



VIDEOPRO

VideoPro — Set Up Your Production

Document: VP-PRODUCTION

Revised: 2026-07-13

Nevco Sports · 301 East Harris Avenue, Greenville, Illinois 62246 · 800.851.4040 · support.nevco.com

Set up your production

Use this section to set up how VideoPro fits into your production system: project format, graphics output, live video inputs, switching, replay, streaming, delivery, and audio.

In some shows, VideoPro is the graphics system feeding an external switcher, display, encoder, vMix, TriCaster, or venue system. In others, VideoPro also handles nearby production tasks such as live video inputs, Shot Layouts, switching, replay, streaming, Zoom or Teams contribution, and audio mixing. These features are here because they can simplify the show when VideoPro is already driving the graphics and production logic.

This section is for the person setting up the production: deciding how VideoPro fits into the larger system, choosing graphics output, adding live video sources, deciding which tool handles switching and streaming, and preparing audio before the show goes live.

Use [Design & customize graphics](#) when you need to change the graphics themselves. Use [Control your show](#) when the system is set up and you're ready to operate live.

Two ways VideoPro fits your production

VideoPro commonly fits into production in two ways:

- **Graphics system in a larger production** — VideoPro creates graphics and sends them to a switcher, display, encoder, NDI workflow, SDI card, vMix, TriCaster, or another production tool.
- **Integrated production workflow** — VideoPro also handles supporting tasks such as live video sources, Shot Layouts, switching, replay, streaming, Zoom or

Teams contribution, and audio mixing, so the show can be run with fewer external tools.

Start here

- 01 [Choose how VideoPro fits your production](#) — choose whether VideoPro is a graphics source, a downstream keyer, an integrated production system, or the final delivery path. This choice drives Alpha Key, project format, and output setup.
- 02 [Set the project format](#) — choose resolution, frame rate, Alpha Key, premultiplication, and other project-wide settings before configuring outputs.
- 03 [Set up graphics output](#) — send VideoPro graphics to the rest of the production system using Display, SDI, NDI, OMT, TriCaster, vMix, Wirecast, OBS, or another supported path.
- 04 [Move and resize items for Program](#) — use Preview for fast visual placement and the Transform tab for precise position, scale, and fit settings.
- 05 [Live video inputs](#) — bring cameras, capture cards, NDI feeds, screen captures, browser sources, or windows into VideoPro when the production needs them.
- 06 [Audio Mixer panel](#) — set source levels, monitor audio locally, use Shot Layouts for audio automation, and prepare the Program audio mix.

What's in this section

- **Choose how VideoPro fits your production** — the decision hub for selecting the right setup path: graphics source, downstream keyer, integrated production system, or final delivery path.

- **Production setup scenarios** — worked, end-to-end setups for fitting VideoPro into specific tools: vMix, ATEM, HDMI switchers, and SDI broadcast switchers.
- **Set the project format** — resolution, frame rate, Alpha Key, and premultiplication. These settings affect every downstream output.
- **Set up graphics output** — Display, SDI, NDI, OMT, TriCaster, vMix, Wirecast, and OBS: the standard ways VideoPro feeds the production system, with key/fill and transparency behavior.
- **Move and resize items for Program** — fast visual placement in Preview and precise placement in Transform.
- **Live video inputs** — cameras, capture cards, NDI, screen capture, window capture, and browser sources brought into VideoPro.
- **Stingers & transitions** — transition setup, including stingers between graphics, shots, or sources.
- **Switching & instant replay** — VideoPro as the internal switcher, plus replay setup and live replay operation.
- **Audio mixing** — the Program audio mix, local monitoring, and Shot Layout audio automation.
- **Streaming & delivery** — RTMP, SRT, multi-destination streaming, Zoom/Teams sends, virtual webcam, recordings, image sequences, and watch folders.

Not every send path is the same. Some destinations are primary graphics or Program outputs. Others receive a copy, stream, file, virtual device, recording, or integration-specific send. Use [Choose how VideoPro fits your production](#) to decide which path matches your setup.

Related sections

- Once the production is set up, drive the show from it. See [Control your show](#) for cue and take, Shot Layouts, Stream Deck, and Companion.
- For graphics, values, and live data sources, see [Play and update graphics](#).
- If you need a full venue playbook (sports, worship, hybrid event, ATEM, vMix, or TriCaster), see [Solution Recipes](#). Recipes combine Set up your production, Play

and update graphics, and Control your show.

- When Program goes black, an SDI card is missing, or a stream drops, see [Troubleshooting](#).

Choose how VideoPro fits your production

Before you configure any output, decide how VideoPro connects to the rest of your system. That decision drives your project's **Alpha Key** setting, your project format, and which **Program Out** you use. This page helps you place VideoPro; the scenario pages it links to explain each setup in detail.

The core question: where is the final image composited?

Almost every setup is one of three roles, and the role decides your Alpha Key setting:

- **Graphics overlay source** — another device or application composites your graphics over video. VideoPro sends keyed graphics; turn **Alpha Key** on.
- **Downstream keyer** — a switcher has already produced its program, and graphics are added on top of it, either by SDI hardware or by bringing the program into VideoPro. The Alpha Key setting depends on which way you do it.
- **Final renderer** — VideoPro produces the finished frame, ready to stream, record, or display. Turn **Alpha Key** off.

You set Alpha Key itself in [Set the project format](#).

Choose your production setup

If VideoPro feeds another production system, pick the page for your system in [Production setup scenarios](#):

- **Software switchers** — [vMix](#), plus TriCaster and OBS (see [Output graphics to a TriCaster](#) and [Output graphics to OBS Studio](#)).

- **Hardware switchers** — [an HDMI switcher](#), [ATEM](#), or [an SDI broadcast switcher](#).
- **Network transport** — [NDI](#) or [OMT](#).

If VideoPro produces the finished show, you're sending or capturing a result — a stream, a video call, a virtual webcam, or files. See [Streaming & delivery](#).

Primary output and additional sends

Keep two ideas separate:

- The **primary output** is how VideoPro joins the production system — Display, SDI, NDI, OMT, TriCaster, or the OBS plugin. This is where project format and Alpha Key matter.
- **Additional sends** distribute, stream, record, or republish the result, and can run alongside the primary output — streaming, a virtual webcam, recording, an Image Sequence, or a Watch Folder.

A graphics contributor usually has just a primary output; a full production often adds several sends at once.

At a glance

YOUR SETUP	VIDEOPRO'S ROLE	PRIMARY OUTPUT	ALPHA KEY
Software switcher (vMix)	Graphics overlay source	NDI or OMT	On
HDMI switcher (ATEM, Roland)	Graphics overlay source	Display, key-color background	On
SDI broadcast switcher	Graphics overlay source	SDI key + fill	On
Downstream keyer	Adds graphics over a program	SDI, or program in and finished frame out	Varies
Full production in VideoPro	Final renderer	A stream or a display	Off
Video call (Zoom, Teams)	Final renderer	Direct send, or Virtual Webcam	Off
File or CG system	Varies	Image Sequence or Watch Folder	As needed

Any of these can add streaming, recording, a virtual webcam, or file output alongside its primary output — see [Streaming & delivery](#).

ifdef::scoreview[]

Drive a venue display

In a VideoPro venue display setup, the finished production goes to one or more digital displays at the venue — a scoreboard screen, a video wall, or a courtside monitor. You map the parts of your project to physical screens with zone layouts and the display configuration, rather than feeding a switcher. See [Output graphics to a display](#) for the Display output.

endif::[]

After you choose

- 01 Set the project's format and Alpha Key for your role — [Set the project format](#).
- 02 Configure the primary output — [Set up graphics output](#).
- 03 Add any additional sends — [Streaming & delivery](#).
- 04 Follow the scenario page for your setup — [Production setup scenarios](#).

Related

- [Production setup scenarios](#) — choose the page for your production system.
- [Set the project format](#) — the Alpha and format settings this choice drives.
- [Set up graphics output](#) — Display, SDI, NDI, OMT, TriCaster, and OBS.
- [Switcher integrations](#) — end-to-end recipes for specific switchers.

Set the project format

A project's **video format** defines the frame VideoPro renders before anything goes to an output, and it shapes every part of the project from the inputs to Program Out. Set it before you configure any output.

Open **Settings > Project...** to open the **Project Settings** dialog.

The dialog's **Video Format** section holds the settings every output depends on. The quickest way to set them is to pick a **Video Preset** that matches your delivery format — that fills in **Width**, **Height**, **Frame Rate**, and **Interlaced** together. You can also set each field by hand.

Resolution, frame rate, and interlacing

These are the most important settings and the least nuanced: match them to the format you're delivering. Unlike the alpha setting below, they don't just shape the output — they propagate inward through every part of the project.

- **Width** and **Height** set the canvas size every output renders at, and the size every live video input is scaled to. A 4K camera entering a 1080p project is downscaled at the input; a 1080p camera entering a 4K project is upscaled. There is no per-source resolution override.
- **Frame Rate (fps)** drives every output's frame cadence and the cadence of cache pre-rendering. It also drives the Instant Replay memory budget — see [Set up Instant Replay](#) for buffer sizing.
- **Interlaced** sets interlaced versus progressive output. Most projects leave it off.

Warning: Changing resolution or frame rate while a production is live is disruptive. Every live input re-allocates its capture buffer, so expect a glitch frame across all sources, and every graphic re-renders, so any graphic that was on air stops and has to be played on again. Change the project format between shows or before you go live — never during a live production.

Working with alpha

The **Alpha Key** checkbox decides whether your output carries transparency. What it really comes down to is the role VideoPro plays in your production:

- **Graphics source** — your graphics are composited over video somewhere else (a switcher, vMix, a downstream keyer). Turn **Alpha Key** ON so the output carries transparency.

- **Final renderer** — VideoPro produces the finished frame (graphics already over video, or a full-screen graphic). Turn **Alpha Key** OFF.

If you're not sure which role you're in, see [Choose how VideoPro fits your production](#). Alpha Key on is the default and the most common case.

With Alpha Key on

- **NDI** and **OMT** carry transparency, so a receiver can key the graphics over its own video.
- **SDI** runs in **key + fill** mode by default, using two connectors — one for the key, one for the fill — for a downstream switcher's keyer. On cards that support internal keying, you can instead turn on **Use Internal Keyer** under **Program Out > SDI Setup**: the card acts as a downstream keyer, taking the incoming program on one SDI connector and sending the keyed result out the other.
- **Display** output is composited over a blue or green chroma key or a black luma key background, so a downstream switcher can key the graphics from its HDMI input. The key-color choice appears in **Display Setup** when Alpha Key is on.
- **Image Sequence** and **Watch Folder** outputs write **PNG** files, which carry transparency.
- **OBS** — the NewBlue OBS plugin brings the graphics into OBS Studio with transparency.

Note: Virtual Webcam output is always opaque, whether Alpha Key is on or off. The receiving app — Zoom, Teams, Meet, a browser — composites the feed onto its own background, so it sits outside the Alpha Key choice.

With Alpha Key off

- **NDI** and **OMT** send an opaque image with no alpha channel — more efficient than the transparent stream.
- **SDI** runs in **single-output-per-channel** mode — each VideoPro channel maps to one connector instead of two.

- **Display** output shows the finished, opaque frame, with no key-color background.
- **Image Sequence** and **Watch Folder** outputs write **JPG** files: smaller, and with no transparency.

Premultiplied

When Alpha Key is on, the **Premultiplied** checkbox chooses how the alpha channel is combined with the color values. Most downstream tools accept either setting; a few ask for one specifically. You normally don't need to change it unless your receiving app shows incorrect edges — a fringe of black or white around graphics — in which case try toggling it.

Set the project format: At a glance

OUTPUT	ALPHA KEY ON	ALPHA KEY OFF
NDI / OMT	Carries transparency	Opaque, no alpha (more efficient)
SDI (DeckLink, AJA)	Key + fill on two connectors	One connector per VideoPro channel
Display	Over a chroma or luma key background, keyable	Opaque finished frame
Image Sequence	00001.png , with transparency	00001.jpg , no transparency
Watch Folder	.png	.jpg
Virtual Webcam	Opaque (both modes)	Opaque (both modes)

Set up graphics output

Use this chapter when VideoPro needs to send graphics or Program to another part of your production system. These outputs are the standard ways VideoPro feeds switchers, displays, encoders, SDI cards, NDI systems, vMix, TriCaster, and other production tools.

Which output you choose follows from how VideoPro fits your production. If you haven't made that decision yet, start with [Choose how VideoPro fits your](#)

[production](#) — it maps each integration model to the right output and alpha setting.

Before configuring a graphics output, check the project's video format and alpha settings — output drivers use those project settings when sending Program to SDI, NDI, Display output, files, and other destinations. If the output needs transparency, make sure **Alpha** and premultiplication are set correctly for the destination. See [Set the project format](#).

Primary destinations are selected through the **Program Out** menu.

What's in this chapter

- [Output graphics to a display](#) — to an HDMI or DisplayPort-attached screen, with a downstream key color.
- [Output graphics with SDI](#) — to a Blackmagic DeckLink or AJA SDI card, key + fill or single-output.
- [Output graphics with NDI](#) — broadly supported network video, with audio and tally; the usual path into vMix and other software switchers.
- [Output graphics with OMT](#) — Open Media Transport, a low-latency NDI-class network video transport.
- [Output graphics to a TriCaster](#) — TriCaster's AirSend, with bidirectional tally and command support.
- [Output graphics to OBS Studio](#) — direct integration via the NewBlue OBS plugin, for OBS workflows.

Set up graphics output: Related

- [Set the project format](#) — the project's video format and alpha settings shape every output here.
- [Streaming & delivery](#) — for sending or capturing the finished result: streaming, virtual webcam, recording to files.

- [Troubleshooting](#) — if an output is configured but nothing is reaching the destination.

Output graphics to a display

Every VideoPro edition can route playout to a screen connected to your computer — HDMI, DisplayPort, or any other monitor connection. The Display output sends a full video frame over that connection, which fits two common roles:

- **Graphics contributor into an HDMI switcher.** When a downstream switcher has no key + fill, NDI, OMT, or SDI input but does have an HDMI input and can chromakey, VideoPro draws your graphics over a chroma or luma key background and the switcher keys them over its program. This is common with compact HDMI switchers such as the Blackmagic ATEM and Roland lines. Turn the project's **Alpha Key** on for this role.
- **Final output to a monitor or display.** Send a finished production to a confidence monitor, a projector, or a venue display — including when VideoPro is the downstream graphics tool, overlaying graphics on a switcher program that came in (for example, an ATEM's program over USB-C) and sending the result to a display while also streaming, or feeding the switcher back on another bus. Turn the project's **Alpha Key** off for this role.

For how these fit the wider picture, see [Choose how VideoPro fits your production](#).

Set the display resolution and Display output

- 01 Set your destination screen's resolution and refresh rate to match your project's resolution and frame rate. On Windows, use **Display Adapter Properties**; on macOS, use **System Settings → Displays**. (VideoPro renders graphics at your project settings, but the Display output follows the screen's adapter settings, so the two need to match.)
-

02 In the VideoPro playout window, click the **Program Out** menu and choose **Display**. The Display window opens and shows the color key plus any graphics that are currently live.

03 Drag the Display window onto your separate HDMI or DisplayPort screen, or onto whichever monitor your switcher / capture device is attached to. You can also pick the target screen from **Program Out** → **Display Setup** → **Video**.

04 Double-click anywhere in the Display window to expand it to full screen. Double-click again to return to the original size.

Note: The mouse cursor is hidden while it is over a program output window, so an accidental mouse-over doesn't show up on air.

NOTE

NOTE: About the Program Out menu: "Program Out" is the menu where you choose VideoPro's output destination — Display, NDI, SDI, virtual webcam, image sequences, and so on. It controls where the rendered playout goes.

Select the color key

The color key is the background color shown behind your alpha-channel graphics, intended to feed a downstream chroma keyer. You can choose **Black**, **Blue**, or **Green**.

You can change the key color in two places:

- In the VideoPro playout window, click the **Program Out** menu, choose **Display Setup** → **Key**, and select a color.
- In the Display window itself, open the **Settings** menu, choose **Key**, and select a color.

A key color change takes effect immediately on the running Display output — you don't need to close and reopen it.

Note: The key color is used only when **Alpha Key** is on in [Project Settings](#). With Alpha Key off, the Display output is an opaque finished frame and the key option is not shown.

Choose the audio device

A specific audio output device can be assigned for the Display output. In many cases this means sending the audio to the same device the video goes out on, so the audio travels with the Display output (HDMI, DisplayPort, or other monitor connection).

