

POMFORT<sup>fn</sup>

## User Manual



# *Reeltime* **PRO**

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# Getting Started

## Quick start guide for Reeltime

This article describes how to quickly get started with setting up Reeltime for a first evaluation. All you need is a Mac with an Apple Silicon processor, macOS 14 or newer, and a webcam. In addition to the minimal setup with a webcam, the article also covers a basic setup with a video I/O device. Furthermore, the “first steps” sections walk you through some essential application features.

### Trial mode and adding a license key

After starting the software for the first time, you can use it in trial mode for ten days. You can extend your use at any time by entering a valid license within the License Window (Reeltime Pro/Reeltime Lite > Licenses...). Note that the trial license version includes a visible watermark in recordings and video outputs. For prepping and testing purposes you can also create a free test license in your Pomfort account. The test license has the same limitations as a trial version and is valid for 30 days. You can create a new test license at any time after a license has expired.

### Sample project and sample footage

You can download a sample project and associated sample footage with dedicated menu items in the help menu.

The sample project allows you to evaluate the software with a small library that contains recorded clips from a real-world production.

The associated project media (= sample footage) is a Reeltime “media folder” that you can save on your preferred directory and then configure it as the media path in the recording settings of your project.

All media files are graded and encoded in ProRes Proxy (to keep the download size as small as possible).

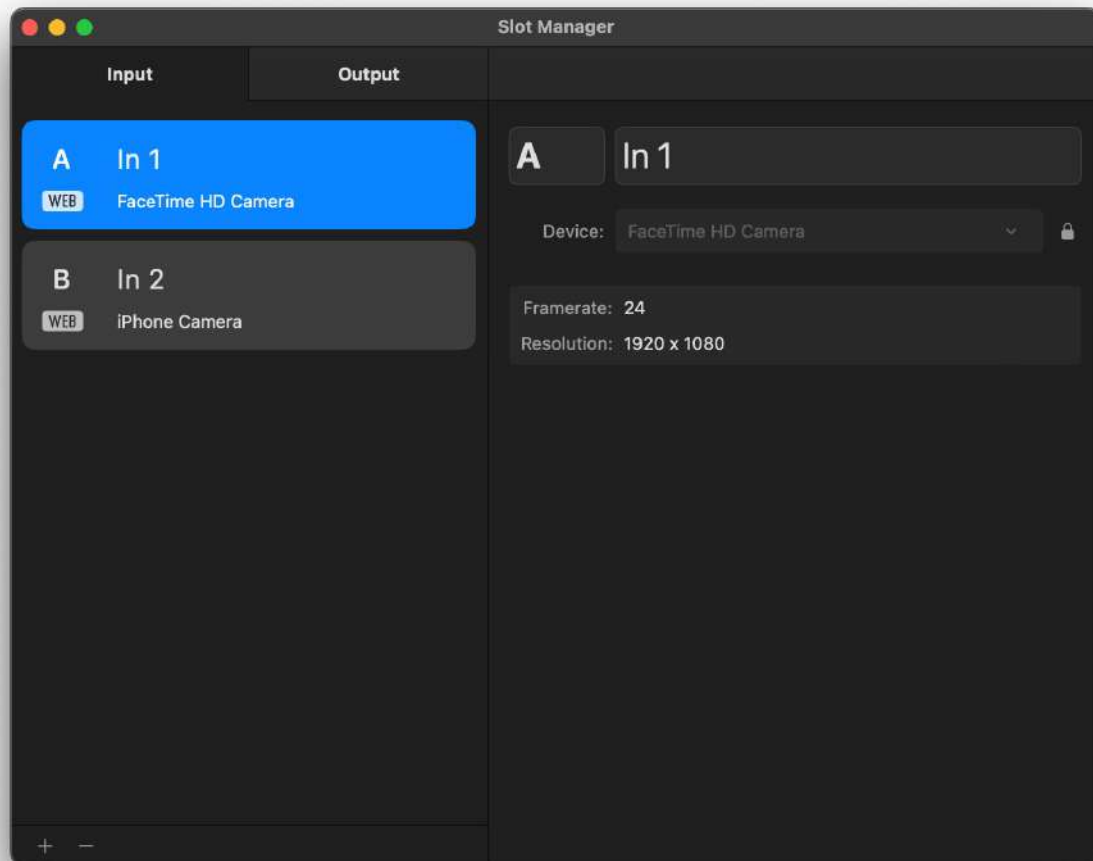
### Minimum setup with webcam inputs

Configuring a webcam as input makes it easy to evaluate Reeltime without video I/O devices. If you have two webcams at hand (i.e. an additional USB webcam), it’s beneficial as you can test the group recording and playback functionality.

**Tip:** Use the internal FaceTime webcam of your Mac notebook as the first input and the camera of your iPhone or iPad as the second camera. Your iPhone’s or iPad’s camera will appear as a webcam automatically if you are connected with the same Apple ID as on your Mac.

Within the slot manager (Reeltime Pro/Reeltime Lite > Slot Manager...), you can associate an input video source, such as a webcam, with an input slot:

- Open the slot manager’s input tab and select an existing input slot (e.g., slot “A”)
- Choose the desired video input device under “Device”, for example, the internal “FaceTime HD Camera” of your MacBook
- Select another existing input slot (e.g., slot “B”) and configure a second webcam input
- The webcams’ signals now appear in the live slot mode of your input slots “A” and “B”



Slot manager with configured webcam inputs

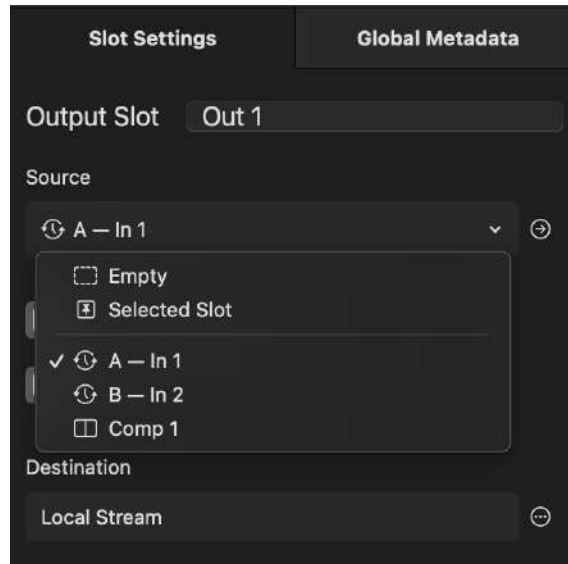
You are all set for your first steps with recording and playback.

### Add local streaming outputs (optional)

#### PRO

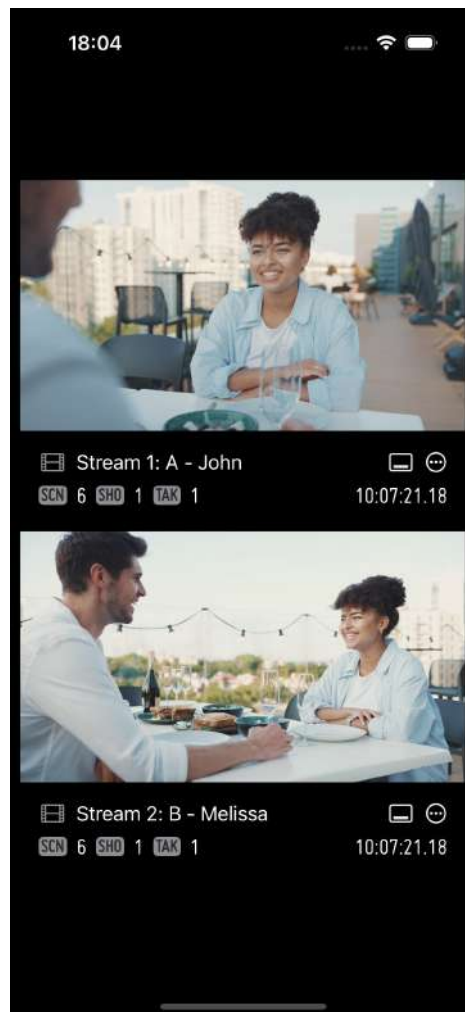
Even without I/O devices you can still evaluate how Reeltime Pro's outputs can be configured. If you have an iPhone or iPad at hand you can configure your output slots as local streams:

- Open the slot manager's output tab and select an existing output slot (e.g., "Out 1")
- Choose "Local Stream" as output type under "Device"
- Select another existing output slot (e.g., slot "Out 2") and configure a second local stream
- By default the input slots "A" and "B" are set as sources for the output slots "Out 1" and "Out 2"
- You can change the source of an output slot by selecting the output slot in the main window and changing the source within the slot settings.



Setting the source of an output slot in the slot settings

- To view the local streams on your mobile device, you can easily install the free “Reeltime Viewer” companion app from the App Store by displaying the QR code in the local streaming settings (Reeltime Pro > Settings... > Local Streaming)
- To access the local streams on your iPhone or iPad, you must enter the password, which you can view in Reeltime Pro’s local streaming settings
- You can choose between different screen layouts. For example, you can choose a two-viewer screen layout if you want to see the two local streams “Out 1” and “Out2” on your iPhone.



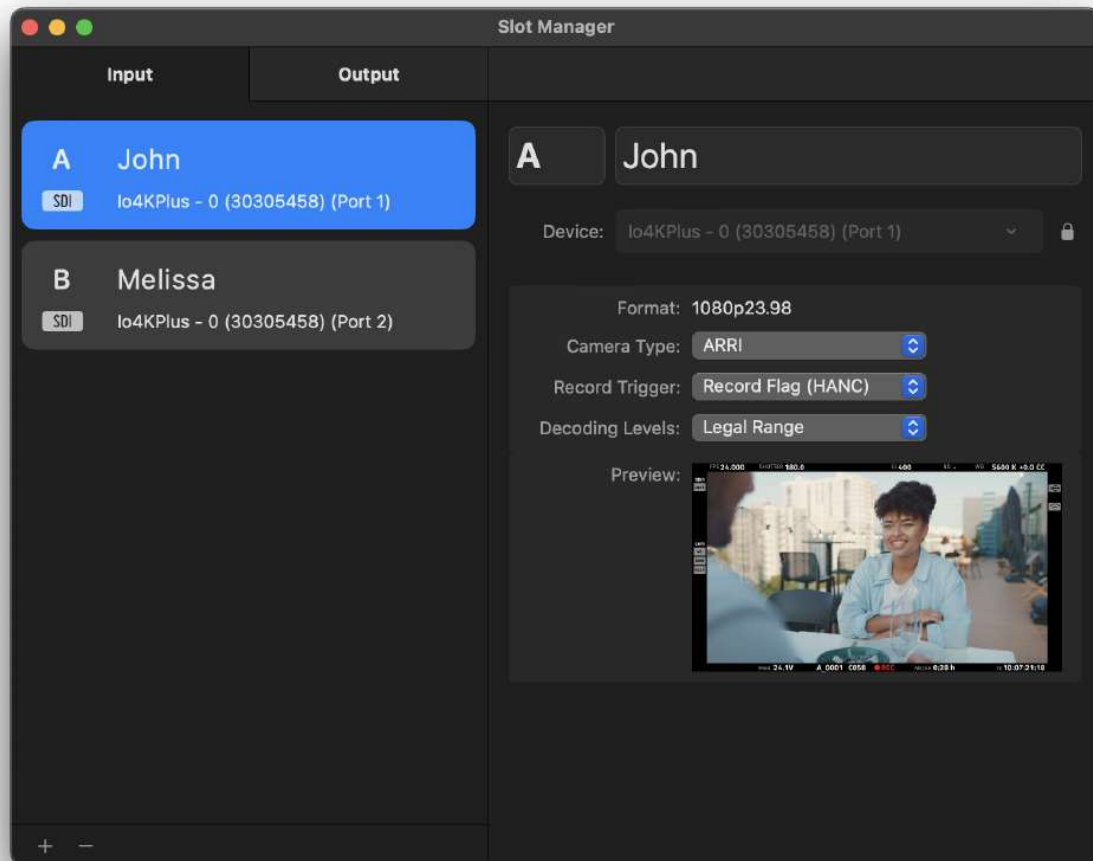
Reeltime Viewer with a two-viewer screen layout on an iPhone

Read more about receiving local streams with the Reeltime Viewer companion app for iPhones and iPads under [Getting Started With Reeltime Viewer](#).

### Basic setup with a video I/O device

Within the slot manager (Reeltime Pro/Reeltime Lite > Slot Manager...), you can associate the input ports of your video I/O device with an input slot:

- Open the slot manager's input tab and select an existing input slot (e.g., slot "A")
- Choose the desired video input port under "Device"
  - The video format of the incoming video signal sets the video format of your device automatically.
  - To receive the camera's ANC metadata correctly and trigger recording based on the record flag embedded in the SDI signal, ensure setting the appropriate camera type and your preferred record trigger method.
- Select another existing input slot (e.g., slot "B") and configure a second input.
- The video signals now appear in the live slot mode of your input slots "A" and "B".



Slot manager with SDI device configuration for an input slot

In the same way, you can associate the output ports of your video I/O device with an output slot:

- Open the slot manager's output tab and select an existing output slot (e.g., "Out 1").
- Choose the desired video output port under "Device".
- The video format of outgoing signals usually derives from the input and may not be editable. However, with some devices, the output's video format can be set manually.
- Select another existing output slot (e.g., slot "Out 2") and configure a second output.
- By default the input slots "A" and "B" are set as sources for the output slots "Out 1" and "Out 2".
- You can change the source of an output slot by selecting the output slot in the main window and changing the source within the slot settings.

### Quick audio setup (optional)

If you want to include audio in your recordings, you can configure multiple audio inputs and mix them down into one main audio track, which is then included in your video recordings:

- Connect your **audio interface** to your machine.
  - You can connect any audio source that is supported by macOS including embedded audio channels from SDI signals via the drivers by AJA and Blackmagic.
- Open Reeltime's audio settings.
  - Enable at least one audio input by clicking on the speaker icon in the de table row.
- The "Input Devices" list displays all audio devices that are connected to your machine.
  - You can enable all channels you want to use. Each channel has an individual volume slider.



- For **audio monitoring and playback** you can choose an output device or select to use system's audio output device.
- You can set the **audio source** to follow the last selected input slot or library slot automatically, or pin the audio source to a specific input slot or library slot.
- The **audio meters** in the toolbar visualize the active audio in green (for playback), blue (for monitoring), and grey (if the audio is muted).
- There are menu items (in the audio menu) and associated controller actions for **muting the live audio or all audio** and an associated global mute toolbar button.

Learn more about working with the main audio in the article [Main Audio for Recording and Playback](#).

Read how to set up audio devices in the article [Setting Up Audio I/O Interfaces](#).

### Recording and playback with input slots – First steps

Input slots are your “primary workbench” for recording and playback, as they allow you to monitor your live signals, record clips, and playback the clips that were recorded. Consequently, input slots have three different slot modes:

- the **Live** mode – for monitoring and recording the live signal from a camera
- the **Playback** mode – for playing back the recorded clips from the associated source camera
- the **Reference** mode – for comparing live and playback signal with various layout option

There are dedicated buttons in the toolbar for **switching all input slots to live/playback** slot mode.



Toolbar buttons for switching all inputs slot to “Live”/“Playback” slot mode

There are several ways to **create single recordings and TC-synced group recordings**:

- You can create a **single recording** from a single camera's live signal with the record button in the individual slot card
- You can create a **timecode-synced group recording** from all input slots
  - with the record button in the viewer controls (a sync info label indicates which slots are currently synced and will be included in the group recording),
  - or with the “record all” button in the toolbar.
  - With a configured video I/O device by AJA and DELTACAST you can also trigger recording based on the record flag embedded in SDI signals from professional cameras.
- Generally, all “armed” input slots are recorded in the upcoming group recording. However, you can un-arm slots you want to exclude from the next group recording with the arrow button beside the record button in the slot UI.
- You can set **multiple in and out ranges** during recording for marking several actions within one take.



Input Slots in “Live” slot mode during group recording

You can now **playback your recordings** with several options in the playback slot mode of the input slots:

- New recordings appear in the clip library and are loaded automatically into their source slots for instant playback
  - you can disable this behavior by checking “Disable automatic loading of new clips for playback” in the recording settings
- You can also **load a synced group recording** from the library into the source slots by double-clicking a clip from that group
- Alternatively, you can **load a single clip** from the library into the currently selected slot with the “Load Selected Clip into Current Slot” menu item
- **Ranges playback and looping options** allow you to play back only the marked ranges in a group or single clip

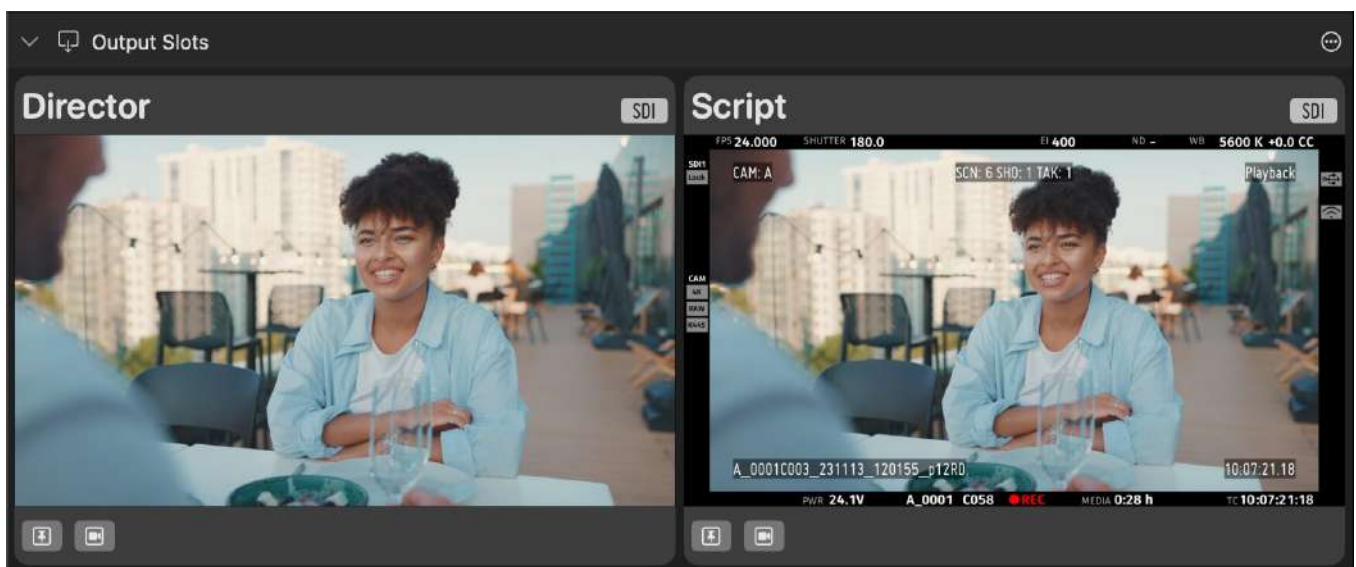


Playback controls with editing options and enabled ranges playback and loop playback

To learn more about the individual features, read the article [Recording and Playback](#).

## Output slots – First steps

You can think of an output slot as a “showroom” for displaying the final product to your client. With two configured output slots, you are all set to create “tailored views” by applying individual filters to them. For example, you could apply a crop filter in the output slot “Out 1” and a metadata overlay filter in the output slot “Out 2.”



Tailored views configured with individual filters per output slots

Additionally, the output routing options allow you to temporarily switch an output slot's source signal:



- **Force Slot to Follow Live Video** – for forcing an output slot to always show the live signal of its configured input source (= the input slot's live slot mode)
- **Set Slot to Follow Selection** – for automatically setting the input/library/composite slot that is selected in the slot overview UI as the source for the output slot ("what you select is what you get")

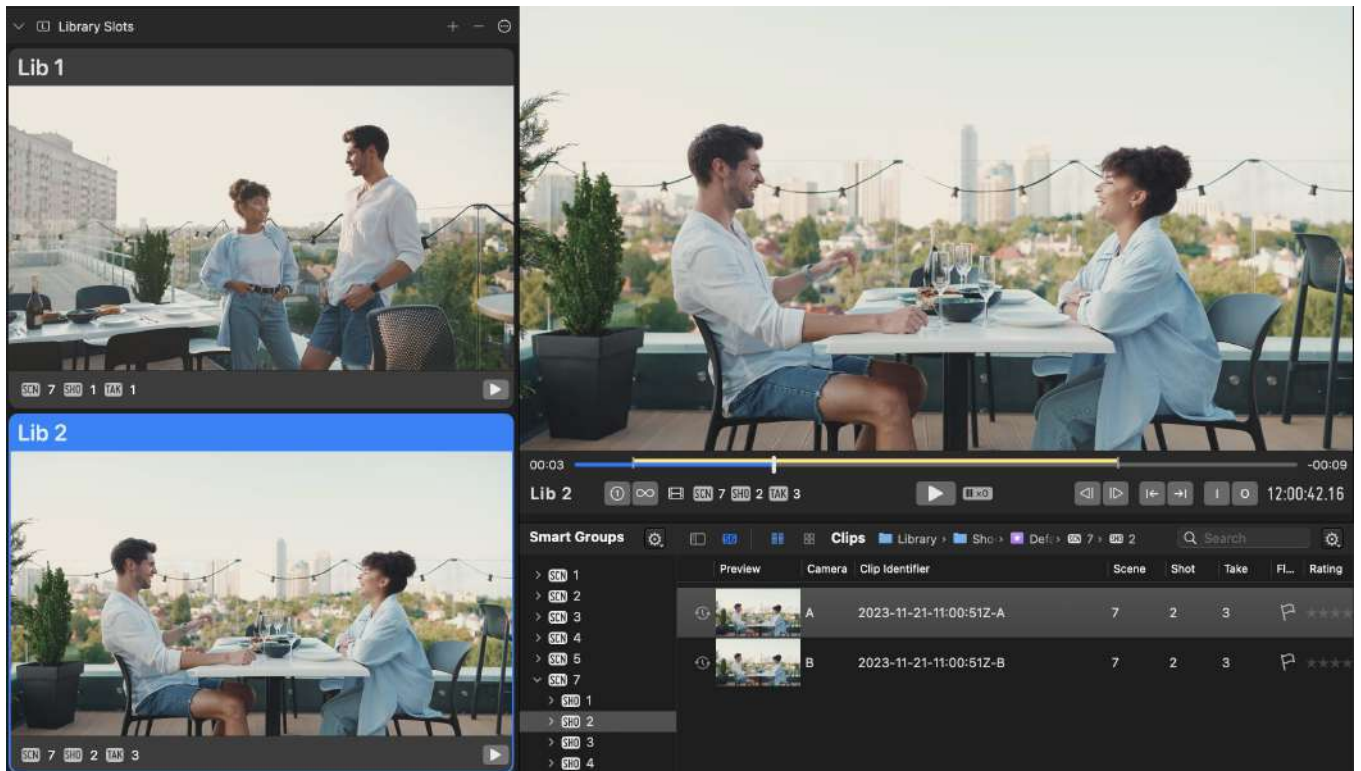
Learn more about tailored views with video filters in the blog article [How to Craft Tailored Views With Reeltime Pro's Slot System.](#)

### Library slots – First steps

When you recorded your files you can also check out the library slots. You can use a library slot as a kind of "personal workbench" where you prepare requested actions or references for review before anyone else actually sees them. Library slots are directly linked to the clip library, so you can fill any library slot with any item you can select in the clip library.

**Library slots** allow you to:

- Find a specific clip by browsing the library with
  - the arrow down/up keys to **auto-load the selected clip in the library** for instant review and playback.
- Compare shots or compare different play positions with
  - an **independent library selection per library slot**, (e.g., different folder/bin/smart group levels) and/or,
  - an independent playhead position per library slot, (e.g., two different ranges within the same recording).



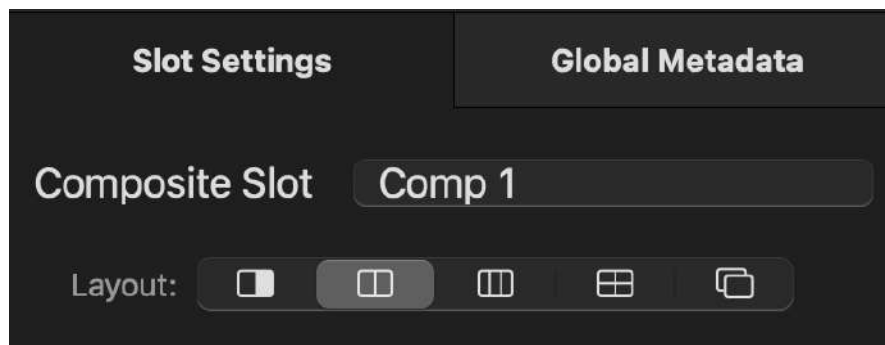
Two library slots with different selections in the clip library



## Composite slots – First steps

Composite slots serve as an “assembly zone” where you can create composites out of input and library slots. **Composite slots** allow you to:

- Compose a view from multiple input and/or library slots with live and/or playback signals.
- Choose from a range of **layout options** for your compositing:
  - Side-by-Side (2×1): Create a side-by-side view of 2 slots (e.g., “A” and “B” camera)
  - **PRO** Side-by-Side (3×1): Create a side-by-side view of 3 slots
    - There is an “Orientation” parameter in the composite slot’s filter settings that lets you rotate the composite by -90° or +90° for vertical monitor installation (e.g., for a composite of three images below each other).
  - 2×2 Grid: Create a grid view of up to 4 slots (e.g., “A” and “B” camera and two library slots “Lib 1” and “Lib 2”)
  - Swipe: Compare the content of two slots with a horizontal or vertical swipe
  - **PRO** Overlay: Mix and overlay the content of two slots (e.g., to match the framing of two shots)



Composite slot layouts

To learn more about working with slots, read the article [Manage Video Signals With “Slots”](#).

## Further reading

The main window contains all primary controls for your daily tasks. To learn how to use the individual features, read the article [The main screen](#).

Reeltime’s innovative slots concept lets you flexibly manage your incoming and outgoing signals and create tailored views for the different roles on set. To learn more about working with slots, read the article [Manage video signals with “Slots”](#).

You can create TC-synced group recordings or single recordings, set multiple in and out ranges already during recording, and instantly play back all relevant ranges with various neat actions and playback options. To learn more about the individual features, read the article [Recording and playback](#).

Reeltime’s clip library and metadata features enable you to reveal recorded clips in no time and let you make use of all the metadata you applied during your project. To learn more about working with the library and metadata, read the article [Clip library and metadata](#).



Reeltime's versatile device integrations allow you to build a hardware setup optimized for your production's requirements. To learn more about supported devices and different setup options, read the article [Hardware setup options](#).



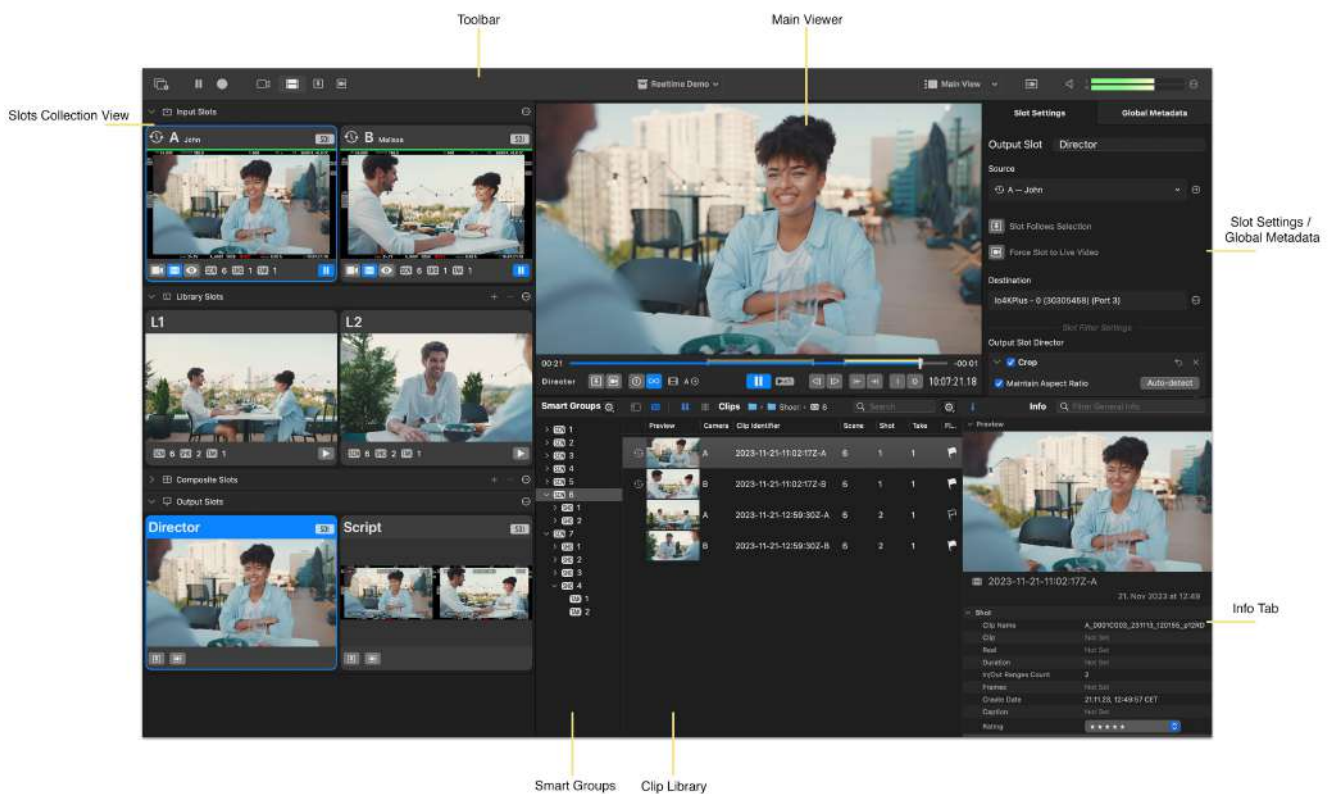
# Primary Features

## The main screen

The main screen of Reeltime contains all the primary controls for operating the software.

You can, for example, control recording and playback, change the internal routing between slots, apply and configure filters and composite layouts, fill in global metadata, and browse and maintain the recorded clips in the clip library.

All controls in the main window can also be found in the main menu and can be triggered by keyboard shortcuts or associated Stream Deck controller actions. Some elements offer a context menu with additional options on a right-click (or option-click), for example, clips in the clip library.



Main View window layout

## Main view layout

The main view provides all essential controls and UI elements you need for your video playback related tasks. You can see all configured slots in a slots collection view, and you can control and view the selected slot's content in the main viewer. Furthermore, you can change the settings of the selected slot and have access to all the clips you recorded in the clip library.

### Toolbar:

The toolbar at the top of the interface is available in all window layouts and contains buttons for the most common global actions. You can customize the toolbar with the contextual "Customize Toolbar..." menu item (right-click / opt-click on toolbar) and drag and drop more actions into the toolbar or change the position of the buttons.



## Slots collection view:

Slots are represented in the user interface as individual slot cards in the slot collection view on the left of the main window. The slots are grouped by the slot types input slots, library slots, composite slots and output slots. Library slots and composite slots can be added and removed within the main window directly. For managing input slots and output slots and configuring devices you can open the slot manager (via a toolbar button or options menu button the slot overview). In the options menu you can also choose the slot card size. The slot cards have various labels and indicators that help to keep track on the slot's status. Learn more about slots in the article [Manage Video Signals With "Slots"](#).

## Main viewer:

The main viewer in the upper middle of the interface displays the image of the currently connected slot and provides either playback controls in the playback slot mode or recording controls in the live slot mode. Recording controls provide controls for triggering recording actions in a single slot or timecode-synced groups of slots. Furthermore, recording controls allow setting multiple in and out ranges while recording. Playback controls provide flexible options for playing back single recordings or timecode-synced group recordings. Furthermore, playback controls allow navigating within the recording/s and editing or adding in/out ranges. Most of the viewer controls apply to the current group – for playback: all clips from the currently loaded group, for recording: all armed input slots. The current group is indicated by the sync info label.

## Slot settings:

The slot settings in the config panel of the right-hand side of the interface display settings for the currently selected slot based on its slot type. In an input slot you can configure the slot mode, add and edit filters, or inspect source, the loaded clip or the currently configured destinations. In a library slot you can add and edit filters, or inspect the loaded clip, or the currently configured destinations. In a composite slot you can choose from different composite layout modes, configure source slots for the composite, and inspect or edit related filter settings. In an output slot you can configure the source slot, set quick-routing options "Slot Follows Selection" and "Force Slot to Live Video", or add and edit filters, and inspect or edit related filter settings.

## Global metadata (Main view):

The global metadata tab in the config panel lets you inspect and edit metadata that is valid for all currently configured input slots. Global metadata fields are slate info fields such as scene, shot and take, production info fields such as location and crew unit, or general info fields such as time and date. The global metadata is stored together with the slot specific metadata such as clip name and timecode in each clip entry of the clip library.

