

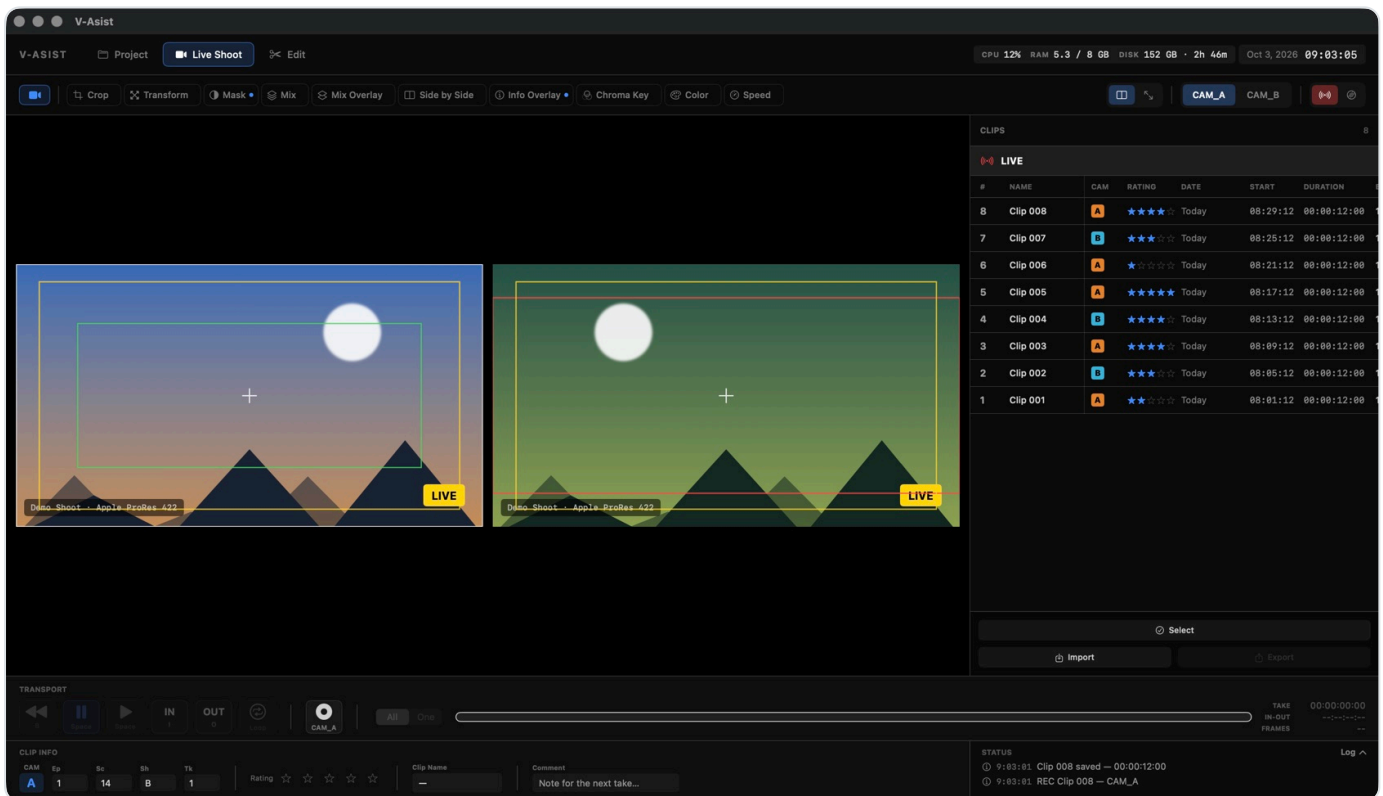
V-Asist



Video assist for the film set, on a Mac. Recording that follows the camera's own REC, two live SDI inputs, monitor tools, synced playback of two cameras, an edit room, a processed SDI feed and a live stream to iPhone and iPad.

macOS 26.5+ · Apple silicon · AJA · Blackmagic · system cameras

Public beta. V-Asist is still being shaped on set, and feedback from operators goes straight into the next build. Something broken, unclear or missing? Write to feedback@vasist.app with what happened, your setup (Mac, capture card, camera) and the log: click the STATUS panel, then **Copy All**.



Live Shoot: two inputs with frame lines and Info Overlay, the clip list on the right, transport, slate and the status panel below. (Screenshots in this guide use V-Asist's built-in test pictures and generated demo takes.)

At a glance

- **Auto-REC** from the camera's own SDI REC flag, frame-accurate.
- **Two inputs** live, Dual or Full, Live or Disk per view.

- **Ten monitor tools** per view, sent out the SDI exactly as seen.
- **Mix**: a storyboard frame, logo, GIF or video over the picture.
- **Multiple IN / OUT** pairs per take; play All or One; jump with [].
- **Status panel** with a full log of every warning and take.
- **Stream** both views to iPhone and iPad.
- **Transform** the picture: scale, stretch, rotate, move.
- **Speed, Clip Sync, Play Sync**: two cameras' takes played together.
- **Rate by keyboard**:  then a number.
- **Projects**: rename, duplicate, export, import, delete to Trash.
- **Export**: shot log (CSV, PDF), EDL and Final Cut XML.

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Getting started

1. **Install the driver** for your capture hardware: AJA desktop software (NTV2) or Blackmagic Desktop Video.
2. **Open V-Asist**, go to **Project ▶ Camera**, pick AJA, Blackmagic or System, choose one or two inputs and a device for each. Name them (CAM_A, CAM_B...).
3. **Set where takes go** in **Project ▶ Projects ▶ Recording Destination**, and the codec in **Output Format**.
4. **Switch on Auto-REC** in **Project ▶ Automation** so takes start and stop with the camera.
5. **Go to Live Shoot** () and roll.

V-Asist reopens exactly where you left it: the project, the views, every tool setting.

The screen, button by button

V-Asist has three rooms: **Project** (settings and projects), **Live Shoot** (the working screen) and **Edit** (sequences for review). The two header rows are always on top.

Header, top row

CONTROL	WHAT IT DOES
Project · Live Shoot · Edit	The rooms. Also    .
CPU · RAM · DISK	Whole-Mac CPU, memory used / total, free space on the recording drive and roughly how much recording time that is at the current codec and size. Orange, then red, when it's getting tight.
Stream viewers	While the network stream is on: how many iPhones / iPads are watching.
Date and clock	Time of day.

Header, second row

CONTROL	WHAT IT DOES
VIDEO OUT	What the SDI output carries: Processed (what you see) or Live Passthrough (hardware, near-zero delay). See SDI output.
Crop ... Speed	The ten monitor tools. Click one (or  ... ) to open its controls in a third row; click again or press  to close. A dot means the tool is on for the active view.
Dual · Full	Both views side by side, or only the active one, full size ().
CAM_A · CAM_B	Which view is active ( ). The transport, slate and tool controls always follow the active view.
Live · Disk	The active view's source: the live camera, or a recorded take ( ).

On narrower windows the buttons pack tighter, then collapse to icons; every button keeps its name and shortcut as a tooltip.

The views

- A white border marks the active view; it turns **red while recording**.
- The badge bottom right shows the state: **LIVE**, **REC**, **PLAY** or **PAUSED**.
- Info Overlay (bottom left) shows project, codec, timecode and durations when switched on.
-  hides everything except the picture;  again brings it back.

Footer

Left: **Transport** on top, **Clip Info** (the slate) below. Right, under the clip list: the **Status** panel. Every footer control is described in chapter 6, 10 and 11.

Slate (Clip Info)

FIELD	WHAT IT DOES
CAM	Camera letter, filled in from the active input.
Ep • Sc • Sh • Tk	Episode, scene, shot, take. Stamped onto each take when recording stops; the take number counts up by itself.
Rating	One to five stars. On Disk it rates the loaded take (the same stars as in the clip list); on Live, the take being recorded or the next one. Click the same star again to clear.
Clip Name	The take loaded in the active view.
Comment	On Disk: a note on the loaded take. On Live: a note for the take being recorded, or the next one.

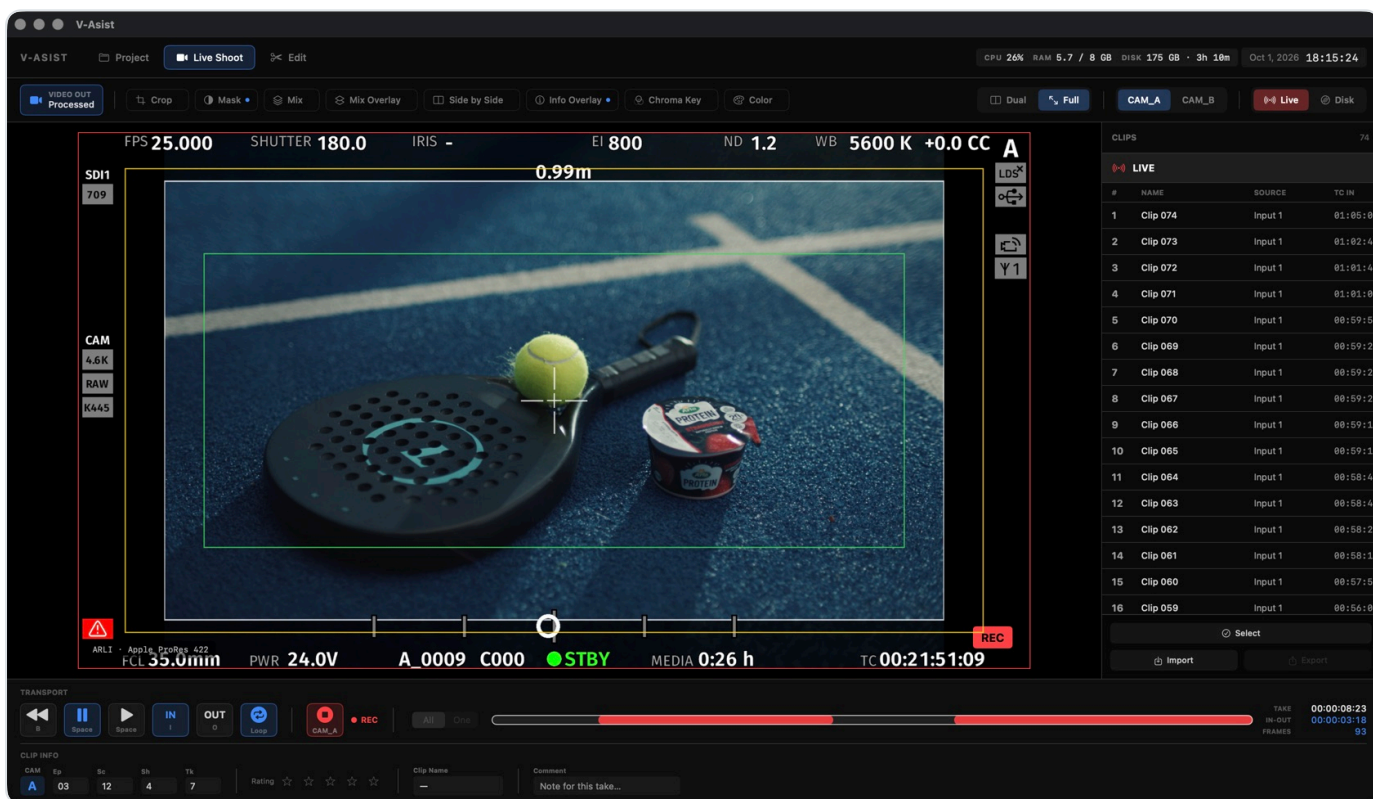
Auto-REC

The camera operator hits REC and V-Assist is already recording. Two independent switches in **Project**