You can set the audio device in two places:

- In the VideoPro playout window, click the **Program Out** menu, choose **Display Setup** → **Audio**, and select the audio output:
- In the Display window itself, select the audio output from the settings:

The mix that plays out is the Program audio mix; set source levels in the [Audio Mixer panel](#).

Multi-region Display output

When zone layouts are enabled for your VideoPro edition, regions of your project can be mapped to specific physical screens — a video wall, a stadium board plus a locker-room feed, or any setup where different parts of the frame go to different displays.

A **Display Region** is defined in the zone layout: give a zone a `Display` user tag, and the tag's value becomes the region's name. Zones that share the same tag value are combined into a single region.

To assign regions to screens:

01 Click the **Program Out** menu and choose **Display Setup** → **Assign Display Regions....** The **Assign Display Regions** dialog opens with two panels: **Project Display Layout** on top — your project's frame with its Display Regions (or a single **Whole Project** region when the layout defines none) — and **Display Devices** below, showing the screens currently connected.

02 Drag a Display Region from the project layout onto one or more displays. A region can go to several displays, and a display can hold several regions — they render stacked top to bottom.

03 To change a display's stacking order, select a region on the display and use the Up/Down arrow keys; press Delete to unassign it.

04 Click **Apply**.

If the dialog reports that no Display Regions are defined in the current Zone Layout, add a `Display` user tag to at least one zone in the layout first.

Note: When the active zone layout defines Display Regions, per-screen assignment happens only in this dialog — the single-screen **Video** picker in the Display Setup menu is hidden.

See also

- [Set the project format](#) — how the alpha and premultiplied options in your project affect every output destination.
-

Output graphics with SDI

If your VideoPro license includes SDI output, you can drive a Blackmagic DeckLink or AJA SDI output card directly from VideoPro. (These cards are commonly called "capture cards" because most of them capture too, but in this article we're using them for output.) VideoPro's default SDI mode is **key +**

fill — one connector carries the alpha key and another carries the fill, intended for the key/fill input of a downstream switcher such as a TriCaster, a vMix system with SDI inputs, or a hardware switcher. With your project's alpha turned off, VideoPro switches to a single-output-per-channel mode.

- [Set up SDI output](#)
- [Choose between internal and external keying](#)
- [Tested cards](#)

Set up SDI output

- 01 In the VideoPro playout window, click the **Program Out** menu and choose **SDI**, then select **Blackmagic DeckLink** or **AJA**.

Note: The SDI submenu only appears when VideoPro detects a compatible SDI card. If you have a card and don't see it in the menu, install the card vendor's latest drivers and restart VideoPro.

The **Card Output Connections** dialog appears. The dialog is informational — it tells you which physical SDI connectors to plug your key and fill cables into:

"Please connect SDI 1 & 2 of your DeckLink Duo 2 to Key and Fill."

This dialog reappears whenever you change the device assigned to a VideoPro channel, showing the connector instructions for the newly selected device.

Tick **Do not show this dialog again** to suppress it.

- 01 On each Layers tab, use the device-channel dropdown to pick which SDI output that tab plays out to. Different tabs can use different sub-devices on the same card, and (if you have more than one card) different tabs can use different cards.

- 02 Click a graphic's **Play** button to broadcast it through SDI.

Important: SDI output normally runs in **key + fill** mode and requires a card with two or more SDI outputs that support external keying. If your project has alpha turned off,

VideoPro uses one SDI connector per VideoPro channel instead — see [Set the project format](#).

Choose between internal and external keying

By default, VideoPro sends key + fill out two SDI connectors and lets your switcher do the keying. If your card supports it (most current Blackmagic DeckLink and all current AJA models do), you can have the card do the keying internally and emit a single composited SDI feed.

To switch:

- 01 In the VideoPro playout window, click the **Program Out** menu and choose **SDI Setup**.
- 02 Click **Use Internal Keyer** to toggle internal keying on. (When the menu item is checked, internal keying is active.)

The **Use Internal Keyer** option is disabled when an SDI device is currently in use — stop SDI output first, change the setting, and start it again. It's also disabled if your project's alpha is turned off, since internal keying requires alpha.

Driver requirements

VideoPro requires Blackmagic DeckLink driver versions that match the DeckLink SDK VideoPro is built against. If your driver is older, VideoPro displays a one-time **DeckLink Outdated** warning naming the required version when you first try to use SDI output. Update the driver from the Blackmagic website.

Tested cards

The cards below have been tested by NewBlue. Other DeckLink and AJA cards may also work as long as the card's driver advertises external keying support and the card can run at your project's resolution and framerate. Cards that

don't pass that capability check will not appear in the SDI menu, even if they're listed below.

Blackmagic DeckLink

Supports Windows and macOS.

Tested:

- DeckLink Duo 2
- DeckLink Quad 2
- DeckLink 4K Extreme
- DeckLink 4K Pro
- DeckLink 8K Pro
- UltraStudio HD Mini
- UltraStudio 4K Mini
- UltraStudio 4K Extreme

Known not to work (no external keying):

- DeckLink Mini Monitor (base and 4K)
- DeckLink Mini Recorder (base and 4K)
- DeckLink Duo (original)
- DeckLink Quad (original)
- DeckLink Studio 4K
- DeckLink SDI 4K
- UltraStudio Mini Monitor
- UltraStudio Mini Recorder

AJA

Supports Windows only.

Tested:

- Kona 4
- Kona 3G (discontinued)
- Io x3
- Io 4K Plus
- Io 4K
- Io XT
- Corvid 44
- Corvid 88
- Corvid 22
- Corvid 24

Known not to work:

- Kona 5
- Kona HDMI
- Kona IP
- Kona LHi
- Kona 1
- Kona LHe Plus
- Io IP
- Io Express
- T-Tap
- U-Tap SDI
- U-Tap HDMI
- Corvid 3G
- Corvid
- Corvid HEVC
- Corvid HB-R

Output graphics with SDI: See also

- [Set the project format](#) — how alpha and premultiplied alpha settings affect SDI output.
-

Output graphics with NDI

If your VideoPro license includes NDI output, you can publish each VideoPro playout channel as a separate NDI source on your network.

In the VideoPro playout window, click the **Program Out** menu and choose **NDI**.

Each channel on the Channel panel becomes a unique NDI source. For example, if your project has channels named "Lower Thirds", "Picture in Picture", and "Full Screen", three NDI sources will appear on the network.

Tip: NDI is the usual path into vMix and other software switchers: add the VideoPro NDI source as an input in that tool. With your project's alpha on, the NDI source carries transparency, so the receiving switcher can overlay the graphics directly.

How NDI sources appear on your network

VideoPro publishes each channel as a separate NDI source named `VideoPro` — for example, `VideoPro Lower Thirds`. Renaming a channel in VideoPro renames its NDI source: the old name disappears from receivers and the new name takes its place.

Audio

NDI output includes audio. The sample rate and channel count come from your VideoPro project settings. Some receivers (Wirecast and Gameshow) automatically request 44.1 kHz stereo, and VideoPro honors that.

Tally

When a receiver such as Wirecast, vMix, or TriCaster places one of your NDI channels on **preview** or **program**, that channel's tally indicator lights up in VideoPro.

Channels and tiers

The number of simultaneous channels you can create depends on your VideoPro license. For details, see [VideoPro license tiers and add-ons](#).

Tips

- To rename a channel, double-click the channel name, type a new name, and press **Enter**.
- To create a new channel, click the **+** button to the right of the channel names. (Whether new channels can be added depends on your VideoPro tier.)
- To delete a channel, right-click (Windows) or Control + click (macOS) the channel name, choose **Delete**, and confirm.
- Click a graphic's **Play** button to broadcast the graphic on its matching NDI channel. You can monitor it in VideoPro's Program Monitor panel.

Output graphics with NDI: See also

- [Set the project format](#) — with alpha on, NDI sends 32-bit BGRA (with alpha channel); with alpha off, it sends 32-bit BGRX (alpha byte unused).
 - [Output graphics with OMT](#) — an alternative low-latency network video transport.
 - [Output graphics to a TriCaster](#) — when targeting a TriCaster specifically, AirSend offers tally and command round-trip beyond what NDI provides.
-

Output graphics with OMT

OMT (Open Media Transport) is an open-source, low-latency video transport. It's an alternative to NDI for receivers that support it — such as omtplayer, OBS with the OMT plugin, and other OMT-compatible applications.

OMT and NDI are peers in VideoPro. Pick whichever your downstream tooling supports best.

In the VideoPro playout window, click the **Program Out** menu and choose **OMT**.

Each channel on the Channel panel becomes a unique OMT source on your network.

How OMT sources appear to receivers

VideoPro publishes OMT sources with these names:

- **Single channel** — `VideoPro`
- **Multiple channels** — `VideoPro` (for example, `VideoPro Lower_Thirds`)

If you change the number of channels (from one to two or vice versa), the source name pattern changes — receivers locked onto `VideoPro` will lose the stream when you add a second channel.

What works the same as NDI

- Each channel is a separate OMT source.
- Audio is included.
- Channel renaming is supported by double-clicking the channel name.
- The number of channels you can create is set by your VideoPro license.

What's different from NDI

- **No tally** — when a receiver puts your OMT source on preview or program, VideoPro's tally indicator does not light up. (Tally is supported on NDI but not on OMT.)

- **TCP transport** — OMT uses reliable TCP, which means slightly different network behavior than NDI's UDP-based discovery and delivery. For most local networks no configuration change is needed.
- **Discovery ports** — OMT uses ports 6400–6600 by default. If your firewall blocks these, receivers will not see the VideoPro source.

Output graphics with OMT: Tips

- To rename a channel, double-click a channel name, type a new name, and press **Enter**.
- To create a new channel, click the **+** button to the right of the channel names. (Whether new channels can be added depends on your VideoPro tier.)
- To delete a channel, right-click (Windows) or Control + click (macOS) a channel name, choose **Delete**, and confirm.
- Click a graphic's **Play** button to broadcast the graphic on its matching OMT source. You can monitor it in VideoPro's Program Monitor panel.

When to choose OMT vs. NDI

YOU WANT...	CHOOSE
Tally lights to follow your switcher	NDI
To receive in OBS, Wirecast, vMix, TriCaster	NDI (broadly supported)
To receive in omtplayer or an OMT-only application	OMT
Lowest latency on a reliable LAN	Either; test both

Output graphics with OMT: See also

- [Output graphics with NDI](#)
 - [Set the project format](#)
-

Output graphics to a TriCaster

If you're sending VideoPro graphics to a NewTek/Vizrt TriCaster switcher, you have two options:

- 01 **AirSend (Tricaster)** — TriCaster's direct integration, with bidirectional tally and command support.

- 02 **NDI** — TriCaster's standard NDI Net Inputs, with audio and an unlimited number of channels.

This article covers the **AirSend (Tricaster)** option. For NDI, see [Output graphics with NDI](#).

Note: Availability: AirSend (Tricaster) ships with VideoPro **Broadcast** only.

When to use AirSend (Tricaster)

Choose AirSend when you want any of the following:

- TriCaster preview/program **tally** to drive VideoPro's tally indicators.
- TriCaster macros or DSK commands to be received by VideoPro (so a switcher operator can trigger VideoPro animations).
- Direct integration with TriCaster's AirSend inputs.

Choose **NDI** instead when you need:

- **Audio** with your graphics. AirSend is video-only.
- More than two simultaneous TriCaster destinations from one VideoPro.
- Compatibility with non-TriCaster receivers from the same output.

Setup

- 01 In the VideoPro playout window, click the **Program Out** menu and choose **AirSend (Tricaster)**.
-

02 On your TriCaster, configure your AirSend input(s) to receive from this VideoPro machine. (Refer to your TriCaster documentation for AirSend input setup.)

AirSend supports up to **two** TriCaster destinations from a single VideoPro session. If you need more, use NDI.

What works

- **Video only:** graphics with alpha key, sized to your project resolution and frame rate.
- **Tally:** when a TriCaster operator places the AirSend input on preview or program, VideoPro's tally indicator for that channel lights up.
- **Bidirectional commands:** TriCaster macros that target the AirSend input can trigger VideoPro playout actions.

What doesn't work with AirSend

- **Audio** — AirSend output is video-only in VideoPro. If you need audio with your graphics, use NDI.
- **More than two destinations** — AirSend is fixed at two destination devices.
- **Mac** — AirSend output is Windows-only. Mac users must use NDI.

AirSend vs. NDI on a TriCaster — at a glance

CAPABILITY	AIRSEND (TRICASTER)	NDI
Video	Yes	Yes
Audio	No	Yes
Tally back to VideoPro	Yes	Yes
TriCaster command round-trip	Yes	No
Maximum simultaneous destinations	2	Set by your channel limit
Platform	Windows only	Windows and macOS

Output graphics to a TriCaster: See also

- [Output graphics with NDI](#)
 - [Set the project format](#)
-

Output graphics to OBS Studio

Send VideoPro's rendered channel directly into OBS Studio. The channel appears as a source inside OBS with alpha, audio, and lower latency than Virtual Webcam.

If you stream or record from OBS, this is the path to use.

When to use OBS vs. Virtual Webcam

- **Virtual Webcam** appears as a system-wide camera that any camera-aware app can pick — Zoom, Teams, Meet, OBS, browsers. Quality is fixed at 1920 × 1080. On Windows, it carries video only.
- **OBS** is a private channel between VideoPro and OBS, with lower latency, full alpha, video and audio.

If you're streaming or recording from OBS specifically, prefer **OBS** over **Virtual Webcam**.

Output graphics to OBS Studio: Setup

VideoPro's OBS integration is included automatically — there's no separate plugin to install or register.

01 In the VideoPro playout window, click the **Program Out** menu and choose **OBS**.

02 In OBS, click + in the Sources panel and add a new source — choose **VideoPro**. VideoPro is discovered automatically.

03 The channel's playout is now mirrored into OBS, with alpha and audio.

Per-channel sources

If your project has multiple channels, each one is a separate source. Add a separate **VideoPro** source in OBS for each VideoPro channel you want to bring in.

Video format

The feed into OBS is **1920 × 1080 at 30 fps**, regardless of your project's resolution or framerate. VideoPro resamples to that fixed format at the boundary. OBS can scale or composite as needed; if you need a different framerate end-to-end, use NDI or SDI instead.

Output graphics to OBS Studio: Related

- [Output graphics as a Virtual Webcam](#) — the system-wide camera alternative when you need a feed that any camera-aware app can pick.
 - [Set up streaming](#) — for the in-app streaming path that doesn't require OBS.
-

Move and resize items for Program

Use the **Preview panel** to quickly move, resize, and reset a graphic, live video source, media clip, or other visual Project List item before it goes to Program. For exact values, fit behavior, or repeatable placement, use the **Transform** tab in the Properties panel. Both change playout behavior only — they do not edit the original title design.

Project settings define the canvas; Preview and Transform place items on that canvas.

Drag in the Preview panel

Dragging an item in the [Preview panel](#) canvas is the fastest way to place it: drag to move, and use the handles to resize. The canvas and the **Transform** tab are two ways to change the same playout positioning — drag in the canvas and the Transform rows update; edit the rows and the item moves in the canvas.

The Transform tab

The Transform tab lives in the [Properties panel](#) for the items that support it. Use it for exact values, fit behavior, or repeatable placement.

Which items show which controls

- **Graphics** show **Position** and **Scale**.
- **Media** shows **Position**, **Scale**, **Fit Mode**, and **Fill Color**.
- **Live inputs** show **Fit Mode** and **Fill Color** only.
- Some item types — Shot Layouts among them — have no Transform tab at all.

Position and Scale

- **Position** — pixel offset from the item's designed position. Default is **(0, 0)**, which preserves the design. Positive X moves right; positive Y moves down.
- **Scale (%)** — independent X and Y scale factors. Default is **(100, 100)**. Each axis is set separately.

There is no rotation field on this tab. Rotation is set in the [Designer](#), not in playout.

Fit Mode

When the project supports content zones, the **Fit Mode** selector chooses how the item scales inside its assigned zone:

- **Fill (Crop)** — the item fills the zone, cropping anything that does not fit.
- **Stretch** — the item is stretched to the zone's dimensions, distorting the aspect ratio.
- **Fit** — the item fits inside the zone without cropping, leaving margins where the aspect ratios differ.
- - — the project's default behavior.

Fill Color

When **Fit** leaves margins around an item, **Fill Color** sets the color drawn behind it to fill those margins. The default is opaque white. The picker supports alpha — set the alpha to 0 to leave the margins transparent.

