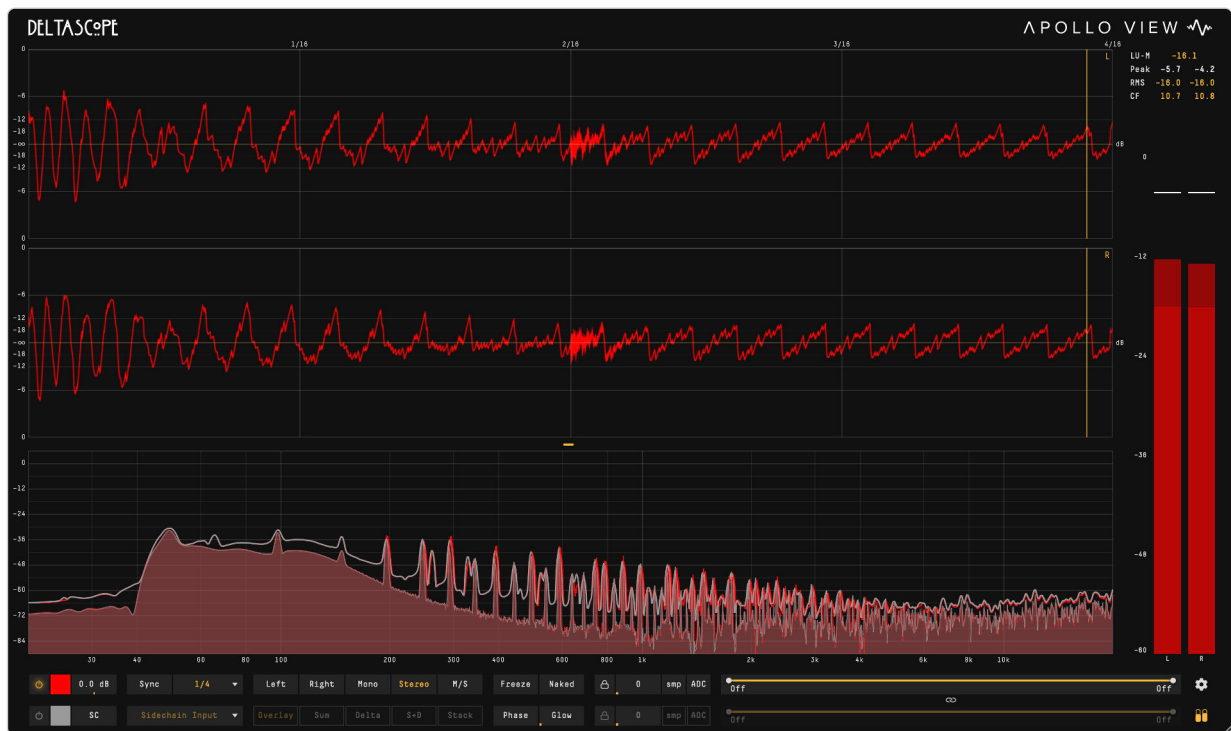


DELTA SCOPe

SEE THE DIFFERENCE



MANUAL V1.1

APOLLO VIEW 

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INTRODUCTION

WHAT IS IT?

Oscilloscope and signal-comparison analyser.

DeltaScope is a GPU-accelerated oscilloscope that can hold two signals at once: the track it sits on, and a reference brought in over sidechain or linked directly from another DeltaScope instance anywhere in your session. It overlays them, sums them, stacks them, or shows the delta: the exact difference between the two, on screen and, if you want, in your monitors.

Around that core sit the tools a comparison needs to be honest: sample-accurate alignment with auto delay compensation, zero-phase band filters to isolate the range you care about, an FFT spectrum analyser, phase correlation, loudness and peak metering, freeze, zoom and click-drag waveform measurement.

The audio passes through untouched. DeltaScope reports zero latency and never modifies the signal path, with one deliberate exception: the optional Hear the Delta monitor, which replaces the output with the difference signal while you audition a null.

FEATURES

- Everything in Scope, our free oscilloscope: beat-synced and free-run display, clip indicators, rolling mode, resizable to 4096 x 2160
- Sidechain input with five comparison modes: Overlay, Sum, Delta, S+D, Stack
- Instance linking: compare against any other DeltaScope in the session, no cabling
- Hear the Delta: monitor the difference signal itself
- Sample offset plus ADC (auto delay compensation), local and cross-instance
- Zero-phase HP/LP band filters on main and sidechain, linkable
- FFT spectrum analyser, 2048 to 65536 points, peak hold, tilt, delta views
- Phase correlation display, bar or heatmap, amplitude weighted
- Level meters: sample or true peak (ITU-R BS.1770), momentary, short-term and integrated LUFS, RMS, crest factor
- Mid/Side mode, Freeze, Naked mode, MIDI note-locked timebase
- Zoom to 64x, pan, and click-drag measurement with frequency, note and level readouts

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. Install, open your DAW, insert DeltaScope on a track.
2. First open shows the activation screen. Enter your email and licence key and click `Activate`, or click `Continue in demo mode` to try everything first (see Demo mode).
3. Press play. The waveform draws beat-synced at the default 1/4 division.
4. To compare two signals: route a reference into DeltaScope's sidechain input (or pick another DeltaScope instance in the source picker), press `SC`, then press `Delta`. What you now see is the difference between the two signals. If they null, the line is flat.

TIP: The fastest tour of DeltaScope is hovering things: every control describes itself in the title bar while tooltips are enabled.

OVERVIEW



DeltaScope with the KEY numbers used below.

KEY

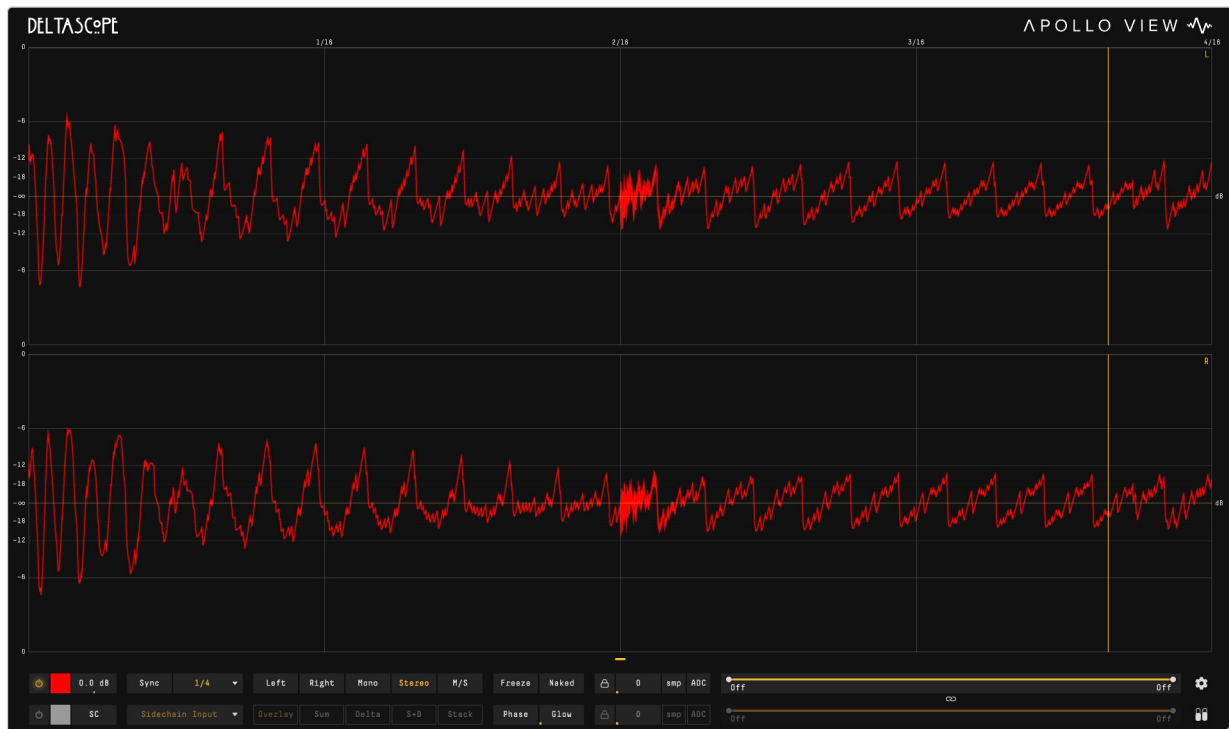
- | | |
|---|--|
| 1 Main row: power, waveform colour, GAIN. | 2 Timebase: Sync / Free / MIDI, division or window. |
| 3 Channel modes: Left, Right, Mono, Stereo, M/S. | 4 Freeze and Naked. |
| 5 Main alignment: lock, sample offset, units, ADC. | 6 Main band filter (HP/LP thumbs) and band link. |
| 7 Sidechain row: SC power, colour, enable, source picker. | 8 Comparison modes: Overlay, Sum, Delta, S+D, Stack. |
| 9 Phase and Glow. | 10 Sidechain alignment and band filter. |
| 11 Settings cog and level-meter toggle. | 12 The display: scope lanes, spectrum pane, divider. |

The top row of controls belongs to the **main** signal, the bottom row to the **sidechain**. The display splits horizontally between scope and spectrum; drag the small divider between them.

RESIZING

Grab any edge or corner and resize. DeltaScope works from 1230 x 300 pixels up to 4096 x 2160, so a full-screen analyser on a 4K display is entirely reasonable (on anything larger than 4K the window stops growing at 4096 x 2160). The size is remembered per instance, and `Save As Default` in Settings makes your preferred size the default for new instances.

