the signal. Bear in mind that, unlike the controls in the Master Input section described previously, the controls in the Layer Inputs section apply to the current layer and can be different for each layer.

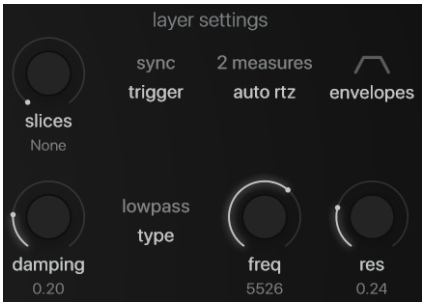
The Mon Mode switch optionally routes the layer's input signal to the layer's output. This is different from the signal path controlled by the Master Input section in that the layer's input signal can be passed to its output only when the layer is recording, whereas the master monitoring signal path operates independently of any activities and settings of the layers.

The Buss Send knob determines how much, if any, of the layer's output signal is added to the internal routing buss for recording by other layers.

Each layer's overall loudness, stereo position, effects levels, and output assignments are controlled by the mixer-like Levels pane, which we'll describe later.

Layer Settings

The controls in the Layer Settings section affect how the layer records and plays. There are also controls for the layer's multi-mode filter.



Slices knob: Turning this up from its default value of None applies a non-destructive grid to the layer's audio, dividing it into 2 to 16 equal-length slices. Rounded rectangles drawn over the layer's waveform show the slices. Clicking within one of these rectangles moves the play position to the beginning of the slice, whether or not the slice is currently playing. The Slices knob has no effect during recording or overdubbing.

Trigger menu: Sets one of three triggering modes, which work in conjunction with the Trigger button to determine when recording starts in an empty layer. There are three choices:

- Free: Recording begins as soon as the Trigger button is pressed.
- Audio: Recording begins when the level of the incoming audio exceeds the setting of the Trigger Level slider. In other words, you can hit the Trigger button and recording won't start until you start playing your instrument.
- Sync: Recording is synchronized to the playback of the first layer. After you hit the Trigger button, recording starts when the first layer's play position crosses the beginning of the loop. This setting also causes the layer's length to be rounded to large fractions, or multiples, of the length of the first layer. In other words, the Sync option makes it easy to record subsequent layers that are perfectly synced to the first layer.

Auto RTZ menu: Chooses one of several modes which cause the layer to restart playing from its beginning while playing, in other words, to automatically return to zero. There are several choices:

- Never: No effect; the layer plays over and over without interruption.
- Master RTZ: The layer restarts playing as dictated by the Auto RTZ setting of the first (master) layer.
- 1/2/4/8 Measures: The layer restarts playing after the given number of measures, if the global Sync setting is on and Circa's behavior is determined by your host's transport. If Sync is off, a measure is considered to be the length of the first (master) layer.

Envelopes: Clicking this icon invokes a pane for setting the record and playback envelopes. Each has two settings, In and Out. Their values are shown in milliseconds; change them by dragging vertically.

The Play envelope creates fade-in and fade-out ramps when playback starts and stops. These volume ramps are also applied when you switch slices by clicking on the layer's waveform. Generally you'll want to use short or zero-length ramps when working with rhythmic or percussive material to create fast jumps in the loop. Use longer ramps with sustained material for smooth transitions. Jumping in and out of audio with no volume ramps produces clicks; very short ramps help remove these clicks. The play envelope settings are non-destructive; they do not affect the original recording.

On the other hand, the Record envelope applies volume ramps while the layer is recorded and during overdubbing. When recording or overdubbing starts, the incoming audio fades in over the duration set by the Record In control. When recording stops, the audio fades out for the length of the Record Out control. On the initial recording in an empty layer, this fade-out happens after the end of the loop and is used during playback to crossfade with the beginning of the loop. Hence you can create seamless loops of sustained material by setting the Record In and Out times to around 20-100msec. Hold down a chord on your keyboard, hit the Trigger button to begin recording, and continue sustaining the input signal after you hit the Trigger again to finish recording. Circa automatically creates a crossfade at the loop splice using the fade-out it recorded.

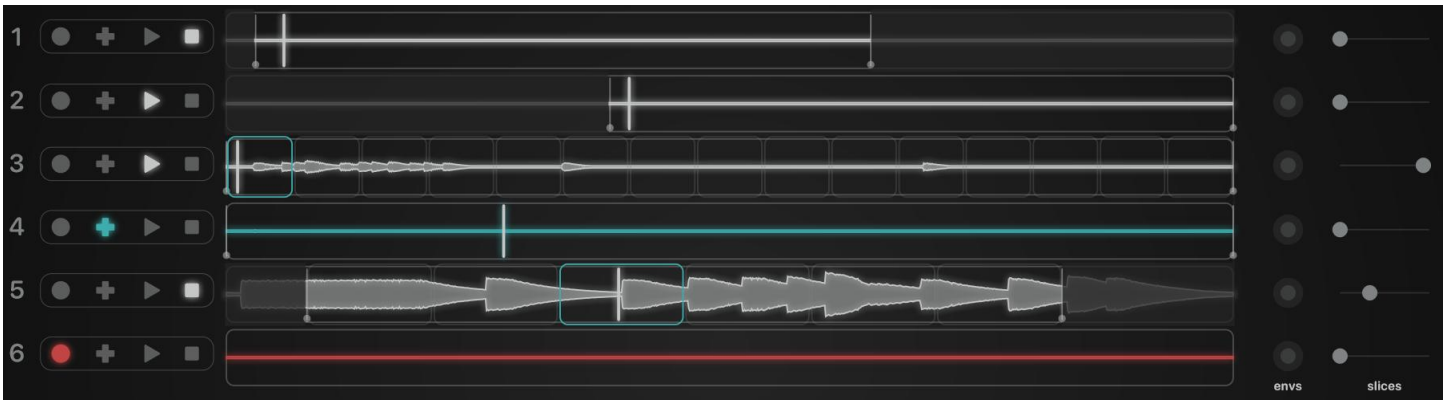
Env to Speed switch: causes the Play envelope to affect the playback speed rather than the volume. When you start the layer, the play speed will start at zero and move to the layer's Velocity setting in the time set by the In control. Playback slows to zero and stops in the time set by the Out control after you stop the layer.

Damping knob: This knob limits how quickly playback speed changes when you click in the play speed control. Turning the Damping knob up makes speed changes happen more slowly. See the section above on the speed control for more information.