Zone Assignment

When the project supports content zones, the **Zone Assignment** row shows the current zone for the item. The default is **Unassigned**. Click the button to open the zone selection dialog; pick a zone and click **OK**.

Reset Values

Reset Values resets only Position and Scale, back to **(0, 0)** and **(100, 100)**. It does not reset **Fit Mode**, **Fill Color**, or **Zone Assignment** — those keep their current values. Reset each one separately if needed.

Bake the transform into the design

Playout Position and Scale live with the Project List item — the original design is untouched. To make them part of the design itself, open the graphic in the Designer and choose **Alignment** → **Apply Global Scale and Position**. The design geometry absorbs the current playout Transform, and Position and Scale reset to their defaults — the Designer now shows exactly what plays out. If you discard the Designer session instead of saving, the previous Position and Scale are restored.

After Effects items

When the item is rendered through the After Effects renderer, a **Scale to fit project dimensions** checkbox appears. Check it to scale the AE composition to your project's frame size — for example, a 3840x2160 composition into a 1920x1080 project. When checked, the Scale rows are disabled and the item is locked to the comp-to-project ratio.

Move and resize items for Program: Related

- [Properties panel](#)
 - [Preview panel](#)
 - [Use live video sources](#)
 - [Create a media sequence](#)
-

Create a squeeze (squeezeback)

A **squeeze** — also called a **squeezeback** — is the broadcast move where the live video shrinks into a smaller area of the screen while graphics slide in to fill the space that opens up. It's the look a sports broadcast uses when it pinches the game video into one corner and brings in a stats panel, sponsor bar, or "coming up next" sidebar, then expands the video back to full screen afterward.

In VideoPro you build a squeeze with the **zone** system. You describe where the video and graphics sit in two different arrangements, and VideoPro animates smoothly from one to the other when you play a Shot.

How a squeeze works

Three building blocks work together:

TERM	WHAT IT IS
Zone	A named rectangle on screen that holds content — for example a Video zone, an L Bar zone, or a Full Screen zone.
Zone layout	A complete arrangement of zones. You make two: one for the normal (full-screen) look and one for the squeezed look. Each is saved as a .zonelayout file.
Shot	A button in the Shot Launcher that puts the program into a chosen state. A Shot can select which zone layout is active, so playing it triggers the squeeze.

The key idea: you create **two zone layouts that contain the same zones**, but with the zones in different positions and sizes. In the *normal layout the video fills the screen and the side bar sits off-screen; in the squeezed layout the video is smaller and the side bar is on-screen*. When you play a Shot that switches from one layout to the other, VideoPro animates every zone from its old position to its new one — so the video shrinks and the bar glides in together.

Before you start

- Zone layouts must be enabled for your VideoPro edition. If Project Settings has no **Layout Preset** row, or a Shot's properties have no **Zone Config** control, zone layouts aren't enabled for your edition — contact NewBlue or your administrator.
- Decide your project's video format first (for example **1920 × 1080**) and design your zone layouts to match it, so positions line up exactly.

Step 1 – Plan your zones

Sketch your two looks and give each region a name. Use the **same names** in both layouts. A typical sports squeeze uses three zones:

- **Video** — the live camera/program video.
- **L Bar** — the sidebar or lower bar graphic that moves in.
- **Full Screen** — a full-frame overlay that stays put in both looks (good for a scoreboard or clock that should never move).

ZONE	NORMAL LOOK	SQUEEZED LOOK
Video	Full screen (e.g. 1920 × 1080)	Smaller (e.g. 1600 × 900, top-left)
L Bar	Off-screen / hidden behind the full video	On-screen, filling the freed space
Full Screen	Full screen (unchanged)	Full screen (unchanged)

Tip: Keep the video's shape. If your project is 16:9, make the squeezed Video zone 16:9 too (for example 1600 × 900) so the picture shrinks without stretching.

Step 2 – Create the two zone layouts

Use the **Zone Layout Editor** to build each layout. You can start from a built-in preset — **Horizontal Split**, **Vertical Split**, or **Quads** — or build your own zones from scratch.

01 Open the Zone Layout Editor and create a new layout. Name it something clear, such as `Squeeze Normal`.

02 Add your zones and give each one a **name**, a **position**, and a **size**. Add the same set of zones you planned in Step 1.

For the *normal* layout, make the Video zone full screen and place the L Bar zone so it's off-screen or fully covered by the video.

01 Save the layout to a `.zonelayout` file.

02 Create the second layout, name it `Squeeze Applied`, and add the **same zones with the same names** — but position them for the squeezed look: a smaller Video zone and the L Bar zone moved on-screen.

03 Save this layout too.

Important: Names must match. A zone only animates if a zone with the *identical name* exists in **both** layouts. The Video, L Bar, and Full Screen zones must appear in both `Squeeze Normal` and `Squeeze Applied`. A zone that exists in only one layout will not move smoothly.

Step 3 – Add the layouts to your project

- 01 Open **Project Settings**.
- 02 Find the **Layout Preset** row. Use its load button to import your first layout file (`Squeeze Normal`), then repeat for the second (`Squeeze Applied`). Both now appear in the **Layout Preset** list.
- 03 Choose your project's starting layout in the **Layout Preset** dropdown — normally the full-screen one (`Squeeze Normal`).
- 04 Save Project Settings.

Note: If you later change a layout in the Zone Layout Editor, re-import it so the project picks up the updated version.

Step 4 – Assign your content to zones

Tell each piece of content which zone it belongs to:

- Assign each **graphic, media clip, or live source** to a zone with the **Zone Assignment** row on its [Transform tab](#) — put the side-bar graphic in `L Bar` , and a scoreboard or clock in `Full Screen` so it stays put.
- Assign the **switcher video** to the `Video` zone with the Shot's **Switcher Zone** control (see [Create Shot Layouts](#)).

Tip: Designing the bar graphic. Build the bar artwork so the colored bar sits where you want it on-screen and the rest of the graphic is transparent, so the video shows through. When the video squeezes, the bar is revealed in the space the video no longer covers.

Step 5 – Create the Shots

Make one Shot for each look. For each Shot, open its **Shot Properties**:

- 01 **Normal Shot**

- **Zone Config:** Squeeze Normal (or **Follow Project Setting** if that's your full-screen default).
 - **Switcher Zone:** Video .
-

02 Squeeze Shot

- **Zone Config:** Squeeze Applied .
- **Switcher Zone:** Video .
- **Animation:** the length of the move, in seconds (for example 0.5).
- **Timing:** the easing curve for the move:
 - **Linear** — constant speed.
 - **Ease In** — starts slow.
 - **Ease Out** — ends slow.
 - **Ease In+Out** — slow at both ends (a smooth, natural broadcast move).

Name the Shots clearly — for example **Normal** and **Squeeze** — so they're easy to find in the Shot Launcher.

Step 6 – Run the squeeze

01 Play the **Normal** Shot to establish the full-screen look.

02 Play the **Squeeze** Shot. The video pinches down to the Video zone while the side bar glides into the L Bar zone, over the duration and curve you set.

03 Play the **Normal** Shot again to squeeze back out to full screen.

Note: The move happens between Shots. The animation plays when you switch from one Shot's layout to another. The first Shot you play simply sets its look; the move appears when the next Shot changes the layout.

Tips and best practices

- **Same zones, same names, both layouts.** This is the single most important rule. The video and every graphic that should move must exist, under the same name, in both layouts.
- **Use a Full Screen zone for anything that shouldn't move** — a scoreboard, clock, or bug. Keep it identical in both layouts and it stays rock-steady through the squeeze.
- **Match your project's video format.** Design the layouts at the same resolution as your project so positions line up exactly.
- **Pick a duration that reads on air.** Around **0.3–0.7 seconds** with **Ease In+Out** gives a clean, professional move. Shorter feels snappy; longer feels gentle.
- **Build bar graphics with transparency** where the video shows through, so the squeeze reveals the bar cleanly.
- **Reuse the pair.** Once you have a Normal / Squeeze layout pair and the two Shots, you can drive the whole effect from two buttons for the rest of the show.

Worked example – sports sidebar

Goal: webcam/game video squeezes to the upper-left, a blue sidebar slides in on the right, and a scoreboard stays pinned at the top.

ELEMENT	ZONE	NORMAL LAYOUT	SQUEEZED LAYOUT
Game video	Video	1920 × 1080 (full)	1600 × 900 (top-left)
Sidebar graphic	L Bar	Hidden / off-screen	On-screen at right
Scoreboard	Full Screen	Full screen	Full screen (unchanged)

Shots:

- **Normal** → Zone Config Squeeze Normal , Switcher Zone Video .
- **Squeeze** → Zone Config Squeeze Applied , Switcher Zone Video , Animation 0.5 , Timing Ease In+Out .

On air: play **Normal** for full-screen game video; play **Squeeze** to pinch the video and bring in the sidebar; play **Normal** again to return to full screen. The scoreboard never moves.

Create a squeeze (squeezeback): See also

- [Move and resize items for Program](#) — the **Zone Assignment** and **Fit Mode** controls for placing content inside a zone.
 - [Create Shot Layouts](#) — Shot Properties, including **Switcher Zone** and **Switcher Video**.
 - [Use the Switcher panel](#) — set up the live video sources a squeeze switches between.
-

Live video inputs

Bring live video into VideoPro from cameras, capture cards, NDI, screen capture, window capture, browser sources, and other sources. Use live video inside graphics, in Shot Layouts, as full-screen sources, or with the Switcher panel.

Live video inputs: What's in this chapter

- [How live video inputs work](#) — what kinds of live sources VideoPro accepts and how they behave in the project.
- [Use live video sources](#) — use this when you need a camera or other live video feed in your show.
- [Cameras and capture cards as a live source](#) — USB, HDMI, DeckLink, and AJA devices.
- [NDI as a live source](#) — discovery, PTZ, audio, and Lock on for downstream keying.
- [Screen as a live source](#) — full-display capture on Windows and Mac.

- [Window as a live source](#) — single-application window capture.
- [Browser as a live source](#) — URL-driven sources, transparent backgrounds, control pages.

[Live video inputs: Related](#)

- [Set up your production — section overview](#)
 - [Switching & instant replay](#) — for cutting between live sources on air.
-

[How live video inputs work](#)

A live video input is any moving source you bring into VideoPro as a layer or as a Switcher feed: a camera connected to the machine, an NDI stream on the network, a captured display or window, a web page, an SDI capture card, a network protocol like SRT, or a Zoom participant. They all enter the project through the same pipeline, which means once a source is open every consumer in the project can read it — the same camera can be a layer in two channels and a Switcher input without ever copying the captured frame.

This article orients you to the input categories and how they map to the **Live Audio/Video** menu. Each type has its own dedicated article with the details you need when you set the source up.

[Live Audio/Video input categories](#)

When you go to **Add new item > Live Audio/Video** (or right-click in the Project List and choose **New > Live Audio/Video**), VideoPro shows the categories below. Which categories are visible depends on your VideoPro edition, the hardware present, what's discovered on the network, and any active integrations:

- **Commonly discovered video sources** — **Windows Device / Mac Device** for USB and HDMI cameras (Media Foundation on Windows, AVFoundation on

Mac); **NDI** for sources advertised on the local network; **Screen** for a full display; **Window** for a single application window.

- **User-created / preset sources** — **Browser** (a web page; use **Add Browser** to create a URL preset), **SRT / RTSP / RTMP** (network protocols; use the **Add ...** entries), and **Media Clip** (use a saved media item as a live video source).
- **Hardware / protocol sources** — **Blackmagic** and **AJA** for SDI capture cards; **OMT** for OMT senders; **Zoom** when a Zoom meeting is joined and producing per-participant feeds.
- **Audio-only sources** — **Audio Device** (input devices the OS exposes) and **System Audio** (the desktop's own audio output).

The same menu is reused in the Switcher panel's right-click **Add input** menu, so the source you create as a layer also becomes selectable as a Switcher input.

How sources persist

Once a source is open, the whole project can share it. Multiple layers and the Switcher can read from one source simultaneously — there is no duplicate capture and no extra CPU cost when the same camera feeds two places.

Sources that disappear (a camera unplugs, a network stream drops) are marked failed and re-opened automatically when they return. You do not need to remove and re-add the source after a brief interruption.

Browser sources persist as project presets — their URL, name, and settings are saved with the project. NDI, screen, and device sources are discovered each time the project opens and are matched back to your layers by name.

Test patterns

Beyond the user-created and discovered sources, VideoPro also includes built-in test sources — colored bars, test patterns, and similar — under the **Utility** entry. These behave like every other input and are useful for proving the output path before the cameras are connected.

Audio comes with video

Most input types carry audio alongside video. NDI, OMT, Browser, capture cards, and Mac screen capture all deliver audio into the project's audio mixer. Windows screen capture is the exception — it does not capture system audio; pair it with a separate **System Audio** source if you need the desktop's sound.

Audio from a live input is routed through the Audio Mixer into the Program audio mix. See [Audio Mixer panel](#) for the controls.

Layering and the Switcher

A live video source on its own is a layer in a channel — order it relative to your graphics layers in the Project List. Graphics typically sit **above** live video layers so titles render on top of the camera.

When you add the same source to the [Switcher panel](#), the Switcher cuts and dissolves between sources at the program output level. The layer in the Project List and the Switcher input share the same captured frame.

Where to go next

Each input type has its own setup article:

- [NDI as a live source](#) — discovery, PTZ, audio.
- [Screen as a live source](#) — display capture, Windows and Mac.
- [Window as a live source](#) — per-application window capture.
- [Browser as a live source](#) — URL-driven sources, transparent backgrounds, control pages.

For cameras connected directly to the machine, see [Use live video sources](#), which also covers PTZ controls and the Lock on for downstream keying option.

How live video inputs work: Related

- [The Switcher panel](#) — cutting between live inputs.

- [Audio Mixer panel](#) — routing audio from live inputs.
- [Set the project format](#) — project resolution and frame rate, which all inputs are scaled to.

[Use live video sources](#)

Add live video sources from your production directly into a VideoPro channel. A live video source appears in the Project List as a layer you manage with the same playout controls as any other layer, with additional properties depending on the source.

- [Add a live video source](#)
- [Lock on for downstream keying \(Broadcast only\)](#)
- [PTZ controls](#)

[Add a live video source](#)

A live video source accompanies your graphics and media in the channel: it displays the live feed in real time and appears in Program when the layer is live.

- 01 Open VideoPro. Click **Add new item** at the bottom of the Project List (or right-click in the Project List) and choose **Live Audio/Video**.
VideoPro shows the input categories below. Which categories are visible depends on your VideoPro edition, the hardware present, what's discovered on the network, and any active integrations.

- **Windows Device / Mac Device:** USB or HDMI cameras connected directly to the machine running VideoPro, plus OS-level virtual cameras (Zoom virtual camera, OBS virtual camera, NDI Webcam).
- **NDI:** live video sources that are being transmitted over NDI on your local network. VideoPro discovers them automatically.

- **Screen / Window:** a live feed of a full display or a single application window. Displays appear under **Screen**; the **Window** submenu lists each capturable application window as . On macOS, ScreenCaptureKit can also capture an application across virtual desktops.
- **Browser:** a web page rendered as a live video source. Choose **Add Browser** to enter the URL and save the source as a preset. A Browser source can optionally use a transparent background (for web overlays that composite over other layers) and a separate **control URL** for an operator dashboard. Audio from the page is captured directly from the page itself.
- **Blackmagic / AJA:** SDI capture from a Blackmagic Design (DeckLink) or AJA card. Visibility depends on your VideoPro edition and on the vendor driver being installed.
- **SRT / RTSP / RTMP:** live network protocols. Use the **Add ...** entries under each to point VideoPro at a stream URL.
- **Media Clip:** a saved media file consumed as a live video source.
- **Zoom:** per-participant feeds from a joined Zoom meeting (appears when a meeting is active).
- **OMT:** OMT senders on the network.
- **Audio Device / System Audio:** audio-only sources for the Audio Mixer.
- **Utility:** built-in test pattern and generator sources.

01 Selecting any of the options above will add that live video source as a layer on your current channel. You may click and drag the layer above or below other layers to determine its layer hierarchy.

Note: Live video layers work best if they are below your graphics layers so that your graphics will play above your live video sources.

Source settings

After you add a live source, select its row and open the **Live Audio/Video** tab in the Properties panel — the input source picker and the per-source settings

live there.