THE DISPLAY



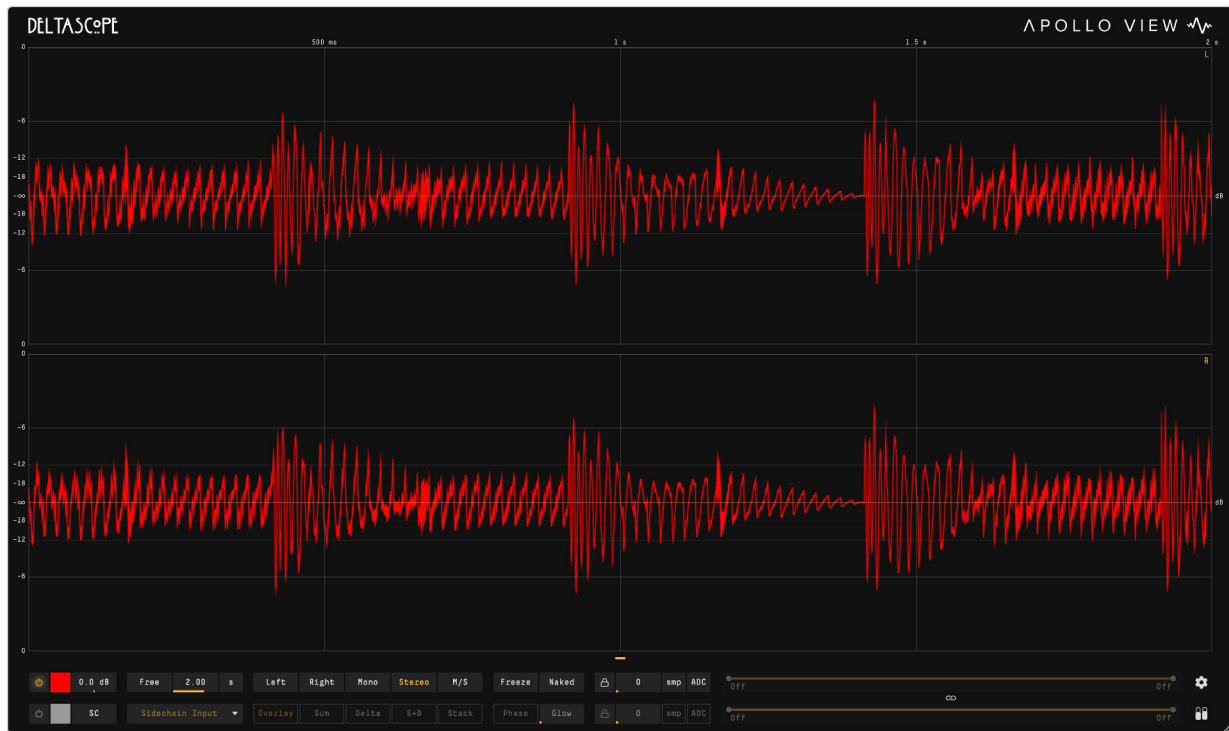
Stereo lanes, beat-synced, spectrum hidden.

DeltaScope draws the incoming waveform against a dB-calibrated grid:

- **Amplitude labels** mark -6, -12, -18 dB and the minus-infinity centre line of each lane.
- **Time labels** mark beats in Sync mode, or the window in Free-run.
- **Write cursor:** the thin vertical line is the current write position. Toggle it with `CURSOR` in Settings.
- **Lanes:** Stereo splits into L and R lanes; M/S into Mid and Side; sidechain modes add or merge lanes as described in Sidechain.

ROLLING MODE

Rolling mode scrolls the waveform continuously instead of redrawing in place: the newest audio enters at the right edge and everything slides left. Enable `Rolling` in Settings. Zoom, trigger, the write cursor, click-drag measurement, the band filters, Glow and the phase correlation display are inactive while rolling; freeze a rolling display and measurement becomes available again on the still waveform.



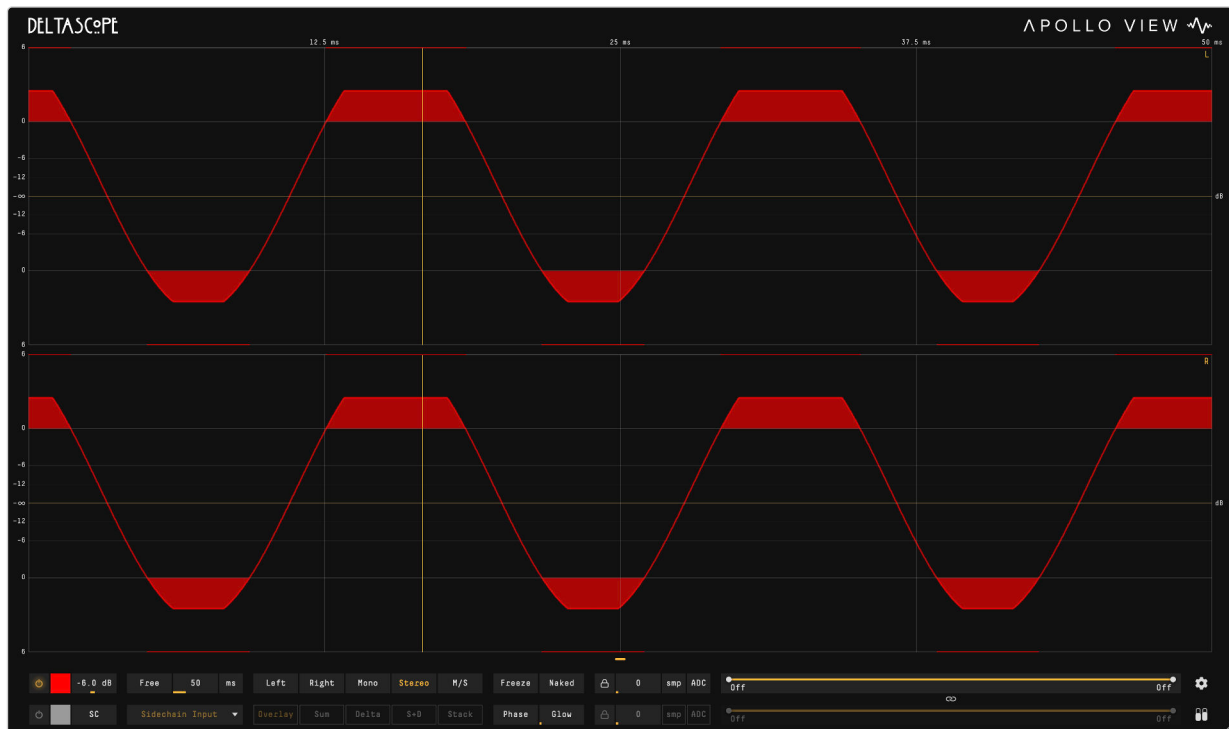
Rolling mode: the newest audio enters at the right edge...



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

CLIP INDICATORS

The display edge lights red where samples rise above 0 dBFS (possible inside a DAW's floating-point signal path, for example after a hot gain stage): top border for positive clipping, bottom for negative. The clipped stretch of waveform is also drawn highlighted so it stays visible in place. Both are toggleable in Settings.



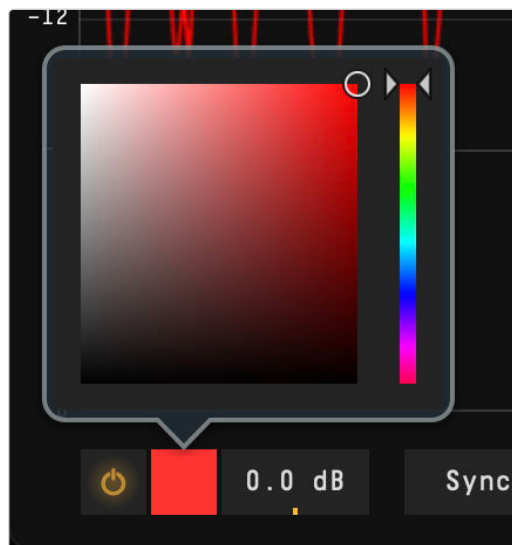
A hot signal driven above 0 dBFS: border flash at the edges plus the highlighted clip overlay. Display gain at -6 dB keeps the waveform clear of the border.

POWER, GAIN AND COLOUR

Power toggles the main waveform drawing; audio always passes through.

GAIN scales the displayed amplitude, -36 to $+36$ dB in 0.1 dB steps, display-side only. Click the slider to type an exact value (Enter commits, Esc cancels); Alt-click resets to 0 dB. Every value slider in DeltaScope answers these same two gestures (the two-thumb band sliders are drag-only).

Colour: click the swatch to recolour the main waveform. The sidechain has its own swatch in the row below.



The colour picker.

TIMEBASE

The mode button cycles `Sync` , `Free` and `MIDI` .

SYNC

Locks the display to host tempo and transport. Pick the window with the beat-division menu:

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

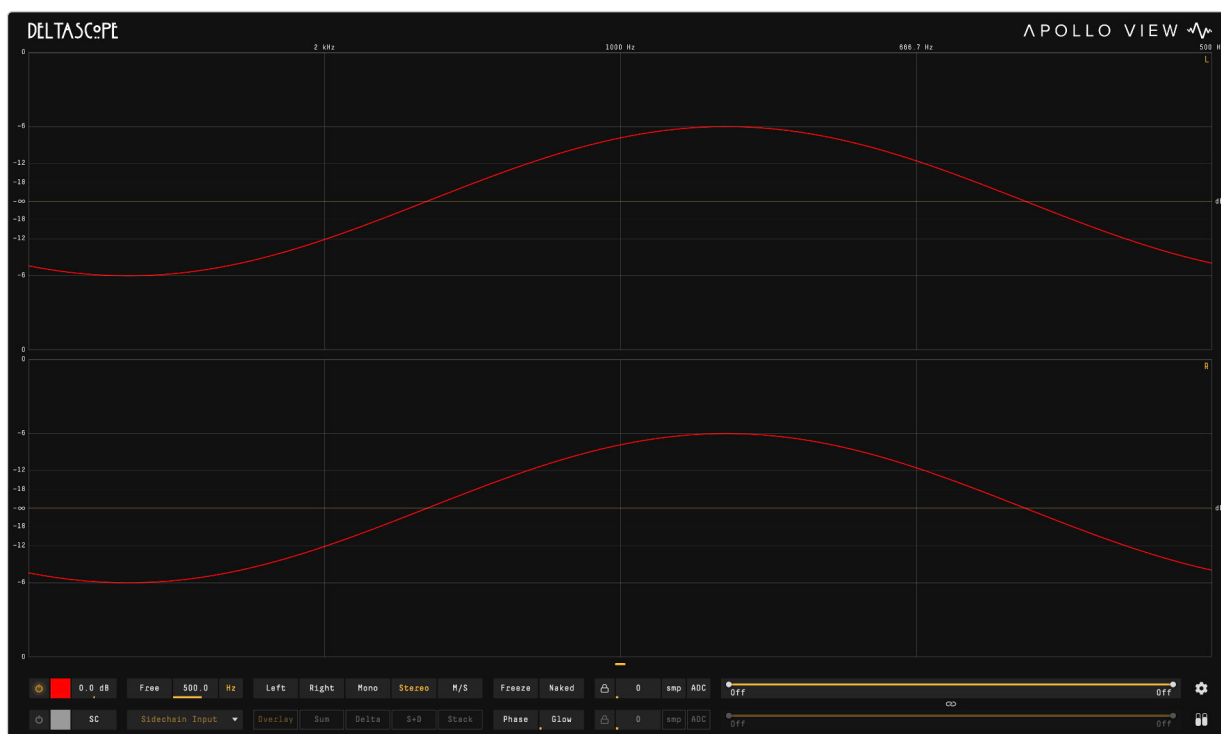


The beat-division menu.

FREE-RUN

Unlocks from tempo. The slider sets the window, 10 ms to 10 s; Alt-click returns to 500 ms. The units button toggles time (ms / s) against frequency (Hz / kHz): at 500 Hz, one cycle of a 500 Hz tone 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.

In Free-run DeltaScope phase-locks the sweep to a zero crossing automatically, so periodic material stands still instead of swimming.



Free-run in Hz units after an Alt-click reset to 500 Hz: one cycle of a 500 Hz sine fills the window, held steady by the trigger.

MIDI

MIDI locks the window to the note you are playing: send MIDI to DeltaScope’s input and the display shows exactly one wavelength of the incoming note’s pitch. The octave slider shifts the window by -4 to +4 octaves for a wider or tighter view.