Filter controls: Each layer has its own analog-modeled, multi-mode filter. The Type menu chooses the response mode: lowpass, highpass, bandpass, notch, and none; the last choice bypasses the filter altogether. The Freq(uency) knob sets the corner or center frequency of the filter. The Res(onance) knob causes the filter to emphasize frequencies near the setting of the Frequency knob. In the case of the notch mode, the Resonance knob narrows the frequency notch, removing less of the signal.

Speeds View

The Speeds view shows six instances of the speed control strip found in the Layers view. Each behaves the same as described above, allowing you to manipulate the speed of all six layers rather than just the current layer.

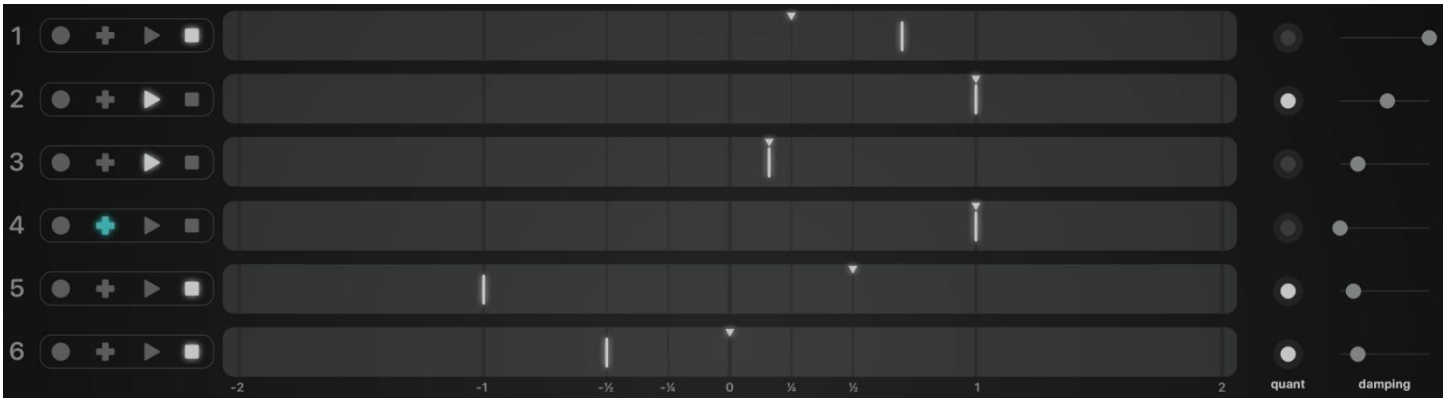


To the left of each control strip you'll find buttons for switching the layers between their various operating states: recording, overdubbing, playing, and stopped. Click or tap the buttons to change states.

On the right of each control strip is a button for turning speed quantization on or off, and a slider for adjusting the speed damping. Both of these controls operate as described previously in the Layers View section.

Positions View

The Positions view contains six instances of the waveform display and attendant controls seen in the Layers view. Each operates in the same manner as the single waveform display in the Layers view, showing you linear depictions of the contents of all six layers in a single view. You can change the start and end markers, move the play position, and scrub in all six displays.

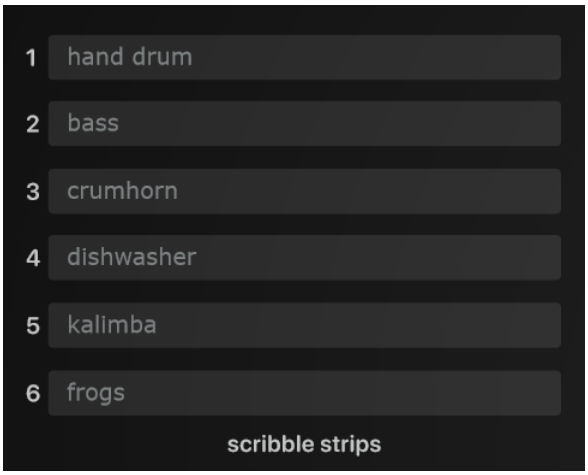


As in the Speeds view, there are buttons on the left for switching the layers between their various operating states: recording, overdubbing, playing, and stopped. Click or tap the buttons to change states.

To the right of the waveform displays are buttons for invoking the Envelope popup menus and a slider for activating slices within the layer.

Settings View

Circa's Settings view contains several controls affecting the behavior of presets and the plugin's appearance.



First, the six text fields on the left labeled Scribble Strips allow you to enter names or short comments for each layer. Anything that you type into these fields is superimposed over the waveform displays in the Layers and Positions panes.

The switches on the right perform the following functions:

Save audio data in presets and session: If this switch is turned on, the audio recordings in the layers is saved with any presets you save, and in your host DAW's session (along with the plugin's parameters and other settings as usual). If this switch is not on, the audio is discarded when you close your host or the standalone version of Circa. There are a couple of things to consider about this switch. If it's off, the audio is gone for good after you close your DAW. On the other hand, saving the audio means generating potentially large preset and DAW-session files, large enough that you will notice the additional load time when you reopen the session. You may find it preferable to always record the audio emanating from Circa into tracks in your DAW, rather than relying upon Circa to retain the audio. Your DAW is far better suited to storing large chunks of audio than any plugin.

Display tooltips when hovering over controls: When this switch is on, Circa displays brief descriptions of the controls when you point at them with your mouse cursor. While we hope that you'll find this useful while learning your way around the plugin, we also recognize that you might find it annoying later. Turn this switch off if such annoyance arises.

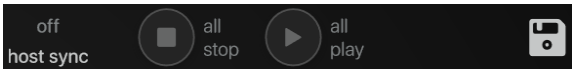
Play animation on mixer and about pages: Turn this switch on to invoke something nice to look at in the Levels page and Circa's information pane.

Render glows and drop shadows: Turn this switch off to reduce the complexity of Circa's graphics rendering, which can improve performance on some older computers.

Search for monome and/or arc on instance: Enables Circa's custom integration of monome controller hardware. See "" below for more information.

Global Controls

There are a few controls present at the top of Circa's window regardless of which view is active.



Host Sync switch: If this switch is off, Circa pays no attention to your host DAW's tempo or transport activity. If Circa happens to

be your main compositional tool for a project and you don't need tight synchronization between it and other tracks in your DAW, leave this switch off. Circa uses the first layer you record to establish a reference for other layers. On the other hand, if you do want things you record in Circa to stay in sync with other things in your DAW, turn this switch on. See the section on Synchronization and Timing for more information.