Protocol inputs add their own settings tab next to it. **RTMP Settings** and **SRT Settings** carry the connection mode, the listen port, and the addresses external encoders connect to:

Lock on for downstream keying (Broadcast only)

The **Lock on for downstream keying** checkbox in the live layer's **Layer Properties** panel locks playback on so that, once the layer is playing, it cannot be stopped until the checkbox is cleared. Use it when a live video source has to stay live for the whole show — a downstream key, a permanent background, a return feed — and a stray hot-key or shot recall should not be able to take it off air.

Downstream keying is included with VideoPro Broadcast; other editions may not show the checkbox.

PTZ Controls (Broadcast only)

If a PTZ camera is added as a live video source and you are licensed for VideoPro Broadcast, then your **Layer Properties** panel will contain PTZ controls for that live video layer. PTZ is supported on NDI-enabled PTZ cameras; USB PTZ support is limited and not all USB cameras expose PTZ on every OS.

Use the **Pan**, **Tilt**, **Zoom**, and **Focus** sliders to frame the shot. The **Auto** button on the Focus row autofocuses the current shot. You can also adjust Pan and Tilt directly from the Designer's editable display: hold CTRL and drag inside the editable preview to move the camera.

To save a preset, click **Store** (it stays pressed), then click one of the 12 numbered preset buttons. To recall, click the numbered button directly or pick the preset from the **Play Preset** dropdown so it recalls automatically when the layer plays. The store grid exposes 12 slots; the **Play Preset** dropdown currently exposes presets 1-8.

Cameras and capture cards as a live source

USB webcams, HDMI capture sticks, and built-in laptop cameras enter VideoPro through the **Windows Device** (Windows) or **Mac Device** (Mac) entry on the **Live Audio/Video** submenu. Professional SDI capture cards from Blackmagic Design and AJA take their own entries — **Blackmagic** and **AJA** — because the vendor SDKs each register a distinct input type and VideoPro explicitly filters them out of the generic Windows/Mac device list. This article covers adding any of these sources, PTZ on supported cameras, audio handling per device class, and the differences that matter for SDI cards.

Cameras and capture cards as a live source: Before you start

- On Windows, plug the camera or capture card in before launching VideoPro. The device list is enumerated through Media Foundation; new arrivals show up on the next scan.
- On macOS, the first time you use a camera you'll see a system prompt asking to grant camera access to VideoPro. Grant it; without permission the source produces a black frame.
- SDI cards (DeckLink, AJA) require their vendor driver to be installed, and some VideoPro editions do not include SDI capture. If the card is installed but the menu entry is missing, your edition may not include it — contact NewBlue support to add it.

Add a camera or capture device

01 From the bottom of the Project List click **Add new item** (or right-click anywhere in the Project List) and choose **Live Audio/Video** > the entry that matches your device:

- **Windows Device** (Windows) or **Mac Device** (Mac) for USB webcams, HDMI capture sticks, built-in laptop cameras, and OS-level virtual cameras (Zoom

virtual camera, OBS virtual camera, NDI Webcam — these appear here because the OS presents them through the same camera APIs).

- **Blackmagic** for DeckLink SDI capture (and Blackmagic's other SDK-driven inputs).
- **AJA** for AJA SDI capture.

01 The submenu under each entry lists every connected device of that type by name. Pick the one you want.

02 The device is added as a layer on the current channel. Drag the layer up or down to set its z-order relative to your graphics.

PTZ on USB cameras

PTZ controls are not NDI-only. A USB UVC camera that reports pan, tilt, and zoom through Media Foundation on Windows exposes the same Layer Properties controls described in [NDI as a live source](#) — Pan, Tilt, Zoom, Focus, the **Auto** button on the Focus row, and a 12-slot Preset store grid with a **Store** button (the **Play Preset** dropdown exposes presets 1-8). CTRL-drag in the Designer's editable display also pans and tilts.

If the camera does not report PTZ capability, the PTZ block in Layer Properties is absent — there's no error, just no controls.

SDI capture: DeckLink and AJA

DeckLink and AJA cards each take their own **Live Audio/Video** submenu entry. A few behaviors are specific:

- **Auto format detection** — If the incoming signal format changes mid-show (1080p59.94 to 720p, say), the card stops and restarts capture. Expect one glitch frame at the change.
- **Embedded audio** — SDI capture carries the embedded audio with the video; it appears in the Audio Mixer automatically. USB cameras require a separate

audio source.

- **DeckLink hot audio** — DeckLink delivers audio about +20 dB above unity. VideoPro compensates on the way in so meters read normally. A parallel monitor path on the same DeckLink card will read 20 dB hot relative to the VideoPro mixer.
- **Shared availability** — a VideoPro edition that includes DeckLink capture also includes AJA capture, and vice versa.

Audio handling

USB and HDMI cameras (Windows or Mac) deliver video only through the **Windows/Mac Device** path. To bring in the camera's microphone, add the matching audio device under **Live Audio/Video > Audio Device** — it's a separate source in the Audio Mixer.

SDI capture (DeckLink, AJA) carries the embedded audio with the video; no separate add step is needed and the audio appears in the mixer automatically.

Disconnect handling

If a camera stops delivering frames — unplugged, powered off, signal lost — the layer shows a "disconnected" overlay with the device name after roughly three seconds. The layer keeps trying to reconnect; plugging the camera back in or restoring the signal resumes capture without re-adding the source.

There is no manual **Refresh devices** button. Hot-plugged devices appear in the menu on the next scan cycle (a few seconds).

Cameras and capture cards as a live source: Lock on for downstream keying (Broadcast only)

The **Lock on for downstream keying** checkbox in the live layer's **Layer Properties** panel locks playback on so the layer cannot be stopped until the checkbox is cleared. Use it when a camera or capture card has to stay live for the whole show. Downstream keying is included with VideoPro Broadcast; other editions may not show the checkbox.

Cameras and capture cards as a live source: Related

- [How live video inputs work](#) — the input pipeline overview.
 - [NDI as a live source](#) — PTZ controls and the broader Layer Properties layout.
 - [Use live video sources](#) — Lock on for downstream keying and live-layer ordering.
 - [The Audio Mixer](#) — audio routing for cameras and SDI capture.
-

NDI as a live source

NDI lets VideoPro receive video, audio, and PTZ control from any NDI source on the local network. Cameras, switchers, and software encoders that advertise NDI appear in the **Live Audio/Video > NDI** submenu without any IP address entry. This article covers adding an NDI source, the PTZ controls, audio handling, and the differences between NDI input and NDI output.

NDI as a live source: Before you start

- Both machines must be on the same network, or you must have an NDI Discovery Server or NDI Access Manager configured to bridge segments. NDI uses mDNS for peer discovery; sources in another VLAN do not auto-appear without one of these.
- If you also send NDI **out** of VideoPro, see [Output graphics with NDI](#). The NDI input described here is independent of the NDI output side — different settings, different sources, different controls.

Add an NDI source

- 01 Open the project. From the top menu, choose **File > New > Live Audio/Video > NDI**, or right-click in the Project List and choose **New > Live Audio/Video > NDI**.
-

- 02 Pick the source from the submenu. VideoPro lists every NDI source it has discovered on the network.
-

- 03 The source is added as a layer on the current channel. Drag the layer up or down to set its z-order relative to your graphics.

If the source you expect is missing, give the discovery scan a few seconds. The list updates whenever you reopen the **Live Audio/Video** menu; sources appear automatically as the NDI discovery layer sees them on the network. There is no manual rescan button.

PTZ controls

When an NDI source advertises PTZ capability, the **Layer Properties** panel shows sliders for **Pan**, **Tilt**, **Zoom**, and **Focus**, an **Auto** button on the Focus row (autofocus), and a grid of 12 numbered preset buttons with a **Store** button beside them. A separate **Play Preset** dropdown can recall presets 1-8 when the layer plays.

- 01 Select the live video layer in the Project List.
-
- 02 In the **Layer Properties** panel, adjust **Pan**, **Tilt**, **Zoom**, and **Focus** to frame the shot.
-
- 03 Click **Auto** on the Focus row to autofocus.
-
- 04 To save a preset: frame the shot, click **Store** (it stays pressed), then click one of the numbered preset buttons (1-12).
-
- 05 To recall a preset: click the numbered button directly, or select the preset from the **Play Preset** dropdown so it recalls automatically when the layer plays.

You can also pan and tilt directly from the Designer's editable display: hold CTRL and drag inside the editable preview to move the camera.

PTZ capability is detected a moment after the camera connects. A freshly-opened source may briefly show no PTZ controls; they appear once the camera has reported its capabilities.

NOTE

NOTE: PTZ is not NDI-only. USB UVC cameras that report PTZ through Media Foundation on Windows also expose these controls when added as a **Windows Device** source. The control set is the same.

Audio

NDI carries audio alongside video. VideoPro routes NDI audio into the project's audio mixer, where it fans out to the Program, Monitor, ISO, and streaming buses subject to per-source mute and Audio-Follows-Video settings.

There is no extra step to enable NDI audio — when the NDI source produces audio, VideoPro mixes it. To mute the source, use the Audio Mixer's per-channel mute. To follow video automatically (audio on when the source is on Program), configure Audio-Follows-Video on the Switcher panel.

See [The Audio Mixer](#) for the routing controls.

Lock on for downstream keying

The **Lock on for downstream keying** checkbox in the live layer's **Layer Properties** panel locks playback on so that, once the layer is playing, it cannot be stopped until the checkbox is cleared. Use it when an NDI feed has to stay live for the whole show — a downstream key, a permanent background, a return feed — and a stray hot-key or shot recall should not be able to take it off air.

Downstream keying is included with VideoPro Broadcast; other editions may not show the checkbox.

Reconnection

When an NDI source drops and comes back, the NDI library normally reconnects automatically and frames resume on their own. The layer you set up in the Project List keeps its name and properties; you do not need to re-add the source.

NDI input versus NDI output

These are two separate features and they don't share settings:

- **NDI input** (this article) brings an external NDI source **into** VideoPro.
- **NDI output** sends VideoPro's Program **out** to other NDI receivers. See [Output graphics with NDI](#).

The NDI Group setting on the output side does not affect the input side. If you need an NDI input from a specific group, configure that filtering in the NDI Access Manager on the receiving machine.

NDI as a live source: Related

- [How live video inputs work](#) — the input pipeline overview.
- [Use live video sources](#) — Lock on for downstream keying details and the broader live-layer workflow.
- [Output graphics with NDI](#) — the output side.
- [The Audio Mixer](#) — audio routing for NDI sources.

Screen as a live source

Screen capture brings a live feed of any monitor connected to the VideoPro machine into the project as a video source. Use it to show a presentation, a software demonstration, or any application that runs full-screen on a connected display. This article covers full-display capture; for capturing a

single application window instead of the whole desktop, see [Window as a live source](#).

Screen as a live source: Before you start

- On Windows, screen capture uses the Windows Graphics Capture API. This requires **Windows 10 version 1803 (April 2018 Update) or newer**. On older Windows versions the **Screen** submenu is empty and no error is shown.
- On Mac, screen capture uses ScreenCaptureKit. Grant VideoPro Screen Recording permission the first time you add a screen source. macOS requires a relaunch after granting Screen Recording permission.
- Plan your project resolution before adding a screen source. The captured display is scaled to the project resolution; a 4K display captured into a 1080p project is downscaled at capture time.

Add a display as a source

- 01 Open the project. From the top menu, choose **File > New > Live Audio/Video > Screen**, or right-click in the Project List and choose **New > Live Audio/Video > Screen**.
- 02 The **Screen** item opens onto two sibling submenus — **Screen** (the connected displays) and **Window** (visible application windows). Open the **Screen** submenu and pick the display you want to capture.
- 03 The captured display appears as a layer on the current channel. Drag it relative to your graphics layers to set z-order.

Display names come from the OS, refined by Qt's display information when available. If both come back empty, the fallback is "Display 1", "Display 2", and so on.

NOTE

NOTE: The **Screen** and **Window** menu items are two views of the same capture feature; they appear as separate submenus to make the choice between "full display" and "single window" clear. Settings and behavior overlap between the two; the differences are noted in the window article.

Static screens stay live

A captured display that does not change (a paused slide, a static dashboard) does not generate new frames — the OS only delivers a frame when something on screen actually changes. VideoPro keeps the source marked as live during these idle periods, so a frozen slide does not get a "disconnected" overlay drawn on top of it.

Cursor capture

In the source's Live Audio/Video properties panel, a **Capture mouse cursor** checkbox controls cursor inclusion. The checkbox is on by default and shows only when the device type is **Screen** (which covers both display and window capture).

Audio: Mac yes, Windows no

- **Mac (ScreenCaptureKit)** can capture audio scoped to the source — for an Application Capture source the audio is scoped to that app, for a Display Capture source it is system audio. Enable audio capture on the source's settings.
- **Windows (Graphics Capture)** does **not** capture system audio. If your show needs the desktop's sound, add a separate **System Audio** source from the **Live Audio/Video** menu and mix it with the screen capture in the audio mixer.

Frame rate

The capture frame rate can be configured per source. Set it to match the project frame rate for steady playback. A display that refreshes at 144 Hz captured at 30 fps delivers 30 fps to the project — the capture rate caps the ingest, regardless of the display's refresh.

VideoPro on the captured screen

If you point screen capture at the same display where VideoPro's own window is shown, you get a feedback recursion — VideoPro renders itself rendering itself. On Mac, ScreenCaptureKit's self-exclusion can hide VideoPro's window from the capture. On Windows, move VideoPro to a different display.

Edge cases

- **No "screen capture unavailable" message on older Windows.** If you're on a Windows build before 10/1803, the **Screen** submenu lists nothing. Update Windows, or use a different source type.
- **4K capture is heavy.** Capturing a 4K display into a 4K project consumes proportionally more CPU and memory than 1080p. If you see dropped frames on the Program output, lower the capture frame rate or downscale by reducing the project resolution.
- **Capture rate caps the source.** Even on a 144 Hz monitor, only the configured frame rate reaches the project.

Screen as a live source: Related

- [Window as a live source](#) — capture one application window instead of the whole display.
- [How live video inputs work](#) — the input pipeline overview.
- [The Audio Mixer](#) — routing screen capture audio (Mac) or a paired System Audio source (Windows).
- [Set the project format](#) — project resolution and frame rate.

Window as a live source

Window capture brings a single application window into the project as a live video source — a slide deck, a browser window, a scoring app, or any visible (non-fullscreen) application — without including the rest of the desktop. This is the targeted alternative to full-display capture. If you need the whole monitor, see [Screen as a live source](#).

Window as a live source: Before you start

- On Windows, window capture uses the Windows Graphics Capture API and requires **Windows 10 version 1803 or newer**. On older Windows the **Window** submenu is empty.
- On Mac, the equivalent is application capture via ScreenCaptureKit — a scope set to a specific application rather than a specific window. Grant Screen Recording permission to VideoPro the first time.
- Open the target application **before** you try to add it as a source. Windows are discovered from the OS's list of visible top-level windows.

Add a window as a source

- 01 Open the application you want to capture so its window is visible (not minimized).
 - 02 In VideoPro, choose **File > New > Live Audio/Video > Screen**. The **Screen** item is itself a submenu that contains two sibling submenus — **Screen** (the displays attached to your machine) and **Window** (the visible application windows).
 - 03 Open the **Window** submenu and pick the window. Each entry is labeled  so you can pick the right one even when two apps have similar titles.
-

04 The captured window appears as a layer on the current channel.

If your window is not in the list, give the discovery scan a few seconds. VideoPro refreshes the window list automatically. If the window still doesn't appear, the OS may not consider it capturable — try a regular application window rather than a tool window or system overlay.

On Mac, window capture is reached differently: choose **Add Application Capture** from the source picker. The picker has a **Method** combo with **Display Capture** and **Application Capture** options; pick **Application Capture** and choose the running app.

NOTE

NOTE: **Screen** and **Window** are two views of the same capture feature; the menu separation reflects the choice between a full display and one window. On Mac, the equivalent is application-scoped capture: ScreenCaptureKit follows the captured app across virtual desktops, so a window that moves to a different Space stays visible.

What gets captured

The window's contents fill the captured frame. The OS taskbar, the wallpaper, and other windows are not included. If the user resizes the window mid-show, subsequent frames carry the new size and the layer is scaled to fit.

If the source window is hidden

- **Minimized:** behaviour depends on the OS. Test with your target application before going live — some apps still deliver frames when minimized, others stop.
- **Behind other windows:** the captured frame usually continues to update — the Graphics Capture API can render windows that aren't on top.
- **Closed:** capture stops. The last frame freezes on the layer; VideoPro does not draw an automatic "disconnected" overlay for window or screen capture (these sources are marked as allowing infrequent updates so they're never

flagged as disconnected). To clear the frozen frame, reopen the application and re-add the source.

