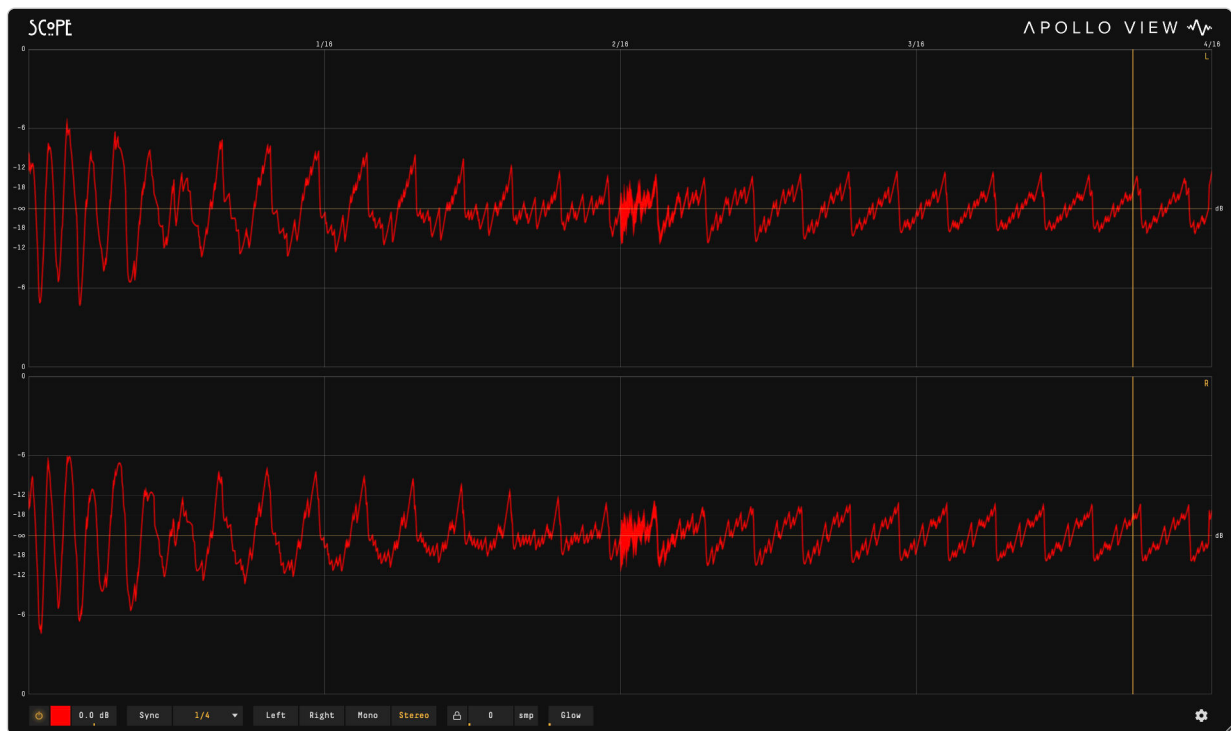


SCOPE

SEE THE SIGNAL



MANUAL V1.1

APOLLO VIEW 

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INTRODUCTION

WHAT IS IT?

Real-time oscilloscope for your DAW.

Scope is a free, GPU-accelerated oscilloscope plugin. Drop it anywhere in a signal chain and it draws the waveform as it happens, beat-synced to your session or free-running at any time window from 10 milliseconds to 10 seconds. The audio passes through untouched: Scope adds zero latency and never modifies the signal.

Scope is built by Apollo View Modular, the Eurorack hardware company. It follows the same philosophy as our hardware: do one job properly, look good doing it, and stay out of the signal path.

FEATURES

- Real-time waveform display, GPU-accelerated, sharp at any window size
- Beat-synced timebase with 22 divisions from 1/128 to 16 bars
- Free-run timebase from 10 ms to 10 s, also addressable in Hz
- Left, Right, Mono and Stereo channel modes
- Clip indicators: polarity-aware border flash plus in-waveform clip overlay
- Rolling mode for a continuously scrolling view
- Display offset in samples or milliseconds, for lining up latent chains
- Any waveform colour you like, with a phosphor-style glow to taste
- Resizable from its minimum size up to 4096 x 2160 pixels
- Zero added latency, zero signal modification
- VST3 and AU for macOS 11 or later, with free registration

SYSTEM REQUIREMENTS

Requirement	Minimum
OS	macOS 11 (Big Sur) or later
CPU	Intel Core i5 / Apple silicon
RAM	4 GB (8 GB recommended)
GPU	Any GPU with OpenGL 3.2 support
Formats	VST3, AU