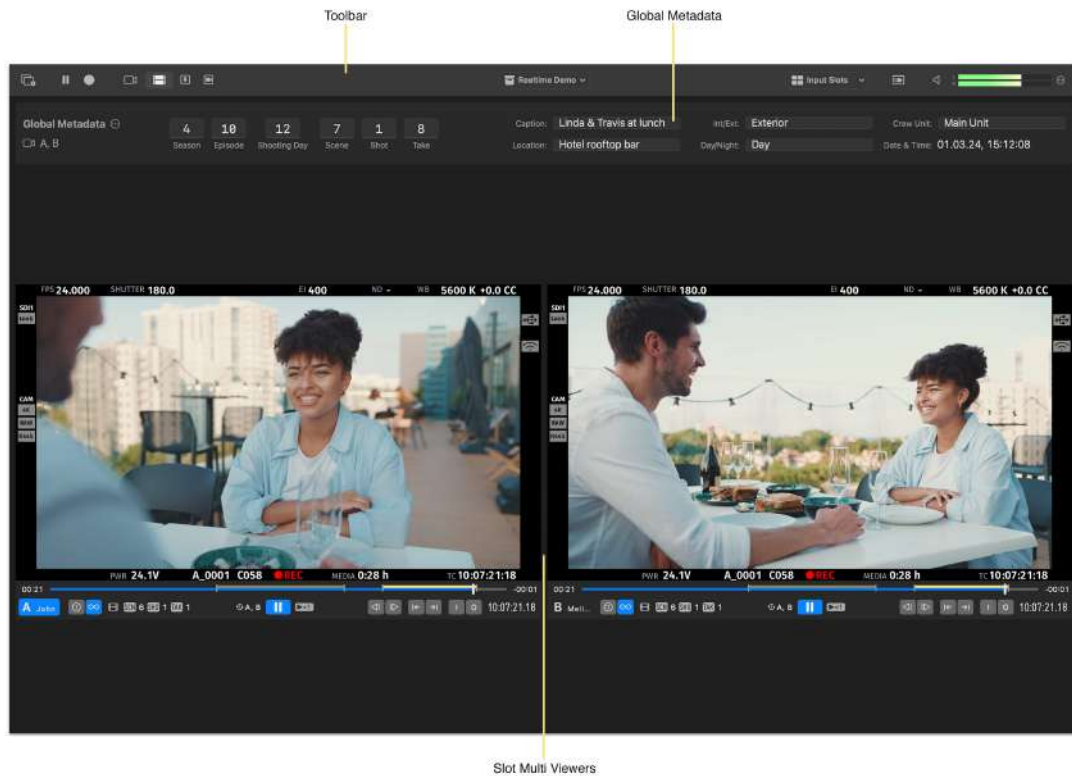
You can configure the global metadata field with the options menu button to include only fields required by your production.

## Clip library:

The clip library contains all recordings made throughout a project. It offers various tools to reveal a required clip quickly. A library outline allows you to sort recordings into folders and bins manually. The smart groups tab lets you outline and filter the library with flexible hierarchies based on the existing clip metadata (e.g., Scene/Shot/Take). You can view clips in a tabular form in the clips table, which displays all clips and their metadata in customizable column layouts. The collection view displays each clip with a large thumbnail and provides a visual search with a skimming mechanism, allowing you to find a specific action within a clip quickly. A text search allows you to search for specific terms to quickly display matching clips in the clips table or collection view. Furthermore, an info tab shows the metadata of one or more selected clips in a detail view and allows you to inspect and (multi-)edit the clip metadata. To learn more about the clip library, read the article [Clip Library and Metadata](#).

## Multi view layouts

Apart from the main view window layout, there are also multi view layouts that offer a reduced set of UI elements and represent each slot in its own viewer. Multi view layouts are optimized to ensure efficient work also on small screen sizes.



Multi View window layout

### Slot multi viewers:

The slot multi viewers work the same way as the main viewer but display each currently configured slot in its own viewer window. There are dedicated multi view layouts for the slot types: input slots, library slots, and output slots. Multi view layouts automatically adapt their sizing and grid layout depending on the number of configured slots. The multi view layouts can display up to 3x3 (9 slots).

### Global metadata (Multi view):

The global metadata panel in the multi view layouts works similarly to the global metadata panel in the main view layout but uses a horizontal layout with larger text boxes. You can increase the values in a text box with the arrow up/down keys and navigate back and forth between fields with a tab or shift tab.

## Manage video signals with “Slots”

Slots are a flexible and transparent way to manage and route live and playback video signals to various destinations.

Each slot is a container for either a signal input, video playback, video output or a composite of other slots. You can connect slots to each other to create internal video routing setups from simple to complex structure.

Slots are represented in the user interface as individual slot cards in the slot overview on the left of the main window. Slots are grouped in the slot overview by type:

- **Slot types** are
  - input slots,
  - library slots,
  - composite slots and
  - output slots

Slots of the “Input Slot” type can have further modes. Slot types and slot modes are explained in more detail below.

## Input slots

Input slots are your “primary workbench” for recording and playback, as they allow you to monitor your live signals, record clips, and playback the clips that were recorded.

- Input slots allow you to:
  - Associate your input slots with the video inputs installed on your system (such as SDI input ports) in order to monitor, record and distribute all your incoming signals.
  - Play back the clips that were recorded in the associated source input slots.
  - Consequently, input slots have three different slot modes:
    - the Live mode – for monitoring and recording the live signal from a camera,
    - the Playback mode – for playing back the recorded clips from the associated source camera (recorded clips are loaded into their source input slot by default),
    - the Reference mode – for comparing live and playback signal with various layout options:
      - Side-by-Side: For creating a side-by-side view of the slot’s live and playback signal.
      - Swipe: For comparing the content of the slot’s live and playback signal with a horizontal or vertical swipe.

### PRO

Overlay: For creating an instant mix and overlay composite of the slot’s live and playback signal, (e.g., to match the framing).



Input Slots in “Live” slot mode during group recording



- There are dedicated buttons in the toolbar for switching all input slots to live/playback slot mode, (e.g., switch all input slots to live lets you quickly resume to the live signal if shooting continues).



Toolbar buttons for switching all inputs slot to “Live”/”Playback” slot mode

## Output slots

You can think of an output slot as a “showroom” for displaying the final product to your client. Output slots allow you to:

- Associate your output slots with the video outputs installed on your system (such as SDI output ports) in order to distribute the signals from input slots, library slots, and composite slots to various destinations.
- You can configure the source of an output slot in the slot settings, which are located on the right-hand side of the main window. As a source, you can configure any available input, library, or composite slots.
- Alternatively, you can change the source for the selected output slot with dedicated Slot > Change Source of Selected Output Slot menu items, or the associated Stream Deck controller actions.
- Additionally, the output quick routing options allow you to temporarily switch an output slot’s source signal:
  - Force Slot to Follow Live Video – for forcing an output slot to always show the live signal of its configured input source (= the input slot’s live slot mode).
  - Set Slot to Follow Selection – for automatically setting the input/library/composite slot that is selected in the slot overview UI as the source for the output slot (“what you select is what you get”).
- You can create a filtered, composited view tailored for the associated watcher or specific use case with individual filters and appearance settings and flexible routing options (e.g., the director wants to see a cropped image from camera A, while Script Continuity wants to see an un-cropped side-by-side view of camera A and B).

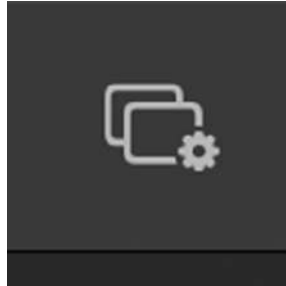


Output slot viewer and settings



## Managing input slots and output slots in the slot manager

You can add or remove input and output slots and associate them with your connected devices in the Slot Manager window (e.g., via the button from the main window's toolbar)



Toolbar button for opening slot manager

### LITE

You can flexibly add up to 4 input/output slots (3 inputs + 1 output *or* 2 inputs + 2 outputs *or* 1 input + 3 outputs) with Reeltime Lite

### 3CH

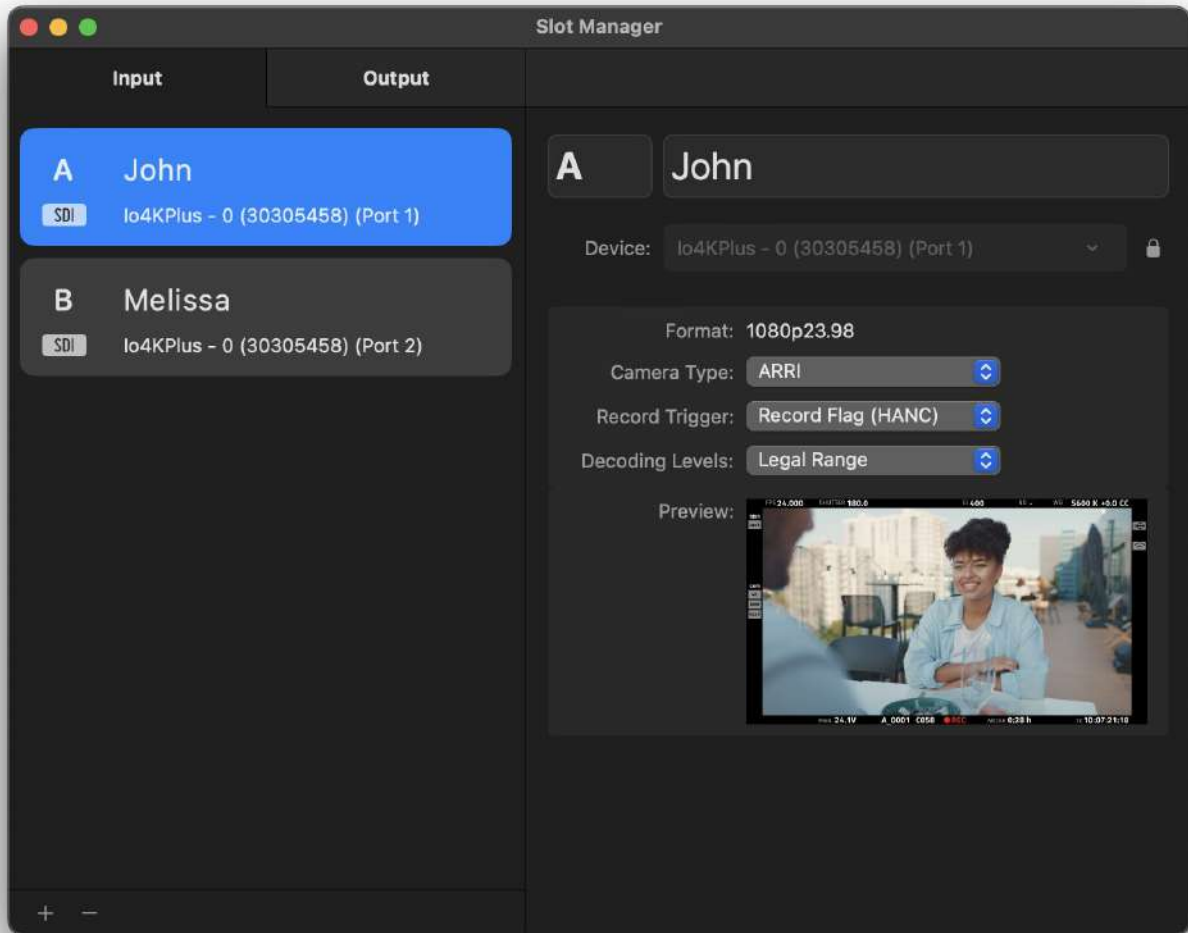
You can add up to 3 input slots and up to 6 output slots with the Reeltime Pro 3-Channel option

### 6CH

You can add up to 6 input slots and up to 9 output slots with the Reeltime Pro 6-Channel option

Within the slot manager, you can associate input sources (e.g., SDI input ports) from any compatible device that is connected to your machine with an input slot and, in the same way, destinations (e.g., SDI output ports) with output slots:

- The video format of the incoming video signal sets the video format of your device automatically.
- The video format of outgoing signals usually derives from the input and may not be editable. However, with some devices, the output's video format can be set manually.
- To receive the camera's ANC metadata correctly and trigger recording based on the record flag embedded in the SDI signal, ensure setting the appropriate camera type and your preferred record trigger method
- In rare cases, you can also change the decoding levels from legal to full, for example, if you receive an ungraded signal from a Sony camera that outputs an SDI signal in extended range.



Slot manager with SDI device configuration for an input slot

## Slot setups

If you need to frequently switch between various setup configurations, you can save and restore “slot setups”. A slot setup includes all configured slots, including the configuration of input/output devices and streams.

You open the dedicated Slot Setups window via the Reeltime Pro / Reeltime Lite > Slot Setups... menu item or a **Slot Setups...** button at the top right corner of the slot manager. The Slot Setups window allows you to save your current setup, restore a previously saved setup, rename, duplicate, and delete slot setups.

## Library slots

You can use a library slot as a kind of “personal workbench” where you prepare requested actions or references for review before anyone else actually sees them. Library slots are directly linked to the clip library, so you can fill any library slot with any item you can select in the clip library. Library slots allow you to:

- Find a specific clip by browsing the library with
  - the arrow down/up keys to auto-load the selected clip in the library for instant review and playback



- Compare shots or compare different play positions with
  - an independent library selection per library slot, (e.g., different folder/bin/smart group levels) and/or
  - an independent playhead position per library slot, (e.g., two different ranges within the same recording)

**Tip:** To play back multiple library slots from their current playhead position simultaneously, you can use the “Toggle Playback in All Library Slots” menu item or the associated Stream Deck controller action. There is also a dedicated “Play All Library Slots” toolbar button that you can add to your toolbar layout when customising the toolbar (right-click or option-click on the toolbar).

### LITE

You can add up to 2 library slots with the Reeltime Lite

### 3CH

You can add up to 6 library slots with the Reeltime Pro 3-Channel option

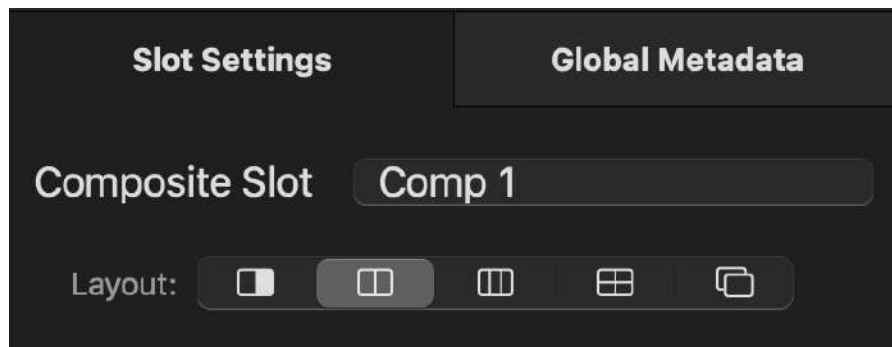
### 6CH

You can add up to 9 library slots with the Reeltime Pro 6-Channel option

## Composite slots

Composite slots serve as an “assembly zone” where you can create composites out of input and library slots. Composite slots allow you to:

- Compose a view from multiple input and/or library slots with live and/or playback signals:
- Choose from a range of layout options for your compositing (similarly to the reference mode of the input slots):
  - Side-by-Side (2×1): Create a side-by-side view of 2 slots
  - **PRO** Side-by-Side (3×1): Create a side-by-side view of 3 slots
    - There is an “Orientation” parameter in the composite slot’s filter settings that lets you rotate the composite by -90° or +90° for vertical monitor installation (e.g., for a composite of three images below each other).
  - 2×2 Grid: Create a grid view of up to 4 slots
  - Swipe: Compare the content of two slots with a horizontal or vertical swipe
  - **PRO** Overlay: Mix and overlay the content of two slots (e.g., to match the framing of two shots)

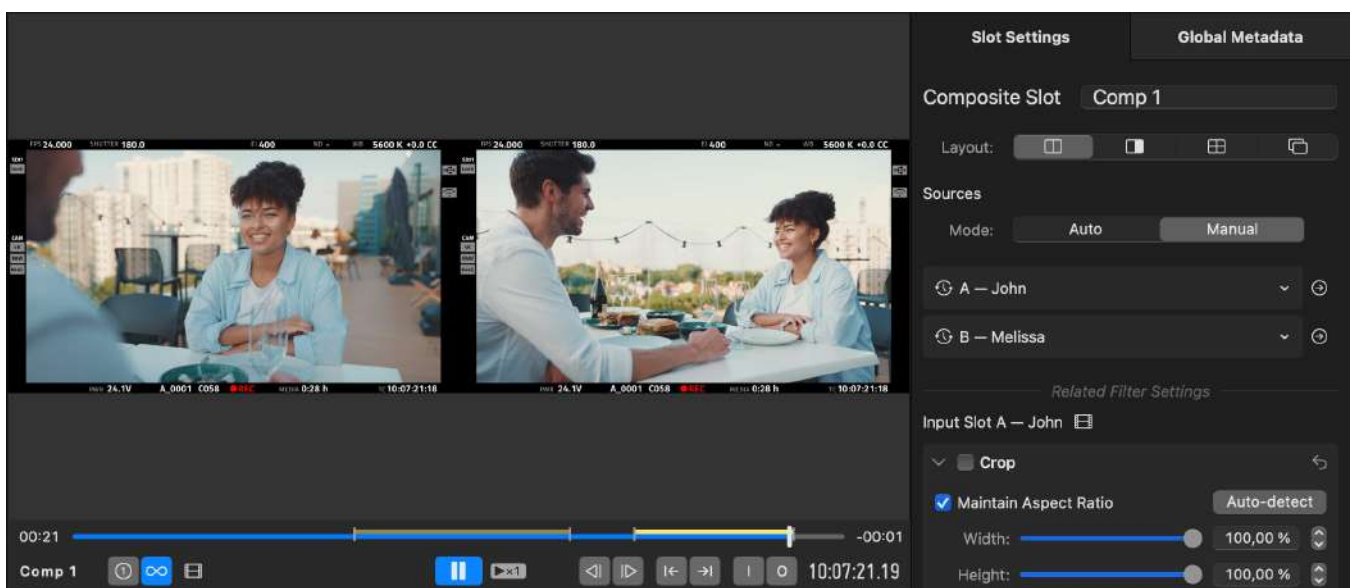


Composite slot layouts

- Combine a composite slot's source selection with the input slot modes "Live/Playback/Reference", "Switch All Inputs Slots to Live Video/ to Playback", and the output routing option "Force Slot to Follow Live Video", (e.g., you can let the composite slot always show the signal of the active input slot mode, or force it to show always the live signal of the configured input slots)
- Auto-configure the input source for a composite slot using the Auto mode in the composite slot settings by letting you configure the source with (option-click) on the desired input slots

### PRO

Arm and record composite slots together with input slots, (e.g., to record a green screen compositing preview together with your foreground and background)



Composite slot viewer and settings with side-by-side layout configured

### PRO

In a composite slot's viewer controls, you can switch between recording and playback controls.

Furthermore, you can toggle between the composite's global controls and the controls of the individual sources. You can cycle through those individual controls by clicking on the composite slot's slot name label or using the menu item "Cycle Viewer Controls of Composite Slot" or the associated Stream Deck controller action.

In addition to the composite features, you can choose from various video filters to create tailored views for the different watching roles on set. Read more about working with filters in the article [Create Tailored Views With Video Filters](#).



## LITE

You have 1 composite slot in Reeltime Lite

## 3CH

You can add up to 2 composite slots with the Reeltime Pro 3-Channel option

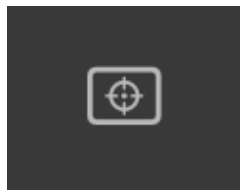
## 6CH

You can add up to 4 composite slots with the Reeltime Pro 6-Channel option

### Highlight connected slots

You can visually highlight all slots that are connected to the currently selected slot with the “Connected Slots” toolbar button or the associated “Highlight Connected Slots” menu item and Stream Deck controller action.

This way, you can see the internal routing between your slots – from input slots/library slots through composite slots to output slots (e.g., for seeing quickly which source/s are configured to an output slot).



Connected slots toolbar button

**Note:** You can add the “Connected Slots” toolbar button by customizing your toolbar; see the article Customizable Toolbar.

### Recording and playback

Reeltime provides a highly performant video pipeline and a modern recording and playback engine allowing for simultaneous TC-synced group recording of up to six camera signals (in HD & 4K resolution at up to 60 fps).

**Note:** Interlaced video formats are not supported

### Create recordings

There are several ways to create single recordings and TC-synced group recordings:

- You can create a single recording from a single camera’s live signal with the record button in the individual slot card, the associated menu item, or Stream Deck controller action.
- You can create a timecode-synced group recording from all currently armed input slots and composite slots
  - with the record button in the viewer controls (a sync info label indicates which slots are currently synced and will be included in the group recording)
  - or with the “record all” button in the toolbar, or the associated menu item, or Stream Deck controller action.



- Generally, all “armed” input slots (and composite slots) are recorded in the upcoming group recording. However, you can un-arm slots you want to exclude from the next group recording with the arrow button beside the record button in the slot UI.
  - You can enable and disable recording for a slot by clicking the arrow button beside the record button in the slot UI. When set, the slot is “armed” for the upcoming group recording. For example, if you shoot one scene with three cameras and the next scene will only be shot by two cameras, you can keep your third input slot and un-arm the third slot for that scene.
- You can set multiple in/out ranges during recording for marking several actions within one take. You can annotate and rate in/out ranges already during recording, or delete ranges in the in/out ranges and markers tab. Refer to the dedicated knowledge base articles: [In/Out ranges and markers with annotations](#) and [In/Out ranges and markers tab](#).
- The clip name and SMPTE timecode that is embedded in SDI camera signals are stored together with the global metadata for each recorded clip (SMPTE timecode only works with the “Original Timecode” [recording settings](#)).
- If you want to abort an ongoing recording, you can cancel recordings via dedicated menu items, keyboard shortcuts, or Stream Deck controller actions, either for the selected slot or for all recordings. Canceled recordings do not appear in the library, and their media can either be moved to the trash or deleted permanently. You can set your preferred behavior in the [recording settings](#).



Recording controls with multiple in/out ranges

## Load and play recorded clips

There are several ways to load and playback single clips or TC-synced group recordings:



- You can load a synced group recording from the library into the source slots by double-clicking a clip from that group. Alternatively, you can use the Library > Load Group of Selected Clip into Source Slots menu item, or the associated keyboard shortcut, or Stream Deck controller action. There is also a contextual menu item for each group recording in the library.
- You can load a single clip from the library into the currently selected slot with the Library > Load Selected Clip into Current Slot menu item, or the associated keyboard shortcut, or Stream Deck controller action. There is also a contextual menu item for each clip in the library.
- By default, new recordings are loaded into their source slots for instant playback. You can disable this automatic behavior by unchecking “Automatically load new clips for playback” in the “Behavior After Recording” box of the [recording settings](#).
  - In the same settings, you can specify whether the new recording should start playing back automatically (immediately after loading, or after a short delay).
- The Playback > Play Last Recording menu item, or the associated keyboard shortcut or Stream Deck controller action, lets you load and play the last recording at any time.

## Playback controls

There are several ways to control the playback of clips:

- Industry-standard “JKL” keyboard shortcuts let you navigate conveniently within clips:
  - Toggle playback (Space)
  - Play forwards/backward (L/J)
  - Play faster (press L/J multiple times to increase playback speed to 2x, 4x, 8x, 16x, 32x and 64x)
  - Play slower (Shift-L/Shift-J, and press multiple times to decrease playback speed to 1/2x, 1/4x and 1/8x)
  - Step to next/previous frame (hold K and press L or J)

**Tip:** You can control playback with “JKL” controls also with a Stream Deck controller. The Stream Deck buttons behave the same as the keyboard shortcuts. For example, pressing the “L – Forward” button once starts playback forward at normal speed, pressing the button a second time speeds up playback forward to 2X speed, etc.

- Various controls and actions let you navigate through in/out ranges and markers:
  - Jump to next/previous in/out point (cycle through)
  - Jump to next/previous marker (cycle through)
  - Learn more about working with in/out ranges and markers by reading the knowledge base article [In/Out ranges and markers with annotations](#).
- Ranges playback controls allow you to play back only the marked ranges in a group or single clip:
  - Playback the entire clip
  - Playback the current range
  - Playback all ranges
- Loop playback controls allow you to loop a playback (also in combination with ranges playback):
  - Loop
    - loops from the start until the end of a clip or range (in combination with ranges playback).
  - Ping Pong
    - loops alternating forward and backward from the start until the end of a clip or range (in combination with ranges playback).



Playback controls with editing options and enabled ranges playback and loop playback

## Playback speed

You can increase or decrease the playback speed with JKL commands (see above), or you can set a playback speed multiplier from various factor presets or enter a custom factor (e.g., for simulating a slow-motion shot).

A playback speed badge in the viewer controls indicates the current playback speed. By clicking on the playback speed badge, you open an overlay displaying the available preset factors and a field for entering a custom factor.



Setting the playback speed in the viewer controls

Alternatively, you can also switch to a desired playback speed multiplier via the Playback > Set Playback Speed menu items or the associated Stream Deck controller actions.

## Audio recording and playback

Reeltime can receive audio input signals from multiple connected audio devices and record the audio in sync with your video recordings. The input signals are mixed down to one main audio track, which you can include in any recordings, and simultaneously output to one audio output device for live audio monitoring or audio playback.

Here's a quick overview on working with audio recording and playback:



- The audio settings allow selecting **multiple audio input devices** and mixing their channels into one dual-mono audio output signal for recording and monitoring.
- For audio monitoring and playback you can choose an **output device** or select to use system's audio output device.
- You can set the **audio source** to follow the last selected input slot or library slot automatically, or pin the the audio source to a specific input slot or library slot.
- The **audio meters** in the toolbar visualize the active audio in green (for playback), blue (for monitoring), and grey (if the audio is muted).
- There are menu items and controller actions for **muting the live audio or all audio** and an associated global mute toolbar button.
- You can add an **audio delay** to the audio recording to keep it in sync with the video signals.

Learn more about working with the main audio in the article [Main Audio for Recording and Playback](#).

Read how to set up audio devices in the article [Setting Up Audio I/O Interfaces](#).

## Clip library and metadata

Reeltime stores all your recordings in a comprehensive clip library including clip-based and global metadata. The clip library and its underlying media file management (media folders and record folder) is project-dependent so that you can have a dedicated library with individual media file management for each of your shoots.

### Manage clips and stills in the clip library

Over the course of a project the clip library grows to a comprehensive log of all shots and rehearsals that can be accessed anytime for review.

#### Adding clips to the library:

You can add clips by creating recordings manually or automatically using the auto-record mechanism (e.g. following the record flag in SDI signal's ANC metadata).

You can add stills from the currently selected slot's signal (live or playback mode), all armed slots (live mode), or all loaded group clips at the current playhead position (playback mode).

Additionally, an "Import Media..." menu item in the library menu lets you import QuickTime movies in a ProRes codec or still images (in jpeg, png, tiff, heif and heic) as a reference.

All clip entries combine the clip specific metadata (such as clip name and timecode from the ANC metadata in the video signal) with the currently filled in global metadata fields which helps later to find clips using the smart groups and/or the text search, etc.

A "Duplicate" contextual menu item in the clip library allows for duplicating the selected clip(s) and/or still(s).

#### Loading clips for playback:

By default recorded clips are automatically loaded for playback into the associated source slot when recording has stopped. If you wish you can disable this behaviour in the recording settings.

Additionally, you can also load a clip manually by double-clicking the clip in the library:

- If the clip is a single recording the clip is loaded into the currently selected slot
- If the clip is in a group the whole group is loaded into its associated source slots for TC-synced group playback, (e.g., the clip from camera A into slot A, the clip from camera B into slot B, etc.)



Using the “Load Selected Clip into Current Slot” menu item or controller action you can also load a single clip from a group into the currently selected slot.

### Managing groups:

You can select the whole group of a clip by option-clicking one clip of the group, (e.g., to edit the metadata for all selected clips in the info tab, see below). Furthermore, you can remove a clip from a group or merge clips into a group, (e.g., if you finished recording in one of the slots accidentally and then restarted recording a second “part” of a clip you will need to add the second part to the group).

**Note:** Groups are synced through their SMPTE timecode track. When merging groups make sure the timecode of the clips are overlapping.

### Applying clip-specific metadata and global metadata

Each recording comes with clip-specific metadata fields such as timecode, clip name and camera (slot character). Global metadata are metadata fields that are valid for all recordings in a group, for example slate info fields (scene, shot, take, etc.) and production info fields (shooting day, location, crew unit, etc.).

Clip-specific metadata fields are usually auto-populated based on the metadata in the SDI signal and the slot configuration.

You can fill-in the global metadata fields in the global metadata panel. There is a vertical panel in the upper right hand side of the main view layout or a horizontal panel between the toolbar and viewers in the multi-view layouts. By default the take field is increased automatically after recording stopped (except for single recordings triggered directly from the slot card). You can disable the automatically increasing for the take field in the recording settings.



| Slot Settings |                         | Global Metadata |     |
|---------------|-------------------------|-----------------|-----|
| Season:       | 4                       |                 | ↑ ↓ |
| Episode:      | 10                      |                 | ↑ ↓ |
| Shooting Day: | 12                      |                 | ↑ ↓ |
| Scene:        | 13                      |                 | ↑ ↓ |
| Shot:         | 2                       |                 | ↑ ↓ |
| Take:         | 10                      |                 | ↑ ↓ |
| Crew Unit:    | Main Unit               |                 |     |
| Caption:      | Linda & Travis at lunch |                 |     |
| Location:     | Hotel rooftop bar       |                 |     |
| Int/Ext:      | Exterior                |                 |     |
| Day/Night:    | Day                     |                 |     |
| Date & Time:  | 06.03.24, 12:34:42      |                 |     |

Global Metadata panel in main view window layout

You can set your preferred behaviour (e.g., how the scene field should increment) in the slating settings.

The “Take” field is increased automatically after a recording stopped (you can disable this behaviour by checking “Disable increase of take number after recording has stopped”)

### Rehearsal mode:

You can activate the “rehearsal mode” to apply a customizable rehearsal prefix to the take field of the upcoming recording(s). The default rehearsal prefix is “R”, however, you can change it to your preferred prefix in the slating settings.

You enable the rehearsal mode via the Slot > Enable Rehearsal Mode menu item, or the associated Stream Deck controller action. Alternatively, you can toggle the rehearsal mode on/off with the dedicated “R” global toolbar button.

The active rehearsal mode is also indicated by the amber-colored color bar in the input slots and the amber-colored record button during recording.

Additionally, all recordings made during rehearsal mode get assigned the amber-colored clip label “Rehearsal” (the automatic behavior can be changed in the library settings under “Automatic Label Assignment”).



## Clip labels:

You can assign a colored clip label to any media item in the library. The label names are customizable in the library settings under “Label Names”. The label settings are project-dependent. By default, labels are assigned automatically for the following labels:

- Movie recordings > “Recorded Takes” (red label)
- Recordings of rehearsals > “Rehearsal” (amber label)
- Created stills > “Reference” (yellow label)
-  Composite recordings > “Composite Recording” (violet label)
- Imported media > “Imported Media” (grey label)

The automatic behavior can be changed in the library settings under “Automatic Label Assignment”. The automatic label assignment settings are project-dependent.

## The clip library’s UI elements

The clip library has multiple UI elements helping you to manage and inspect your clips in your preferred appearance and structure.

### Clip library outline (Folders and Bins):

Clips always reside in bins, and bins can be grouped in folders. Folders and bins can be used to give your project a logical structure by for example grouping shots in shooting days, cameras, units, or scenes. You can create bins and folders with the corresponding buttons above the clip library. Drag and drop bins for grouping bins in folders or reordering bins and folders. You can hide the clip library outline column (e.g., if you prefer to browse the library only using smart groups)

### Smart groups:

There is an advanced “Smart Groups” view accessible from the clip library window, that displays a hierarchical structured outline of the currently selected folder level of the shot library. Smart groups are auto-generated based on clip metadata. You can define the hierarchy levels for the outline in an option menu, that provides the metadata fields “Season”, “Episode”, “Flagged”, “Label”, “Crew Unit”, “Shooting Day”, “Scene”, “Shot”, “Take”, “Camera”, “Caption”, “Location” and “Rating” to choose from. You can also choose from predefined smart group layouts or save and apply custom layouts. You can hide the smart groups column, (e.g., if you want to the clip library outline instead or need more space to view your table content or collection view content.)

**Note:** Smart groups are pre-filtered by the selected folder/bin in the shot library sidebar. When you want to view all available items in the library, make sure to select the “Library” home folder in the shot library sidebar.



|       | Preview | Camera | Clip Identifier        | Scene | Shot | Take | FL... | Rating | Clip Name         |
|-------|---------|--------|------------------------|-------|------|------|-------|--------|-------------------|
| SCN 6 |         | A      | 2023-11-21-11:02:17Z-A | 6     | 1    | 1    | 🚩     | ★★★★★  | A_0001C003_23111  |
| SCN 6 |         | B      | 2023-11-21-11:02:17Z-B | 6     | 1    | 1    | 🚩     | ★★★★★  | B_0001C008_23111  |
| SCN 7 |         | A      | 2023-11-21-12:59:30Z-A | 6     | 2    | 1    | 🚩     | ★★★★★  | A_0001C007_231113 |
| SCN 7 |         | B      | 2023-11-21-12:59:30Z-B | 6     | 2    | 1    | 🚩     | ★★★★★  | B_0001C011_231113 |

Library with “Scene” > “Shot” > “Take” smart groups

### Clips table:

The clips table displays the clip entries of the currently selected bin or folder in the clip library.

