SOFTRON
record stream play

MovieRecorder 4
MovieRecorder Express 4
User Manual

MovieRecorder User Manual

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About MovieRecorder 4

MovieRecorder (MR) is a macOS application that allows you to record almost any video clip with a large range of resolution and codecs. A reliable tool for the most demanding productions: sports, music, multi camera productions, news, REMI, corporate events-houses of worship...

Simplicity
The User Interface has been designed to be easy to use. It is the key of MovieRecorder's success.

Flexibility
MovieRecorder is also very flexible, it supports multiple formats (SD, HD, 4K or 8K) and a wide range of codecs. It integrates easily with past, present and future systems. Boasting a wide range of features such as edit-while-ingest (growing files), multi channel recordings, multi destinations, external audio, NDI, HDR, timecode, and remote control make this recording solution a crucial part of your workflow.

Security
MovieRecorder 4 is based on a macOS architecture which is known for reliability and flexibility. All solutions developed by Softron Media Services are fully tested and approved before released. Prompt and personalized support is also what we do best.

MovieRecorder 4 is a very intuitive program with a lot of features and functions. What follows is a brief explanation of how to use the application, beginning with installation instructions, followed by a description of the User Interface and then with instructions on how to get the most from the application.

In addition to this user manual, you can also find a lot of information:
- on our website: www.softron.tv; at the bottom of the MovieRecorder page, you will find:
    - http://softron.tv/downloads: to download the latest version of MovieRecorder
    - Resources: where you most probably found this manual, but also with some Sample AppleScripts and other White Papers
    - Tech Specs: where you will find recommendations on what you need, what drivers to use, what video cards and codecs are compatible, etc.
- in our Release notes.
- on our support desk, there a lot of information is available in the help center.
- on our YouTube channel,
- and don't forget to follow us on Twitter and Facebook for the latest Softron news.

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What's new in MovieRecorder 4.6 ?

With the latest versions of MovieRecorder, changes were made and new features were added:

- The **High Frame Rate option** (read our zendesk article).
- Use **HEVC for streaming** to play up to 4k videos.
- Added support for **Apple ProRes 4444 XQ**
- **Scheduled Recordings**: Added a webpage to view and edit the scheduled recordings.
- **AV Presets**: Added support for audio track languages and DV codecs.
- Videohub Control: Added the "directly" method in AppleScript.
- **Metadata**: Possible crash when editing metadata in preferences.
- **AVID DNx**: Added native support for DNxHD and DNxHR with Apple Silicon computers.
- **Deltacast devices**: Added support for Rec. 2020 Wide Gamut and HDR (HLG & PQ).
- **Blackmagic-Design**: Added support for up to 64 audio channels (with supported devices).
- **AVID DNx:** Added native support for DNxHD and DNxHR with Apple Silicon computers.
- **Scheduled Recordings**: There would be a warning with AppleScripts missing while they were not.
- **Videohub Control:** Added the "directly" method in AppleScript
- **RS422 Timecode**: Potential issues with negative values when using fractional frame rates.

... And many new features on their way !

To see the latest news and all the details, go to our Softron website.
If you want to submit a request, contact our support team, always ready to help you.

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Main differences between MovieRecorder Express and MovieRecorder

Important Note: In this document, to keep things simple, we will mainly use the word "MovieRecorder". We will just indicate which features are only for MovieRecorder, so if you are using MovieRecorder Express you can skip these parts.

We offer two versions of our ingest application. MovieRecorder Express is the "entry-level" ingest solution from Softron, while MovieRecorder offers more advanced features.

You can compare the two versions in the feature list of the MovieRecorder page on our website.

But here are a few explanations on the main differences:

- **Multiple Destinations**: Record to multiple destinations at once so you can, for example, record to 2 different storage devices for redundancy, and/or record to 2 different codecs.
- **Supported Codecs**: In addition to ProRes, H.264 and HEVC, MovieRecorder can also record to AVC-Intra, DV/DVCPRO, DVCPRO HD, DNxHD, HDV, IMX andXDCAM.
- **Supported Wrappers:** MovieRecorder can record to MXF (Op1a), as well as QT.
- **Closed Captioning**: If a valid CC signal is detected on the input, a CC icon will be displayed. Record CEA-608 or CEA-708 Closed captioning tracks.
- **Metadata**: Add metadata to the recorded file, either as a side car file or embedded in the movie (the embedded option is available only in QuickTime).
- **External audio sources**: Instead of using the audio input of the video device (AJA, Blackmagic-Design, Deltacast), use external audio, such as the built-in audio input of the Mac, or Dante audio, etc.
- **Effects and Overlays**: In AVPresets, you can choose to rotate, crop, scale, overlay TC, Text, and/or a graphic (such as your logo).
- **Save and restore configurations**
- **VTR Control and batch capture**: Control a VTR with an RS422 port, create batch lists, and capture them. Ideal if you have a lot of tapes to capture.
- **Remote Source "Slave" mode**: You can set a remote source to do exactly the same thing as the source you are controlling. This is a great solution for redundancy, so you can have multiple computers start and stop recording at the same time.

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Before Installation

If you use a video device from AJA, Blackmagic Design or Deltacast, make sure the device is physically connected. Double check that all cables and hardware are installed correctly.

Also check that you have the appropriate version of the driver and OS:

1. On the Softron website, check which driver and OS is recommended for your card.
2. Download the appropriate driver from the AJA, Blackmagic-Design or Deltacast website.
3. Make sure you use a compatible version of Mac OS

Once the drivers are installed, verify the settings of your card using the Preference pane or control application (if applicable) included with the hardware. For example, with a Blackmagic-Design card, you may want to change whether the input is through the SDI or the HDMI connector.

Software Installation

1. Download the software from our website .
2. Unzip the downloaded file.
3. Drag and drop the MovieRecorder (or MovieRecorder Express) application into your applications folder.

First Start

1. **Double click on the MovieRecorder icon** or select the icon in the Applications folder and use your File > Open command to launch the application.
2. When prompted with the message that "MovieRecorder.app is an application downloaded from the Internet. Are you sure you want to open it?" Click on **Open**.
3. A license agreement window will open. Enter your name and email address for the registration. Tick the check-box and click on "**Accept.**"
4. Enter an **admin password** to install the required components.
5. **If you have a dongle connected** to the computer with valid licenses for MovieRecorder, the application will start right away.
6. **If you do not have a dongle connected**, a license window will open to offer you three choices:
   - **Register:** if you own a serial number, click on this button and follow the procedure to activate it. You can read more about the activation procedures on our support desk.
   - **Buy:** if you don't have a serial number, but want to buy one, click on that button.
   - **Demo**: if you want to try the application in DEMO mode, click here. In DEMO mode, MovieRecorder is fully functional. The only limitation is that a blue frame will be written to the file every few seconds.

   Note that the license window will only open the first time you start the application. If you want to add a license, or upgrade later on, you can access the license window in the Menu "MovieRecorder 4 > License..."
7. That's it — you are ready to use MovieRecorder 4!

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1. Overview of the User Interface

There are three windows in MovieRecorder:
- The "**Main**" window where you can setup and control MovieRecorder
- The "**Activity & Logs**" window
- The **"Stream Deck"** window

1.1. The Main Window

In the main window of MovieRecorder, there are three areas:

1. The left panel with the list and configuration of:
   - the **Sources** (Local, NDI and Remote)
   - the **Destinations** (Quicktime, MXF and Streaming)

2. The center area with the multiple "**Viewers**" where you can preview and control the different Sources.

3. The right panel where you can:
   - Create and edit **Scheduled Recordings**
   - **Control VTRs** and create batch lists. See chapter "VTR Control" (not available in MovieRecorder Express)
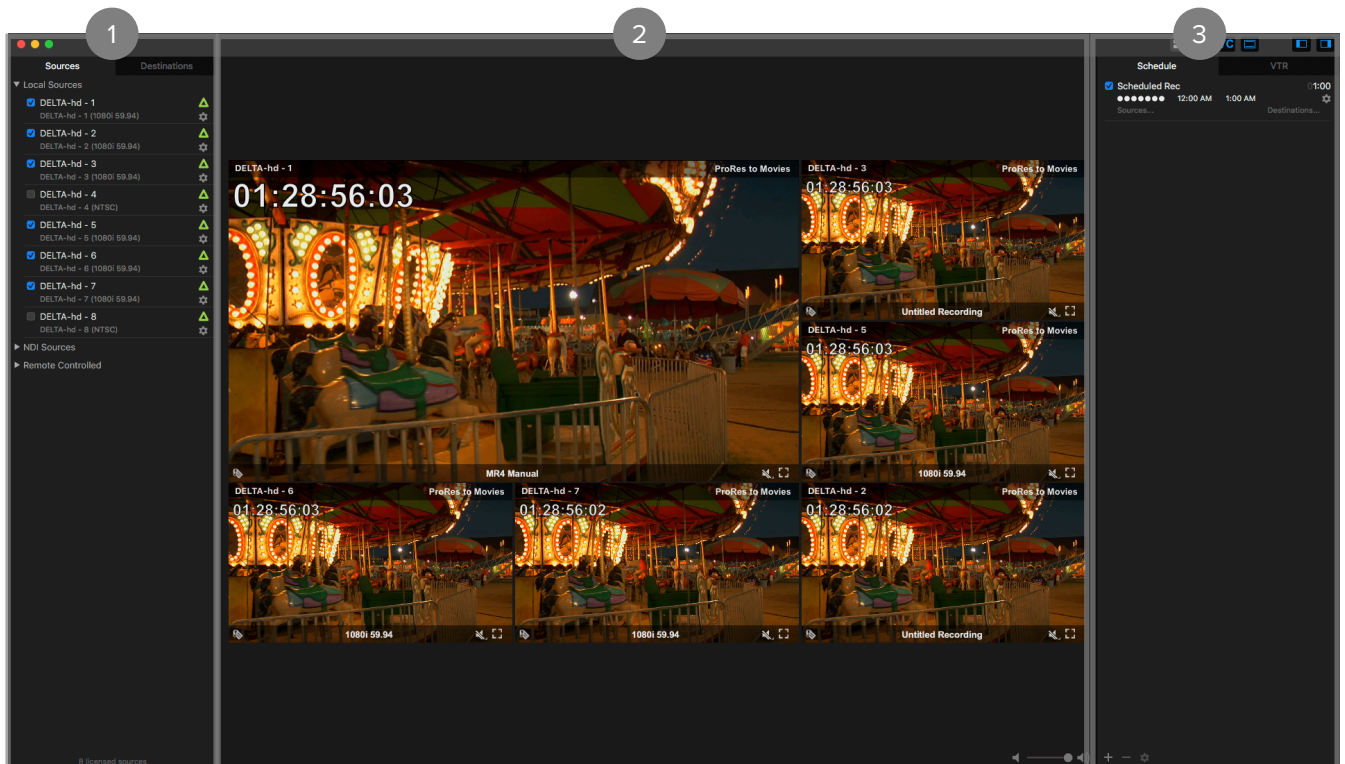
1.1.1. Viewers Options

Within the Viewers area, you can control sources, their destinations but also metadata and audio options. Here is an example of a source in the Viewer:
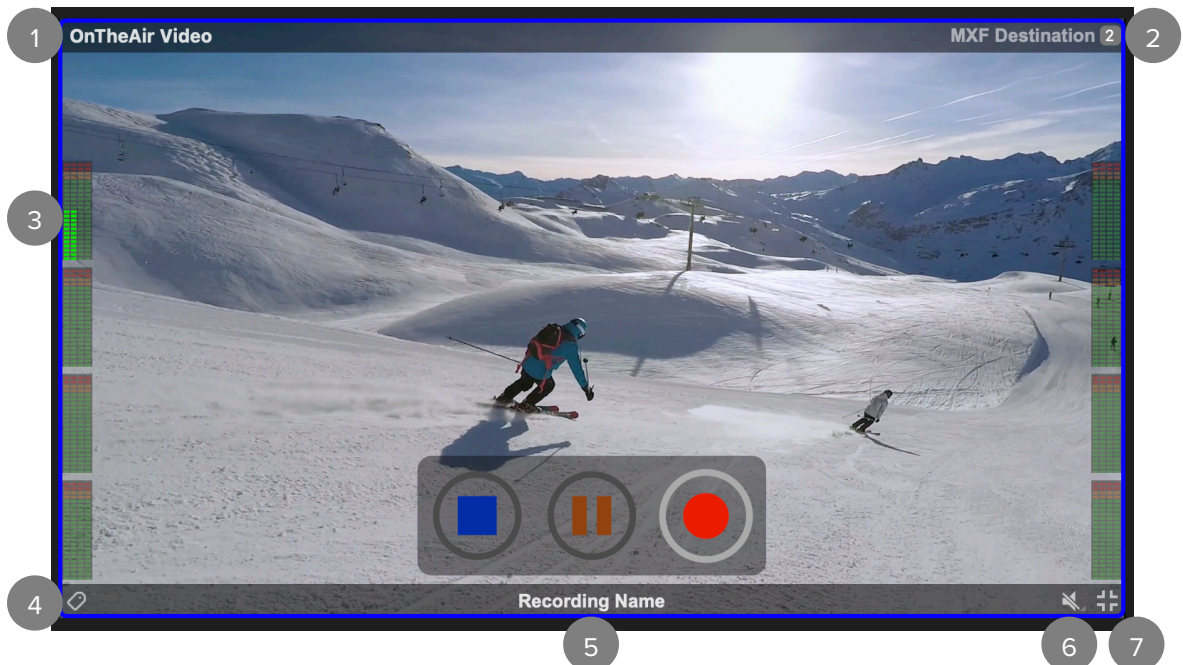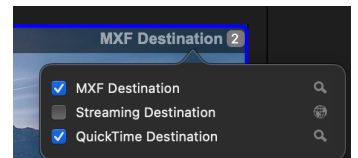

1   **The Sources list:** click on it to see all the sources available. If you select another source, it will replace the actual one in the viewer.

2   **The Destinations list:** with all the destinations you have set. You can enable/disable multiple destinations on that source to set your recording(s).

3   **The VU Meters:** The audio signal levels of the source. You can go up to 64 audio channels.

4   **Metadata:** Here you can set the metadata informations of the source. It will be included with the recording.
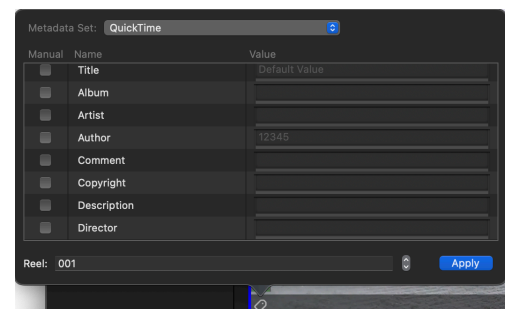
5   **Recording Name:** Click on it to change the name of your recording.

6   **Audio Preview:** Click to mute or unmute the audio in the output preview. Hold to select the audio channel you want to hear.
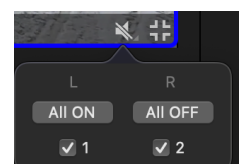
7   **Widow/Full Screen:** Select whether you want the source to display in full screen or windowed mode in the Viewer.

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1.2. The Activity and Logs Window

In the Activity and Logs window there are two areas:

1. At the top is the "**Activity**" area where there are many different gauges that offer a quick view of how the different computers, sources and destinations perform. If you see some gauges filling up and getting red, it is usually not a good thing. For an explanation of what each gauge means, you can hover your mouse on any of them and a Tooltip should appear with a brief explanation. We also have an article in our Help Center that explains more about this.

2. Below is the "**Logs**" area where you may see important warnings. If anything issues arise during the recording, you will see some messages or warnings there. Note that you can filter what is seen by using the search field at the top right of the area.

There are also a few options at the bottom of this window:

*   **Show on Error:** when enabled, the log window will automatically open when there is a log shown in the lower area. Leave it enabled if you want to be warned about possible issues. Disable it if you don't want to be disturbed.

*   **Now:** the log area will always show you the latest log.

*   **Reset Warnings:** Clears the logs, as well as all attention signs that were shown on sources or destinations (unless they are permanent warnings such as a Volume not mounted for a destination)

*   **Search**: Allows you to search for a specific logs in the logs shown.
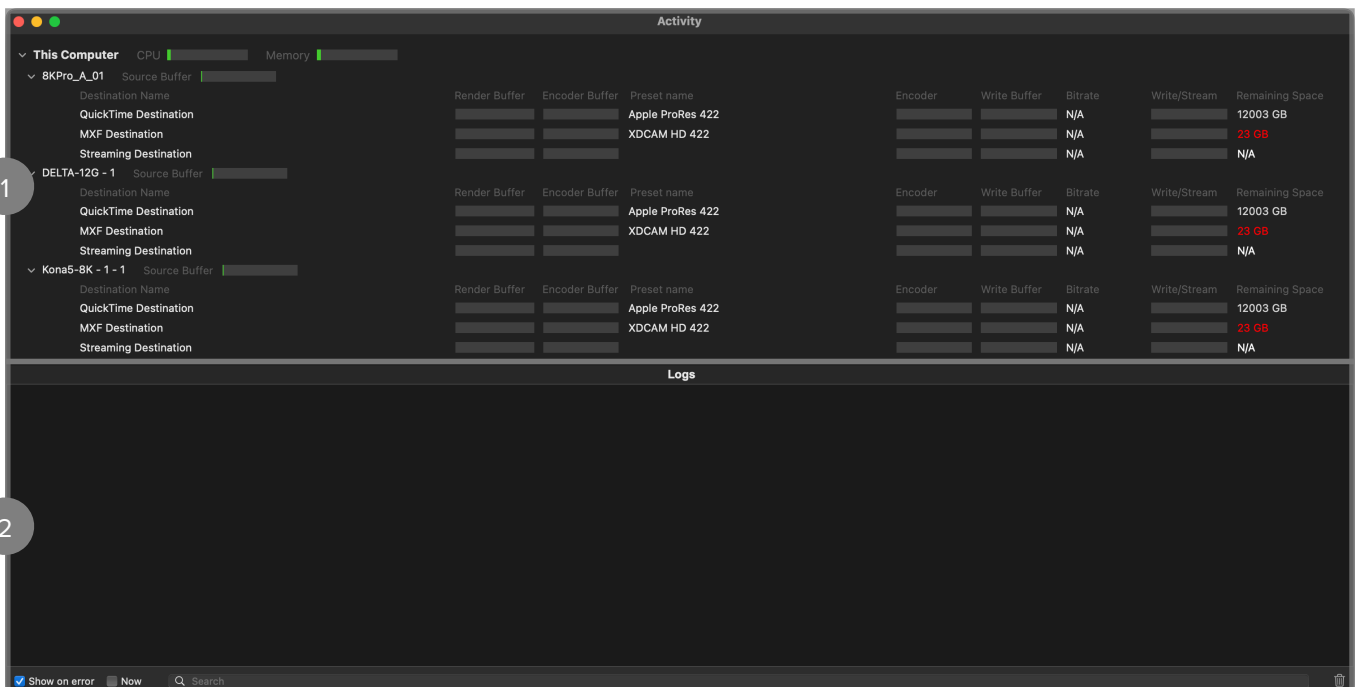
1.3. The Stream Deck Window

There are two sections in the window:
1. To the left is the list of **available pages**, with their names and which kind of Stream Deck device they are for.

2. To the right is the list of Stream Deck **devices that are connected** to your computer. On the screenshot below, there is a "Classic" and a "Mini".
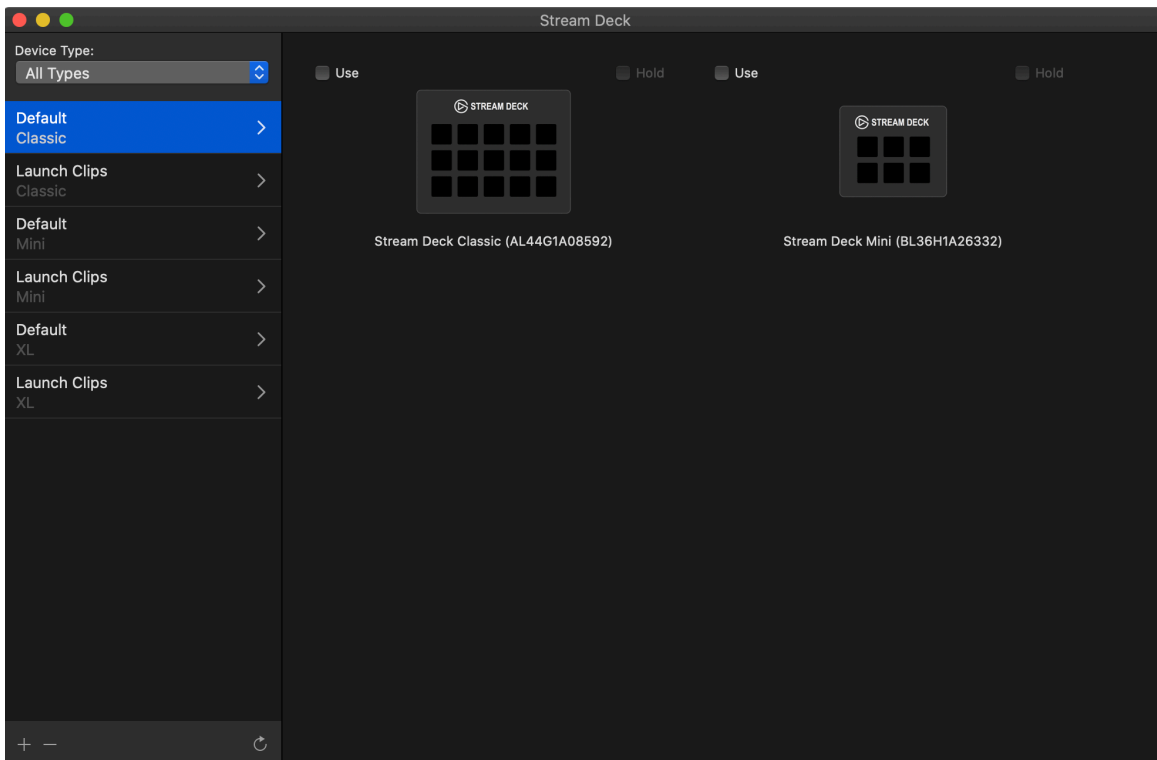
The explanations on how to use these three windows are coming in the chapter "Stream Deck"

2. Enable and Set Up Sources

The **Sources** tab is where you will select the sources (or inputs) from which you will be recording. There are three kinds: Local Sources, NDI Sources and Remote Sources.

2.1. Local Sources

Local Sources are **video devices that are connected directly to your Mac**. You can connect most AJA or Blackmagic-Design devices, as well as our M|Family devices (M|8e, M|8i, M|4e, and M|4i). Depending on the type of device that you connect, you will be able to see more or less Sources. Some devices can have multiple inputs, while others have just one. Check our website for the list of compatible video devices.

2.1.1.   Enable Sources

Any sources connected to your system will automatically show up in the Local Sources section, provided their driver is installed (and up-to-date). The sources will be given a default name, based on the device name and the number of the input, but you can always rename them either:

- in the Sources list directly (click on the name and leave the mouse for a few seconds)
- in the setup window, accessed by clicking on the gear icon, in the "*Source Name*" field.
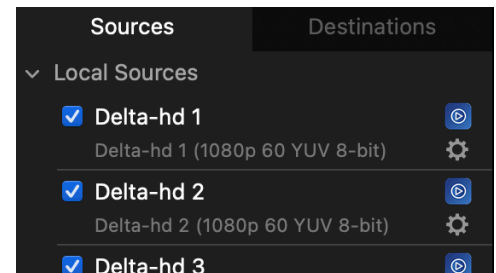
Note that sources are sorted using the "*Source Name*" but you can also sort them using the default device name. To change the sort method, right click on the Sources list and select either "*Sort by name*" or "*Sort by device*".