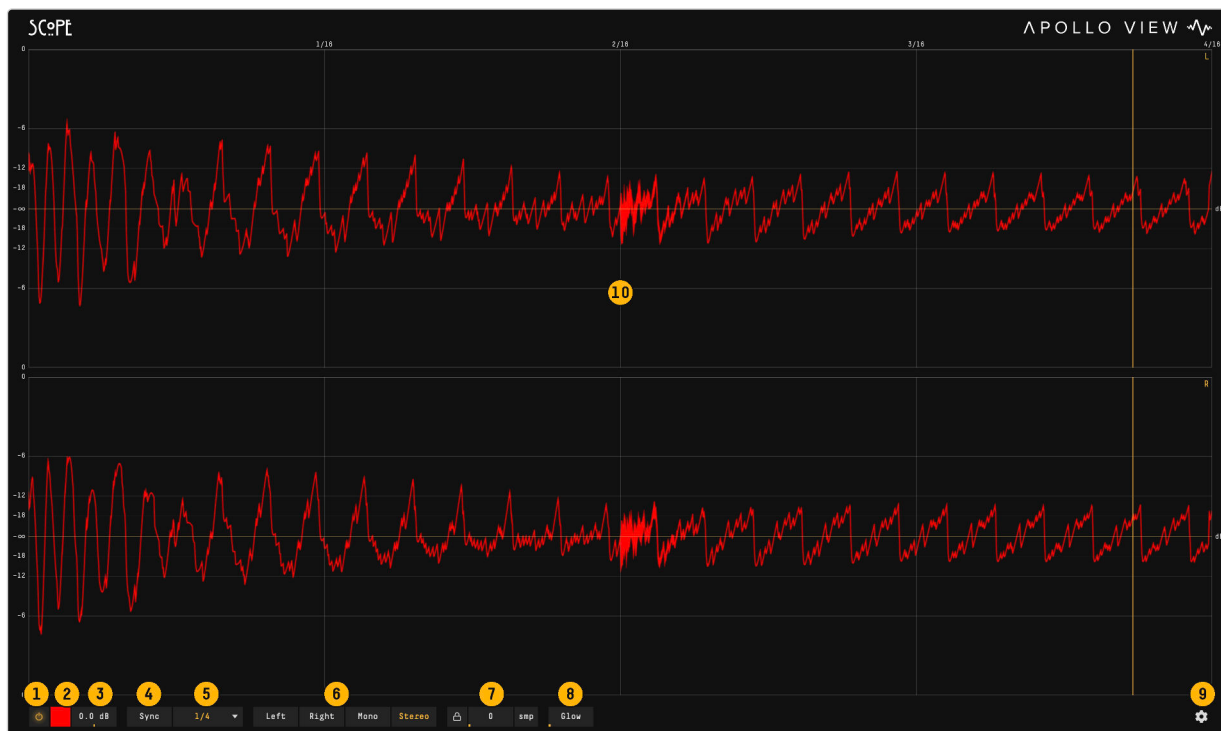
QUICK START

1. Run the installer and open your DAW. Scope appears as an effect plugin under Apollo View.
2. Insert Scope on any track. The first time it opens you will see the activation screen: enter your email and your free licence key, then click **Activate**. Keys are free from shop.apolloviewmodular.com/plugins/scope.
3. Press play. The waveform draws left to right, locked to your project tempo at the default 1/4 beat division.
4. Drag the GAIN slider to scale the display, or Alt-click it to sit back at 0 dB.

That is the whole workflow. Everything else in this manual is detail.

TIP: Scope's display keeps drawing while the transport is stopped, so live input (a synth you are playing, an incoming mic) is always visible.

OVERVIEW



Scope with the KEY numbers used below.

KEY

- | | |
|--|---|
| 1 Power. Toggles the waveform display on and off. | 2 Colour swatch. Click to choose the waveform colour. |
| 3 GAIN slider. Scales the display amplitude, -36 to +36 dB. | 4 Timebase mode. Toggles between Sync and Free-run. |
| 5 Division picker (Sync) or time slider (Free-run). | 6 Channel modes: Left, Right, Mono, Stereo. |
| 7 Offset: lock, offset slider, <code>smp</code> / <code>ms</code> units. | 8 GLOW slider. Phosphor-style glow amount. |
| 9 Settings cog. Opens the Settings panel. | 10 The display: waveform, grid, dB and time labels, write cursor. |

The title bar shows the product logo on the left and the Apollo View wordmark on the right. When tooltips are enabled, hovering any control shows its description in the title bar.

SLIDERS

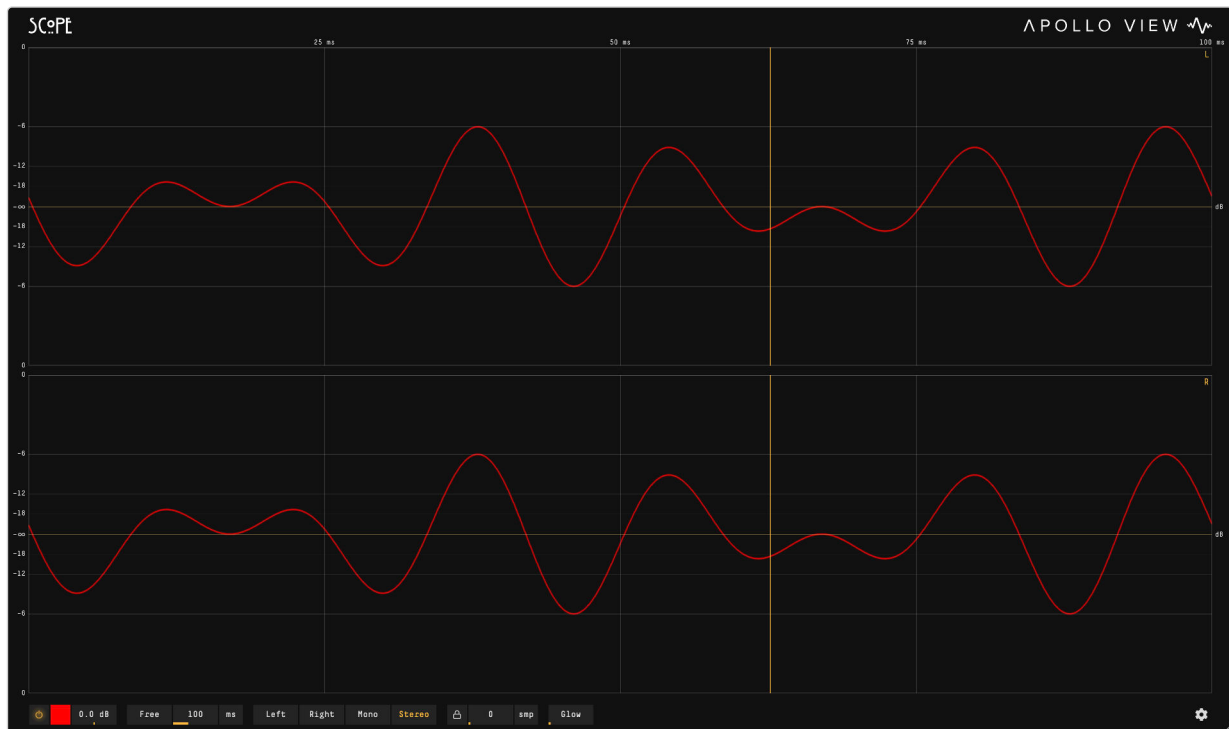
Every slider in Scope answers the same two gestures. **Click** one and type an exact value: Enter commits it, clamped to the slider's range, and Esc cancels. Typed values understand units, so "250 ms", "1.5 s" or, in frequency units, "2k" all land as written. **Alt-click** (Option) resets a slider to its default.