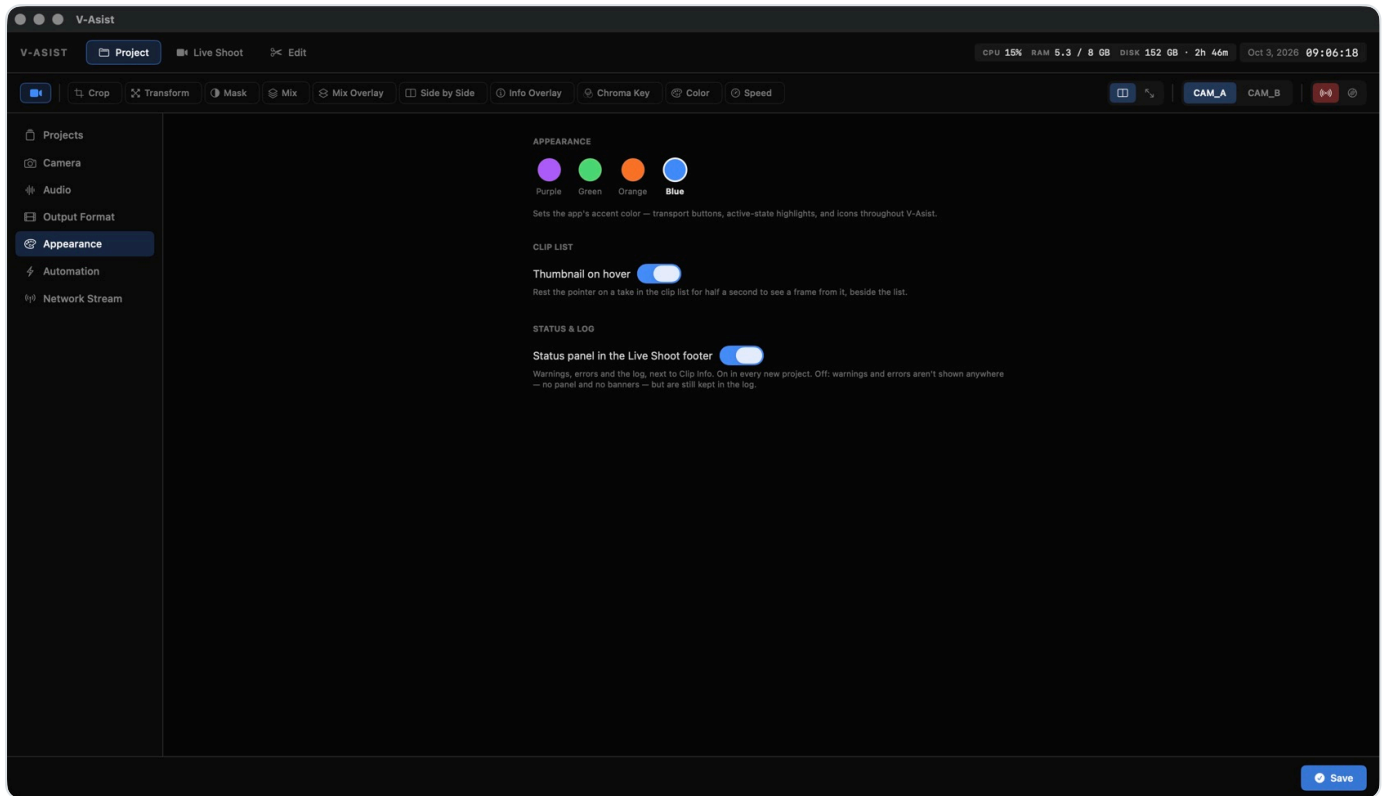
► Automation:

- **Camera SDI REC flag:** the REC bit the camera sends inside SDI. ARRI's flag is decoded by the AJA driver; Blackmagic cameras embed a REC trigger. Takes start and stop exactly with the camera. Use this first.
- **Camera timecode (Rec Run):** for cameras without a REC flag. Frozen timecode means stopped, running means recording. Free Run timecode keeps running when idle, so it can't start a take; on Blackmagic, timecode can only stop one.

With both on, the REC flag decides whenever the camera sends one, and timecode is the fallback. **R** or the REC button always works by hand. When a take starts, the active view switches to Live by itself.



On set: an ARRI camera through an AJA ioXT, the take started by the camera's REC, two IN/OUT ranges marked while rolling.



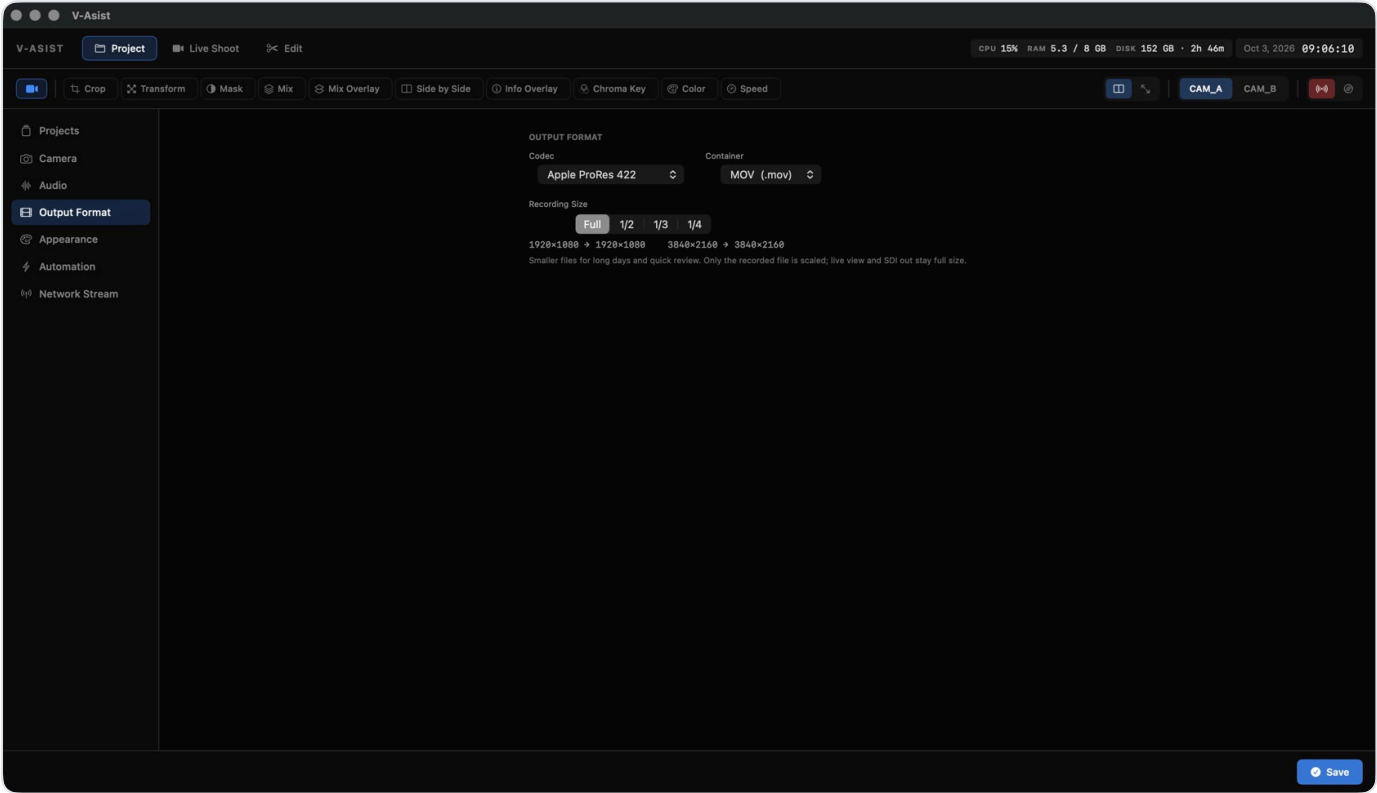
Project ▶ Automation: the two Auto-REC sources.

Over wireless video. The REC flag passes through a Vaxis link; ARRI's metadata (clip name, lens, ND) doesn't. A Teradek link carries the metadata too.

Recording formats

SETTING	OPTIONS
Codec	Apple ProRes 422, ProRes 422 HQ, H.264 (DNxHD is written as ProRes 422).
Container	MOV or MP4.
Recording size	Full, 1/2, 1/3 or 1/4 of the input. 1080p becomes 960×540, 640×360 or 480×270. Only the file is scaled; the live view and SDI out stay full size.

Measured on 3-second 1080p25 ProRes 422 HQ takes: Full 71 MB, 1/2 27 MB, 1/3 16 MB, 1/4 10 MB. The DISK readout in the header shows how much recording time is left at the current codec and size.