⚠️ If the device does not show up, check that:

- The device is properly plugged in.
- The drivers for your device are properly installed. You can download drivers from the manufacturer's website. Here are the links to AJA, and Blackmagic-Design. For Deltacast, we recommend downloading from our website as we will validate them.
- Make sure that the appropriate version of the drivers are installed (if not, you should see a warning in the Logs area of the "Activity and Logs" window).
- Some devices (AJA and M| Family) will only show up if they are connected before the application starts. If you connect the device after MovieRecorder started, it will not show up. Quit and restart MovieRecorder to see them.
- You have allowed the extension to load in "System Preferences > Privacy & Security."
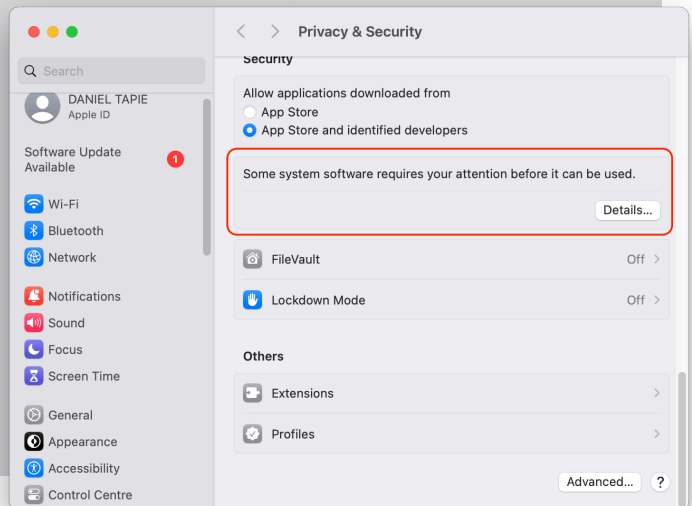
To use a source, just enable the appropriate box in front of the Source's name.
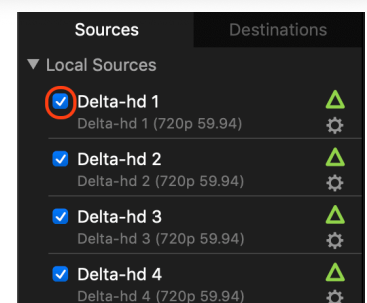
2.1.2. Setting up Local Sources (all)

To set up a source, either:
- Click on the "gear" icon
- Double-click on the Source cell
- Right-click on the source cell and (there's an extra space here) select "Edit Settings"

This will open a popover window wherein you can change a number of settings, including the **Source Name**, as well as the **Video, Audio and Timecode Settings.**
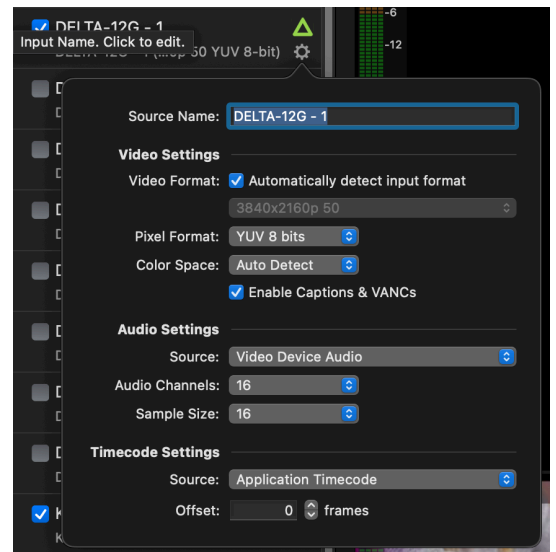
Depending on the type of device that you use, the layout and options might differ slightly. For all devices you will be able to configure the following settings.

If a source refuses to enable and show a warning icon, click on the warning icon. This will show the 'Activity and Logs" window. Check the logs area for a possible explanation. The most common reasons for that are:
- The device is already in use by another application
- The device is not properly configured
- You do not have enough licenses (you need one license per source/channel)

2.1.2.1. Video Settings

- **Video Settings**:
  - **Automatically detect the input format**: This is very useful if you are changing a lot across different types of video formats. If the above option is disabled, you will have to manually select the incoming video format in the popup menu below.
  - **Pixel Format:** Choose between YUV 8, 10 bits or ARGB.
  - **Color Space:** Choose between Auto Detect, REC 601, 609 or 2020.
  - **Enable Captions & VANCs:** Allows Closed captioning and other datas (Metadata, timecode, SCTE...)
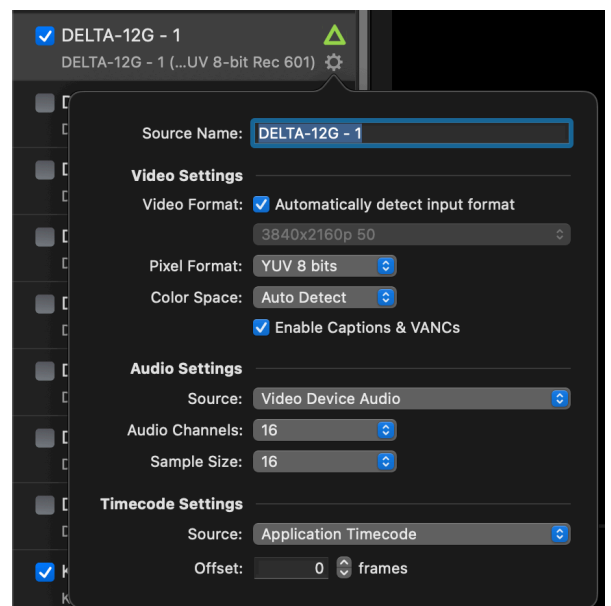
- The **available input video and pixel formats depend on the type of video device used**. If you don't see a video or pixel format in the popup menus, it means that your video device does not support it. Check with the device manufacturer.
- If you don't change the video format often, we would recommend to **disable the auto detect feature**. Indeed, some video device can be sensitive and sometimes report a format change when there was not, or when there are instability in the signal, it can also have some weird behaviors.

- **Setting with NDI sources:**
  - **Frame rate is not constant:** When Enable, it allows MovieRecorder to handle better Frame rate with softwares like NDI Scan Converter.

2.1.2.2. Audio Settings

First you will be able to select the Audio Source. Either:

- **Video Device Audio**: when you want to record the audio that gets in the video device that you use. Depending on the type of device you use, it will either be the audio embedded in the SDI, or analog audio if your device supports that.
- **External Audio Sources**: when you want to record the audio coming from a different source than the video device (not available in MovieRecorder Express).

MovieRecorder (not MovieRecorder Express) can use **any audio sources that are visible to the macOS** as an external audio source. It can be a built-in audio input on your Mac, or a USB audio device that you have connected to your Mac, and it can even support IP audio protocols, such as Dante, which is very useful in today's workflows. Basically, if you see an audio input in the System "Settings > Sound > Inputs pane", you should be able to use it in MovieRecorder.

To see the available audio sources, click on the popup menu "Sources" in the Audio Settings of the sources settings popover:

- **Sample Size** (the available sample sizes presented depend on the type of device used).
- **Delay Offset:** Necessary f there is a disparity between the audio and video signals. The delay is in frames, and will delay the audio for the amount of frames set there. This is even more useful if you use an external audio source as the Video and Audio pipelines will be different and usually audio will arrive quicker than video, and thus you will need to add a delay.
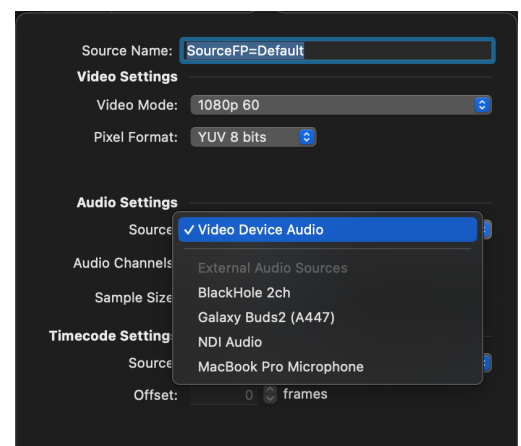
Note that you cannot **map audio** in the sources settings. If you need it, this is done in the AVPresets settings, using custom presets. The reason it is done in AVPresets (and thus relative to destinations) is so you may have different audio mapping for different destinations (for example, for users with multiple languages).
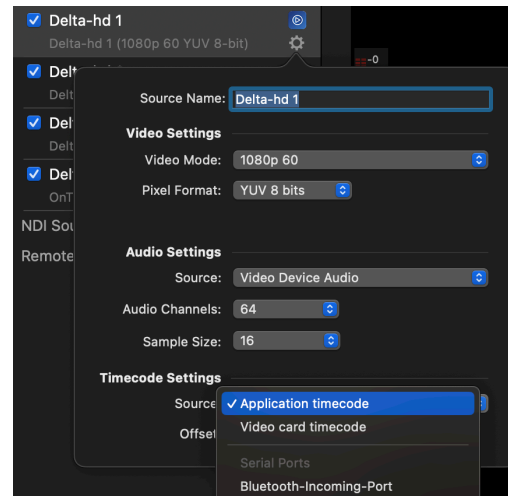
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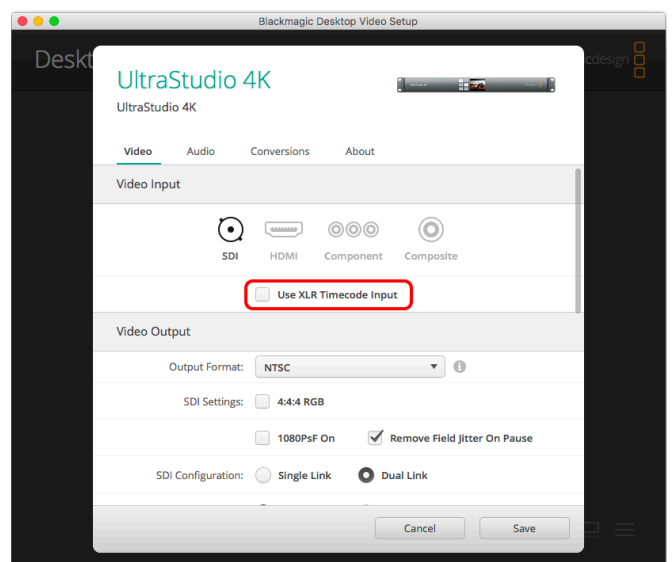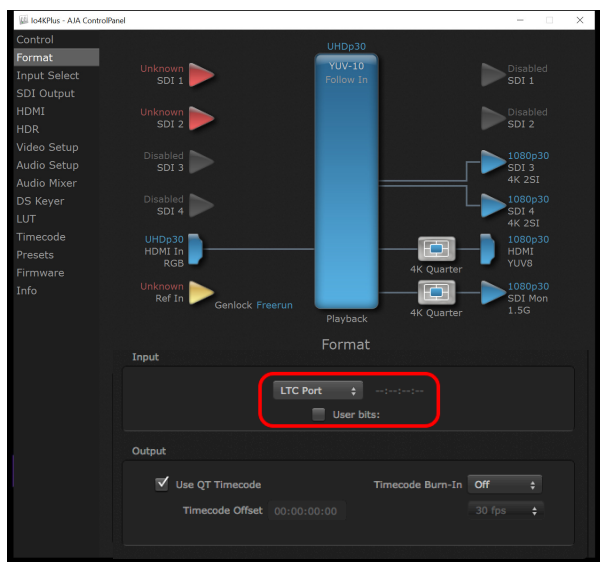
2.1.2.3. Timecode Settings

For each source, you can choose between:

- **Video card timecode** (when it is the video device that provides the TC)
- **Application timecode** (when the video device does not provide the TC and it is retrieved by an external device such as an audio input for Audio LTC).

The video card timecode uses the timecode that is provided by the video device (there is no need then to setup anything in the MovieRecorder preferences). The type of Timecode available on the device will depend on the type of device used. Typically there may be a few timecode sources available on the device:

- **Embedded Timecode**. Is the timecode that is embedded in the SDI signal, either in RP188, LTC, VITC...
- **Audio LTC Timecode**. Some devices (check on the manufacturers website) have a timecode input. Usually it is either an XLR or BNC connector that will receive an Audio LTC timecode signal (how to set up Audio LTC). If you want the video card to read the timecode from that connector, you have to open either "AJA Control Panel" or "Blackmagic Desktop Video Setup" applications to set it up:
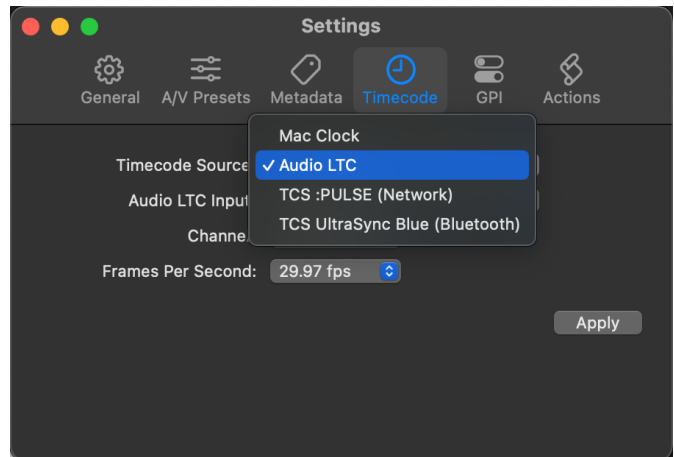
The Application Timecode uses the timecode that is set in the settings of MovieRecorder. To change the application timecode source, go in the settings of MovieRecorder and select the "Timecode" pane:

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In the first dropdown menu, you can choose from four timecode sources for the application timecode:

- **Audio LTC**: select the audio input on which the Audio LTC (how to set up Audio LTC) is received. You will be able to use the same audio inputs that are available for your system audio, as well as all the sources that are set to use "Video card Timecode" (to use the timecode of a given source for all sources at the same time, see Timecode "Sharing" below for more info on this)
- **Mac Clock**: will simply use the time of day of your Mac to generate a timecode
- **TCS :PULSE (Network)**: use Timecode Systems products via WiFi or Ethernet. You can read more about this the following help center article.
- **TCS UltraSync Blue (Bluetooth):** use Timecode Systems products via Bluetooth. You can read more about this the following help center article.

> ⚠️ When using a video device with an Audio LTC timecode input, always select "Video card timecode" to use the timecode input. A common mistake is to select "Application timecode" and then in the MovieRecorder preference to select "Audio LTC" and then select the video card. This won't work. You can information about how to set up Audio LTC in our website.

2.1.2.4. Timecode "Sharing"

In MovieRecorder 4 it is possible to share the Timecode of a source with other sources. So, for example, if you use an MI8, you can have only one SDI input with embedded TC and share it with all eight sources. Or with an AJA Io 4K to share the RS422 timecode input with the other inputs. This reduces the requirement to have a TC embedded for each signal.

This is a two step process:
- Make sure that **at least one source uses "Video Card Timecode"** (and not Application Timecode):
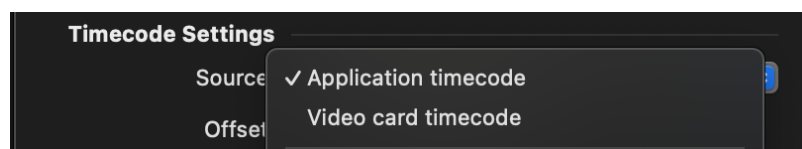
- Then **go to the MovieRecorder Settings**, and you should now see the source as a possible Application Timecode Source.

2.1.3. Specifics of "Blackmagic Design" Sources

With **Blackmagic Design**, the popup to set up the sources should look something like this.

If you need to change other settings than the ones shown there, use the "Blackmagic Desktop Video Setup" application. For example, you might:

- Select if you want to automatically detect input format (if for example your device has a SDI and HDMI input).
- Enable downscaling on one of the inputs.
- Set if you want to use p or psf,
- Set if you want to use the available timecode input.
- Set the "Connector Mapping" on certain devices.
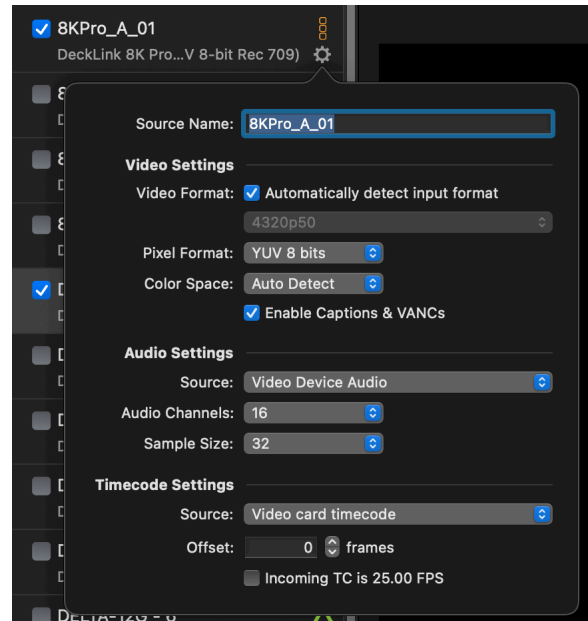
2.1.4. Specifics of "Deltacast" Sources (Hardware Bundles)

If you are using an MI80, MI62 or MI40 (or their 3G "X" equivalents, such as the MI80X), then all the setup happens in MovieRecorder, and there is nothing to be configured elsewhere.

You can find a lot of information bout Deltacast card on our Support desk. Such as:

- HOW TO: Know which version of Deltacast Drivers is installed

- HOW TO: Update the firmware on a Deltacast card

- HOW TO: Change the configuration of some Deltacast cards
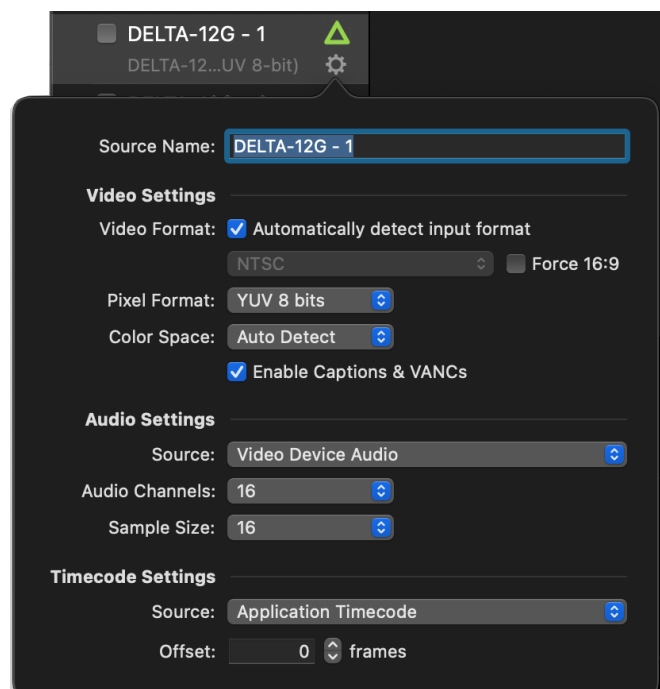
2.1.5. Specifics of "AJA" Sources

With AJA there are a few more settings to configure in MovieRecorder:

Indeed, the AJA Control Panel application is not really intended for independently addressing the multiple channels of some AJA devices, such as the four channels of an AJA Io 4K or a Corvid 88. **In AJA Control Panel, you will only set the following things**:

- the source of the reference signal
- the timecode source.

All the other settings will be done directly in MovieRecorder, so do not worry about setting the frame buffer format, etc... In addition to the "regular" settings regarding the video format, etc, for AJA devices you will be able to set:

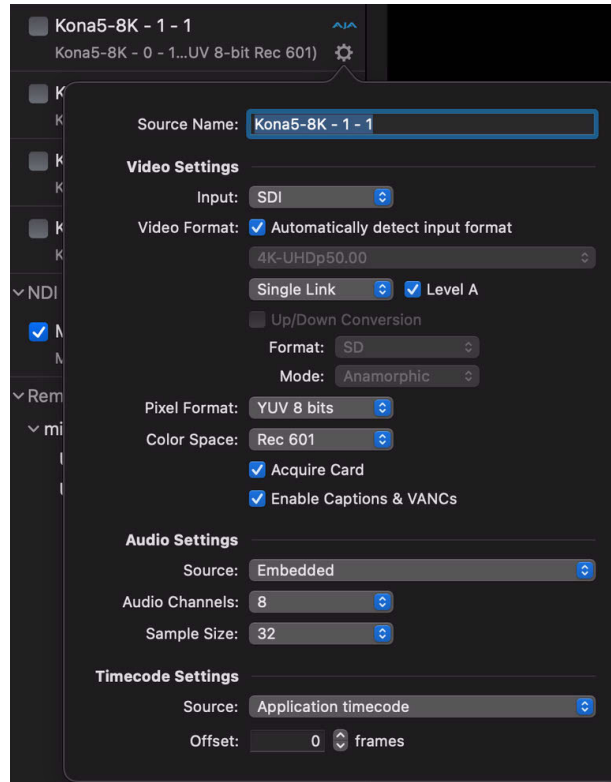- **HDMI**: Some AJA devices have an HDMI output, but, for example, the Io 4K has just one HDMI input, but four sources available. This sets which input you should use for the HDMI input instead of the SDI input.
- **Up/Down Conversion**: Sets the up or down conversion that will be done. Note that if your device has a Ufc and 4K firmware (as does the Io 4K), up and downscaling may only be available when the card is loaded with the "Ufc firmware," and thus have only two inputs.
- **Acquire card**: if enabled, only MovieRecorder will be able to use the device, so you won't be able to use it with OnTheAir Video, for example. It is recommended to leave this on so other applications will not interfere.

There are other things to know about using MovieRecorder 4 with AJA devices, and we recommend reading the following article.

2.2. NDI® Sources

2.2.1. Setting Up NDI® Sources

MovieRecorder is compatible with NewTek's Network Device Interface, or NDI®, allowing you to access sources connected over IP, via an Ethernet cable. To add an NDI Source, first click on the "+" icon to the right of the NDI Sources section on the Sources panel.

Doing so pops up a window listing all NDI Sources available on the network. Enable whichever ones you'd like to be able to use, and it will then show in the sources list and you can then enable the sources the same way you enable a Local Source. Note that NDI sources can take a few seconds to receive the signal.
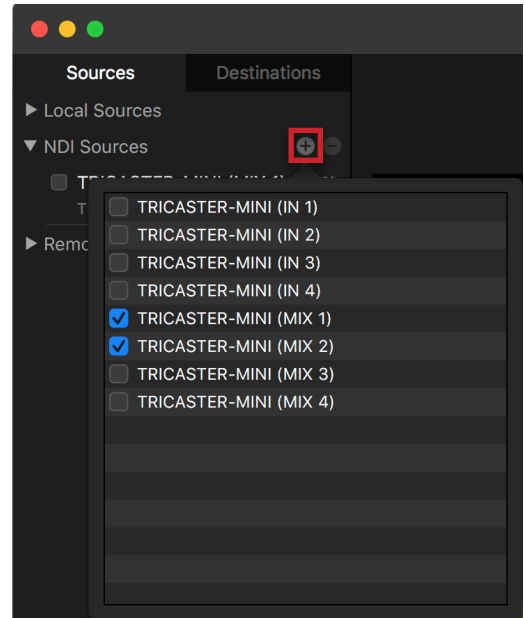
If you click on the gear icon to adjust some of the settings, you may only change the Source Name, but not the Video Mode, the Pixel Format, and the number of Audio Channels, as these depend on what we receive from the NDI source.
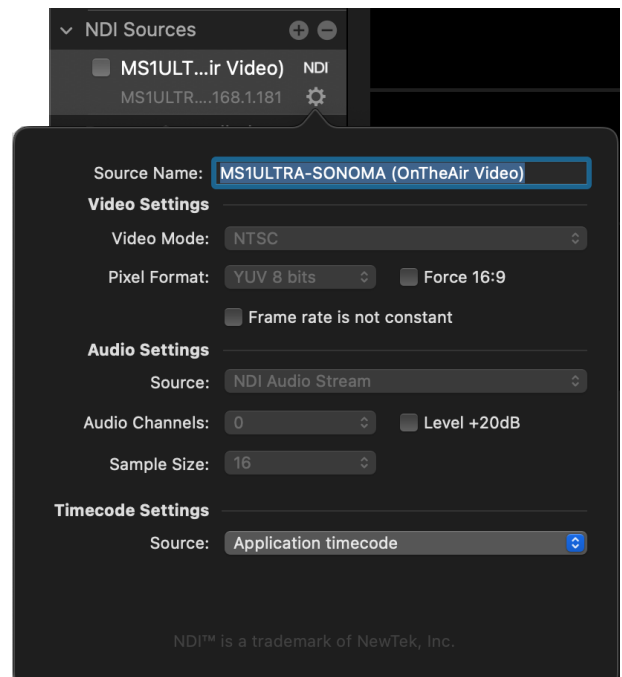
2.3. Remote Controlled Sources

You may also access sources that are not directly connected to your Mac. For example, you can control multiple MovieRecorder 4 applications remotely. We have customers who have up to 49 inputs in their facility, and they can all control them from just one computer and one screen.

You can use a demo version of MovieRecorder to control another MovieRecorder, as you only need to pay the license for an actual source.