RESIZING

Grab any edge or corner and resize. Scope's window works from 679 x 240 pixels up to 4096 x 2160, so a full-screen scope on a 4K display is entirely reasonable (on anything larger than 4K

the window stops growing at 4096 x 2160). The window size is remembered per instance, and `Save As Default` in Settings makes your preferred size the default for new instances.

THE DISPLAY



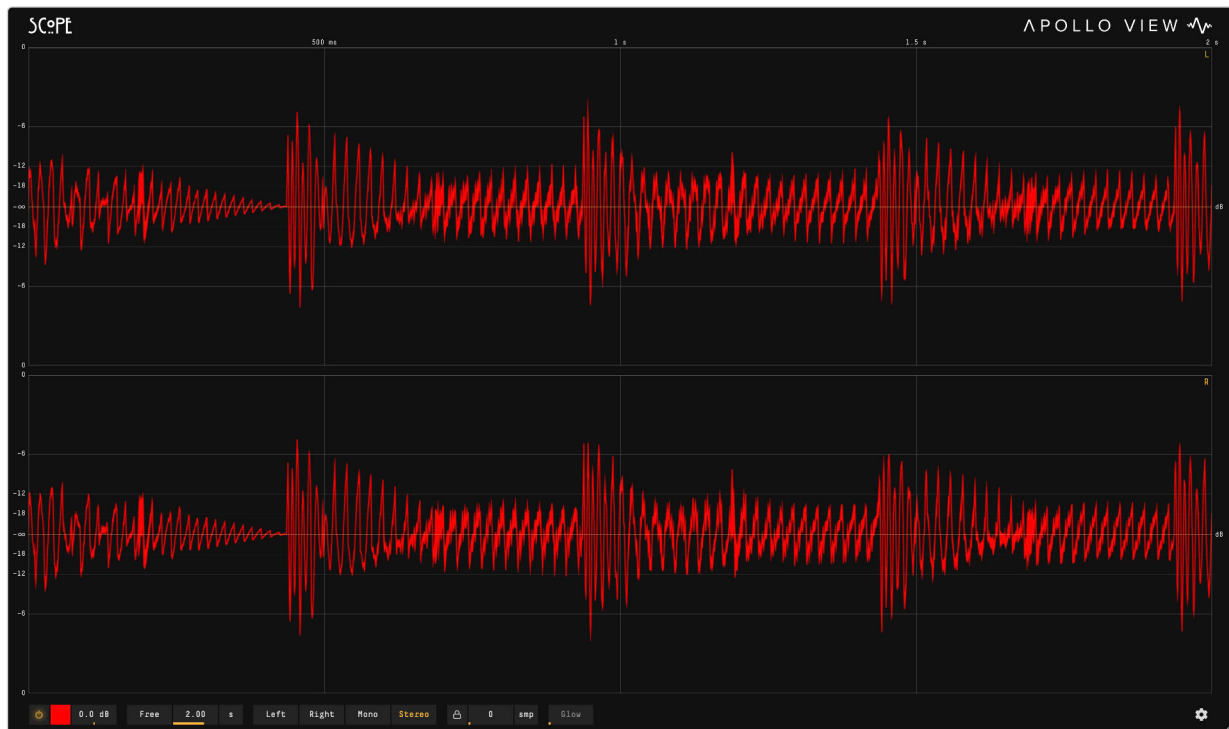
Free-run at 100 ms showing a 50 + 70 Hz two-tone signal.

The display is the instrument. Scope draws the incoming waveform against a dB-calibrated grid:

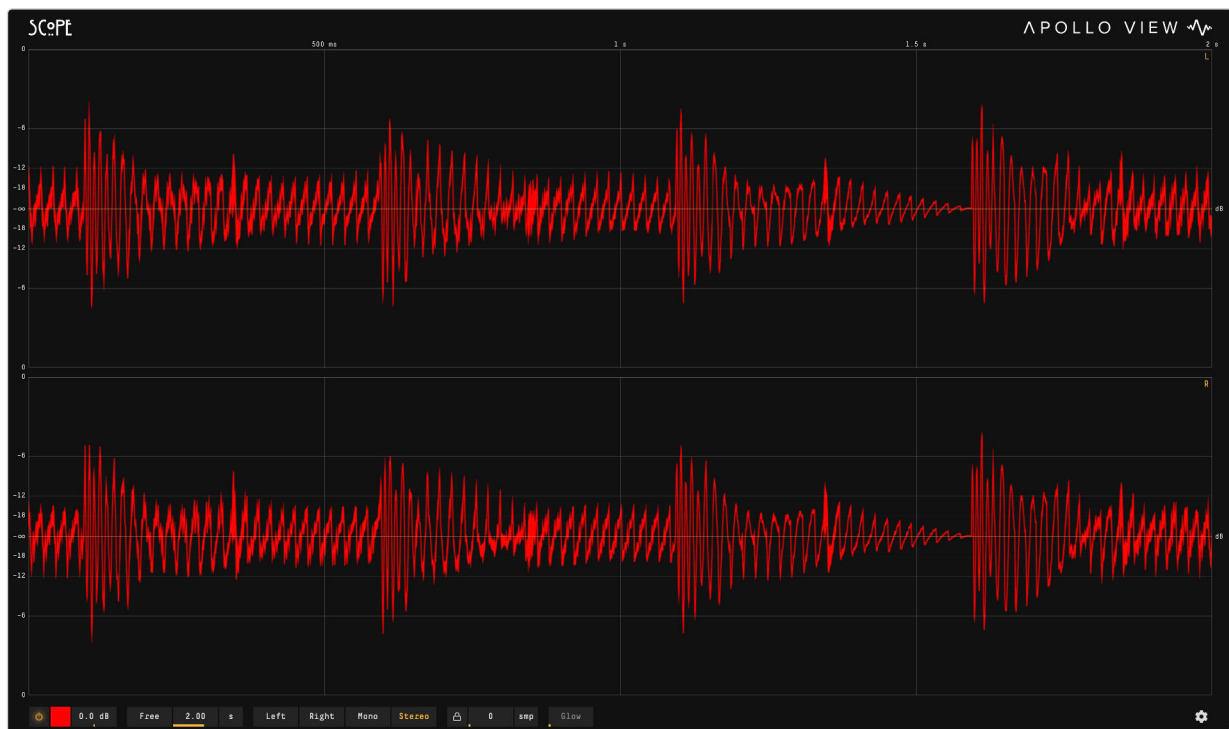
- **Amplitude labels** on the left mark 0 dB at the lane edges, -6, -12, -18 dB and the minus-infinity centre line of each lane.
- **Time labels** along the top mark the beat grid in Sync mode, or the time window in Free-run.
- **Write cursor**: the thin vertical line is the current write position. The wave ahead of it is the previous sweep. Toggle it with `CURSOR` in Settings if you prefer a clean frame.
- In **Stereo** mode the display splits into two lanes, L above R, each with its own labels.

ROLLING MODE

By default Scope redraws in place like a hardware oscilloscope sweep. Rolling mode instead scrolls the waveform continuously: the newest audio enters at the right edge and everything slides left. Enable `Rolling` in Settings. There is no write cursor in rolling mode (the newest audio is always at the right edge), so the `Cursor` toggle does not apply here.



Rolling mode: the newest audio enters at the right edge...



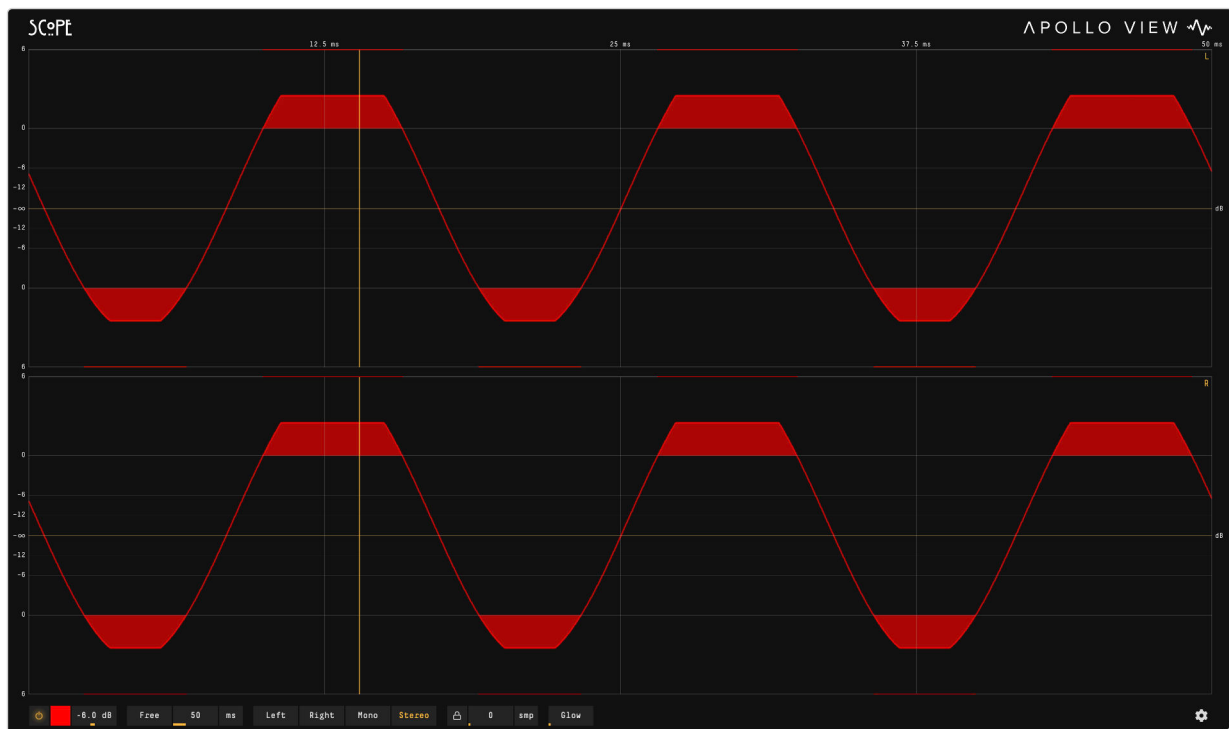
...and a moment later everything has slid to the left.

CLIP INDICATORS

Scope watches for samples above 0 dBFS (possible inside a DAW's floating-point signal path, for example after a hot gain stage):

- **Clip border:** the display edge lights red where clipping occurs. The top border marks positive clipping, the bottom border negative, so you can see asymmetric clipping at a glance.
- **Clip overlay:** the clipped section of the waveform itself is drawn highlighted, marking exactly where in the wave it happened.

Both indicators can be toggled in Settings (`Clip Border` , `Clip Overlay`).