A clip’s metadata is displayed as columns that you can sort by or edit clicking into the field. You can change the list’s shown columns with the options menu on top of the clips table. You can also reorder the table columns by dragging them. If you want to use multiple column layouts for different use cases or projects you can save a column layout and/or restore one of the saved column layouts. Furthermore, a text search field lets you display only clip entries that match the currently entered text string.

### Clips collection view:

The clips collection view is an additional view in the clip library that visually represents clips with a large thumbnail, the clip’s name and rating and flagging properties. By hovering over a thumbnail you can skim through the clip’s content and load the clip at the current skim-head position by double clicking. You can use the text search field to display only clip entries that match the currently enters text string.

**Tip:** You can use the skimming mechanism to find a specific action within a clip. By double-clicking you can directly load the selected clip or group at the skim head’s position to start playback at the intended position.

### Info tab:

The info tab in the lower right-hand side of the interface lets you inspect and edit the metadata of the selected clip in the clip library. If you select multiple clips you can also inspect fields with matching values or multi-edit metadata fields for all selected clips at once.

**Tip:** Select a whole group with option-click on on of the clips and use the info tab to edit metadata such as rating or flagging for all clips in the group at once

## In/Out ranges and markers with annotations

Reeltime allows you to annotate sections or specific frames in recordings by setting in/out ranges and/or markers with info. In the clip library, you can search through in/out ranges and marker info to reveal the annotated sections and positions.



## In/Out ranges vs. markers

In/out ranges are interlocked with Reeltime's playback and loop mechanism. Hence, in/out ranges are ideal to mark the sections that are relevant for playback reviews, e.g. set an in/out range for each action within a take.

Markers are primarily designed to annotate a specific frame position or sections that you may need to revisit later for reference, QC-related topics, continuity issues, etc., e.g., you can set a continuity marker to note a continuity issue you want to share with the script supervisor or set a marker range (with an out-point) for a temporary event that is relevant for QC, e.g., if the boom microphone is visible for some time during the shot.

In group recordings in/out ranges always apply to all clips in the group. Markers can apply to the whole group (group markers) or to the individual clips of a group (single markers).

Markers and marker ranges (markers with an in and out point) can overlay in/out ranges and other markers, e.g., you can set a continuity marker and QC marker at the exact same frame. In/out ranges, on the other hand, can not be set on top of each other.

The differences between in/out ranges and markers in summary:

### In/Out ranges

- Interlocked with playback and loop mechanism
- Ideal for marking sections relevant for playback reviews
- Used to set ranges for each action within a take
- Apply to all clips in group recordings
- Cannot overlap with other in/out ranges

### Markers

- Designed for annotating specific frame positions or sections for later reference
- Used for QC-related topics, continuity issues, and temporary events
- Can be set as group markers or single markers in group recordings
- Can overlay in/out ranges and other markers at the same frame or section

## Set in/out ranges with annotations

You can set in/out ranges to mark the relevant sections within a take (e.g., set one in/out range for each action):

- In/out ranges are deeply interlocked with Reeltime's playback functions and let you
  - set multiple in/out ranges during recording or playback,
  - enable the ranges playback mode to play back only the marked range(s) in the clip,
  - combine the ranges playback also with looping to loop through only the marked range(s) in the clip,
  - edit in/out ranges in playback mode to fine-tune their in and out points or add new ranges,
  - apply a rating and note to each in/out range.

**Tip:** Tag your in/out ranges with a rating and/or a note to find a relevant action quicker (e.g., set a 5-star rating for the best action in a take)

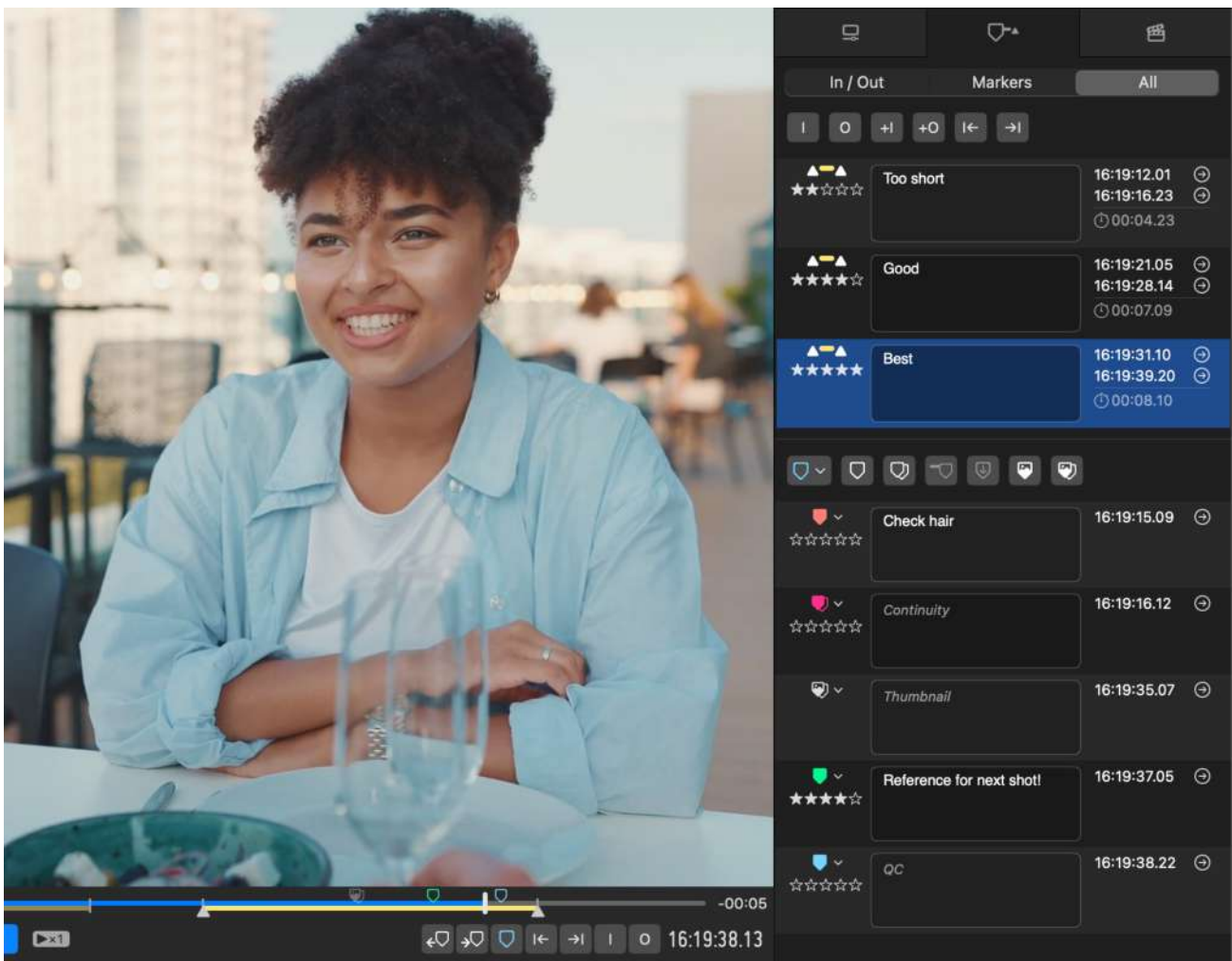
## Set markers with annotations

You can set markers to annotate a relevant frame position or a section for reference, continuity, QC, or other purposes:

- Markers allow you to mark frame positions or sections
  - during recording or in playback mode,
  - for an individual recording or all recordings of the group,
  - with eight colored marker types, that you can customize within the library settings,
  - and with a rating and note for each marker.
- The thumbnail frame is a special kind of marker that allows you to set a clip's frame position for visual representation in the library (by default, the middle of the clip). Like with other markers you can set the thumbnail frame position for an individual recording or all recordings of the group.

**Tip:** You can copy/cut and paste markers – along with their info – to another position or clip, e.g., to reuse markers with specific information as templates for frequently occurring use cases. Additionally, you can copy and paste markers with their details into a text document.

A dedicated list view lets you inspect all in/out ranges and markers of the current recording/loaded clip and edit their info. Read more about the in/out ranges and markers list view in the article: [In/Out Ranges and Markers Tab](#)



In/out ranges and markers in viewer control and dedicated in/out ranges and markers tab



## Find annotated in/out ranges and markers in the library

The clip library's text search includes searching through the complete in/out ranges info and marker info for the optimal retrievability of your annotated sections and frames.

In the library's detail view, there is a tab displaying the selected clip's marker and in/out range information. A reveal button lets you load clips directly at the marked position.

## Create tailored views with video filters

In addition to Reeltime's composite features (available in composite slots and the reference mode of input slots), you can choose from various video filters to create tailored views for the different watching roles on set. For example, the Director may prefer a clean image where the camera's metadata HUD is cropped, while for Script/Continuity seeing the camera's metadata is essential and in addition they would like to see a metadata overlay with the camera name and the slate info. You can flexibly add filters to your slots to serve everyone's needs.

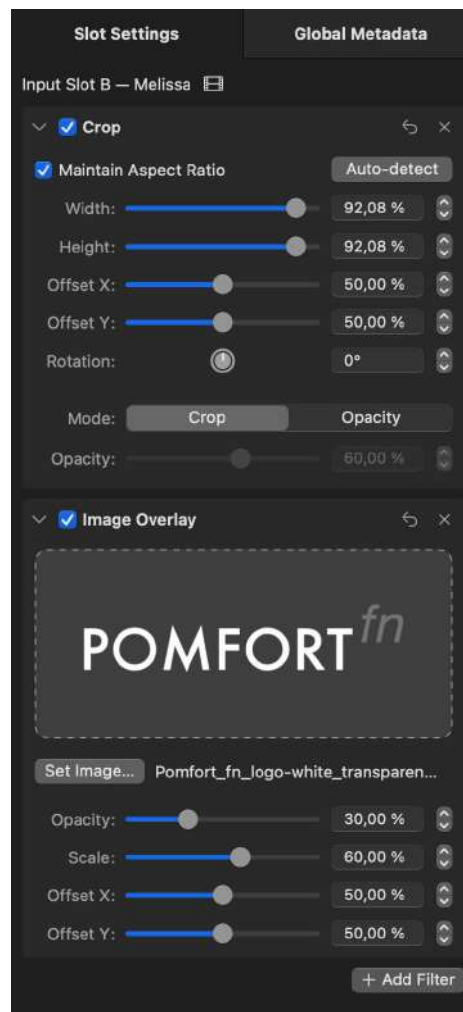
**Tip:** Consider if it makes sense to apply a filter to an input slot or an output slot. For example, if you want to ensure that everyone sees a look from a LUT filter, you can apply the filter to the input slot. However, if only some watchers want to see metadata overlays, apply the metadata overlay filter individually per output slot.

- **Video filters:** The application provides the following video filters for input slots, library slots, or output slots:
  - **Crop** with offset and rotation parameters and an auto-detection to crop out the black-bordered status info from a camera HUD
  - **Flip** for flipping the image horizontally/vertically
  - **Transform** with scale, rotation, and offset parameters, e.g., for re-positioning cropped layers of a compositing
  - **Anamorphic Desqueeze** with various lens squeeze factors for de-squeezing signals shot with anamorphic lenses
  - **Metadata Overlay** with parameters for the metadata fields Camera, Slate Info, Slot Mode (Playback/Live), Tally State (Record/Live/Play/Pause), Clip Name, and Timecode
  - **Tally** with various indicator options, and style and size parameters allows to apply an on-screen tally to indicate the current operation state (Record, Record Rehearsal, Live, Play, Pause) in various styles
  - **Image Overlay** with opacity, scale, offset parameters, e.g., for adding a watermark or overlaying frame lines from a PNG
  - **LUT** for loading a 3D LUT in a .cube format, e.g., for applying a look if you receive an ungraded signal



Tailored views configured with individual filters per output slots

- **PRO**
  - **Chroma key and compositing filters:** The application provides the following chroma key and compositing filters for input slots, library slots, or output slots:
    - **Keyer** with various matte and fill control parameters and a spill suppression allows real-time removal of greenish or blueish areas from live or playback signals and creating a transparent, isolated foreground for compositing (via the overlay layout mode of a composite slot)
    - **Color Adjust** with basic color adjustment parameters such as contrast, temperature and saturation (e.g., for balancing the foreground and background of a compositing)
    - **Blur** adds a Gaussian blur (e.g., for softening the background plate of a compositing)
  - **Filter Settings:**
    - You can inspect and edit filter settings in the settings tab of each slot.
    - You can adjust the values in the filter setting text fields using the arrow up and down keys on your keyboard.
    - You can reset a filter's parameter to its default value by double-clicking on the parameter's label.
    - There are consistent layout options in composite slots and the reference mode of input slots (Side-by-Side, Swipe, Overlay).
    - Filter settings of all currently connected slots are accumulated (for example, an output slot shows filter settings for itself but also for the connected input slot(s) under "Related Filter Settings").
    - Dedicated menu items and controller actions allow you to copy and paste filters and their settings between slots or remove all filters from the selected slot.



Configured filter settings with crop and image overlay filter

## Green screen compositing

Reeltime Pro allows you to apply a real-time chroma key filter to any live or playback signal and composite the isolated image as a foreground with a background plate that you imported or recorded into the clip library and loaded into a library slot. This article describes creating a green screen compositing with the keyer filter and the overlay layout option in the composite slot and fine-tuning your composite with additional filters such as basic color adjustments and a blur filter.

### 1. Apply a keyer filter

If you want to key one or more incoming live signals, you can apply the “Keyer” filter directly in the input slots.

The “Keyer” filter uses a very efficient method to remove green or blue areas in the image signal, which allows it to be applied in real-time without introducing additional latency.

**Note:** The “Keyer” filter is designed to work only within the green or blue color ranges. If you select another color, the filter may not have the desired effect.

For the best outcome, you can customize your key with dedicated viewing modes and a range of “Matte Control”, “Matte Fill” and “Spill Control” parameters:



- **Mode:** Switch between the viewing modes:
  - Preview (=filtered image) and
  - Screen (transparent areas in black / non-transparent areas in white)
- **Channel:** Choose the desired target color channel for your key (green or blue)
- **Color picker:** Pick a color in the area of the green or blue screen
- **Noise level:** Increases the amount of pixels included in the transparent area
- **Details level:** Retains more details in the non-transparent areas
- **Amount:** Increases the overall red/green (or orange/blue) color difference mask
- **Black fill:** Increases the transparent areas of the final mask
- **White fill:** Increases the non-transparent areas of the final mask
- **Spill level:** Neutralizes color spill in the overall image

Follow these steps to apply a chroma key to your green screen live signal:

- Select the input slot with the green screen signal.
- Choose the “Keyer” filter from the “Add Filter” button menu.
- Use the color picker to pick a greenish color in your green screen background.
- You can switch to the “Matte” viewing mode to inspect the key.
- Refine your key with the “Matte Control”, “Matte Fill” and “Spill Control” parameters until your keyed area is black and the foreground is white.
- Switch back to “Preview” viewing mode to inspect your final key.

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The keyer filter will automatically be saved in the upcoming recording. You can change the filter parameters anytime when loading the clip into the playback mode of an input slot or a library slot. Ensure that you save the filter settings when you want to keep your adjustments (with the “Save” button in the filter settings or the associated menu items or Stream Deck controller actions).

**Tip:** There are menu items and Stream Deck controller actions for copying and pasting your filter settings from one slot to the other if you have more than one camera that captures the green screen.

## 2. Import background plates

You can import clips as background plates into your project’s clip library via the movie import function. Note that imported movies need to be in a ProRes codec (as Reeltime Pro uses the built-in ProRes hardware acceleration of Apple Silicon processors to achieve the best performance).

Follow these steps to import your background plates:

- Select a folder and bin in your clip library into which you want to import your background plates.
- Choose “File” > “Import Media...” and select the movies you want to import and proceed.
- Create a library slot or select an existing library slot.
- Load the imported movies into the library slot and find the most appropriate background plate.



**Tip:** Use the auto-load mechanism of library slots to quickly toggle between your background plates (by selecting the first clip in the bin and toggling between clips using the arrow up and down keys).

- When you find the desired background, start playback and enable loop playback if it makes sense.

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### 3. Composite the masked image signal with a background plate

Now, you can blend your masked image signal with a background plate using the “Overlay” layout mode in a composite slot.

Follow these steps to create your final green screen compositing:

- Create a composite or select an existing composite slot and switch to the overlay tab.
- Set the masked image signal (e.g., input slot “A”) as the first source of the composite slot (= your foreground).
- Set the background plate (e.g., library slot “Lib 1”) as the second source of the composite slot (= your background).
- Expand the “Overlay” settings in the composite slot and set the opacity to 100%.
  - The “Overlay” settings also allow you to scale the size and offset the position of your foreground. However, please note that those parameters will not be saved in the clip library. If you instead apply filters to your input or library slots you can save your adjustments to your clips.
- To crop and offset the position of your background and/or your foreground, you can apply a “Crop” filter to the library slot and/or the input slot.
- To match the color of your background and/or foreground, you can apply a “Color Adjust” filter.
- To separate your foreground and background, you can soften your background plate with a “Blur” filter.

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For live monitoring and recording, you can loop your background plate. If you have set an in and out range in your background plate, it may make sense to enable ranges playback and combine it with looping. After the recording, the background plate remains as is and keeps looping. With the composite slot selected you can keep previewing your composite also during playback.

**Tip:** You can also arm and record a composite slot together with your input slots, e.g., for convenient recording and playback of a green screen compositing preview together with the individual recordings of foreground and background.



#### 4. Control and sync the sources of a composite slot

In a composite slot's viewer controls, you can toggle between

- The composite's global controls,
- the foreground's viewer controls and
- the background's viewer controls.

You can cycle through those individual controls by clicking on the composite slot's slot name label or using the menu item "Cycle Viewer Controls of Composite Slot" or the associated Stream Deck controller action.

If needed, you can sync the playhead position of your recording with the background plate by switching to the individual controls and changing the playhead position, or the in and out range of the clip.

For example, you can adjust the background plate's in and out range to match the duration of the foreground clip. Then, you can switch back to the global controls, move the (global) playhead to the in points, and start playback (with ranges playback and looping if desired).

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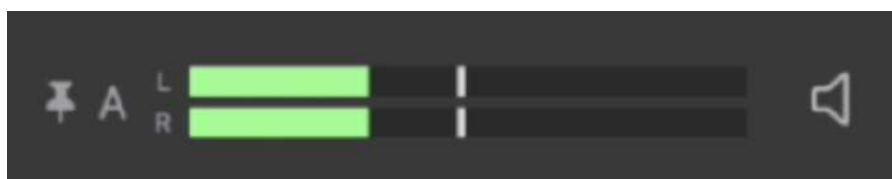
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**Tip:** An info label is displayed when hovering over an in and out range. Inspect the label to see the currently set in and out points and the duration of a range.

#### Audio monitoring and playback with green screen compositing

When working with green screen compositing, you will usually have a composite slot selected. Sometimes, you will also switch to an input or library slot. However, you will want to keep hearing the audio of the input slot to listen to the live audio or the original audio that was recorded. Consequently, disabling the automatic audio source selection and keeping the audio pinned to the input slot is recommended.



Audio source pinned to slot "A"

#### On-set editing with Final Cut Pro

Reeltime Pro integrates directly with Final Cut Pro, enabling immediate edit previews during production. Clips—including metadata, in/out ranges, and markers—can be exported to structured multicam or multi-track Final Cut Pro timelines for review, continuity checks, and preliminary editing.

Projects can be opened locally in Final Cut Pro or exported as an .fcpxml file for import on other computers. Alternatively, you can import the .fcpxml file into other NLE systems, such as DaVinci Resolve or (via the third-party conversion tool XtoCC) into Adobe Premiere.



In addition, Reeltime Pro supports receiving an NDI stream from Final Cut Pro. This allows routing the edit playback back into Reeltime, where it can be monitored live or distributed to the video village.

This article describes the full on-set editing workflow with Reeltime and Final Cut Pro.

## Setting up NDI and Final Cut Pro integration

In this section, you will get all instructions on how to set up on-set editing with Final Cut Pro.

### Install NDI Tools:

If you would like to receive your editing preview from Final Cut Pro within Reeltime for monitoring in input slots and distribution to output slots, you must ensure that you have installed the latest version of NDI Tools for Mac. Refer to the Knowledge Base article [Setting up NDI input](#) for further information.

### Set up Final Cut Pro:

1. Open Final Cut Pro and create a library into which you can import your Reeltime exports, e.g., a library named “Reeltime Exports”.
2. It is recommended to prevent Final Cut Pro from copying the original files into its event media: Go to Settings > Import > Files and choose Leave files in place.
3. Go to Settings > Playback > A/V Output and choose the desired NDI output format, e.g., “NDI 1920 x 1080 @24”.

### Set up Reeltime Pro:

1. Create a dedicated input slot for receiving the A/V output from Final Cut Pro, e.g., an input slot named “F” with the label “FCP”.
2. Associate the input slot with the NDI input stream provided by Final Cut Pro; the name of the stream usually includes the postfix “(macOS A/V Output)”.
3. It is recommended to unarm the input slot receiving the NDI input from Final Cut Pro, as you typically do not want to record the NDI stream together with other input sources.
4. If you have already planned to distribute the timeline’s signal to one or more dedicated output slots, you can already set the input slot as the source for the output slot(s). However, you can also do that later or simply route to the timeline’s signal temporarily, e.g., via the quick routing action “Slot Follows Selection,” etc.

## Exporting clips and auto-generate timelines

In this section, you will get all instructions on how to export clips from Reeltime Pro for on-set editing with Final Cut Pro.

### Exporting clips:

You can export all clips from your current library view via the File > Export to Final Cut Pro menu item (or the associated item in the dropdown of the export toolbar button).

Alternatively, if you only want to include specific clips, you can select the clips in the library and export them via the File > Export Selected Clips to Final Cut Pro menu item (or the associated item in the dropdown of the export toolbar button).

The exported clips will open in a Final Cut event bin, including the following info from Reeltime Pro:

- In/out ranges (with rating) → keyword range with name concatenated out of slate info, ranges index and ranges rating, e.g., “SCN-26\_SHO-4\_TAK-7\_RNG-1\_★★★★★”
- Best rated in/out ranges → favorite (green line in filmstrip view)
- In/out ranges notes → keyword range



- Single-frame markers (with info) → marker with details, e.g., “Hair & Make-Up, check hair, ★★★★★”
- Marker ranges (with info) → keyword range
- Slate info → Scene and Take field, e.g. Scene “26-4”, Take “7”
- Comment, clip rating, flagging, caption, location → Notes field, e.g. “Comment: Check background noise, Rating: ★★★★★, Flagged: Yes, Caption: A: Medium Close-Up Timo, over shoulder Josie B: Medium Close-Up Josie, over shoulder Timo >> shot/reverse shot, Location: Joiner’s workshop, Munich”

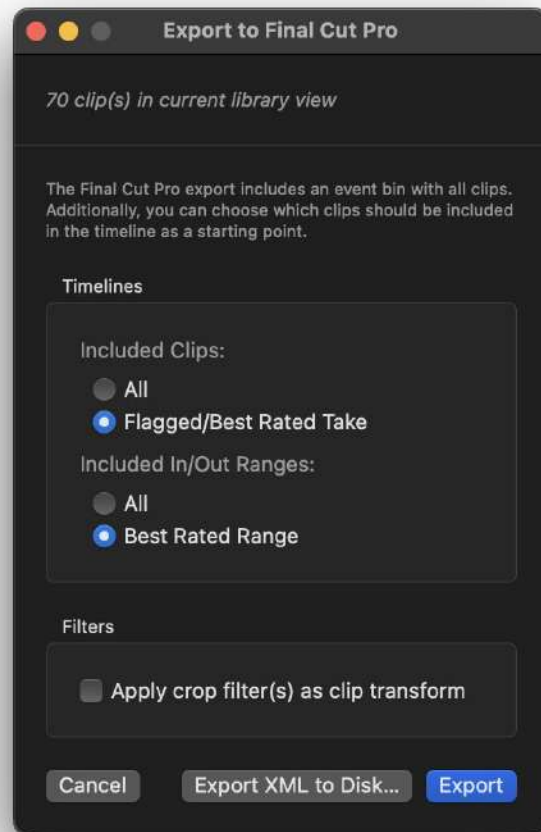
### Auto-generate timelines:

The Final Cut Pro export includes an event bin with all clips. Additionally, you can choose which clips to include in the timeline as a starting point in the Export to Final Cut Pro window:

- Included Clips: > Flagged/Best Rated Take will only include the circled takes in the timeline. If you did not flag or rate the clips, the last take for each shot will be included.
- Included In/Out Ranges: > Best Rated Range will only include the best rated in/out range of each included take in the timeline. If you did not rate the in/out ranges, the last range of the take will be included.

Optionally, you can also choose to apply the crop filters of Reeltime as clip transform settings in Final Cut Pro.

**Note:** If you stream your timeline’s signal back into Reeltime Pro via NDI input, keep in mind that your crop filters may be reapplied if you distribute them to output slots if the crop filters were configured in the output slots.



Final Cut Pro export window with configured options

The Final Cut Pro export will automatically generate two timelines:

- The multicam timeline with the postfix “MulticamTimeline” will include multicam clips generated from each exported group recording.

**Tip:** When using multicam editing, ensure you choose View > Show in Viewer> Angles to view each camera angle of the multicam clip in the Final Cut Pro viewer.

- The multi-track timeline with the postfix “ClipTimeline” will include the individual clips as overlying tracks for each exported group recording.

### Direct export for instant editing on set

If you use Final Cut Pro on the same computer as Reeltime Pro, you can export your clips and timelines directly to a Final Cut library. When you press the **Export** button in Reeltime Pro’s Export to Final Cut Pro window, Final Cut Pro will open automatically and display a window with the available Final Cut Pro target libraries. You can choose the desired library or create a new one. Then, a newly created event will open in the library, and you can open a timeline to start editing.

## XML export for editing on other computers or other NLE systems

Alternatively, you can export an .fcpxml file using the **Export XML to Disk...** button in Reeltime Pro's Export to Final Cut Pro window and save the file to your desired location. Then, you can import the .fcpxml file on another machine or into other NLE systems, such as DaVinci Resolve or (via the third-party conversion tool XtoCC) into Adobe Premiere.

**Note:** If you import the .fcpxml file on another computer or hand the file over to another department, ensure you also include a copy of the recording folder that includes the required media. After the XML import, it may be necessary to relink the media in the editing system, e.g., in Final Cut Pro via File > Relink Files > Original Media....

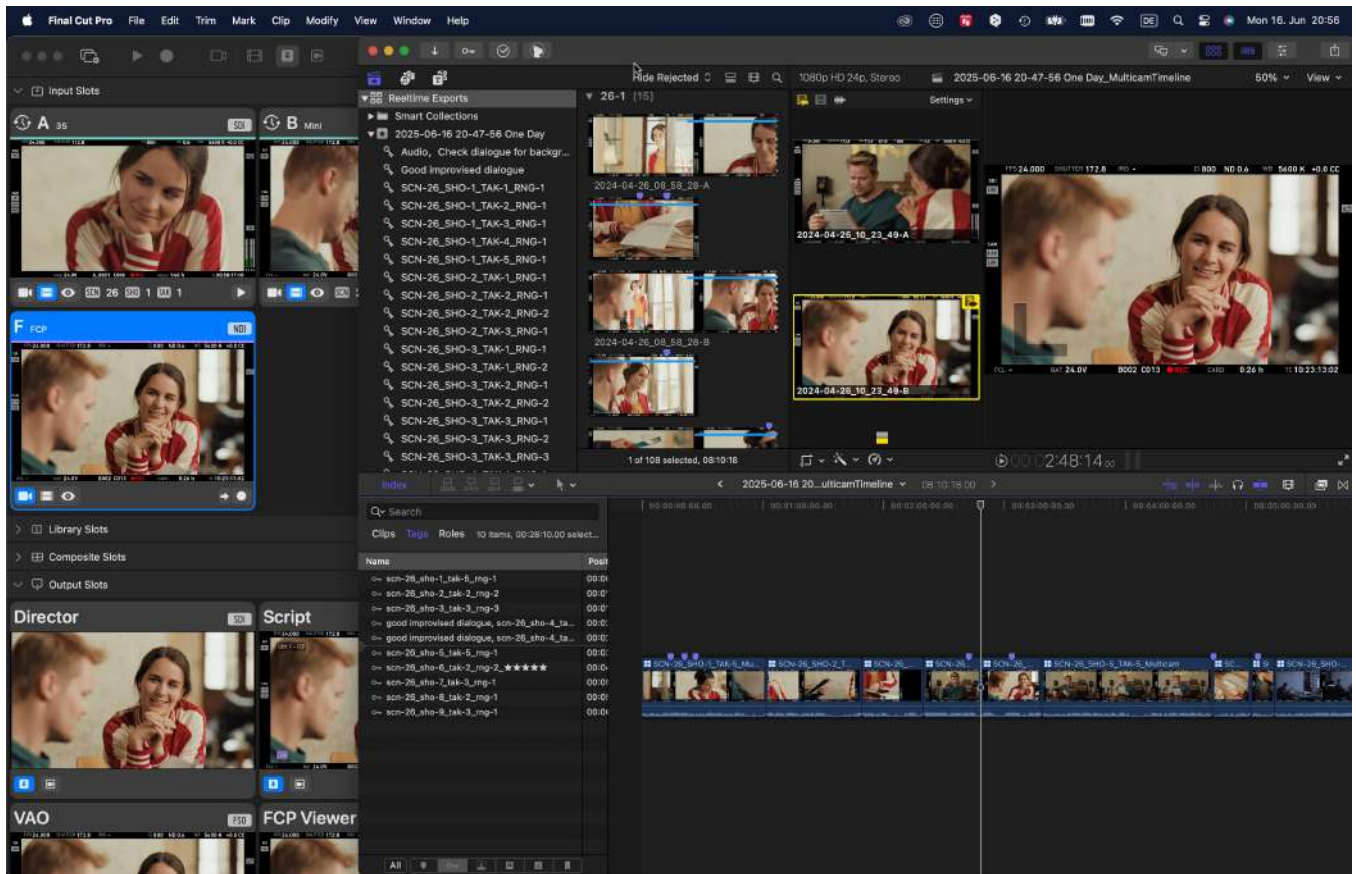
## Monitoring and distributing the timeline's signal in Reeltime

If you use Final Cut Pro on the same computer as Reeltime Pro and have followed the instructions under "Setting up on-set editing with Final Cut Pro", you can now receive the timeline's signal via NDI.

You can monitor the signal in an input slot and distribute it to any configured output slot.

**Tip:** If you only want to temporarily distribute the timeline's signal to one or all output slot(s), consider using the quick routing actions "Slot Follows Selection" or "Slot Follows Selection for All Output Slots".

To receive the audio of the NDI stream, ensure you enable the channels of the "NDI Audio" input device in Settings... > Audio > Input Devices. Typically, you don't want to mix the timeline's audio signal with live audio signals, so you need to mute the other channels. Alternatively, you can output audio directly from Final Cut Pro to the same output device as configured in Reeltime Pro (e.g., the system audio output device) and mute live audio in Reeltime Pro when playing back a timeline.



Multicam editing of an auto-generated timeline in FCP and feeding the timeline's signal back to Reeltime Pro via NDI

## Compatibility with other NLE systems

Although using the above-described seamless integration with Final Cut Pro is recommended, you can also export an .fcpxml file to import it into other non-linear editing (NLE) systems. Before exploring this option, consider the following aspects and limitations:

- **DaVinci Resolve:**
  - Supports .fcpxml import natively, but will not import any keywords, markers, or metadata. You can still work with the auto-generated timelines, including multicam editing.
  - Does not support NDI output natively. However, you can check if third-party tools, such as FlowCaster, provide a working solution.
- **Adobe Premiere:**
  - Only supports importing Final Cut Pro 7 XMLs. However, you can use the third-party tool XtoCC to convert and import the XML.
  - Supports NDI output natively.
- **Avid Media Composer:**
  - Does not support Final Cut Pro XML import. However, you can import the .fcpxml file into DaVinci Resolve or Adobe Premiere (as described above) and then export an AAF file from there.
  - Supports NDI output natively.



# Device Integrations

## Hardware setup options

Reeltime allows routing, capturing, and playing back SDI video signals on-set. The application comes with built-in integrations for

- video I/O devices by AJA, Blackmagic, and DELTACAST,
- video routers by AJA and Blackmagic,
- Stream Deck USB controllers,
- and allows audio recording and playback with any class-compliant audio interface supported by macOS.

Please refer to the article [All device integrations](#) for an overview of all Reeltime device integrations.