All Stop button: Click or tap this button to stop any/all layers which are currently playing or recording. A long press on this button resets all of Circa's layers, returning them to their empty, pre-recorded state. Use with caution.

All Play button: Click or tap this button to start playback of all layers which have audio in them.

Preset button: Click or tap this button to invoke the preset manager, described later under Presets. Eventually we'll think of some other symbol for the act of saving information on a computer, but for now we're still resorting to the anachronism of a floppy-disc icon.

Synchronization and Timing

Broadly speaking, Circa can operate in one of two ways: using a host DAW as its timing reference, or using an internal timing reference. As mentioned previously, the Host Sync switch near the top of the window chooses one of these two operating modes. If you're using a standalone version of Circa, or if you don't need tight synchronization between Circa's activity and other tracks in your DAW, turn this switch off. On the other hand, if you do want Circa's loops to stay in sync with your DAW, turn this switch on. There are advantages and disadvantages to either setting, which we'll discuss next.

External Sync - Host Sync On

With Host Sync on, Circa relies on information from your DAW for timing. When the Layer Trigger menu is set to Sync, Circa waits for the DAW transport to cross barlines before it responds to the first click on Trigger button. In other words, you can hit the Trigger button while your DAW plays and Circa won't start recording until your DAW reaches the beginning of the next measure. Once it has started recording, and you hit the Trigger button a second time to finish the recording, Circa will extend or truncate the raw recording so that the layer stays in sync with your DAW when it plays. It sets the length of the recording as follows, with lengths expressed as measures:

Raw Length	**Saved Length**
3/16 or less	1/8
3/16 to 3/8	1/4
3/8 to 3/4	1/2
more than 3/4	1
more than 1	the nearest whole measure

This looks complex but what it boils down to is that the recording is rounded to the nearest 1/8, 1/4, 1/2, or full measure, rounding to larger intervals for longer recording lengths. In other words, you don't have to hit the Trigger button with absolute precision; Circa will tighten up the timing of the recording so it plays in sync with the other layers and your other tracks.

Circa remembers the tempo setting of the host at the time you record the first layer. If you change the host's tempo, Circa plays the layers slower or faster to keep them in sync with the rest of your project. It uses a fairly simple resampling approach for speed changes, so the perceived pitch of your audio goes up and down when played faster or slower. If you need to change the tempo of your project without introducing pitch artifacts, print Circa's output on one or more tracks and use your DAW's more-capable tools for time adjustment.

Internal Sync - Host Sync Off

With Host Sync off, Circa uses the first layer you record as a timing reference. It can be any of the six layers, but it's easiest to keep track of what's going on if you always start with the first (left-most) layer. After you record the first layer, Circa makes a guess about how many measures, and at what tempo, this layer represents. It's an educated guess but it's still just a guess. You may play something that you think of as two measures at 75 beats per minute,

which lasts 3.2 seconds. However, one measure at 150bpm also lasts 3.2 seconds. Circa has no way of knowing which it should be; it just knows that you recorded a chunk of audio that's 3.2 seconds long.

Given this ambiguity, why does Circa guess at a tempo marking and number of measures; i.e. why does it even care? Because it uses the same procedure described in the previous section to adjust the lengths of the *second* and subsequent layers you record. The *first* layer serves as the timing reference, so Circa has to decide (for itself) how many measures the first layer represents. After that it can apply the rounding approach described above to extend or shorten the recordings you make on the other layers, assuming that their Layer Trigger menu is set to Sync.

Once the first layer is recorded, Circa uses its measured tempo henceforth. Changing the speed of the first layer does *not* alter the internal tempo setting. This means that if you set the speed of the first layer to something other than +1, the synchronization of other layers might not behave as you expect. Everything should work well if the first layer's speed is one of the quantized settings (like 1/2) since these are simple multiples of the original speed.

Switching Host Sync On and Off

Switching Host Sync on and off can be done, of course, but there is a complication to be aware of. If you record your first layer with Host Sync off and then turn Host Sync on, you'll almost certainly hear your layer(s) speed up or slow down. This is because Circa adopts the host tempo when you turn sync on (since that's what sync is for, after all) and it's unlikely that the tempo that Circa assigned based on the length of your first layer will match the current tempo of your DAW. You can adjust the DAW's tempo to bring Circa's audio back to its original speed and pitch.

But This Is Complicated...

Yes, it is. Most of the time you don't have to think about it much, though. Turn Host Sync on and use the Sync setting in the Layer Trigger menu if you're using Circa in a DAW in conjunction with other instruments and want things to stay lined up. If you're using Circa by itself and just want its layers to play together nicely, again use the Sync setting in the Layer Trigger menu but turn Host Sync off. Either way Circa will do its best to adjust your recordings so that they play together in a cohesive manner, without requiring you to hit the Trigger button at exactly the right times.

...And Really It's Not That Important To Me

We hear you. One wonderful approach to loop-based composition and improvisation is to not worry about keeping everything in sync, deliberately record loops of different length, and rejoice in the unexpected juxtapositions that occur as the sounds move together and apart, in phase and out of phase, creating polyrhythms and a whole greater than its parts. If this speaks to you, the other two entries on the Layer Trigger menu, Audio and Free, are for you. With either of these settings, the Host Sync switch is irrelevant. The duration of the recording depends entirely on when you hit the trigger button; no alteration happens afterwards. Layers recorded this way cycle at their own intervals, independently.

Note that it's not an all-or-nothing sort of affair. You can record some layers with the Sync setting and others with the Audio or Free settings. Sync-enabled layers will keep their rhythmic relationships while the others will drift apart from them and each other (probably, unless your timing is very good). Just remember that the Layer Trigger control applies when the layer is *recorded*; it has no effect after that. Also, remember that the Auto RTZ control lets you reset any layer, regardless of how it's recorded, at predictable intervals. This can impart rhythmic cohesion on layers originally recorded without synchronization.