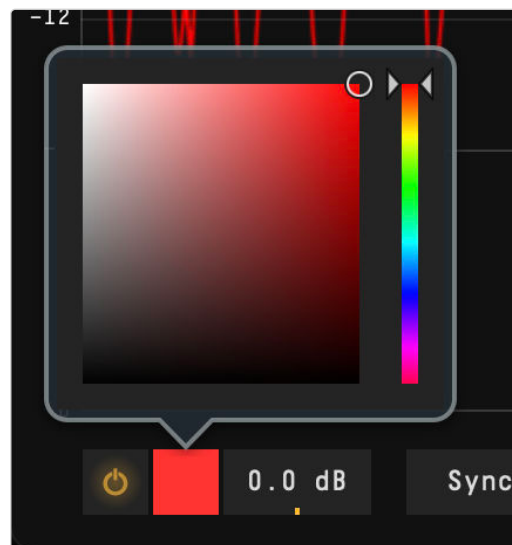
A hot signal driven above 0 dBFS: border flash at the edges plus the highlighted clip overlay. Display gain at -6 dB keeps the waveform clear of the border.

POWER, GAIN AND COLOUR

Power (the  button, far left) toggles the waveform display. Audio always passes through unaffected; power only controls drawing.

GAIN scales the displayed amplitude from -36 dB to $+36$ dB in 0.1 dB steps. This is display gain only, it never touches the audio. Click to type an exact value, Alt-click to reset to 0 dB. The value reads out in the slider itself.

Colour: click the swatch next to the power button and pick any colour for the waveform. The default is signal red.



The colour picker.

NOTE: Nothing in Scope changes your audio. Gain, power, colours and timebase are all display-side.

TIMEBASE

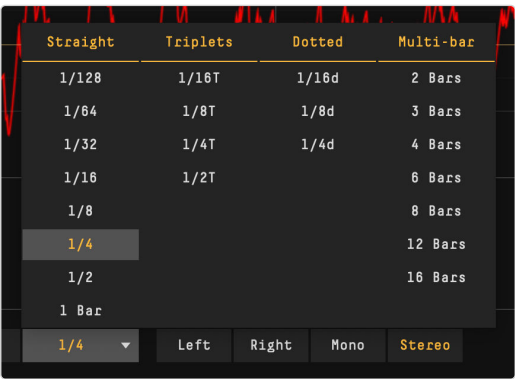
The timebase decides how much time one screen width represents. The mode button toggles between the two timebases:

SYNC

Sync locks the display to your DAW's tempo and transport. The window is chosen with the beat-division picker:

Group	Divisions
Straight	1/128, 1/64, 1/32, 1/16, 1/8, 1/4 (default), 1/2, 1 Bar
Triplets	1/16T, 1/8T, 1/4T, 1/2T
Dotted	1/16d, 1/8d, 1/4d
Multi-bar	2 Bars, 3 Bars, 4 Bars, 6 Bars, 8 Bars, 12 Bars, 16 Bars

In Sync mode the grid lines are beat lines. A kick on every quarter note stands still on a 1/4 display: that is the point of sync. Anything drifting is drifting in time.

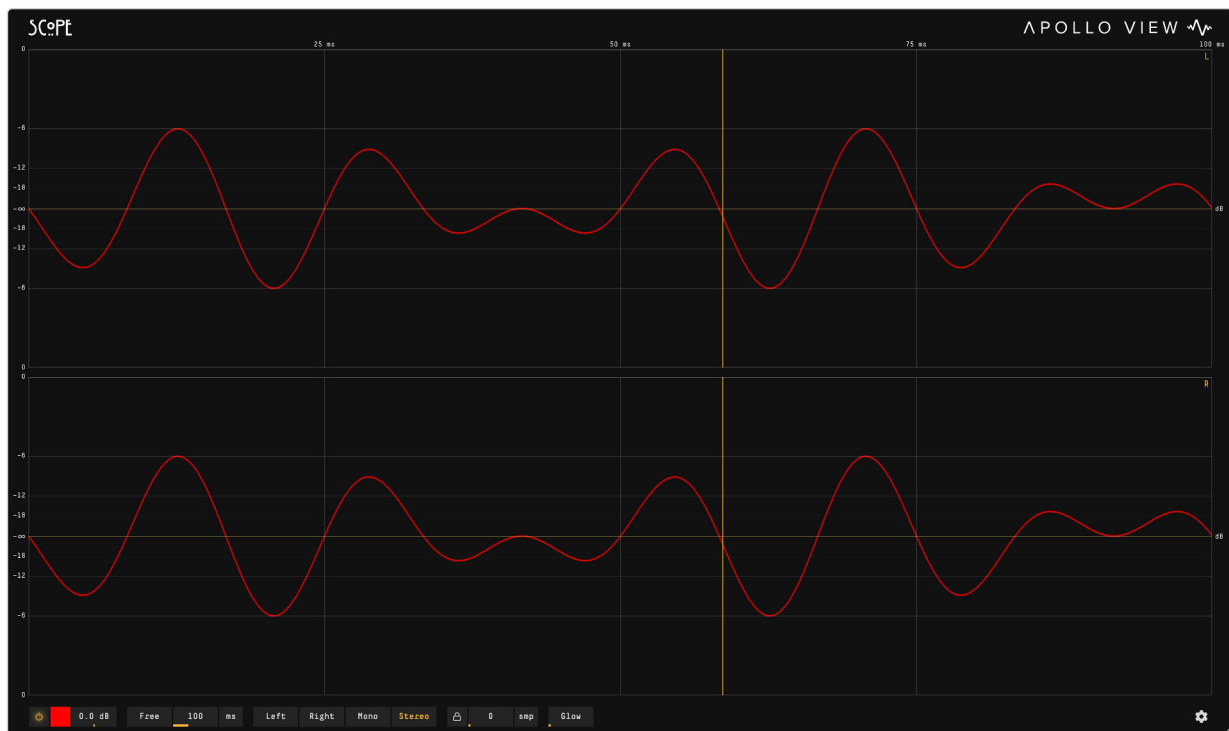


The beat-division menu.