### LITE

You can flexibly add up to 4 input/output slots (3 inputs + 1 output or 2 inputs + 2 outputs or 1 input + 3 outputs) with Reeltime Lite

### 3CH

You can add up to 3 input slots and up to 6 output slots with the Reeltime Pro 3-Channel option

### 6CH

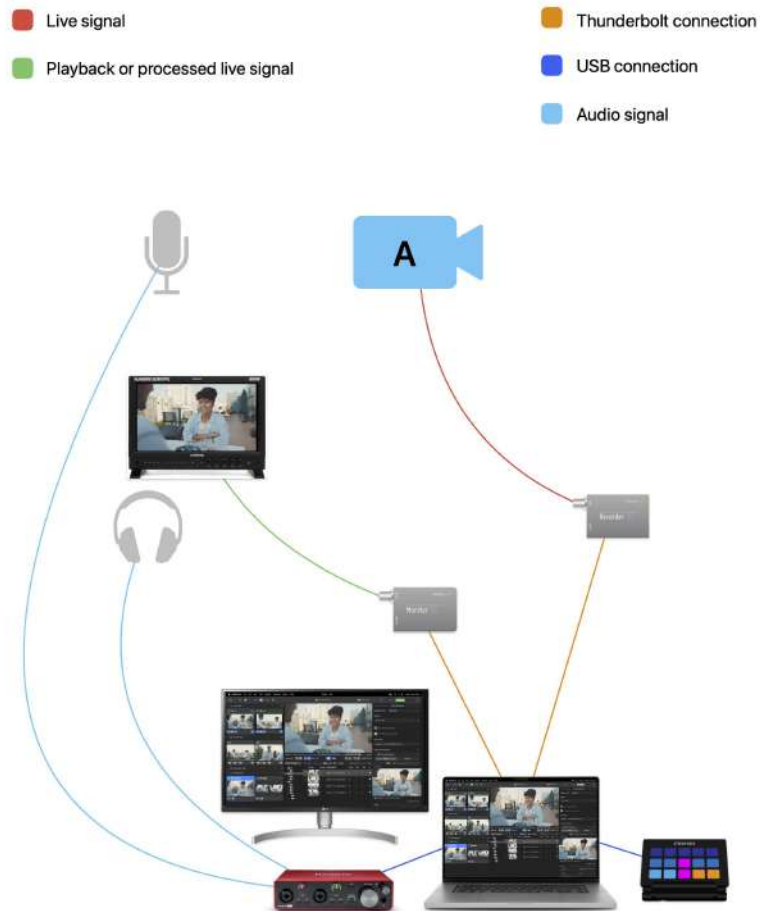
You can add up to 6 input slots and up to 9 output slots with the Reeltime Pro 6-Channel option

This article explains typical hardware setups with diagrams of four example setups.

### Basic hardware setup (1 camera / 1 monitor)

This is a low-budget setup for a single camera shoot with one SDI monitor. You can increase the number of cameras if you add more devices with SDI input ports, and you can increase the number of monitors if you add more devices with SDI output ports, or a video router for splitting up one outgoing signal to multiple destinations.

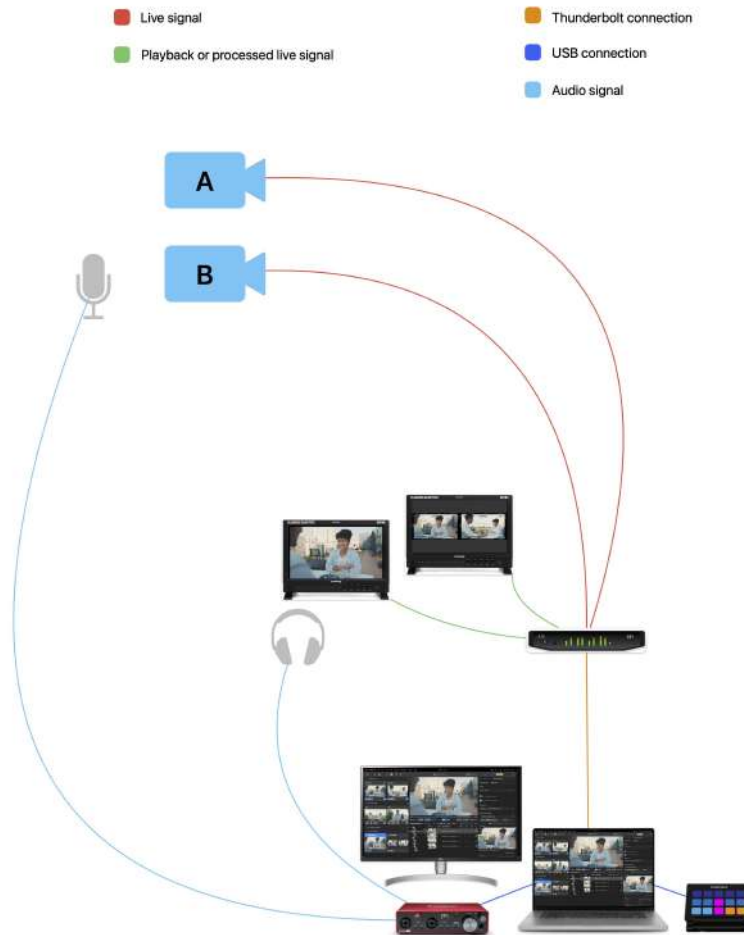
**Tip:** You can use multiple units of the same device type, e.g., two Blackmagic UltraStudio Recorder 3G. Furthermore, you can also use video I/O devices from different manufacturers simultaneously.



Basic hardware setup with 1 camera and 1 monitor

### Basic hardware setup (2 cameras / 2 monitors)

This is a basic setup for a two-camera shoot. In this example, there are two monitors that can either be used as a pair for the same watcher (to show each camera signal on a separate monitor), or they can be used by two separate watchers, e.g., one for the Director and the other for Script/Continuity. Since the AJA Io 4K Plus has 4 bi-directional SDI ports it can handle two inputs and two outputs simultaneously.



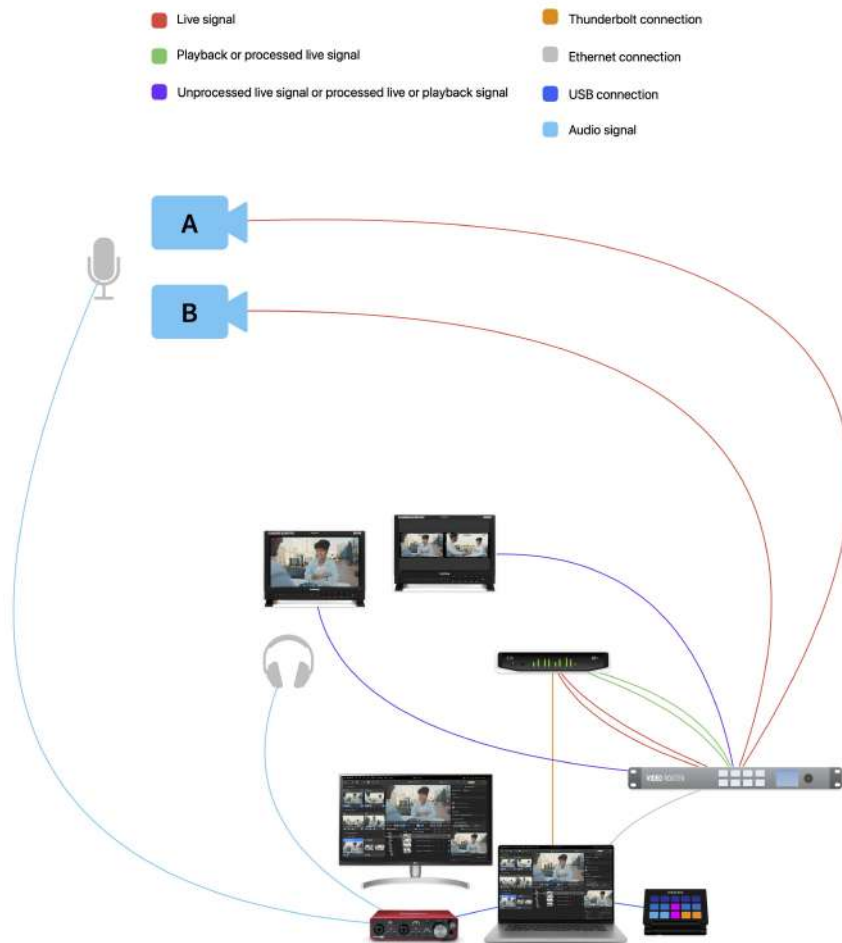
Basic hardware setup with 2 cameras and 2 monitors

### Advanced hardware setup with external video router (2 cameras / 2 monitors)

This is an advanced setup with external video router for a two-camera shoot.

The video router allows for more flexible video routing options. For example, you can set up a video routing configurations that routes the live signal directly to the monitors for lowest latency as possible. Another video routing configuration routes the signal through the software in order to show playbacks, or processed live signals.

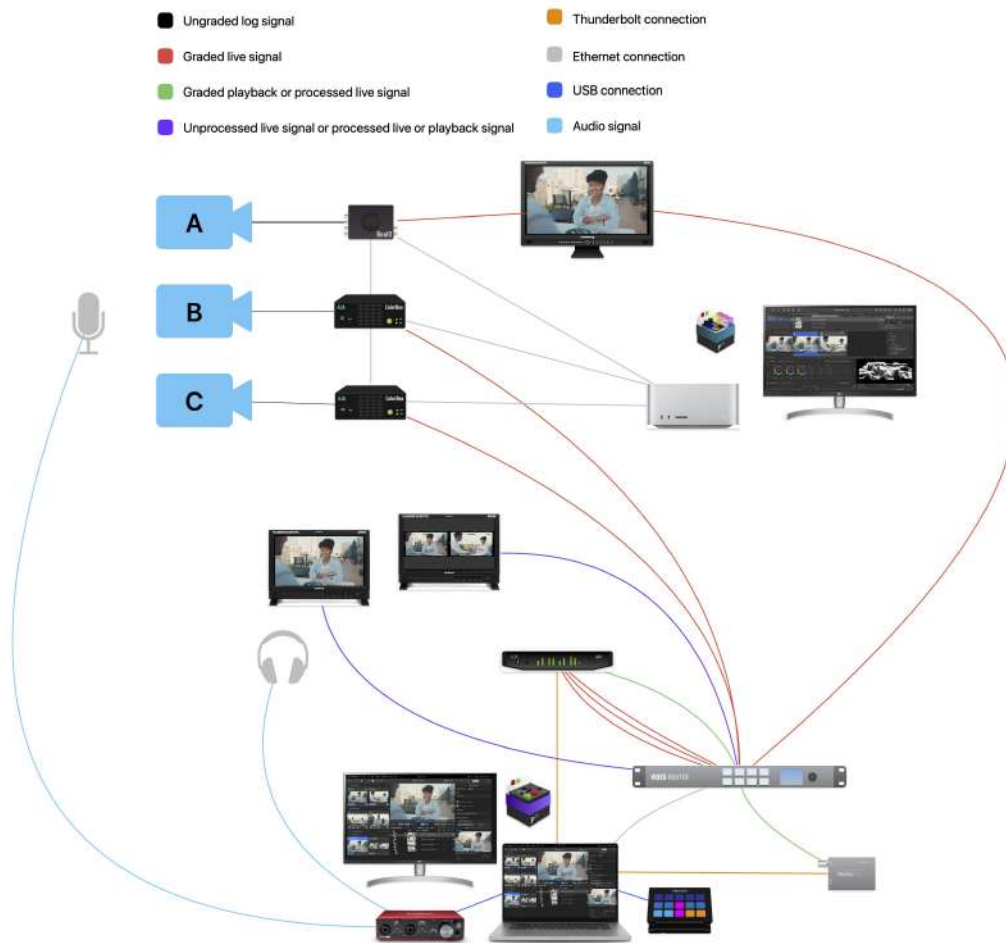
**Tip:** Automations allow you to trigger video routing configurations automatically based on specific events, read the article [Manage Configurations for an External Video Router](#).



Advanced hardware setup with an external video router, 2 cameras and 2 monitors

### Advanced hardware setup with Livegrade (3 cameras / 2 monitors)

This is a typical setup for shoots where the DIT in the camera department adds live color to the unprocessed signal using Pomfort Livegrade and LUT boxes. The graded signal is then routed to the video playback station.



Advanced hardware setup with a Livegrade station, and 3 cameras and 2 monitors at the video playback station

## Setting up AJA video I/O devices

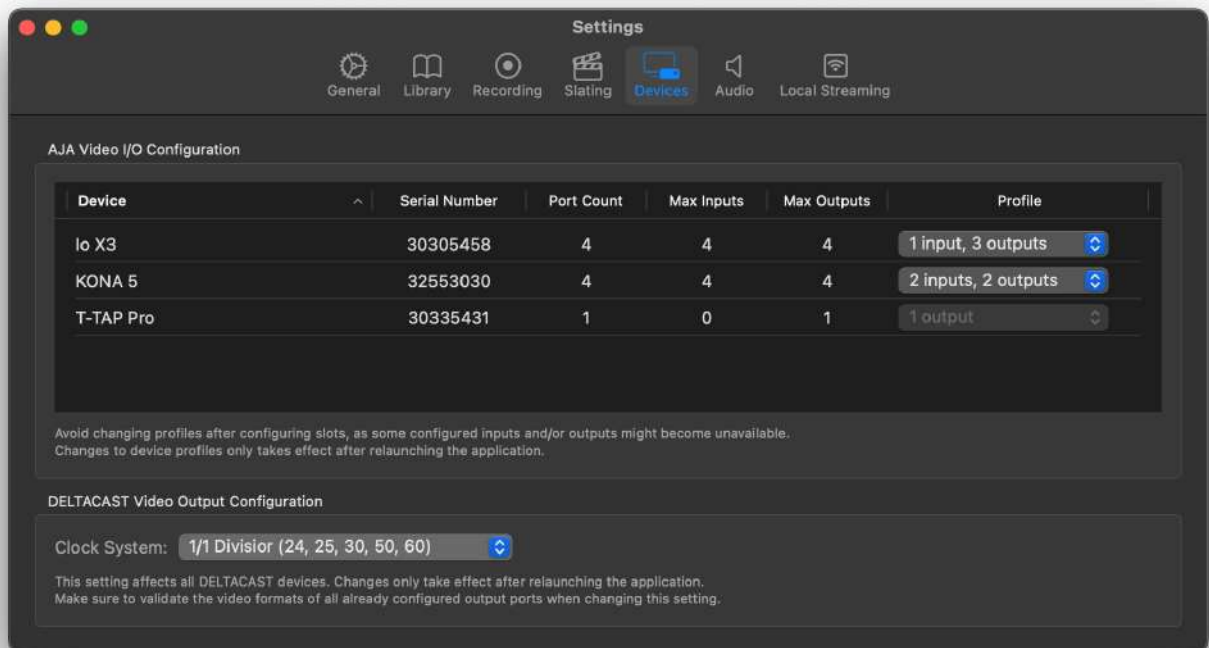
Reeltime supports the following video I/O devices by AJA for capturing and playback of SDI signals:

- **AJA Kona** family (e.g., KONA 5):
  - up to 4 bi-directional input/output ports
  - 1.5G, 3G, and depending on model 6G and 12G SDI signals
- **AJA Io** family (e.g., Io 4K Plus and Io X3)
  - up to 4 bi-directional input/output ports
  - 1.5G or 3G SDI signals
- **AJA Corvid** family (e.g. Corvid 88)
  - up to 8 bi-directional input/output ports
  - 1.5G, 3G, and depending on model 6G and 12G SDI signals
- **AJA T-Tap** family
  - T-Tap: 1 output port for playback of 1.5G or 3G SDI signals
  - T-Tap Pro: 1 output port for playback of 1.5G, 3G, 6G or 12G SDI signals

## Configure bi-directional device ports as inputs or outputs

You can configure your device's bi-directional SDI ports to be used as input or as output ports within the "Devices" settings under "AJA Video I/O Configuration."

A table displays all connected devices in a separate row, and you can choose from a range of configuration presets supported by each device.



Device-specific AJA video I/O configuration in devices settings

When you finish configuring the device ports of your AJA video I/O devices, you need to restart the application to apply your changes.

## Associate device ports with input and output slots

Within the slot manager, you can associate your AJA device's SDI input ports with an input slot and, in the same way, SDI output ports with output slots:

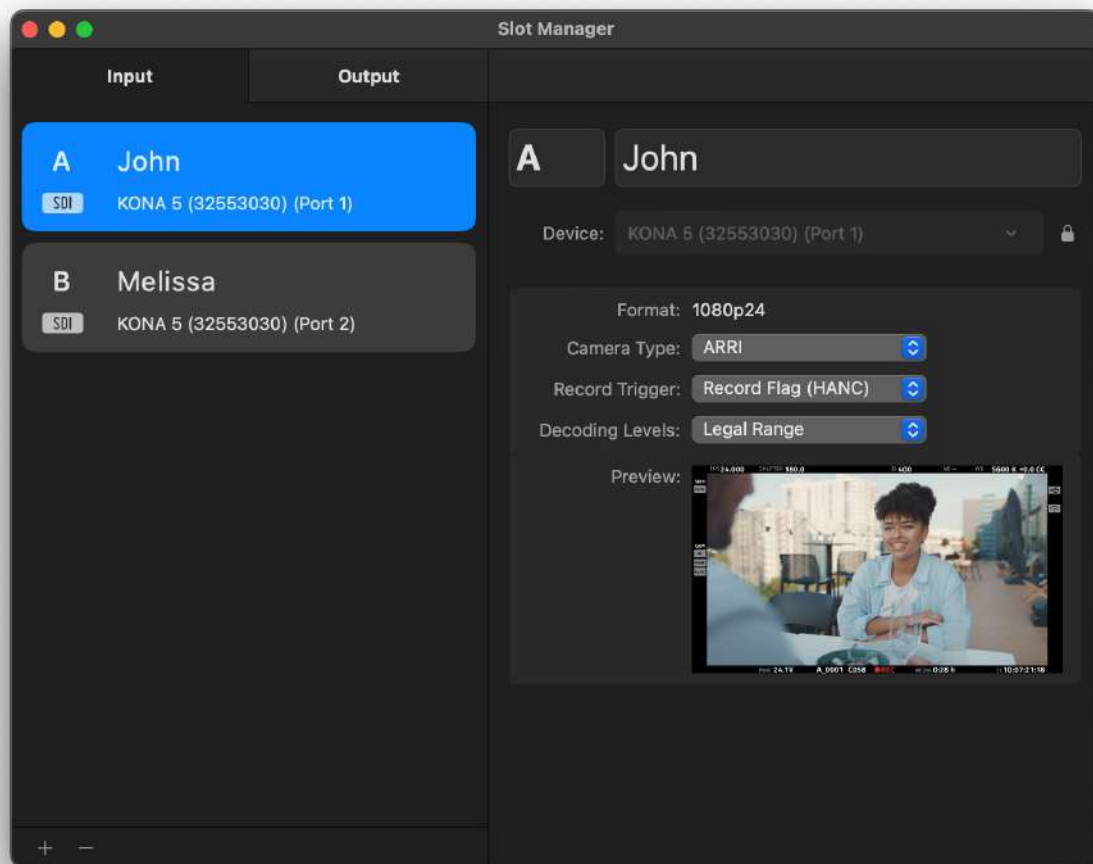
- In existing slots, you can choose from all currently available ports in the "Device" drop-down menu.
- If you want to add a new slot, you can press the "+" button that lets you associate a device port with your new slot directly.

When configuring an input port, there are the following options:

- **Format:** The video format of the incoming video signal sets the video format of your device automatically.
- **Camera Type:** Ensure that the appropriate camera type is set to receive the camera's ANC metadata correctly and trigger recording based on the record flag embedded in the SDI signal.



- **Record Trigger:** You can choose which detection method should be used to trigger the recording automatically. Note that the appropriate method depends on your setup and camera:
  - Choose “Record Flag (HANC)” to detect the record flag embedded in the horizontal ANC metadata of SDI signals from ARRI, RED, and Sony cameras.
  - Choose “RecRun Timecode” if your camera is set to use RecRun timecode and you would like to trigger recording/stop recording depending on whether the timecode is running or the timecode is stopped.
  - Choose “None” to disable the auto-record function for this camera
- **Decoding Levels:** In rare cases, you can change the decoding levels from legal to full, for example, if you receive an ungraded signal from a Sony camera that outputs an SDI signal in extended range.



Slot manager with SDI device configuration for an input slot

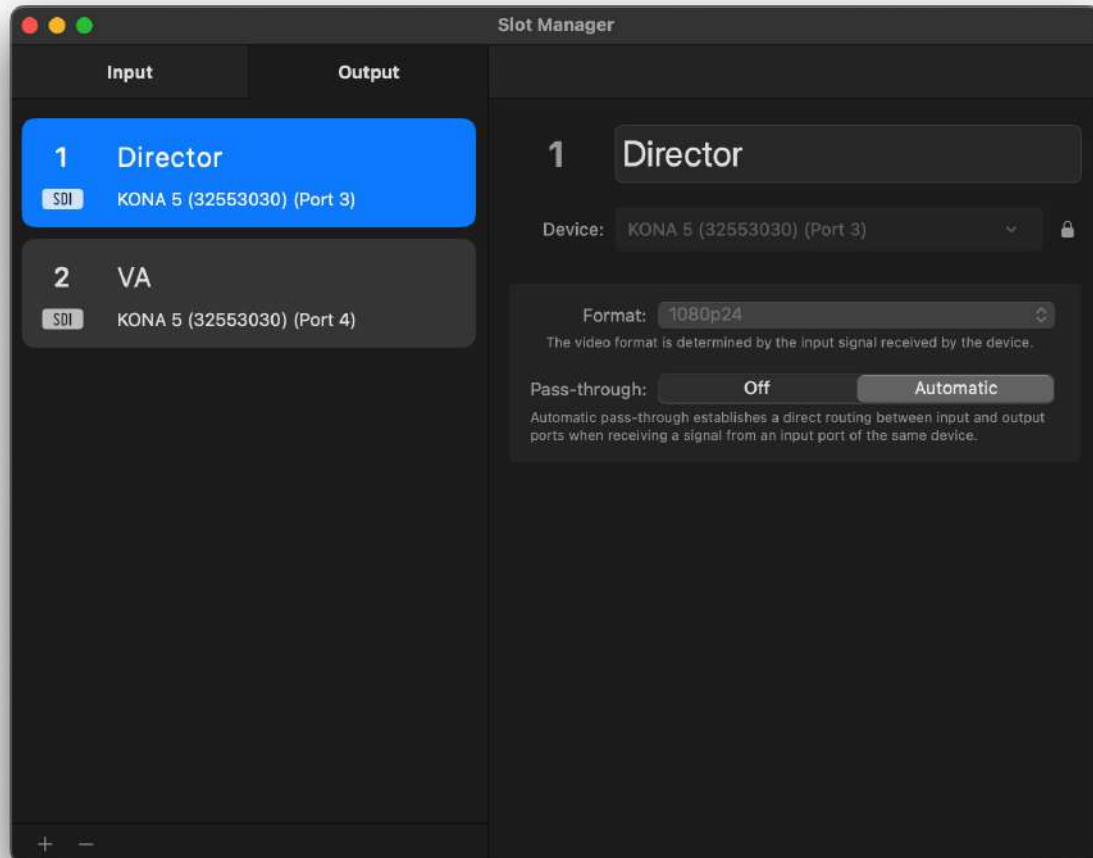
When configuring an output port, the outgoing signals' video formats usually derive from the input and are, therefore, not editable. However, you can set an output video format manually if you configure the device to use all ports as outputs.

**Note:** AJA video I/O devices can only be set to use one video format at a time. If you need to use multiple video formats, you will need one device per video format.

## Automatic pass-through

AJA video I/O devices with at least one input and output port support the automatic pass-through option. This mechanism bypasses Reeltime's video processing by routing camera signals directly in the AJA device for zero-added latency live monitoring.

You can enable the automatic pass-through option for any compatible output port that you configure in an output slot.



Automatic pass-through option in output slot

If automatic pass-through is enabled and the output slot shows a live signal, the mechanism automatically switches to the unprocessed direct live feed received on an input port of the same device.

If automatic pass-through is enabled and the output slot shows a playback signal, the feature switches seamlessly to the output from the application.

When you change the output slot's source to another live input, the feature automatically continues to show a pass-through signal if the new source is from the same I/O device or seamlessly switches to the processed output from the application.



**Important Note:** For configuring two or more simultaneous pass-throughs using a single I/O device, it is important to genlock the camera signals. For example, if you want to show camera A on the director's monitor and camera B on the script supervisor's monitor, and both should see a pass-through signal for zero-added latency, ensure to genlock camera A and B (e.g., using an Ambient Lockit or similar device.)

### Pass-through on quit

When quitting the application, a default pass-through routing from input port(s) to output port(s) is automatically applied. For example, if you have an AJA Io X3 configured for 2 inputs and 2 outputs and quit the application, the signal received on input port 1 is passed through to output port 3, and the signal received on input port 2 is passed through to output port 4.

### Setting up Blackmagic video I/O devices

Reeltime supports the following video I/O devices by Blackmagic for capturing and playback of SDI signals:

- **Blackmagic UltraStudio** family (e.g., UltraStudio 4K Mini):
  - up to 2 input/output ports
  - 1.5G, 3G, and depending on model 6G and 12G SDI signals
- **Blackmagic DeckLink** family (e.g., DeckLink 8K Pro)
  - up to 4 bi-directional input/output ports
  - 1.5G, 3G, and depending on model 6G and 12G SDI signals

### Associate device ports with input and output slots

Within the slot manager, you can associate your Blackmagic device's SDI input ports with an input slot and, in the same way, SDI output ports with output slots:

- In existing slots, you can choose from all currently available ports in the "Device" drop-down menu.
- If you want to add a new slot, you can press the "+" button that lets you associate a device port with your new slot directly.

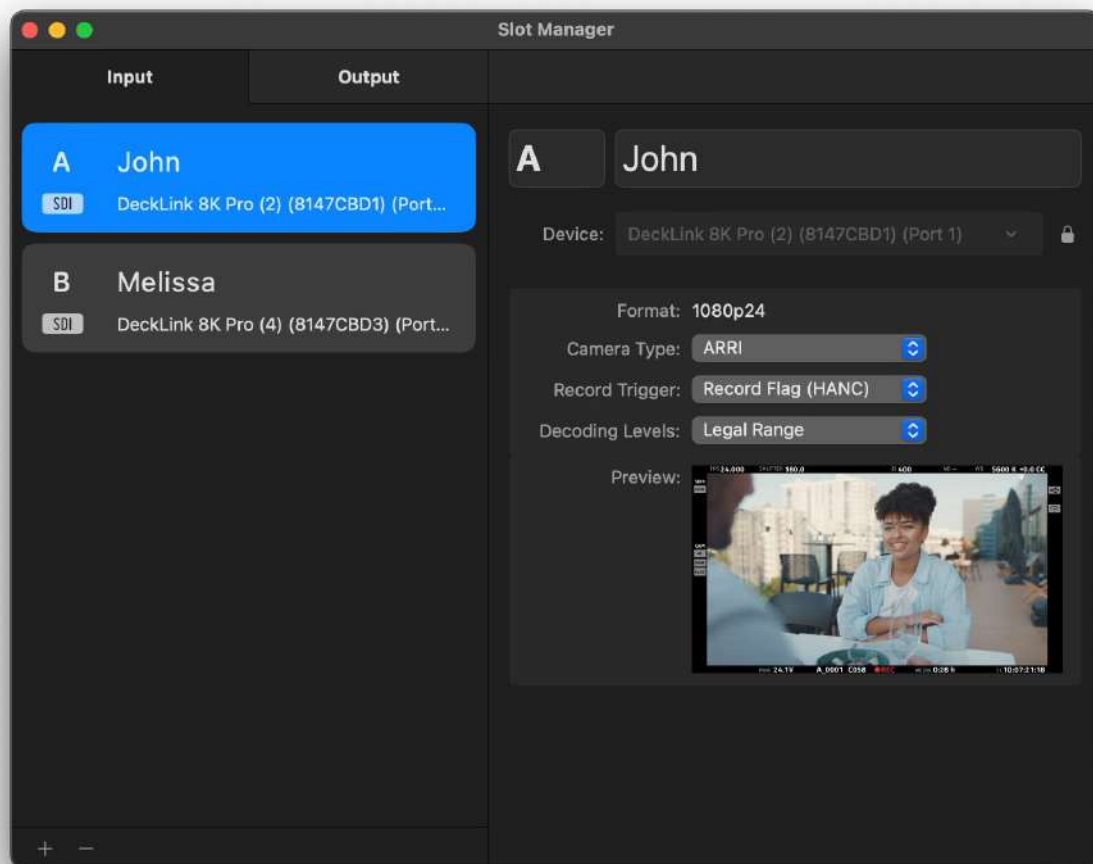
You can configure your device's bi-directional SDI ports by assigning them as an input port or as an output port within the slot manager's input or output tab. If you configured a bi-directional port as input, it will no longer show up in the drop-down list of available output ports (and vice-versa).

When configuring an input port, there are the following options:

- **Format:** The video format of the incoming video signal sets the video format of your device automatically.
- **Camera Type:** Ensure that the appropriate camera type is set to receive the camera's ANC metadata correctly and trigger recording based on the record flag embedded in the SDI signal.
- **Record Trigger:** You can choose which detection method should be used to trigger the recording automatically. Note that the appropriate method depends on your setup and camera:
  - Do not choose "Record Flag (HANC)," as Blackmagic devices do not support receiving the record flag embedded in the horizontal ANC metadata for SDI signals.
  - Choose "RecRun Timecode" if your camera is set to use RecRun timecode and you would like to trigger recording/stop recording depending on whether the timecode is running or the timecode is stopped.
  - Choose "None" to disable the auto-record function for this camera



- **Decoding Levels:** In rare cases, you can change the decoding levels from legal to full, for example, if you receive an ungraded signal from a Sony camera that outputs an SDI signal in extended range.



Slot manager with SDI device configuration for an input slot

When configuring an output port, you can set an output video format manually. However, it is recommended that the output's video format be set based on the incoming video format.

**Note:** If you experience issues with re-connecting Blackmagic video I/O devices, please refer to the article [Troubleshoot re-connecting of Blackmagic video I/O devices](#)

## Setting up DELTACAST video I/O cards

Reeltime supports a wide range of video I/O cards by DELTACAST for capturing and playback of SDI signals.

**Note:** Ensure that your installed DELTACAST VideoMaster driver version matches the SDK version used in your Reeltime version. You can see the SDK version in the "Reeltime Pro"/"Reeltime Lite" menu under "About Reeltime Pro"/"About Reeltime Lite" > "SDK Versions".



## Associate device ports with input and output slots

Within the slot manager, you can associate your Blackmagic device's SDI input ports with an input slot and, in the same way, SDI output ports with output slots:

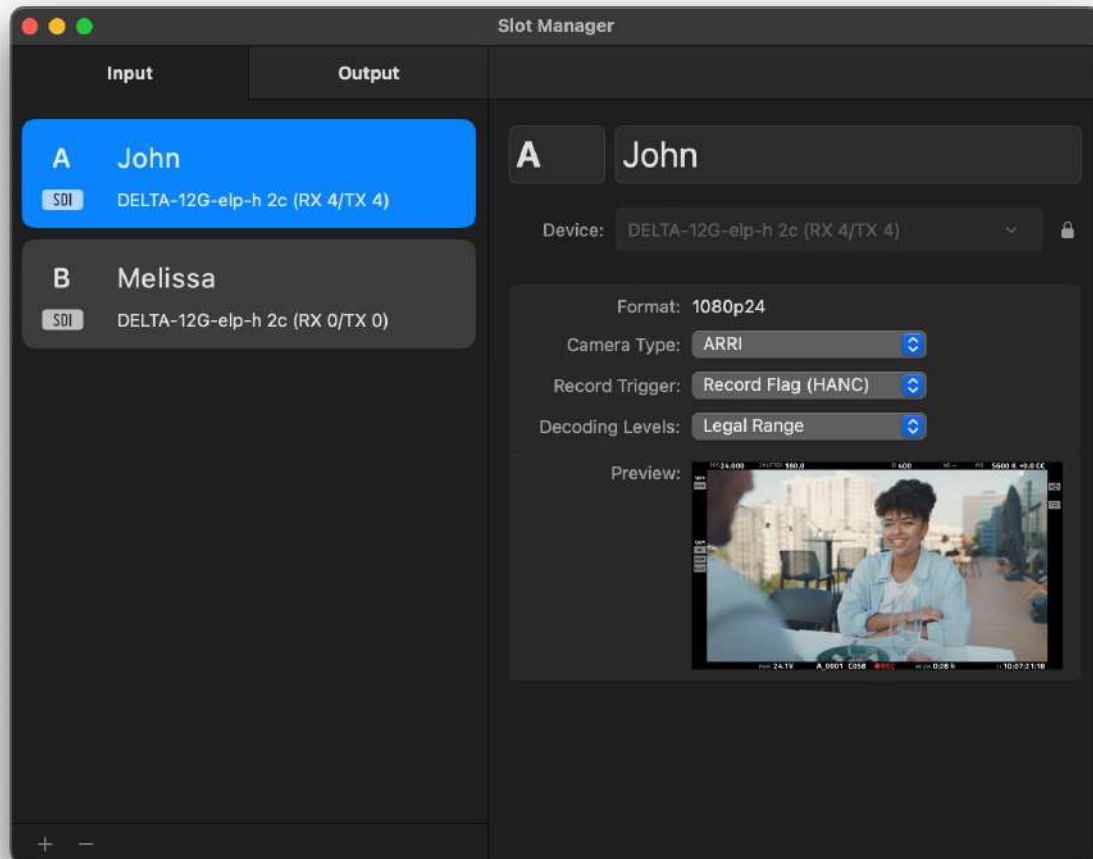
- In existing slots, you can choose from all currently available ports in the “Device” drop-down menu.
- If you want to add a new slot, you can press the “+” button that lets you associate a device port with your new slot directly.