To know how to control Remote sources, go to chapter "Control Remote Sources".
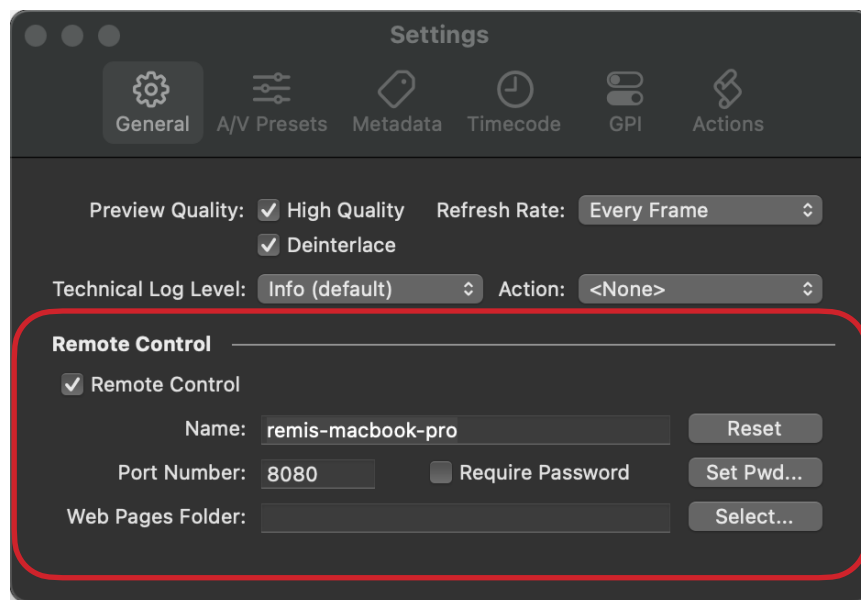
2.3.1. Set Up the MovieRecorder you Want to Control

Before doing anything, first check on the computer that you want to control that the "Remote Control" option is enabled.

You may also want to check:

- **Name**: the name under which you will see it in the MovieRecorder that will control it. The default name is the Mac Bonjour Name, but you can change it to whatever you like, provided it is unique. If you named two or more MovieRecorders the same way, there will be a conflict, and you won't know which one you control.
- **Port Number**: the default is 8080, but if that port is not available in your network because the Firewall blocks it, you can change that value
- **Web pages Folder**: If you have created one or several web pages to interact with MovieRecroder, you can select the folder containing those pages and it will be hosted by the application. For instance, a page called "Custom.html" in a folder selected could be reached at *127.0.0.1:8080/Custom.html*
- **Password**: sets whether the password is required or not. Enabled, only the individuals with the password can control MovieRecorder.

!!! **You may need to quit and restart MovieRecorder after you change any of those settings.**

2.3.2. Adding Remote Sources with "Bonjour"

Now that your MovieRecorder on "Computer A" is ready to be controlled, open MovieRecorder on "Computer B" (as a reminder, it can be a demo version), and simply click on the + icon at on the bottom left of the Remote Sources panel. A pop-up window will appear.

If "Computer B" is located in the same local area network as "Computer A," you will see it listed with the name you have specified in its preferences. Double-click on the name of the Computer you want to control, it will then be added to the list:
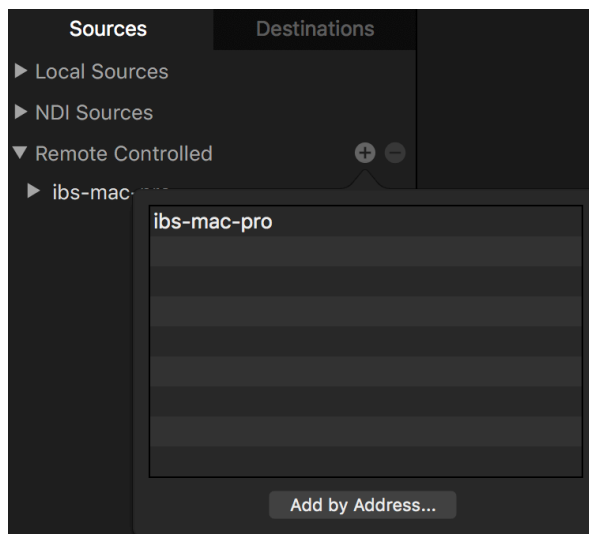
Then if you click on the "Disclosure" icon, it will show the list of sources available remotely:
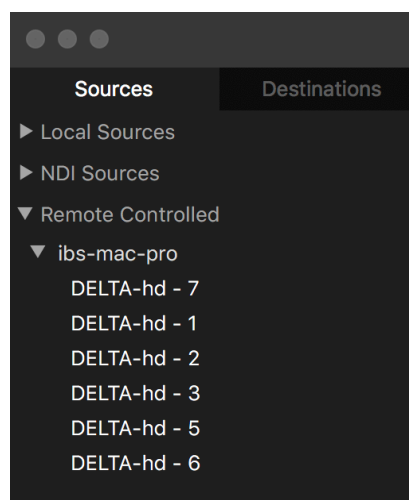
You can then use the remote sources the same way you use local sources (with some limitations; see below). You can either drag and drop a source name to a Viewer or select it in the Viewers Source selection menu:
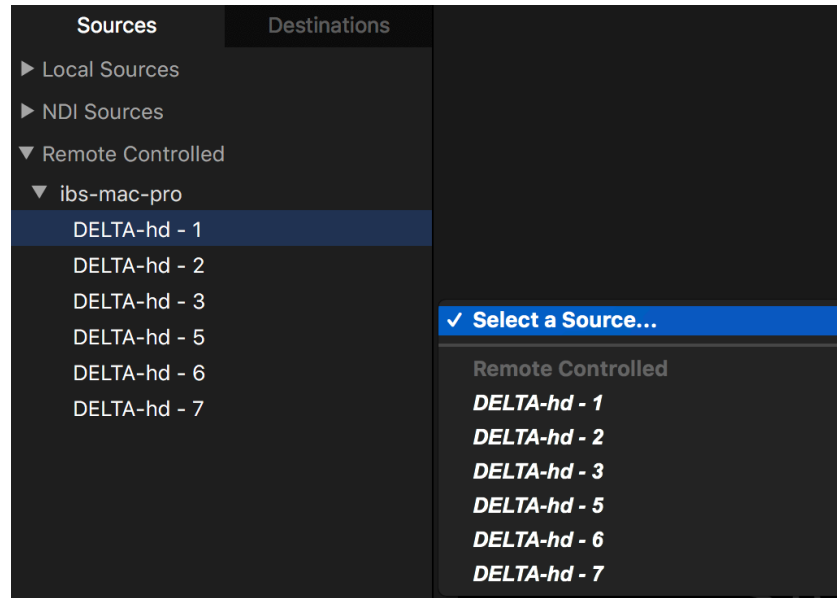
2.3.3. Adding Remote Sources with a Manual IP Address

If your Mac does not show up in the list, it may be that you are not in the same subnet, and you will have to add the remote computer using its IP address. To do so, click on the "Add by Address..." button.

Another window will pop up; enter the IP Address there.
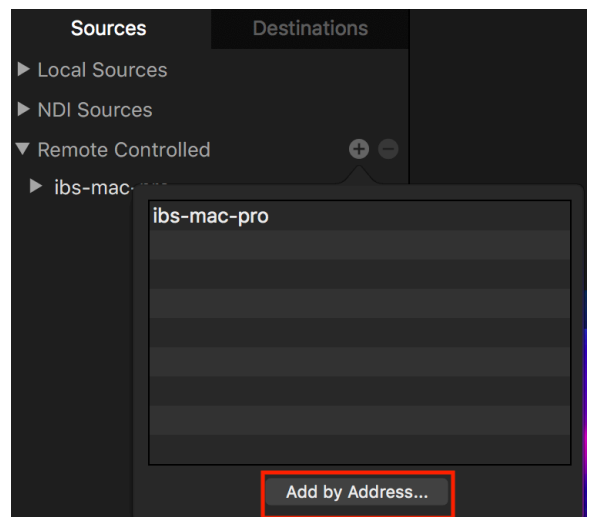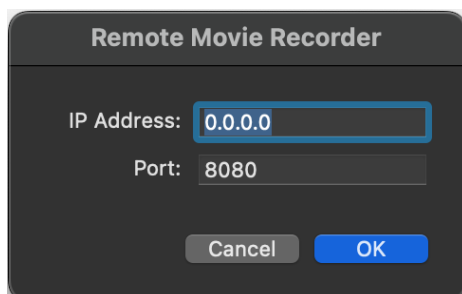
2.3.4. Working with Password Protected Remote Sources

If on Computer A you have required a password to be able to connect to it, there will be an additional window that will pop up when you connect:
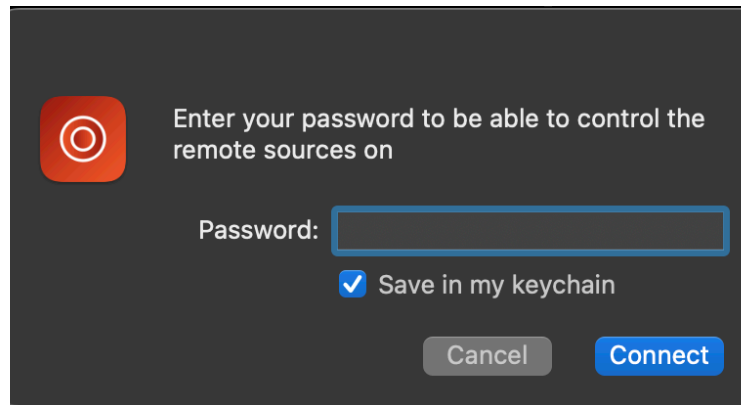
Enter the password that you have specified and, optionally, save it in the keychain. If you save it, the next time you start MovieRecorder, you won't have to enter the password anymore to control it — but only store the password on a trusted computer.

When a remote source is unlocked, the little lock next to the computer name will show as "unlocked", and its sources will be listed below.

2.3.5. Lock/Unlock a Remote Source

If you want to lock a computer to prevent other users from controlling it, just click on the lock. If its sources were used in any of the Viewers, they will not show up anymore.

To unlock it just click on the same lock icon. If the password was saved in the keychain you won't be asked to enter it; if not, you will have to enter the password again to unlock it.

When a remote source is greyed out, it means that the computer cannot be reached. Check your internet connection, and that MovieRecorder is running on the remote computer, and that "Remote Control" is enabled in the Settings.

2.3.6. Redundant Mode

Not available in OnTheAir Video Express.

For redundancy, MovieRecorder 4 offers a "Redundant Mode", so that you can have another MovieRecorder record at the same time. Ingest will then happen through two separate Macs. Below we will talk about Master and Slave Macs. The Slave Mac is the one that will follow all that the Master Mac is doing.

To set this up:

- Set up a Source on the "Master" and "Slave" MovieRecorders to bear the same name. It may be necessary to change their names. Make sure that the names are strictly identical.
- On the "Master" Mac add the "Slave" Mac as a "Remote Controller" source.
- Then in the list, right click on the Slave Mac (not on the sources themselves) and select "Enable Slave Mode".
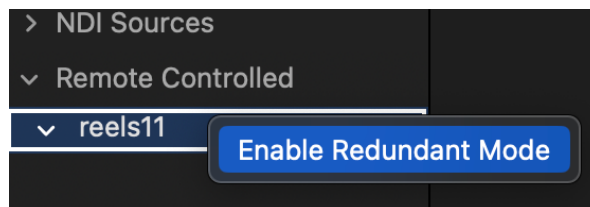
- Once enabled, you will now see an "S" next to the computer name.
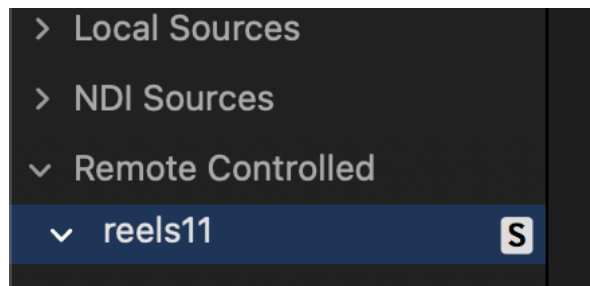
Once this is set up, when you record from the "Master" MovieRecorder, if (for example) you start recording on a Source named "Source 1", and if the "Slave" MovieRecorder also has a source named "Source 1", that source will start recording as well. Same thing if you stop recording, etc...

Note that:

- we cannot guarantee frame accuracy — the start and stop of the recordings may be a few frames off between the two computers
- Only basic controls are slaved. We haven't yet implemented more advanced controls such as metadata, etc... If you have such a request don't hesitate to let us know and we'll see what we can do.

3. Set Up Destinations

The Destinations tab opens a panel wherein you can create and setup destinations. By default there is one destination created. If the panel is not visible, you can reveal it by clicking on the small icon in the upper right corner.
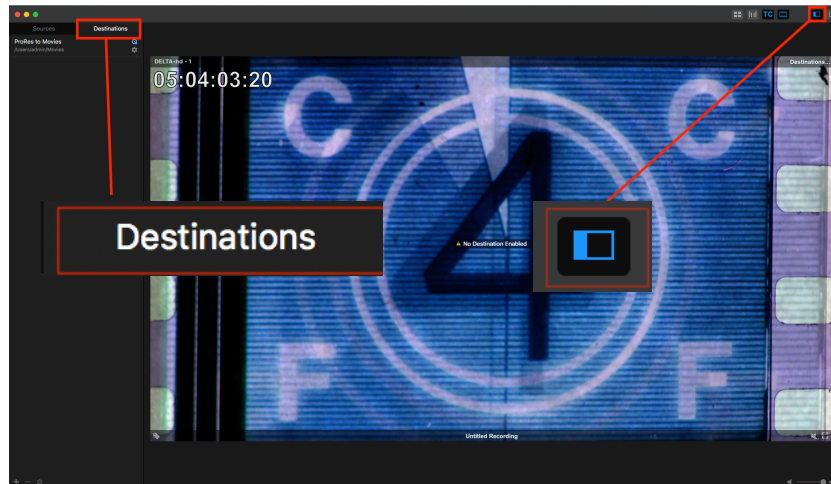
3.1. Destinations Defined

A destination is:
- a **location** where you will record the file
- a video **codec**
- and **other settings** that you'll discover below.

3.2. Creating a Destination

To create a new destination, click on the + icon at the bottom of the Destinations list, and a popover will show up allowing you to select three main types of destinations:
- **QuickTime** (with 3 subtypes: None, Segmented or Classic)
- **MXF**
- **Streaming** (only available when the application "Streaming Center" is installed, and with the "Softron Streaming Pack" option)

You can also duplicate destinations in two ways:
- Right-click on a destination and select "Duplicate"
- Drag and drop it while holding the "alt" key down
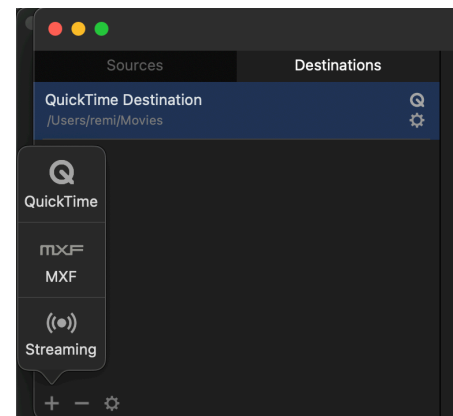
By default, destinations chosen in QuickTime will be displayed as "QuickTime Destination" while those in MXF will be displayed as "MXF Destination". You can rename them directly in the list. Just click on the name and leave the mouse there. Note that destination names must be unique.

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3.3. About the Different Types of Destinations

We can differentiate between three main types:

- The **MXF** and **QuickTime** destinations will create files on a local or shared storage. So let's call them "File based destinations". Check the following article to know more about the different destination types and their advantages.
- The **Streaming** Destination will create a RTMP stream to a server. For more information on streaming, see the following article.
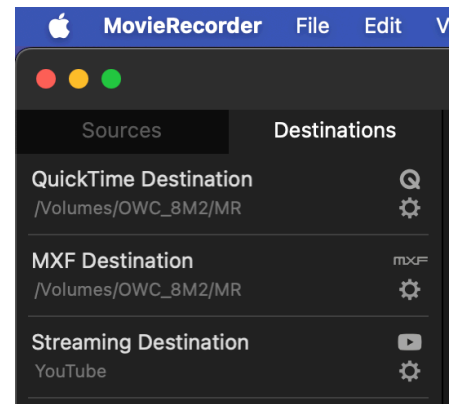
3.4. Setting Up a QuickTime Destination

You may modify the **Destinations** by clicking on the gear symbol or by double-clicking on the appropriate destination.
In addition to changing the **Destination Name**, you may change:

- **Location:** set where you would like to save the recording.
- **Naming & Metadata:** set how MovieRecorder will automatically name your files and add metadata to it. *(Metadata is not available in MovieRecorder Express)*
- **Edit-while Ingest:** set the type of QuickTime Movies created (None, Segmented or Classic).
- **A/V Presets:** Select a recommended or custom A/V Preset.
- **Auto Split:** Set if you want MovieRecorder to automatically split the recordings into multiple files.

These settings are detailed more thoroughly in the following pages.
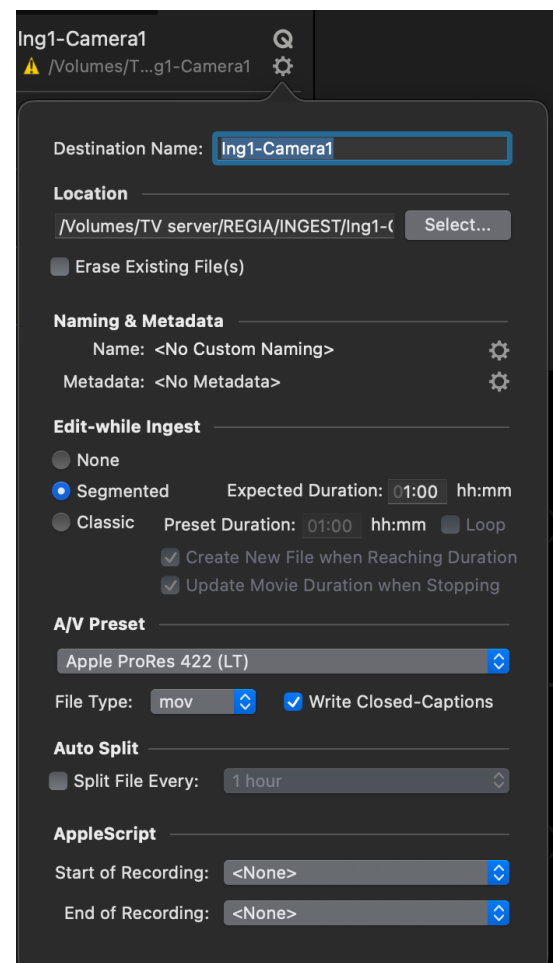
3.4.1. Location

This is where you select where you want to record the video file.

You can also set whether or not you want to "Erase Existing File(s)." When this option is disabled, and a file already exists in the folder you are recording to, MovieRecorder will append a number to the file to avoid deleting it. You can set the format and location of that counter in the custom "**Naming**" tokens. If the option is enabled, MovieRecorder will delete the file that has the same name.

> You can record to almost any kind of storage. As long as the Volume mounts on the Mac and you have enough bandwidth to record the number of channels, you should be good. As usual, we recommend testing with a free demo version of the application available on our website.
>
> **You can measure the read and write speed of storage solutions** using software such as Blackmagic Disk Speed Test or AJA System Test, but remember that these applications measure the speed at a specific time. You may want to let the test run for a few days, as **there are some things that can temporarily impact the performances of a storage**, such as:
> - Some use SSD caches. So if you write small amount of data, the speed will be huge, but if you write a lot of data for a long period of time, these caches will fill up, and you will write directly on the slower parts of the storage.
> - They can have some temporary maintenance operations, usually happening in the middle of the night.
> - Copying or duplicating files at the same time will impact performances, so test a "real life" scenario, with people working on the storage as usual.
> - If you are using a NAS, make sure that the whole infrastructure is properly cabled, etc... A wrong router or bad cable can ruin a whole network.

About error handlings on storage:
- If the folder you have selected does not exist when you start recording, MovieRecorder will create it if it has write permissions to (new in MovieRecorder 4)
- If the Volume is getting full or is not mounted we will show a warning icon next to the destination.

3.4.2. Naming

In the Naming and Metadata section, there are two parts. Let's talk about the "Naming" function first.

You may set up **MovieRecorder** to automatically name your files by clicking on the gear icon to the right of the **Name** section. A pop-up window will show with the heading "**Name Format.**" There will be an empty panel, beneath which are a number of "**Tokens**" that you can use to name your files.
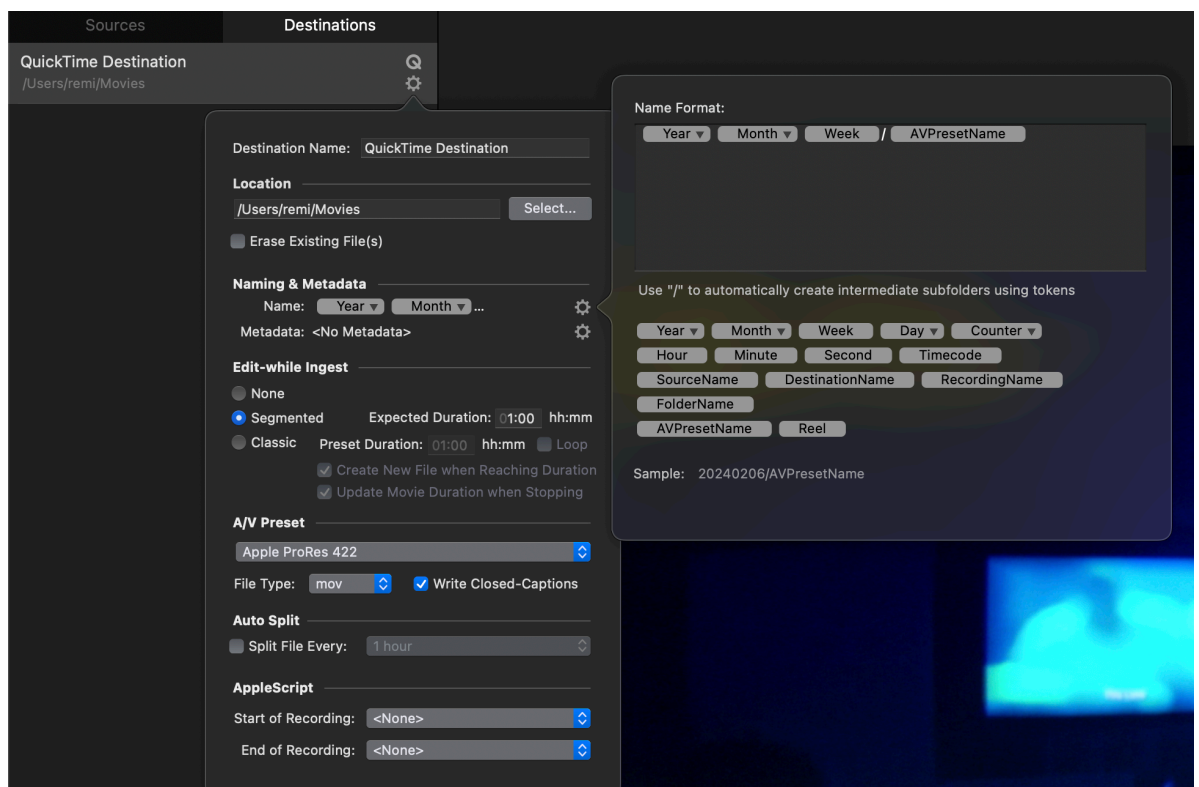
Simply **drag the tokens you would like to use to name your file into the Name Format panel, in whatever order you would like the file name to be displayed**. For example, if you would like to name your file by the date it is recorded, you would drag the Year, Month, and Day Tokens into the panel (plus the Hour, Minute, and Second if you would like to narrow down the parameters even further).

You can also type any characters in the Name Format area, and these will be added to the file name.