FREE-RUN

Free unlocks the display from tempo. The timebase slider sets the visible window from 10 ms to 10 s. Alt-click the slider to return to 500 ms.

The units button next to the slider toggles between time (ms / s) and frequency (Hz / kHz). Frequency units are handy when you are inspecting a known tone: set 440 Hz and one cycle of a 440 Hz wave fills the screen. In frequency units the slider re-ranges to 0.1 Hz to 10 kHz, and Alt-click resets to 500 ms in time units or 500 Hz in frequency units. Typed values follow the active unit family: click the slider and “250 ms”, “1.5 s” or, in frequency units, “2k” all do what they say.



Free-run, 100 ms window.

CHANNEL MODES

Four buttons choose what is drawn:

Mode	Shows
Left	Left channel only.
Right	Right channel only.
Mono	The mono average, $(L + R) / 2$.
Stereo	Both channels in two stacked lanes, L above R. Default.

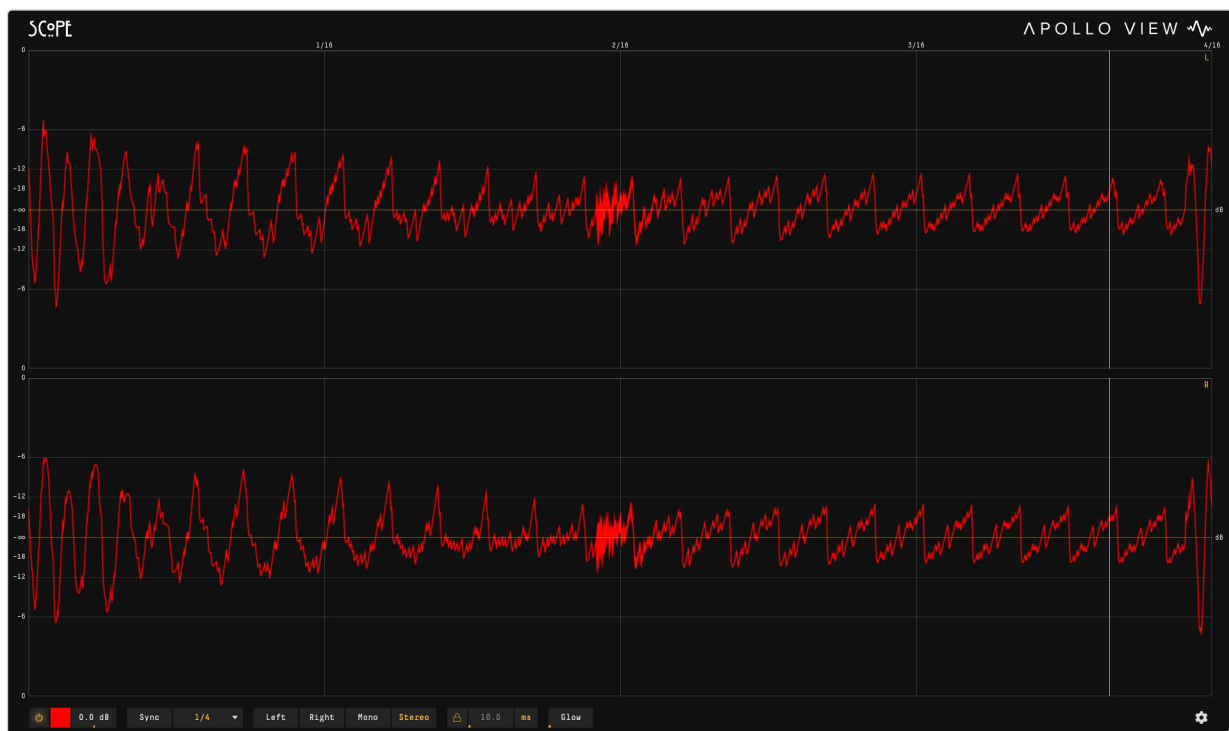
On a mono track, Scope follows the host bus layout and draws the single channel.

OFFSET

Latency upstream of Scope (a lookahead limiter, a linear-phase EQ) shifts what you see: in Sync mode the whole waveform lands late against the beat grid. The offset slider nudges the display back into place, delaying it by up to one second, set in samples or milliseconds; the **smp** / **ms** button toggles the units.

This is display alignment only, the audio is untouched. Drag the slider by eye, or click it and type the exact figure: most DAWs report each plugin's latency (REAPER shows it per plugin in the FX chain window; check your host's plugin-delay readout), so the right number is usually a lookup away. Alt-click resets to 0.