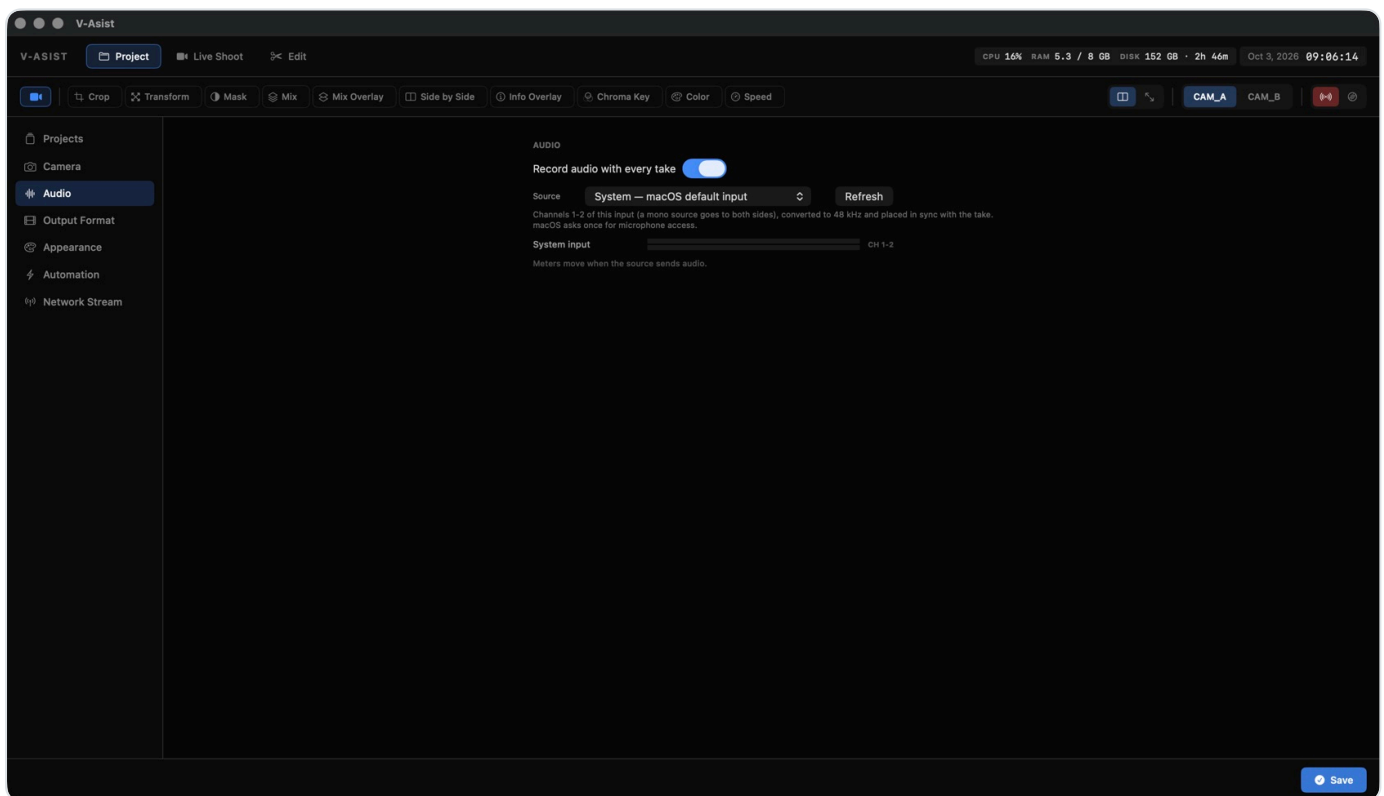
Project ▶ Output Format: codec, container and recording size, with the resulting raster for HD and UHD.

Audio

Turn on **Project ▶ Audio ▶ Record audio with every take** and choose the source:

SOURCE	WHERE THE SOUND COMES FROM
SDI	The audio embedded in each input's SDI signal (AJA and Blackmagic).
System	macOS's default input, as set in System Settings ▶ Sound.
A device	Any input by name: the Mac's microphone, a USB or Thunderbolt audio interface, AJA's CoreAudio device, an iPhone via Continuity.

Channels 1–2 are recorded as stereo at 48 kHz (a mono source goes to both sides): 16-bit PCM in MOV, AAC in MP4. Audio is placed against the take's first video frame, on the same clock as the video, and stays continuous even when a video frame is dropped. Level meters show in the Audio tab and next to REC.



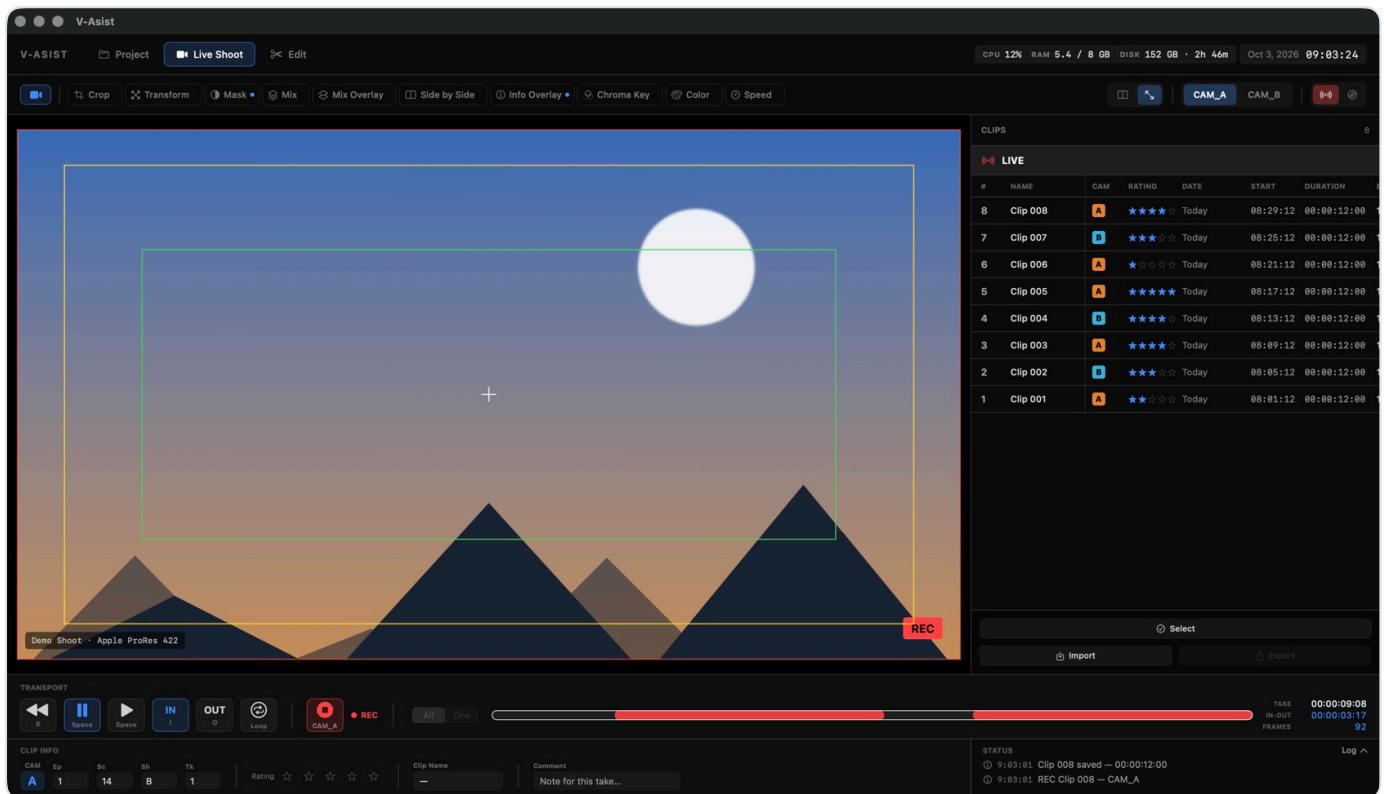
Project ▶ Audio: record switch, source and meter.

Transport, IN / OUT and playback

Transport, left to right

BUTTON	WHAT IT DOES
 (B)	Play in reverse, from OUT down to IN.
 (Space)	Pause.
 (Space)	Play from IN. With nothing loaded, Space plays the last take.
IN (I)	Mark IN. Hold the button 1 s to clear just the IN.
OUT (O)	Mark OUT. Hold the button 1 s to clear just the OUT. Delete clears both.
Loop	Play around and around: the whole set of pairs in All, the same pair in One.
REC · CAM	Record / stop by hand (R); shows which camera is recorded, the audio meter and the live dropped-frame count.
All · One	All: Play runs through every IN/OUT pair in turn, jumping the gaps. One: only the pair you click on the bar.
Timeline	Recording: the marked ranges in red. Disk: the IN/OUT range in the accent color, drag to scrub, click a pair to select it.
TAKE · IN-OUT · FRAMES	Take length, length of the current IN/OUT, and its frame count.

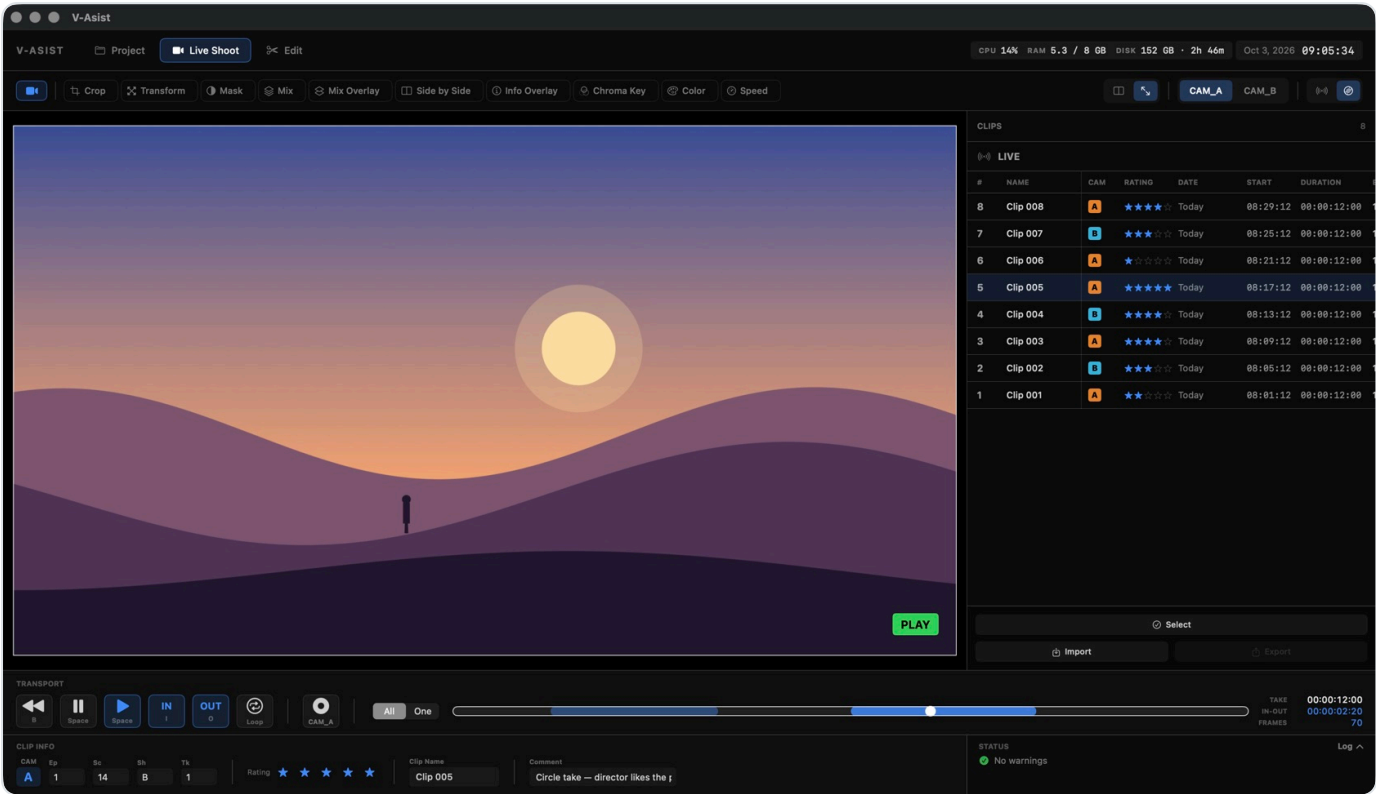
Marking while rolling



While recording: the bar fills red only where you marked; TAKE / IN-OUT / FRAMES count on the right.