3.4.2.1. "Recording Name" Token

The "**Recording Name**" token is the name that you set in the Viewer window:
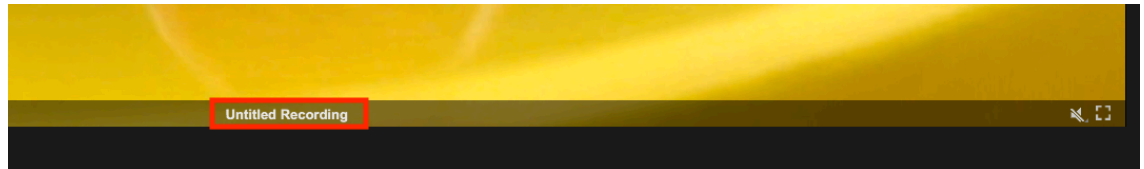
If you don't set any "naming format," then your file name will be the one displayed in the Viewer. However, if you set a naming format by using tokens, but do not include the "**Recording Name**" token, the recording name in the viewer won't appear in your file name.

3.4.2.2. "Formatting" Token

Some tokens can be formatted in different ways. These are the ones that have a little arrow on them (*Year, Month, Day, Counter*). To change the format, click on the arrow and select the format. For example, you can choose the Month to be set as "*April*," or "*04*", etc...
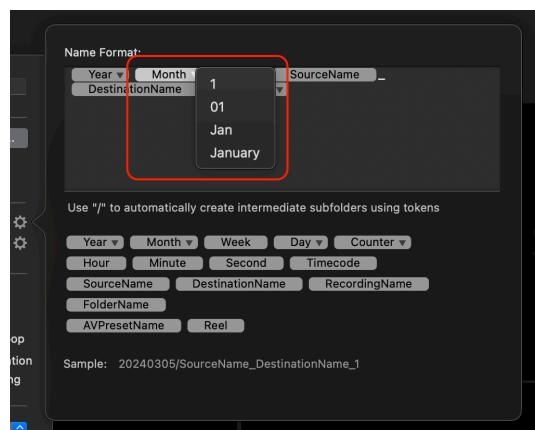
3.4.2.3. Automatically Create Subfolders

A very useful and unique feature of MovieRecorder is the ability to **automatically create subfolders**. To do that add a forward slash ("/") key where you would like to add the folder to the file path.

For example, if you wanted to create a subfolder that holds all of the files within a particular year, and then a subfolder with the month and day, and then the file name to use first the Source Name, the Destination Name and Recording Name, all separated by an underscore, you would pull Tokens into the Name Format panel as follows:
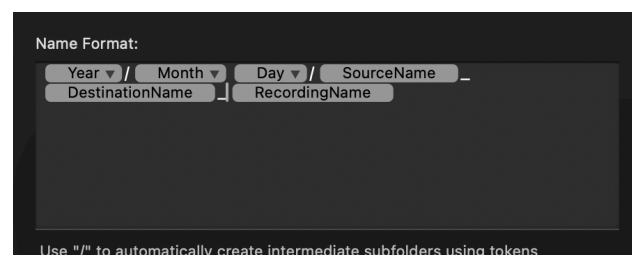
> Sometimes MovieRecorder can automatically append some information to the file name. For example, if you have one source that records to two destinations, but in the custom naming you don't add the destinations token, it will still be added to the file. Otherwise you could create conflicts and have two destinations writing to the same file.

3.4.3. Metadata
Not available in MovieRecorder Express.

Metadata are used to add information about the recorded files. The metadata can be retrieved by Media Asset Management. We cover the metadata part in a specific section below.

3.4.4. Edit-While-Ingest

You may use MovieRecorder 4 to edit your files (with the QuickTime Container), even as they are being recorded. You may opt for one of three **Edit-While-Ingest** destinations: **None**, **Segmented**, or **Classic**. Everything explained in chapter: Edit-While-Ingest.

3.5. Setting Up an MXF Destination
Not available in OnTheAir Video Express.

For the most part, setting up **MXF Destinations** is the same as setting up QuickTime Destination. However, a few features are not available in MXF:

- Metadata may not be embedded into the file — a sidecar must be created, if metadata is desired.
- All MXF files are generated with the "Open" flag, so they can be used for edit-while-ingest on editing solutions that support it.
- You may decide between two muxing settings for the codecs: either XDCAM or Generic OP1a. The difference between XDCAM and Generic Op1a is the way we respect the standard. With "pure" XDCAM, we can only accept audio tracks with maximum one channel per track and no CC track. With the "Generic Op1a", we are more flexible but therefore do not strictly adhere to the XDCAM standard.

3.5.1. Edit-While-Ingest with MXF Files

Edit-while-ingest with MXF files is possible too. It is, in fact, the file wrapper that Adobe recommends to use.

Avid Media Composer supports edit-while-ingest with MXF files too, but please read the following article to know all that is required.

3.6. Setting Up an Edit-While-Ingest Destinations

You may use MovieRecorder 4 to edit your files, even as they are being recorded. You may opt for one of three **Edit-While-Ingest** destinations: **None**, **Segmented**, or **Classic.**

3.6.1. With Quicktime

- **None:** With this, you opt not to use the **Edit-While-Ingest** feature. Note that this type of file will only be readable when they are "closed" at the end of the recording. This means that if there is an issue before the file can be closed, the file will not be readable nor recoverable. This is why we recommend to use either Segmented or Classic modes instead.

- **Segmented:** There is no predefined duration to set. The file is growing upon ingest and is a much more modern format that supports many codecs (such as XDCAM or H.264). But:

  - The growing files will only work in [Final Cut Pro](#). Other editing solutions support segmented movies, but only after the recording is complete.
  - Files are not usable during the first 10 seconds of recording, and they are updated every 10 seconds.
  - You cannot use them in the project and see them growing there. You can only see the portion of the file that was there when you inserted it into the timeline, unless you trim it manually.
  - You cannot use **segmented** movies to do edit-while-ingest in Multicam clips.

- **Classic:** With **Classic**, you have to set a predefined duration, and some codecs (such as H.264) are not supported. But:
  - Classic Movies are growing both in Final Cut Pro and Adobe Premiere Pro.
  - You can immediately use the file.
  - You can place the whole file (with its predefined duration) in the project and cut it from there. Note that this works only in Final Cut Pro. The file will not grow in the timeline of Adobe Premiere, except when using a trick explained in the [help center article](#).
  - You can use **classic** movies to do edit-while-ingest in Multicam clips in Final Cut Pro to do a live Multicam edit while the recording is still taking place.
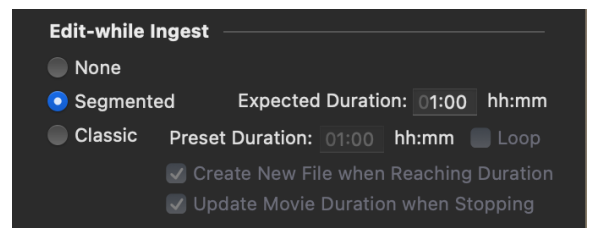
You may **Edit**, **Delete**, or **Duplicate** any **Destinations** you have set up by clicking on the gear icon on the bottom of the Sources panel and selecting the appropriate action. You can also delete a **Destination** by highlighting it and clicking on the "-" icon.

3.6.2. With Quicktime

Final Cut Pro also supports growing MXF files. There is nothing specific to set here.

⚠️ Edit-While-Ingest with MovieRecorder works with Final Cut Pro, Adobe Premiere Pro and Da Vinci Resolve. Information in chapter "[Edith-While Ingest](#)".

3.7.   Stream with MovieRecorder

To stream with MovieRecorder, you need to buy our Streaming Pack.

It allows you to stream from MovieRecorder or MovieRecorder Express, running on the same Mac. Just create a preset in the "Streaming Center" application and it will be available to use on multiple channels, the number limited by the capability of your Mac to encode H.264.

Here is an overview of the *Softron Streaming Center* application :

You can stream to a RTMP or RTSP server, to a Wowza server, or directly to YouTube or Facebook. For each, you can find information about how to setup your stream on our website.

Once your preset is ready, go back to MovieRecorder and create a new "**Streaming Destination**".

Then click on the "**Setup wheel**" and select the Streaming Preset that you have just created.

You can also change the name of the destination so it describes better where you are streaming to.

Now you are ready to use it as you would with any other destination in MovieRecorder!
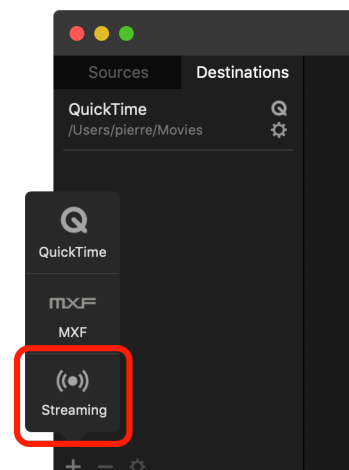
3.8. Selecting and Modifying A/V Presets

MovieRecorder 4 is capable of recording to many codecs (see our MovieRecorder web page, under codecs and formats, for the full list). Depending on the chosen codec, you will be able to record more or less channels (also depending on the format). Indeed codecs such as H.264 or H.265 (HEVC) are very demanding compared to codecs such as ProRes. Note that MovieRecorder Express is limited to the ProRes family of codecs, and does not have the full availability of codecs available in MovieRecorder 4.

3.8.1. Recommended and User Presets

We have created a set of "**Recommended Presets**" for most codecs. These cannot be modified by the user. That way you know that they won't be modified and correspond to what is usually recommend (for example, XDCAM has a specific audio configuration that is required for MXF XDCAM). We tried to limit the list, so we have not done all configurations possible and some codec flavors are not available as recommended presets.
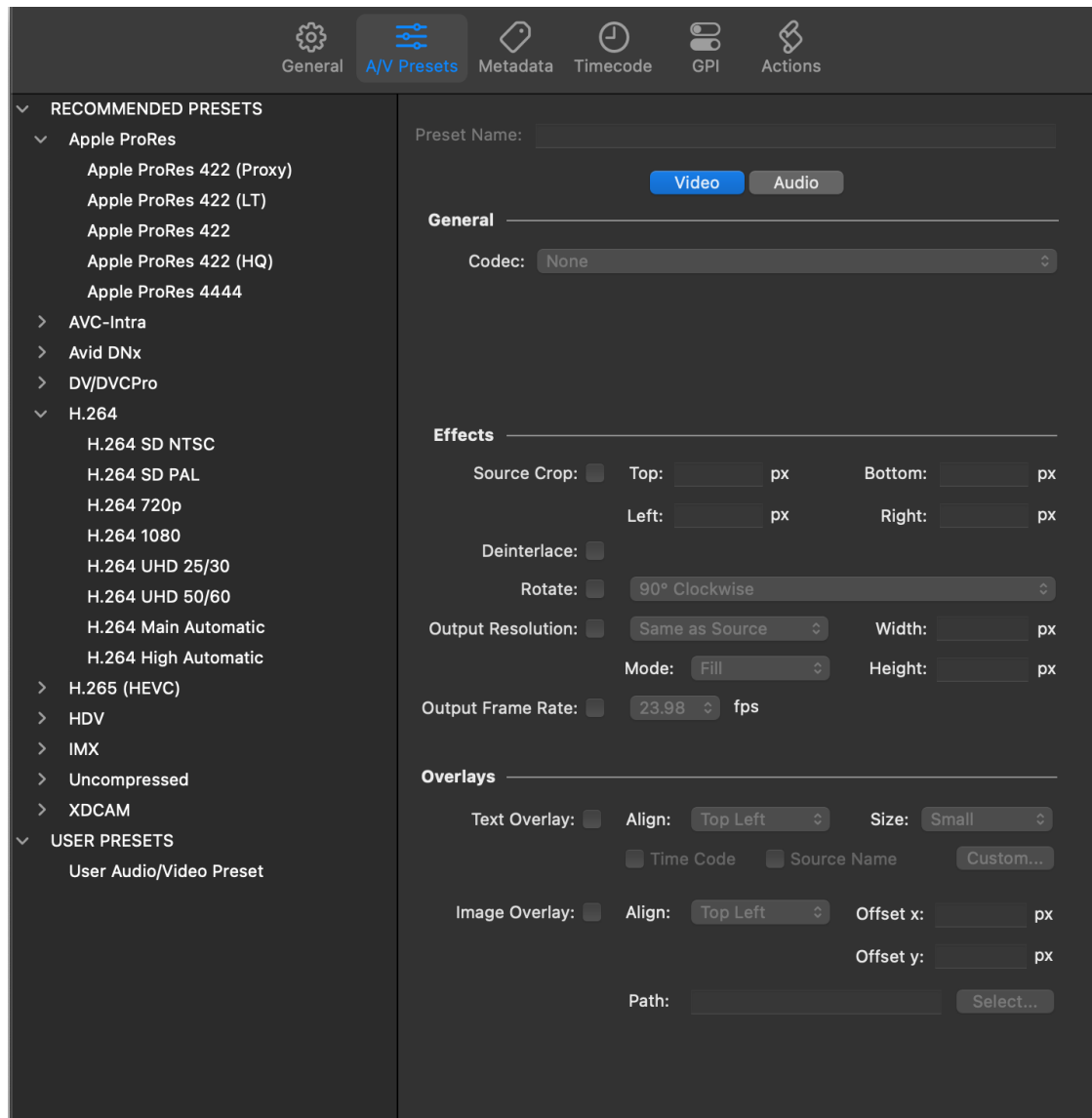
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But you can create any number of "**User Presets**" for which you can change the video codec, the effects, and audio configuration and mapping.

To create a user preset, you may want to start from a recommended preset. Highlight it in the list on the left, and then Duplicate it in one of three ways:

- Right click and select "**Duplicate**".
- Click on the **gear** icon at the bottom left of the panel and selecting "Duplicate" from the popup menu.
- Click on the "**Duplicate**" button on the bottom right corner of the panel.

Once you do so, a copy of the Recommended Preset will appear beneath the User Presets area, and the panel to the right will be opened up to allow you to make modifications to the video, effects and audio settings.
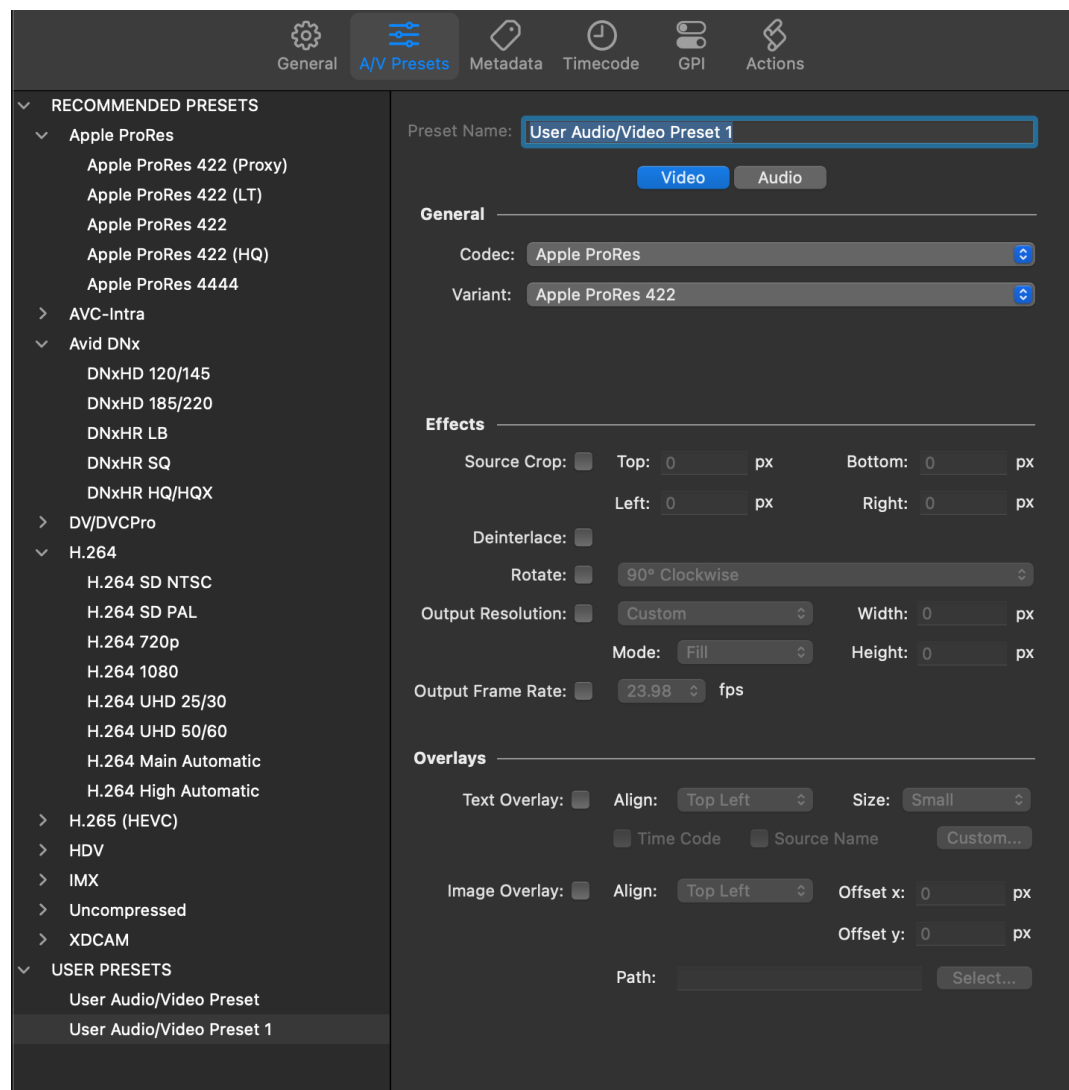
You may rename the **AVPreset name** by clicking on the Preset Name box and rewriting it to whatever name you prefer.

3.8.2. Video - General Settings

Under the video tab, first select the codec used. Then, depending on the codec selected, you may have some additional options for that codec. For example, for ProRes you can select the flavor you want (Proxy, LT, HQ,...) and for codecs such as H.264 you will be able to set the bitrate, profile level and format.
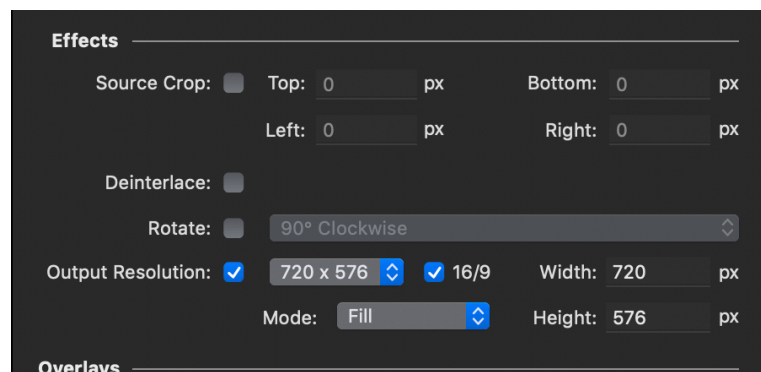
3.8.3. Video - Effects

Not available in OnTheAir Video Express.

You may also add a number of effects to the file:

- You can crop the recording.
- You can deinterlace the file.
- You can rotate the recording 90°clockwise or counterclockwise, or 180°.
- You can change the output resolution. This is especially useful after cropping a recording to restore it to an HD format, for example.
- As of MovieRecorder 4.1.3, you may set the aspect ratio to 16/9 in the generated file.

3.8.4. Video-Overlays

Not available in MovieRecorder Express.

You may also overlay Timecode and/ or the Source Name to the recording, or you may overlay an image (by aligning it as desired, and then choosing a path to the image file).

Video Effects and Overlays can greatly impact performances. So before enabling any effect or overlay, and start a recording session, make sure that your computer can sustain the increased resources required. As always run tests before going into production, using the same type of video signal as you will be using as performances can vary a lot if the video is more or less complex to encode.

3.8.5. Audio

Edit the Audio Setting by clicking on the Audio Tab.

Add (or remove) tracks by clicking on the "+" icon at the bottom of the panel, and you may duplicate channels by highlighting one and clicking on the gear icon then select "Duplicate".

You can also change the language of the track by clicking on "English" and clicking on the language of choice from the pop-up selection. This language will be assigned to the QuickTime audio track created.
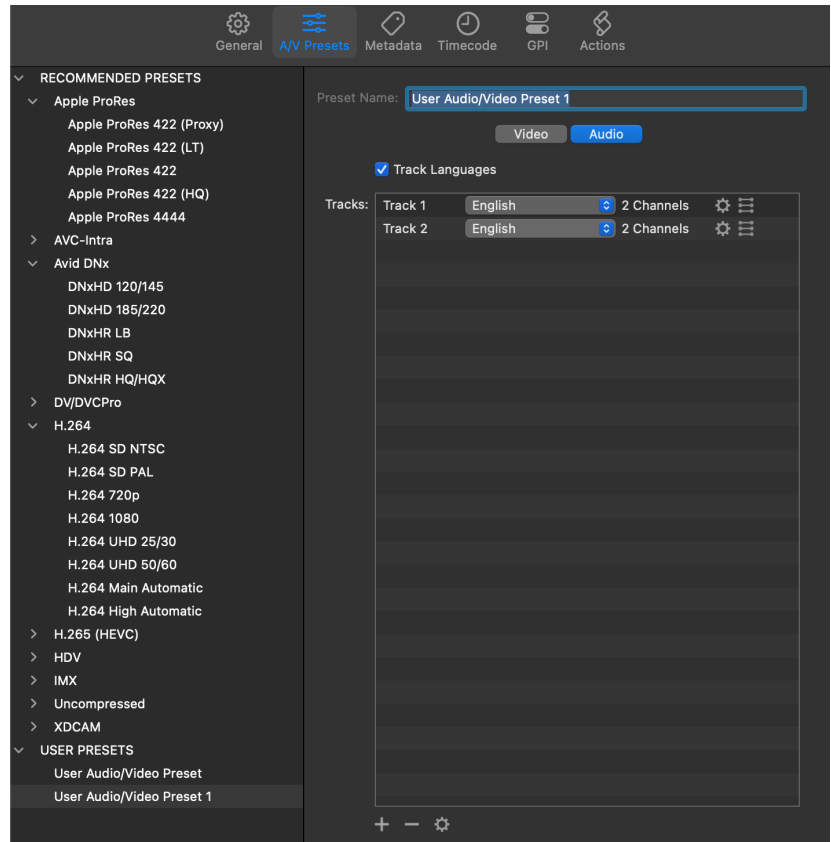
Click on the gear icon on a track line to **change the audio codec settings**:
- Change the audio codec: Linear PCM or AAC.
- Then, depending on the audio codec you can choose the bit rate, sample rate and whether it is big or little endian.
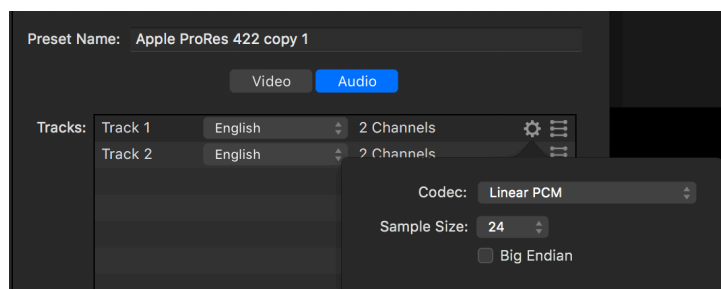
Click on the "ladder" icon on a track line to **change the audio tracks and mapping**:
- Adjust the number of audio channels you want to record in that specific track (up to 8).
- Then for each channel you may select which source channel to use, and to which speaker the audio will be mapped.

3.9. Using AppleScripts

You may now add AppleScripts to the MovieRecorder application. You may set this up at the bottom Destinations tab:

If you need more information about Applescripts in MovieRecorder, go to our website and read this article: "Learning how to build AppleScripts"
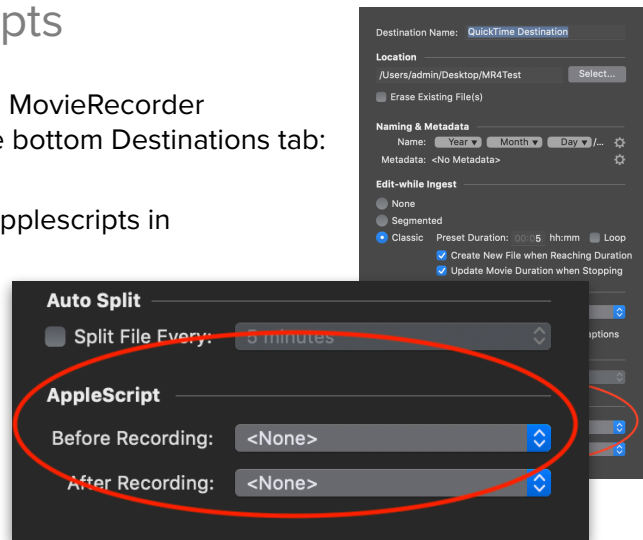
3.9.1. About AppleScript Authorization

Starting with macOS 10.14 (Mojave), the OS may show a warning when an AppleScript tries to control some applications (particularly the ones with private info). It is not the case for all Applications, and you will only know when the AppleScript is triggered. But you usually don't want to have a warning showing up during your shows.