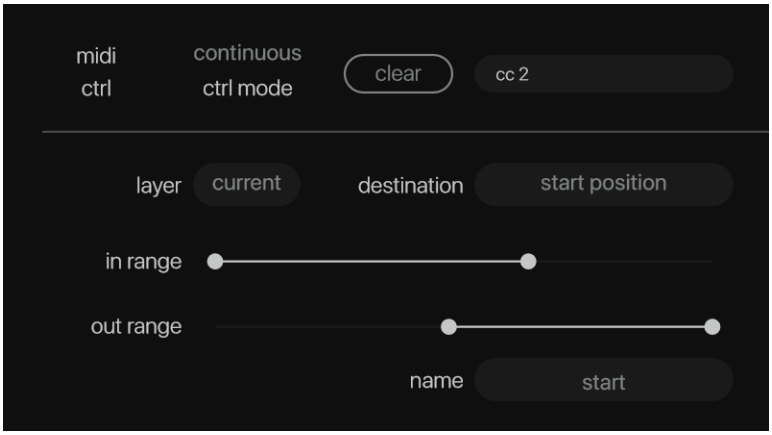
Modulations

Circa's modulation system allows control of its looping layers and parameters with internal and external signals. Each rounded rectangle in the Modulations pane represents a connection between a modulation source and a destination. As of version 1.0, MIDI messages are the only modulation source. We will expand Circa's modulation capabilities in future releases.

To add a modulation connection, click one of the plus symbols in an empty rectangle. The modulation assignment panel appears. It has the following controls:

Ctrl: currently only MIDI.

Ctrl Mode switch: This switch has two options, Momentary and Continuous. These names reflect the motion of the physical device that you interact with to generate MIDI messages: momentary for things that send discrete messages after a brief interaction, continuous for things that send a stream of messages as you move them. Use Momentary for pushbuttons, switches, keyboard keys, and drumpads. Use Continuous for knobs, sliders, etc.



Learn button: After you click this button, Circa waits for the next MIDI message--either a note-on message or a controller message--and records it as the modulation source for this connection. Text indicating whether it's a note message or a controller message, and the note or controller number, appears in the field to the right upon reception of the message, and the button's name changes to Clear. Clicking it again removes the assignment, should you decide you wanted a different source for this connection.

Layer menu: A popup menu to choose the layer affected by this connection: the current layer, all layers, or one of the six layers.

Name field: An editable text field in which you can enter a name to remind yourself of what the modulation does.

The remaining controls depend on the setting of the Ctrl Mode switch. If this switch is set to Momentary, the following controls appear. Each control is a popup menu listing the commands sent upon a movement of the assigned controller:

- Control Down: The command sent upon pressing the assigned key or switch. For controller messages, a value of 64 or greater is interpreted as "down". This is usually how buttons and footswitches on MIDI controllers work. If your controller of choice doesn't work this way, you can either change its behavior with software supplied by its maker, or you can assign Circa's commands in an inverted sense.
- Control Up: The command sent upon releasing the assigned key or switch. For controller messages, a value of 63 or less is interpreted as "up".
- Control Hold: The command sent after the assigned key or switch is held down for about a second.

The commands on these popup menus are as follows. Other than the first eight commands which change which layer is selected, the commands apply to the layer(s) chosen with the Layer popup menu described previously.

- Unassigned: Nothing happens.
- Inc Layer: Selects the layer to the right of the current layer. If the rightmost layer was selected upon reception of this command, the leftmost layer will be selected.
- Dec Layer: Selects the layer to the left of the current layer. If the leftmost layer was selected upon reception of this command, the rightmost layer will be selected.
- Sel Layer 1-6: Makes the layer indicated by the number the current layer, counting from left to right.
- Play: Starts playing, if there's audio in the chosen layer(s).
- Stop: Stops playing.
- Play Toggle: Starts playing the chosen layer(s) if they're not playing and stops currently playing layers.
- Record On: Begins recording in the chosen layer(s).
- Record Off: Finishes recording.
- Record Toggle: Starts recording the chosen layer(s) if they're not recording and stops currently recording layers.
- Overdub On/Off/Toggle: Same as the Record commands above but turns overdubbing on/off rather than recording.
- Erase On/Off/Toggle: Same as the Record commands above but turns erasure on/off rather than recording. Note that unlike the eraser button in Circa's window, the Erase On command is not momentary. Erasing will continue indefinitely once it's started. Hence, you'll usually want to map Erase Off when you map Erase On. For instance, if you map Erase On to a key press Down, map Erase Off to the key release in the same assignment.
- Reverse Direction: Reverses the play/record/overdub direction of the chosen layer(s).
- Erase Contents: Destructively silences all of the audio in the chosen layer(s) but leaves their loop length intact.
- Trigger: Equivalent to pressing the Trigger button; initiates recording, playback, or overdubbing.
- Reset Returns the chosen layer(s) to their unused state: destructively silences all of the audio, clears the loop length.
- RTZ: Forces the playback position to immediately move to the beginning of the recording of the chosen layer(s).
- Undo: Equivalent to pressing the Undo button; removes the result of the last recording operation in the chosen layer(s).

- Play Gesture: Starts playing a recorded gesture. Use the Layer menu to choose which gesture; they're numbered 1 to 6 from left to right just like the layers.
- Stop Gesture: Stops a recorded gesture.

If the Ctrl Mode switch is set to Continuous, the following controls appear, starting with a single popup menu.

Destination: The setting or parameter which changes when this modulation connection receives a control-change message.

The destinations on this menu are as follows. Other than the Layer Select destination, the changes affect the layer(s) chosen with the Layer popup menu or the Layer Select destination. In other words, by using the Layer Select destination, you can use one controller to select the layer which will receive subsequent control-change messages from other controllers.

- Unassigned: Nothing happens.
- Layer Select: Changes which layer is selected.
- Speed: Sets the velocity of the record/playback position.
- Speed Damping: Same as the Damping knob; slows the record/playback position's response to changes.
- Start Position: Sets the position from which the chosen layer(s) will start playing and jump back to from the end position.
- Stop Position: Sets the position at which the chosen layer(s) will stop playing and jump back to the start position.
- Play Fade In: Same as the In setting of the Play Envelope; adjusts the fade-in duration used when playing starts.
- Play Fade Out: Same as the Out setting of the Play Envelope; adjusts the fade-out duration used when playing stops.
- Record Fade In/Out: Same as Play Fade In/Out but affects the Record Envelope.
- Input Source: Same as the layer Input Source switch; chooses whether the layer records from the plugin's input or the internal signal buss.
- Triggered Record: Level Same as the small slider below the input-level meters; adjusts the loudness threshold at which recording will commence.
- Output Level: Same as the Level knob in the Levels panel; controls the overall loudness of the layer's signal.
- Panning: Same as the Pan knob in the Levels panel; moves the layer's signal back and forth in the stereo field.
- Buss Send Level: Same as the Buss Send knob; adjusts how much of the layer's signal is added to the internal signal buss.
- Position: Moves the play position of the chosen layer(s). Note that this can set up an argument between the modulation information and Circa's usual control of the position, so the results may or may not be to your liking.