This is the synth-tuning mode: play a pad, see its actual cycle shape at any pitch, no slider juggling.

Getting notes into DeltaScope needs one routing step, because an instrument track’s synth normally consumes the MIDI itself:

- **Ableton Live:** create a MIDI track carrying the same notes (duplicate the clip, or route the instrument track’s MIDI to it), then set its **MIDI To** to the track hosting DeltaScope and pick DeltaScope as the destination in the second chooser.

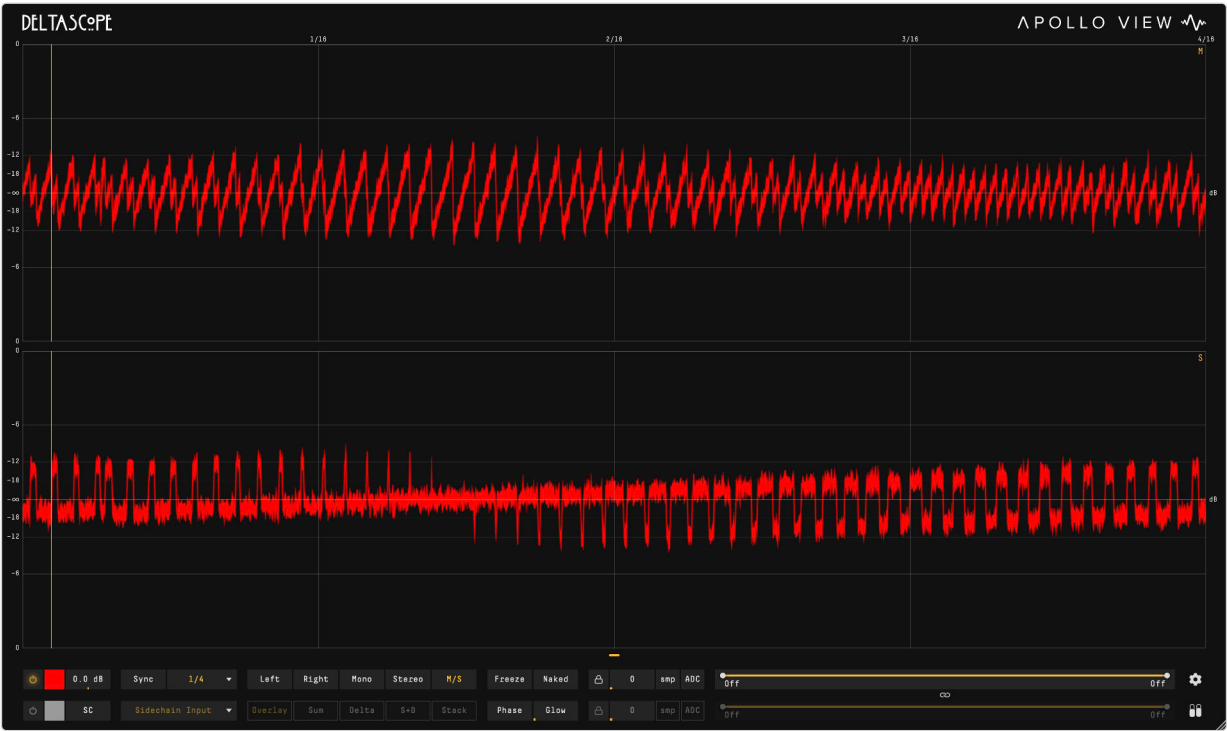
- **REAPER:** MIDI flows down the FX chain, so DeltaScope inserted on the instrument's track after the synth already receives the notes. From another track, add a send and enable MIDI on it.
- Other hosts follow the same idea: anything that can route MIDI to an effect plugin on an audio track will feed DeltaScope's MIDI input.

CHANNEL MODES

Mode	Shows
Left	Left channel only.
Right	Right channel only.
Mono	The mono average, (L + R) / 2.
Stereo	Both channels in stacked lanes. Default.
M/S	Mid (sum) and Side (difference) in stacked lanes.

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

M/S is the stereo-image x-ray: content that exists only in the Side lane disappears in mono playback. Pair it with the phase correlation display when checking mono compatibility.



M/S on a wide signal: strong Side lane content means strong stereo (and mono risk).

FREEZE AND NAKED MODE

FREEZE

Freeze holds the display while audio keeps playing. Frozen frames can be zoomed, panned and measured at leisure. Freeze is a display state, not a transport state: unfreeze and the live waveform resumes.

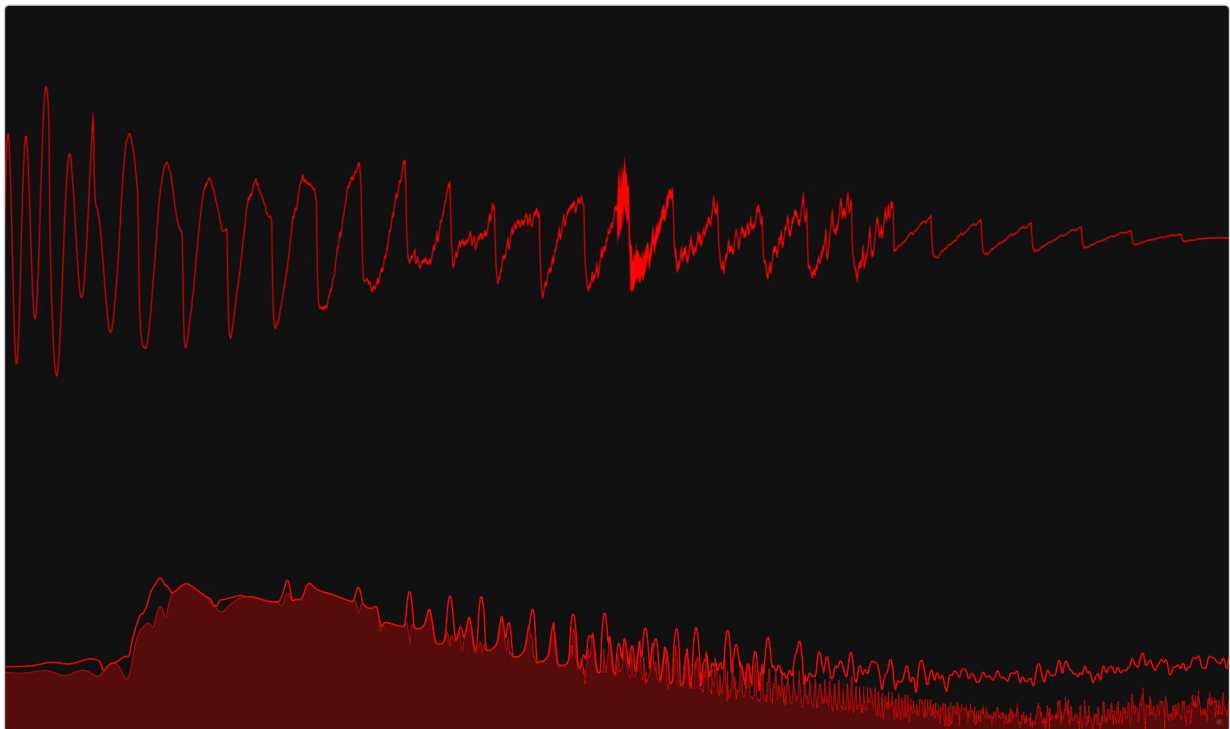
Freeze is per instance and deliberately not saved with the project, so a reopened session never greets you with a stale frame.

NAKED MODE

Naked hides every control and border: the waveform fills the entire window. For a projector, a second screen, or just concentration.

A single dim dot remains in the **bottom right corner**; click it (tooltip: “Click to restore controls.”) to bring the controls back. Naked mode pairs well with Freeze.

Naked mode is also made for video. Every piece of display chrome is removed, leaving the pure waveform, the FFT, or both, edge to edge: drop the window into a screen recording or use it as an overlay in a music video, tutorial or livestream.



Naked mode in Mono: waveform and spectrum edge to edge, ready for a video overlay.

ZOOM, PAN AND MEASUREMENT

ZOOM AND PAN

- **Scroll** over the scope zooms the time axis toward the cursor, up to 64x.
- **Cmd-drag** pans left and right while zoomed.
- **Double-click** resets to the full window.

Zoom is display-side and works on live or frozen waveforms (not in rolling mode). The same gestures work in the spectrum pane.

MEASUREMENT

Click and drag across the waveform to measure a region. The selection snaps its edges to zero crossings, and the readout shows:

- frequency of the selection (and the nearest MIDI note)
- peak, trough and RMS level in dB
- duration in ms and beats (beats when the host reports a tempo), and the number of cycles

Hold **Alt/Option** and hover instead: DeltaScope auto-detects one cycle of the fundamental at the cursor by autocorrelation and measures it, sub-cent accurate on stable pitches.

TIP: Workflow: measure on a still image. Press **Freeze**, drag your selection at leisure, then unfreeze. On a live display the waveform keeps moving under your selection.



Drag-measuring one frozen cycle of a 440 Hz sine: exactly 1.00 cycles, edges snapped to zero crossings.

SIDECHAIN

The bottom control row manages the reference signal. Enable it with `sc`.

CHOOSING THE SOURCE

The source picker offers two kinds of reference:

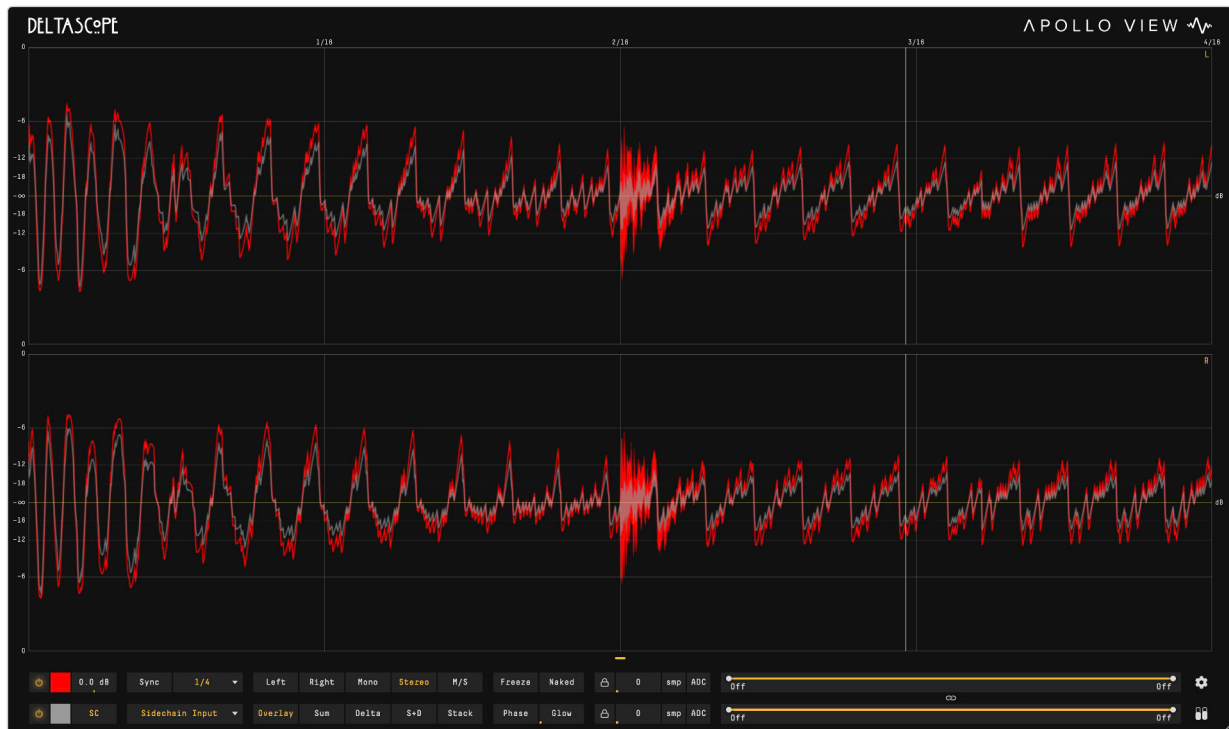
- `Sidechain Input`: the plugin's sidechain bus, routed from your DAW like any sidechain compressor's key input.
- **Another DeltaScope instance**: every DeltaScope in the session appears in this menu by its track name. Pick one and its signal is read directly, sample-aligned, with cross-instance delay handled for you. No routing required.