Static windows stay live

A captured window that doesn't change (a static slide, a paused dashboard) does not generate new frames — the API only delivers frames on content change. VideoPro keeps the source marked live during these idle periods, so a static window is not flagged as disconnected.

Window as a live source: Cursor capture

In the source's Live Audio/Video properties panel, a **Capture mouse cursor** checkbox controls cursor inclusion. The checkbox is on by default and shows only when the device type is **Screen** (which covers both window and display capture).

The same panel carries **Include in Switcher / Instant Replay** and, on Broadcast, **Lock on for downstream keying** — see [Use live video sources](#).

Window as a live source: Audio

- **Windows:** window capture does **not** carry audio. If you need the application's sound, add a separate **System Audio** source.
- **Mac:** application-scoped ScreenCaptureKit capture can include audio, scoped to the captured app (not system-wide). Enable audio on the source's settings.

Window as a live source: Edge cases

- **Windows are bound by handle.** The OS identifies a window by a handle that is created at launch and goes away when the app closes. If you close and reopen the target application, you may need to re-add the source — the new instance has a different handle. Restart the target application **before** opening the VideoPro project where possible.

- **Best-effort window list.** The capture API filters out some windows (system tray, certain UWP overlays, the Windows shell). Apps that don't appear in the menu generally can't be captured this way; switch to full-display capture and crop with the layer's transform.
- **No "Add Window" entry.** Unlike Browser, windows are discovered automatically. Open the window in the OS, then refresh.

Window as a live source: Related

- [Screen as a live source](#) — full-display capture, the companion to this article.
 - [How live video inputs work](#) — the input pipeline overview.
 - [The Audio Mixer](#) — pairing a System Audio source on Windows.
-

Browser as a live source

Browser source lets VideoPro render any web page as a live video input. Point it at a URL and the rendered page becomes a layer in the project — useful for web-based scoreboards, lower thirds from a web app, social widgets, or any page you'd otherwise screen-capture. Browser sources are **project presets**: their URL, name, and settings save with the project rather than being discovered each session.

Browser as a live source: Before you start

- Some VideoPro editions include the Browser source. If the **Browser** option is not in the **Live Audio/Video** submenu, your edition may not include it — contact NewBlue support to add it.
- Decide whether you want a transparent background. Web pages designed as broadcast overlays should set `body { background: transparent; }` (or leave the body background unset) so they composite cleanly over other layers.
- If the page needs operator interaction during the show (a control dashboard for a web scoreboard, for example), have its **control URL** ready. This is a

separate page rendered inside the Browser tab's preview area for the operator to click around.

Add a browser source

- 01 From the top menu, choose **File > New > Live Audio/Video > Browser**, or right-click in the Project List and choose **New > Live Audio/Video > Browser**.
- 02 Pick **Add Browser**. A dialog titled **Add Browser Source** appears.
- 03 Enter the URL in the **Url** field and click **OK**. The source is created and opens on the current channel; the URL is saved as a preset automatically.

Note: After the page loads and reports its title, VideoPro renames the saved preset to that title — so the Browser submenu shows the meaningful page name (e.g. "Sports Scoreboard") rather than "Browser 1" the next time you add it.

The preset persists with the project. If you reopen the project on another machine, the same Browser source is available — no need to re-create it.

On the Browser tab of the Properties panel, the editable fields are **Overlay Url** (the primary URL — what becomes the layer's video) and, if you set one, **Control Url** (the optional operator dashboard).

Transparent background

When the source's **Transparent Background** checkbox is on, VideoPro injects a stylesheet that makes the page body transparent. Web overlay graphics (lower thirds, animated tickers) then composite cleanly over the camera or other live source beneath them.

- 01 Select the browser source layer.
-

02 On the **Browser** tab of the Properties panel, tick the **Transparent Background** checkbox.

03 The setting takes effect immediately; no page reload required.

The injection sets the `body` background transparent. If the page sets a solid background higher up the cascade (`html { background: white; }` or an opaque body background in its own CSS), that wins and the result is not transparent. Author your overlay pages with this in mind.

Control URL – the operator dashboard

A browser source can carry a second URL, the **Control Url**. When set, the Browser tab's preview area in the Properties panel renders the control URL instead of the overlay video — so the operator interacts with the control page directly inside VideoPro, without leaving the application. This is the typical pattern for web-based scoreboards: the **Overlay Url** renders the on-screen graphic, while the **Control Url** renders a button-and-input control panel only the operator sees.

The control page is interactive — clicks, key presses, and form input work as in a regular browser. Anything you type in the control page that updates the rendered page (via WebSockets, server push, or shared state) is reflected on the source.

The control page is rendered inline in the Properties panel; it does not appear in the Switcher, and it does not have its own tally.

Browser as a live source: Audio

Audio that the page plays — embedded video, WebRTC, HTML5 audio — is captured directly from the page and routed into the project's Audio Mixer. This is the cleanest way to bring a web page's audio into your show.

If you've been screen-capturing a web page to get its audio, switch to a Browser source instead. Windows screen capture does not carry audio at all;

Browser source delivers both video and audio in one source.

Page reload, auto-reconnect, static pages

If the page fails to load (network blip, server hiccup), VideoPro retries automatically. You don't need to re-open the source. For a deliberate reload to pick up edits on a hosted page, click **Refresh** on the **Browser** tab of the Properties panel (tooltip: "Reload the overlay page"). **Refresh** only reloads the overlay page; it does not reload the control page.

A page that paints once and stops (a static graphic, a finished animation) does not produce new frames. VideoPro keeps the source marked live during these idle periods so a finished overlay is not flagged as disconnected.

Browser as a live source: Edge cases

- **Each browser source runs its own browser process.** Memory and CPU scale with the number of open Browser sources. Use them deliberately on modest hardware.
- **Browser audio beats screen-capture audio.** If you need a web page's sound, always use Browser. On Windows this is the only option.
- **Page title overrides the preset name.** When the loaded page reports its title, VideoPro renames the source's preset to that title — that's the name that shows up in the Browser submenu of saved presets and in the Project List. The name you type when you first add the source is only the initial label.

Browser as a live source: Related

- [How live video inputs work](#) — the input pipeline overview.
 - [Screen as a live source](#) — when the page is in a separate browser app and you can't change that.
 - [The Audio Mixer](#) — routing browser audio.
-

Stingers & transitions

Configure the wipes, dissolves, and animated stingers that bridge one graphic state to the next.

Use this chapter when you want transitions to read as broadcast polish rather than hard cuts. VideoPro ships a library of transition styles and lets you load custom stingers; this is where you assign them at the project level so they apply consistently across your show.

Stingers & transitions: What's in this chapter

- [Set up transitions](#) — use this when configuring the transitions used between graphic takes.
- [Set up a stinger](#) — promote an animated title to a stinger transition, set the cut point, and add it to the Switcher's transition list.

Stingers & transitions: Related

- [Set up your production — section overview](#)
- [Add transitions to design layers](#) — for per-layer entry/exit animation at design time.

Set up transitions

When switching between two or more live video sources in the Switcher panel, you have the option of adding transitions. There are stinger graphics within various collections within your graphics library, as well as a number of general transitions to choose from.

VideoPro includes two types of transitions, selected from the same Switcher controls:

- **Stingers** are graphic titles with embedded animation, audio, and a cut point. A stinger fires immediately when triggered; the incoming source is cut in at the stinger's cut point.
- **FX transitions** are procedural pixel effects applied to the video frame as it transitions. An FX transition is scheduled to run after the outgoing layer plays out.

You select either type from the same Switcher dropdowns; the type used is determined by the transition you pick.

- [Using transitions in the Live Video Switcher](#)
- [Using transitions with the Shot Launcher](#)

Using Transitions in the Live Video Switcher

- 01 From the Setup workspace, drop the stinger transition from the graphics library into your Project List.

Note: Any graphic can also be enabled as a transition by right-clicking in the Project List > **Enable As Transition**.

- 01 In the Live workspace, navigate to the bottom right corner of the Video Switcher panel and change one of the two **Cut** transition buttons to the Stinger Transition you just added to the Project List, with the drop-down menu.

- 01 Select that transition so there is a blue border indicating it will be played when switching between video sources.

- 02 Switch between the live video sources within the Switcher panel to play your transition.

- 03 Add a second transition using a general transition by selecting the second dropdown **Cut** > **Add Transition** > choose from a list of all

NewBlue transitions.

Note: Each new general transition you add will appear in your Project List and in the dropdown menu's list of available transitions. **Tip:** Delete any of the transitions from your Project List by highlighting the transition > right-clicking > **Delete**.

- 01 Selecting the transition in the Project List will display the control options in the Properties panel such as duration, preset, background, etc. Each transition will vary slightly.
- 01 Switch between transitions during broadcast by selecting the desired transition so the blue border indication is present in the Video Switcher panel.

Using Transitions with the Shot Launcher

There is the option to add a transition to any of your Shots as well, as long as one of the live video sources is enabled as a background.

- 01 Select the Shot in the Project List to display the Shot Properties tab in the Properties panel.
- 01 Choose the live video source for the background to open transition options.
- 01 Choose the transition from the dropdown menu.

The selected transition should now be triggered when your Shot is played on/off air.

Set up a stinger

A **stinger** is a graphic title — a short animated logo, a branded wipe, a motion graphic with sound — that you promote to act as a transition between live

video sources. When triggered, the stinger animates on top of the outgoing source, the source switch happens at a defined moment inside the stinger's timeline (the **cut point**), and the stinger animates off over the new source.

A stinger is distinct from an FX transition. FX transitions are procedural pixel effects (dissolves, wipes, slides) computed live; stingers are pre-rendered graphic titles with embedded animation and audio. Both appear in the same Switcher dropdowns; the type used depends on which transition you pick. VideoPro also offers per-layer FX transitions configured on the layer's Properties panel — that's a third, separate mechanism used at design time.

This article covers bringing the graphic into the project, marking it as a transition, **setting the cut point**, and using it from the Switcher, Instant Replay, and Shot Layouts.

Set up a stinger: Before you start

- You need a graphic intended to act as a transition. VideoPro ships a Stingers folder in the Library; you can also create your own in the [Designer](#).
- For a custom stinger, plan the cut point: the frame at which the underlying source switch should happen. A good cut point is the moment the stinger fully obscures the screen — the cut is invisible because the audience can't see it.
- Keep stingers short; broadcast practice puts most in the 0.5-2 second range.

Add the stinger to the project

01 From the Library, drag the stinger graphic into the **Project List**. Stinger graphics ship in the **Stingers** folder; custom graphics can come from any folder.

02 The graphic appears in the Project List like any other title.

At this point the graphic is a regular title, not yet a transition. The next step changes that.

Mark the graphic as a transition

01 In the Project List, right-click the graphic.

02 Choose **Enable As Transition**.

The graphic is now flagged in the project as a transition. It appears in the Switcher's Cut Default dropdowns and in the Instant Replay entry/exit transition lists alongside the FX transitions.

To reverse the promotion, right-click and choose **Disable As Transition**. The graphic returns to behaving as a regular title.

Set the cut point in the Designer

The cut point is the moment within the stinger's timeline when the source switch happens. Without one, the stinger plays but the switch happens at the timeline boundaries — usually visible to the audience.

01 Open the stinger in the [Designer Timeline](#).

02 Find the marker strip above the layer tracks.

03 Right-click the marker strip at the frame where you want the cut — usually the frame where the stinger fully covers the screen.

04 Choose **Add Transition Midpoint**.

The marker both **flags the title as a transition** and **sets the cut point** at that frame. Drag the marker to move the cut point; save the title.

NOTE

NOTE: The marker-strip context menu also offers **Add Pause Point**, **Add Fade In Endpoint**, **Add Fade Out Startpoint**, and **Add Custom**. Pause points hold the timeline at a frame until the operator advances; fade endpoints bound animated fades; custom markers are user-named references. Only **Transition Midpoint** sets the stinger cut point.

To remove a marker, right-click it directly. The context menu's first entry is **Delete** followed by the marker's name (for a Transition Midpoint, that's **Delete Transition**; for a Custom marker, it's **Delete** plus the name you gave it).

Use the stinger as a Switcher transition

- 01 Switch to the **Live** workspace layout. In the Switcher panel, find the **Cut Default** slots at the bottom right.
- 02 In one of the slot dropdowns, pick your stinger from the list. Stingers and FX transitions are shown together.
- 03 Click the slot so it has a blue border — that's the active transition.
- 04 Cut between two live video sources. The stinger plays; at the cut point, the underlying source switches; the stinger animates off over the new source.

The stinger fires **immediately** on the cut command. FX transitions wait for any outgoing layer animations to finish before they begin.

Use the stinger for Instant Replay and Shot Layouts

For **Instant Replay**: in the Switcher panel, click **Instant Replay**. In the **On Replay Start** and **On Replay Stop** dropdowns, pick your stinger. See [Set up Instant Replay](#).

For **Shot Layouts**: when a Shot's background is a live video source, the Shot can carry its own transition. Select the Shot, open the **Shot Properties** tab, set the background, and pick the stinger from the transition dropdown. The stinger plays when the Shot is taken on or off air.

Stinger audio

Stinger titles can carry embedded audio — the "whoosh" that goes with the wipe. The stinger's audio plays through the Program mixer bus during the

transition. This is one of the visible differences from FX transitions: stingers can include sound design, FX transitions cannot.

The mixer does not show the stinger as a separate channel. To adjust a stinger's volume, edit the title's audio in the Designer.

Set up a stinger: Edge cases

- **No cut point = bad timing.** A stinger without a **Transition Midpoint** marker still plays, but the source switch happens at the timeline boundaries — usually visible to the audience. Always set the cut point.
- **No on-air preview.** Once the cut is given, the stinger plays through. There is no scrub or preview-while-running.
- **A slot holds one transition.** Stingers and FX transitions don't stack at the Switcher level. Per-layer FX transitions (set on the layer's Properties at design time) are a separate mechanism that can still apply to titles while a stinger transitions the source switch.

Set up a stinger: Related

- [Set up transitions](#) — the broader transitions setup workflow, including FX transitions.
 - [The Switcher panel](#) — the Cut Default slots that hold the active transition.
 - [Set up Instant Replay](#) — picking entry and exit stingers for replay.
 - [Designer Timeline](#) — where the cut point is set.
-

Set graphic transition overrides

Use **FX Transitions** when a graphic needs its own play or update animation. The **Play Transition** controls how the graphic appears. The **Update Transition** controls how the graphic changes while it is already on air — such as when Live Values edits or Values Grid rows update the graphic.

You set both on the **FX Transitions** tab of the [Properties panel](#), per graphic, without touching the rest of the project's transitions.

Play Transition vs. Update Transition

- **Play Transition** — the transition used when the graphic builds in (off to on).
- **Update Transition** — the transition used when the graphic is already on air and a value change arrives. Set this to give a value change its own animation.

Each transition has its own duration.

Choose a transition

- 01 Click the **Play Transition** selector. A menu opens listing every transition installed for your project, with **None** and **Mix** at the top.
- 02 Pick one. The selector closes and the menu button shows the chosen name.
- 03 Set the **Duration** in the row below using the time edit.
- 04 Repeat for **Update Transition** if you want a distinct animation on value changes.

Default for both selectors is **None**. **Mix** is a straight cross-fade between the previous and new state; **None** disables the transition entirely.

Note: The row that sets the Update Transition's duration is labeled "Update Transition" rather than "Duration" — the time field in that row is the duration.

When the tab appears

The FX Transitions tab only appears when the selected item is a graphic and your VideoPro edition includes FX transitions.

How this differs from other transitions

FX Transitions are per-graphic build-in and update animations. They don't change how the Switcher moves between sources — that's a Switcher transition or stinger, set up at the production level. See [Set up transitions](#) and [Set up a stinger](#).

Set graphic transition overrides: Related

- [Properties panel](#)
 - [Live Values tab](#)
 - [Values Grid tab](#)
 - [Set up transitions](#)
-

Switching & instant replay

Cut between live video sources inside VideoPro and roll back the action for replay, without a separate switcher.

Use this chapter when VideoPro is switching live sources, Shot Layouts, or replay internally instead of only feeding graphics to an external switcher. Use the Switcher panel when VideoPro is handling the video switching for a compact production, or when live video sources already need to be inside VideoPro for graphics, replay, or streaming. The Switcher panel cuts between inputs; Instant Replay captures a continuous buffer so you can roll back any moment without prepping a clip.