You can configure your device's bi-directional SDI ports by assigning them as an input port or as an output port within the slot manager's input or output tab. If you configured a bi-directional port as input, it will no longer show up in the drop-down list of available output ports (and vice-versa).

**Tip:** See DELTACAST's cabling guide for your SDI card to identify the device ports.

When configuring an input port, there are the following options:

- **Format:** The video format of the incoming video signal sets the video format of your device automatically.
- **Camera Type:** Ensure that the appropriate camera type is set to receive the camera's ANC metadata correctly and trigger recording based on the record flag embedded in the SDI signal.
- **Record Trigger:** You can choose which detection method should be used to trigger the recording automatically. Note that the appropriate method depends on your setup and camera:
  - Choose “Record Flag (HANC)” to detect the record flag embedded in the horizontal ANC metadata of SDI signals from ARRI, RED, and Sony cameras.
  - Choose “RecRun Timecode” if your camera is set to use RecRun timecode and you would like to trigger recording/stop recording depending on whether the timecode is running or the timecode is stopped.
  - Choose “None” to disable the auto-record function for this camera
- **Decoding Levels:** In rare cases, you can change the decoding levels from legal to full, for example, if you receive an ungraded signal from a Sony camera that outputs an SDI signal in extended range.



Slot manager with SDI device configuration for an input slot

When configuring an output port, you can set an output video format manually. However, it is recommended that the output's video format be set based on the incoming video format.

## Setting up full screen output devices

Reeltime supports using HDMI/DisplayPort/USB-C/Thunderbolt monitoring devices as “full screen output devices”, enabling high-quality video signal distribution directly from your Mac's built-in HDMI or Thunderbolt output ports. The feature enables flexible, low-latency monitoring on computer monitors, TVs, or via converters for SDI-based setups.

### macOS display configuration

Before enabling full screen outputs in Reeltime:

1. Connect your target monitor or device to your Mac using an HDMI or Thunderbolt/DisplayPort cable.
2. Open System Settings > Displays and:
  - Set the desired resolution for the connected display.
  - Adjust the refresh rate to 60 Hz or 50 Hz for optimal low-latency performance. Lower refresh rates are supported, but will result in increased delay.
  - Disable True Tone to avoid unwanted color shifts on video outputs.



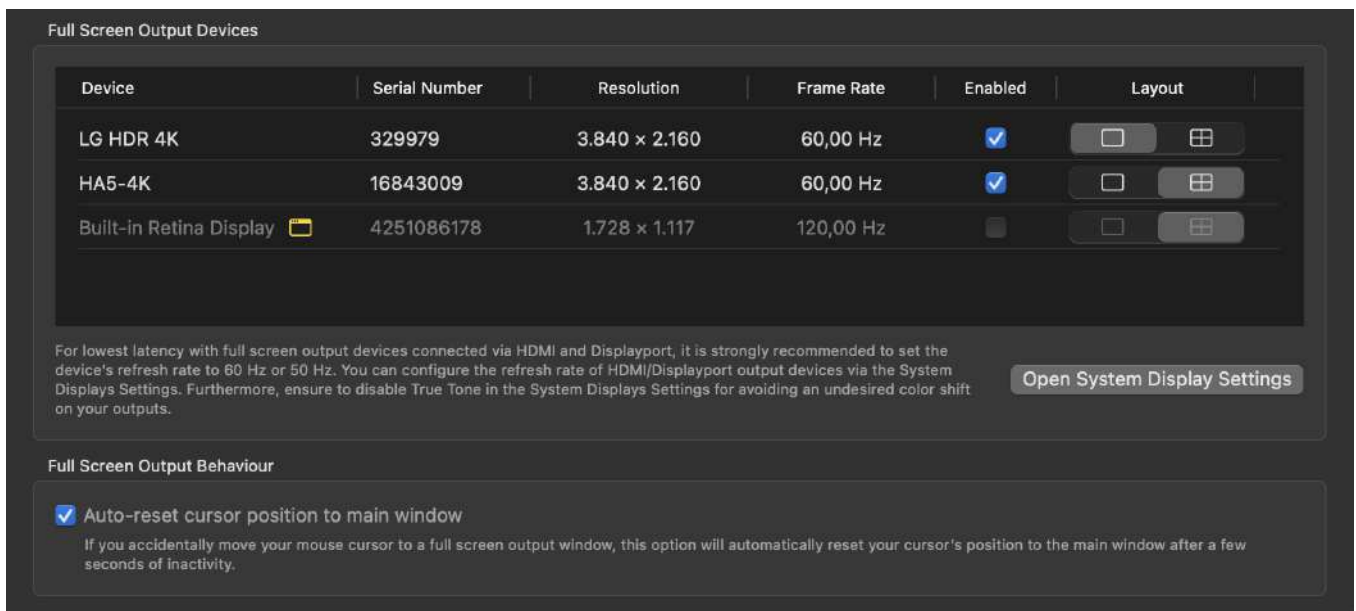
## Reeltime configuration

1. Go to Reeltime > Settings > Devices.
2. Enable the desired HDMI/DisplayPort/USB-C/Thunderbolt-connected display as full screen output device.
3. Select a layout:
  - Single view: one “FSO” (full screen output) will be available in the slot manager.
  - Quad view: four individual “FSO” outputs will be available in the slot manager.
4. In the slot manager:
  - Assign one or more of the “FSO” outputs to your output slots.
  - Set the desired source for each slot.

**Important Note:** Avoid changing a display’s resolution while it is being used as a full screen output device. If you adjust macOS display settings, restart Reeltime to ensure stable output behavior.

In the devices settings, there is also an option to automatically reset the mouse cursor to the main display window if it is moved into a full screen output.

- The “Auto-reset cursor to main window” option is enabled by default.
  - If the cursor remains inactive in the full screen output area, it is automatically repositioned to the main interface after a short delay.



Configured full screen output devices in the devices settings

## Quad view for converter integrations

Full screen outputs configured as quad view support splitting a 4K signal into 4 HD-SDI signals using HDMI or DisplayPort to SDI converters.

## Supported converters

Full screen outputs configured as quad view allow outputting a single 4K HDMI/DisplayPort signal that can be split into four independent HD-SDI outputs using supported converters:

- **AJA HA5-4K:** Converts a 4K HDMI signal into four 3G-SDI outputs.

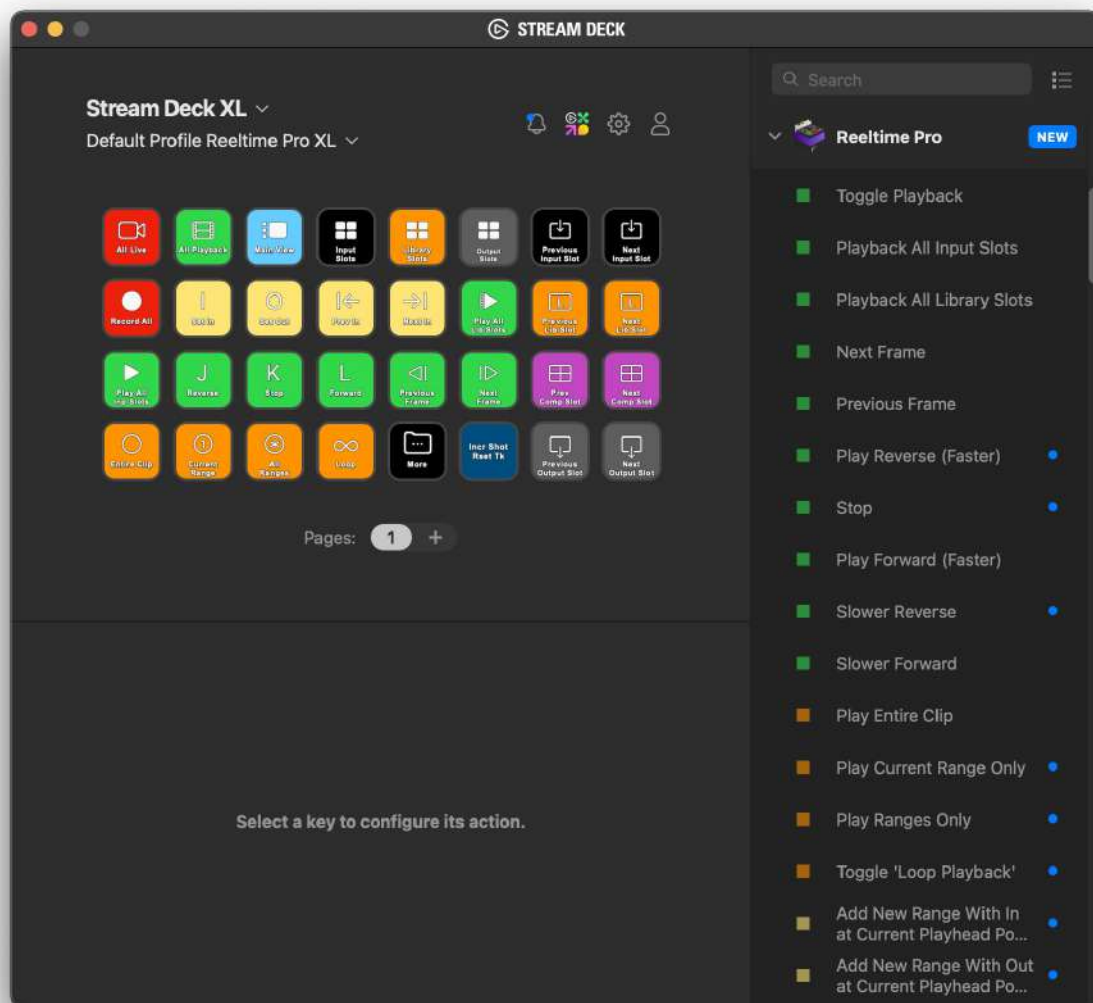
**Important Note:** The AJA HA5-4K requires an HDMI 2.1 compatible HDMI port, which are usually available on Macs with an M2 chip (or newer).

## Setting up Stream Deck controllers

Reeltime integrates with Elgato's Stream Deck devices. There are pre-configured profiles for

- Stream Deck Classic
- Stream Deck XL

devices.



Stream Deck configuration app with installed Reeltime Pro profile



## Installation of your Stream Deck device(s)

To get started with your Stream Deck device(s),

- download and install the latest Stream Deck configurations app from [Elgato's website](#),
- attach all Stream Deck device(s) you want to use with your computer and
- open Reeltime and choose the menu item “Reeltime Pro”/”Reeltime Lite” > **“Install Stream Deck Plugin...”**

Reeltime will then install

- **Actions** for Stream Deck devices
- **Default profiles** with recommended configurations for all currently attached Stream Deck devices

## Add another Stream Deck device

If you already installed a Stream Deck device on your computer and want to use another one, attach it via USB to your machine and click “Reeltime Pro”/”Reeltime Lite” > **“Install Stream Deck Plugin...”** to add default profiles for your attached Stream Deck device.

## Configure and manage profiles

After installing the Stream Deck plugin, open the configuration app and configure the profiles to your personal needs. You can assign, move, or delete actions to the buttons of your Stream Deck.

## Troubleshooting

***“My Stream Deck buttons show ? question marks.”***

*A re-install of the Stream Deck plugin most often helps.*

- Make sure that you are on the latest Reeltime version
- Close Reeltime
- Uninstall the Reeltime plugin in the Stream Deck configurations app by right-clicking on one of the Reeltime actions and choosing “Uninstall...”
- Open Reeltime and go to “Reeltime Pro”/”Reeltime Lite” > **“Install Stream Deck Plugin...”**

***“I updated to a new Reeltime version, and some Stream Deck Actions don’t work anymore”***

*Re-install the Stream Deck plugin via your updated Reeltime application.*

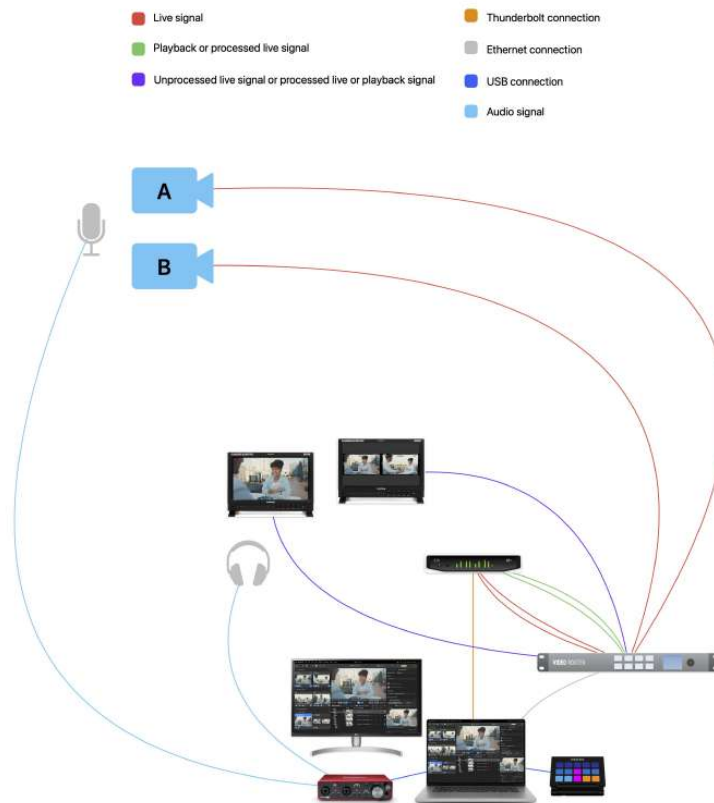
- Close Reeltime
- Open Stream Deck configurations app and backup your Stream Deck profiles if you have customized profiles
- Uninstall the Reeltime plugin in the Stream Deck configurations app by right-clicking on one of the Reeltime actions and choosing “Uninstall...”
- Open Reeltime and go to “Reeltime Pro”/”Reeltime Lite” > **“Install Stream Deck Plugin...”**
- Check if your profiles work again, and if necessary, replace non-working actions with a new action

## Manage configurations for an external video router



Video routers often sit at the core of a flexible video playback station. Video routers have multiple input and output ports and allow to easily switch the connections between these ports. Reeltime comes with the ability to control a video router and to apply pre-defined configurations of connections – either manually or on certain events such as switching slots in the application’s user interface.

The various hardware setup options with Reeltime are described in the article [Hardware Setup Options](#).



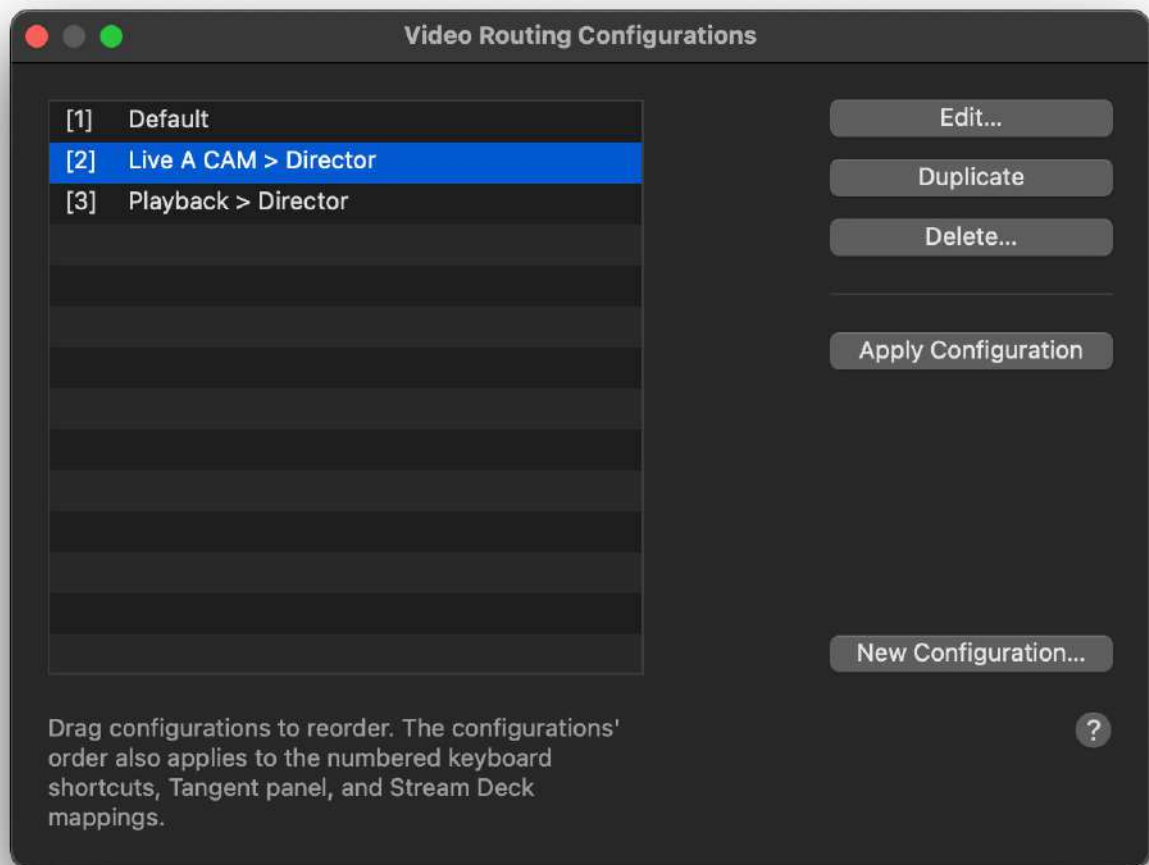
Hardware setup with an external video router, 2 cameras, and 2 monitors

Reeltime has an additional, dedicated view for directly controlling a video router and monitoring routings visually. See [Interactive Router Control](#) for detailed information.

You need a working network connection between the computer running Reeltime and the video router. For setting up the network, please refer to your video router’s manual.

### Managing video routing configurations

You open the Video Routing Configurations window from the main menu by choosing “Configure Video Routing” > “Manage Configurations...” from the application menu.



Video Routing Configurations window

The Video Routing Configurations window shows a list of configured configurations and options to edit, duplicate, and delete a selected configuration. You can also test the selected configuration by clicking the “Apply Configuration...” button.

You can rename a configuration by double-clicking the entry in the list.

The configurations have an automatically assigned index number for easier referencing (e.g. when using Stream Deck devices to apply configurations remotely).

You can change the order of the configurations by dragging and dropping a configuration entry in the “Manage Configurations” window.

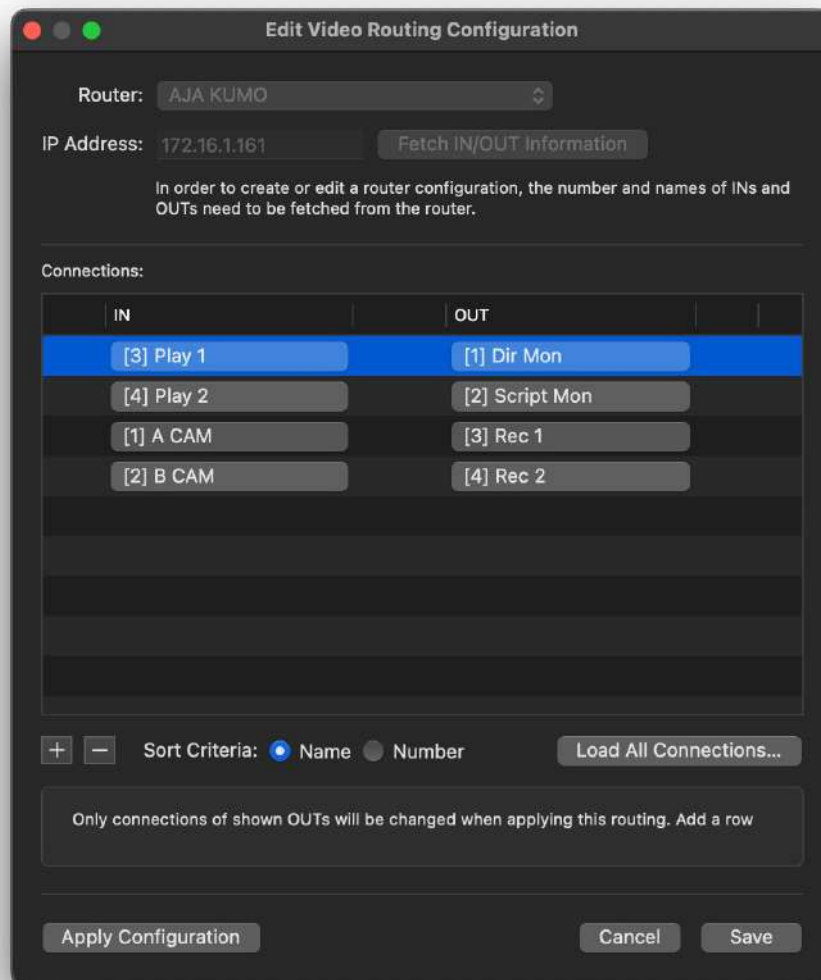
### Creating a new video routing configuration

By clicking the “New Configuration...” or choosing “Configure Video Routing” > “New Configuration...” from the application menu, you open the dialog for creating a new video routing configuration.

To create connections between the in and out ports of your router, you need to connect to the router first. This is needed so the application can fetch a list of ports and their names from the router.



Choose an auto-detected router in the “Router” popup button, or choose the router model family you have (AJA Kumo or Blackmagic Design Smart VideoHub) and enter your router’s IP address or hostname. Click the “Fetch IN/OUT Information” button. If the router’s information has been fetched successfully, the controls below the connection table get enabled, and you can start creating new connections.



Editing a video routing configuration

Click the “+” button to create a new connection and “-” to remove the selected connection.

When clicking the “+” button below the connection table, you can choose which input (IN) port should be connected to which output (OUT) port. Choose the ports according to your setup and click “Add”. You can edit the connection at any time by double-clicking the connection.

Only connections of shown OUTs will be changed when the routing configuration is applied. All other output ports of your router will remain unchanged when applying this configuration.

You can test your current configuration by clicking the “Apply Configuration” button. The configuration will become active in the connected video router.

You can sort the connection table by IN or OUT ports and choose if the selected column is sorted by name or port number with the “Sort Criteria” controls below the table.

When clicking “Load All Connections...” you can fill the connection table with your video router’s current, complete routing configuration. This can be useful as a starting point for complex routing configurations with lots of connections.

When clicking “Save...”, you will be prompted with a name for the video routing configuration, and the configuration appears in the list of configurations in the Video Routing Configurations window.

### Applying video routing configurations via the menu and keyboard shortcuts

Once a video routing configuration is saved, it will also appear in the “Video Routings” submenu of the application menu. When choosing one of the stored configurations in the menu, the configuration gets applied to the connected router.

You can assign keyboard shortcuts to the menu entries for individual video routing configurations with the Keyboard Shortcuts Manager. This allows you to switch between video routing configurations with keyboard shortcuts easily.

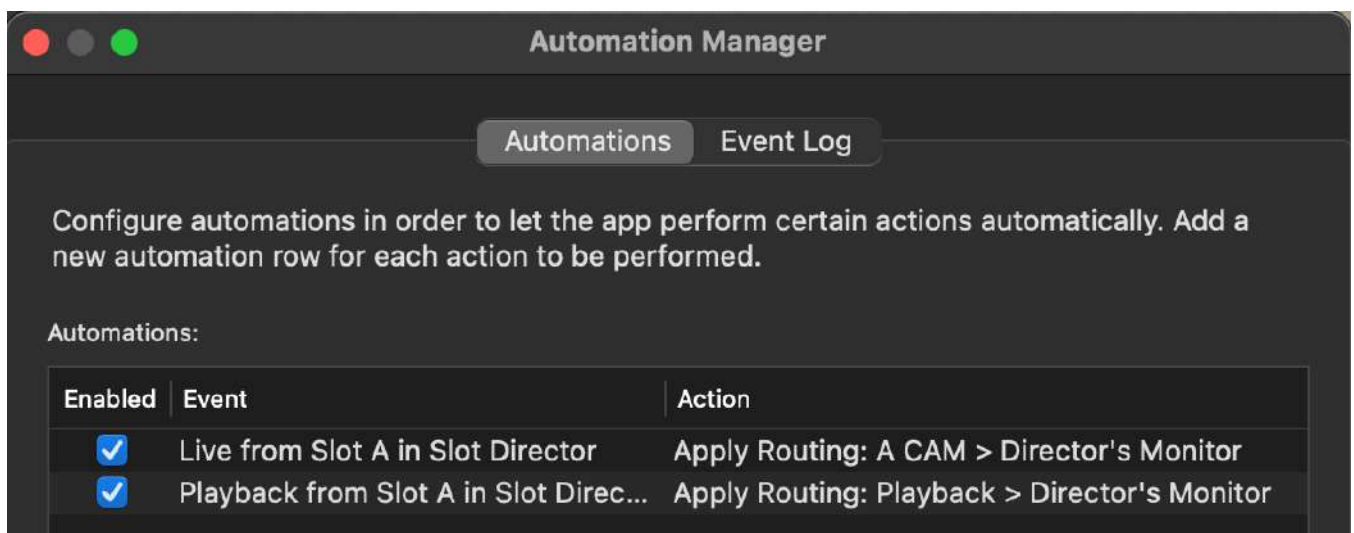
See the article about the [Working With Keyboard Shortcuts](#) for more information.

### Applying video routing configurations from Stream Deck

You can also apply up to 20 video routing configurations from Stream Deck devices using the Stream Deck plugin. There is a dedicated “Routing” page in the default profiles.

### Automating video routing configurations

You can automate video routing configurations by using them as actions in the Automation Manager. This allows you to automate the change of the routing configuration based on a specific event. For example, you can apply different configurations based on whether an output slot receives a live or playback signal to ensure the Director always receives a live signal as a direct feed from the camera without latency.



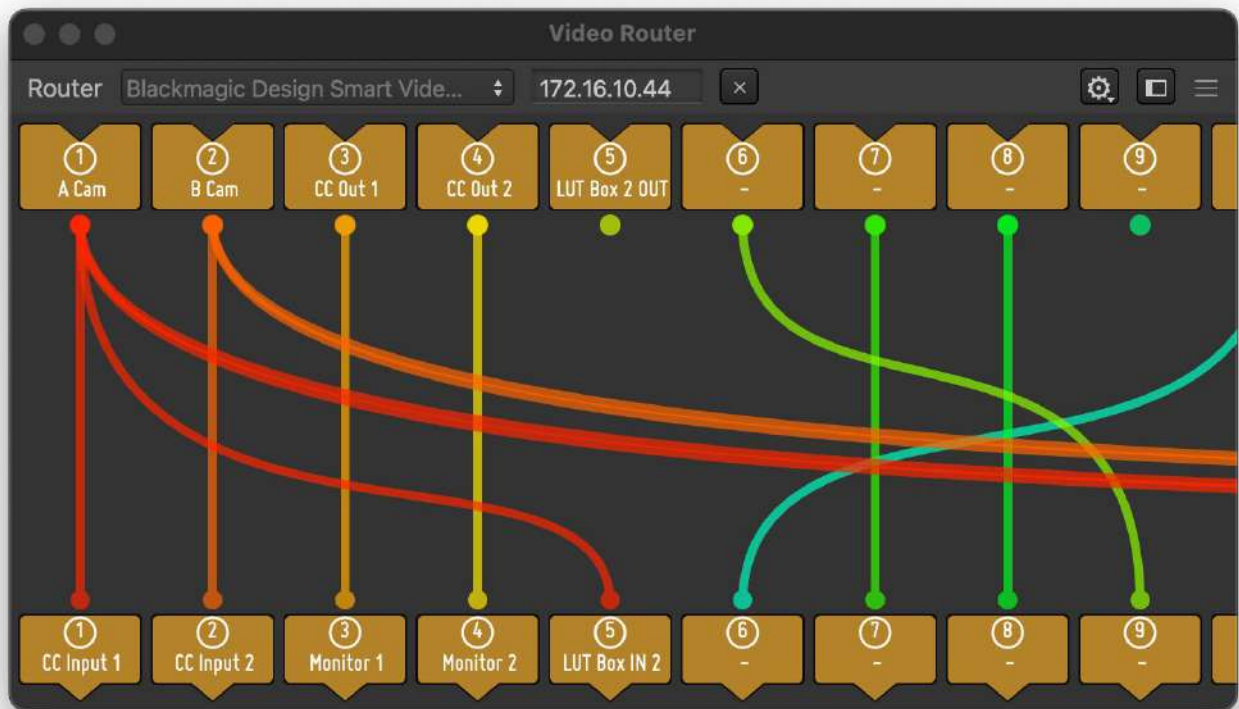
Automation Manager with configured automations to trigger video routing configurations

### Interactive video router control

In addition to defining routing presets (see [Manage configurations for an external video router](#) for more information) Reeltime has a dedicated view for directly controlling a video router and monitor routings visually.

The video router view displays all inputs and outputs of a connected video router, and lets you interactively change routings.

You can open the video router panel with a dedicated button in the toolbar, or via the application menu “Video Router...”.



Interactive video routing panel

### Connecting to a video router

Choose an auto-detected router in the “Router” popup button, or choose the router model family you have (AJA Kumo or Blackmagic Design Smart VideoHub), enter the IP address or hostname of your router and click the connection button beside the field for the IP address. You can disconnect the video router anytime by clicking the connection button again.

### Managing connections

The Video Router view displays all connections between input ports and output ports currently active in the connected video router.

Usually, an input port can be connected to multiple output ports, but an output port can only be connected to one input port. Connections between ports are displayed as colored lines.

Input ports are displayed on the top of the view (on the left in vertical layout), output ports are displayed on the bottom of the view (on the right in vertical layout). The ports display the port number in the router (the circled number) and one or two rows of the name of the port.

Port names can be configured in your video router’s administration interface. Please refer to your router manual to learn how to do that.

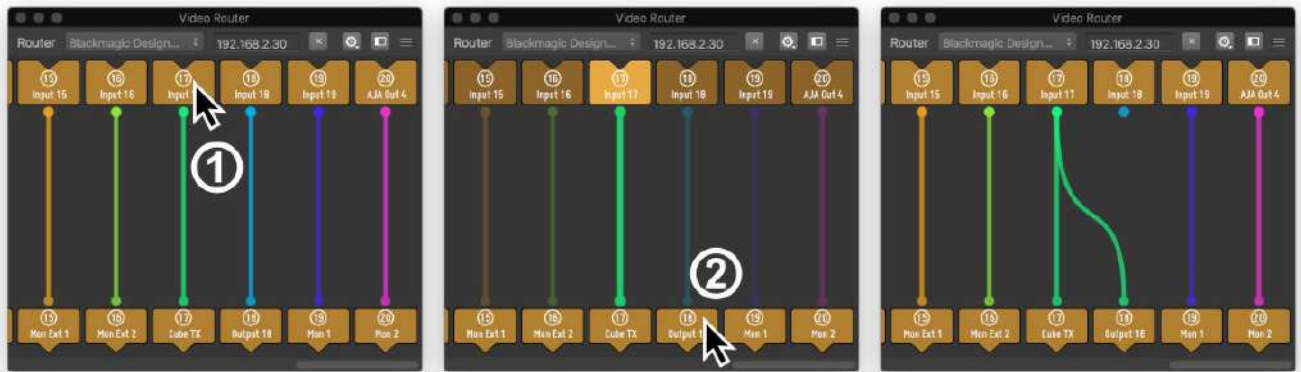
When connections change (either from within the application or from outside, e.g., by using a hardware control panel or the web UI), they flash in white to indicate the change.



## Changing connections via selecting ports

You can select a port by clicking on it. The port and its current connections get highlighted. You then can click on one of the ports of the other port type to change a connection:

For example, when an input port is selected first and an output port is selected second, the output port changes its connection to the selected input port. You can achieve the same effect by selecting an output port first and the input port second.



Changing video routing connections by clicking on ports

You can select ports also from the utility menu in the wedge button in the header bar of the Video Routing view, or from the main menu by choosing one of the entries in the “Interactive Video Routing” submenu of the “Video Routing” menu in the application menu.

You can also right-click on each port button to inspect and change the connected port(s).

## Changing connections via drag-and-drop

Each port has a small colored circle besides it. You can drag a line from this circle to the port that you want to make connection with.

## Video routing configurations

You can set up video routing configurations as shortcuts to change one or more connections. See [Manage configurations for an external video router](#) for more information.

Configured video routing configurations appear as menu items in the wedge button in the header bar of the Video Routing panel.

You can also use the current state of the video router with all its connections as a starting point for a new configuration. Choose “Save Current Connections...” in the menu of the wedge button in the header bar of the Video Routing view.