- **I** / **0** set IN and OUT; a new IN after an OUT starts another pair. An open IN runs red up to "now".
- Marks belong to the take, so switching views or inputs mid-take never loses them.

Playing back



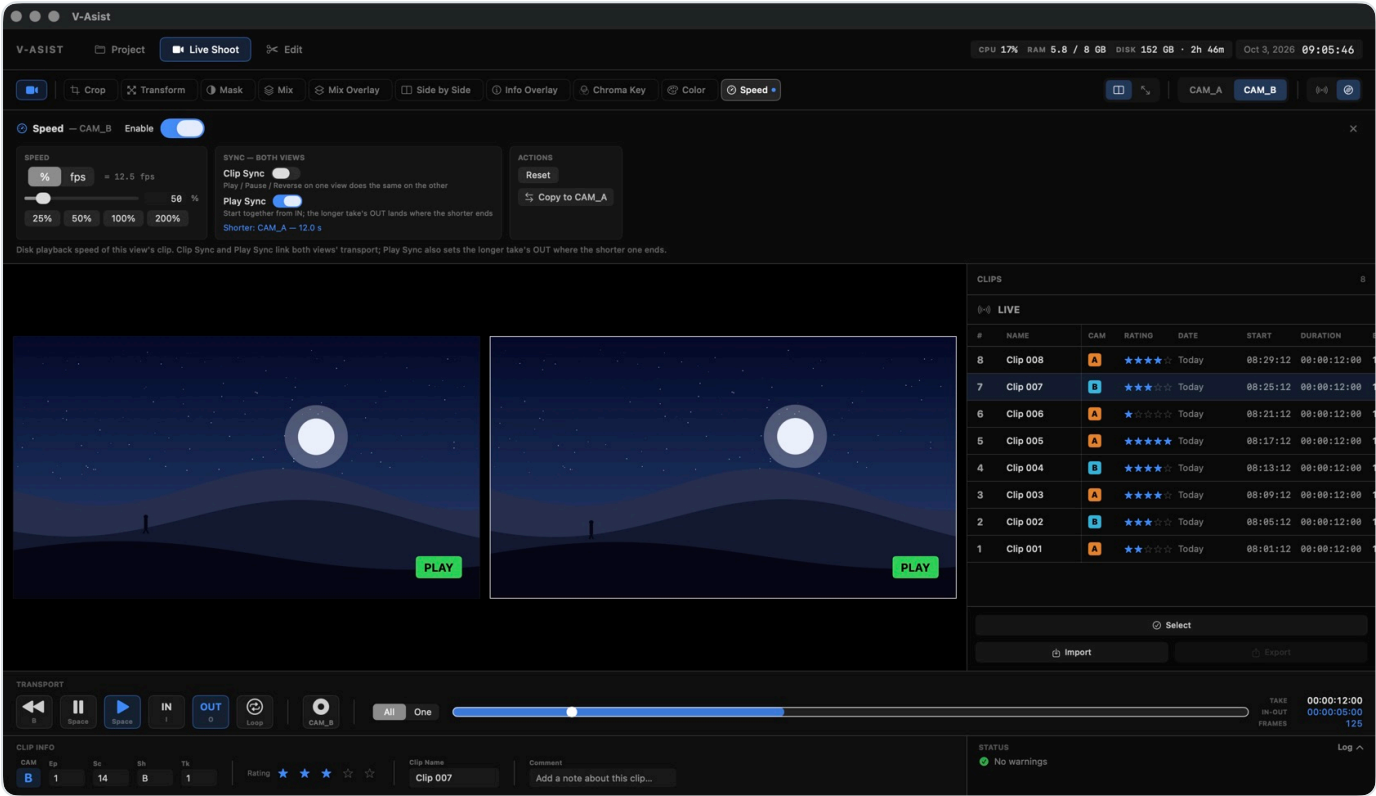
Disk playback in All: both pairs of the take on the bar, the current one brighter.

KEY	WHAT IT DOES
[]	Previous / next pair. With a single pair: restart / go to the end.
← →	One frame back / forward, exact on every clip; hold to repeat.
↑ ↓	Previous / next take in the clip list (LIVE is at the top).

OUT is hit frame-accurately, and Play always starts exactly at IN.

Speed, Clip Sync and Play Sync

The **Speed** tool () changes how fast the active view's take plays, and links the two views' transport.



Play Sync on, CAM_B at 50 %: both takes start together; the shorter one leads.

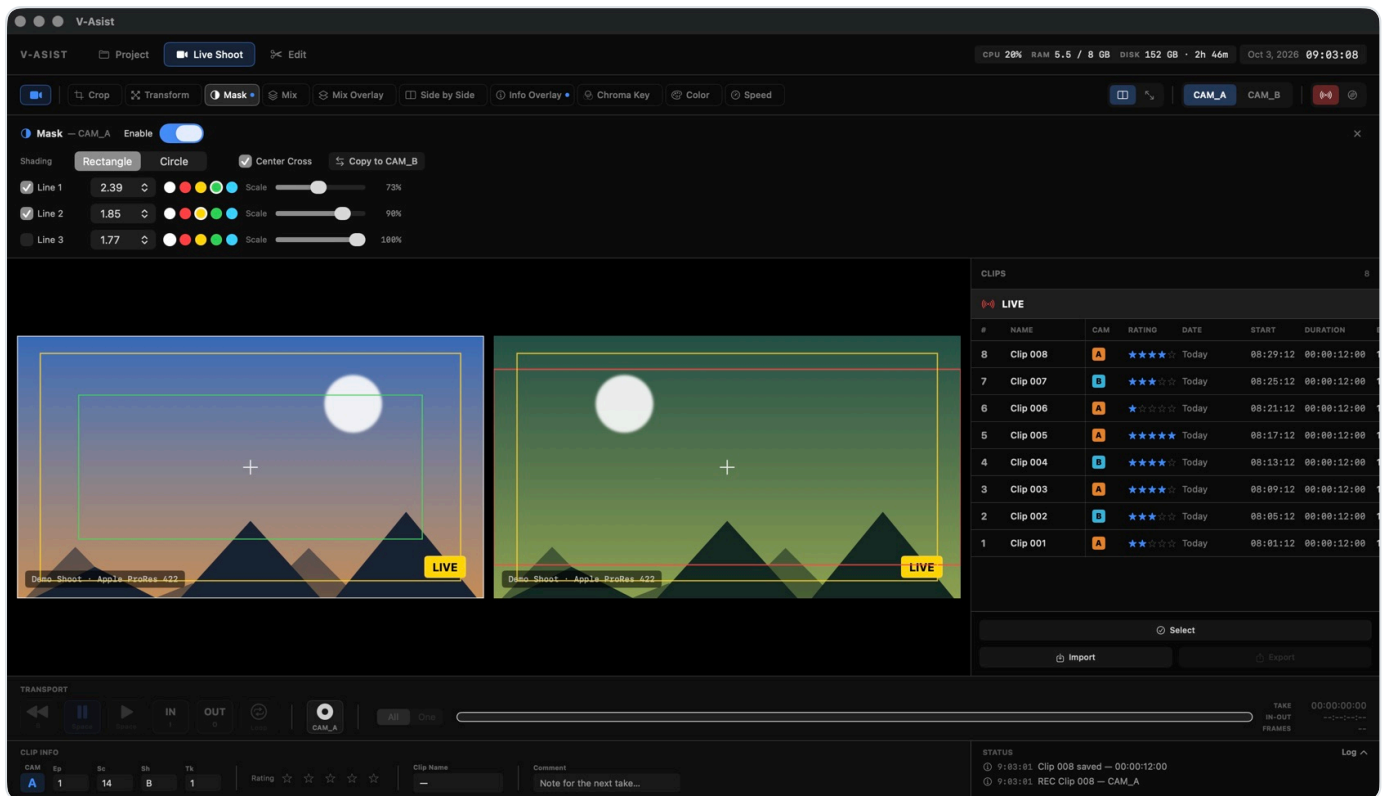
CONTROL	WHAT IT DOES
% · fps	Enter the speed as a percentage (5–400 %) or as the frame rate to play the clip at: a 50 fps take at 25 fps is 50 %. The other unit is shown next to it. Slider, typed value, or a preset (25 / 50 / 100 / 200 %, or 12 / 24 / 25 / 30 / 50 fps).
Enable	Switches the speed on or off for this view without losing the value. Works forward and in reverse, and changes while playing.
Clip Sync	Play, Pause and Reverse on one view does the same on the other, for two cameras of the same take. Both players start on the same frame.
Play Sync	Both views start together from their IN, on the same frame. The shorter take leads : the longer take's OUT is set where the shorter one ends (at each view's speed), so both stop together. Switch Play Sync off and the longer take's own OUT comes back; the clip itself is never changed.
Reset · Copy to	Back to 100 %; or the same speed on the other view.

Heavy files. Sync is frame-exact with ProRes and HD H.264. Very heavy files (4K HEVC from a phone) can play slower than real time on a smaller Mac and fall behind.

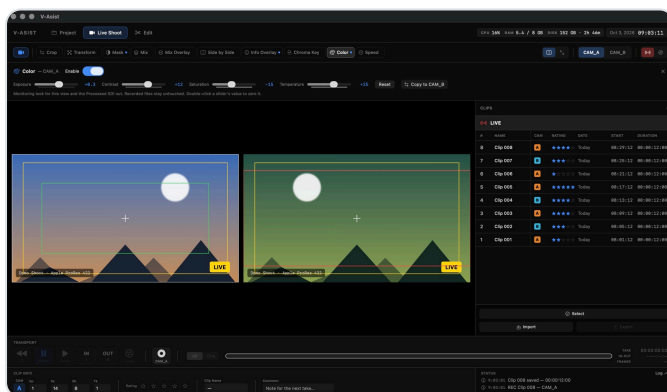
Monitor tools

Each tool is set per view (except Mix Overlay), with **Copy** to the other view. Tools apply on screen, on the Processed SDI out and on the stream, never to recordings.