Switching & instant replay: What's in this chapter

- [Use the Switcher panel](#) — use this to configure and operate the in-app video switcher.
- [Set up Instant Replay](#) — use this to set up the replay buffer at project time.

- [Instant Replay during the show](#) — scrub the buffer, set in/out points, pick a speed, drop markers, and use Quick Settings mid-show.

Switching & instant replay: Related

- [Live video inputs](#) — bring sources in before you can switch between them.
-

Use the Switcher panel

Live video switching is available in VideoPro to allow the operator to easily switch between all live sources from their own Live Video Switching panel during broadcast. For versatility purposes, there is the option to switch the Live Video Switching control on and off at your convenience to reactivate control back in the Project List with all the other graphics. The Live Video Switching panel allows you to group, view, and control all live sources from a single panel versus having to sift through the Project List when time is of the essence.

- 01 Ensure your Live Video Switching panel is open by clicking the **Switcher** icon in the top Menu Bar so that it highlights in blue, or go to **View > Video Switcher** so there is a check visible.
-

- 02 Add a new live video source by going to one of the following:

- **File > New > Live Audio/Video** > choose video source from the options connected.
- In the Project panel > Right-click > **New > Live Audio/Video** > choose video source from the options connected.

The live video source will now be visible in the Live Video Switcher panel and a Live Audio/Video tab will open when the layer is selected. Repeat for all live video feeds you plan on using.

- 01 Select the video source in the Live Video Switcher to play live.
-

- 02 To take a live video source out of the Switcher (and out of Instant Replay), uncheck the **Include in Switcher / Instant Replay** control in the Live Audio/Video tab of the Properties panel. (The live video source must be selected in the Project List for the Live Audio/Video tab to appear.) Audio Mixer inclusion is governed separately.

Note: There is an option to change the Live Audio/Video to a different source by clicking the source-labeled button in the Live Audio/Video tab in the Properties panel > **Windows Device** > choose a different source.

Click behavior during Instant Replay

Tile clicks behave differently when Instant Replay is armed:

- For a source that is not armed for replay, clicking the tile cuts that source to Program (no transition).
- For an armed source, clicking the tile drives the replay state machine. Depending on the current state, the click either starts replay playback or switches the active replay source while playback continues.

During replay playback, each armed tile splits into two regions: a small live-feed inset and a larger replay-buffer region. Clicking the inset cuts back to the live feed (returns the replay state to ready). Clicking the buffer region cuts that source onto the active replay output. Scrubbing the buffer position is done from elsewhere in the Instant Replay UI, not by clicking the tile.

Right-click and auto-layout

Right-click a tile to open the source context menu — the same menu as **File > New > Live Audio/Video**. Use it to add, remove, or reconfigure live sources without leaving the Switcher panel.

The Switcher tile grid adapts to the dock dimensions and source count. Resizing the dock or adding sources triggers an automatic re-layout so each tile uses as much room as the panel allows.

Set up Instant Replay

VideoPro includes Instant Replay — a continuous circular buffer recorded from one or more armed live video sources, plus an in-Switcher panel for trimming and rolling clips on air. This article covers the project-time setup: arming sources, picking buffer length, and choosing the entry and exit transitions.

For the runtime operator workflow (scrubbing, in/out points, playback speed, freeze frames, Quick Settings during the show), see [Instant Replay during the show](#).

Important: Instant Replay does not currently work with Audio Sources.

- [Basic Project Setup](#)
- [Configure Instant Replay](#)
- [Resource Use Cases](#)

Basic Project Setup

01 Ensure your Live Video Switching panel is open by clicking the **Switcher** icon in the top Menu Bar so that it highlights in blue, or go to **View > Video Switcher** so there is a check visible.

01 Add a new live video source by going to one of the following:

- **File > New > Live Audio/Video** > choose video source from the options connected.
- Anywhere in the **Project List** > Right-click > **New > Live Audio/Video** > choose video source from the options connected.
- In the bottom of the Project List panel, click **Add New Live Audio/Video** > choose video source from the options connected.

Note: Available sources include NDI, SDI, any USB connected video device, or a live

feed via Zoom, etc.

01 The live video sources will now be visible in the Live Video Switcher panel and a Live Audio/Video tab will open when the layer is selected. Click each to preview.

01 Choose a Stinger or Transition to enter and exit Instant Replay by going to the Library > **Stingers** or any folder with a Transition and drag into your Project List.

Your project is now set up to configure Instant Replay from within the Video Switcher panel.

Configure Instant Replay

VideoPro uses a circular buffer to record throughout your broadcast. Choose one of the discrete buffer lengths: 15, 30, 45, 60, or 90 seconds. Follow the steps below to set up your Instant Replay settings for broadcast.

01 In the Video Switcher panel, select **Instant Replay** on the bottom right.

02 Within the Instant Replay Options Window, select your Replay Buffer Length. The memory required is dependent upon the buffer length you have selected, as well as your project frame rate and resolution.

01 Set your Stinger or Transition: **On Replay Start** and **On Replay Stop**.

02 If you are using an external switcher, check the **Don't Use VideoPro For Switching** box.

03 Under **Recording Sources**, toggle to Arm all the video feeds you plan to use for Instant Replay clips.

04 Click **Enable Instant Replay** to start the Buffer Recording.

You are now in Recording Mode indicated by the red button in the lower right and you can see the buffer is running. For the operator workflow once

recording has started — scrubbing, trim, speed, freeze frames, Quick Settings — see [Instant Replay during the show](#).

Resource Use Cases

Below are examples of estimated RAM usage scaled based on number of camera sources and buffer time. This RAM usage is in addition to the RAM used by VideoPro itself, any other running software, and the system in general. We recommend not to have Instant Replay use more than 60–70% of the RAM available to the system. A higher percentage of RAM usage may result in potential performance or stability issues.

Project settings of 1920x1080 30p/i:

- 2 sources w/ 30s buffer — 5.6 GB
- 2 sources w/ 60s buffer — 11.2 GB
- 4 sources w/ 30s buffer — 11.2 GB
- 4 sources w/ 60s buffer — 22.4 GB

Project settings of 1920x1080 60p/i:

- 2 sources w/ 30s buffer — 11.2 GB
- 2 sources w/ 60s buffer — 22.4 GB

Note: Resource usage scales linearly regardless of the variable changed. Also, whether the project is using a progressive or interlaced frame rate is irrelevant.

For a visual reference, see the [Instant Replay tutorial](#). If you have any further questions or issues, please submit a [Support Ticket](#).

Instant Replay during the show

Once Instant Replay is configured and recording, this article covers the moves an operator makes on air: scrubbing the buffer to find the moment, trimming

with in and out points, picking a playback speed, using Freeze Frame to hold a moment, dropping markers, and adjusting transitions and mute behaviour mid-show from the Quick Settings menu.

For initial configuration — buffer length, source arming, entry and exit transitions — see [Set up Instant Replay](#).

Instant Replay during the show: Before you start

- Instant Replay must be enabled and the buffer must be in **Replay ready** (green dot). **Replay recording** (red dot) means the buffer is still filling.
- At least one source must be armed. Only armed sources can be played back.
- The Switcher panel must be visible.

The Instant Replay bar

The bar runs along the bottom of the Switcher panel. From left to right: the settings cog (tooltip **Edit instant-replay settings**), cut buttons, the buffer timeline with playhead and in/out drag-handles, the playback speed dropdown, and the Play / Pause / Live button.

At the bottom right of the Switcher panel, a status indicator shows the buffer state: red dot with **Replay recording** during recording, green dot with **Replay ready** when the buffer is full enough to play back.

Find the moment: scrub the timeline

- 01 Wait for the **Replay ready** indicator.
- 02 Drag the playhead along the timeline to scrub through the buffer. The Preview shows the frame under the playhead.
- 03 Release the mouse to set the playback start to that frame.

The smaller window in each source tile shows the live feed; the larger window shows the buffer at the current playhead position.

Trim with in and out points

The in-point and out-point handles on the buffer timeline trim the replay clip to just the moments that matter.

01 Drag the in-point handle to where the clip should begin. The handle snaps to the playhead when you release.

02 Drag the out-point handle to where the clip should end.

03 Drag either handle again to adjust.

In and out points persist until you move the handles or clear the buffer — useful when you want to replay the same trimmed moment more than once.

Choose a playback speed

The speed dropdown offers four discrete options: **0.25x**, **0.5x**, **1.0x**, and **2.0x**. There are no intermediate values.

The default speed at the start of a session is 0.5x. Change it from the dropdown at any time — the change applies to the next playback start.

Play, pause, resume

Click the play button to start playback from the in point (or from the playhead if no in point is set). Click again to pause. Click again to resume.

When playback reaches the out point, the clip auto-exits with the configured **On Replay Stop** transition and the channel returns to live.

Hold a frame across multiple angles

To hold one frame on air while you cut between camera angles of the same moment:

01 Pause playback at the frame you want to hold.

02 Click each armed source tile in the Switcher to show that source's buffer at the same paused frame — multi-angle stills.

03 Click play to resume normal playback.

Markers

Up to 8 marker slots are available for jumping to specific moments in the buffer. The markers are designed for control-surface and shortcut access; check your Stream Deck / Companion mapping or the Settings cog for the binding details.

Quick Settings (cog)

The cog at the bottom left of the bar opens an in-place menu so you can change replay options without leaving the panel:

- **Transition: on replay start** — pick a different entry transition from the project's transitions.
- **Transition: on replay stop** — pick a different exit transition.
- **Mute graphics during replay** — toggle whether the channel's running graphics are taken down during replay.
- **Don't use VideoPro for switching** — toggle for setups where an external switcher handles the cut and VideoPro only plays back the clip.

NOTE

NOTE: Mute graphics during replay is on by default. If you want graphics to remain visible through the replay, open Quick Settings and turn this off. Operators who expect graphics to persist are sometimes surprised the first time.

Multi-angle: switching sources during playback

While playback is running, clicking a different armed source tile swaps the displayed source to that source's buffer at the same playback position — same moment, different camera. Speed and trim points carry across the switch. Clicking a non-armed source exits replay and returns to live.

Recording pauses during playback

A warning icon on the bar marks an important detail: **the buffer is not updated while a replay is playing**. Recording resumes when the channel returns to **Replay ready**.

This matters for long clips. A 20-second playback is a 20-second gap in what is recorded for the next replay. Plan around back-to-back plays.

To resume recording immediately, exit replay mode (click the Live button or click a live source tile).

Exiting replay

- Click a live (non-buffered) source tile to switch to live and play the **On Replay Stop** transition.
- Let playback reach the out point — auto-exit fires the same transition.
- Click the Instant Replay button or the Live button to exit immediately.

Instant Replay during the show: Related

- [Set up Instant Replay](#) — initial setup, buffer length, source arming.
- [The Switcher panel](#) — the panel the Instant Replay bar lives in.
- [Set up transitions](#) — picking the entry and exit transitions used by replay.

Audio mixing

Use the VideoPro Audio Mixer to balance audio coming from media clips, live video sources, and microphone inputs.

Reach for this chapter when your show carries sound — when graphics include audio beds, when live video sources contribute their own audio, or when you need to mute or duck a source under another. It covers the live Audio Mixer panel and, separately, how Shot Layouts automate the mix as you switch shots.

Audio mixing: What's in this chapter

- [Audio Mixer panel](#) — operate the live in-app audio mixer.
- [Automate audio with Shot Layouts](#) — store per-shot audio settings that apply automatically as you switch shots.

Audio mixing: Related

- [Set up your production — section overview](#)
 - [Live video inputs](#) — for sources that bring their own audio in.
 - [Use the Audio Visualizer](#) — diagnose audio routing, mute, and level problems.
-

Audio Mixer panel

The **Audio Mixer** panel controls the audio sources that contribute to Program. Use it to set source levels, mute sources, monitor audio locally, and control the master Program mix.

Shot Layouts can also automate the mix as you move from shot to shot — a separate workflow from this panel; see [Automate audio with Shot Layouts](#). On this panel, each source's **Override** button decides whether a shot's stored audio drives that source.

Program audio, monitor audio, and shot automation

- **Program audio** is the audio VideoPro sends with its output. The Audio Mixer controls the Program audio mix.
- **Monitor audio** is what you hear locally through speakers or headphones. Changing the monitor device or muting a source in the monitor does not change Program audio.
- **Shot Layouts** can automate the Program mix. When you take a Shot Layout, VideoPro can apply the audio levels, mute states, or pan settings stored with that shot.

Add audio sources

VideoPro can use audio devices that are connected to your computer and available to the system. Add the sources you want to use to the Project List; audio-bearing sources then appear in the Audio Mixer.

01 Right-click in the **Project List** and choose **New > Live Audio/Video > Audio Device**, then choose your source.

02 Repeat for each audio source you want to include in Program.

Per-source controls

Each source fader in the Audio Mixer carries a meter and gain fader, a mute button (headphones icon), and — when a Shot Layout drives the source — an **Override** button.

- **Gain fader** — drag to set how much of this source is sent to the Program mix.
- **Mute (headphones icon)** — mutes the source in the Program mix. The headphones dim when muted and brighten when active.
- **Override** — controls whether Shot Layout audio automation drives this source. See [Automate audio with Shot Layouts](#).

Note: The meter scale runs from -64 dB to +7 dB. The scale extends above 0 dB because VideoPro processes audio in floating point; treat 0 dB as the practical ceiling.

Source meters read each source's own level and don't move with the Master fader; the **Master** strip meters the final Program mix.

Note: Every audio-bearing source on the active channel gets its own fader — there is no limit on the number of faders. The Audio Mixer is scoped to the active channel, so each channel shows only the sources that are live on it; a source that goes offline is hidden until it reconnects.

A small arrow toggle at the top of the panel collapses the per-source faders so only the Master fader is visible. Click it again to restore the source row.

Master fader

The fader strip on the right of the panel labeled **Master** controls the overall Program audio mix — the audio that travels with Program output to destinations that carry audio. Monitor audio is controlled separately; see [Choose the monitor audio device](#).

Choose the monitor audio device

The monitor device is where local monitoring plays — what you hear at your station. It does not change the Program audio mix.

- 01 In the Audio Mixer, right-click the headphones or click the arrow next to it, and choose the monitoring device.
- 01 Or go to **Settings > Audio Monitor** and select from the available devices.

Mute a source in local monitoring only

Use **Mute audio in monitor** when a source should still contribute to Program but should not be heard through local monitoring.

Select the source and, in its **Live Audio/Video** properties, check **Mute audio in monitor**. The source stays adjustable in the Audio Mixer and keeps feeding Program; it just isn't heard at your station.

Audio Follows Video

Use **Audio Follows** to make an audio source active only when a selected video source is live. This is useful when cameras or live video sources each have their own audio feed and you want the audio mixed in only while the matching video is on.

The **Audio Follows** option is on the source's **Live Audio/Video** tab, alongside the **Mute audio in monitor** checkbox:

Click **Audio Follows** to see your options:

The list shows all available live video sources along with **Always On**. Choose **Always On** to keep the audio available and mix it manually, or choose a video source to have the audio turn on only when that video source is live.

Note: Shot Layout audio automation takes priority over Audio Follows. If a Shot Layout controls the source's audio, the shot's stored audio settings override the Audio Follows behavior.

Display output audio

The Audio Mixer controls the Program audio mix. To choose which audio device the Display output uses, go to **Program Out > Display Setup > Audio**, or use the Display window's settings. See [Output graphics to a display](#).

Diagnosing audio issues

When audio doesn't behave the way you expect — no audio on air, echo, glitches, or one source sitting at the wrong level — open the **Audio Visualizer**. It draws every audio source, mixer bus, and output in one picture with the live signal flowing through each connection, so you can see where audio is being muted, mis-routed, or clipping. Open it from the **View** menu.

See [Use the Audio Visualizer](#) for how to read it.

[Audio Mixer panel: Related](#)

- [Program Monitor panel](#)
 - [Program Monitor audio controls](#)
 - [Shot Layouts & Shot Launcher](#)
 - [Output graphics to a display](#)
-

[Automate audio with Shot Layouts](#)

Beyond the live [Audio Mixer](#) panel, VideoPro can change the audio mix automatically as you move from shot to shot. A Shot Layout stores audio settings — level, mute, and pan — for the sources in the shot, and applies them when you take that shot. Different shots can carry different mixes: a camera shot brings up that camera's audio, while a replay or graphics shot lowers or mutes it.