## Configuring the video routing interaction

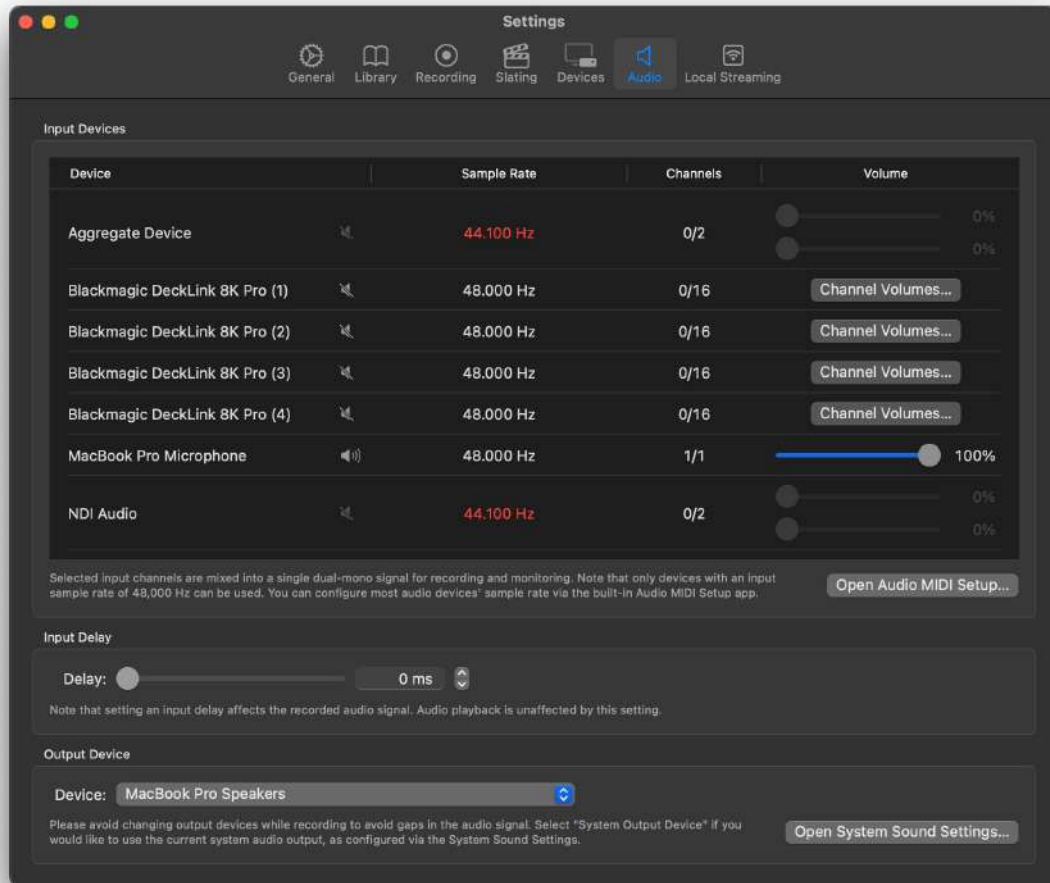
You can view connections either in horizontal layout or vertical layout. Choose “View in Vertical Layout” or “View in Horizontal Layout” menu items in the wedge button in the header bar of the Video Routing view to change the layout.

## Setting up audio I/O interfaces

This article walks you through setting up audio I/O interfaces in Reeltime:



- Connect your audio interface(s) to your machine
  - You can connect any audio source that is supported by macOS, including embedded audio channels from SDI signals via the drivers by AJA and Blackmagic
- Open Reeltime's audio settings
  - The audio settings allow selecting multiple audio input devices and mixing their channels into one dual-mono audio output signal for recording and monitoring



Audio settings with multiple audio inputs

- The “Input Devices” list displays all audio devices connected to your machine.
  - You can enable all channels you want to use. Each channel has an individual volume slider.
  - The “Input Delay” setting allows you to add an audio delay to the audio recording to keep it in sync with the video signals

**Note:** If a device is not configured to 48 kHz, it is displayed in red and cannot be used. However, you can open the Audio MIDI Setup to configure the device to 48 kHz.

- For audio monitoring and playback, you can choose an output device or select to use the system's audio output device
  - including embedded audio output for SDI signals via the drivers by AJA and Blackmagic
- The audio meters in the toolbar visualize the active audio in green (for playback), blue (for monitoring), and grey (if the audio is muted)



There are menu items (in the audio menu) and associated Stream Deck controller actions for muting the live audio or all audio, as well as an associated global mute toolbar button.



# Streaming Integrations

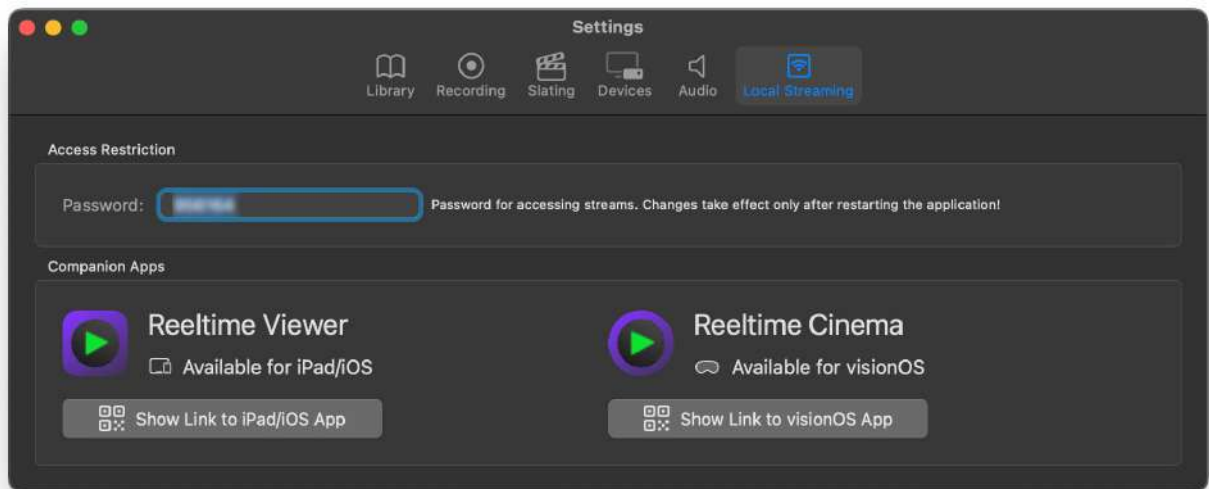
## Distributing local streams for companion apps

Reeltime Pro lets you distribute local streams for the companion apps Reeltime Cinema and Reeltime Viewer. The video streams you distribute from Reeltime Pro in the local network are protected using industry-standard encryption to fulfill your production's security guidelines.

Like all other outgoing signals, you can configure local streams in the output slots. The current version of Reeltime Pro supports up to 9 output slots. Consequently, you can distribute up to 9 different local streams (if you do not need further outgoing signals such as SDI outputs to monitors).

**Tip:** Reeltime Pro's filter and compositing options let you optimize the appearance of your streams according to the production's guidelines and the individual use cases of the watching roles. For example, you could add an image overlay filter to all streams if your production's security guidelines require that. Or you can create one stream with a clean image for the Director and another with metadata overlays for Script / Continuity.

To give your crew access to the local streams, you can set a password in Reeltime Pro's local streaming settings and share the password with your team members. Additionally, you can display a QR code that links to the companion apps in the App Store or copy the link to share it with other team members.

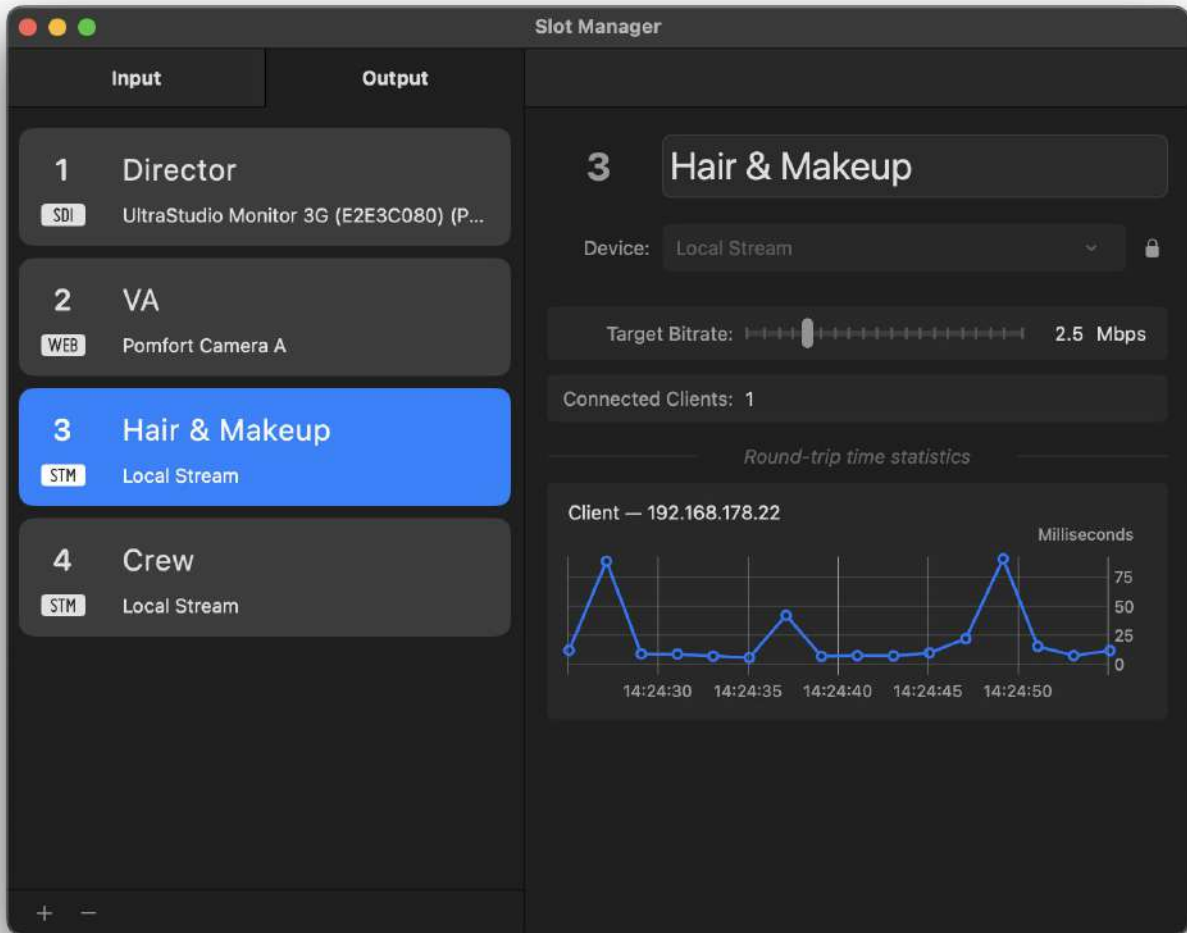


Local streaming settings

To add another output slot as a local stream, open the slot manager and add an output slot in the "Output" tab. Choose "Local Stream" under "Device" and name the output slot as intended.

**Note:** The output slot's name will appear as the stream's name within the companion app. So, remember that the name should be meaningful and self-explanatory for everyone with access to the local streams.

You can modify the target bitrate in the output slot settings and inspect how many clients are connected to the stream (output slot). Furthermore, a diagram visualizes the round-trip time statistics for each connected client so that you can monitor the connection quality if needed.



Setting up local streaming through an output slot in the slot manager

## Distributing internet streams via internet streaming services

Reeltime Pro comes with integrations for a wide range of internet streaming services:

- **Sony Ci Media Cloud**
- **RePro Stream**
- **Autodesk Flow Capture**

and the hardware-based integrations with

- **Teradek TV** and
- **Sohonet ClearView Flex**

You can set up and control an internet stream through an output slot. If your service supports multiple streams and the network quality and speed are sufficient, you can also set up various streams that work simultaneously.

For the software-based internet streaming integrations with Sony Ci Media Cloud, RePro Stream, and Autodesk Flow Capture you first need to create a live stream on the service's platform. Please refer to your service's documentation for more information.



All internet streams are secured using industry-standard encryption.

Read more about the detailed setup process in the following articles:

- [Setting up an internet stream with Sony Ci Media Cloud](#)
- [Setting up an internet stream with RePro Stream](#)
- [Setting up an internet stream with Autodesk Flow Capture](#)

For the hardware-based integrations with Teradek TV and Sohonet ClearView Flex, you set up the streams via an SDI output port of a video I/O device connected to your machine. Then, you connect the SDI output port to an SDI input port of a compatible hardware device by the manufacturer. Please refer to your service's documentation for more information.

Read more about the detailed setup process in the following articles:

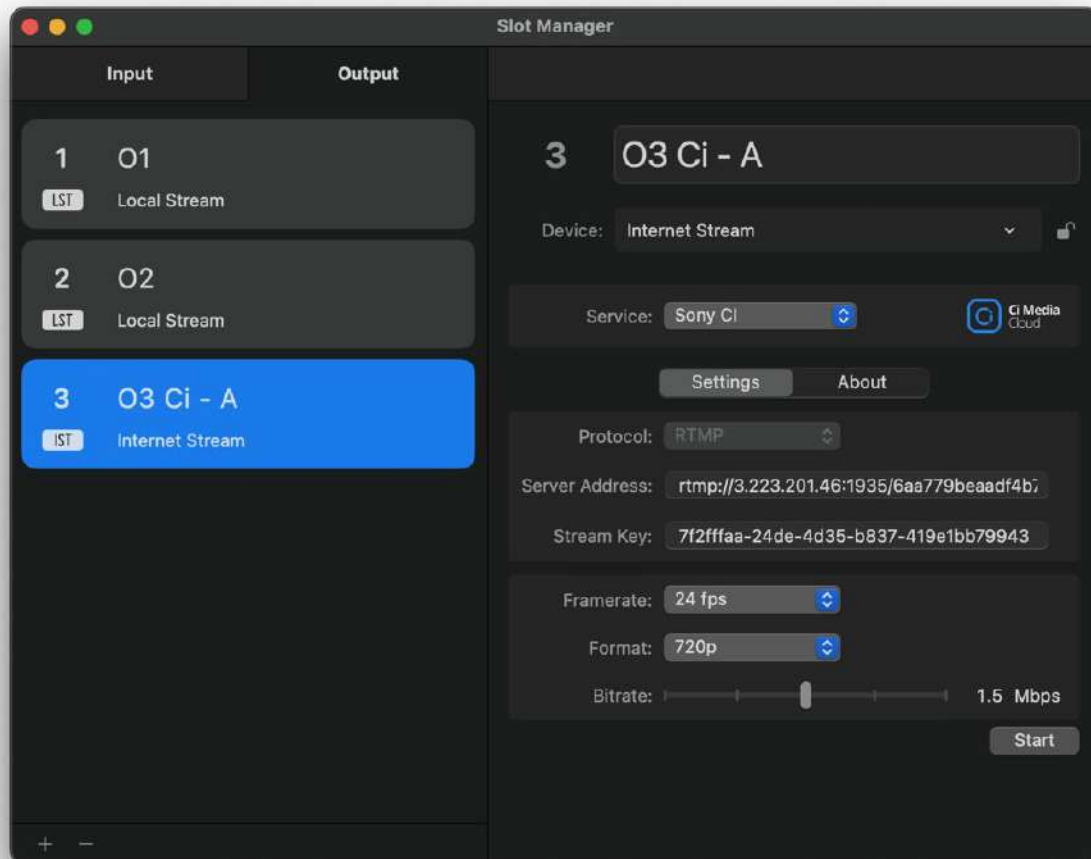
- [Setting up a hardware-based internet stream with Teradek TV](#)
- [Setting up a hardware-based internet stream with Sohonet ClearView Flex](#)

## **Setting up an internet stream with Sony Ci media cloud**

To set up an internet stream via Sony Ci Media Cloud, you first need to create a live stream on the service's platform. For more information, please refer to Sony Ci Media Cloud's documentation.

Once your live stream is created, you can configure the internet stream in the output slots:

- Open the slot manager and add an output slot in the "Output" tab,
- Select "Internet Stream" under "Device" and name the output slot as desired,
- Choose "Sony Ci Media Cloud" and fill in the live stream information you can copy from the platform's interface.



Output slot with Sony Ci Media Cloud internet streaming configuration

You can configure the stream's resolution, framerate, and target bitrate to optimize them according to your production's requirements and the technical conditions on set.

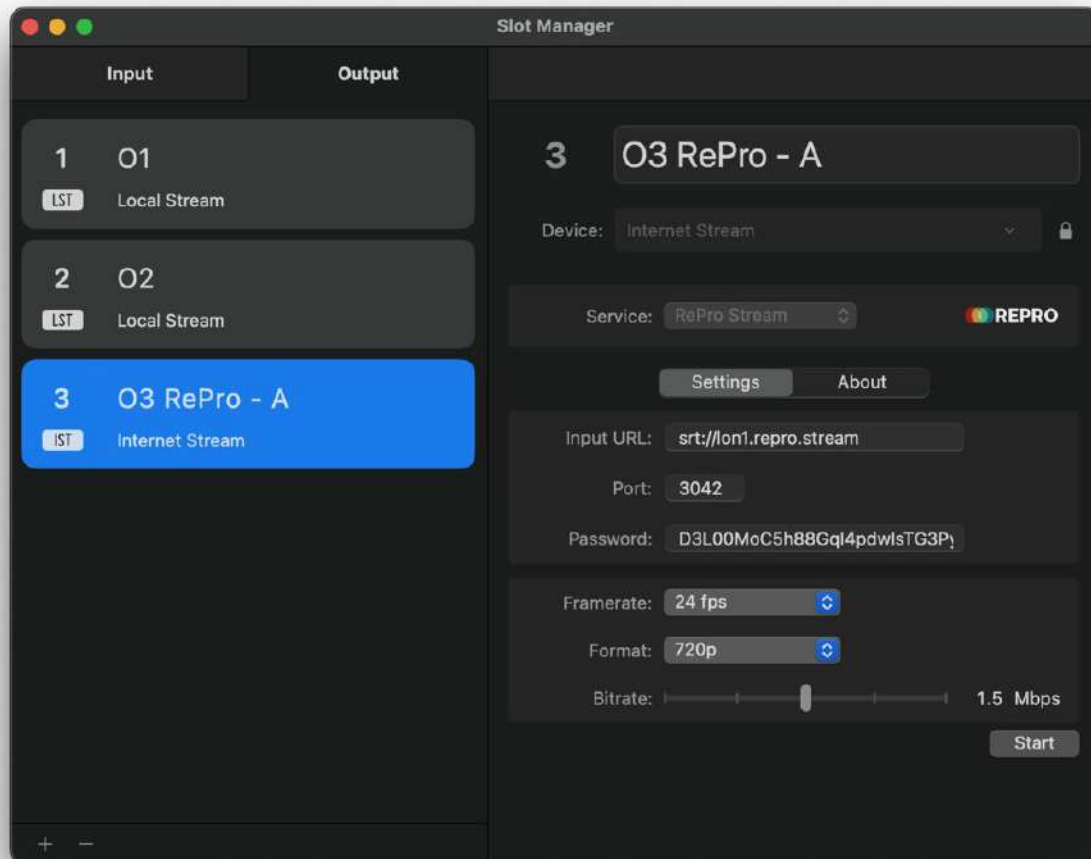
**Note:** The video stream includes the application's main audio, which is currently audible. Hence, you may need to unmute the live audio to send a stream with audio.

## Setting up an internet stream with RePro stream

To set up an internet stream via RePro Stream, you first need to create a live stream on the service's platform. For more information, please refer to RePro Stream's documentation.

Once your live stream is created, you can configure the internet stream in the output slots:

- Open the slot manager and add an output slot in the "Output" tab,
- Select "Internet Stream" under "Device" and name the output slot as desired,
- Choose "RePro Stream" and fill in the live stream information you can copy from the platform's interface.



Output slot with RePro Stream internet streaming configuration

You can configure the stream's resolution, framerate, and target bitrate to optimize them according to your production's requirements and the technical conditions on set.

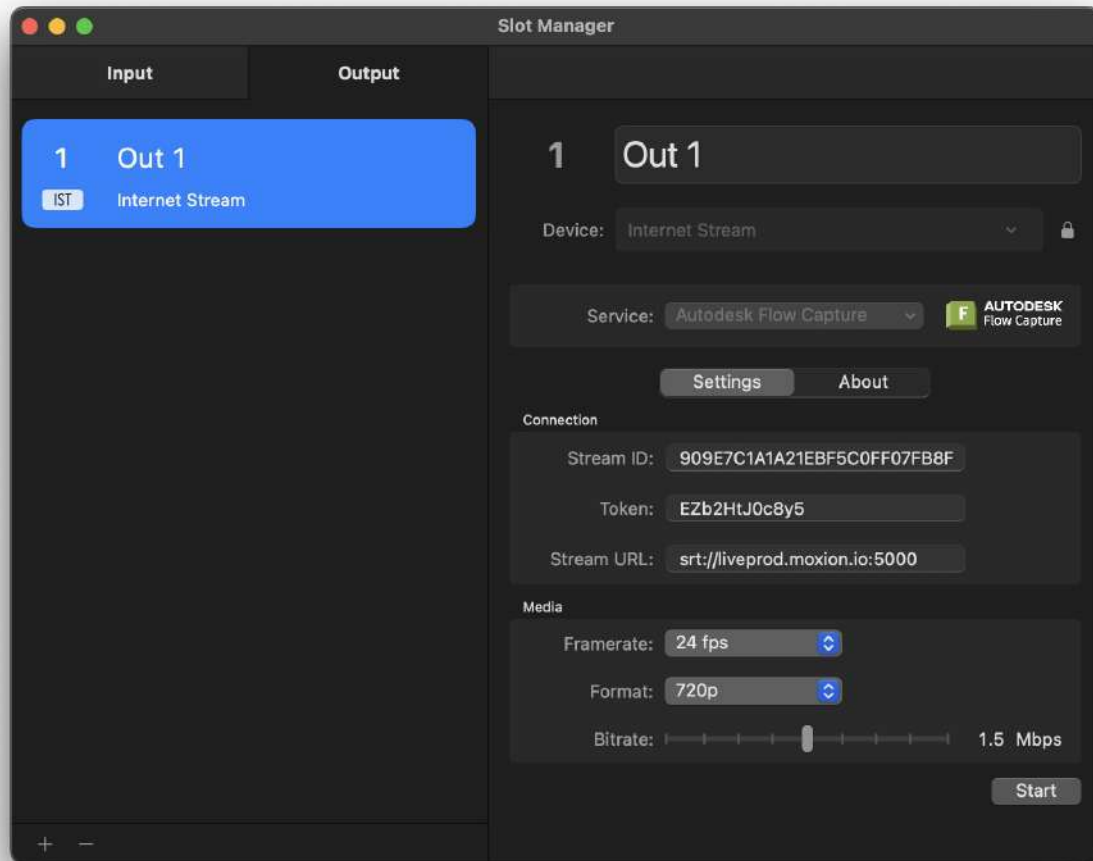
**Note:** The video stream includes the application's main audio, which is currently audible. Hence, you may need to unmute the live audio to send a stream with audio.

## Setting up an internet stream with Autodesk Flow Capture

To set up an internet stream via Autodesk Flow Capture, you first need to create a live stream on the service's platform. For more information, please refer to Autodesk Flow Capture's documentation.

Once your live stream is created, you can configure the internet stream in the output slots:

- Open the slot manager and add an output slot in the "Output" tab,
- Select "Internet Stream" under "Device" and name the output slot as desired,
- Choose "Autodesk Flow Capture" and fill in the live stream information you can copy from the platform's interface.



Output slot with Autodesk Flow Capture internet streaming configuration

You can configure the stream's resolution, framerate, and target bitrate to optimize them according to your production's requirements and the technical conditions on set.

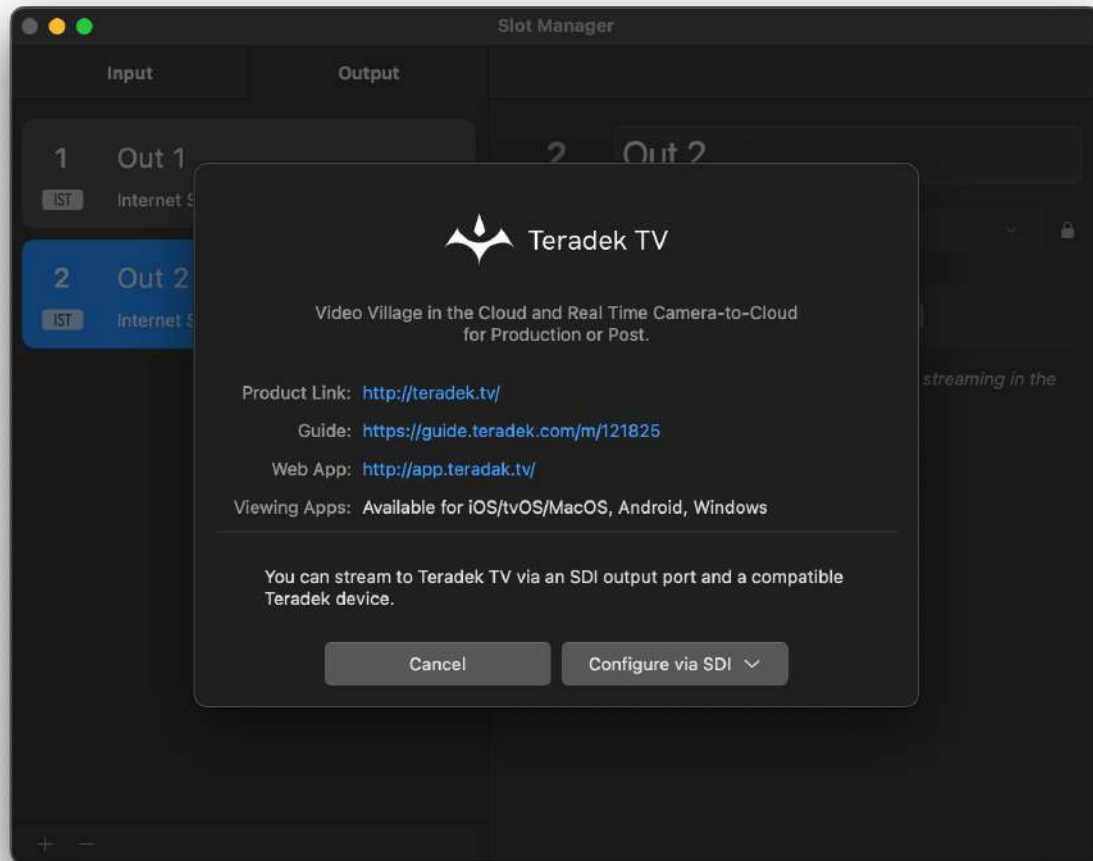
**Note:** The video stream includes the application's main audio, which is currently audible. Hence, you may need to unmute the live audio to send a stream with audio.

## Setting up a hardware-based internet stream with Teradek TV

To set up an internet stream with Teradek TV, you configure the stream via an SDI output port of a video I/O device connected to your machine. Then, you connect the SDI output port to an SDI input port of a compatible hardware device by the manufacturer. Please refer to Teradek TV's documentation for more information.

Once your hardware is connected appropriately, you can configure the internet stream via Teradek TV in the output slots:

- Open the slot manager and add an output slot in the "Output" tab,
- Choose "Internet Stream" under "Device",
- Choose "Teradek TV" and configure the stream via an SDI output device.



Output slot with Teradek TV configuration

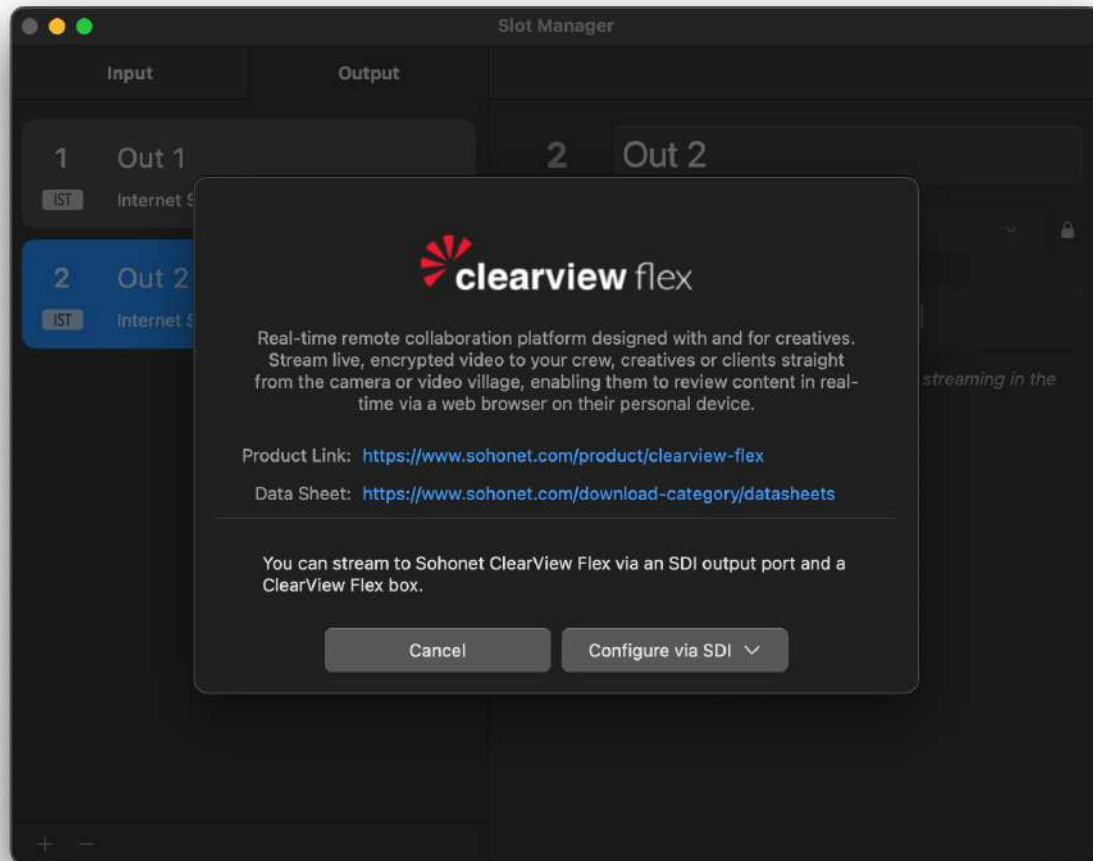
**Note:** For some video I/O devices, you cannot choose a video format for the output ports if the device's input ports are already configured to a specific video format.

## Setting up a hardware-based internet stream with Sohonet ClearView Flex

To set up an internet stream with Sohonet ClearView Flex, you configure the stream via an SDI output port of a video I/O device connected to your machine. Then, you connect the SDI output port to an SDI input port of a compatible hardware device by the manufacturer. Please refer to Sohonet ClearView Flex's documentation for more information.

Once your hardware is connected appropriately, you can configure the internet stream via Sohonet ClearView Flex in the output slots:

- Open the slot manager and add an output slot in the "Output" tab,
- Choose "Internet Stream" under "Device",
- Choose "Sohonet ClearView Flex" and configure the stream via an SDI output device.



Output slot with Sohonet ClearView Flex configuration

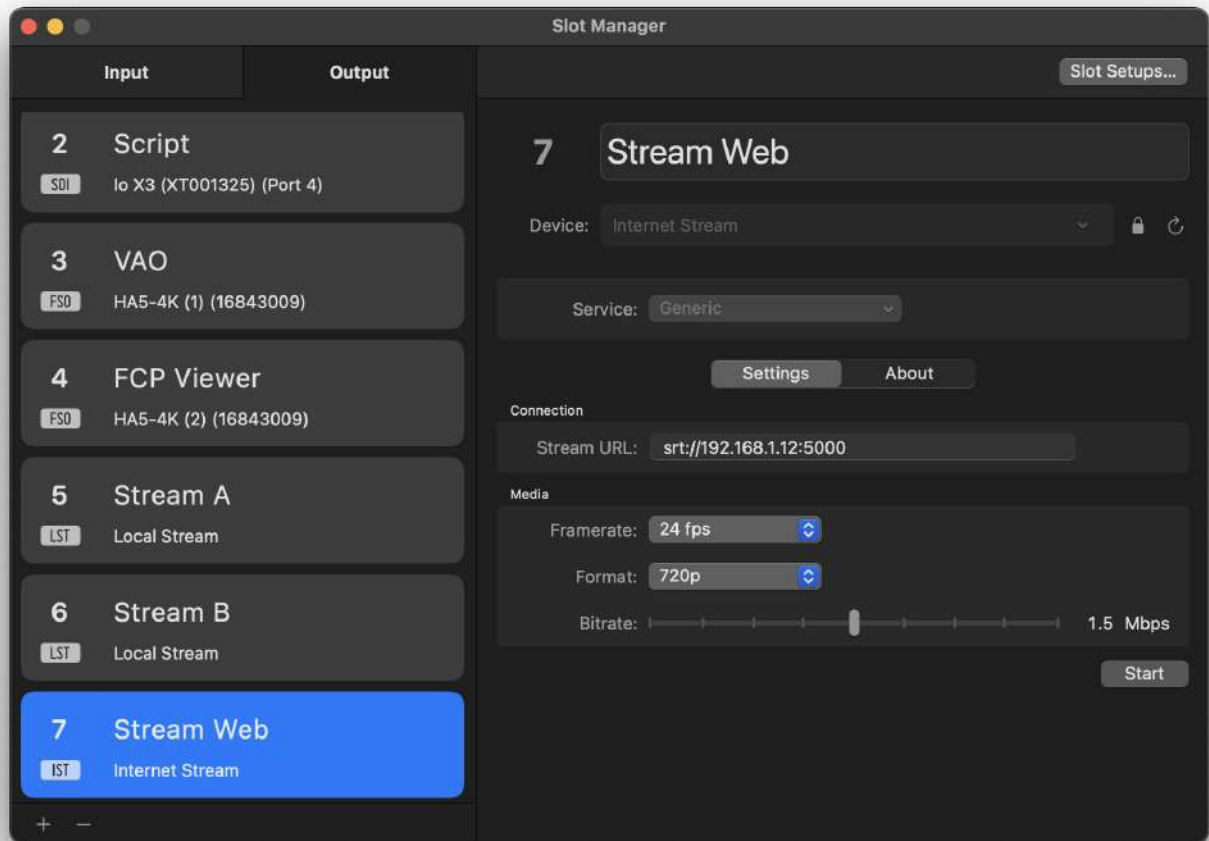
**Note:** For some video I/O devices, you cannot choose a video format for the output ports if the device's input ports are already configured to a specific video format.