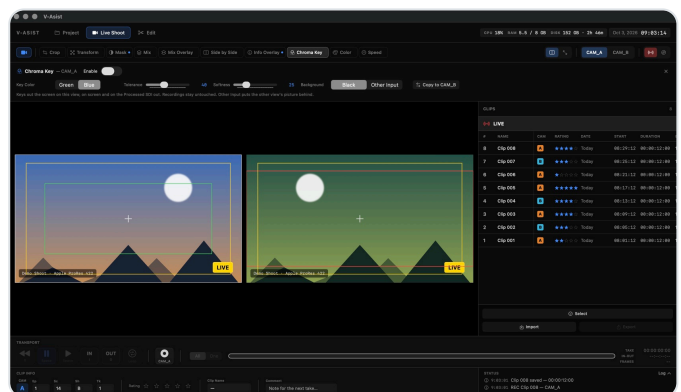
TOOL	KEY	WHAT IT DOES
Crop	^1	Mattes each edge (0–45 %), with Aspect Lock to move all four together.
Transform	^2	Scale, stretch, rotate and move the picture. See chapter 9.
Mask	^3	Rectangle or circle shading, a center cross, and up to three frame-line guides (1.33, 1.66, 1.77, 1.85, 2.35, 2.39) with color and size.
Mix	^4	A still image, GIF or video over the picture. See chapter 9.
Mix Overlay	^5	Input 1 over Input 2: Normal, Add or Multiply, with opacity; Main chooses the base layer. For matching a frame.
Side by Side	^6	Both inputs next to each other, horizontal or vertical.
Info Overlay	^7	Project, codec, timecode, total and IN-OUT durations on the picture.
Chroma Key	^8	A GPU keyer: green or blue, tolerance, softness, spill suppression. The background is black or the other input, e.g. a live plate behind the actor.
Color	^9	Exposure, contrast, saturation and temperature: a monitoring look. Double-click a value to zero it.
Speed	^0	Playback speed and the two sync switches. See chapter 7.



Mask: frame lines at 2.39 and 1.85 (90 %, yellow) with a center cross.



Color: CAM_A warmer and more contrasty than CAM_B.



Chroma Key: key color, tolerance, softness, background.

Transform and Mix

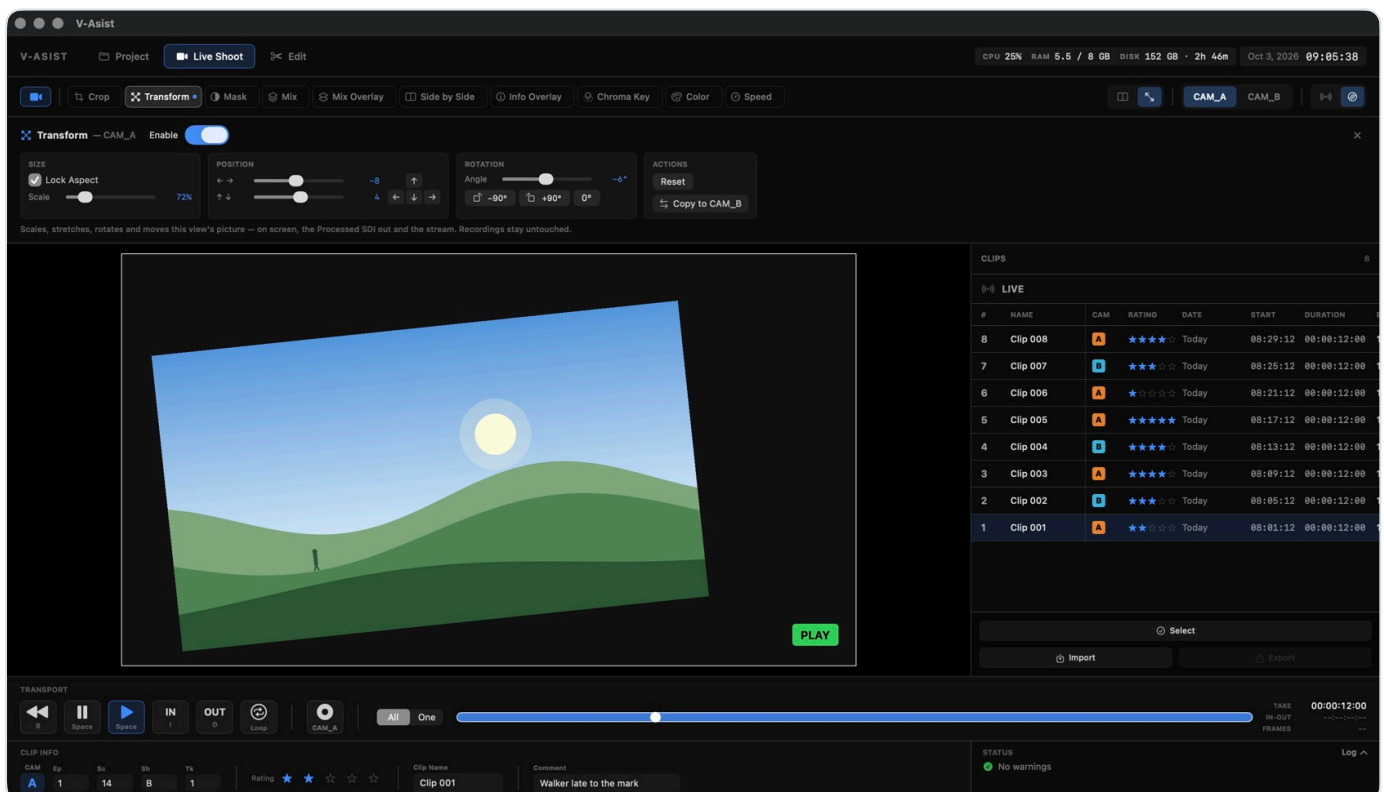
Both tools share one set of controls, grouped in sections.

SECTION	CONTROLS
Size	Lock Aspect on: one Scale (10–400 %). Off: Width and Height separately, to stretch or squeeze.
Position	← → and ↑ ↓ sliders (–100...100 % of the view) and arrow buttons that move 1 % per click.
Rotation	Angle (–180...180°), –90° , +90° and 0° .
Actions	Reset size, position and rotation; Copy to the other view.

Double-click any value to put it back to its default.

Transform

Scales, stretches, rotates and moves the view's own picture: to check a reframe, straighten a horizon or fill the monitor with a letterboxed image.

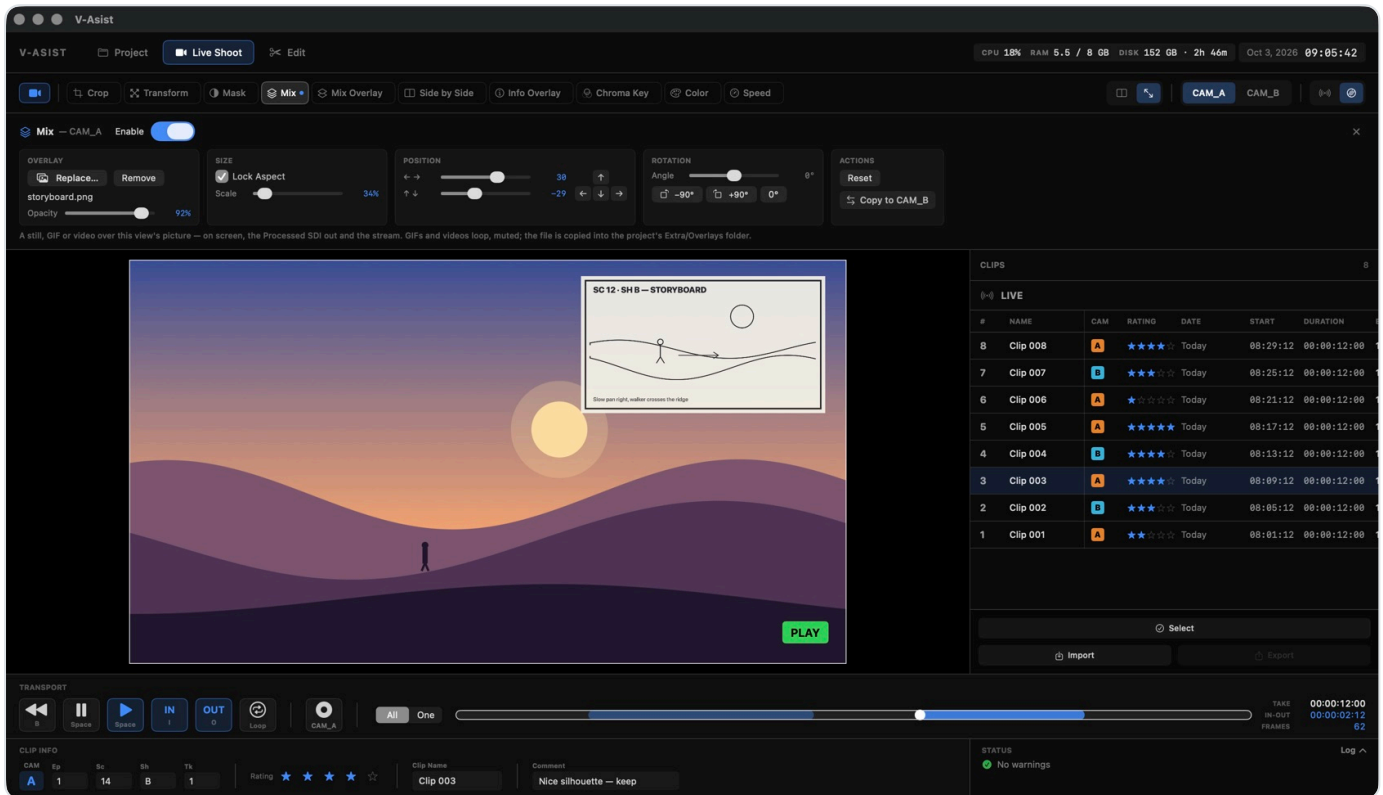


Transform: 72 %, moved a little, rotated –6°.

Mix

Lays a file over the picture: a storyboard frame, the previous setup for continuity, a logo, a GIF or a video.

- **Choose File...** takes PNG, JPEG, HEIC, TIFF, GIF, MOV or MP4. The file is copied into the project's `Extra/Overlays` folder, so it moves with the project.
- **Opacity** 0–100 %; a new file starts fully opaque. GIFs and videos loop, muted.
- **Replace...** swaps the file; **Remove** takes it off (the file stays in Overlays).



Mix: the storyboard frame for the shot, top right at 34 %.