You author these settings on the **Shot Audio** tab as you build a Shot Layout — a separate place from the live Audio Mixer panel, which mixes the current Program by hand.

[Set levels and mutes for the shot](#)

The **Shot Audio** tab shows a fader for each audio source in the shot:

- **Faders** — drag a source's fader to set the level it plays at when this shot is taken. The value is stored with the shot.
- **Mute button** — the speaker icon at the bottom of a fader mutes that source for this shot. The source stays in the project but isn't heard while the shot is on air.

These levels and mutes take effect automatically when you take the shot — for the sources whose **Override** is on.

The Override button

Each source's fader in the [Audio Mixer](#) has an **Override** button that decides whether a Shot Layout drives that source:

- **Override on** — the shot's stored audio settings (level, mute, pan) take effect on this source when the shot plays, and adjusting the controls sets the levels stored with the live shot.
- **Override off** — the shot leaves this source alone; your manual mixer setting stays in place as shots change.

Automate audio with Shot Layouts: Related

- [Audio Mixer panel](#) — the live mixing surface.
 - [Shot Layouts & Shot Launcher](#) — building and running shots.
-

Streaming & delivery

Use this chapter when VideoPro is sending or capturing the finished result instead of feeding a graphics path into another production system. This includes RTMP and SRT streaming, multi-destination streaming, virtual webcam output, image sequences, and watch folders.

These delivery paths differ from the graphics outputs in [Set up graphics output](#): some destinations receive Program as a primary output, while others receive a copy, a stream, a file, a virtual device, or an integration-specific output.

Streaming & delivery: What's in this chapter

- [Streaming with VideoPro](#) — the streaming starting point: pick a service and configure an RTMP destination.
- [Stream with SRT](#) — low-latency Secure Reliable Transport with encryption and packet recovery.
- [Stream to multiple destinations](#) — encode once and push to several services simultaneously.
- [Output graphics as a Virtual Webcam](#) — appears as a camera in Zoom, Teams, Meet, and any other app that consumes a webcam.
- [Output graphics as an image sequence](#) — numbered PNG or JPG frames in a folder, for downstream compositors.
- [Output graphics to a watch folder](#) — a single, continuously updated PNG or JPG file, for systems that monitor a folder.

Streaming & delivery: Related

- [Set up graphics output](#) — Display, SDI, NDI, OMT, TriCaster, and OBS paths into the production system.
 - [Connect Zoom Manager \(Meeting Workflow\)](#) — for sending VideoPro output into a Zoom meeting.
 - [Troubleshooting](#) — if the stream drops or a delivery path stops producing output.
-

Streaming with VideoPro

VideoPro publishes its program output to live-streaming services in real time. You can stream to one destination or, in editions that include Multi-Destination Streaming, several at once — including a mix of RTMP services and SRT.

This article covers RTMP services. For SRT specifically, see [Stream with SRT](#). For sending the same broadcast to multiple destinations, see [Stream to](#)

[multiple destinations.](#)

Supported services

VideoPro ships with built-in presets for these RTMP services:

- YouTube Live
- Facebook Live
- LinkedIn Live
- X (Twitter)
- Twitch
- Switchboard Live
- Generic RTMP (any other RTMP endpoint)

For each preset (except **Generic RTMP**), VideoPro shows a clickable link to the service's stream-setup page so you can grab the URL and stream key without leaving the dialog.

Open the Streaming Setup dialog

Two ways:

- Click **Start Streaming** in the top bar. If you have no destination configured yet, the Streaming Setup dialog opens first; the OK button reads **Start Streaming**.
- Choose **Settings** → **Streaming....** The OK button here reads **Save Settings** — clicking it does not start the stream, only saves the configuration.

Set up an RTMP destination

01 Open Streaming Setup (above).

02 If your license includes multi-destination streaming, you'll see one or more **destination tabs** at the top of the dialog. Click an existing tab to

edit, or click **+** to open a menu of available services and pick one — a new destination tab is added for that service.

-
- 03 Choose the service from the **Service** dropdown.
-
- 04 (Optional) Click the configuration link to open the service's stream-setup page in your browser. Copy the **Server URL** and **Stream Key** from there.
-
- 05 Paste the **Server URL** and **Stream Key** into the corresponding fields. The stream key is masked by default — click **Show** to reveal it.
-
- 06 Give the destination a **Name** (any label you'll recognize) and tick the **Active** checkbox.
-
- 07 (Twitch only) Pick a server location from the dropdown. Twitch accepts any of its listed ingest servers, but choose the one nearest you for best quality.
-
- 08 Pick a **Format** preset (resolution, frame rate, and bitrate). The default is **Project**, which matches the project's frame size and frame rate. Other presets — for example 1920 × 1080 at 30 fps, 4500 Kbps, and lower-resolution options for bandwidth-limited uplinks — are listed below it.
-
- 09 (Optional) Tick **Save Destinations to Project** to embed the destination in the project file. Otherwise, destinations live in your user registry and don't travel with the project.
-
- 10 Click **Start Streaming** (or **Save Settings**, depending on how you opened the dialog).

Stop streaming

Click **Stop Streaming** in the top bar.

Where to find your stream URL and key

PLATFORM	WHERE TO FIND IT
YouTube Live	YouTube Studio → Go Live → Stream tab
Facebook Live	live.facebook.com → Advanced Settings
LinkedIn Live	LinkedIn Live → Go Live (third-party stream tool flow)
X (Twitter)	X Studio → Producer
Twitch	Twitch Dashboard → Settings → Stream Key
Switchboard Live	Destinations tab; stream key shown per output
Generic RTMP	Whatever your custom RTMP endpoint provides

The exact location of the stream key changes from time to time. The configuration link in the Streaming Setup dialog always opens the current page.

Status while streaming

The top-bar status panel shows each destination's name and current bitrate, color-coded:

- **Green** — connected and streaming (e.g., `4500 Kbps`)
- **Yellow** — connecting
- **Orange** — reconnecting (with attempt counter, e.g., `Reconnecting (1)`)
- **Red** — error
- **Gray** — idle

Hover over a destination's status to see its server URL and any error detail.

Reconnect behavior

If a destination drops mid-stream, VideoPro reconnects automatically up to **3 times** with **2, 4, and 8 second** waits between attempts. If the server rejects the connection within 2 seconds of accepting (typical of an invalid stream key that the platform validates lazily), VideoPro waits 10 seconds before retrying.

After 3 unsuccessful attempts, the destination goes red; other destinations keep streaming.

Troubleshooting

SYMPTOM	LIKELY CAUSE
Error immediately after Start Streaming	Wrong server URL or stream key. Double-check both.
Connects, then drops within seconds, then errors	Stream key was rejected by the platform. Generate a new one or check that you used the right account.
Some destinations work, others fail	Per-destination problem. Check each destination's tooltip for the actual error.
"You have reached the maximum number of streaming destinations (1)."	Your license doesn't include multi-destination streaming.
Bitrate jitter or audio dropouts	Uplink bandwidth too low for the bitrate preset. Lower the preset.

Streaming with VideoPro: See also

- [Stream with SRT](#)
- [Stream to multiple destinations](#)

Stream with SRT

SRT (Secure Reliable Transport) is a low-latency streaming protocol designed for delivering live video over unpredictable networks. Compared to RTMP, SRT adds packet loss recovery and AES encryption while keeping latency in the hundreds of milliseconds.

Note: Availability: Some VideoPro editions include SRT streaming. If you don't see SRT as a service option in the Streaming... dialog, your edition may not include it — contact NewBlue support to add it.

When to use SRT

- You're sending to a cloud ingest, broadcast facility, or hardware decoder that supports SRT.
- You need lower latency than RTMP can provide (typically 200–500 ms vs. multiple seconds).
- You need encryption end-to-end without relying on TLS proxies.
- You want to send the same broadcast to multiple destinations simultaneously, mixing SRT and RTMP — see [Stream to multiple destinations](#).

Set up an SRT destination

01 In the VideoPro playout window, click **Start Streaming** in the top bar (or open **Settings** → **Streaming...**).

02 In the Service drop-down, choose **SRT**.

03 Choose a connection mode:

- **Caller** (default): VideoPro connects out to a remote SRT receiver. Enter the receiver's hostname or IP and port — for example, `live.example.com:9000`.
 - **Listener**: VideoPro opens a local port and waits for a remote caller to pull the stream. Leave the host empty and just enter a port — for example, `:9000`.
-

04 (Optional) Enter a **Stream ID** if your receiver requires it. Some SRT gateways use Stream ID for routing or authentication.

05 Click **Advanced** to expose:

- **Latency (ms)** — 200 ms is a good default. Use 100 ms or less on a local network; raise to 300–500 ms for cross-continent links. The receiver must use a comparable latency setting.

- **Passphrase** — 10–79 characters. If set, the stream is AES-encrypted. The receiver must use the same passphrase.
- **Overhead %** — 25% by default. Raise this if your network drops packets frequently — it reserves more bandwidth for retransmissions.

06 Click **Save Settings** (or **Start Streaming**, depending on how you opened the dialog).

Status indicators

While streaming, VideoPro shows:

- Server URL (Caller mode) or `Listener :port` and `Waiting for caller` (Listener mode, before a connection arrives).
- Round-trip time (RTT) in ms.
- Current bitrate.
- Packet loss count, if any.

Latency tuning rule of thumb

- Local network: 20–60 ms
- Regional (same country): 100–200 ms
- Intercontinental: 300–500 ms

A safe rule is $\text{latency} \geq \text{RTT} \times 3$.

Stream with SRT: Troubleshooting

SYMPTOM	LIKELY CAUSE
"Connection refused" in caller mode	Receiver isn't listening, firewall blocking outbound UDP, or wrong port. SRT uses UDP, not TCP.
Caller stays "Connecting..." forever	Network unreachable, or remote requires a passphrase you didn't supply.

SYMPTOM	LIKELY CAUSE
Listener never accepts	Inbound UDP blocked by firewall, port already in use, or remote is also configured as Listener (one end must be Caller).
Audio out of sync at the receiver	Latency too low for the link. Raise both ends to the same higher value.
"SRT" not in the service list	Your VideoPro edition doesn't include SRT streaming.

Stream with SRT: See also

- [Streaming with VideoPro](#) — RTMP services
- [Stream to multiple destinations](#)

Stream to multiple destinations

VideoPro can stream the same broadcast to several services at once — YouTube and Twitch and LinkedIn at the same time, for example, or any mix of RTMP services with one or more SRT destinations. VideoPro encodes the program once and sends the same encoded video and audio to every active destination.

Note: Availability: Some VideoPro editions include Multi-Destination Streaming. Without it, VideoPro limits you to one destination at a time. If you click + and see "You have reached the maximum number of streaming destinations (1).", your edition doesn't include this feature — contact NewBlue support to add it.

Add a destination

01 Open **Settings** → **Streaming...** (or click **Start Streaming** when no streams are configured).

02 Click the + button in the top-right of the destination tab row.

03 Choose how to create the destination:

- **New Service** — create a destination from a built-in preset (YouTube Live, Twitch, Facebook Live, LinkedIn Live, X (Twitter), Switchboard

Live, Generic RTMP, or SRT — SRT availability also depends on your edition).

- **From Preset** — create a destination from one of your saved presets (see *Presets* below).

04 Fill in the URL and stream key (or, for SRT, the host and port).

05 Make sure **Active** is ticked. Inactive destinations are saved with the project but not started.

06 Repeat for as many destinations as you need.

Remove a destination

- Click the **x** on the destination's tab, or right-click the tab and choose **Remove Service**.
- A confirmation appears: *"Are you sure you want to remove '...'?"*.
- You can't remove the last remaining destination — there must always be at least one tab. VideoPro shows: *"You must have at least one streaming destination."*

Start streaming all destinations

Click **Start Streaming** in the top bar. Every Active destination is opened simultaneously. Each connects independently.

Watch each destination's status

The top-bar status panel shows one widget per active destination, with name and current bitrate, color-coded:

- **Green** — connected and streaming
- **Yellow** — connecting
- **Orange** — reconnecting (with attempt counter)

- **Red** — error
- **Gray** — idle

Hover over a destination for its server URL and any error detail.

When one destination fails

A failed destination does not stop the others. VideoPro keeps the working streams running and shows a partial-failure warning so you know something needs attention. Each destination tries to reconnect on its own — see [the reconnect rules in Streaming with VideoPro](#). After 3 attempts the destination goes red and stays there; other destinations are unaffected.

If destinations fail their initial connection, VideoPro keeps the session running and shows the errors per-destination in the status bar — it does not auto-stop. Read the status text to see which destinations connected and which need attention.

Presets

A preset is a saved destination configuration. Useful for: a tour of weekly streams to the same set of services, or moving the same set of destinations between machines.

- **Save** — right-click a destination tab → **Save as Preset...**, give it a name.
- **Apply** — click **+** → **From Preset** → pick the preset, or use the same path from the right-click menu. A new destination tab is created from the preset (with its own ID, so editing it doesn't change the preset).
- **Delete** — right-click a destination tab → **Delete Preset** → pick the preset.

Presets live in your user registry and are local to your machine.

Save destinations with the project

By default, destination credentials live in your user registry and travel with the user, not the project. Tick **Save Destinations to Project** in the Streaming... dialog to embed the destinations (URLs, stream keys, names, active flags) in the project file. Useful if you want a project to ship with its destinations or share a project for testing.

Warning: Project files become sensitive when you save credentials into them. Don't share such projects publicly.

Format settings are session-wide

Output resolution, frame rate, and bitrate are picked **once** per session — every destination gets the same encoded stream. There is no per-destination encoding. Choose the lowest preset that meets the requirements of your most demanding destination, and bear in mind your upload bandwidth needs to be roughly the bitrate × number of active destinations.

Stream to multiple destinations: See also

- [Streaming with VideoPro](#) — RTMP services and the basic streaming flow
- [Stream with SRT](#)

Output graphics as a Virtual Webcam

VideoPro can publish each playout channel as a **virtual webcam**, so apps like Zoom, Microsoft Teams, Google Meet, OBS Studio, and any other camera-aware app can pick VideoPro as their camera source. The setup steps differ between macOS and Windows.

Turning it on inside VideoPro

In the playout window, click the **Program Out** menu and choose **Virtual Webcam**. There is one virtual webcam per channel — different channels appear as separate camera sources in your meeting app.

The video format is **1920 × 1080 at 30 fps**. VideoPro resamples to that fixed format at the boundary, regardless of your project's resolution or framerate.

Alpha

The Virtual Webcam is an **opaque** camera source — meeting apps composite it onto their own background, so the consuming app sees the channel pre-flattened over black. If you need to deliver a key-able feed with alpha to a downstream tool, use the [OBS Studio output](#) or NDI instead.

macOS: approving the camera extension (one-time setup)

The macOS virtual webcam is implemented as a **camera system extension**. The first time you select Virtual Webcam, macOS asks you to approve it. You only need to do this once.

Requirements

- macOS 13 (Ventura) or later.
- **VideoPro must be installed in your Applications folder.** macOS refuses to install camera extensions from any other location. If you launched VideoPro from `~/Downloads`, drag it into `/Applications` first and relaunch.

Approval steps

- 01 Open the Permissions panel in VideoPro. The **Virtual Camera** row shows the current state.
 - 02 Click **Activate Extension**. macOS submits the activation request and VideoPro switches to **Waiting for your approval**.
-

- 03 Click **Open System Settings**. macOS opens **Privacy & Security**.
- 04 Scroll to the bottom and click **Allow** next to the blocked VideoPro camera extension.
- 05 Return to VideoPro. The Virtual Camera row will switch to **Active** when macOS finishes loading the extension.

If the Allow prompt has disappeared, click **Retry** in VideoPro to re-trigger it.

Restart-after-upgrade

When VideoPro ships a new version of the camera extension, macOS may need a **restart** before the new version is active. The Virtual Camera row will say **Restart required**. VideoPro keeps working normally; the virtual webcam is just temporarily unavailable until you reboot.

Common errors

- **"Applications folder required"** — drag VideoPro into `/Applications` and relaunch.
- **"macOS policy is blocking the virtual camera"** — check **System Settings** → **Privacy & Security**. An MDM profile or parental control may be blocking system extensions.
- **"Another copy of the virtual camera extension is already installed"** — uninstall the duplicate from System Settings → Privacy & Security → Login Items & Extensions, then click Retry.

The dialog maps each macOS error to a remediation hint. If the dialog says *"This is a build or signing issue — please contact support,"* the installer is broken; reinstall from the official download.

How the camera appears in your meeting app

In Zoom, Teams, Meet, OBS, etc., choose **VideoPro Virtual** as the camera source.