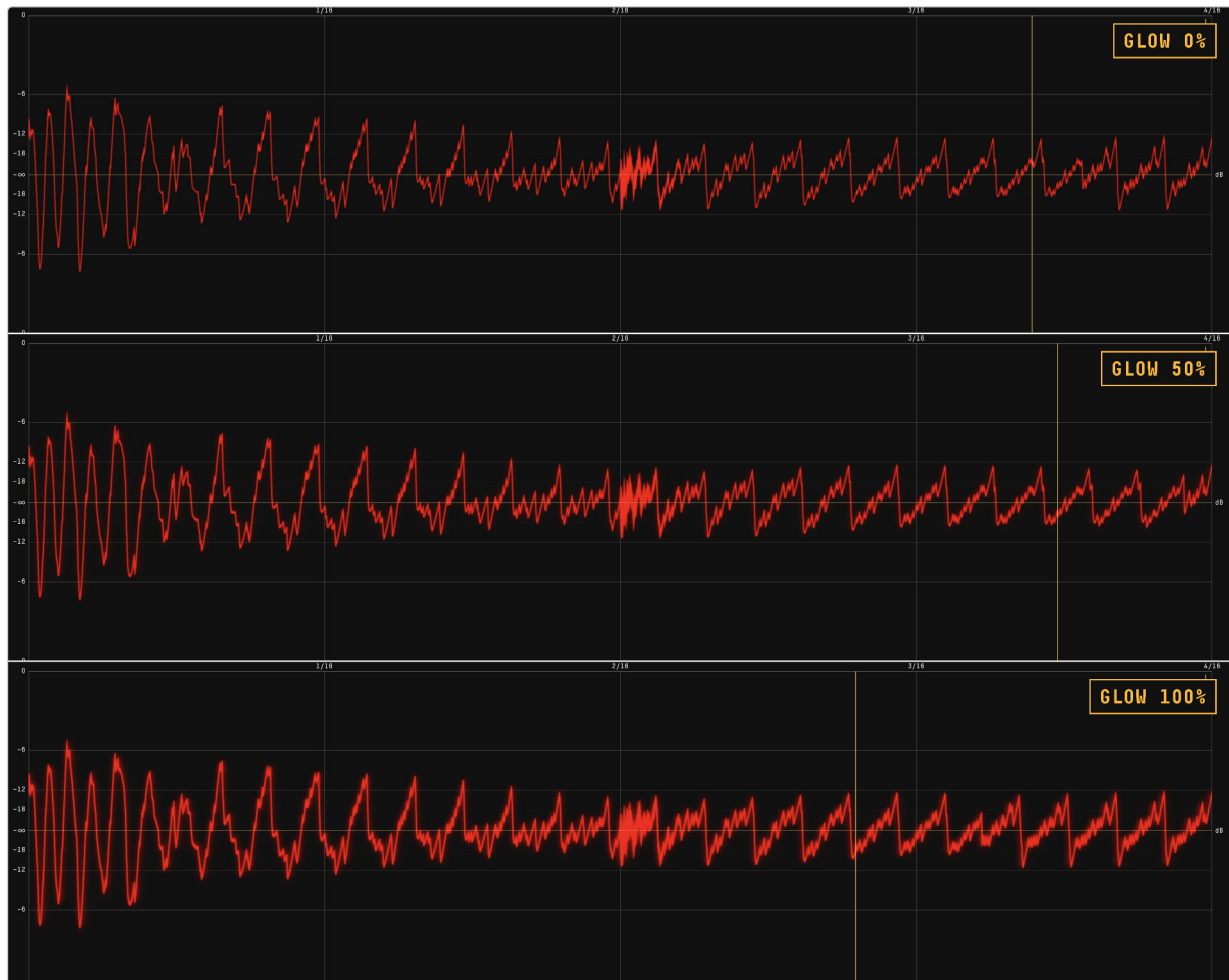
The padlock guards the offset against accidental drags. It engages by itself ten seconds after your last adjustment, and immediately when you type a value; click it to unlock and adjust again.



A 10 ms offset dialled in and locked: the padlock is closed and the units button reads **ms**.

GLOW

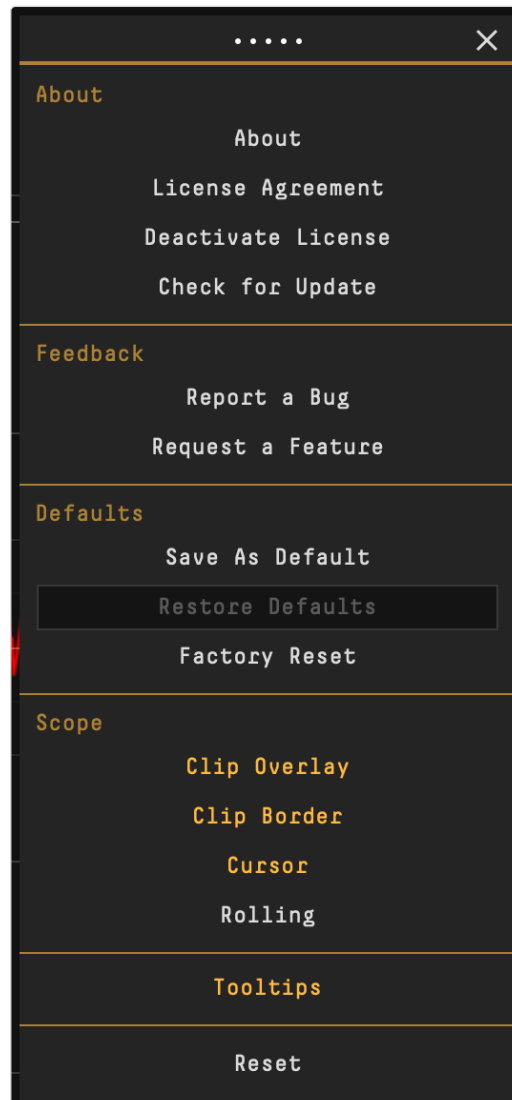
The GLOW slider adds a phosphor-style bloom to the waveform, from a clean trace at 0% to full CRT at 100%. A typed value here is on a 0 to 1 scale: click the slider and type 0.5 for half glow. Beyond looks, it helps dense material read: where the trace piles up, the glow builds brighter. Alt-click resets to 0. The amount is saved with your session.



The same beat at Glow 0%, 50% and 100%.

SETTINGS

Click the cog to open the Settings panel. It floats above the plugin and closes when you click anywhere else. Drag its handle to move it.



The Settings panel.

FILES

Scope keeps two files outside your DAW projects, both under

`~/Library/Application Support/ApolloView/` on macOS: the licence (`Scope.license`) and your saved defaults (`Scope/defaults.json`). Back them up when moving to a new machine. Deleting the licence file returns the plugin to the activation screen; deleting the defaults returns new instances to factory settings.