This is why we have an "AppleScript" Setting pane where you will be able to "Authorize" an AppleScript.
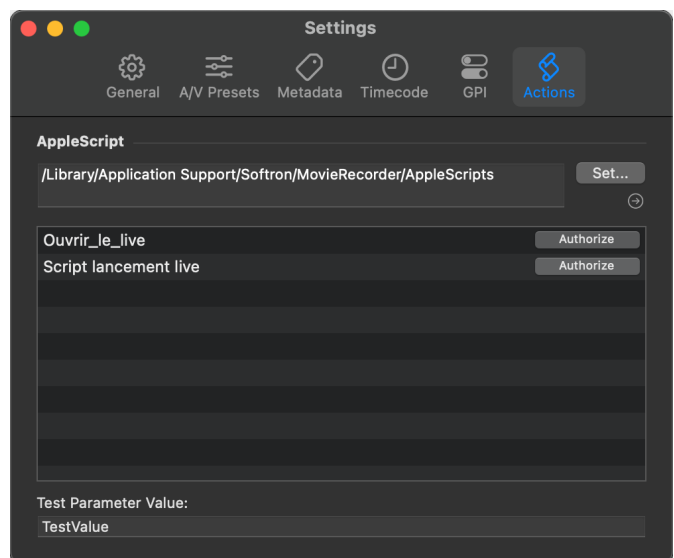
3.9.1.1. When Should AppleScripts be Authorized?

Unfortunately it is not very clear as to when an AppleScript will require you to be authorized to control the other Application. It all depends on the kind of application you are controlling, and on the kind of info that you are requesting.

Also, you should not have to authorize again after having installed an update, but just to be sure, you should do that from time to time.

> Authorizing AppleScripts will actually run the script and do the action. So make sure that you do not do this authorization during a production, or that the Script does not have an impact on your production. You could write AppleScripts that you use only for tests and don't actually do anything but are just used for Authorization.

3.9.1.2.   Changing the Location of the AppleScripts

At the top of the window, you can see where that AppleScript is located and change its location by clicking on the "Set..." button.
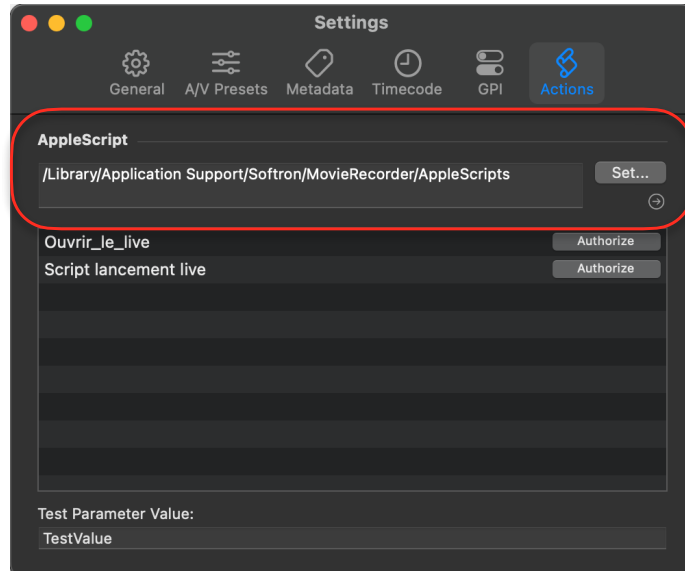
In the table below you should see the list of AppleScripts that you have placed in the Actions folder.

3.9.1.3.   About the Test Parameter Value

Before you click on the "Authorize" button, you should first make sure that you have entered a valid "Parameter" in the text field at the bottom:
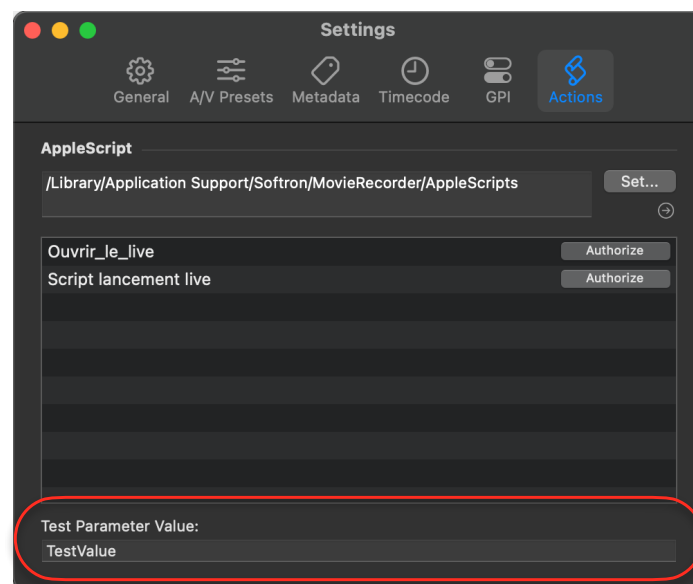
The validity of that parameter depends on the AppleScript. Some of them will require a text, others a number. In general it's just a test and leaving it to "TestValue" should be just fine for the purpose of this test.

3.9.1.4. What will Happen when you Click on Authorize?

As explained above, we will actually run the AppleScript and it will then do the actions it should do. (We tried other options, such as just opening the application, but this would not trigger the authorization, as it will also depend on what you ask the application to do). So either:

- if the AppleScript performs an action that does not impact your production, just click on "Authorize".
- if it will have an impact on your production:
    - authorize it when you are not in production
    - or write another "Test AppleScript" that will do something else, but not impact your production. Make sure it does still try to control all the applications, and that this action triggers an Authorization. We have seen that some actions triggered it and others not. It basically depends on what you are asking the application.

This is why when you click on Authorize, we will show the following warning:
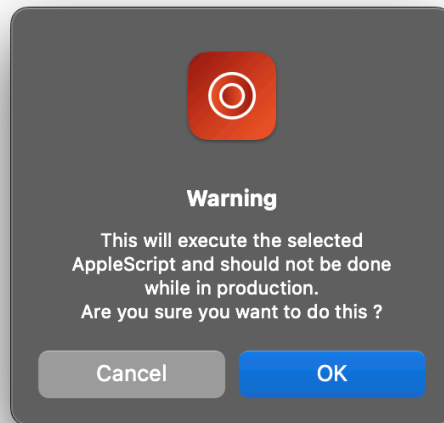
Once you have clicked on "OK", a few things may happen:

- the AppleScript **will run and not show any window** asking you if you authorize to control another application. You are all good then.
- a **window such as this one will show up**. Click on OK. And now you are good.
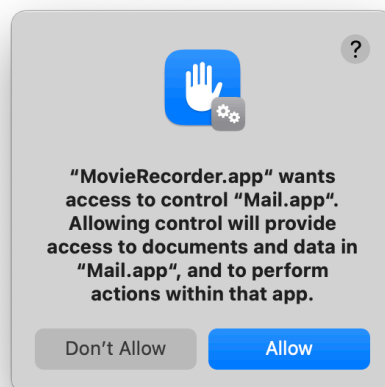
3.9.2. Possible Errors

3.9.2.1. Error with the Script itself

A quick reminder that to work, your scripts should all start with "on Action (parameter)", and end with "end Action".

As the AppleScript runs you may have an actual issue with your script, if there is an error in your script, you should see the following error. Make sure to correct your Script.

The operation couldn't be completed. /Library/Application Support/Softron/MovieRecorder/ AppleScripts/SECREC.scpt: execution error: OnTheAir Video got an error: Can't get playlist "Hello Softron". (-1728)
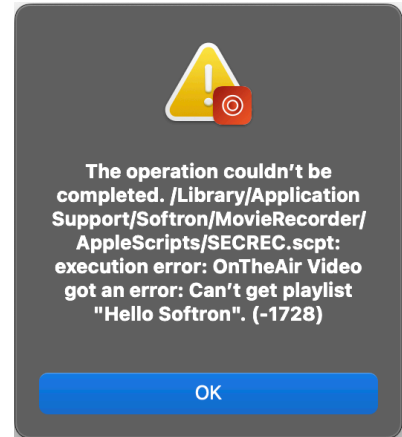
3.9.2.2. Application not Authorized

If in the past you have refused the authorization, the following error should be shown.

The operation couldn't be completed. /Library/Application Support/Softron/MovieRecorder/ AppleScripts/RepeatStop.scpt: execution error: Not authorised to send Apple events to Mail. (-1743)
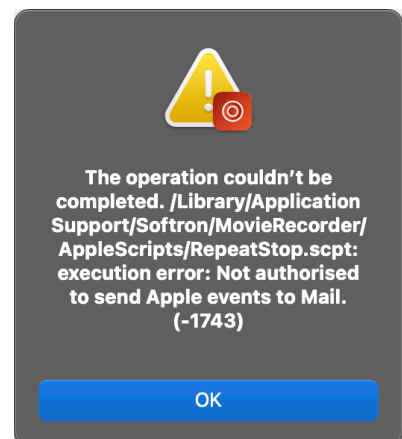
To overcome that issue, open "System Settings > Security & Privacy > Automation". Search for MovieRecorder, disclose the content, and make sure to enable the control of the Applications that you want MovieRecorder to control.

This screenshot on the right means that MovieRecorder is allowed to control (send AppleEvents) to the "Mail" application.
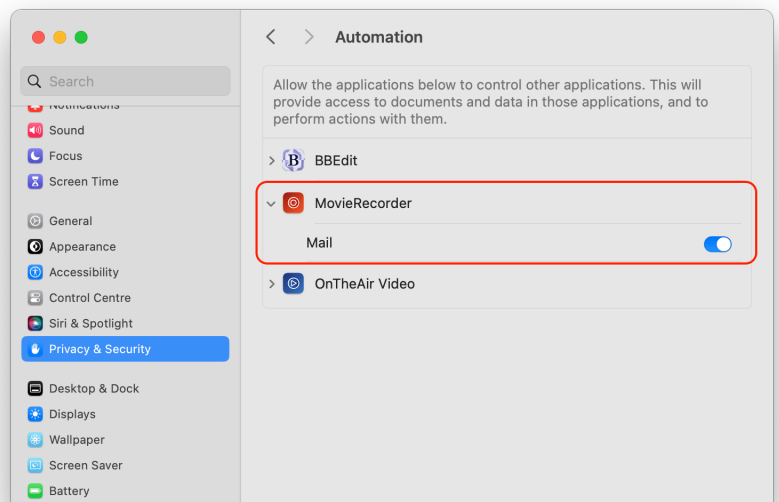
4. Viewers Area: Layout and controlling Sources

4.1. Setup the Viewers Layout

If you have multiple sources, you can display any number of Viewers (up to 49, depending on the size of your display) by clicking on the Viewers setup icon at the top right corner of the window:
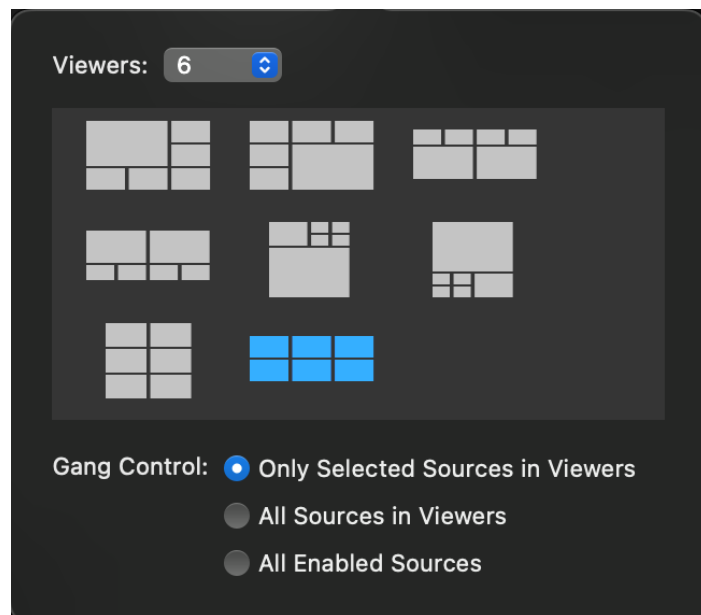
Select the number of Viewers to be displayed, then select the layout you want to use:

If you enable the option "Size to Fit", the Viewers will fill the size of the MovieRecorder window. When enabled, the Viewers can be larger than the Window itself and thus you may not see all sources at once. To resize the Viewers, use the bottom right corner of the first Viewer, click, drag and drop to set it to the size you need.

Note that we provide a set of layouts but this can be customized. If you don't see the layout that suits you, get in touch with us and we'll explain how to customize the Views to fit your needs.

From there, as well, you can set up the behavior when you will use the gang controls (see below the section about gang controlling multiple sources at once).

4.2. Assign Sources to Viewers

Once sources are enabled, you will be able to assign them to Viewers to see the incoming format and control the recording for it. You can either:

- Click on the "Select a Source..." menu at the top left of any Viewers. Then select the Source you want. You can select either a Local, NDI, or Remote Source.
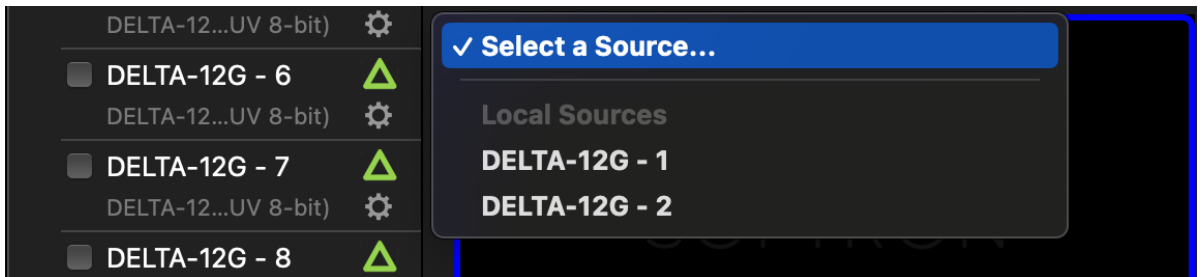
- Alternatively, you can enable a source with a simple drag-and-drop: click on the source cell in the sources list, and drag and drop it into any of the Viewers. You can also select multiple sources at once and drag and drop them to the Viewers area. This will assign all of them to the Viewers at once, and enable them if they were not enabled yet

4.3. Controlling the Overlays on the Viewers

A great deal of useful information can be displayed on the viewers, including the Timecode, the recording's duration (while recording), and VU meters:

(Some Overlays may not be available in MovieRecorder Express; for example, the metadata and CC icons as these features are not available in MovieRecorder Express)

You can set which pieces of information is displayed by using the controls in the upper right corner of the UI:

- *The first icon* above is to select the number of viewers that are visible.

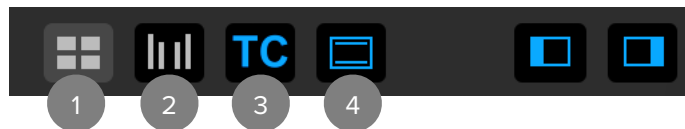- *The second icon* is used to set up the presence of VU meters. Clicking it pulls up a pop-up menu, from which you can select how many meters will be displayed.

  > There are three different settings for the VU meter display: off (the icon will be white on a gray background); on when you move your cursor over the viewer (white on a black background); or always on (blue on a black background).

  > Clicking on the icon cycles through the three choices.

- *The third icon* is for TC display. As in the VU meters, clicking on the icon cycles through off; on when moving a cursor over the viewer; or always on.

- *The fourth icon* allows you to display or hide the information presented in the outer corners of the viewers: the Source Name (upper left), the Destination Name (upper right), volume controls (see below) and full-screen (lower right corner), and the metadata tag. When the icon is blue on a black field, the information is displayed; when white on black, it is hidden.

4.4. Enabling Destinations

(In MovieRecorder Express, you'll only be able to enable one destination at a time)

When no destination is enabled for a given source, it shows a warning in the middle of the viewer: "No Destination Enabled":
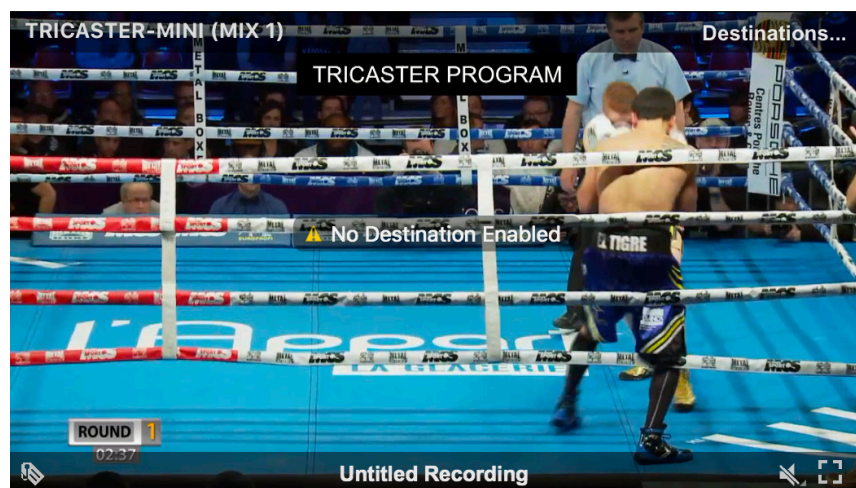
Once destinations are configured (see below), you can enable one or more destinations to a given source.

There are multiple ways to enable a destination for a source:

- **Click on "Destinations..."** at the top right of a viewer, and enable the destination(s) you want to use:

- In the Destinations list in the left pane, **right-click on a destination** and select either:
  - "Enable On All Sources" to enable that destination on all sources visible in the viewers.
  - "Disable On All Sources" to disable that destination on all sources visible in the viewers. *(Not available in MovieRecorder Express)*
  - "Solo On All Sources" to enable only that destination on all sources visible in the viewers (all other destinations will be disabled). *(Not available in MovieRecorder Express)*
- **Drag and drop** a destination on to a Viewer with either of these modifier keys:
  - "No modifier keys": the destination will be enabled on the Viewer.
  - "Alt": the destination will be "solo" on that viewer, all the others will be disabled.
  - "⇧": the destination will be enabled on all the Viewers.
  - "⇧ + alt": the destination will be "solo" on all the Viewers.

⚠️ The"enable on all" feature only works for local or NDI sources; it does not work for remote sources.

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Why should I use Multiple Destinations?

Typically, multiple destinations can be useful either for:

- Recording the **same codec to multiple volumes**, so you have a backup (in case of hardware failure, for example). If the AV Preset is the same, we will encode the signal only once, and write the same frames to the 2 (or more) destinations. This means that it does not use a lot more CPU to encode to multiple destinations.
- **Record a High-Res and Proxy**. The same source is recorded to two different codecs and/or frame sizes. So you have one high resolution version together with a lower resolution that is easier to work with, as it will use less bandwidth

The number of destinations that can be enabled at once will depend on a few things:

- If you use **MovieRecorder Express**, you'll be able to enable just one destination at a time.
- the **computer**. The encoding happens on the CPU, so the better the CPU, the more destinations you will be able to do.
- the **format** and **fps** of the signal. Of course you'll be able to do less encodings in 4K than in HD.
- the **codec** used. Some codecs are more demanding than others. H.264, for example, is one of the most demanding codecs. Some computers (all the Intel Core i5 and i7 processors) have a hardware acceleration chip for H.264 encoding of one channel, and one encoding process can happen on that chip. So, for example, on a Mac mini, if you encode one H.264 destination almost no CPU will be used.
- the **storage**.

It is difficult to give exact numbers, especially as they can change with macOS versions, drivers, hardware, etc… so check on our website in the tech specs area, or contact us for more information.

4.5. Other Controls on Viewers

4.5.1. Audio Preview

Clicking on the Speaker icon at the bottom right of each Viewer mutes (or un-mutes) your audio on the viewer. Clicking and holding the Speaker icon opens another window that allows you to set up your Audio Channels for the viewer.
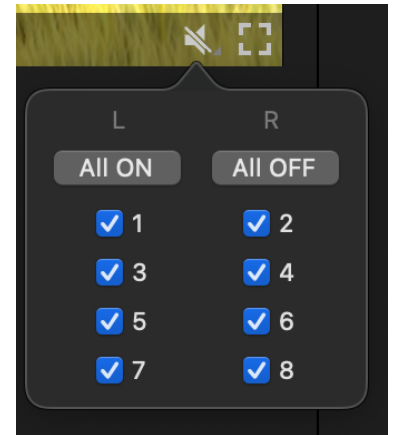
But if you want to control the Volume of all Viewers at the same time, you can do that at the bottom of the Viewers window:
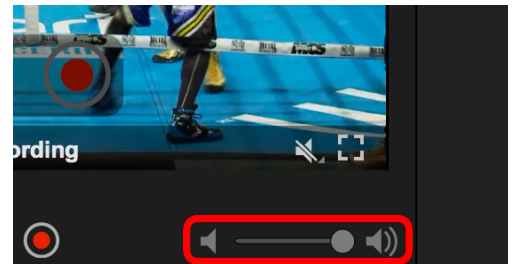
4.5.2. Temporary Fill Screen

You can also set one of the Viewer temporarily to fill the screen by clicking on the Fill screen icon at the bottom right of each Viewer:
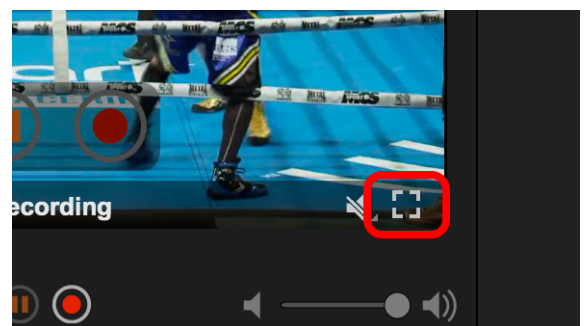
5. Recording with MovieRecorder 4

5.1. Basic Controls

Recording is simple and intuitive with MovieRecorder 4. To do so, simply hover your mouse on a Viewer and click on the corresponding controls that show up.
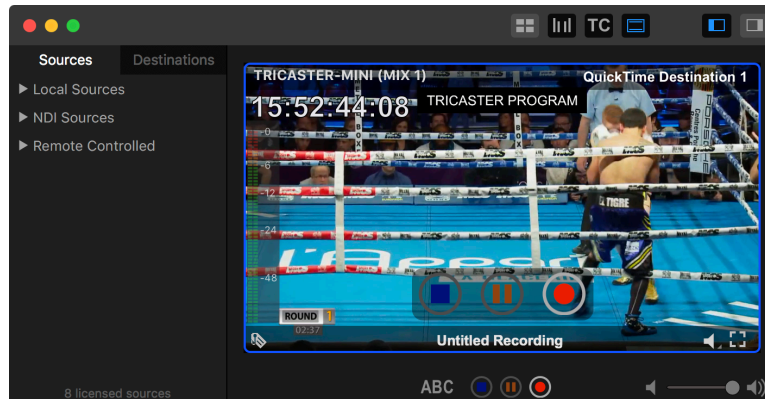
Click on the red Record button to start recording (the only button available); the Viewer will then be circled in red and a "REC" will show up at the top:
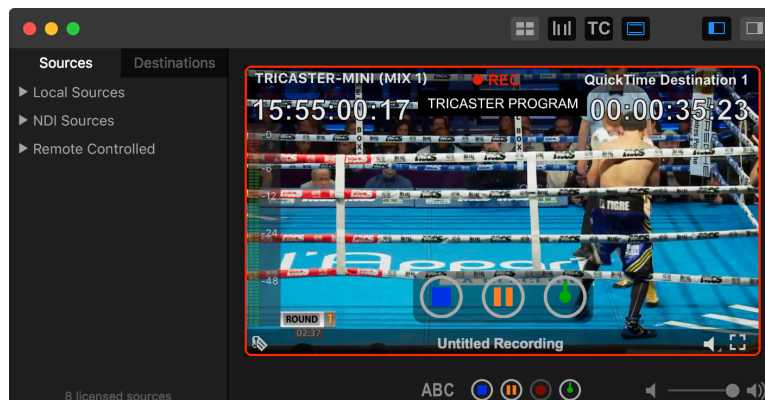
Note that the controls changed slightly and you can now select:

- Stop recording
- Pause recording (this is only available for "Classic" destinations)
- Time the recording: Clicking on the Timer button pulls up a pop-up window that allows you to either finish in a certain amount of time, or to end at a certain time. This is very useful if you don't want to forget to stop the recording:
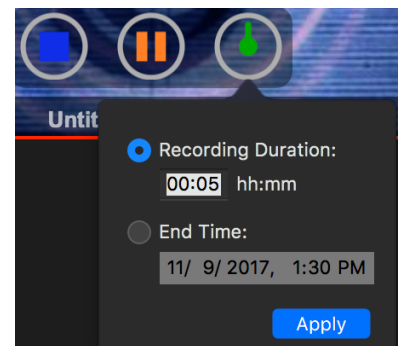
5.2. Gang Recording

You can set up MovieRecorder 4 to control multiple recordings at once. Once one or more viewers are selected, gang controls appear on the bottom of the UI. You can use them to control all of the selected viewers with the touch of a button.
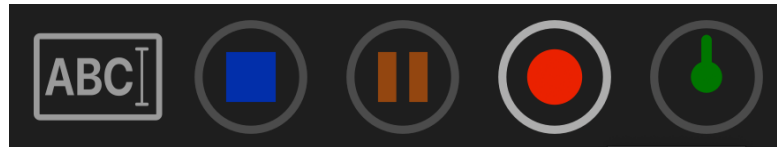
There are three modes of Gang controls available in MovieRecorder 4. These are set in the Viewers layout popover:

- **Only Selected Sources in Viewers:** This is how MovieRecorder 3 used to behave: When you use the gang controls, only the Viewers selected (highlighted in blue) will be controlled. You can use the cmd+A keyboard shortcut to quickly select all.
- **All Sources in Viewers:** In this case, you don't need to worry about the selection, all the sources visible in Viewers will be controlled.
- **All Enabled Sources:** Here even Sources that are not visible will be controlled by the gang controls. This can be useful if for example you have used the temporary full screen feature of one Viewer.
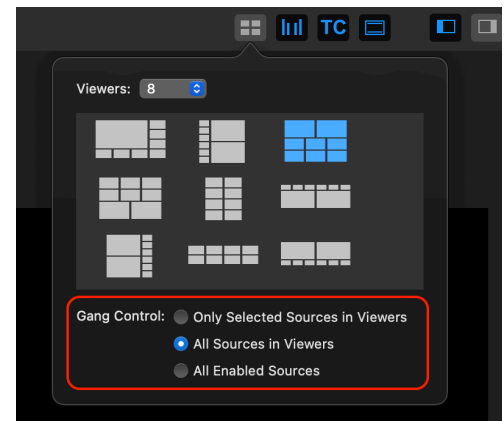
- Below are the keyboard shortcuts that can be used that will have the same behavior as clicking on the gang controls in the user interface (so it depend on your gang controls settings):

  - cmd + 1: Select/Deselect Viewer 1
  - cmd + 2: Select/Deselect Viewer 2
  - cmd + #: Select/Deselect Viewer that corresponds to the number
  - cmd + R: Record
  - cmd + K: Stop
  - cmd + P: Pause
  - cmd + T: Timer (pulls up the Timer settings window)
  - cmd + N: Gang Naming (allows you to name all ganged recordings at once)
  - cmd + L: Lock the viewer(s)
  - cmd + U: Unlock the viewer(s)

6. Control Remote Sources

To set up the remote control option, go back to chapter "Remote Controlled Sources".