Also present when the Ctrl Mode switch is set to Continuous are a pair of range sliders which work together to tailor the modulation connection's mapping of MIDI controller values to the settings they affect:

- In Range: Sets the range of controller values recognized by the connection. The positions of the slider thumbs indicate the lowest and highest values, within the standard range of 0-127. Incoming values outside of this range are ignored. For example, if you leave the left thumb at its default position at the far left, and move the right thumb to the middle of the range, only controller values in the range 0-64 will cause a change in Circa's settings.
- Out Range: Sets the range of values sent to the destination. This range is scaled to match the destination; the slider represents the entire range of the destination's values. For example, if the In Range thumbs are set as previously described, and the Out Range thumbs are set to positions about 1/3 and 2/3 of the length of the Out Range slider, and the Destination popup menu is set to Start Position, incoming MIDI messages in the range 0-64 move the chosen layer's start-position marker to locations within the middle third of the length of the layer's loop.

To remove an assignment altogether, click and hold on its rectangle for about one second.

The modulation rectangles blink briefly when a MIDI message matching their assignment arrives.

Gesture Recorder

Circa's Gesture Recorder captures and plays back your interactions with Circa's controls. It operates independently of the audio recording. While there happen to be six slots in the gesture recorder and six audio layers, there's no direct connection between the Nth gesture slot and the Nth layer.

The gesture recorder appears on the Modulations pane of the lower half of Circa's window. Each slot in the gesture recorder looks like this:

The four familiar symbols along the bottom of the slot's panel do what you'd expect: clicking them makes the gesture recorder record, overdub, play, and stop. Clicking the stop button a second time resets the gesture's playback position to its beginning. The oval-arrow switch near the upper-left corner determines whether the gesture plays over and over or stops after playing once. Once you've recorded a gesture, you'll see a thin, grey line at the top of the panel. When you play a gesture, this line is overlaid with a growing white line to indicate the gesture's current position within its recording.

To record a gesture, click the record button then move one or more controls in Circa's window. Everything you do will be recorded, in real time, until you click another of the slot's buttons. At that time the length of the recording will be fixed. If you click either the Play or Overdub button, the gesture will start playing from the beginning, reproducing all of your manipulations of the controls.

The overdub control lets you add new interactions to the gesture as it plays. Any new control change gets added to the existing gesture recording. If you engage the record button while a gesture is playing, any/all activity in the gesture is erased as it plays and any new activity is recorded.

When you record a gesture, there’s usually some lag between when you hit the record button and when you move the first control. Like everything you record, this lag will be recorded as part of the gesture and may seem like a delay between when you play the gesture and when something happens. This is particularly noticeable if you’re using a mouse-based computer and you must switch between Circa’s views to reach the first control. Clicking the little scissors button near the top right of the gesture’s slot trims off that interval at the beginning of the recording so that the first control change happens immediately after you click the gesture’s play button.

A long press on the stop button erases the gesture altogether.

Almost all of Circa's controls and parameters can be recorded in gestures. Most of the exceptions are to avoid confusing outcomes: switching panes in Circa's window, interactions with the Modulator settings and with the gesture recorder's controls themselves cannot be recorded.

Gestures can be played and stopped with Modulation mappings, so that you can use MIDI controllers to start/stop gestures. See the Modulations section above for more information.

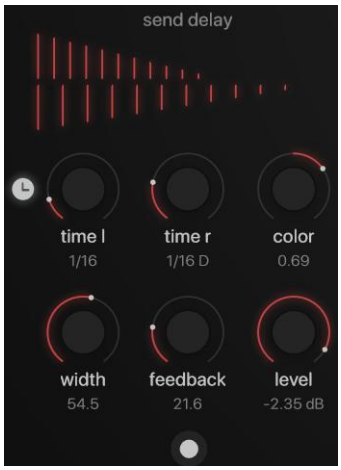
Because the gesture recorder's intention is to record your manual interactions with Circa, you may find that controlling some of Circa's parameters with the gesture recorder is not as smooth as using your host DAW's automation features. You may also find the opposite to be true. This depends on many things, including (of course) your particular host's approach to automation and your audio interface buffer size.

Effects

Circa includes four versatile audio effects—Delay, Reverb, Equalizer, and Compressor—designed to complement its looping capabilities. These effects enhance your loops with creative textures, spaciousness, tonal shaping, and dynamic control. They're useful whether you're subtly polishing Circa's mix or dramatically transforming your sound.

Delay

Leftmost in Circa's effects pane is a stereo delay, with separate delay lines for each channel. Delays can be used for anything from short doubling effects to long, spacey echoes. The delay has the following controls:



Time L and Time R knobs: set the delay times of the left and right delays, respectively. They have a range of one millisecond to two seconds. Turning on the Sync switch--the small icon that looks like an analog clock--makes the delay times operate in metrical units, expressed as fractions of a measure. The letters D and T indicate dotted and triplet values, so for example a setting of 1/8 D means a dotted eighth note. When the Sync switch is on the delay times will change to match the tempo of your host DAW.

Feedback knob: sends some or all of the delayed signals back to the inputs of the delay lines. If the feedback is zero, you'll hear only a single delayed copy of the signal. Turn up the Feedback and you'll hear more copies which fade out with each repeat. A setting of 100 means that all of the delayed signal goes back to the inputs, sustaining the sound more or less indefinitely.

Color knob: a set of filters modifies the tone of the delayed signal. The Color knob controls these filters, brightening or darkening the sound of the delay. Turn it clockwise to reduce the low frequencies, making the sound thinner and brighter. Turn it anti-clockwise to reduce the highs, making the sound darker and warmer.

Width knob: The two delay lines operate independently, potentially creating a wide stereo effect. Delays panned completely to the left and right sometimes sound too wide, so we've added a handy Width knob. At 100% the delays are entirely separate, creating the widest separation. Turn the knob down to move the delays towards the center. A setting of zero gives a mono output.

Level knob: simply adjusts the loudness of the delayed signal. Turn it all the way anti-clockwise and you won't hear the delay at all. This knob is also present on the Levels page for convenience.

Click the dot below the Feedback knob to turn the delay on and off altogether.