Output graphics as a Virtual Webcam: Audio

The macOS Virtual Webcam carries **video only**. Apple's `CMIOExtension` camera framework does not provide an audio path — there is no microphone counterpart you can pair with the camera. If you need to send audio from VideoPro to a meeting app, set the meeting app's microphone to a separate audio device (a real microphone, a virtual audio device like BlackHole or Loopback, or VideoPro's separate audio output) and run audio in parallel with the camera.

Windows: how the virtual webcam is installed

The Windows Virtual Webcam is a DirectShow filter registered automatically when VideoPro is installed. There is no in-app activation step and no separate permission prompt.

Output graphics as a Virtual Webcam: How the camera appears in your meeting app

In your meeting app, choose **Virtual Webcam VideoPro x32** as the camera source.

Note: On the device name: The literal device name shown by Zoom, Teams, and other apps ends in `x32`. This is a legacy artifact in the name string — the filter itself is 64-bit and runs on 64-bit Windows. Just choose the entry that begins with "Virtual Webcam VideoPro".

Output graphics as a Virtual Webcam: Audio

The Windows Virtual Webcam carries **video only**. If you also need to send audio from VideoPro to your meeting app, route audio through a separate audio device.

Output graphics as a Virtual Webcam: Tips

- One Virtual Webcam per channel. To rename a channel, double-click the channel name, type the new name, and press **Enter**.

- To delete a channel, right-click (Windows) or Control + click (macOS) the channel name, choose **Delete**, and confirm.
- The Virtual Webcam mirrors the channel's **Program Monitor** in real time — anything you bring live with **Play** appears in the camera feed.

Output graphics as a Virtual Webcam: See also

- [Output graphics to OBS](#) — for use specifically with OBS Studio (and other apps with the NewBlue plugin), this path offers lower latency, full alpha, and audio.
-

Output graphics as an image sequence

Note: Formerly called "PNG Sequence" in older versions of VideoPro.

If your VideoPro license includes the Image Sequence output, you can write rendered graphics frame-by-frame to a folder. Streaming and compositing tools that read sequential image frames can pick up the files as VideoPro writes them.

Each rendered frame becomes one file. Animations are captured as a sequence — for a 50-frame animation, VideoPro writes 50 images.

File format

The output format is determined by your project settings:

- **Alpha on** — files are written as **PNG** with transparency.
- **Alpha off** — files are written as **PNG** by default. To request **JPG** instead, give the setup file a `.jpg` (or `.jpeg`) extension. JPG is smaller but does not support transparency.

For more on the alpha and premultiplied alpha settings, see [Set the project format](#).

Set up the output

- 01 Create a folder on your computer where VideoPro should write the image sequence.
- 02 In the VideoPro playout window, click the **Program Out** menu and choose **Image Sequence Setup**.
- 03 In the **Set File Name for Image Sequence** dialog, navigate to your folder and type a filename. The filename you type is used only to choose the folder and (for non-alpha projects) the file extension — the actual files VideoPro writes are numbered (see below).
- 04 Click **Save**.
- 05 From the **Program Out** menu, choose **Image Sequence** to enable the output.

Run the output

In the Project List, click a graphic's **Play** button. VideoPro writes one image per rendered frame to your folder, named:

```
00001.png  
00002.png  
00003.png
```

The numbering is 5 digits, zero-padded. (`.jpg` if you requested JPG.)

Notes

- All open Project List tabs render into the same sequence. You get one sequence, not one per tab.

- If two consecutive frames are identical, VideoPro skips writing the second one and removes any stale file at that index left over from a previous run. Gaps in the file numbering are normal and indicate frames that did not change.
- The frame index restarts at `00001` each time you enable the output. Previous files at the same index will be overwritten.
- The filename you typed during setup is **not** used as a prefix on the output files — only the folder and (for non-alpha projects) the file extension matter.

Output graphics as an image sequence: See also

- [Set the project format](#)
 - [Output graphics to a watch folder](#) — write a single, continuously updated image instead of a numbered sequence.
-

Output graphics to a watch folder

If your VideoPro license includes the Watch Folder output, you can have VideoPro continuously update a single image file on disk with the graphic that is currently on air. A switcher or compositor configured to "watch" that file will see the image change as you play, change, and clear graphics.

The output is a single still image (one frame), not an animation. Animated graphics are sampled at the moment the file is updated.

Output graphics to a watch folder: File format

The format is determined by your project settings:

- **Alpha on** — file is written as **PNG** with transparency.
- **Alpha off** — file is written as **JPG**. JPG does not support transparency.

For more on the alpha and premultiplied alpha settings, see [Set the project format](#).

Output graphics to a watch folder: Set up the output

- 01 Create a watch folder on your computer where VideoPro should write the file.
- 02 In the VideoPro playout window, click the **Program Out** menu and choose **Watch Folder Setup**.
- 03 In the **Watchfolder Save File** dialog, navigate to your folder and type a filename. VideoPro appends `.png` (alpha on) or `.jpg` (alpha off) to whatever you type. Click **Save**.
- 04 From the **Program Out** menu, choose **Watch Folder** to enable the output.
- 05 In your switcher, add a source that watches the file you just chose.

Output graphics to a watch folder: Run the output

In the Project List, click a graphic's **Play** button. VideoPro writes the rendered graphic to the file you chose. As you change graphics, the file is updated to match the current on-air state.

When no graphic is on air

When the on-air graphic clears, VideoPro rewrites the file as a transparent PNG (or a black JPG, if your project has alpha turned off). Switchers keying on the watch-folder source will see an empty key and stop showing the previous graphic automatically.

Multiple channels

If your project has multiple channels, VideoPro writes one file per channel, with each channel's name appended to the basename you typed during setup.

For example, if you typed `lower-thirds` and your project has channels "Lower Thirds" and "Full Screen", VideoPro produces:

```
lower-thirdsLower Thirds.png (the first channel)
lower-thirdsFull Screen.png (the second channel)
```

A single-channel project writes just `lower-thirds.png` (no name appended).

Configure your switcher to watch the file matching the channel you want.

Output graphics to a watch folder: See also

- [Set the project format](#)
 - [Output graphics as an image sequence](#) — write a numbered sequence of frames instead of a single, continuously updated image.
-

Production setup scenarios

Use this chapter when VideoPro needs to fit into another production system — a software switcher, a hardware switcher, or a network transport. Each page covers one kind of system: which connection to use, whether to turn **Alpha Key** on, and a high-level setup, with links to the reference articles for the exact settings.

If you haven't decided where VideoPro fits yet, start with [Choose how VideoPro fits your production](#). These pages tell you **which path to choose**; the [Set up graphics output](#) articles tell you **how to configure it**.

Software production systems

- [Use VideoPro with vMix](#) — feed vMix a graphics overlay over the network.

More software-switcher pages (TriCaster, Wirecast, OBS Studio) are on the way; until then, see [Output graphics to a TriCaster](#) and [Output graphics to OBS Studio](#) for those transports.

Hardware switchers

- [Use VideoPro with an HDMI switcher](#) — for switchers that chromakey an HDMI input.
- [Use VideoPro with ATEM](#) — the two ATEM workflows, in both directions.
- [Use VideoPro with an SDI broadcast switcher](#) — key + fill into a production switcher.

Network and facility transport

For the network transports themselves, see [Output graphics with NDI](#) and [Output graphics with OMT](#). System-specific NDI and OMT scenario pages are being added.

If VideoPro is producing the final show

If VideoPro renders the finished production rather than feeding another switcher, you're sending or capturing a result — streaming, a video call, a virtual webcam, or files. See [Streaming & delivery](#).

Production setup scenarios: Related

- [Choose how VideoPro fits your production](#) — the decision hub for this whole section.
 - [Set up graphics output](#) — the reference articles for each output transport.
 - [Switcher integrations](#) — end-to-end recipes for specific switchers.
-

Use VideoPro with vMix

Use this setup when you switch and produce your show in vMix and want VideoPro to supply the graphics. VideoPro sends keyed graphics over the network, and vMix composites them over your program as an overlay channel.

When to use this setup

- vMix is your production switcher or encoder.
- VideoPro provides lower thirds, scorebugs, sponsor graphics, or other overlays.
- You want a clean network connection rather than capture hardware.

Recommended path

Send VideoPro to vMix over **NDI with alpha**. vMix discovers the VideoPro NDI source on the local network and uses it as an overlay input with transparency.

Alternatives, in order of preference:

- **OMT with alpha** — the same idea over Open Media Transport, when your vMix system is set up for it.
- **SDI key + fill** — only when the machines are connected by SDI capture hardware rather than the network.
- **Virtual Webcam** — a fallback for a single opaque feed; it carries no transparency, so use it only when an overlay isn't needed.

Alpha Key

Turn **Alpha Key** on. VideoPro is a graphics contributor here — vMix does the compositing — so the output needs to carry transparency. If vMix shows a fringe around your graphics, check the **Premultiplied** setting in [Set the project format](#).

Set up overview

- 01 In VideoPro, set the project's video format to match your vMix production, and turn **Alpha Key** on — see [Set the project format](#).
- 02 Enable the **NDI** (or **OMT**) output from the **Program Out** menu.
- 03 In vMix, add the VideoPro NDI (or OMT) source as an input.
- 04 Place that input as an overlay channel above your program, and confirm the graphics key cleanly over video.

Detailed setup links

- [Output graphics with NDI](#) — the exact NDI output settings.
- [Output graphics with OMT](#) — the OMT output settings.
- [Set the project format](#) — resolution, frame rate, and Alpha Key.

Use VideoPro with vMix: Related

- [Add graphics to vMix productions](#) — the end-to-end recipe.
- [Choose how VideoPro fits your production](#) — the decision hub.
- [Production setup scenarios](#) — other systems VideoPro feeds.

Use VideoPro with an HDMI switcher

Use this setup when your switcher takes an HDMI input and can chroma key or luma key, but does not accept SDI key + fill or NDI with alpha. VideoPro's Display output carries the graphics over a key-color background, and the switcher keys that background out to composite the graphics over its program.

Use VideoPro with an HDMI switcher: When to use this setup

- The switcher has an HDMI or DisplayPort input.
- The switcher can chroma key (blue or green) or luma key (black).
- The switcher does not support SDI key + fill or NDI alpha.

This is common with compact HDMI switchers such as the Blackmagic ATEM, Roland, and Epiphan lines.

Use VideoPro with an HDMI switcher: Recommended path

Send VideoPro's **Display output** to the switcher's HDMI input, drawn over a chroma or luma key background, and set the switcher to key that background out.

Alternatives:

- If the switcher **does** accept NDI with alpha, prefer [NDI](#) — it carries real transparency and avoids key-color spill.
- If the switcher has a key + fill input, prefer [SDI key + fill](#).

Use VideoPro with an HDMI switcher: Alpha Key

Turn **Alpha Key** on. With Alpha Key on, the Display output draws your graphics over the chosen key-color background, which is what the switcher keys against. This is a keyable background, not true alpha — the switcher creates the final composite. Pick the key color to match what the switcher keys: blue or green for chroma, black for luma.

Use VideoPro with an HDMI switcher: Set up overview

- 01 In VideoPro, set the project's video format and turn **Alpha Key** on — see [Set the project format](#).
-

- 02 From the **Program Out** menu, choose **Display**, and set the screen's resolution to match your project.

- 03 In **Display Setup**, choose the key color (black, blue, or green) that your switcher keys against.

- 04 Connect the Display output to the switcher's HDMI input, and configure the switcher's chroma or luma keyer to remove the background.

Use VideoPro with an HDMI switcher: Detailed setup links

- [Output graphics to a display](#) — the Display output and key-color settings.
- [Set the project format](#) — resolution, frame rate, and Alpha Key.

Use VideoPro with an HDMI switcher: Related

- [Use VideoPro with ATEM](#) — the most common HDMI-chroma key switcher.
 - [Choose how VideoPro fits your production](#) — the decision hub.
-

Use VideoPro with ATEM

A Blackmagic ATEM can work with VideoPro in two directions: VideoPro can feed the ATEM keyable graphics, or the ATEM's program can come into VideoPro for final compositing. Decide which direction your show runs before you wire it, because it sets your **Alpha Key** and output.

VideoPro into ATEM

VideoPro sends keyable graphics; the ATEM composites them over its program. This is the contributor role — turn **Alpha Key** on.

- **ATEM models with an HDMI chroma keyer** (such as the ATEM Mini line): send the **Display output** over a chroma or luma key background and key it on the

ATEM. See [Use VideoPro with an HDMI switcher](#).

- **ATEM models with SDI fill + key inputs:** send **SDI key + fill** into the ATEM's upstream or downstream keyer. See [Use VideoPro with an SDI broadcast switcher](#).

ATEM into VideoPro

The ATEM produces the program and sends it into VideoPro, which adds graphics on top and sends the finished frame onward. This is the finisher role — turn **Alpha Key** off.

- Bring the ATEM's program in as a live source. On the ATEM Mini, the USB-C program output appears as a webcam capture source; on larger models, use an SDI or HDMI capture card. See [Live video inputs](#).
- Overlay your graphics, then send the finished result to a display, a stream, or back into the ATEM on a separate input. See [Set up graphics output](#) or [Streaming & delivery](#).

Use VideoPro with ATEM: Alpha Key

- **VideoPro into ATEM** — Alpha Key on. VideoPro produces keyable graphics; the ATEM composites them.
- **ATEM into VideoPro** — Alpha Key off. VideoPro produces the finished frame.

Use VideoPro with ATEM: Set up overview

- 01 Decide the direction: is VideoPro contributing graphics to the ATEM, or finishing the ATEM's program?
 - 02 Set the project's video format and **Alpha Key** to match — see [Set the project format](#).
 - 03 Configure the output (Display or SDI) or the live input (capture/USB-C) for that direction.
-

04 Set the ATEM's keyer or input routing to match.

Use VideoPro with ATEM: Related

- [Preparing your Blackmagic ATEM switcher to communicate with VideoPro](#) — the end-to-end recipe.
 - [Use VideoPro with an HDMI switcher](#)
 - [Live video inputs](#)
 - [Choose how VideoPro fits your production](#)
-

Use VideoPro with an SDI broadcast switcher

Use this setup in an SDI-routed production, where a broadcast switcher composites graphics from a paired **fill** and **key** feed. VideoPro sends fill and key on two SDI connectors, and the switcher's keyer lays the graphics over its program. This is the path for Sony, Ross, Grass Valley, FOR-A, Blackmagic, and similar production switchers.

Use VideoPro with an SDI broadcast switcher: When to use this setup

- The switcher accepts SDI key + fill (an upstream or downstream keyer).
- Your facility routes video over SDI.
- You need broadcast-quality keying with no software-compositing overhead on the switcher side.

Use VideoPro with an SDI broadcast switcher: Recommended path

Send **SDI key + fill** from VideoPro into the switcher's keyer. VideoPro drives a fill output and a matching key output on a supported SDI card; assign them to the keyer's fill and key inputs.

Alternatives:

- If the facility runs on NDI or OMT instead of SDI, send graphics over the network with alpha — see [the network-overlay path](#).
- If the switcher has no fill + key input but can chroma key an HDMI feed, use [an HDMI switcher setup](#) instead.

Use VideoPro with an SDI broadcast switcher: Alpha Key

Turn **Alpha Key** on. With Alpha Key on, SDI runs in **key + fill** mode and uses two connectors — one for the key, one for the fill. With Alpha Key off, SDI runs one connector per channel and sends an opaque image, which a key + fill keyer cannot use. If your receiving system shows incorrect edges, set straight or premultiplied alpha to match it — see [Set the project format](#).

Use VideoPro with an SDI broadcast switcher: Set up overview

- 01 Set the project's video format to match the switcher's standard exactly — resolution, frame rate, and interlacing — and turn **Alpha Key** on. See [Set the project format](#).
- 02 From the **Program Out** menu, choose **SDI** and select your card. Confirm it is in key + fill mode.
- 03 Cable the fill and key outputs to the switcher's keyer fill and key inputs.
- 04 On the switcher, assign those inputs and configure the upstream or downstream keyer.

Use VideoPro with an SDI broadcast switcher: Detailed setup links

- [Output graphics with SDI](#) — card setup, key + fill, and the internal keyer option.
- [Set the project format](#) — matching the switcher's format and setting Alpha Key.

Use VideoPro with an SDI broadcast switcher: Related

- [Use VideoPro with ATEM](#) — for ATEM models with SDI fill + key.
- [Choose how VideoPro fits your production](#) — the decision hub.