6.1. Assing sources to Viewers

Remote sources are available as any other sources to be assigned in the Viewers. You can assign remote sources exactly the same way you assign "Local" sources to Viewer:

- Either click on the top left of the Viewers and select the source from the drop-down menu:
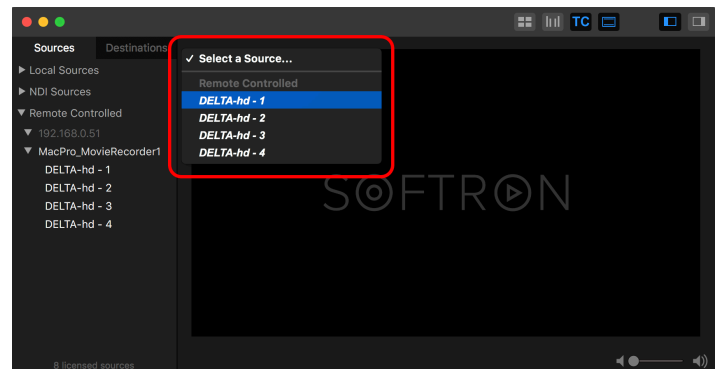
- Or you can select them from the list of sources, and drag and drop them on to a viewer. If you drag and drop multiple sources at once, you will see a green outline on all the viewers they will be assigned to (they will replace other sources that were eventually assigned).

- Once Remote sources are added to the Viewers, note that their name is in italics:
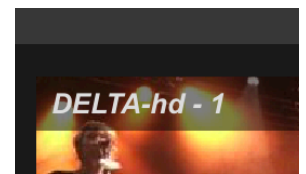
6.1.1. Specifics of "Remote Sources"

Remote sources are controlled the same way as Local sources, but with some differences:

- **You cannot edit the sources settings, nor the destinations settings**. This is by design, because we wanted to make sure that an "admin" user could do a setup in the Remote MovieRecorder while the users could only control it, but not change the important settings.
- You cannot do scheduled recordings or VTR batch captures on Remote sources. These features may be added in future versions of the application. Contact us if you need that feature.

6.2. Remote Control with the Web UI

You can control a remote computers from any browser, on any type of computer, Mac, PC, iPad... For that open a web browser such as Safari and enter the IP address of the computer followed by the port number 8080, for example: http://127.0.0.1:8080/. This should show the following page:
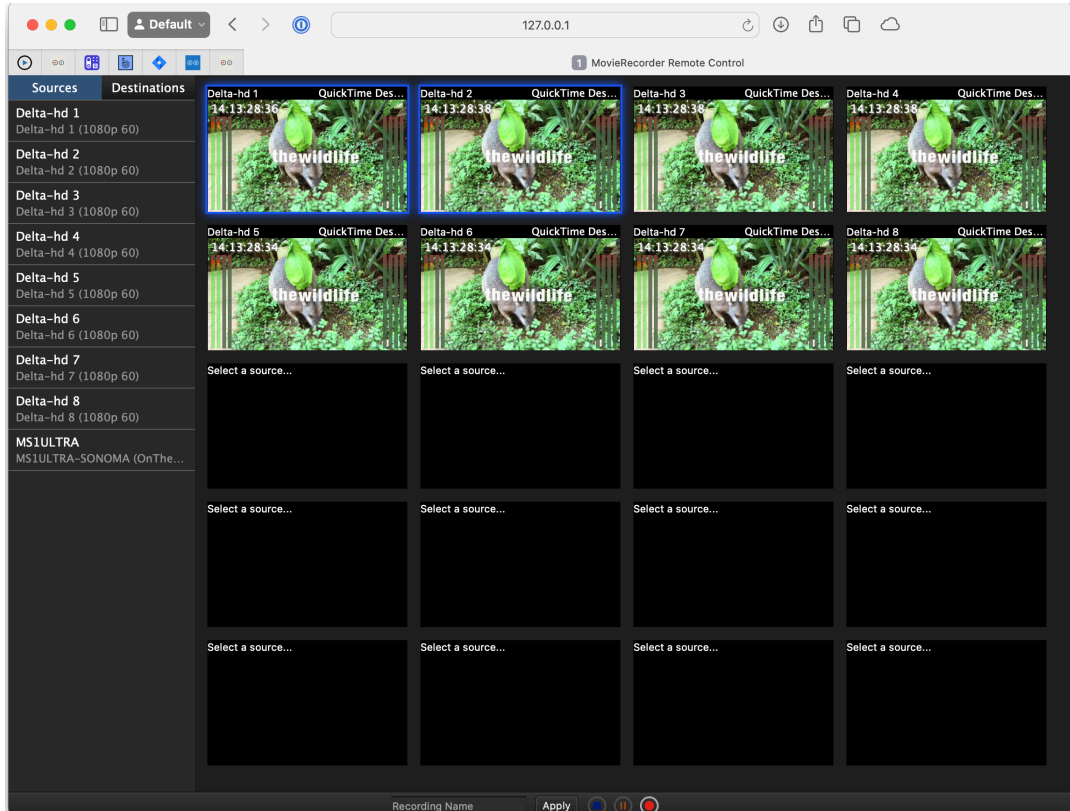
You will then be able to control the multiple local sources available on that computer.

Note that you will only be able to control the Local sources of that MovieRecorder, not the eventual remote sources that it might be connected to.

If you want to view just one source, you can use this URL instead:

http://127.0.0.1:8080/index_single.html

This would show the following page, with just one source:

Important Note: These two webpages are more of a sample to show what is possible to do, it's not a polished solution. The source code of that page is available, and you can modify it at will should you need to modify them to your liking.
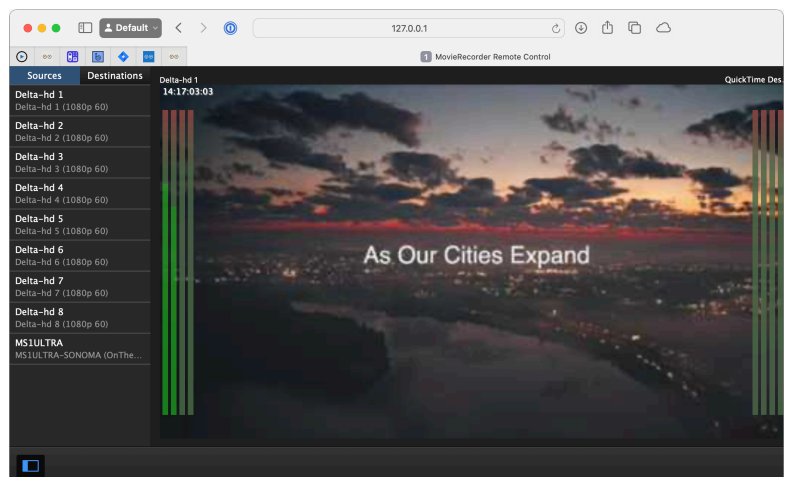
6.3. Remote control the Schedule

Introduced in MovieRecorder 4.5, there is now a scheduled recordings webpage available at http://127.0.0.1:8080/schedule/index.html.

This page supports multiple sources, multiple destination assignments, workday/weekday viewer settings, and much more. There is an explainer video available here.
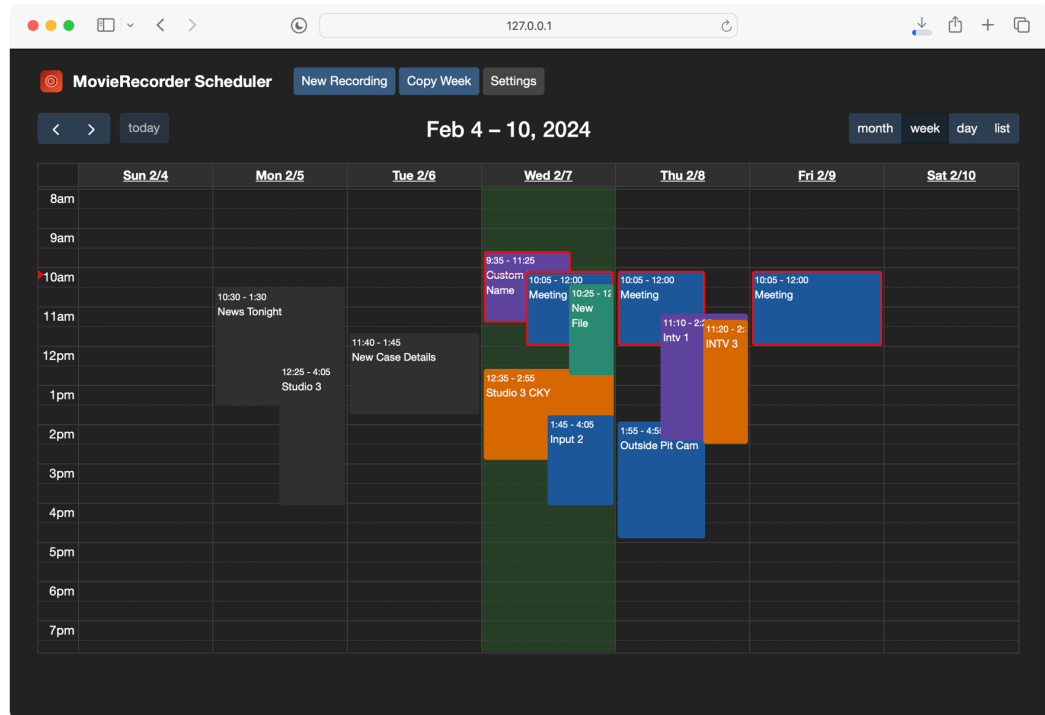
Information about Scheduled Recordings in the next chapter.

6.4. Remote control with the REST API

In order to do the remote control using a web browser, we use a REST API. You can find some information about our REST API on our support desk. If you need more info, don't hesitate to get in touch with us. All the steps are explained in our online article.
On the computer that runs MovieRecorder, you can enter the following url in a Browser:
http://127.0.0.1:8080/api.html

6.5. Remote control with AppleScripts

MovieRecorder is also AppleScriptable. You can create AppleScripts that control a "local" MovieRecorder (see sample AppleScript below), but also a distant MovieRecorder. But the best would be to go for the REST API.
Information about how to use AppleScripts in chapter "Using AppleScripts".

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7. Scheduled Recordings

You may schedule when you would like a recording to begin and end (at a specific date or on specific days of the week). Any schedules you have previously set up will be listed on the panel beneath the **Schedule** tab; if the box is checked, the schedule is active and the recording will begin and end as specified.

You may create new schedules by clicking on the "**+**" icon on the bottom left of the panel. A pop-up window will appear with a number of customizable features.

Under **Recording Name** is a box within which you may enter the name of the recording to be scheduled.
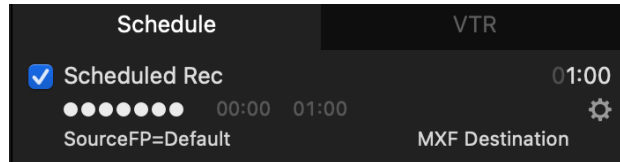
Below that is the **Type** of schedule, either **Weekly** (wherein you would check the boxes beneath the day(s) of the week you would like to record) or **Specific Date** (wherein you would input the date you would like to record). Below the **Type** is the **Time (hh:mm)** boxes, wherein you would input the **Start Time** and **Duration** of the recording; the **End Time** will be automatically calculated (alternatively, you could input the **Start Time** and the **End Time**, and the **Duration** would be calculated).

Below that you must select the **Source** of the recording. Click on the Sources box and scroll down to and select the appropriate Source. Below that is the **Destinations** section, where you may select which destination(s) to which you would like to record.

You may **Edit**, **Delete**, or **Duplicate** any **Schedules** you have set up by clicking on the gear icon at the bottom left corner of the **Schedule** panel and selecting the appropriate action. You can also delete a **Schedule** by highlighting it and clicking on the "-" icon.

8. Recording with Closed Captioning
Not available in OnTheAir Video Express.

As long as the incoming video signal has valid Closed Captioning (see our article How to Do Closed Captioning with Movie Recorder for details), the Closed Captions will be included in the recorded file.

8.1. Setting Up Closed Captioning (CC)

In MovieRecorder, there is nothing much to do. If you have purchased the option, just start the application, enable one source. If you have a valid signal, and use a valid destination (see above), just start recording and the file generated will have the Closed Captioning.

8.2. Supported Hardware

Supported hardware:

All **AJA** and **Deltacast** devices support Closed Captioning.

With Blackmagic-Design, recording Closed Captioning getting in an input is supported with :
   • The devices that support 4K and more will support recording video in 8-bit and 10-bit.
   • All other devices will only record closed captioning when recording video in 8-bit.

8.3. Supported Formats

Note that:
   • **MovieRecorder 4.1** and later supports recording CC to both QuickTime and MXF Destinations. (CC is included in the standard application in MovieRecorder 4)
   • **MovieRecorder 3** records CC only to QuickTime Destinations, not to MXF Destinations and supports only CEA-708. (CC was a paid option in MovieRecorder 3)

In HD and more, MovieRecorder only supports:
   • CEA-708 captions
   • the captions must be present in the VANC of the incoming video signal
   • MovieRecorder will create a QuickTime closed caption track (CEA-708)
   • the supported formats are 1080i29.97 and 720p29.97 or 720p59.94
   • downscaling or upscaling, resizing, etc are not supported

In SD, MovieRecorder only supports:
   • CEA-608 VBI Line 21 captions
   • the captions must be embedded in line 21 of the VBI (Line 21 is the second (field 1) and third (field 2) lines on a 720*486 video)
   • the input must be NTSC
   • the destination should use a 720x486 format, it won't work with other frame sizes
   • downscaling or upscaling, resizing, etc are not supported

8.3.1. With CEA-708

When a signal gets in MovieRecorder and there is valid CEA-708 information available in the signal, we will display a small "CC" icon at the bottom left of the Viewer.

When CC are getting in, they will be overlaid on top of the Viewer. You can disable that by clicking on the CC icon:

8.3.2. With CEA-608 VBI Line 21

As the Closed Captioning info is "burned in" the video frames, we cannot know that there is CC info, unless if we analyzed the frame, but this could use some CPU. So the only way currently is to have a look at the top of the image, and check if you can see the white and black areas, but it might be difficult to see, also because we can crop a few pixels at the top.

If you cannot confirm the presence of CC in a file, please read our website article "HOW TO: Record Closed Captioning with MovieRecorder" to have all the information.

9. Using the Stream Deck Controller

MovieRecorder can be controlled simply using a Stream Deck from Elgato. Different options exist:
- Use the integration that we have built in our software,
- Or use the Bitfocus Companion and either:
    - Some Companion "Modules"
    - Our RESTful HTTP AP
    - The HyperDeck Emulation
- Or use the software that Elgato is providing.

It will be one or the other.

9.1. Softron Integration

First, start your Softron application. Depending on the application that you use, you will have different layouts.

If you go to the menu "Window > Show Stream Deck window", you should see a window such as this one:
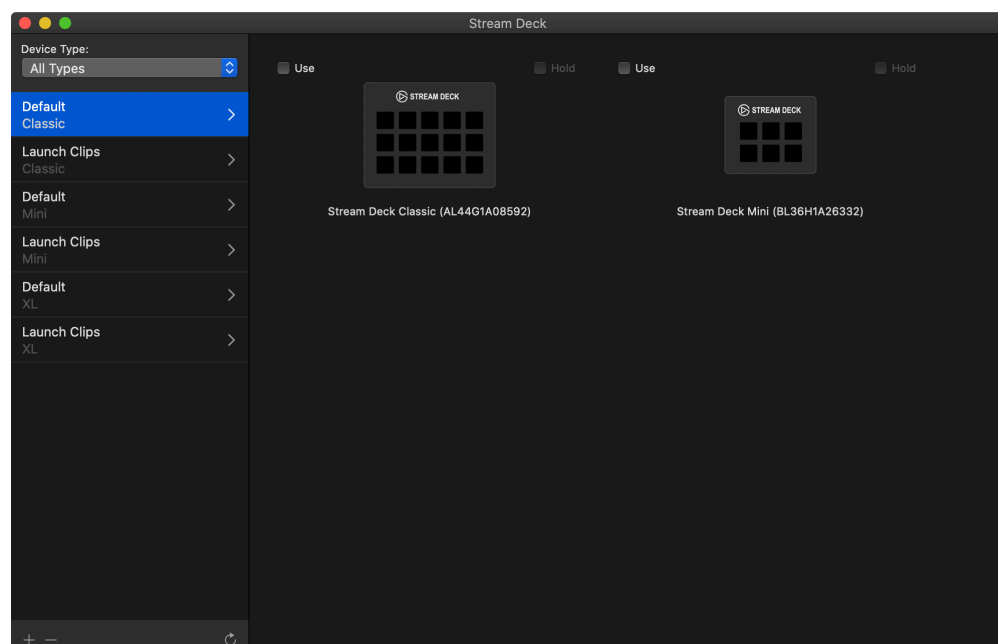
There are 2 sections in the window:
- To the left is the list of available pages, with their names and which kind of Stream Deck device they are for.
- To the right is the list of Stream Deck devices that are connected to your computer. On the screenshot above, there is a "Classic" and a "Mini"

We wanted to allow you to select which device you want to use for each application. Before you can start using your Stream Deck, you have to drag and drop at least one page from the list on the left on to one of the device on the right.

You can also decide to enable the "Hold" option. This option is important for two things:
- if you want to be able to trigger your Softron application, even when using a different application
- if you are using multiple Stream Decks and you want each to use a different application

In order to be able to use the Softron integration, you need to make sure that the "Stream Deck" software is not running. If it is running, it will prevent us to access the Stream Deck. Make sure that it is not set to automatically launch at startup.

If you need help, check our webpage explaining how to use a the Stream Deck Controller

9.1.1. Customizing the Pages

You can create new pages by clicking on the "+" icon at the bottom of the pages list:

Each page can also be modified. For this, right-click on any of the page, and select "Edit":

Or you can click on the triangle.
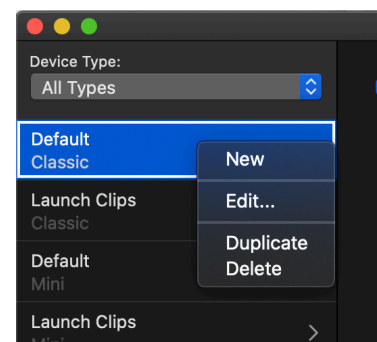
When you are editing a page, you will see the device in an enlarged image, with the list of possible actions on the right:
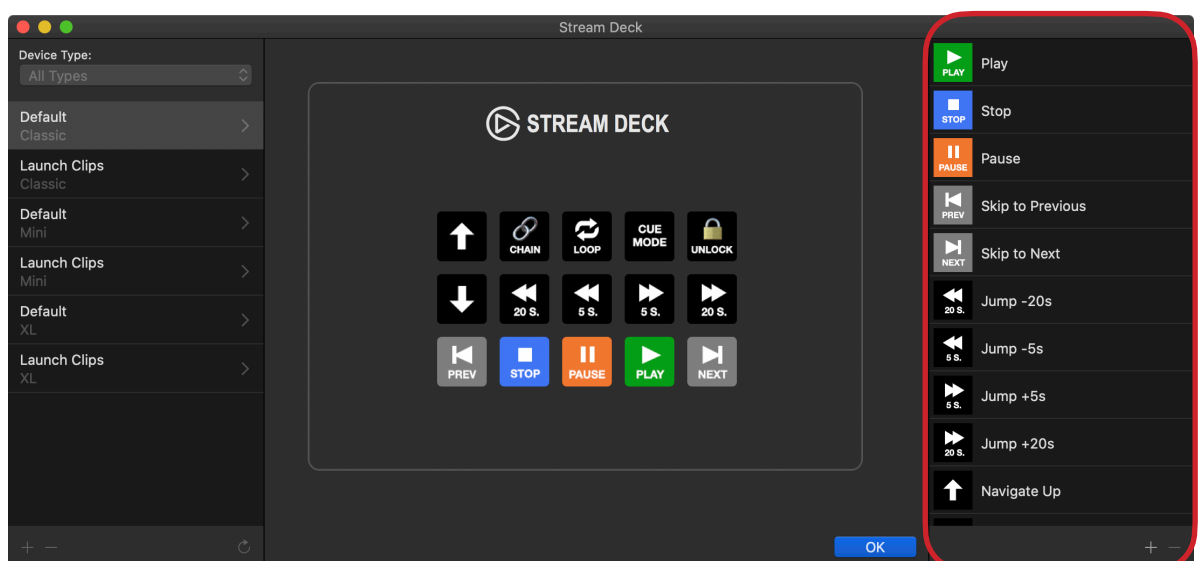
You can drag and drop actions from one button to another to move them, or from the list to a button. Click on "OK" when you are done.

9.1.2. Customizing the List of Actions

In the edit window, you can create a new action by clicking on the + icon at the bottom of the list. You can also select an action, right click and select either "New" or "Duplicate" (note that you cannot edit the default actions).