Reverb

Reverberation, or reverb for short, is the reflections we hear when a sound bounces off the walls, floor, ceiling, and other objects around us. Artificial reverb can add realism to an electronic sound or create unnatural effects. Circa's reverb originated with our experience with Adverb and Eos, our dedicated reverb plugins, but is updated and improved to work with a wide variety of sounds.

Diffusion knob: controls how much the initial density of echoes (often known as early reflections) builds up over time. Turning up the diffusion increases the build-up of echoes immediately following the original signal.

Decay knob: controls how long it takes for the reverberated sound to fade out. This control has the greatest influence on the overall sound of the effect. The range of this control is 0.1 to 10 seconds, which is approximately the amount of time that it takes the reverb sound generated by a full-volume signal to fade to silence. The actual amount of time it takes the signal to fade out is also affected by the Decay control so the numeric value of decay should be considered a relative value.

Size knob: varies the apparent size of the simulated acoustic space. As will be evident when you listen to it, rotating the Size knob changes the "bigness" of the reverberated sound.

Color knob: is a simple-to-use tone control. Turning it to the left makes the reverb's sound darker, turning it to the right makes the sound brighter.

Level knob: adjusts the loudness of the reverb. Turn it all the way anticlockwise and you won't hear the reverb at all. This knob is also present on the Levels page for convenience.

Click the dot below the Decay knob to turn the reverb on and off altogether.

Main Buss Equalizer

Circa's equalizer is a straightforward but powerful three-band EQ, designed to quickly shape and enhance your sound. It provides independent control over the low, mid, and high frequencies. It affects all of the signals on the main stereo buss, including the delay and reverb.

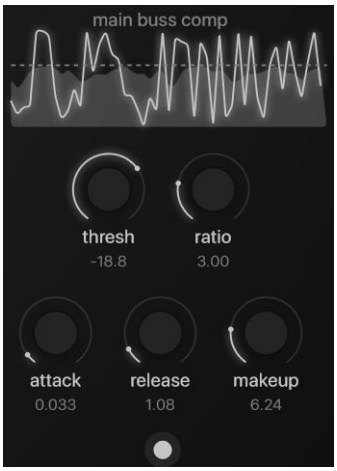
The Low and High gain knobs adjust the volume of the bass and treble frequency bands, respectively. Each knob allows boosting or cutting by up to 20 dB, giving plenty of control for subtle adjustments or bold tonal shaping. The frequency switches for the Low and High bands let you select different corner frequencies, adjusting the range where the bass and treble controls take effect.

The Mid band is semi-parametric, offering even greater flexibility. The Mid Gain knob provides 20 dB of boost or cut, while the Frequency knob lets you dial in precisely which midrange frequency you want to adjust. This allows you to quickly focus on key elements of your sound, from emphasizing vocal clarity to taming unwanted resonance.

Click the dot below the Freq knob to bypass or engage the EQ.

Main Buss Compressor

Circa's compressor reduces the dynamic range of audio signals, making loud parts softer and quiet parts louder. Derived from our wildly popular Rough Rider compressor, it's capable of smoothing out performances, controlling peaks, and adding punch or sustain to Circa's mix. The compressor follows the EQ and is the last stage of Circa's signal path.



Threshold knob: sets the level at which compression starts. When the input signal rises above this threshold, the compressor activates and begins reducing gain. Lowering the threshold makes the compressor act on quieter sounds, while raising it means only louder peaks will be compressed.

Ratio knob: determines how aggressively the compressor reduces signal levels once the threshold is crossed. For example, a 2:1 ratio means that signals exceeding the threshold by 2 dB will only increase the output by 1 dB. Higher ratios yield stronger compression, with ratios above 10:1 effectively acting as limiters, preventing sounds from exceeding the threshold significantly.

Attack knob: controls how quickly the compressor responds when the signal exceeds the threshold. Shorter attack times clamp down immediately, taming transient spikes. Longer attack times let more of the initial punch through, preserving transient detail.

Release knob: determines how fast or slow the compressor stops reducing gain once the signal falls below the threshold. Shorter release settings quickly restore the original volume, resulting in a more aggressive or pumping sound. Longer release settings produce smoother and more natural results.

Makeup knob: compensates for any overall volume loss caused by compression. Turning this knob up boosts the compressed signal, allowing you to match or surpass the original loudness. This is useful for maintaining consistent levels when comparing compressed and uncompressed audio.

Click the dot below the Release knob to bypass or engage the compressor.

Levels

Circa's Levels pane provides mixer-like control over each of the plugin's six independent looper layers. Each layer has its own dedicated channel strip, allowing precise management of the audio routing, levels, and effects sends.

At the top of each strip are two knobs labeled Delay Send and Reverb Send, which control how much of each layer's audio is sent to Circa's built-in Delay and Reverb effects processors. Turn these knobs clockwise to add space and depth to individual loops, or turn them fully anti-clockwise to keep the loops dry.

Below the send knobs, the Pan knob adjusts the stereo position of each loop within the stereo field. Turning this knob left or right places the loop audio accordingly, helping you create width and separation in your mix.

The Output selector switch determines the destination for each layers's audio output. Use it to assign loops to different outputs for additional processing or routing within your host DAW. There are six output busses, labeled Main and Out 2-6. Host DAWs vary in their handling of multiple-output plugins; some require specific settings before the additional outputs are accessible.

Each channel strip also has a Level knob that adjusts the volume of the layer. Turn this knob clockwise to increase loudness or anti-clockwise to lower it.

Finally, each channel strip includes Mute and Solo buttons. Clicking the Mute button silences the selected loop channel, removing it temporarily from the mix. Clicking Solo isolates the selected loop, muting all other channels to allow focused listening and editing.

In the lower right corner of the Levels pane you'll find knobs for adjusting the loudness of the delay and reverb effects. These knobs are duplicates of the level knobs in the Effects pane; we added them to the Levels pane to make it easy to adjust the loudness of the effects while adjusting the output settings of the layers. Likewise, the Monitor knob duplicates the knob bearing the same name in the upper-left Master Input area of the Layers pane.

There is an output selector menu above the delay and reverb level knobs. By default the effects are added to the main output buss but you can route them to the five other output busses or the cue buss. The output selector above the Monitor knob choses whether the monitor signal is added to the main buss or the cue buss.