NOTE: Instance linking is the quickest way to compare two points in a chain: drop a DeltaScope before the processing and one after, then link the second to the first.

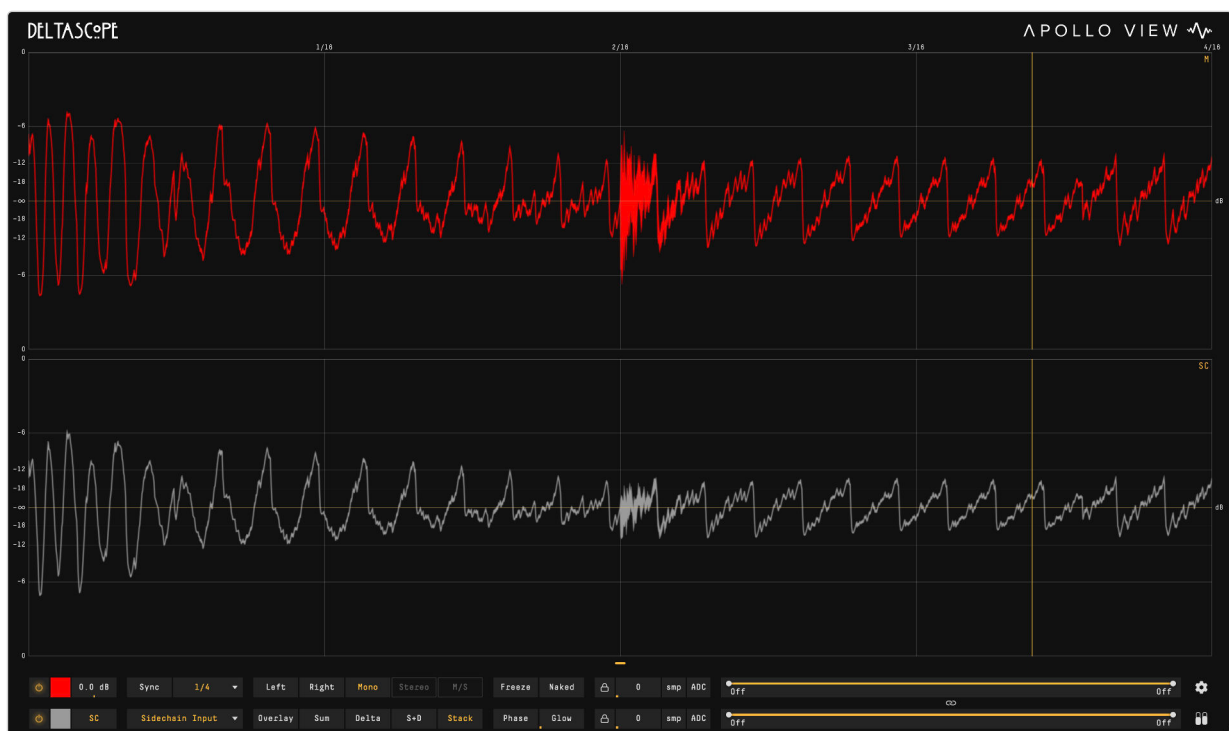
COMPARISON MODES

Mode	Shows
<code>Overlay</code>	Sidechain drawn over the main waveform in its own colour.
<code>Sum</code>	The sum of main and sidechain.
<code>Delta</code>	The difference, main minus sidechain. Identical signals draw a flat line.
<code>S+D</code>	Sum and Delta in stacked lanes.
<code>Stack</code>	Main and sidechain in separate stacked lanes.

NOTE: `S+D` and `Stack` use both display lanes for the comparison, so the channel mode switches to Mono and the `Stereo` and `M/S` buttons are unavailable while either is active.



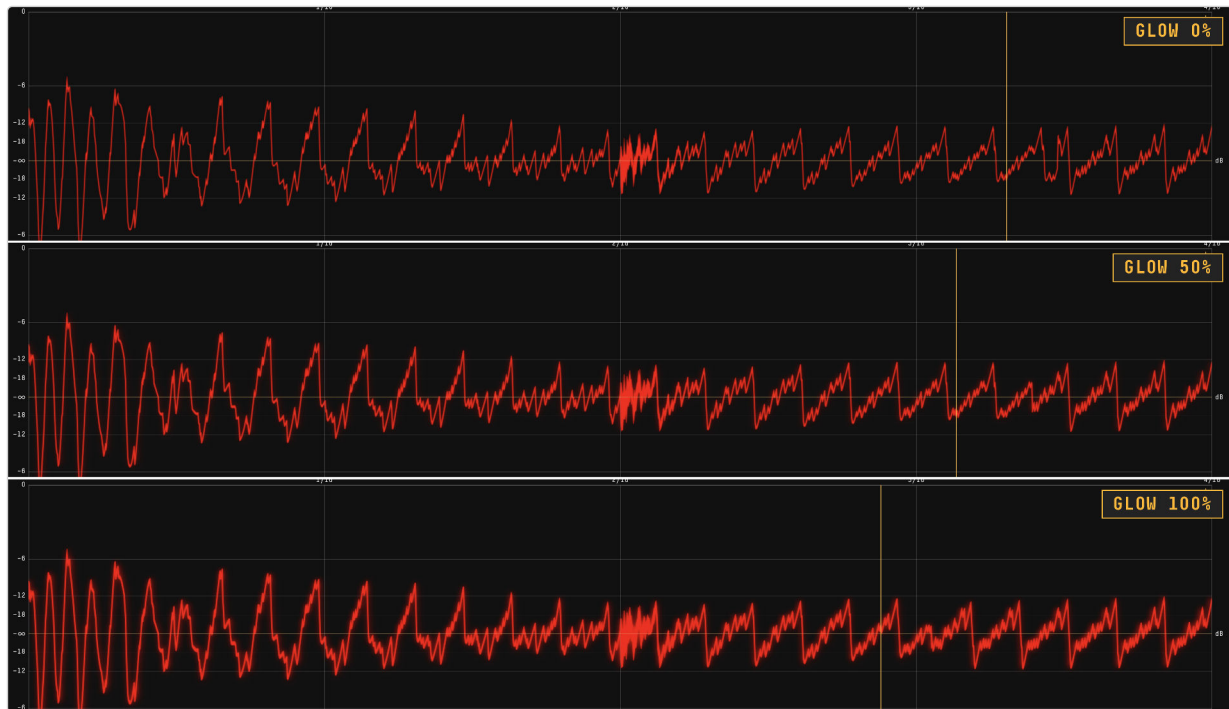
Overlay: processed signal (red) against its dry reference (grey).



Stack: same comparison, separate lanes.

GLOW

The **Glow** slider adds a phosphor-style bloom to the waveforms, strongest where traces overlap. Beyond looks, it makes dense material easier to read: coincident traces glow brighter. Alt-click resets to 0.

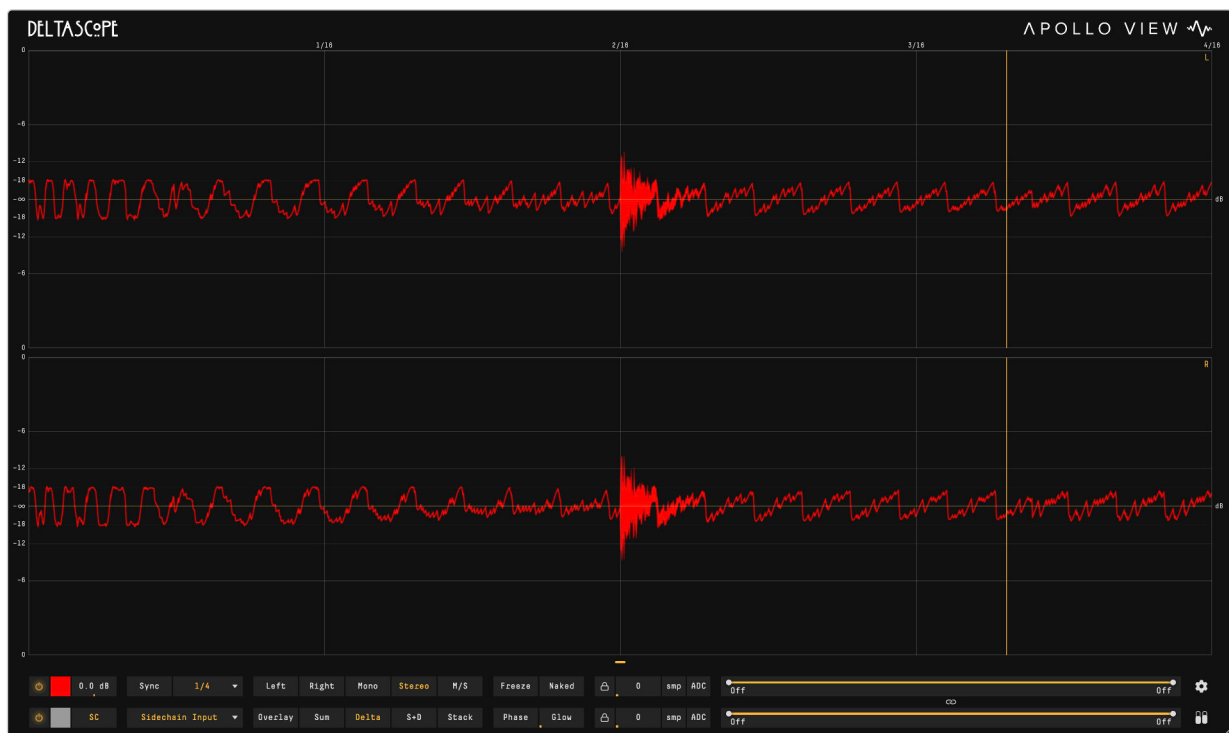


The same beat at Glow 0%, 50% and 100%.