## Setting up a generic internet stream

To set up a generic internet stream, you first need to create an SRT or RTMP stream using your own server or your preferred streaming service provider.

Once your live stream is created, you can configure the internet stream in the output slots:

- Open the slot manager and add an output slot in the “Output” tab,
- Select “Internet Stream” under “Device” and name the output slot as desired,
- Choose “Generic” and fill in the live stream information.



Output slot with generic internet streaming configuration

You can configure the stream's resolution, framerate, and target bitrate to optimize them according to your production's requirements and the technical conditions on set.

**Note:** The video stream includes the application's main audio, which is currently audible. Hence, you may need to unmute the live audio to send a stream with audio.



## Setting up NDI input

Reeltime Pro supports receiving available NDI input streams in your network via input slots, e.g., for monitoring your Final Cut Pro timeline's A/V output and distributing the editing preview to the video village.

### Install NDI Tools for Mac and create a stream

- Install the latest version of NDI Tools for Mac
- Create an NDI stream with a third-party application such as Final Cut Pro
  - In Final Cut Pro: Go to Settings > Playback > A/V Output and choose the desired NDI output format, e.g., "NDI 1920 x 1080 @24".
- If NDI output does not appear in Final Cut Pro's "A/V Output" settings, you may need to restore legacy video device support within the macOS Recovery Mode:
  - Shut down your Mac
  - Press and hold the power button until the options appear, then
    - continue with "Options" and log in
  - Open Terminal from the utilities menu
  - Enter the command: `system-override legacy-camera-plugins-without-sw-camera-indication=on`
  - If the returned message is "command not found", you first have to
    - disable System Integrity Protection (SIP). That is also only possible within the macOS Recovery Mode:
    - If necessary, restart your Mac and enter Recovery Mode as described above
    - Open Terminal from the utilities menu
    - Enter the command: `csrutil disable`
    - Repeat the steps above to restore legacy device support
    - Remember to re-enable SIP after you have completed the necessary changes: `csrutil enable`

### Associate an NDI stream with an input slot

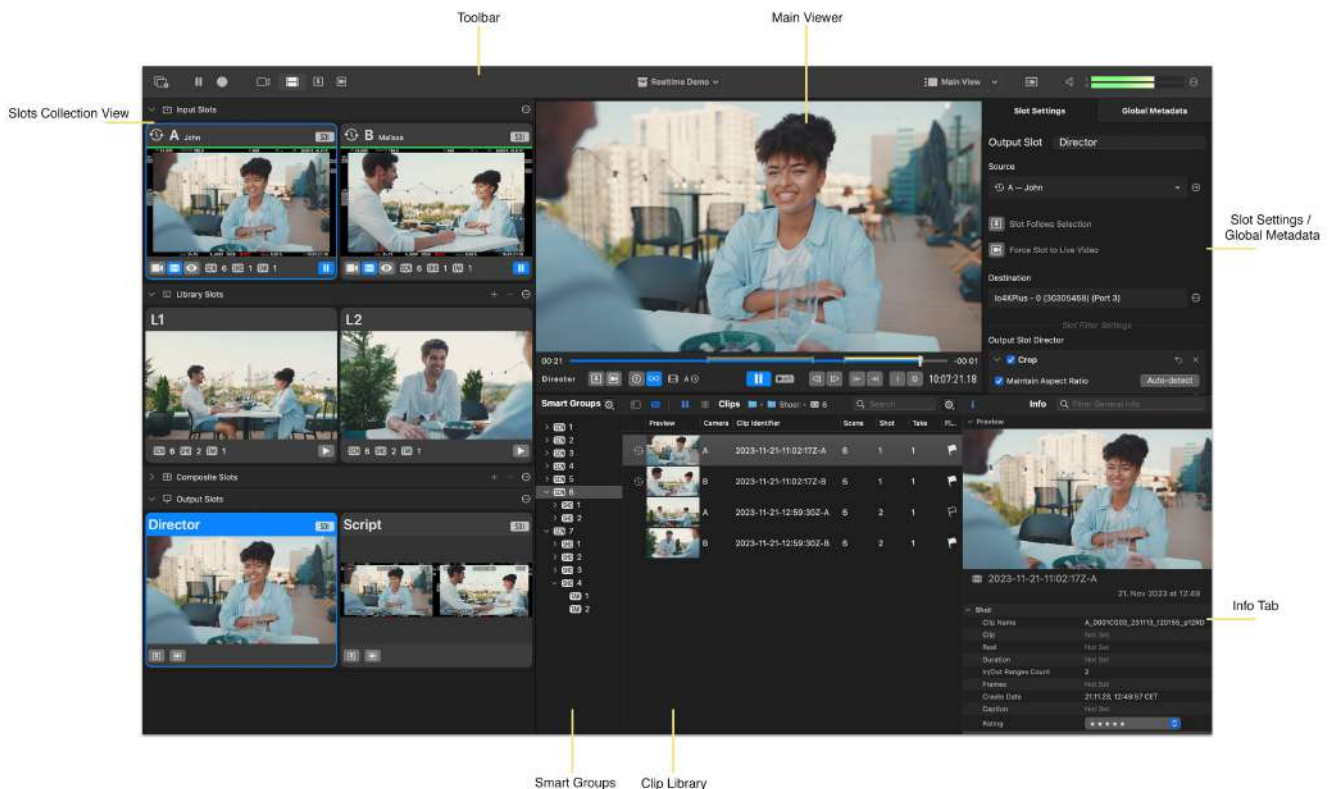
1. Create a dedicated input slot for receiving the NDI stream, e.g., the A/V output from Final Cut Pro.
2. Associate the input slot with the NDI input stream; for example, Final Cut Pro's A/V output stream typically includes the postfix "(macOS A/V Output)".
3. To receive audio embedded in the NDI stream, enable the channels of the "NDI Audio" input device in Settings> Audio > Input Devices.

# User Interface

## Multiple window layouts

Reeltime has multiple window layouts, each providing different UI elements optimized for typical activities and common setups.

- The **“Main View” window layout** allows access to all components in the application, such as
  - the slot column with sections for input slots, library slots, composite slots, and output slots,
  - the “Main Viewer” with recording and playback controls for the currently selected slot,
  - the global metadata,
  - and the clip library
- The View > Enter Main Viewer Full Screen menu item, or the associated keyboard shortcut, or Stream Deck controller action opens the main viewer’s signal in full screen (without UI elements). You can exit the full screen view with the **(Esc)** key, or using the same keyboard shortcut or Stream Deck controller action.



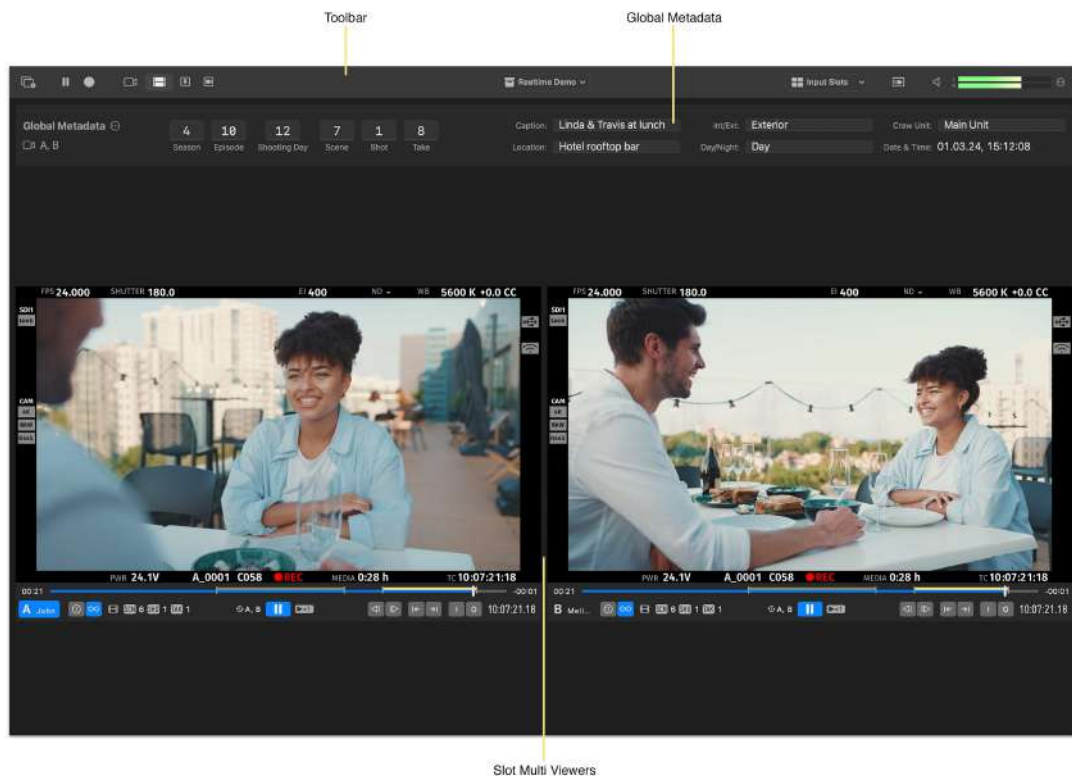
Main View window layout

- The **“Multi View” window layouts** are designed to allow viewing and controlling multiple slots simultaneously and provide viewers with controls for all active slots based on the slot types:
  - Input slots (multi view)
  - Library slots (multi view)
  - Output slots (multi view)

**Tip:** The multi view layouts are optimized to view all your camera feeds simultaneously, also if you work on a small screen, and you do not have a dedicated SDI monitor at your workstation

Multi view layouts automatically adapt their sizing and grid layout depending on the number of configured slots. The multi view layouts can display up to 3x3 (9 slots).

The global metadata panel in the multi view layouts works similarly to the global metadata panel in the main view layout but uses a horizontal layout with larger text boxes. You can increase the values in a text box with the arrow up/down keys and navigate back and forth between fields with a tab or shift tab.



Multi View window layout with two input slots

A picker in the toolbar and associated Stream Deck controller actions let you quickly switch between window layouts.



Stream Deck actions allow switching between window layouts

## Viewer controls

Reeltime's viewer controls are essential for controlling recording and playback in slots. Hence, the viewer controls are one of the core UI elements positioned in a separate bar below the image within the main view's viewer window and all multi views' viewer windows.

The viewer controls display different elements depending on

- the **slot's type** (input/library/composite/output slots)



- the **slot mode** (live/playback/reference)
  - **live** slot mode: the viewer controls are **recording controls** that allow controlling a slot's recording actions
  - **playback** and **reference** slot modes: the viewer controls are **playback controls** that allow controlling a slot's playback actions
- the **window layout** (main view/multi view)

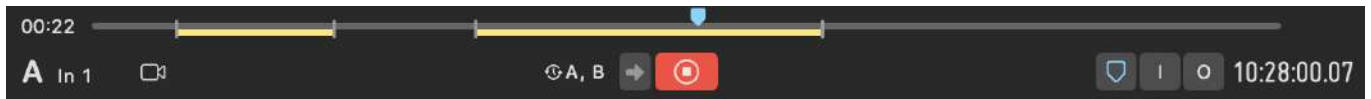
**Note:** Slot modes only exist in input slots but also influence composite and output slots with an input slot as source configured.

In summary, there are two types of viewer controls – recording and playback, depending on the slot's mode. Furthermore, the options provided within the controls vary also depending on the slot type.

### Recording controls

Recording controls provide controls for triggering recording actions in a single slot or timecode-synced groups of slots. Furthermore, recording controls allow setting multiple in and out ranges while recording. Recording controls contain the following elements:

- **Slot character** label
  - displays the slot's slot character
    - Note: the slot character is only available in input slots
- **Slot label** label
  - displays the slot's slot label
    - Note: in slots without slot character (= library/composite/output slots), the slot label is displayed at the position and size of the slot character (first position in larger font size)
- **Slot mode** indicator
  - indicates the currently set slot mode (live/playback/reference)
- **Sync info** label
  - for group recordings only: displays a sync icon and the slot characters of all slots that are synced in the current group recording
- **Arming** button
  - allows arming/un-arming the slot for the upcoming (group) recording
- **Record** button
  - starts/stops recording
  - the button is red during recording
- **Set Marker** button
  - sets a marker at the current position
    - can also be a group marker button (adjustable in the library settings)
- **Set in** button
  - sets an in-point or moves an existing in-point to the current position
- **Set out** button
  - sets an out-point or moves an existing out-point to the current position
- **Timecode** label
  - displays the incoming SDI timecode of the connected device or the current time as timecode (depends on recording settings)
- **Scrub bar**
  - **Elapsed time** label
    - displays the elapsed time of the current recording
  - **In/out ranges**
    - display the marked in/out ranges in the current recording within the scrub bar



Recording controls

## Playback controls

Playback controls provide flexible options for playing back single recordings or timecode-synced group recordings. Furthermore, playback controls allow navigating within the recording/s and editing or adding in/out ranges. The playback controls contain the following elements:

- **Slot character** label
  - only available in input slots
- **Slot label** label
- **Slot mode** indicator
  - indicates the currently set slot mode (live/playback/reference)
- **Slate/clip info** label
  - By clicking on the label, the label displays
    - the slate info of the loaded clip (“Standard” slating system: scene/shot/take, “American” slating system: scene/take),
    - or the clip name of the loaded clip
- **Sync info** label
  - for group recordings only: displays a sync icon and the slot characters of all slots that are synced in the current group recording that is loaded for playback
- **Previous frame** button
  - moves the playhead position to the previous frame
- **Play** button
  - toggles between play/pause
  - the button is blue during playback
- **Jump to previous marker** button
  - moves the playhead position to the previous marker
- **Jump to next marker** button
  - moves the playhead position to the next marker
- **Set marker** button
  - sets a marker at the current position
    - can also be a group marker button (adjustable in the library settings)
- **Jump to previous in** button
  - cycles backward through the existing in-points in the clip
- **Jump to next in** button
  - cycles forward through the existing in-points in the clip
- **Set/Move in** button
  - sets an in-point at the current position or moves an existing in-point to the current position
- **Set/Move out** button
  - sets an out-point at the current position or moves an existing out-point to the current position
- **Playback speed** badge
  - displays the current playback speed
- **Timecode** label
  - displays the timecode of the loaded clip at the current playhead position (frame)
- **Ranges playback mode** button
  - toggles between the modes “Ignore Ranges”, “Current Range”, and “All Ranges”
- **Loop playback** button
  - enables/disables loop playback (can be “combined” with the above ranges playback options)



- **Scrub bar**

- **Elapsed time label**
  - displays the elapsed time of the loaded clip's duration at the current playhead position
- **Playhead**
  - displays the current playhead position within the scrub bar
- **In/out ranges**
  - the current range / all ranges can be highlighted or dimmed depending on the ranges playback mode (ignore ranges/current range/all ranges)
- **Markers**
  - the selected marker is displayed as a filled marker symbol; other markers are displayed with an outlined marker symbol
- **Remaining time label**
  - displays the remaining time of the loaded clip's duration from the current playhead position



Playback controls

## Output slots viewer controls

Output slots display the viewer controls of their source slots (input slots/library slots/composite slots)

- Recording controls or playback controls, depending on the slot mode of the configured source input slot
- Additionally, there are
  - Buttons for
    - **Set “Slot Follows Selection” for all output slots**
      - sets “Slot Follows Selection” for all currently configured output slots so that the input source for all output slots temporarily follows the slot selection in the UI
    - **Set “Force Slot to Live Video” for all output slots**
      - sets “Force Slot to Live Video” for all currently configured output slots so that all output slots receive only the live signal of their configured input source slot
  - An indicator with a reveal button for the **configured input source**
    - displays the currently configured source slot and allows to go to the associated slot when pressing the “reveal” button

## In/Out ranges and markers tab

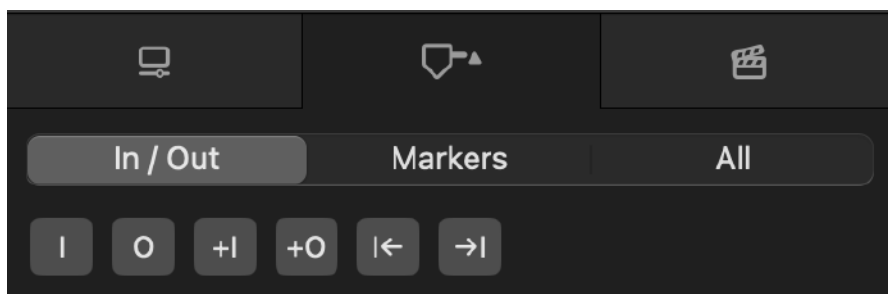
Reeltime's in/out ranges and markers tab lives within the upper right side of the main view (between the slot settings and the global metadata tabs).

The tab shows all in/out ranges and markers of the currently running recording (live mode), or the currently loaded clip (playback mode). If the current recording/clip belongs to a group, all in/out ranges also apply to all associated group recordings/group clips. The same applies to group markers and the group thumbnail frame.

The in/out ranges and markers tab has three sub-tabs, “In/Out”, “Markers” and “All”. The “All” tab displays all elements of both the “In/Out” and “Markers” tab in one view. The “In/Out” and “Markers” tabs are explained in more detail below.

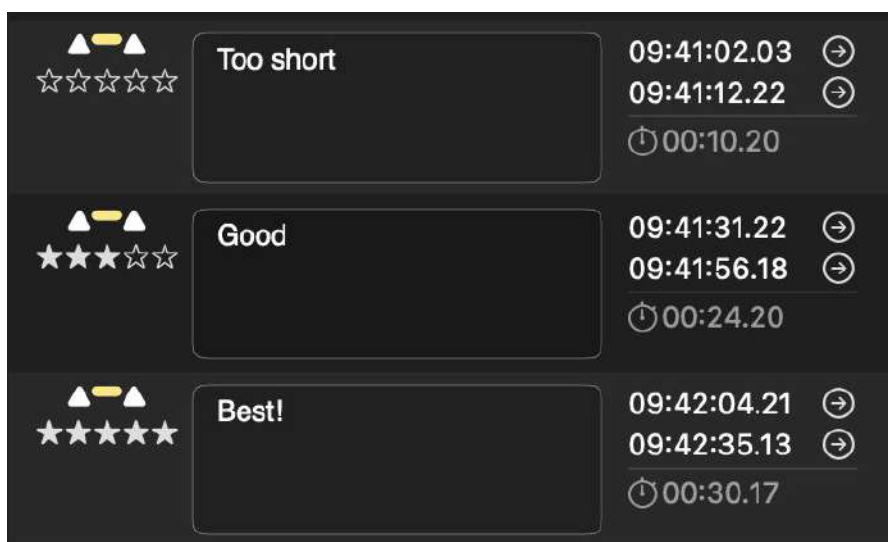
## In/Out ranges tab

The **In/Out tab** displays all in/out ranges of the selected slot's recording or loaded clips:



In/out ranges toolbar

- **In/Out ranges toolbar:** A toolbar at the top of the list provides buttons for the most important in/out ranges-related actions:
  - **Set in**
    - sets an in-point at the current position of the recording (live mode),
    - or at the current playhead position (playback mode)
  - **Set out**
    - sets an out-point at the current position of the recording (live mode),
    - or at the current playhead position (playback mode)
  - **Set new range with in at playhead position**
    - adds a new range with an in-point at the current playhead position (playback mode only)
  - **Set new range with out at playhead position**
    - adds a new range with an out-point at the current playhead position (playback mode only)
  - **Jump to previous in**
    - moves the playhead to the previous in-point (playback mode only)
  - **Jump to next in**
    - moves the playhead to the next in-point (playback mode only)



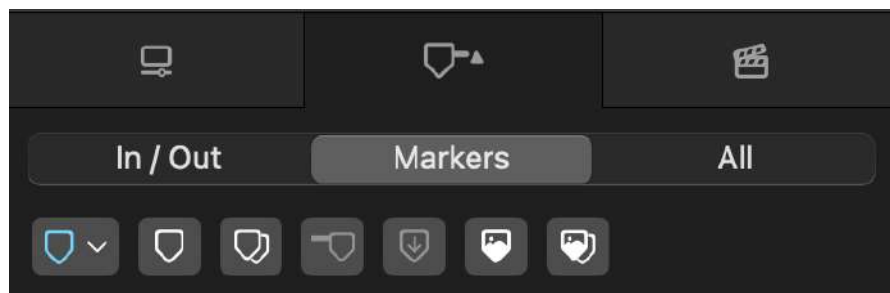
In/out ranges list



- **In/Out ranges list:** Below the toolbar, there is a list view where you can inspect all in/out ranges of the clip and edit their information or navigate to their in-points or out-points:
  - **Rating**
    - allows setting a rating (no rating – 5 stars) by clicking on the stars or using the associated menu items, keyboard shortcut, or Stream Deck controller actions
  - **Note field**
    - allows adding a text note:
      - click into the field or use the tab key to enter it,
      - after typing your desired note text, you can exit the field with the keyboard shortcut Cmd-Enter
  - **In/Out and duration**
    - lets you inspect the in-point's and out-point's timecodes and the duration of the range
    - and jump to the in-point or out-point by clicking on the reveal buttons after the timecode labels
- **Contextual menu:** The in/out ranges list provides various contextual menu items via a right-click on an in/out range (multi-selection is possible for some items only):
  - Jump to In
  - Jump to Out
  - Set Rating
  - Remove
  - Copy Ranges to Text

## Markers tab

The **Markers tab** displays all markers of the selected slot's recording or loaded clips:



Markers tab



- **Markers toolbar:** A toolbar at the top of the list provides buttons for the most important marker-related actions:
  - **Set default marker type**
    - defines the marker type for the next marker
    - select from eight colored marker types that you can customize in a “Marker Names” box within the library settings
  - **Set marker**
    - sets a marker at the current position of the recording (live mode),
    - or at the current playhead position (playback mode)
  - **Set marker for group**
    - sets a marker for all recordings of the group at the current position of the recording (live mode),
    - or for all clips of the group at the current playhead position (playback mode)
  - **Set marker out for selected marker**
    - sets a marker out point for a selected marker at the current position of the recording (live mode) / at the current playhead position (playback mode)
  - **Move selected marker in to playhead position**
    - moves a selected marker to the current position of the recording (live mode) / to the current playhead position (playback mode)
      - if the marker is a range only the in point of the maker is moved
  - **Set thumbnail frame**
    - sets the thumbnail frame at the current position of the recording (live mode),
    - or at the current playhead position (playback mode)
  - **Set thumbnail frame for group**
    - sets the thumbnail frame for all recordings of the group at the current position of the recording (live mode),
    - or for all clips of the group at the current playhead position (playback mode)

|                                                                                                                                                                         |                         |                                                                                                                                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | Check hair              | 09:41:07.04                                                                                                                                                                                                       |
|   | Continuity              | 09:41:43.20                                                                                                                                                                                                       |
|   | Thumbnail               | 09:41:46.03                                                                                                                                                                                                       |
|   | Refrence for next shot! | 09:42:22.19                                                                                                                                                                                                       |
|   | QC                      | 09:42:34.00 <br>09:42:36.12 <br> 00:02.11 |

Markers list



- **Markers list:** Below the toolbar, there is a list view where you can inspect all markers of the clip and edit their information or navigate to their marked position or in and out-points:
  - **Rating**
    - allows setting a rating (no rating – 5 stars) by clicking on the stars or using the associated menu items, keyboard shortcut, or Stream Deck controller actions
  - **Marker type**
    - allows changing the marker's type by choosing a type from the drop-down or using the associated menu items, keyboard shortcut, or Stream Deck controller actions
  - **Note:** You can customize the marker names of your project in the library settings
  - **Group marker/Single marker**
    - allows setting the group state of the marker via the drop-down or using the associated menu item, keyboard shortcut, or Stream Deck controller action
  - **Note field**
    - allows adding a text note:
      - click into the field or use the tab key to enter it,
      - after typing your desired note text, you can exit the field with the keyboard shortcut Cmd-Enter
  - **In/Out and duration**
    - lets you inspect the marked frame position's timecode or (for marker ranges) the in-point's and out-point's timecodes and the duration of the range
    - and jump to the marked frame position or in-point/out-point by clicking on the reveal buttons after the timecode labels
- **Contextual menu:** The marker list provides various other contextual menu items via a right-click on a marker (multi-selection is possible for some items only):
  - Jump to Marker In
  - Jump to Marker Out
  - Cut
  - Copy
  - Change Marker Type
  - Change Group State
  - Set Rating
  - Move Marker In to Playhead Position
  - Set Marker Out to Playhead Position
  - Remove Marker Out
  - Remove Marker
  - Copy Markers to Text

### Remove, copy, cut, and paste markers

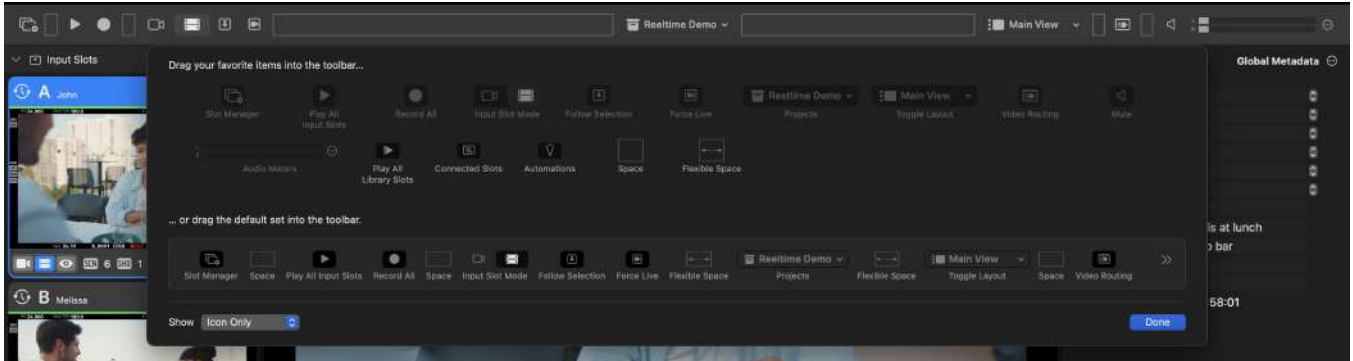
You can remove markers by selecting one or multiple marker(s) in the list and pressing the backspace key. Furthermore, you can copy, cut, and paste one selected marker to move or duplicate it to another position in the same clip or to paste it into another clip. There are also associated menu items and Stream Deck controller actions to remove, copy, cut, and paste markers.

A "Copy Markers to Text" contextual menu item allows pasting the info of one or multiple selected markers into a text document.



## Customizable toolbar

The toolbar is available in all window layouts and contains buttons for the most common global actions. You can customize the toolbar with the contextual “Customize Toolbar...” menu item (right-click / opt-click on toolbar) and drag and drop more actions into the toolbar or change the position of the buttons.



Customizable Toolbar

There are buttons for the following actions:

- **Slot Manager**
  - opens the slot manager window
- **Play All Input Slots**
  - toggles playback for all input slots
- **Record All**
  - toggles recording for all armed input slots
- **Input Slot Mode**
  - switches the slot mode of all input slots (Live/Playback)
- **Follow Selection**
  - sets all output slots to follow the slot selection
- **Force Live**
  - forces all output slots to the live signal (live slot mode)
- **Projects** (picker)
  - allows switching the project,
  - creating a new project,
  - or renaming a project
- **Toggle Layout**
  - allows choosing the window layout:
    - Main view layout
    - Input slots (multi view) layout
    - Library slots (multi view) layout
    - Output slots (multi view) layout
- **Video Routing**
  - opens the interactive video router control panel
- **Mute**
  - globally mutes audio monitoring and playback
- **Audio Meters**
  - visualize the audio level of the current audio signal
  - an options button lets you open an audio pop-over where you can see the current audio configuration and set the audio delay
- **Play All Library Slots**
  - toggles playback for all library slots



- **Connected Slots**
  - visually highlights the connected slots of the currently selected slot (e.g., for seeing quickly which source/s are configured to an output slot)
- **Automations**
  - enables/disables all configured automations
- **Export** (picker)
  - allows exporting
    - the current viewer image to disk,
    - the current viewer image to a custom location,
    - the current viewer image via AirDrop
    - images from the selected media items in the library
  -  the clips of the current library view to Final Cut Pro
  -  selected clips of the library to Final Cut Pro
  - report (PDF)
  - metadata (CSV)



# General Settings

## Projects and media management

Reeltime allows managing your shoots in separate projects. Each project has its own clip library that stores all clips you record during your shoot with all clip-based or global metadata you applied. Furthermore, each project has an individual media management (with project-dependent media folders and record folder).

**Note:** The slot and device configuration is a global setting and, hence, not based on the project.

### Project management

Using the “Projects” toolbar button, you can

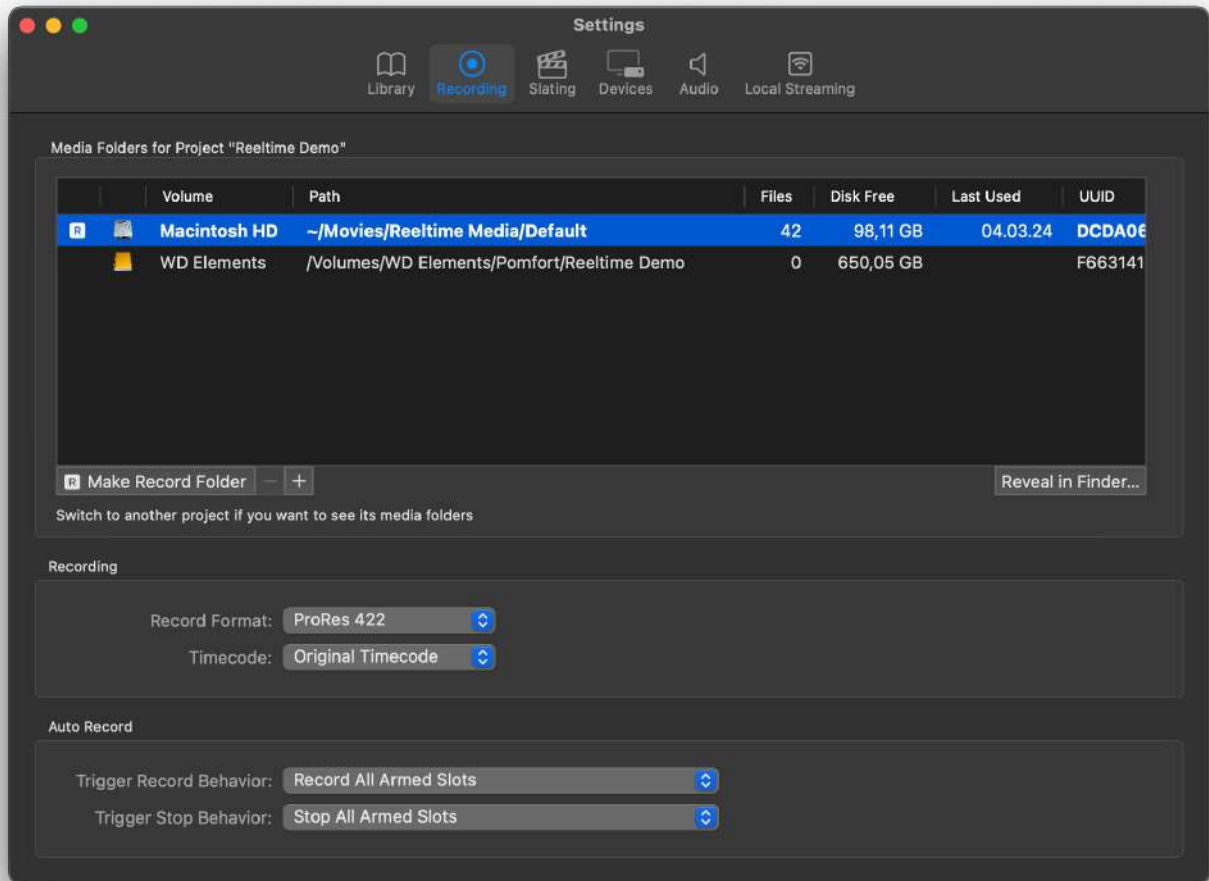
- create a new project via a “Create Project” window,
- switch to an existing project via a “Manage Project” window,
- or rename the current project

### Project-dependent media management

Media files recorded within Reeltime are stored in a designated “Media Folder”. Each project uses one media folder as the current “Record Folder.” When you import create new recordings or import movies, the corresponding media files are saved into the currently set record folder.

Media folders and the current record folder are project-depending settings. Consequently, it makes sense to use a separate media folder/record folder for each project.