Monome Grid and Arc Control

Circa has built-in support for the *grid* (128-button version) and *arc* hardware controllers made by monome[3], providing a more hands-on experience with looping. You can control many of Circa's operations with the buttons and knobs and the LEDs provide visual feedback. Setting up takes a few simple steps.

First, if you haven't done so already, install serialosc. Circa (and most other things) depends upon serialosc to communicate with monome hardware. The instructions and links to the relevant installers are available on the monome site, here: https://monome.org/docs/serialosc/setup/

Next, turn on the Search for monome and/or arc on instance switch in Circa's Settings panel. After turning it on, restart the plugin. Different hosts have different features for restarting plugins; many DAWs provide a "power" switch which you can toggle off and back on. If all else fails, delete Circa altogether and add a new instance.

Your operating system may ask for your permission to access network devices. This is because serialosc uses UDP networking commands to communicate via OSC. Circa doesn't talk to other devices on your network, but serialosc needs your permission to use networking commands when it starts up, so grant it this access if it asks.

Once you've done this, Circa will automatically connect to your grid and/or arc and these switches will appear at the top of its window:

In this illustration, there is a monome grid connected but no arc connected. You can connect or disconnect Circa from your device(s) by clicking on the buttons on the left.

The mappings between Circa and the grid and arc are described in a separate document available here: https://github.com/Audio-Damage-Inc/manuals/blob/main/monome-arc-layout-guide.pdf

Note: Currently Circa's monome integration supports only one instance of Circa.

Automation

Most of Circa's parameters can be automated using your host's automation features. Consult your host's documentation for information on how to use these features. Some of Circa's controls, most notably the Trigger button, cannot be automated. Momentary controls like this one do not work well with all hosts and plugin formats. A workaround is to use a Modulation assignment to operate the Trigger with a MIDI message.

Recording Time and Memory Usage

Circa has no fixed limit on the length of its recordings. You can make loops as long as the available memory in your computer permits. Circa allocates extra memory as it records to provide its undo/redo mechanism. If Circa thinks it will run out of memory while recording it employs a couple of tactics to compensate. It uses the same tactics while loading presets.

The first time memory runs low, Circa disables its undo/redo mechanism and releases the extra memory consumed for this feature. A warning message appears at the top of the window and the undo button disappears, but recording continues without interruption and you can continue to use all other features of Circa. If memory runs low again, more drastic measures are employed: recording immediately stops, no further recording is permitted, and the warning message changes accordingly. You can play existing recordings and even overdub, but you can't record new layers.

As a defensive mechanism, once Circa enters either of these low-memory fallback states, it will remain in this state until you load a preset or completely close Circa and open a new instance. Hence it is smart to immediately save your work (in either a new preset or via your DAW's session) if you see either of these warnings. Once you've done that you can continue to use Circa without fear of losing work. If you free up memory on your system by e.g. closing other applications, you may find that you can reload your preset or session without Circa entering one of its low-memory states.

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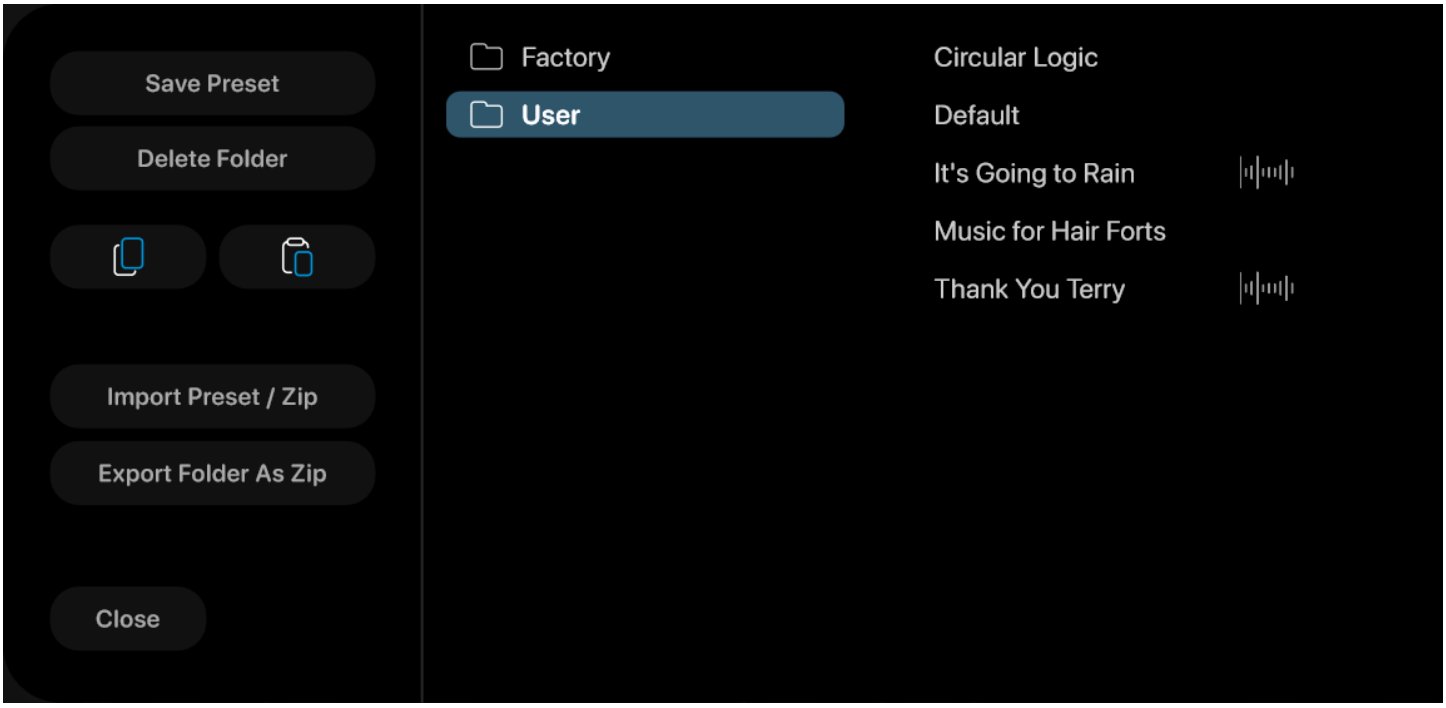
[3] See https://monome.org for information about monome and their products and creations.