After a new action is created (or duplicated), click on the "wheel" icon to edit it (or right-click and select "Edit"). This should open a window:
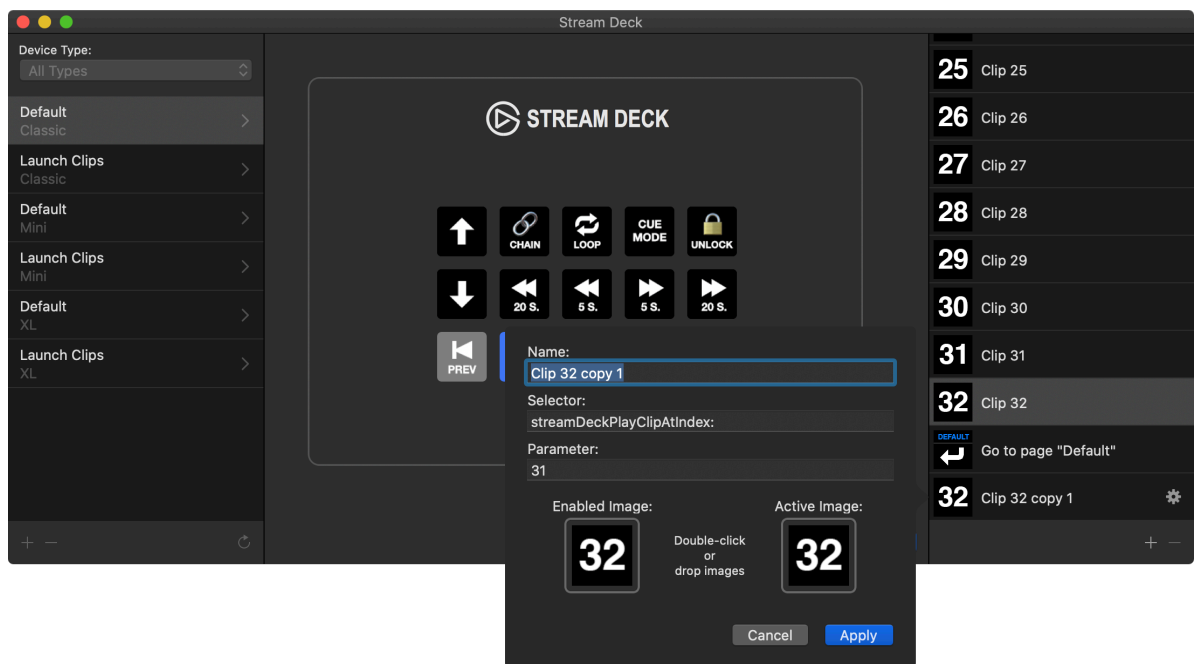

You can set:
- **Name**: This is the name displayed in the list
- **Selector**: This is the "action" that will be made. We recommend that you duplicate an existing action and then edit the parameter, as all possible actions are listed in the list, there are no other.
- **Parameter**: Only certain actions support a parameter. This is true for example in OnTheAir Video to start playing a specific clip, or in Multicam Logger or M|Replay to add markers.
- **Enabled Image**: It's the image that is used when the action is not active.
- **Active Image**: It's the image that is used when the action is active. For example if a source is recording in MovieRecorder.

9.1.3. Restore to Defaults

The "Restore to defaults" button can be used if you want to restore to the default configuration.

Note that this can be useful also if you want to use new features or buttons that were done in a new version of the application. It will also copy the new images to the folder.

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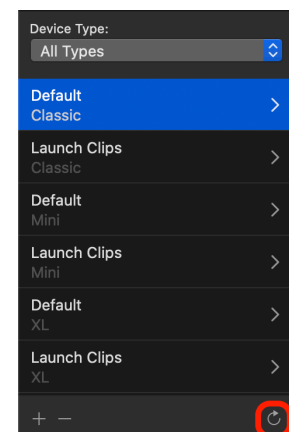
9.2. Bitfocus Companion

First you will need to download the application from Bitfocus's website. Once installed, start it, and click on the "Launch GUI" button.

Then a few questions will be asked to do the setup; we suggest that you check the documentation online to set it up the best way to match your needs. In this case, use a module for MovieRecorder

9.2.1. Using a Module

To control MovieRecorder with Bitfocus, you will need to find the IP address of the computer where it runs (check the network settings) as well as the port number. You can find the different port numbers either in the articles in our help center, or simply by checking the settings of your application.

- Once you have done the first steps of your setups, in the "Connections" tab of Companion, search for "Softron" to show all modules available.

- Click on "Add" next to the module you want to use.

- Then configure:
    The Label = how it will be shown in the Companion settings
    Target IP = the IP address of the computer where your Softron application is running
    Target Port = the port number used by your Softron Application.
Once this is setup, you should see that the Status is now "Connected".
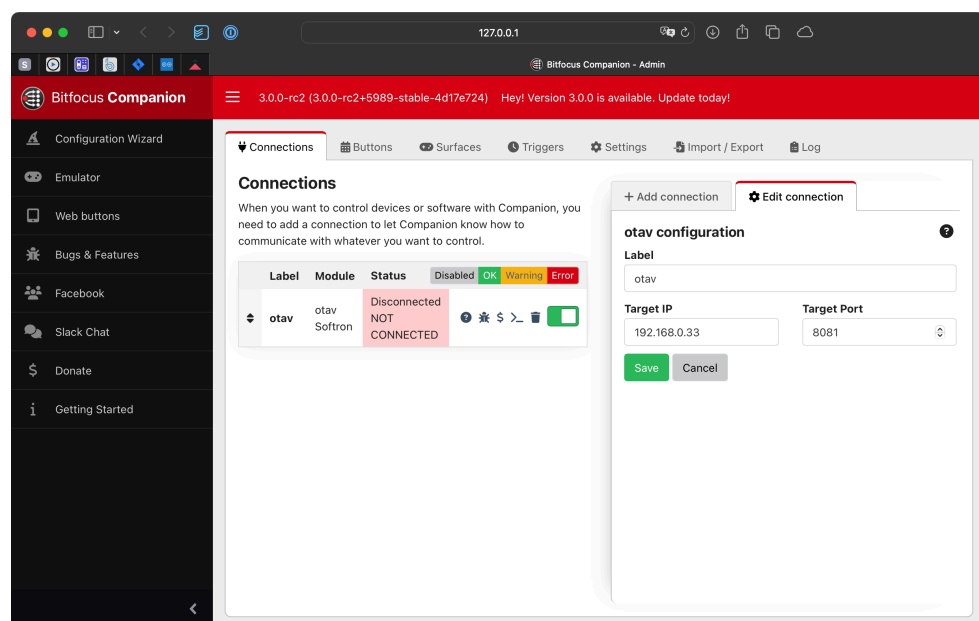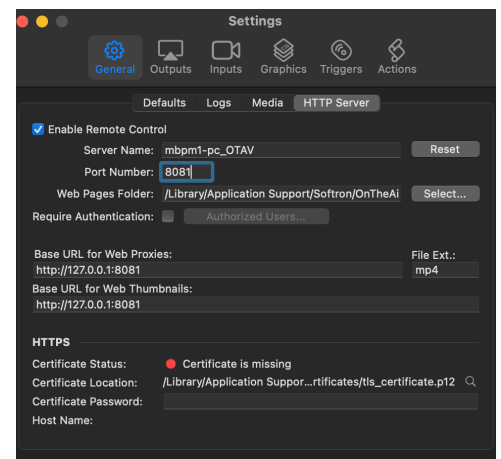
Now go to the "Buttons" pane, where you will now see the Presets for MovieRecorder. Click on the red button, to show the different types of actions. you will see the different "Presets"

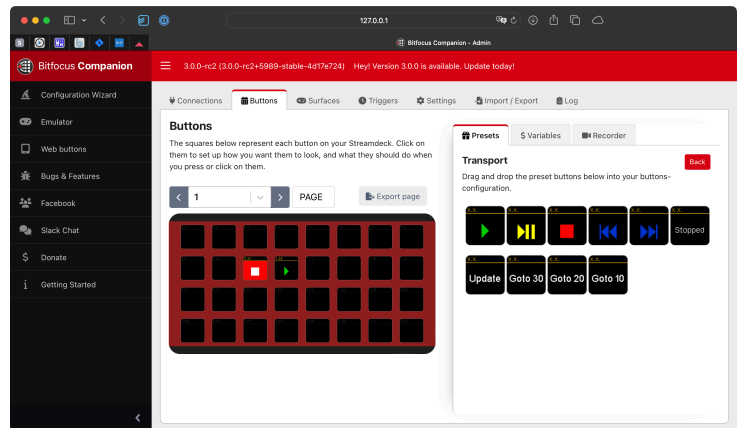available to control MovieRecorder. You can now drag and drop these on buttons to assign them:

That's it, the buttons should now show up on your Stream Deck. If you want to emulate on your computer, you can click on "Web buttons" in the left list.

Of course there is more to it, you can then also edit the preset buttons, as these are just preset, you can modify them to your liking...

9.2.2. Using the REST API

If you want to do actions not available in the MovieRecorder modules, you can use our REST API. You can find some information about our REST API on our support desk. If you need more info, don't hesitate to get in touch with us.

All the steps are explained in our online article.

9.3. StreamDeck Application

We won't go into too much detail, as you can find a lot of info on Elgato's website or on the web about this, but the idea is that you should first download and install the Elgato Stream Deck software.

Again, if you use the Softron integration, you should NOT start the Stream Deck software as it will prevent us to access the Stream Deck. It can be present on the computer, but not running.

Once installed, you will be able to configure the buttons.

For an integration with the Softron software, you will have to either:

- send REST requests (you will have to know how our REST API works)
- emulate keyboard shortcuts (you will have to know the keyboard shortcuts that you can use in our application)

The advantage of the keyboard shortcuts, is that it's way easier to do, but the downside is that you will have to make sure that the application is the front application for the keyboard shortcut to work. If it's not the front application, the keyboard shortcut might do something different. The REST requests are a little harder to setup, but will work whether the application is front or not. All the steps are explained in our online article.
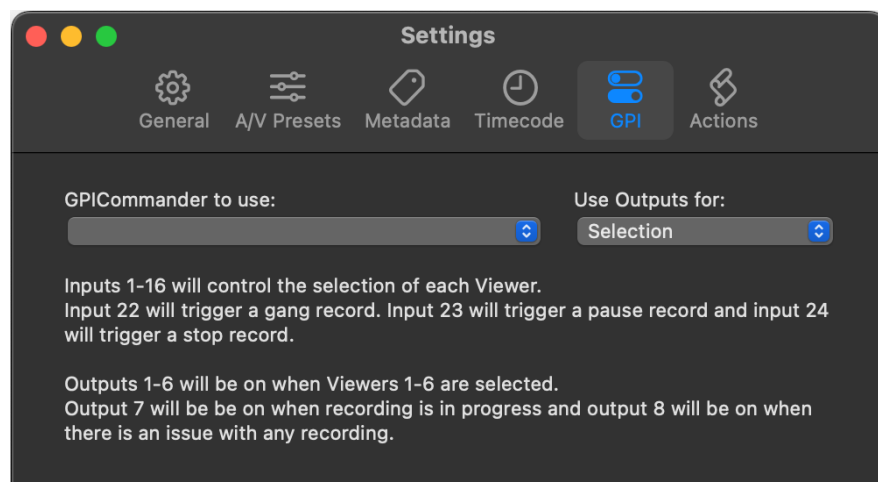
10. Using GPI Commander with MovieRecorder 4

10.1. Setting Up GPI Commander

MovieRecorder is integrated with GPICommander, and can easily be controlled by that device. To set it up, go to the top menu "MovieRecorder > Settings > GPI":

Any connected GPICommanders will be detected by the software and will be displayed in the GPICommander to Use menu.

There are 2 ways to use the GPI outputs:

- with the **direct integration**: you just have to connect the GPICommander box to the computer and go to the preferences of MovieRecorder to set it up. This is the easiest way.
- with **AppleScripts**. This requires you to know how AppleScript work, as well as installing the software GPICommander, but offers a lot of possibility. For example, you could control multiple applications with just one GPI trigger.

10.2. Connecting the GPICommander Box

You will need to:

- Connect the GPICommander device to the computer where either MovieRecorder or GPICommander is running.
- Connect the GPICommander's inputs **to your device** (it can be a production switcher GPI/tally output or a simple push button box) using the DB25 connector. Check the User manual for instructions on how to connect it.

With MovieRecorder you will mainly use the inputs. These 24 inputs are available through a DB25 connector, where basically and very briefly, an action will be triggered in OnTheAir Video when any of the first 24 pins is connected to the "ground" (on pin 25).

10.3. Trigger AppleScripts when Inputs States change

With GPICommander, you can trigger an AppleScript when the state of any of the 24 input changes. You can trigger an AppleScript when the state changes from closed to opened or from opened to closed. These AppleScripts can control any application on the Mac that is AppleScriptable (and MovieRecorder is AppleScriptable).

For this you will need to download the GPICommander application from our website. This is the application that will trigger the AppleScripts. It is best to learn about the basics of GPI commander and apple scripting with this article.

The GPI Commander application will have an AppleScript per input. Here is the path to input 1's AppleScript:
/Applications/GPICommander/Actions/Input 1.scpt.

If you need examples of sample scripts, like how to trigger a specific source, or all sources, to start or stop, go to our website article.

Our GPI commander available on our website shop.

11. Edit-While-Ingest

You may use MovieRecorder 4 to edit your files (with the QuickTime Container), even as they are being recorded. You may opt for one of three **Edit-While-Ingest** destinations: **None**, **Segmented**, or **Classic.** The explanations about how to set up in chapter "Destinations".

11.1. With Final Cut Pro

⚠️ **Disclaimer:** This information is provided without guarantee. We are not the coders of Final Cut Pro, so we can not vouch for its behavior. We can of course vouch for MovieRecorder's behavior. If you experience issues with growing media in Final Cut Pro you should contact your Apple representative. Our files are generated in a "standard" way, and have been working fine since a few years, so there is no reason they would stop working. Of course you can always contact us, and we will try to help, but if the issue is that your file does not grow in Final Cut Pro, it's important to check with them too.

We have seen some issues with files read from **SMB storage**. They would not automatically grow in Final Cut Pro. If you experience that issue, try to use a different type of storage.

When you create a new destination with MovieRecorder, you can select a QuickTime or MXF destination. Both types can work for edit-while-ingest with Final Cut Pro.

11.1.1. Segmented or Classic (Quicktime) ?

For edit-while-ingest, if you choose an MXF destination, there is nothing specific to set. If you choose a Quicktime destination, you can either use Segmented or Classic and here are the pros and cons of each:

- **Segmented**: There is no predefined duration to set. The file is growing upon ingest and is a more modern format that supports more codecs such as the H.264. But,
  - > Files are not usable during the first 10 seconds of recording. And they are updated every 10 seconds.
  - > You can not use them in the project and see them growing there. You can only see the portion of file that was there when you inserted it in the timeline, except if you trim it manually
  - > You can not use segmented movies to do edit-while-ingest in Multicam clips.

- **Classic:** See below how to configure MovieRecorder. You have to set a predefined duration and some codecs such as H.264 are not supported but:
  - > You can immediately use the file
  - > You can place the whole file (with its predefined duration) in the project and cut it from there.
  - > You can use classic movies to do edit-while-ingest on Multicam clips.

11.1.2. Configure Final Cut Pro

⚠️ The two limitations indicated below apply **ONLY if you intend to copy the files that MovieRecorder is recording during the ingest**. You can choose any option and disregard these limitations if you copy the files when FINISHED recording as the files will then just be regular movie files.
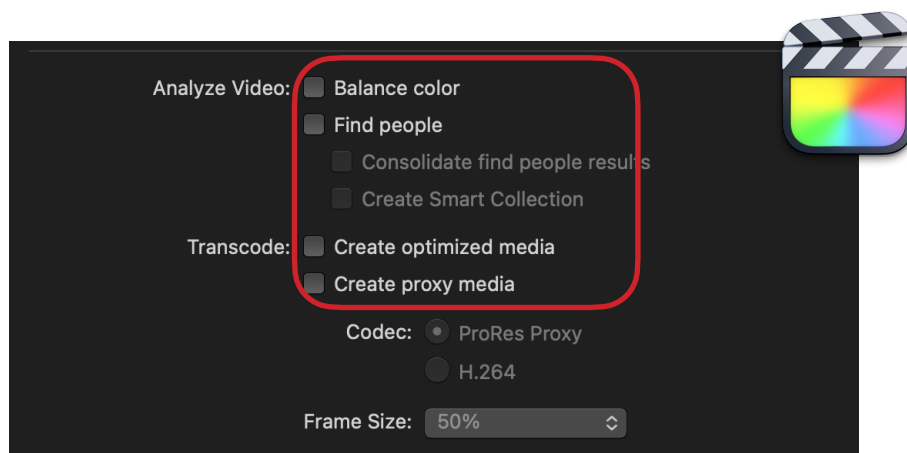
In Final Cut Pro

- **Do not "Copy files to library storage location", leave them in place.**

If you Copy the files to library storage location, Final Cut Pro will copy the file in which MovieRecorder still writes the frames, and thus this copied file will not be updated. There are different ways to do this, but we would recommend changing the behavior in Final Cut Pro "Settings > Import":
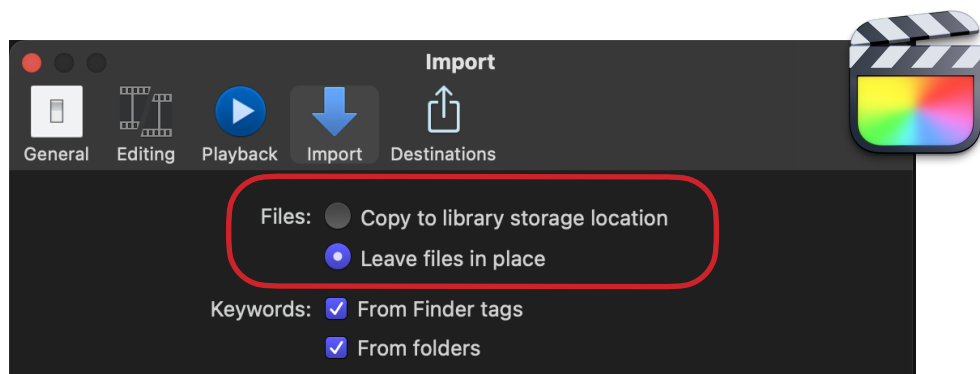
- **Make sure that you have disabled all the Transcoding and Analyze options**

In the same panel, make sure that none of the transcoding or analyze buttons are checked for edit-while-capture files. This is because Final Cut Pro may try to transcode or analyze video frames or audio samples that are not there yet and this could lead to weird behaviors;

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11.1.3. Setup for "Classic" Quicktime Destinations

In MovieRecorder

You can skip this step and configure MovieRecorder the way you want if you set in and out points from the media browser of Final Cut Pro and drag only used media to the project (and do not place media that is not yet recorded in the timeline). But **some workflow require to disable the option "Update Movie Duration when Stopping".**
In MovieRecorder, when you configure a destination, in Classic mode, there is an option to "Update Movie Duration when Stopping".

If you want to know more about the Classic mode, and what the "Update Movie Duration when Stopping" option does, read our Website article.

To explain quickly the idea of the Classic mode: as soon as the recording starts in MovieRecorder, a file is created to the duration of what is set in the settings. If you did set the movie duration to 1hour, the file will have that duration as soon as the recording starts (without using the disk space), and this files gets filled by the new frames coming in.

But if in the end you record only 30 minutes, here is what happens when you stop the recording with or without the option:

- when the "Update Movie Duration when Stopping" option is **enabled**, MovieRecorder will modify the duration of the recorded file to the real recording duration, and not to that theoretical duration, so you have a file of only 30 minutes.
- when the option "Update Movie Duration when Stopping" is **disabled**, MovieRecorder will NOT update the movie duration at the end of the recording, and you will have forever a 1 hour file, even if only 30 minutes was recorded.
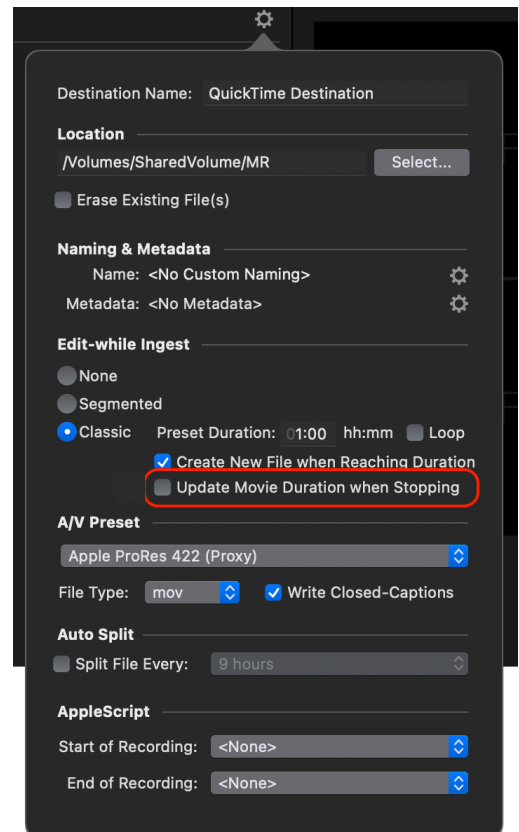
The problem with Final Cut Pro with that option, is that it may refuse is some cases (see below which cases) to relink to the file and it will display this warning:
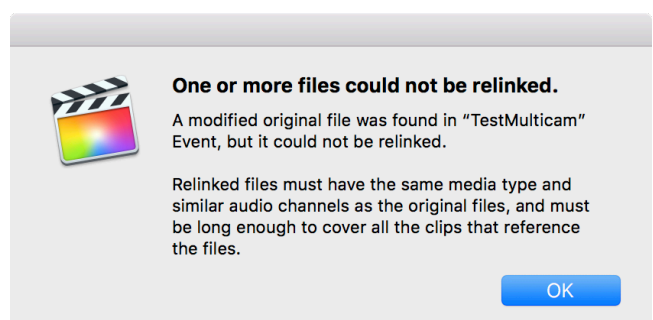
You will then see that Final Cut Pro shows that the file that was being recorded as offline and has created another clip that has the new duration:

If you used only portions of the file in your projects that are still present at the end of the recording, Final Cut Pro will relink to the file.

11.1.4.   When will Final Cut Pro Refuse to Relink the File ?

This will only happen if you used, in a Project or in a Multicam clip, a part of the file that won't be present after the duration is modified by MovieRecorder. So in our example, if you used in a Project only portions of the file that are before the 30 minutes recording, all will be fine. But if for some reason (for example if you dragged and dropped the whole file to the Project and edit from there), you have used some parts after those 30 minutes, FCP X will refuse to relink.

11.1.5.   Edit-While-Ingest with Multicam Files

It is possible to do edit-while-ingest with multi camera files, but only with "Classic" movies. With segmented movies, the files are not automatically updated in the Multicam clip (they are updated in the browser).

Also, in your "Classic" destination, make sure that you disable the option to "Update Movie Duration when Stopping", otherwise you will see the issue explained above and Final Cut Pro will not be able to reconnect the files.

Once that is done, just import (in place) the files being recorded into Final Cut Pro, and use them to create a Multicam file as other regular files. Just make sure that your storage as enough speed to read AND write at the same time the number of channels that you want to record and edit.

11.2. With Adobe Premiere Pro

MovieRecorder supports edit-while-ingest with Adobe Premiere Pro (since version CS5.5). Softron is a [Adobe Video Technology Partners.](#)

It is as easy as this: start recording with MovieRecorder, import the file that is being recorded into Adobe Premiere and start editing. Just make sure to follow the guidelines below...

You can also work with growing files in Adobe Premiere with MovieRecorder Express, but not with MXF files, only with a "Classic QuickTime" destination.

> ⚠️ **Disclaimer:** This information is provided without guarantee. We are not the coders of Adobe Premiere Pro, so we can not vouch for its behavior. We can of course vouch for MovieRecorder's behavior. If you experience issues with growing media in Adobe Premiere Pro you should contact your Adobe representative. Our files are generated in a "standard" way, and have been working fine since a few years, so there is no reason they would stop working. Of course you can always contact us, and we will try to help, but if the issue is that your file does not grow in Adobe Premiere Pro, it's important to check with them too.

We have seen some issues with files read from SMB storage. They would not automatically grow in Adobe Premiere Pro. If you experience that issue, try to use a different type of storage.

11.2.1. Official Recommendations from Adobe

The best is of course to check with Adobe what they say works. You can find that info in the following [article, under the "Support for growing files" section](#).

We recommend MXF XDCAM files for the best experience, all other workflows are more workarounds.