DELTA AND HEAR THE DELTA

Delta subtracts the sidechain from the main signal and draws the residual. This is the null test, live:

- A flat line at minus infinity means the two signals are identical.
- Any residual is exactly what the processing changed: level, tone, timing or added distortion.



Delta of a saturated signal against its dry source: the residual is the added harmonics and level shift.

Hear the Delta (Settings, on by default) routes the delta through DeltaScope's output while the Delta comparison mode is selected, so you can listen to what a processor is doing rather than guessing from the waveform. The delta path is delay-compensated internally; switch the view away from Delta and the normal signal returns instantly.

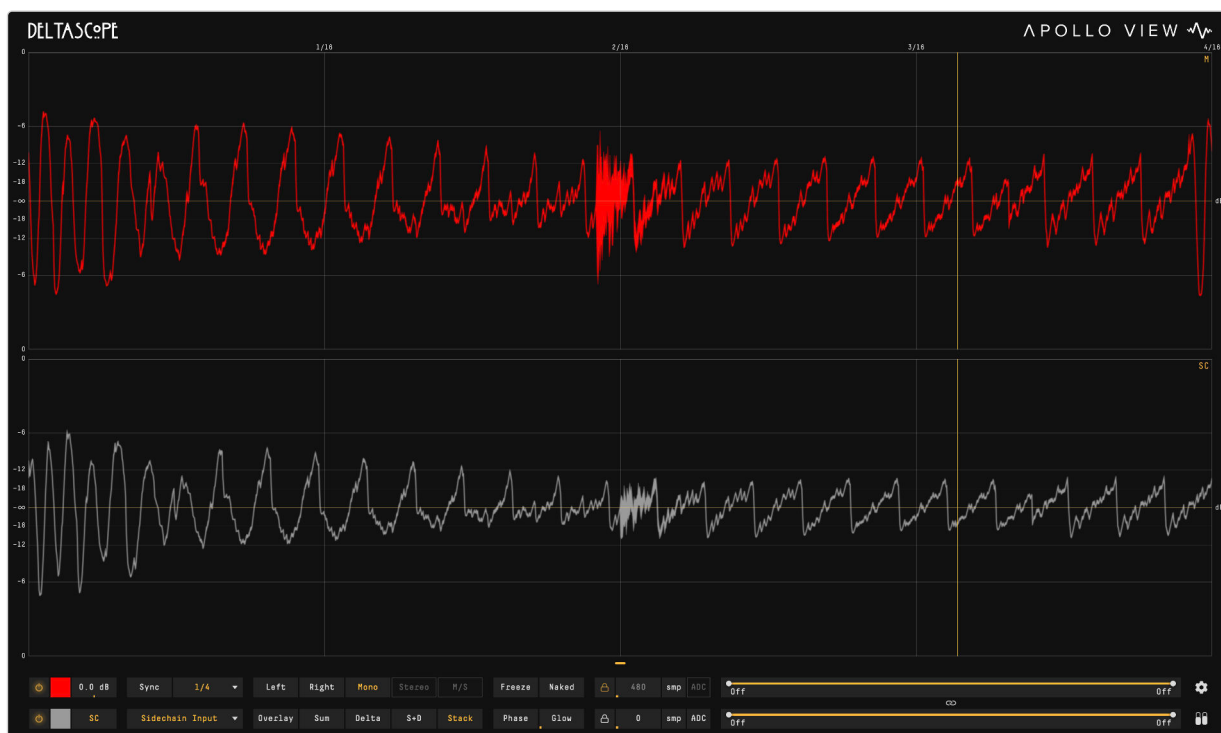
CAUTION: Hear the Delta replaces the plugin output while active. If DeltaScope is on your master bus, what you hear (and could record) is the difference signal, not the mix.

ALIGNMENT: OFFSET AND ADC

A null test is only as good as its alignment: one sample of skew between main and reference turns a perfect null into a comb filter. DeltaScope gives each signal an offset control:

- **Sample offset slider:** delays the waveform display by up to one second, set in samples or milliseconds (units button). Click the slider to type an exact value; Alt-click resets to 0.
- **Lock** (padlock): freezes the offset against accidental drags; it engages automatically ten seconds after you stop adjusting, and immediately when you type a value into the readout.
- **ADC** (auto delay compensation): arm it, press play, and DeltaScope measures the latency between the two signals on the next playback and sets the offset for you. Works locally and across linked instances.

ADC also earns its keep with no sidechain at all. Plugins sitting **before** DeltaScope introduce latency, so in Sync mode the whole waveform lands shifted to the right of the beat grid. Arm **ADC**, play, and the display realigns: on drums, the downbeat kick snaps back to the left edge of the scope where it belongs.



Stacked comparison with a 480-sample offset dialled in and locked.

TIP: Most DAWs report each plugin's latency (REAPER shows it per plugin in the FX chain window; check your host's plugin-delay readout). Add up the chain you are comparing across and type the total into the offset readout: that is exact, sample-accurate compensation. ADC is great for finding an unknown offset, but its detection can miss by a sample or two, so for delta null tests of a chain on the same track, manual entry from the DAW-reported figures is strongly advised.

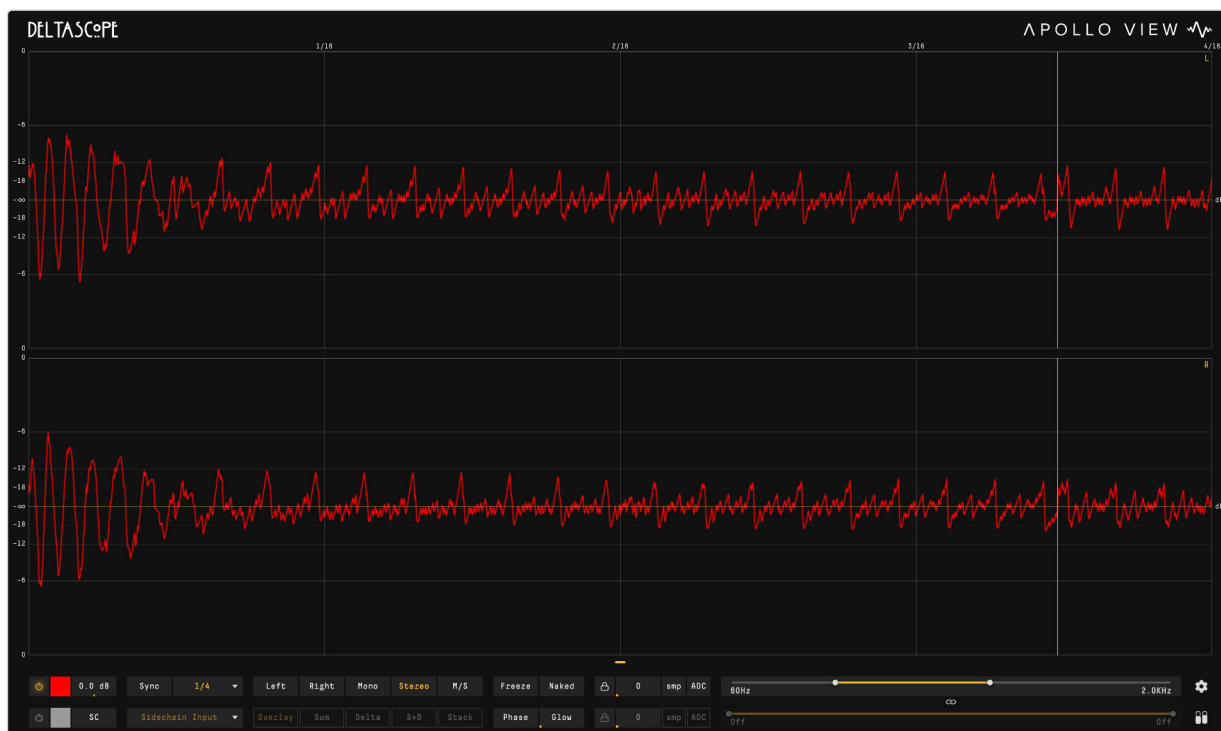
BAND FILTERS

Each signal row ends in a two-thumb slider: a high-pass and a low-pass, 20 Hz to 20 kHz (the high-pass thumb stops at 15 kHz, the low-pass at 30 Hz), zero-phase so the filtering never smears what you see. Park both thumbs at the extremes and the band is **Off**.

CAUTION: The band filters are purely visual. They filter what DeltaScope analyses and draws, never the audio you hear: the signal passing through the plugin stays untouched no matter where the thumbs sit.

Use them to isolate the range you are comparing: solo the low end to check a bass null, or cut the kick's fundamental to see what a saturator does to the mids.

The link button between the rows ties both filters together, so main and sidechain always compare the same band. In Settings you can choose whether the band filter also feeds the spectrum (**Filters » FFT**) and the phase display (**Filters » Phase**): the out-of-band regions dim so you can see exactly what the analysis is listening to.



Main band narrowed to 60 Hz - 2 kHz.



Band at 100 Hz - 2 kHz with Filters » FFT active: the spectrum fill dims outside the band.



Band at 100 Hz - 2 kHz feeding the phase display: correlation is analysed inside the band only.

SPECTRUM ANALYSER

Drag the divider under the scope upward and the FFT spectrum opens beneath the waveform. Drag it fully closed to hide it. Scroll to zoom and double-click to reset, just like the scope; panning is Cmd-drag (plain mouse movement drives the crosshair instead).



Spectrum pane opened wide (Mono), peak-hold line above the live curve.

RANGES AND THE NYQUIST LINE

What the pane shows is set in Settings > FFT: the **frequency range** (**Min** , adjustable 1 to 100 Hz, default 20 Hz; **Max** , adjustable 6 kHz to 96 kHz, default 20 kHz) and the **level range** (**Floor** , -120 to -30 dB, default -90; **Ceiling** , -24 to +30 dB, default +6). Widen the level range to watch noise floors, tighten it to compare mix balances.

If you raise **Max** above half the session sample rate, a gold vertical line appears at **Nyquist**: the frequency where the digital spectrum ends. Nothing exists to the right of that line. In a 48 kHz session it sits at 24 kHz; at 96 kHz it sits at 48 kHz.



Range extended to 40 kHz in a 48 kHz session: the gold Nyquist line at 24 kHz marks the edge of the spectrum.

CROSSHAIR MEASUREMENT

Move the mouse over the spectrum and the crosshair follows with a readout: frequency, the nearest note with cents, and the level of the **live** curve, plus **max**, **min** and **rms** at that frequency. Hold **Option** to snap the crosshair to the nearest peak. The **Crosshair** toggle in Settings > FFT keeps it always on, or shows it only while Option is held.