The clip list and rating

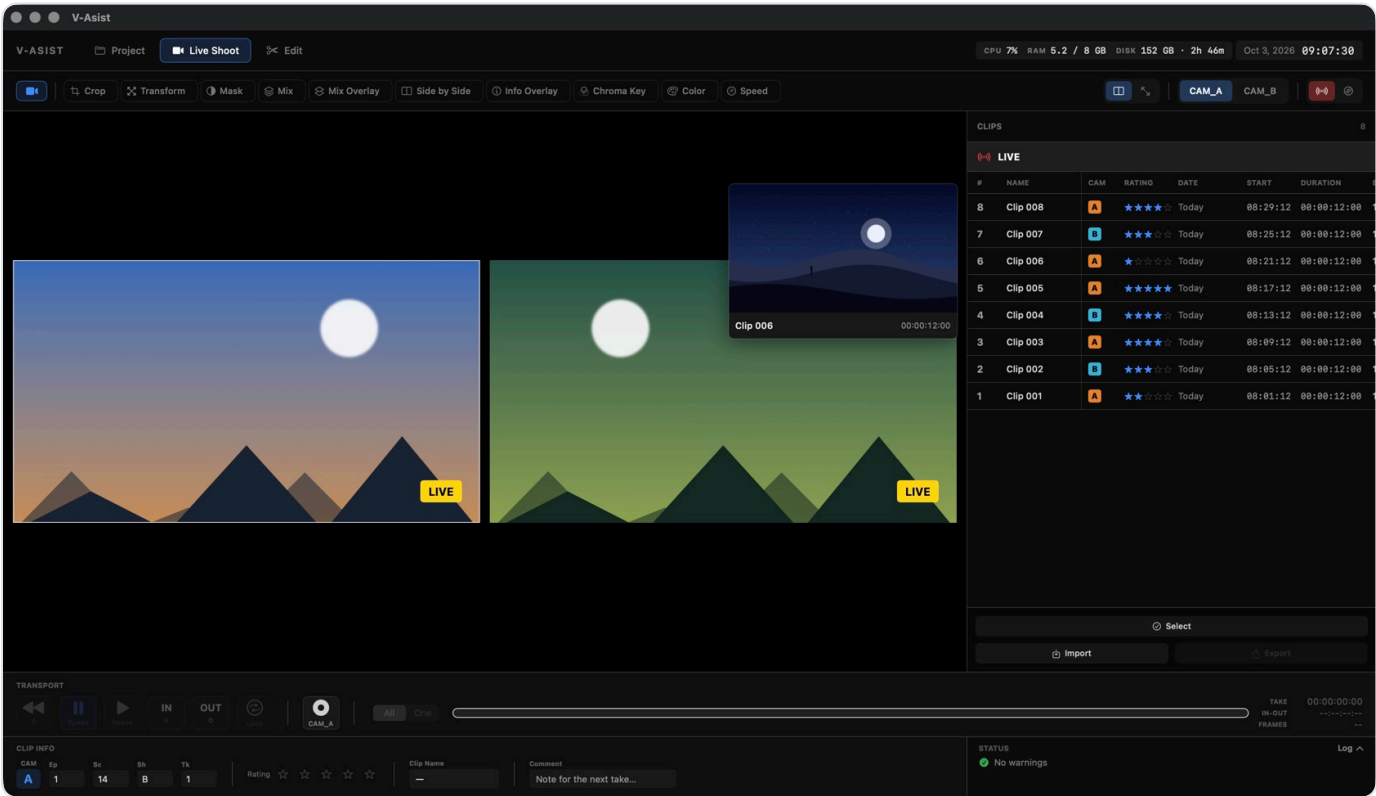
Every take of the project, newest first, with **LIVE** on top. Click a take to load it into the active view (Disk); click LIVE to go back to the camera.

COLUMN	
# • Name	Recording order and clip name; these two stay put while the rest scrolls sideways.
Cam	A or B.
Rating	Click a star to rate; the footer's stars show the same.
Date • Start • Duration	When REC started and how long the take is.
Ep • Sc • Sh • Tk	The slate.
Comment • TC In • Source	The note, the camera timecode at the first frame, and the input.

Click a column title to sort by it; click again to reverse. The arrow keys follow the sorted order.

Thumbnail on hover

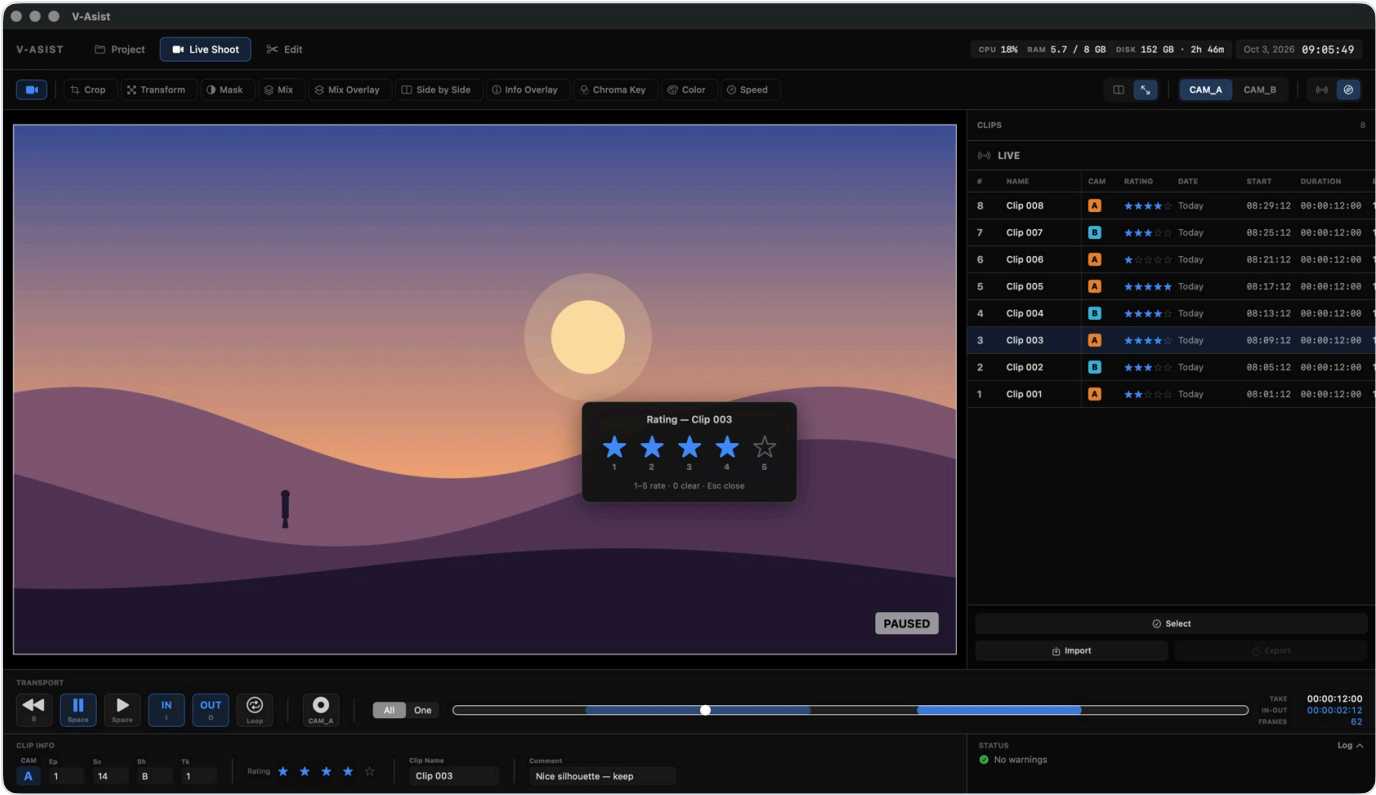
Rest the pointer on a take for half a second to see a frame from it, with its name and length, beside the list. Switch it off in **Project ▶ Appearance**.



The pointer on Clip 006: a frame from the middle of the take.

Rating by keyboard

⌘A opens a small rating window over the picture. Press **1** – **5** to light that many stars, **0** to clear, **Esc** to close. It rates the loaded take on Disk, or the take being recorded / the next one on Live, and closes itself.



⌘A on Clip 003.

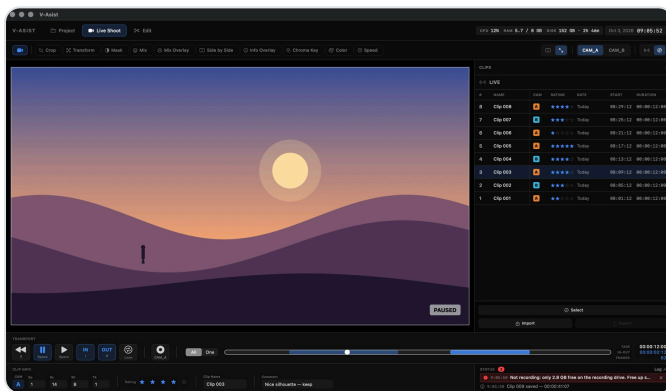
Select, Import, Export, Delete

BUTTON	WHAT IT DOES
Select	Clicks build a selection instead of loading: ↑ -click extends, ⌘ -click toggles, ⌘A selects all.
Import	Adds existing movie files to the list.
Export	Shot log, EDL, XML and optional media copies for the selected takes (see chapter 15).
Delete	In Select mode: deletes the selected takes' files and rows, after asking.

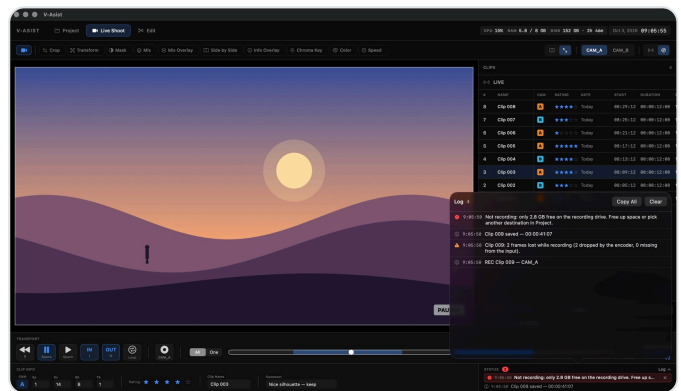
Status panel and log

Warnings and errors have their own place under the clip list, next to Clip Info, instead of covering the picture.

- The current problem stays on top in a frame: **red** for an error (not recording, the drive almost full, a take that couldn't be saved), **orange** for a warning (dropped frames, an AJA app holding the card). **X** dismisses it; it stays in the log.
- Below it, the latest lines: REC started, take saved with its length, project actions.
- The badge next to STATUS counts warnings and errors.
- Click the panel (or **Log**) for the whole session's log, newest first, with **Copy All** and **Clear**. **Esc** closes it.



An error on top, the latest lines below.



The full log.

The panel can be switched off in **Project ► Appearance**; then nothing pops up at all, but everything is still logged.

SDI output

The **VIDEO OUT** button (top left) chooses what the village monitors get:

MODE	SIGNAL
Processed	Exactly what the V-Asist view shows: tools, Transform, Mix, frame lines, overlays, disk playback. About 4–8 ms per frame.
Live Passthrough	The camera routed straight from SDI in to SDI out in hardware, with near-zero delay.