Presets

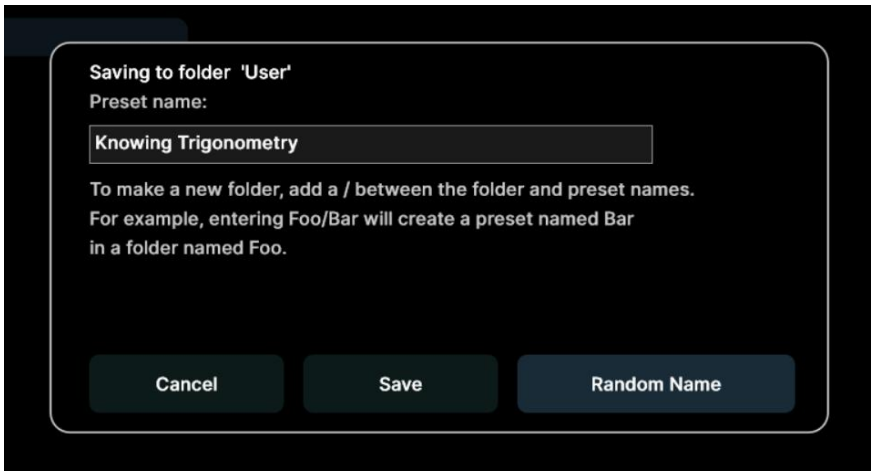
Unlike most plugins, Circa does not come with any presets, in rather the same manner that a turntable doesn't come with records. It's a blank canvas for your creations; of these, the creations you wish to keep become your presets. Circa has a special pane called the preset browser for saving and subsequently retrieving your presets. Click the floppy-disc icon at the top-right corner of the window to open the preset browser. Click anywhere outside of the browser to dismiss it.



The browser displays presets and folders in scrollable lists, arranged in columns. The browser displays four columns so you can nest up to three levels of folders within the Presets folder; that is, two levels of folders within the User folder. The leftmost list shows the presets and folders within Circa's preset collection. Clicking any of these folders reveals its contents in the next list. These folders can contain sub-folders of their own. Clicking on a preset name loads the settings into Circa. Double-clicking a preset name loads the preset and dismisses the preset browser. **Loading a preset irretrievably erases Circa's current settings and any audio you've recorded**, so if you have created something that you want to use again, save it as a new preset before loading another preset.

The folders and presets in the browser correspond to folders and files within Circa's own folder on your storage device (i.e. your computer's hard drive or SSD). This folder is located at `C:\ProgramData\Audio Damage\Circa\` on Windows, and `~/Music/Audio Damage/Circa/` on macOS and Linux. You can store your presets anywhere you like but, to avoid possible collisions during future updates, do not store your presets within the Factory folder.

To save your presets, click the Save Preset button at the left edge of the window. This invokes a dialog box with a couple of helpful features. As the text therein describes, you can create a folder within the destination folder (whose name is given at the top of the dialog box) by adding the folder's name to the beginning of the preset's name, separated by a slash mark.



Clicking the Random Name button replaces the preset's name with a pair of words chosen at random from two lists. While the resulting names won't have any connection with what the plugin is doing, you may find this feature useful for coming up with alternatives to routine names like "My Preset 12".

Potential pitfall: once you've saved a preset, clicking its name in the list loads the preset, overwriting whatever changes you've made since you saved the preset. Hence if you want to save the preset again to preserve the changes you've made, **do not** click on its name before saving it.

You can delete presets from the lists by clicking their name and then clicking the Delete Preset button. Circa will give you a chance to confirm this action or cancel it. If you confirm, the preset/folder will be removed from your storage system and is gone for good.

Importing and Exporting Presets

Preset files are plain-text XML files so that you can exchange them online in forums, copy them between a Windows computer and a Macintosh (and even between an iPad and a regular computer), email them to your friends, etc.

The two buttons with icons representing copying and pasting (copy on the left, paste on the right) copy Circa's current settings to the system clipboard and paste settings from the clipboard. You can use the copy and paste commands to transfer settings between two instances of Circa or paste the settings into an email message or text editor. When copied to the clipboard, presets are presented in the same XML text as used in preset files.

The Import Preset / Zip button provides a way to add presets to Circa without manually moving them into the appropriate folders in your file system. Clicking this button produces a file-browser window wherein you can select either a single preset file or a .zip file containing one or more presets. After you select the file, Circa copies the preset(s) into whichever folder you have selected in Circa's preset list, unzipping the file first if necessary.

Depending on whether you've selected a preset or folder, the Export Single Preset or Export Folder As Zip button performs the complementary functions of the Import button. First select either a preset or a folder in Circa's list, then click the export button. A file-save window appears; choose a location in your file system, give the file a name, and click Save. If you have chosen a folder in Circa's preset list, the plugin places it and all of the presets it contains in a .zip file.

Default Preset

If you save a preset with the special name "Default" in the User folder, new instances of Circa will load it automatically when you add it to your DAW session. You can use a default preset file to give you the same starting point with Circa whenever you use it. Circa's installer creates a default preset file for you but feel free to replace it with your own.

Audio Storage

Circa optionally stores the audio contents of its layers in presets and in your DAW sessions. The appropriately named switch in the Settings pane described previously governs whether or not this happens. Obviously it's nice (and customary) for presets and DAW sessions to restore all settings and internal states of plugins. The drawback to storing audio within presets is that the file sizes can become quite large, as Circa stores audio in a lossless, uncompressed, 24-bit format. You may notice it takes longer to load DAW sessions than usual if you have one or more instances of Circa containing a number of lengthy layers. The workaround for this is to record Circa's output in regular audio tracks in your DAW, rather than depending up Circa to store the audio.

If a preset contains audio, it is marked with a little waveform icon to the right of its name. In the screenshot at the top of this section, two of the presets contain audio.

And Finally...

Thanks again for purchasing Circa. We make every effort to ensure your satisfaction with our products, and want you to be happy with your purchase. Please write to support@audiodamage.com if you have any questions or comments.

Document Revisions

- 7 April 2025: Initial release
- 30 April 2025: various corrections
- 10 June 2025:
  - removed discussion of fixed recording length, added discussion of low-memory handling
  - changed MIDI CC values for momentary controllers (now 0-63 and 64-127 rather than 0 and 127)
  - pointed out pitfall with inadvertently loading a saved preset
- 1 July 2025 – version 1.1:
  - added What's New section
  - added description of Gesture Recorder
  - added new targets in Modulations
  - updated screenshots where needed
- 14 August 2025 – version 1.1.4:
  - added information about monome grid and arc integration