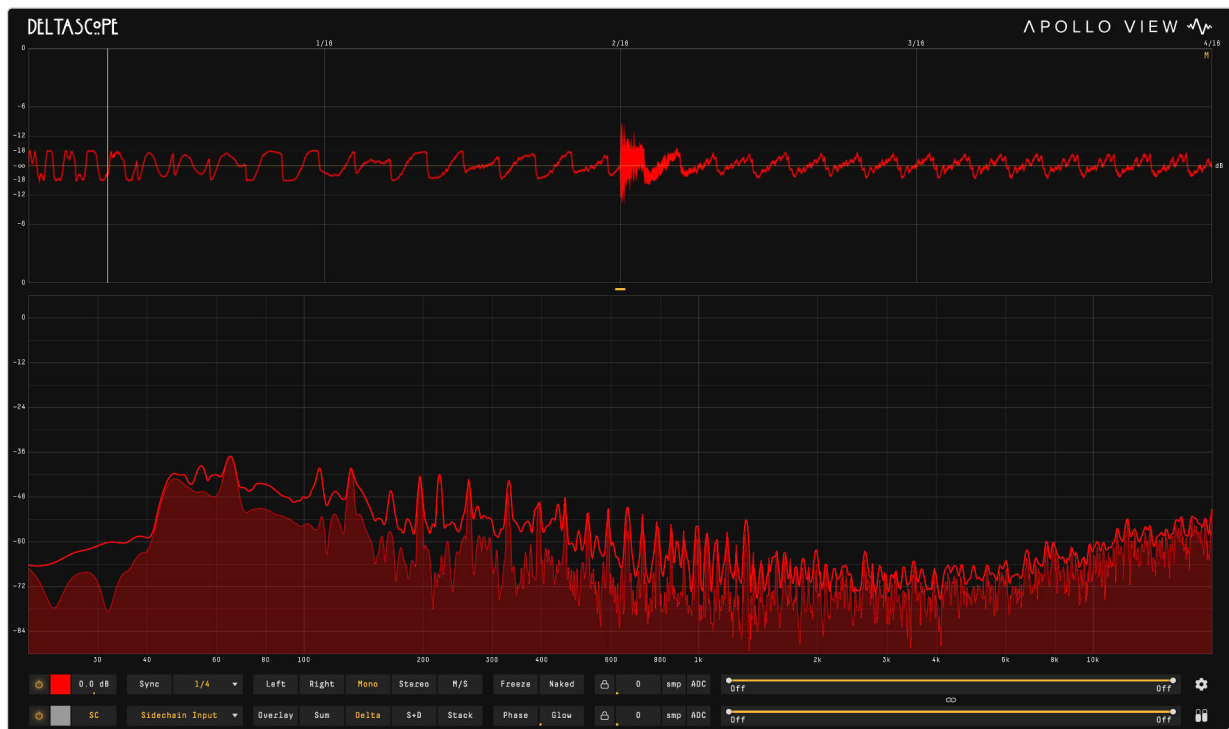


Crosshair snapped to the bass fundamental with Option held: 56.3 Hz, A1, live level plus max / min / rms.

DELTA VIEWS

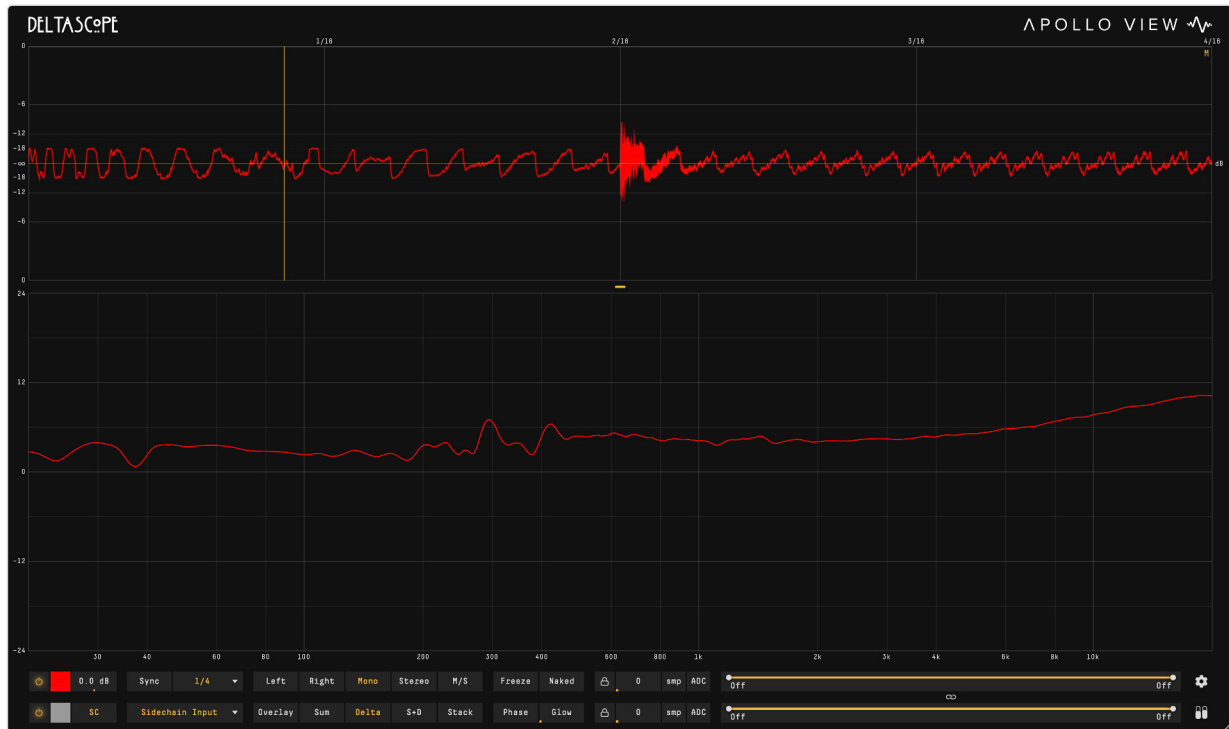
In the Delta comparison mode the spectrum can show two different things. Choose with **View** in Settings > FFT (the control is available only while Delta is selected):

- **Difference:** the FFT of the delta residual, the same signal the scope draws.



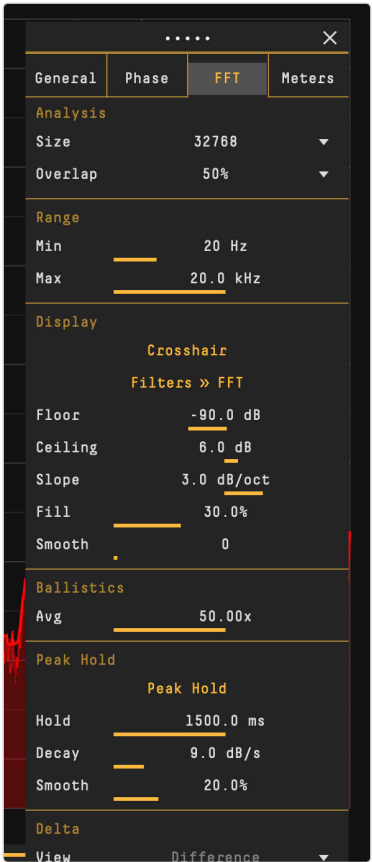
Difference view: the spectrum of everything the processing changed.

- **Magnitude:** main minus sidechain, per frequency, in dB. This turns the spectrum into a **frequency-response trace**: with no processing between the two signals it reads as a flat line at 0 dB, and anything an EQ, a saturator or a whole chain does to the tone draws itself as a curve. Feed DeltaScope pre and post a Pultec-style EQ and you are looking at the EQ's actual response on real programme material.



Magnitude view of wet against dry: the processing's frequency response, drawn live. Flat would mean untouched.

FFT SETTINGS (SETTINGS > FFT)



Settings, FFT tab.

Section	Control	What it does
Analysis	Size	FFT length 2048-65536. Bigger = finer frequency detail, slower response. Default 8192.
	Overlap	50 / 75 / 87.5%. Higher = smoother motion, more CPU.
Range	Min / Max	Displayed frequency range. Min 1-100 Hz (default 20), Max 6-96 kHz (default 20 kHz). Raise Max above Nyquist and the gold line appears.
Display	Crosshair	Always-on crosshair readout (off = hold Option to show it).
	Filters » FFT	Band filters also feed the spectrum.
	Floor / Ceiling	Level range in dB. Floor -120 to -30 (default -90), Ceiling -24 to +30 (default +6).
	Slope	dB/octave tilt compensation. +3 flattens pink noise (the default), 0 is flat.
	Fill	Opacity of the shaded area under the curve.
	Smooth	Fractional-octave smoothing of the live curve.
Ballistics	Avg	Temporal averaging, compensated per FFT size. Higher = smoother, slower.

Section	Control	What it does
Peak Hold	Peak Hold	Enable the peak-hold line.
	Hold / Decay	Hold time before decay (top step is infinite) and decay rate in dB/s.
	Smooth	Extra smoothing of the peak-hold line so it reads as an average.
Delta	View	Difference or Magnitude (available in the Delta comparison mode).

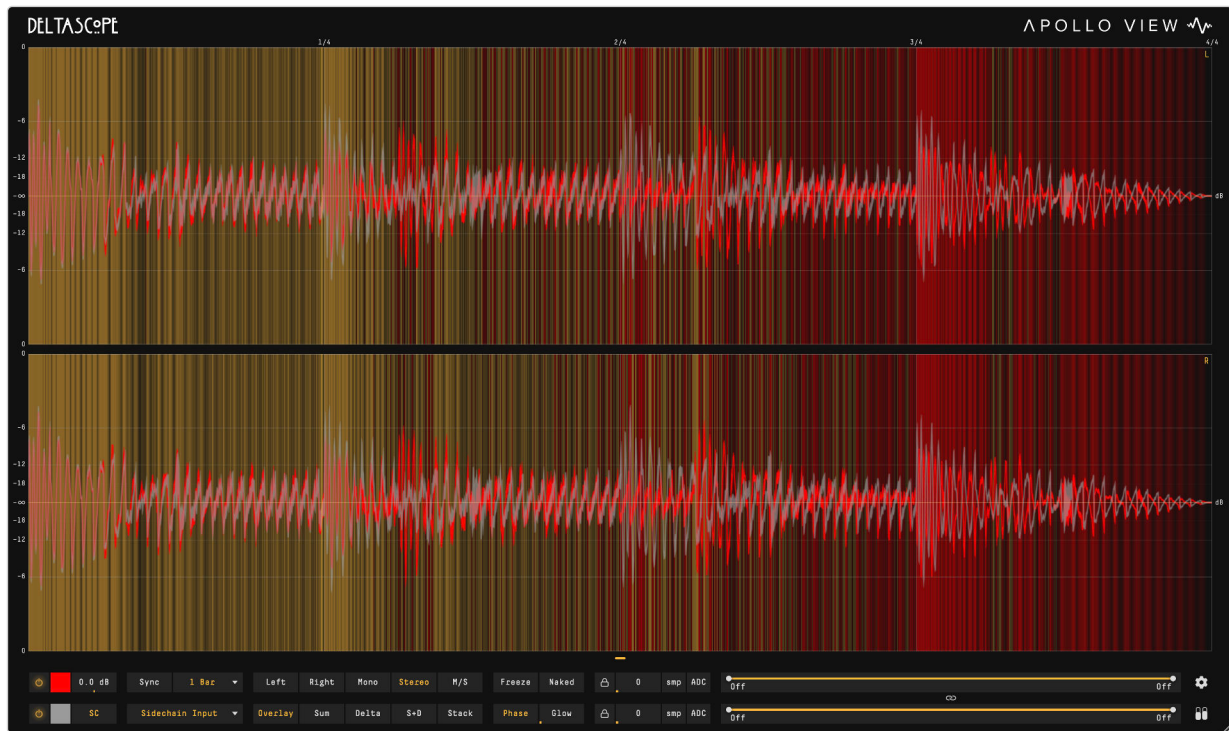
PHASE CORRELATION

Phase overlays a correlation display on the scope: per-time-slice correlation between the **main signal and the sidechain reference**, drawn as bars or as a heat fill behind the waveforms. It lives in the sidechain row for a reason: feed a reference (host sidechain or instance link) and enable **SC**, or there is nothing to correlate against.