You can set the record folder when creating a new project or change the record folder in the “Recording” settings. The default parent directory for project Media is “Reeltime Media” in ~/Movies.



Recording settings

## Unique media folder references and media status

Each media folder contains a JSON file holding a UUID for unambiguously referencing.

**Note:** Reeltime detects a media folder by reading the UUID stored in the JSON file of the folder. Make sure that the corresponding JSON file always remains in its media folder.

## Multiple media folders

You can add multiple media folders to the same project. In the media folders table of your project's recording settings you can add and remove media folders. One media folder can be made the current record folder. You can remove all media folders with the exception of the currently set record folder.

**Note:** When adding a media folder from another project to your project's recording preferences and you delete shots and the associated media files within one of the projects, the files will be offline in both projects



## Handling media files

- **Delete Clips:** When deleting clips, you will also delete the associated media file.
- **Reveal In Finder:** A “Reveal In Finder” item in the contextual menu of the clip library lets you quickly reveal the associated media file of a selected clip in its media folder in the Finder.

## Recording settings

In the recording settings, you find advanced options to customize settings and behaviors related to recordings:

- **Media Folders:** You can add multiple “media folders” to flexibly add additional media storage space. The media folders are a project-dependent setting.
  - You must define one media folder as the current “record folder”. There can only be one record folder configured at a time.
  - Learn more about media folders in the article [Projects and Media Management](#).
- **Record Format:** You can choose between various codecs of the ProRes family.
- **Timecode:**
  - You can sync by using the original timecode embedded in the SDI signal (make sure to jam-sync cameras to create timecode-synced groups using SMPTE timecode).
  - Alternatively, you can sync multiple incoming signals in your group recording by using the current time as timecode.
- **Cancelled Recordings:** You can set whether cancelled recordings should be moved to the trash or deleted permanently.
- **Auto Record:** You can trigger start/stop recording based on the record flag embedded in SDI camera signals.
  - You can choose between different Trigger Record Behaviours and Trigger Stop Behaviours (e.g., if you can only receive a record for one camera in your setup, you can choose that this camera should trigger start/stop recording for all cameras).
  - If your production requirements allow the use of RecRun timecode, you can choose that option as an alternative way to use auto record (e.g., if you cannot receive a record flag via SDI). The RecRun auto record mechanism triggers start/stop recording based on if the timecode is running or not. Consequently, you need to ensure that all cameras are set to RecRun timecode.

**Note:** Blackmagic capture devices do not support receiving the record flag in HANC metadata so that auto record via the HANC record flag is only possible with AJA or DELTACAST capture devices.

In the “Behavior After Recording” box, you can set your preferred automatic behavior after a recording was finished:

- **Increase take number after recording has stopped** automatically increments the take field after recording (respecting your current slating settings).
- **Automatically load new clips for playback** automatically loads new clips for playback into their source slots.
- **Automatically start playback** automatically starts playback after loading the new clips. You can choose if the playback should start immediately, or after a short delay of 3, 5 or 10 seconds.



## Main audio for recording and playback

Reeltime can receive audio input signals from multiple connected audio devices and record the audio in sync with your video recordings. The input signals are mixed down to one main audio track, which you can include in any recordings, and simultaneously output to one audio output device for live audio monitoring or audio playback:

- If you have an input slot set to live slot mode, you can monitor the main live audio.
- If you select a library slot or an input slot set to playback slot mode, you can hear its audio playback.

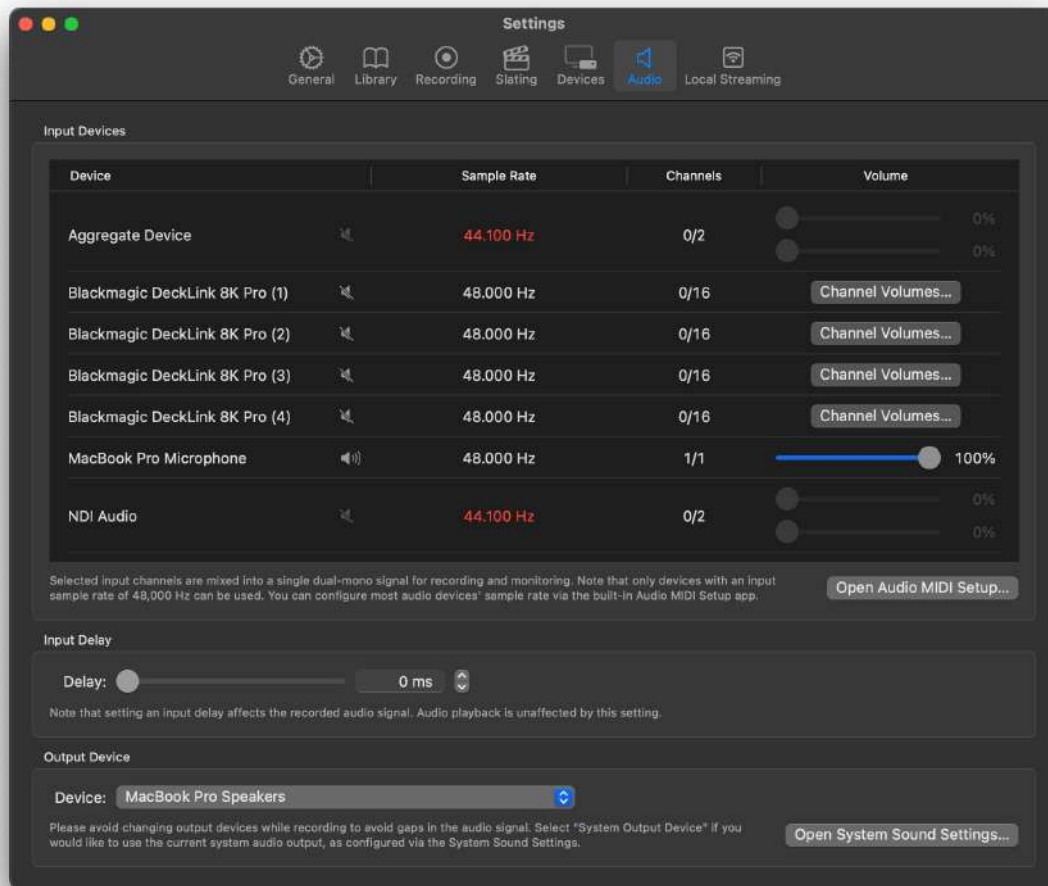
Read how to set up audio devices in the article [Setting Up Audio I/O Interfaces](#).

### Mix down multiple audio input signals into one main audio track

After setting up your audio devices, you can enable multiple channels from multiple connected audio devices and mix them into one main audio output track.

- Reeltime's audio settings allow selecting multiple audio input devices and mixing their channels into one dual-mono audio output signal for recording and monitoring:
  - The "Input Devices" list displays all audio devices connected to your machine and lets you enable all channels you want to use. Each channel has an individual volume slider.
  - The "Input Delay" setting allows you to add an audio delay to the audio recording to keep it in sync with the video signals.

**Note:** If a device is not configured to 48 kHz, it is displayed in red and cannot be used. However, you can open the Audio MIDI Setup to configure the device to 48 kHz.



Audio settings with multiple audio inputs

## Main audio output

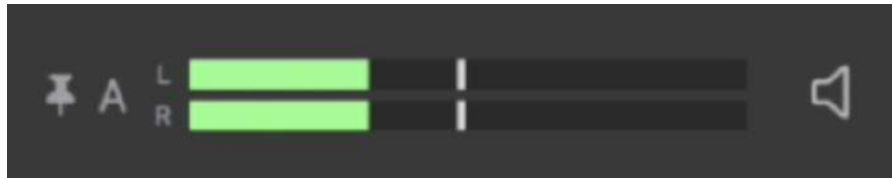
Reeltime's main audio is one 48 kHz audio track, a mixdown of all enabled audio input channels. You can output the main audio to one connected audio output device connected to your machine, e.g., an audio interface. The main audio is also included in the internet streams to RePro Stream and Autodesk FlowCapture.

- For audio monitoring and playback, you can choose an output device or use the system's audio output device.
- The **audio meters** in the toolbar visualize the active audio in green (for playback), blue (for monitoring), and grey (if the audio is muted).
- There are menu items (in the audio menu) and associated Stream Deck controller actions for **muting the live audio or all audio**, as well as an associated global mute toolbar button.

## Audio source selection

The audio source slot for the main audio can either be an input slot or a library slot:

- The audio source selection follows the last selected input slot or library slot:
  - By default, the "Automatic Audio Source Selection" in the audio menu is enabled
- Alternatively, you can pin the audio source to a specific input slot or library slot:
  - If you disable the "Automatic Audio Source Selection," you can choose from all configured input slots or library slots to set them as audio source via a sub-menu.



Audio source pinned to slot "A"

For all audio menu items there are associated Stream Deck controller actions. For example, you can use the "Enable/disable Automatic Audio Source" action to quickly change from

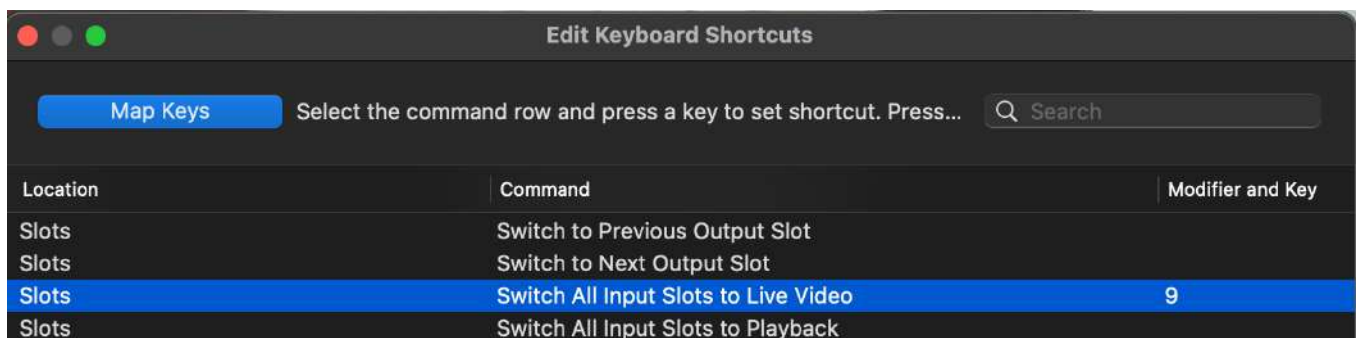
- enabled = Always hear the input slot or library slot that you select,
- disabled = Pin the audio source to the currently selected input or library slot.

## Working with keyboard shortcuts

There are a variety of keyboard shortcuts available for commands in the main menu of the application. Keyboard shortcuts help you to boost your productivity by offering direct physical buttons to features of the application.

Some shortcuts are already predefined. You can also set shortcuts for selected commands that you perform quite often in order to memorize the interaction with the application more easily.

To inspect the exact list of available keyboard shortcuts go to "Keyboard Shortcuts" in the application menu. This will open the Keyboard Shortcuts Editor.



Keyboard shortcuts editor

## Listing and searching keyboard shortcuts

The keyboard shortcut editor shows a table with list of all actions in the main menu with their currently set keyboard shortcuts. You can search the list by typing into the search bar on top of the table.

### Edit keyboard shortcuts

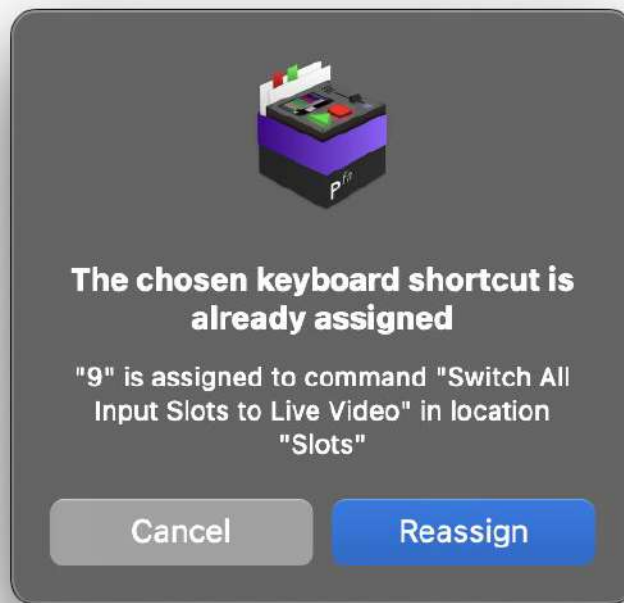
To edit a keyboard shortcut:

1. Select "Map Keys" to allow changes on the key mapping list.
2. Choose the command row.
3. To set or modify a shortcut press the key or keys to use as the new keyboard shortcut. You can use modifiers, numbers, letters and characters individually or in combination.

To remove the associated shortcut permanently press  $\times$  (delete / backspace) button.

Close the Edit Keyboard Shortcuts window when you are done.

If you choose a shortcut already assigned to a command, a warning dialog box will be displayed that shows which command already used the chosen shortcut.



Alert if a key is already assigned

Select “Cancel” and choose another key for your current command, or select “Reassign” which removes the shortcut from the old command and sets it for the selected command.

### Restoring sets of keyboard shortcuts

You can reset all keyboard shortcuts to latest version of defaults by clicking “Restore defaults...”.

**Note:** Restoring keyboard shortcuts requires a restart of the application.

### Exporting and importing of keyboard shortcuts

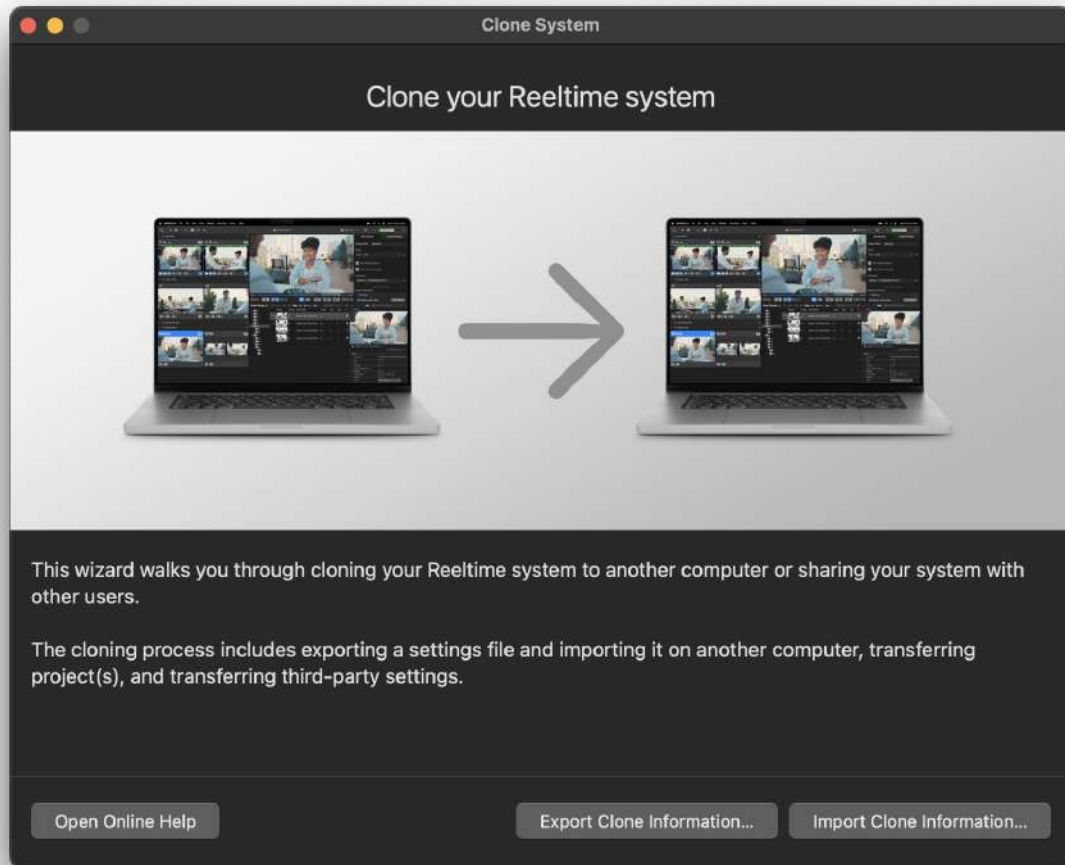
The “Export Keyboard Shortcuts...” menu item lets you export your current mapping to a keyboard shortcuts (.rtkeys) file to disk. In the same way, the “Import Keyboard Shortcuts...” menu item lets you import a previously saved keyboard shortcuts (.rtkeys) file.

### Clone system

Reeltime supports transferring its complete system configuration from one computer to another. You can use this feature if you need to change from one computer to another, or share your system configuration with another user. Additionally, you can back up your preferred system configuration to retrieve it as a starting point at any time.

You open the dedicated “Clone System” wizard via the Reeltime Pro / Reeltime Lite > Clone System menu item. You can choose to “export clone information” to export info from the current computer or “import clone information” to import info from another computer.

The wizard allows exporting and importing a settings file including all relevant configurations, and guides you through the process of transferring projects and settings for Stream Deck controllers.



“Clone System” wizard



# Import & Export

## Media import

Reeltime Pro supports importing media, including QuickTime movies and various still image formats.

### Media import

Use the File > Import Media... menu item, or its associated keyboard shortcut (Cmd-I), to import media into the library. Note that each media item will be copied into the currently configured record folder. In the open dialog, you can select multiple files for simultaneous import, and you can also import movies and still images together.

- Supported formats for movies are QuickTime files in any ProRes family codec.
- Supported formats for still images are jpeg, png, tiff, heif, or heic.

### Automatic label assignment

By default, all newly imported media are automatically assigned the “Imported Media” label (grey label). You can change this behavior in the “Automatic Label Assignment” of the library settings.

## Stills creation

Besides creating movie recordings, Reeltime allows the creation of stills from live or playback signals.

### Stills creation

With dedicated menu items and associated Stream Deck controller actions, you can create stills

- from the currently selected slot’s viewer signal (live or playback mode),
- for all armed slots (live mode),
- or all slots of the currently loaded clip group (playback mode).

The metadata for stills created from live images is generated using the same rules as for recordings. Stills created from a playback inherit the metadata of their source clips.

Stills are represented by a still image symbol in the library, in the slot cards, and in the viewer controls.

**Note:** Other than movie recordings, newly created stills are not auto-loaded for playback after creation.

### Automatic label assignment

By default, all created stills are automatically assigned the “Reference” label (yellow). You can change this behavior in the “Automatic Label Assignment” of the library settings.

## Export reports as PDF

You can export reports from your current library view as a PDF document containing the thumbnails and the metadata of each library item (clip or still), e.g., for documenting your project’s status or to pass on relevant info to other departments.

The contents of the report are based on the metadata columns shown in the library. You can set which columns are shown by clicking on the gear icon on the top right of the library.



To include the in/out ranges info and marker info, ensure to show the “In/Out Ranges Count” and “Markers Count” columns.

To export a report:

- Configure the desired view in the clip library,
- and choose File > Export Report (PDF), or the associated keyboard shortcut, or Stream Deck controller action.
- There are also contextual menu items for folders, bins, and smart groups.
- Additionally, you can trigger the report export via the export toolbar button.

In the save dialog for the PDF file, you can choose a name and target directory for your file, set whether thumbnails should be included, and specify whether the PDF should be opened automatically after creation.

## Export metadata as CSV

You can export metadata from your current library view as a CSV file, for example, to import the metadata into another software or to pass on relevant information to other departments.

The contents of the metadata CSV are based on the metadata columns shown in the library. You can set which columns are shown by clicking on the gear icon on the top right of the library.

To include the in/out ranges info and marker info, ensure to show the “In/Out Ranges Count” and “Markers Count” columns.

To export metadata:

- Configure the desired view in the clip library,
- and choose File > Export Metadata (CSV), or the associated keyboard shortcut, or Stream Deck controller action.
- There are also contextual menu items for folders, bins, and smart groups.
- Additionally, you can trigger the metadata export via the export toolbar button.

In the save dialog for the CSV file, you can choose a name and target directory for your file, set the desired separator/delimiter, and specify whether the CSV should be opened automatically after creation.

## Viewer image export

You can export an image file from the current viewer signal in the file formats jpeg, tiff, or heic file (settable in the advanced settings).

You can choose between three ways to export a viewer image:

- **Direct export to disk:** File > Export Current Viewer Image exports the current viewer image directly to disk. You can set the default location for the image report in the advanced settings.
- **Export to disk with save dialog:** File > Export Current Viewer Image As... opens a save dialog, allowing you to enter a file name and select the target directory for the viewer image to be exported.
- **AirDrop:** File > Export Current Viewer Image via AirDrop... allows you to share the current viewer image with anyone nearby via AirDrop.

Additionally, you can trigger all three viewer image export options via the export toolbar button as well.



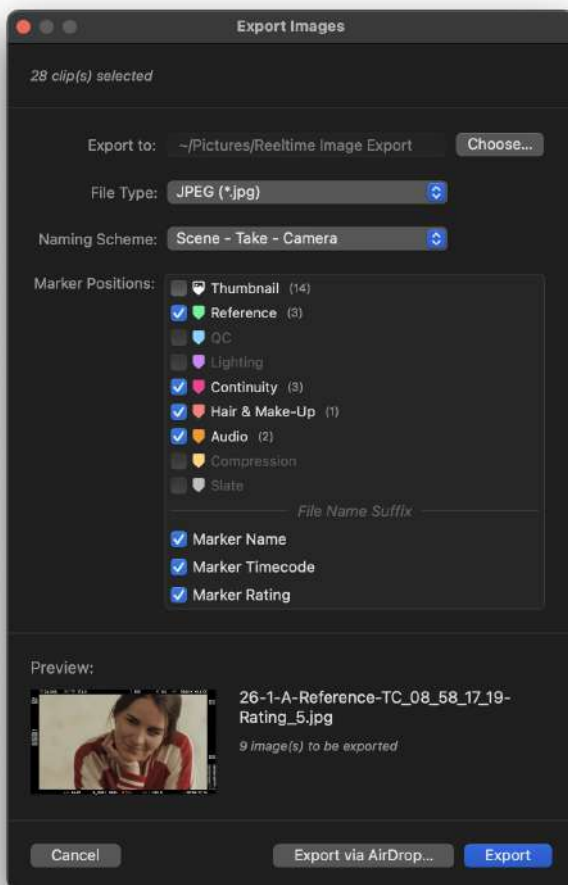
## Library image export

You can export image files from the currently selected media items in the library (clips and/or stills), including the option to export the marker positions of clips as individual stills.

To export images from the library, select the desired media items (clips and/or stills) in the library and trigger the export via the File > Export Images From Selected Media Items... menu item, or via the associated keyboard shortcut. Additionally, you can trigger the library image export via the export toolbar button as well.

An Export Images window lets you choose from the following options:

- **Export to** lets you choose the target directory for your image export.
- **File Type** allows you to choose the image file type for your exported images ( jpeg, tiff, or heic).
- **Naming Scheme** allows you to choose the desired file naming scheme for your exported images.
- **Marker Positions** lets you select which marker types of the selected clips should be included as exported images.
  - **File Name Suffix** options allow you to include relevant info from your markers in the file name of the images:
    - Marker Name
    - Marker Timecode
    - Marker Rating
- The **Export** button exports the images to disk.
- The **Export via AirDrop...** button allows you to share the images with anyone nearby via AirDrop.



Export images window with configured export options



# Troubleshooting

## Transfer Reeltime projects

This article will show you how to transfer a Reeltime project from one machine to another.

**Note:** The new computer's Reeltime version should be at least as advanced as the old one.

### Copy the project's library folder to the new computer

- Locate the currently used project folder via the “Show Library in Finder” item in the file menu.
- Quit Reeltime on the old *and* the new computer.
- Copy the whole project folder (e.g. Project-68684E4EB011) to the same path (e.g. ~/Library/Application Support/Pomfort/ReeltimePro1/) on the new computer.
- If your project contains LUT filters and/or image overlay filters, you also need to copy the directories “LUT” and “Overlays” in ~/Library/Application Support/Pomfort/ to the exact location of the new computer.
- Open Reeltime on the new computer.
- Open your project via the project chooser's “Switch Project...” item and select the copied project to open it.

### Copy the project's record folder to the new computer

- If your record folder with the recorded files is on an external hard drive, you just need to eject and plug out the drive on the old computer and plug in the drive on the new computer.
- If your record folder with the recorded files is on the internal hard drive,
  - locate the project's record folder by selecting the record folder in the media folders table of the recording settings and pressing the “Reveal in Finder...” button,
  - copy the associated directory to an external hard drive,
  - add the copied record folder in the media folders table of the recording settings on the new computer.
- After adding your media folder to your project, you should now be able to continue working as before.

## Troubleshooting issues with the software

### The application does not start

If the application does not start due to a crash or hang, you should first try to

- unplug all the connected devices and re-open application,
- restart your machine

If that does not help, and Reeltime still doesn't launch on your computer, you can reset the preferences for a clean restart of Reeltime.

**Note:** Resetting the preferences results in losing your customized settings and slot/device configuration. If you want to keep your current preferences, you can rename or copy (and backup) the preferences; see below.

Follow the below instructions to reset the preferences of **Reeltime Pro**:

- Quit Reeltime Pro
- Create a copy/backup of the following file (optional)



```
~/Library/Preferences/com.pomfort.ReeltimePro.plist
```

*The Library folder is hidden by default. You can open it in Finder by opening the “Go” menu and holding the “option” key. You will see an extra entry, “Library,” in the “Go” menu. Choose this entry, and a Finder window will open with the Library folder.*

- Open up the Terminal application (type terminal in your spotlight or navigate within the Utilities folder of your application folder)
- Type the following command in your terminal window

```
defaults delete com.pomfort.ReeltimePro
```

- Start Reeltime Pro,  
now Reeltime Pro should again start as usual.

If the problems persist, please contact our [support team](#).

Follow the below instructions to reset the preferences of **Reeltime Lite**:

- Quit Reeltime Lite
- Create a copy/backup of the following file (optional)

```
~/Library/Preferences/com.pomfort.ReeltimeLite.plist
```

*The Library folder is hidden by default. You can open it in Finder by opening the “Go” menu and holding the “option” key. You will see an extra entry, “Library,” in the “Go” menu. Choose this entry, and a Finder window will open with the Library folder.*

- Open up the Terminal application (type terminal in your spotlight or navigate within the Utilities folder of your application folder)
- Type the following command in your terminal window

```
defaults delete com.pomfort.ReeltimeLite
```

- Start Reeltime Lite,  
now Reeltime Lite should again start as usual.

If the problems persist, please contact our [support team](#).

### **The application hangs, or crashes repeatedly**

In the rare case that Reeltime hangs or crashes repeatedly, you can send automatically created reports to our support. You can do this by:

- Choosing “Contact Support” in the “Help” menu of Reeltime.
- Enter your personal information (name and email) so that we can get back to you.
- Enter a short description:
  - What steps do you perform in the software that lead to the problem,
  - what happens when you perform these steps, and
  - what you would expect the software to do instead.

The form will include crash reports, log files, and system information in addition to your message, which will help our support trace possible bugs.

## The video signals are stuttering

Under some circumstances, the application's performance may not be as good as expected, and the video in the input and/or output may stutter or show other undesired effects. Try the following to troubleshoot the issue:

- Restart the application
- Avoid performing demanding tasks in other applications while working in Reeltime; (if possible, close applications that you do not need)
- If the above steps did not help, restart your machine
- Decrease the framerate of the slot previews in the advanced settings
  - The setting only reduces the frame rate of the slot previews in the user interface. The image signals in the viewer, and the output signals retain their original frame.
- Close the application, unplug connected devices, and re-open the application
- Check for a newer driver version of your video I/O devices
- In rare cases, resetting the application preferences can resolve the issue (see above)

**Note:** Removing devices while the application is running may lead to performance issues; therefore, hot-plugging devices is currently not recommended.

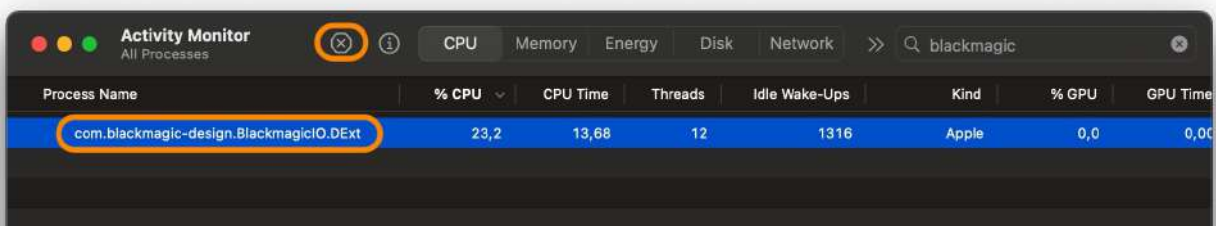
## Troubleshoot re-connecting of Blackmagic video I/O devices

When a Blackmagic video I/O device was disconnected or lost power temporarily, the affected input and/or output slots will display a "No Image Source" placeholder image.

If the device did not automatically resume receiving and/or sending the video signals after re-connecting, and still shows the "No Image Source" placeholder image or a black video image, a Blackmagic background process did not restart successfully.

Follow the steps below to manually restart this background process to continue receiving and sending signals with the device:

- Close the application
- Ensure the device is connected to the machine and has power
- Restart the application
- To restart the Blackmagic background process manually, open the Activity Monitor application and search for "blackmagic"
  - Select all processes named "com.blackmagic-design.BlackmagicIO.DExt", press the "X" button in the toolbar, and proceed with "Force Quit"
  - The process(es) will be quit but will re-appear immediately
  - Shortly after you re-started the process(es), the device should resume receiving and/or sending the video signals in Reeltime Pro as intended



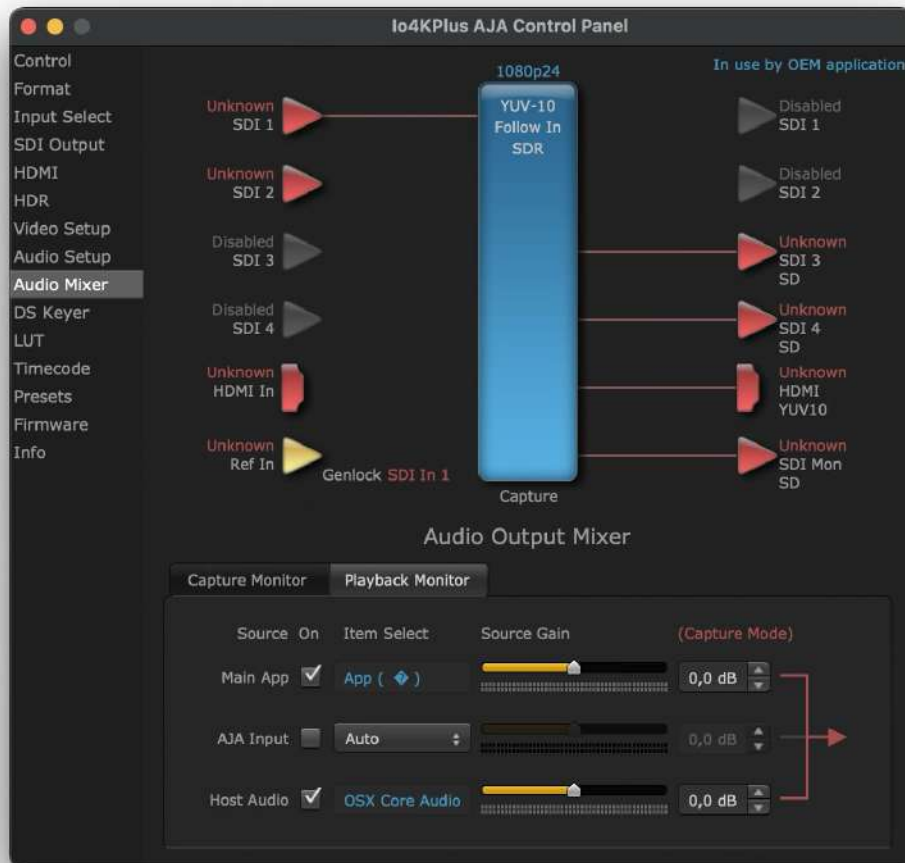
Force quit Blackmagic processes in Activity Monitor

## Troubleshoot issues with embedded audio via AJA video I/O devices



If you encounter problems capturing embedded SDI sound and/or outputting sound to an SDI monitoring device via the driver of your AJA Io 4K Plus or AJA Io X3, try the following steps to troubleshoot the issue:

- Set the AJA audio device as audio output device in Reeltime's audio settings
- Open the AJA Control Panel and go to "Audio Mixer"
- Ensure to set
  - "Capture Monitor" > "Host Audio (OSX Core Audio)" > "On"
  - "Playback Monitor" > "Host Audio (OSX Core Audio)" > "On"



Audio mixer settings in AJA Control Panel

- Restart Reeltime, so that the new audio configuration takes effect

**Note:** You must also ensure that the audio of your playback or live monitoring signal is not muted. For example, the audio meters in the toolbar should be colored during playback or live monitoring.



## **Known issues and limitations**

### **Known issues**

- 4K (6G/12G) SDI input/output with AJA Io 4K Plus is not supported
- Removing devices while the application is running may lead to performance issues; therefore hot-plugging devices is currently not recommended

### **Limitations**

- Interlaced video signals are not supported