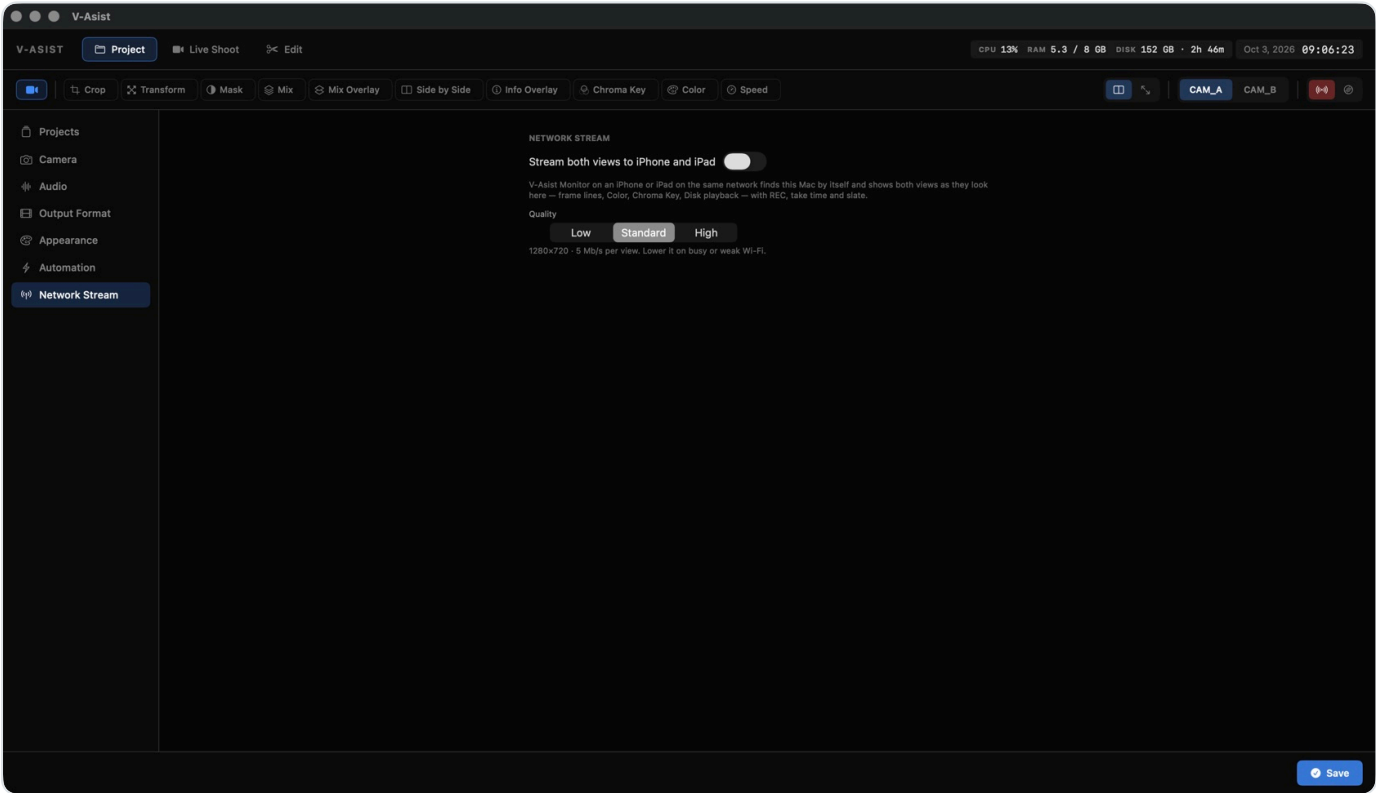
The output device and format are set in **Project ▶ Camera: Match Input**, or a fixed 720p–1080p format (the picture is scaled to fit).

Network stream and V-Asist Monitor

Project ▶ Network Stream ▶ Stream both views to iPhone and iPad sends both views, exactly as they look on the cart, to the **V-Asist Monitor** app on the same Wi-Fi or network. It finds the Mac by itself; no addresses to type.

SETTING / GESTURE	WHAT IT DOES
Quality	Low, Standard or High: picture size and bit rate, for weak or strong Wi-Fi.
Viewers	Every connected iPhone / iPad, by name.
Double tap (Monitor)	Enlarge one view, double tap again to go back to both.
Two-finger tap (Monitor)	On an enlarged view: saves its current frame to Photos.

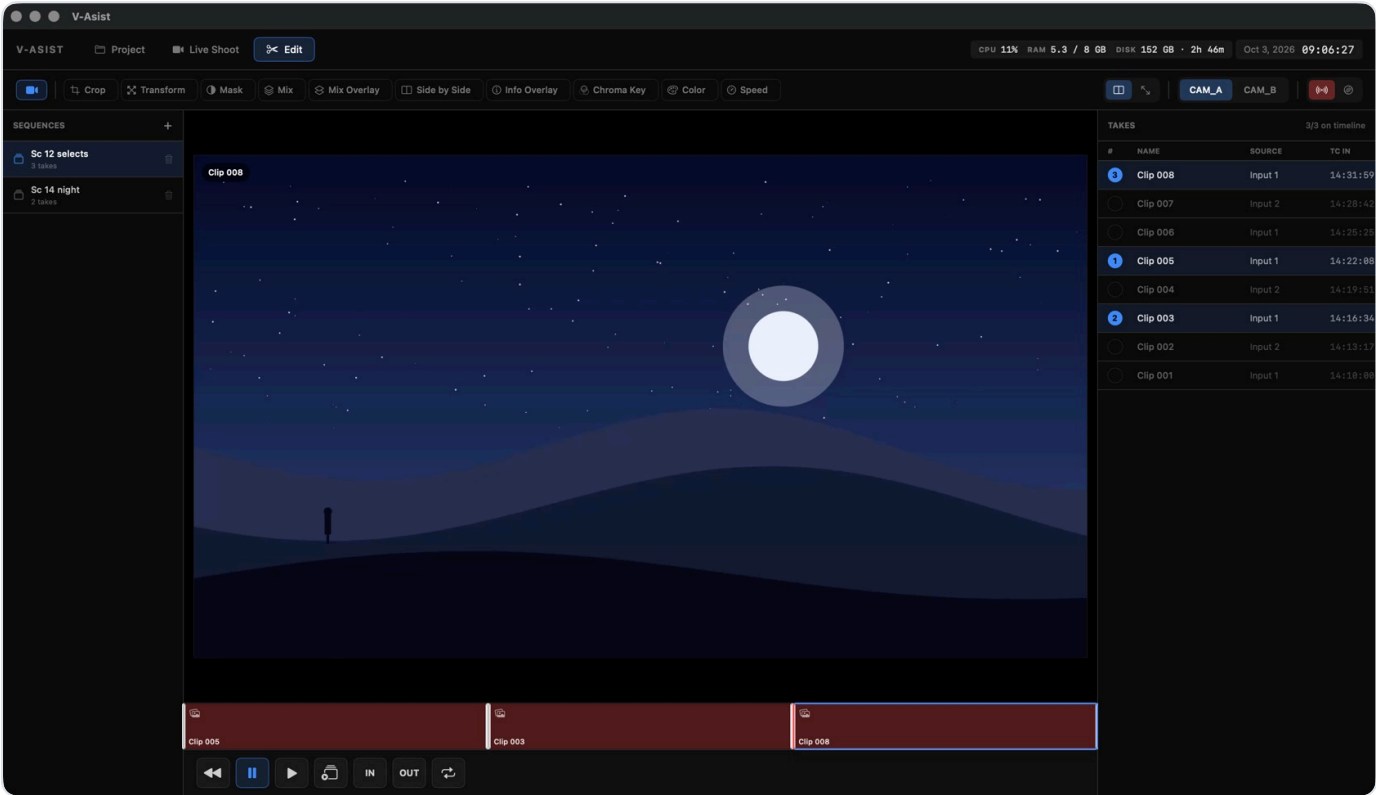
The Monitor shows REC, the take time and the slate. A viewer on weak Wi-Fi skips frames rather than falling behind.



Project ▶ Network Stream.

Edit room

Review selects between setups without leaving V-Asist.

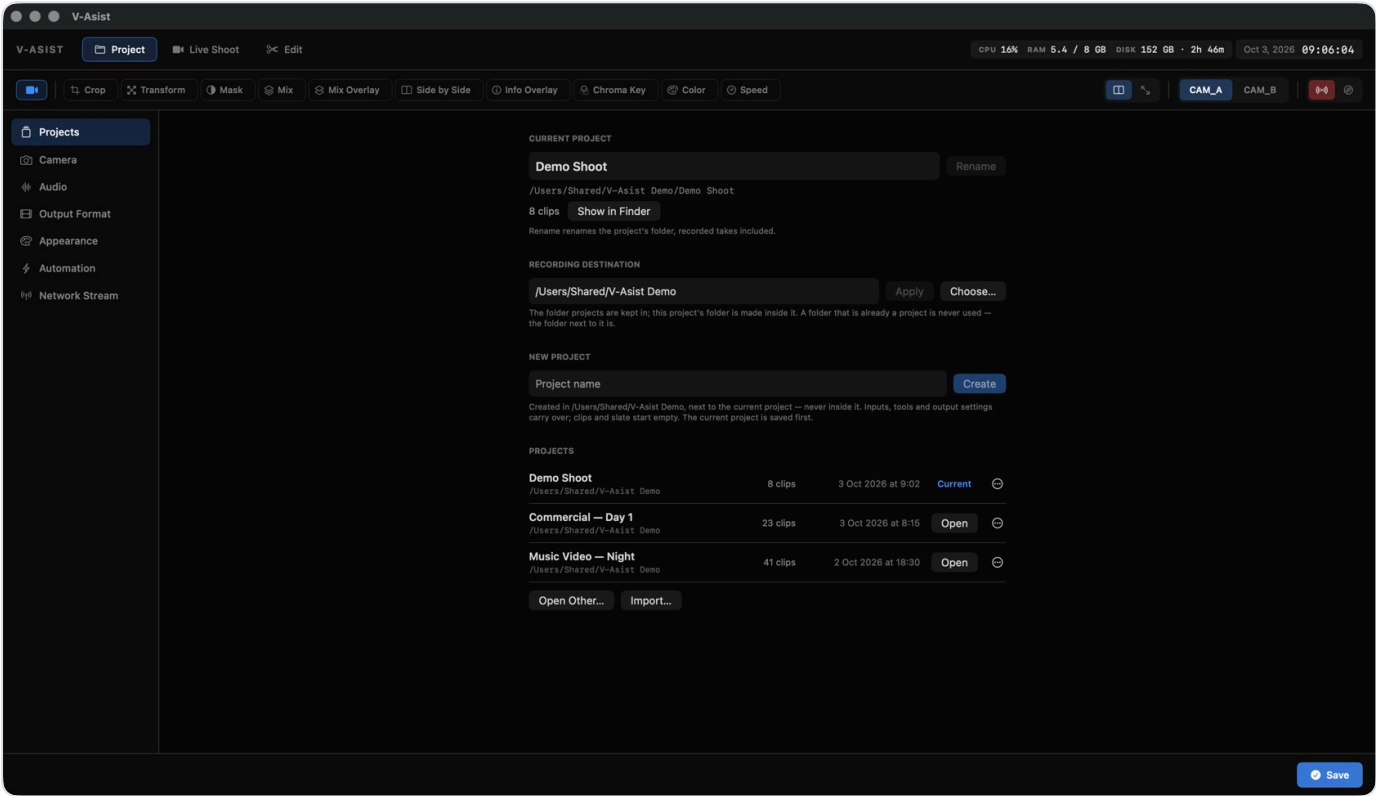


Edit room: sequences on the left, every take on the right, three takes on the filmstrip.