ABOUT

`About` shows the version and credits. `License Agreement` opens the EULA on our website. `Deactivate License` releases this machine's activation. `Check for Update` opens the website to check for a newer version.

FEEDBACK

Report a Bug opens a support email that is pre-filled with the plugin version, your OS, DAW, sample rate and buffer size. It goes to support@apolloviewmodular.com. **Request a Feature** does the same for ideas.

DEFAULTS

- `Save As Default` : saves the current state (size, colours, timebase, toggles) as the default for every new Scope instance.
- `Restore Defaults` : reloads your saved default (dimmed until one has been saved).
- `Factory Reset` : deletes the saved default and returns to factory state.

SCOPE

- `Clip Overlay` and `Clip Border` : the clip indicators (see The Display).
- `Cursor` : the write cursor.
- `Rolling` : rolling mode.

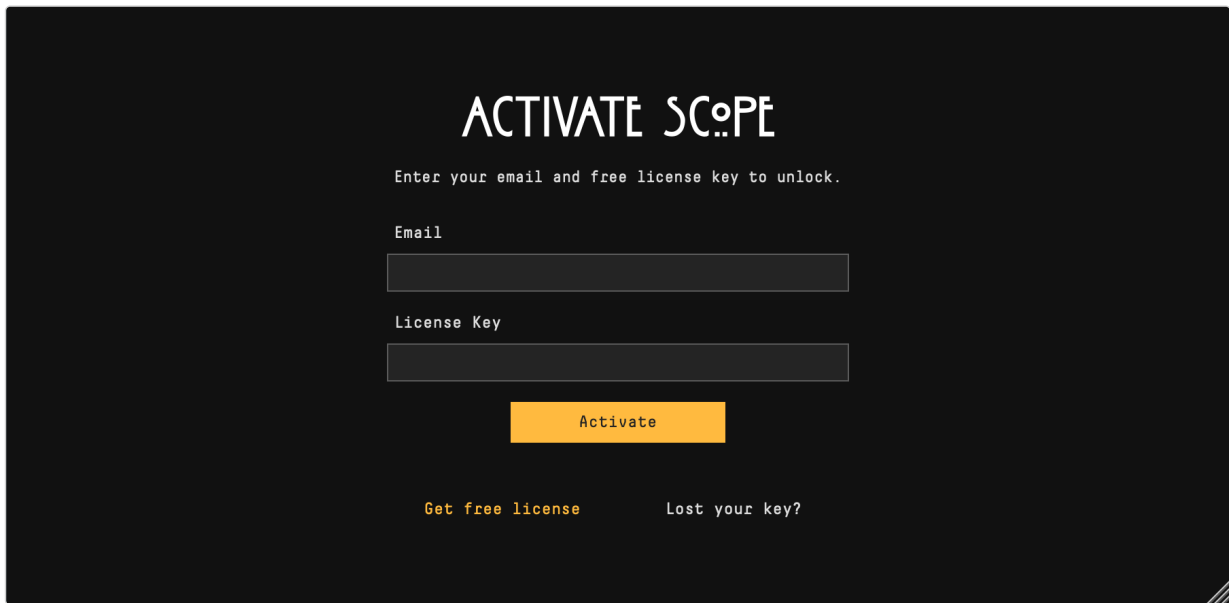
`Tooltips` toggles the control descriptions in the title bar, and `Reset` at the bottom returns this panel's settings to their defaults.

ACTIVATION

Scope is free, and asks once for a licence key so we can let you know about updates.

1. Get a free key from shop.apolloviewmodular.com/plugins/scope (the activation screen's `Get free license` link goes to the same place, and `Lost your key?` recovers a lost one).
2. Open Scope, enter your email and the key, click `Activate`.

Activation is per machine and works offline after the first unlock. `Deactivate License` in Settings releases the machine again.



The activation screen.

UPGRADING TO DELTASCOPE

Scope is the display engine of our paid analyser, DeltaScope. If you ever need to compare two signals rather than watch one, that is what DeltaScope is for: it adds a sidechain input with delta (difference) modes, a spectrum analyser, phase correlation, level meters with LUFS, freeze, zoom, measurement, band filtering and more.

Feature	Scope	DeltaScope
Real-time oscilloscope display	Yes	Yes
Beat-sync and free-run timebases	Yes	Yes
Channel modes L / R / Mono / Stereo	Yes	Yes
Clip border and clip overlay	Yes	Yes
Rolling mode, write cursor, colours, glow	Yes	Yes
Manual display offset (samples / ms)	Yes	Yes
Resizable to 4096 x 2160	Yes	Yes
Mid/Side channel mode	-	Yes
Freeze	-	Yes
Naked mode (controls hidden)	-	Yes
Zoom, pan and waveform measurement	-	Yes
Sidechain input and 5 comparison modes	-	Yes
Delta (null) display and Hear the Delta	-	Yes
FFT spectrum analyser	-	Yes
Phase correlation display	-	Yes
Level meters with LUFS and True Peak	-	Yes
Band filters (zero-phase HP/LP)	-	Yes
ADC (auto delay compensation)	-	Yes
MIDI note-locked timebase	-	Yes
Waveform trigger (zero-crossing lock)	-	Yes

DeltaScope is available from shop.apolloviewmodular.com/plugins/deltascope, and there is a demo mode so you can try everything first.

LICENCE AND WARRANTY

Scope is licensed, not sold. Use of the software is governed by the End User License Agreement shown by `License Agreement` in the Settings panel and included with the installer.

Apollo View Modular Ltd supplies this software “as is” and, to the maximum extent permitted by law, accepts no responsibility for harm to persons, apparatus or data caused through the operation of this product. This does not affect your statutory rights.

Please contact support@apolloviewmodular.com with any questions, bug reports or requests.

<https://www.apolloviewmodular.com>