+1 means the two move together (gold, mono-safe), **0** uncorrelated, **-1** opposite polarity (red, cancels when summed).



Correlation bars, main against reference: gold reaches toward +1 while the two agree, sinking into red toward -1 as the phase relationship drifts apart across the bar.



The same drift in the Heatmap style: gold heat where the signals agree, cooling into red as they fall out of phase.

PHASE SETTINGS (SETTINGS > PHASE)

Section	Control	What it does
Scaling	Blend	Display metric blend: 0% pure phase correlation, 100% interference. Default 50%.
	Weight	Amplitude weight amount, 0-200%. 0% none, 100% normal, 200% stronger.
	Bright	Brightness scale of the bars or heat fill.
	Size	Height scale of the bars or heat fill.
Options	Hi-Res Phase	64 bars per division instead of 32.
	Heatmap	Heat-fill style instead of bars.
	Amp Weighted	Weight the display by amplitude so quiet passages do not shout false alarms.
	Log Scale	Logarithmic scaling of the display.
	Filters » Phase	Band filters also feed the correlation analysis.

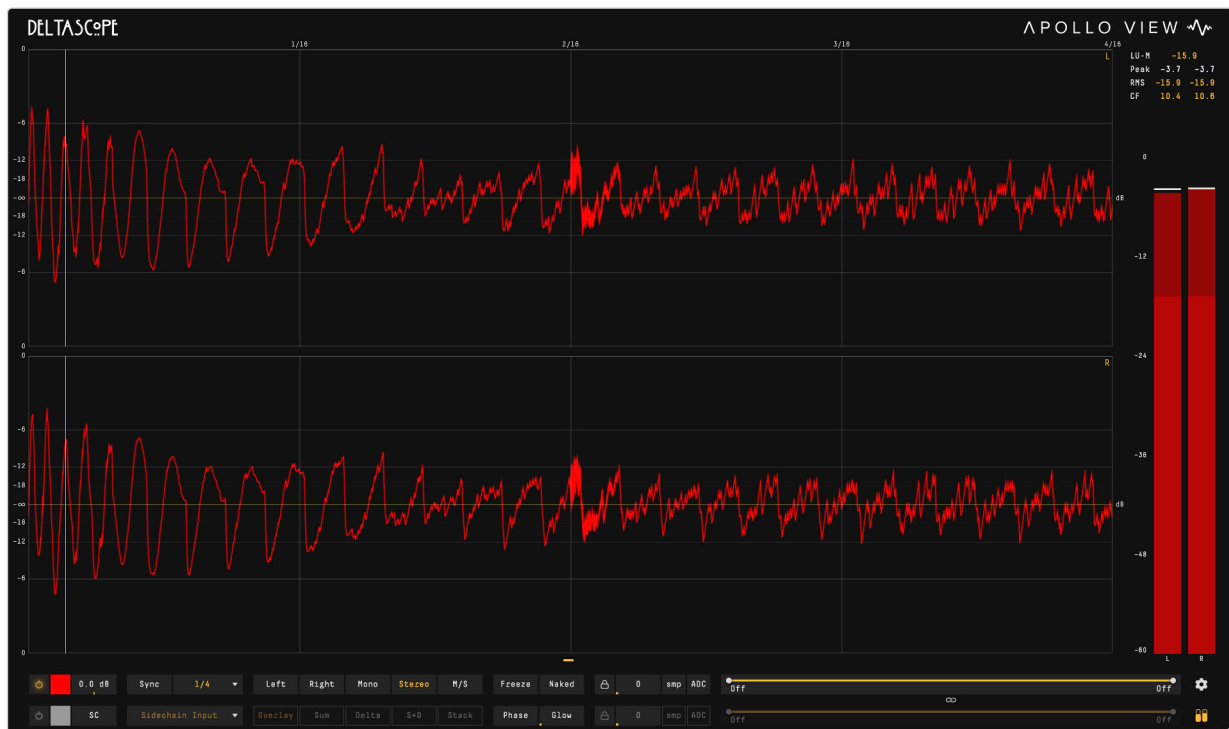


Settings, Phase tab.

LEVEL METERS

The meters button (bottom right) docks a meter strip beside the display:

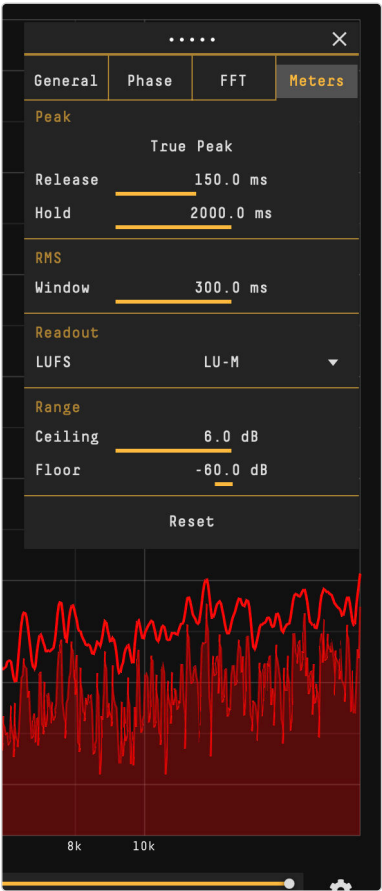
- **Peak bar** per channel: sample peak, or true peak with 4x oversampled interpolation (ITU-R BS.1770), with configurable ceiling, floor, release and peak hold.
- **Secondary bar**: per-channel RMS, with its window set in Settings > Meters.
- **Readout**: LU-M, LU-S or integrated LU-I loudness, K-weighted per BS.1770, alongside per-channel peak, RMS and crest-factor (CF) figures; CF holds its lowest recent value, the most compressed moment, before releasing. Double-click the loudness readout to restart an integrated (LU-I) measurement. The RMS window doubles as the crest-factor window.



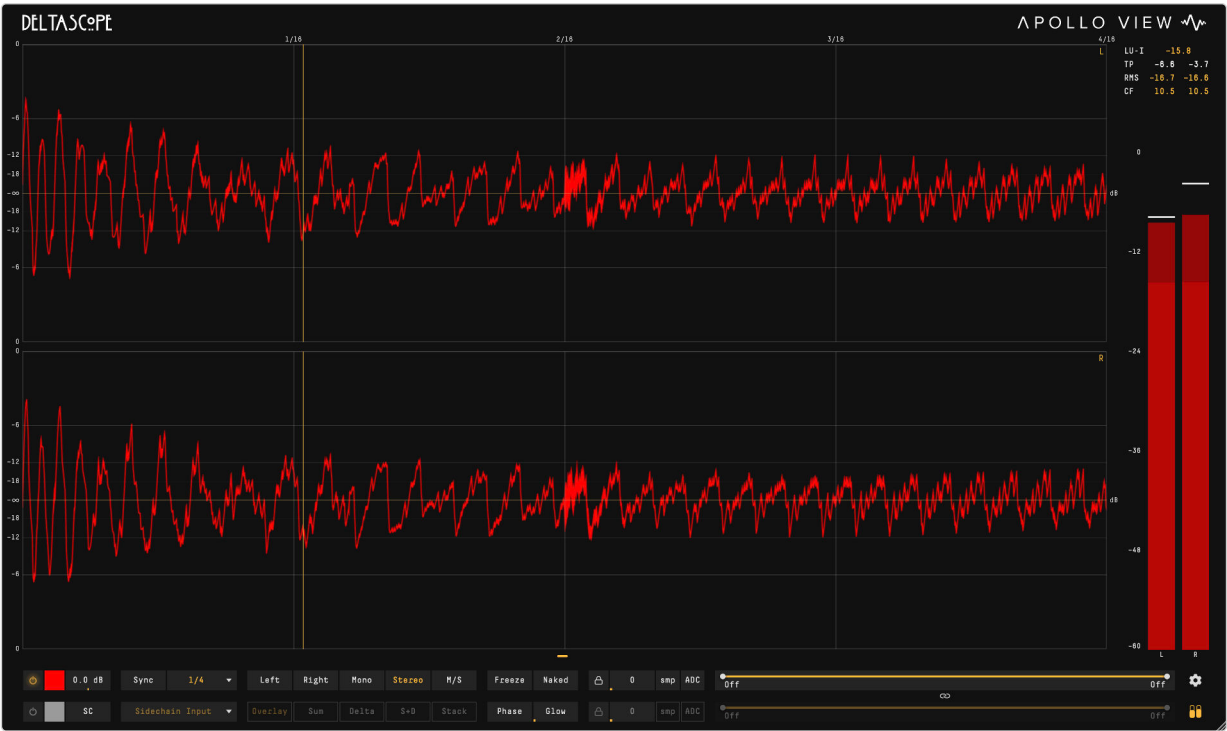
Meter strip docked: peak plus LUFS-M.

METER SETTINGS (SETTINGS > METERS)

Section	Control	What it does
Peak	True Peak	4x oversampled inter-sample peak detection (ITU-R BS.1770) instead of sample peak.
	Release	Peak bar release time. Default 150 ms.
	Hold	How long the peak-hold indicator stays before dropping. Default 2000 ms.
RMS	Window	RMS integration window, also used for crest factor. Default 300 ms.
Readout	LUFS	Loudness readout mode: LU-M (momentary), LU-S (short-term) or LU-I (integrated). Double-click the readout to restart LU-I.
Range	Ceiling / Floor	Meter scale in dB. Default +6 / -60.



Settings, Meters tab.