CONTROL	WHAT IT DOES
Sequences • +	Named groups of takes; + makes a new one, the bin deletes it (the takes stay).
Takes	Click a take to put it on the current sequence's timeline (up to three); click again to take it off.
Filmstrip	One block per take; drag the playhead across the whole strip.
	Reverse, pause, play the focused take.
Play All	Take 1 IN→OUT, then take 2, then take 3.
IN • OUT	Trim the focused take; hold 1 s to clear.
Loop	Off, one take, or the whole sequence.

Projects and export

Each project is a folder, `<destination>/<project>/` , with `Videos` , `Screenshots` , `Extra` and its database `project.vaproj.json` . The last session reopens on launch.



Project ▶ Projects: the current project, where projects are kept, a new project, and every project found.

CONTROL	WHAT IT DOES
Project name · Rename	Renames the project's folder, recorded takes included; every path follows.
Show in Finder	Opens the project folder.
Recording Destination	The folder projects are kept in (Apply, or Choose...). A folder that is already a project is never used: V-Asist uses the folder next to it and says so.
New Project · Create	A new, empty project next to the current one. Inputs, tools and output settings carry over; the current project is saved first.
Open	Switches to that project. Live capture keeps running.
⋮ ▶ Rename...	Renames any project in the list.
⋮ ▶ Duplicate...	Copies the whole project (shows the size first).
⋮ ▶ Export...	One <code>.zip</code> , with the recorded takes or the project only (clip list, marks, screenshots, overlays).
⋮ ▶ Delete...	Asks first, then moves the folder to the Trash, where it can still be put back. The open project can't be deleted.
Open Other... · Import...	Open a project folder from anywhere; or copy in a <code>.zip</code> from Export (or a project folder) next to the current one.

Project changes are blocked while recording.

Export for editorial

Clip list ▶ Select ▶ Export writes a `<Project> Export <date>` folder with:

FILE	CONTENTS
Shot Log .csv / .pdf	Clip, camera, episode / scene / shot / take, rating, comment, TC in, duration, every IN/OUT pair and lost frames.
.edl	CMX3600, one event per IN/OUT pair.
.xml	Final Cut Pro 7 XML for Premiere, Resolve and Final Cut, linked to the media.
Media/	Optional copies of the takes.

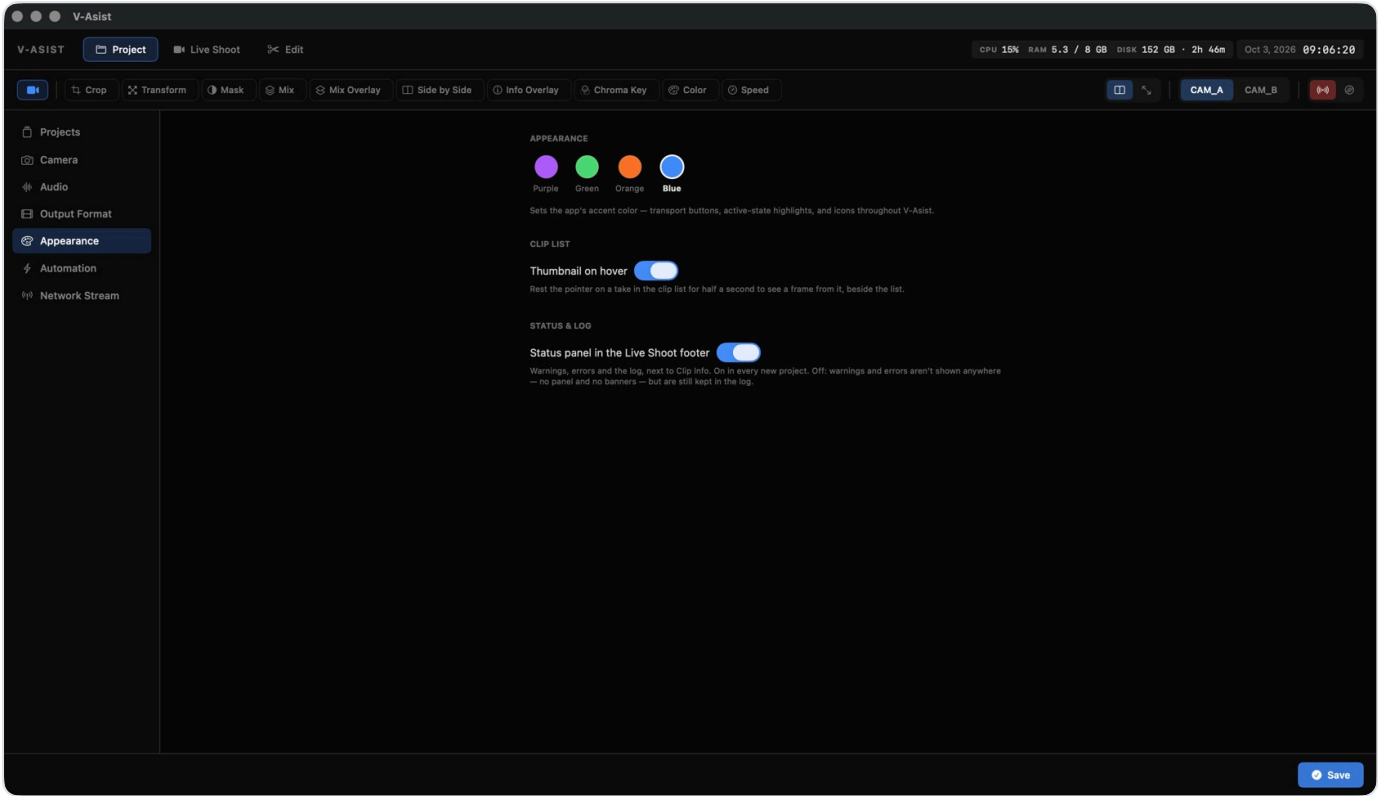
ARLI — Shot Log

5 takes - exported 1 October 2026 at 17:44 - V-Asist

CLIP	CAM	EP	SC	SH	TK	RATING	TC IN	DURATION	IN / OUT	LOST	COMMENT
Clip 070	A				95		00:59:54:24	00:00:25:17			
Clip 071	A				96		01:01:00:13	00:01:05:15	00:00:10:21 – 00:00:21:04 00:00:27:18 – 00:00:33:21 00:00:40:07 – 00:01:05:15		
Clip 072	A				97		01:01:47:17	00:00:47:04			
Clip 073	A				98		01:02:49:21	00:01:02:06			
Clip 074	A				99		01:05:01:20	00:01:34:02			

The PDF shot log.

Appearance



Project ▸ Appearance.

SETTING	WHAT IT DOES
Accent color	Purple, green, orange or blue, for buttons, highlights and the timeline.
Thumbnail on hover	The clip list's hover preview (on by default).
Status panel	The footer's status panel (on by default, and in every new project). Off: no warnings are shown anywhere, but they are still logged.

Safety on set

Tested through a 12-hour shooting day on set.

PROTECTION	WHAT IT DOES
Crash-safe files	Movies are written in 2-second fragments. A crash or power cut mid-take still leaves a playable file up to the last fragment.
Takes that fail	If a take can't be written or finished (no picture, the drive gone), a red error says so; a clip never silently appears without media.
Dropped frames	Frames the encoder dropped and frames missing from the input are counted live next to REC, logged, stored on the clip and listed in the shot log.
Disk guard	REC won't start under 3 GB free; a running take is closed cleanly under 1 GB.
AJA conflicts	A warning while AJA ControlPanel, Control Room or System Test is open; they take over the device and freeze the picture.
Project safety	Nothing that moves files runs while recording; deleting a project goes to the Trash.
Long takes	The record clock never re-renders the interface. A 3-minute ProRes take on an M1 holds 40 % app CPU and about 0.4 ms preview lag from start to end.
Typing	Shortcuts are ignored while you type in a text field.

Keyboard shortcuts

Letters and numbers are matched by key position, so they work on any keyboard layout. None of them fire while you type in a text field.

KEY	ACTION
↑1 ↑2 ↑3	Project / Live Shoot / Edit
^1 ... ^9 ^0	Open a tool: Crop, Transform, Mask, Mix, Mix Overlay, Side by Side, Info Overlay, Chroma Key, Color, Speed (again: close)
Esc	Close the open panel: the rating window, the log, then the tool's row
R	Record / stop
Space	Play / pause; with nothing loaded, play the last take
B	Reverse
I 0	Mark IN / OUT
Delete	Clear IN and OUT
← →	One frame back / forward (hold to repeat)
[]	Previous / next IN-OUT pair
↑ ↓	Previous / next take in the clip list
⌘A, then 1 – 5	Rate the loaded take (Live: the next take); 0 clears
1 2	Active view: Input 1 / Input 2
9 0	Active view: Live / Disk
D	Dual / Full layout
F	Picture only (hide header, clip list and footer)
⌘A	Select all takes (in Select mode)
H	Minimize
Q	Quit (asks first)

Mouse: hold IN or OUT 1 s to clear that mark; double-click a slider value to reset it; ⌘-click / ⌘-click in the clip list in Select mode.

Hardware and requirements

FAMILY	SUPPORT
AJA	NTV2 driver: ioXT, Io 4K Plus, Kona, Io, T-Tap, Corvid. Capture, recording, SDI output, REC flag, embedded audio.
Blackmagic	Desktop Video (DeckLink API): DeckLink and UltraStudio. Capture, recording, embedded timecode and REC trigger, embedded audio.
System cameras	Anything macOS shows as a camera: USB / Thunderbolt capture boxes, webcams. Capture and recording.
Audio inputs	Built-in microphone, audio interfaces, Continuity microphone.
iPhone / iPad	V-Asist Monitor for the network stream.
REQUIREMENT	
macOS	26.5 or later
Mac	Apple silicon (tested on an M1 MacBook Pro with 8 GB)
Drivers	AJA desktop software for AJA cards, Desktop Video for Blackmagic

Used on set with an AJA Io 4K Plus, AJA ioXT, Blackmagic UltraStudio Recorder 3G, ARRI Alexa XT, and Teradek and Vaxis wireless links.

Good to know

- Quit AJA ControlPanel while V-Asist runs; V-Asist warns you when it's open.
- Quit V-Asist normally ( or ⌘Q). Force-quitting it while an AJA ioXT is capturing can make the driver lose the card until it's replugged.
- For the Mac microphone or System audio, the input volume in System Settings ▶ Sound must be above zero.
- System cameras record video only; audio comes with AJA and Blackmagic inputs.

V-Asist 1.1 beta · Feedback: feedback@vasist.app · Feature Guide · Screenshots: V-Asist with its built-in test pictures and generated demo takes; the on-set picture is an ARRI camera through an AJA ioXT.