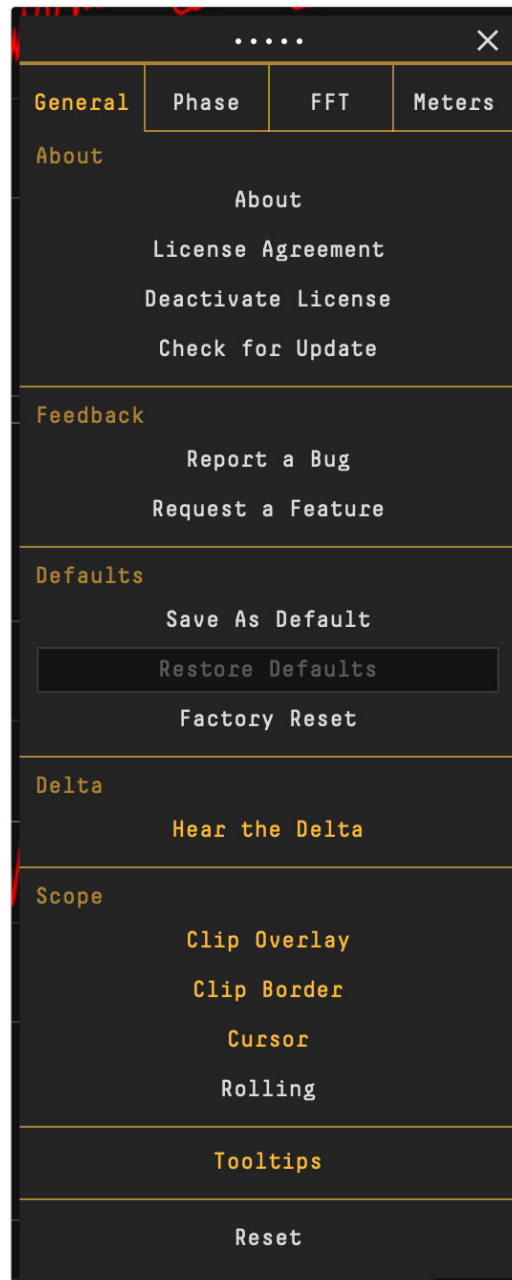


Deliver to spec: **True Peak** on (TP), LU-I integrated readout, RMS secondary bar.

SETTINGS

The cog opens a floating, draggable Settings panel with four tabs: **General**, **Phase**, **FFT** and **Meters**. The last three are described in their feature chapters. General holds, top to bottom:

- **About:** **About**, **License Agreement**, **Deactivate License** and **Check for Update** (the licence agreement and update check open our website).
- **Feedback:** **Report a Bug** and **Request a Feature** open pre-filled support emails (the bug report automatically includes your plugin version, OS, DAW, sample rate and buffer size).
- **Defaults:** **Save As Default** stores the current settings as the default for new instances; session state (Freeze, the sample offsets and the instance link) deliberately stays out of it. **Restore Defaults** reloads the saved default (dimmed until one exists); **Factory Reset** deletes it.
- **Delta:** **Hear the Delta**, the delta monitor switch.
- **Scope:** **Clip Overlay**, **Clip Border**, **Cursor**, **Rolling**.
- **Tooltips** and a **Reset** for the panel's own settings.



Settings, General tab.

FILES

DeltaScope keeps two files outside your DAW projects, both under `~/Library/Application Support/ApolloView/` on macOS: the licence (`DeltaScope.license`) and your saved defaults (`DeltaScope/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.

USE CASES

FIX KICK AND BASS PHASE

The headline workflow. Kick and bass share the low end, and when their phase disagrees the sum loses punch that no EQ brings back.

1. Put DeltaScope on the bass bus and bring the kick in as the reference (sidechain or instance link).
2. Use the band filters to isolate the overlap region (roughly 40 to 150 Hz) so the analysis listens only where they fight.
3. Enable **Phase**. Correlation dipping toward -1 on the downbeats is the two fighting; **Overlay** mode shows the same story in the waveforms.
4. Fix it with a phase-alignment tool such as our Align plugin (broadband phase rotation) on the bass, nudge until the correlation sits positive, and hear the low end lock in.

SEE WHAT YOUR PROCESSING ACTUALLY DOES

Put DeltaScope pre and post your processing: sidechain the clean signal, **Delta** mode. The scope draws exactly what changed; **View** set to Magnitude in Settings > FFT turns the spectrum into the processor's frequency response on your real material. Great for verifying Pultec-style EQ moves, seeing what a compressor reshapes, or auditing a whole chain. ADC or DAW-reported latency figures keep the comparison sample-honest.

LISTEN TO THE DIFFERENCE

Same setup, ears instead of eyes: with Hear the Delta on, DeltaScope's output **is** the difference signal. What you hear is everything the processing added or removed, isolated. The fastest way to catch a limiter chewing transients or a "transparent" plugin that is not.

CHECK WHAT SURVIVES MONO

M/S mode: anything living only in the Side lane disappears when the mix is summed. For the correlation view of the same question, feed the elements you are worried about into main and sidechain (kick against bass, double against lead) and watch where **Phase** turns red. The band filters isolate which frequency range is at fault.

DELIVER TO SPEC

Meters on, **True Peak** enabled, LU-I readout: integrated loudness and true-peak margin that match streaming and broadcast delivery specs, without leaving the scope.

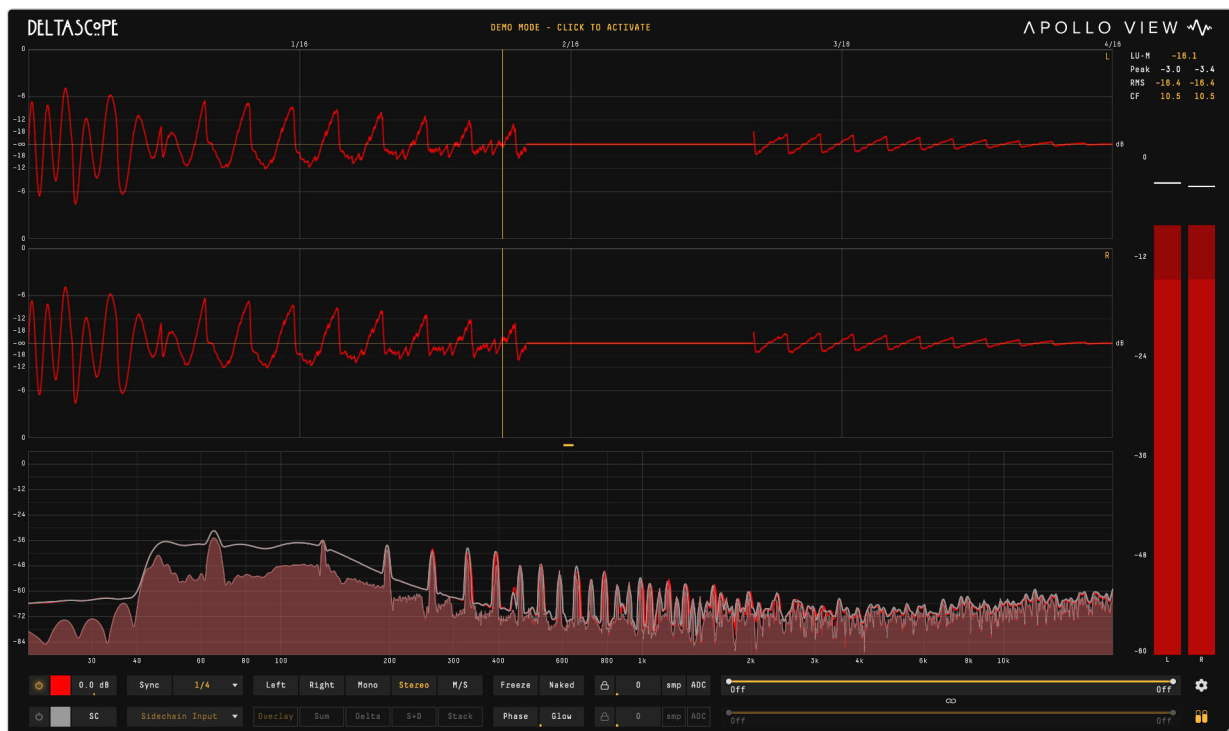
MAKE VIDEO CONTENT

Naked mode strips every control and label, leaving pure waveform, FFT or both, edge to edge: clean output for music videos, tutorials and livestreams.

DEMO MODE

Unlicensed, DeltaScope runs as a full demo: every feature works, but the display blanks and the audio mutes for 3 seconds out of every 40, with a gold **DEMO MODE - CLICK TO ACTIVATE** banner in the title bar. Clicking the banner reopens the activation screen.

The mute is click-free and wall-clock synced across instances, so a session full of demo DeltaScopes spoils politely and predictably.

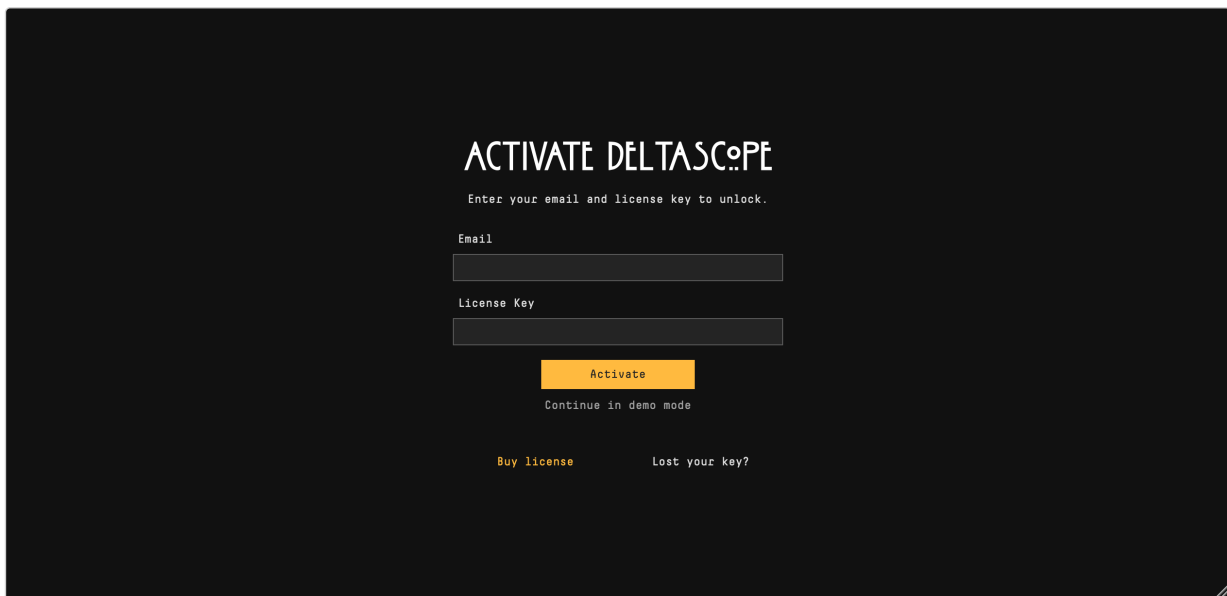


Demo mode: fully functional, gold banner in the title bar. The flat gap in the waveform is the periodic demo mute passing through.

LICENSING

1. Buy a licence at shop.apolloviewmodular.com/plugins/deltascope (the activation screen's `Buy license` link goes to the same place, and `Lost your key?` recovers a lost key).
2. Open DeltaScope, enter your email and key, click `Activate`.

Activation is per machine and works offline after the first unlock. `Deactivate License` in Settings releases the machine so you can move to another.



The activation screen, with demo entry below.

LICENCE AND WARRANTY

DeltaScope 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>