11.2.2. Adobe Premiere Pro Settings

In Adobe Premiere Pro

Go to the top menu "Settings > Media":

- **Disable the option "Write XMP ID to Files on Import" and "Write clip markers to XMP"**. If you fail to do so, Adobe Premiere will modify the file that is already being constantly modified by MovieRecorder and this will corrupt the file.
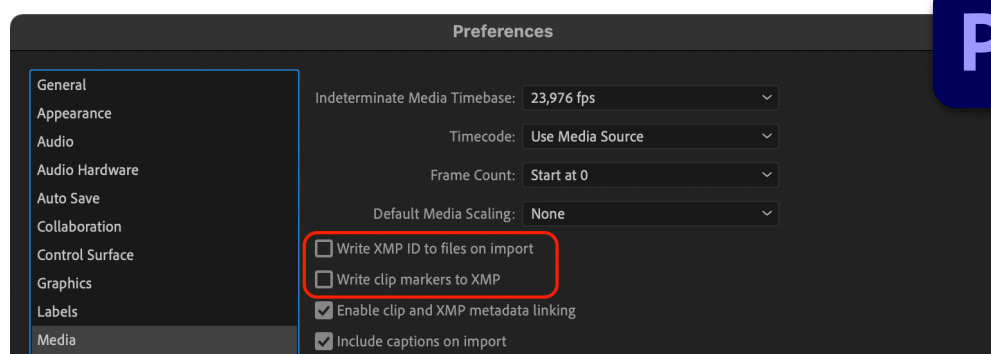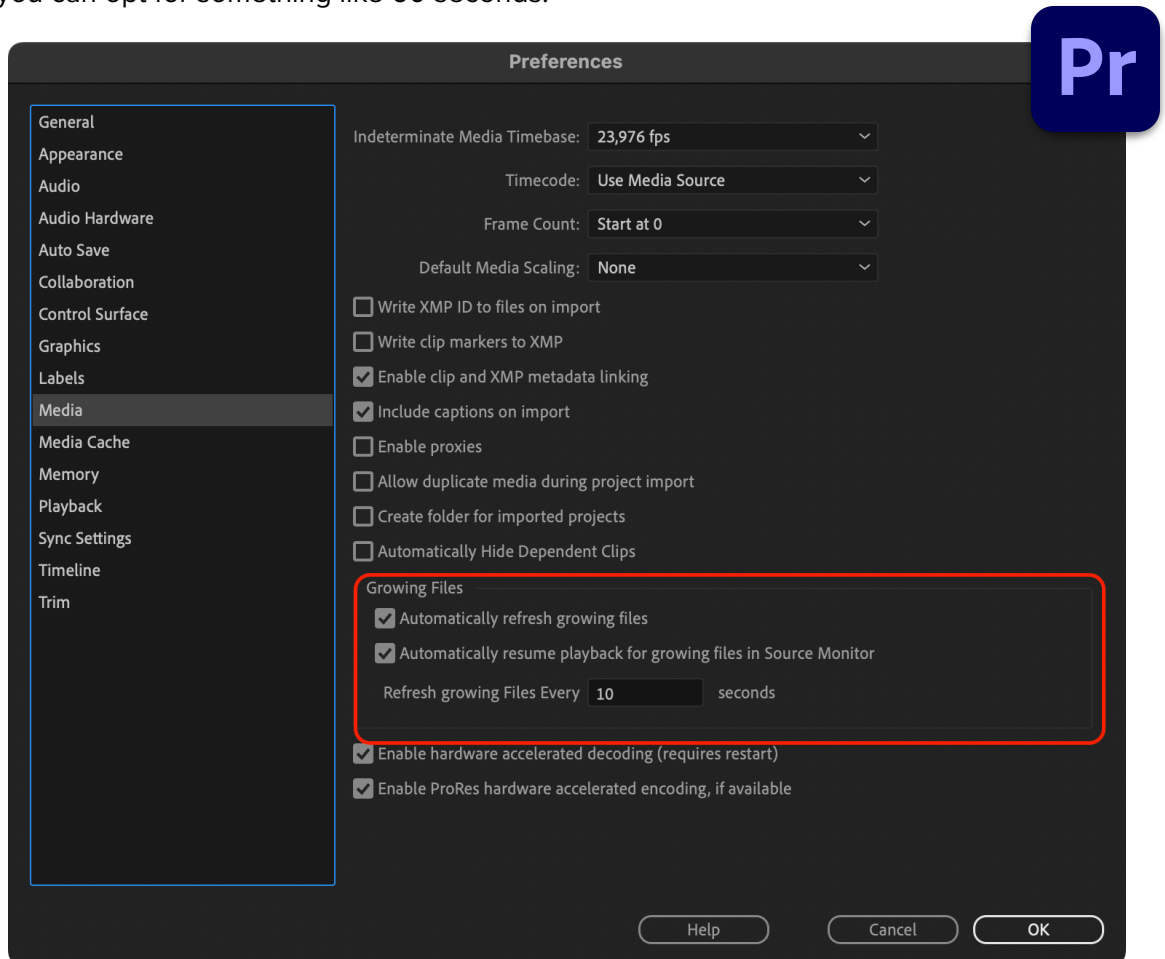
- **Enable the option "Automatically Refresh Growing files".** And set it to the value that best suits your needs. If you want to be really close to the "Live", you can use something like 10 seconds, but if you want to have less frequent updates (and thus easier on the computer), you can opt for something like 60 seconds.

In MovieRecorder

In MovieRecorder, you will need to make sure to **select either:**

- **MXF Destination using the XDCAM codec** (not with MovieRecorder Express). Adobe recommends to use MXF XDCAM destinations for growing files workflows, and only support a specific set of codecs.
- **QuickTime "Classic" Destination**
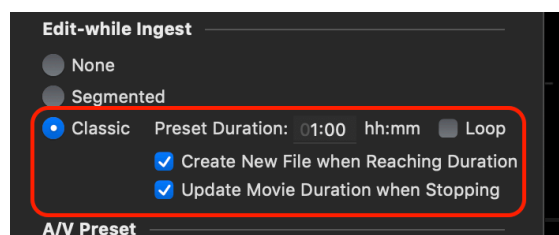
- **QuickTime "Segmented" destination, using the H.264 or HEVC codec AND the mp4 extension** (Adobe Premiere Pro does not support the "Segmented" destinations using .mov extension for growing files).

11.2.3. About the Duration of the "Classic QuickTime" Files

Adobe Premiere behaves differently than Final Cut Pro when you import a Classic file. When you import the file in Adobe Premiere, **it will only show only the current recording duration**. Even if you import a "Classic" file, Adobe Premiere will ignore the duration that we have set to only show the duration of what has already been recorded and this duration will grow every few seconds when the file grows (the rhythm depends on the refresh interval that you have set in the Settings).

To overcome that behavior in Adobe Premiere, below are **2 workarounds possible**, if you want to have the file showing up with the full duration in your timeline:

- **Create an "Offline File"**
- **Create an XML**

You can find all the information <u>in our website version of this chapter.</u>

## 11.3. With Blackmagic-Design DaVinci Resolve

Disclaimer: This information is provided without guarantee. We are not the coders of DaVinci Resolve, so we can not vouch for its behavior. We can of course vouch for MovieRecorder's behavior. If you experience issues with growing media in DaVinci Resolve, you should contact your Blackmagic-Design representative. Our files are generated in a "standard" way, and have been working fine since a few years, so there is no reason they would stop working. Of course you can always contact us, and we will try to help, but if the issue is that your file does not grow in DaVinci Resolve, it's important to check with them too.

We have seen some issues with growing media in DaVinci Resolve, particularly when reading from SMB drives. Files may not grow in Resolve, and when they do, they can have some missing frames, and missing audio. When this happens, you may have to quit and restart DaVinci Resolve. Blackmagic-Design should look into this.

11.3.1. Which Type of Destination ?

When you create a new destination with MovieRecorder, you can select a QuickTime or MXF destination.
DaVinci Resolve supports growing media only with QuickTime files, not with MXF.
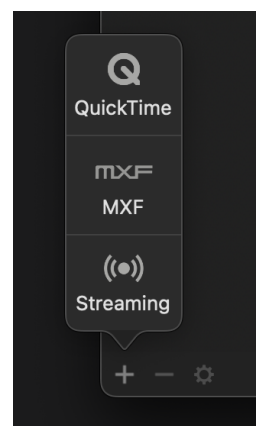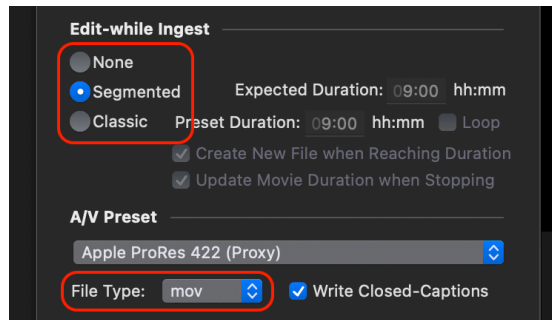
Then once you have created your QuickTime destination, there are 2 other settings to consider:

- the "Edit-while Ingest" setting (None, Segmented or Classic). You can read more about the different type of destinations here.
- the "File Type" setting (mov, mp4 or m4v) - mp4 and m4v only available in Segmented.

And finally, depending on the type of storage that you use, some destinations will be recommended. Here's a table of what we have seen to be working.*

| Destination type:	QuickTime			MXF
Edit-while ingest Type:	Classic	Segmented		
File Type	.mov	.mov	.mp4	.MXF
Recommended Codecs	ProRes	ProRes, H.264, HEVC	H.264, HEVC	XDCAM
Direct Attach	⚠️ **	✅	✅	❌
SAN	⚠️ **	✅	✅	❌
NAS - SMB***	⚠️ **	✅	✅	❌
NAS - AFP***	⚠️ **	✅	✅	❌

Results may vary depending on storage type, macOS version, editing software version, and other variables, this is subject to change, and we recommend testing with a free demo version of MovieRecorder.

** We have seen that Classic movies do grow in Resolve, but sometimes, when getting close to live, we can see frames where Resolve would say "Media Offline". And this would not go away immediately, making it difficult to work with.*

**** Tested on QNAP and Synology*

11.3.2. Which Type of Destination?

In Resolve, open "Settings > Decode Option", and enable the "Automatically refresh growing files in the media pool" option:
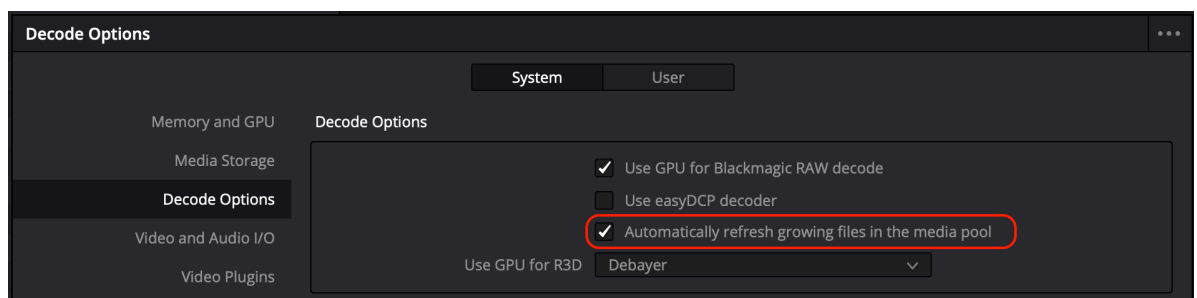
11.3.3. How to work with growing media in DaVinci Resolve

While in theory, the files should be growing in the "Media Pool", we have seen that this was not the case in version 18.5.1, unless we right-clicked on the "Location" and selected "Refresh". To work with these "growing media", we recommend to place them in a timeline, and in "Edit", extend them when they grow.

For example, in the screenshot below, the red line at the end shows that there is no more media:
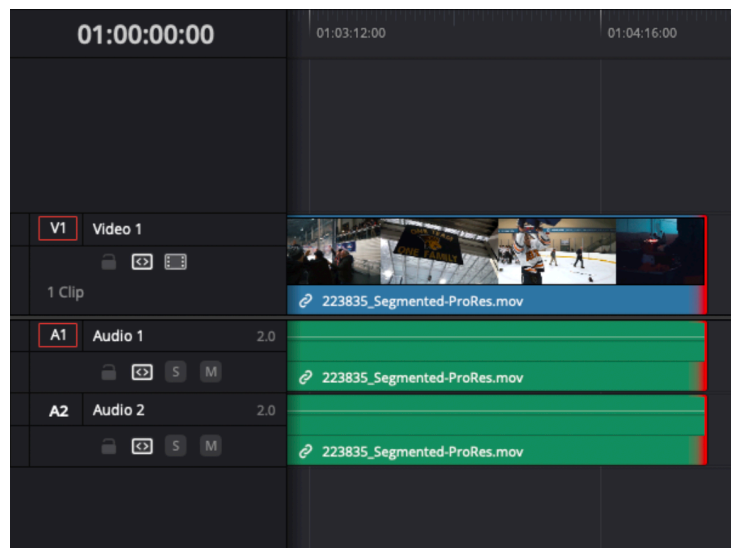
But then once the file has grown (Resolve will refresh every 60 seconds), the red line will turn green showing that there is extra content:
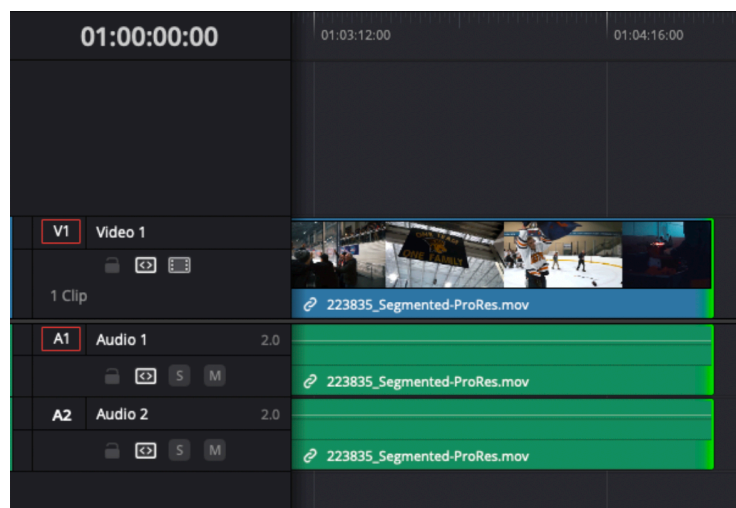
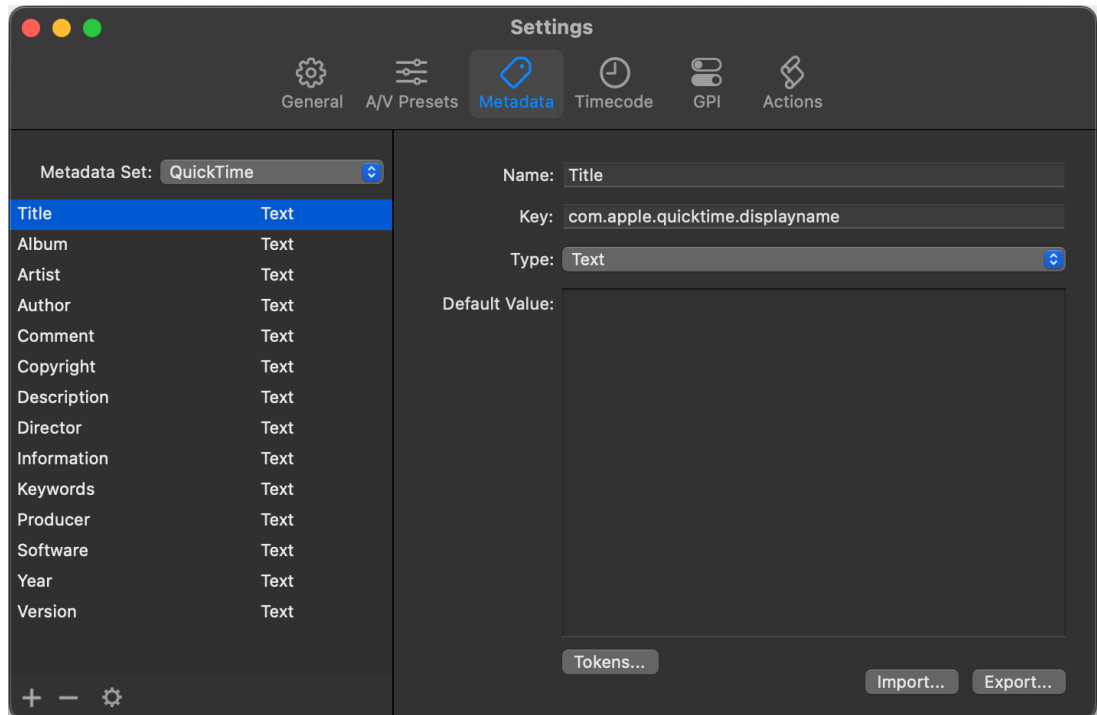Then simply drag the end of the clip to extend it.

MovieRecorder User Manual

12. Working with Metadata
Not available in OnTheAir Video Express.

12.1. Create and Edit Metadata Sets

You may **create Metadata** Sets under the Metadata tab of the Settings menu:

MovieRecorder 4 comes with a QuickTime metadata set, which you can add more data items to by clicking on the "+" icon on the bottom left area of the window, and you can remove data items by highlighting them and then clicking on the "-" icon. You may also duplicate an item by highlighting another item and clicking on the gear symbol, then selecting "Duplicate" on the pop-up menu.

You may also create your own metadata sets from scratch by clicking on the Metadata Set box, then clicking on the Edit option. This will bring up another window showing a list of previously created metadata sets.

You can add or remove sets by clicking on the "+" or "-" icons, or duplicate sets by clicking on the gear icon. If you add a new metadata set, you can rename it by double-clicking on the "Untitled Metadata Set" and typing in the desired name. You will then need to add your own metadata items, as described above.

Each metadata item can be modified by highlighting the object and then adjusting the parameters in the right side of the panel. You can change the Name of the item and the type (your choices are: text, multiple choice, number, date/time, or boolean), and you can set default values in the Default Value box (by typing the value, or by clicking on the Tokens button and dragging and dropping the values into the box, or by importing the metadata).

You can also visit our website to read our article: "HOW TO: Add Metadata to your recorded files".

12.2. Enable the Type of Metadata you need in the Destination

Now that your metadata set is ready, you will need to configure your destinations to use. You may set up how the metadata for your recorded files is saved. To do so, click on the gear icon next to your destination. A pop-up menu will appear, with two empty boxes (or one, if using the MXF wrapper). Clicking the top box, labeled **Embedded (Quicktime)**, embeds the metadata into the file (note that this option is only available with the Quicktime wrapper).

Clicking the **Sidecar** box creates an XML file that includes the metadata. Do not enable any of those 2 boxes if you don't want to create metadata at all.

When creating a sidecar file you can decide a few more settings:

- the format of the XML that will be generated by selecting what **Type** of asset manager you would like to use (either Axle, Cantemo Portal, or CatDV).
- the **Location** of the **Sidecar** file. Either set it to be the same location as the Movie file, or choose another path entirely.
- when, during the recording process, you would like to **create** the sidecar file

12.3. Set the metadata for the source

With your metadata set configured and your destination set, now you are ready to add some metadata values to your recordings.

- First make sure that the source uses the destination you have set with the metadata type you need to record.
- At the bottom left corner of each Viewer you will see a "tag" icon. Click on it to reveal the metadata popover window.
- At the top of the window, select the metadata set you want to use. Then below, if you want to use the "default" value you have set in your Metadata Set, you don't need to do anything. If you want to add a different value, simply enable the checkbox in front and change the Value. To revert to the default value, just uncheck the checkbox.
- Then make sure to click on "Apply". If you don't your modifications will be lost when you close the popover window.

The Reel number at the bottom is a specific metadata item that is written in the Timecode track of your quicktime Movie. It can also be used as a token in the custom naming feature.

13. VTR Control
Not available in OnTheAir Video Express.

With MovieRecorder 3.4, we reintroduced the ability to control a VTR from the user interface. We have done so because of the huge interest that our users have showed to be able to capture their sometimes very large libraries of video tapes. And MovieRecorder with its ability to record multiple channels on one Mac has proved to be the ideal solution for that.

13.1. Hardware needed

You will need either:
- **a video device that has a RS422 port** that supports the Sony VTR Control Protocol (check the AJA or Blackmagic-Design website to know which devices includes this port).
- if your device does not have that (or as the AJA Io 4K, it only has one port but multiple inputs are possible), then you will need to purchase a **USB to RS422 adapter**. We sell those adapters and have two models:
    - a model with one port
    - a model with 4 x RS422 ports (SerialCommander), so you can control 4 VTRs with just one device. If you use an MI80 and want to control 8 VTRs from one Mac, you will have to purchase 2 x SerialCommanders with 4 RS422 ports.

13.2. Setting Up the Source

- Before you can capture, you need to change the timecode source for each source that will need to control a VTR.

- Select one of the ports available in the RS422 section:

- If you own a serial commander, the serial ports will be listed as "usbserial-FT..."
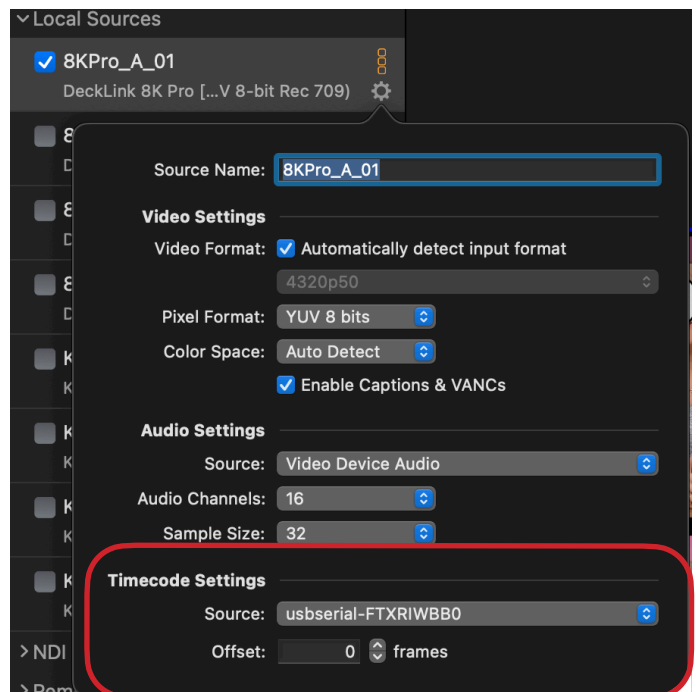
13.3. Controlling the VTR

As soon as you have selected the appropriate RS422 port, in the Viewer of the source, you should see the TC corresponding to the TC of the VTR.
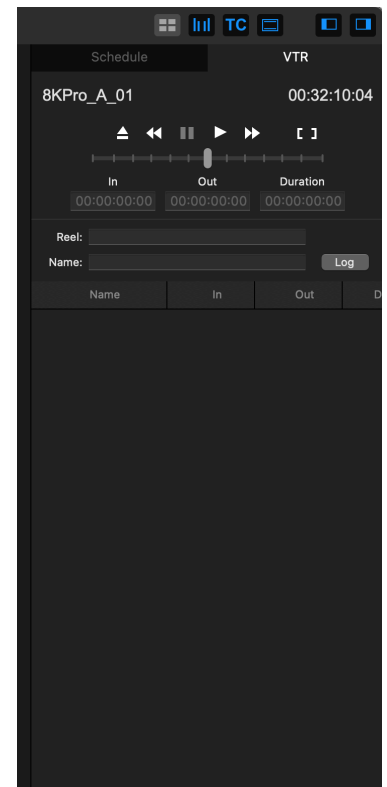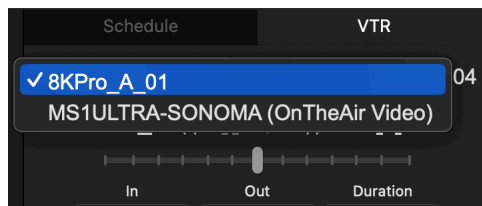
To control the VTR:

- make sure that the VTR is in "Remote" mode and the RS422 cable properly connected
- open the left pane with Schedules and VTR, and select the VTR section
- in the Viewers area, select the "Viewer" with the source you want to control (it will be circled in blue). Note that **you can only select one Viewer at a time**, if you select 2, the VTR area will show "Multiple Selection"

The window will then look like this:

At the top left you can see the name of the current source that you control. Note that you can simply click on this name to switch the source that you are controlling (instead of changing the selection in the Viewer area).

At the top right is the current TC (if the VTR is in "Local" mode it will be shown there).

You can then control the VTR using either:

- the on screen buttons or the slider for jog/shuttle
- keyboard shortcuts:

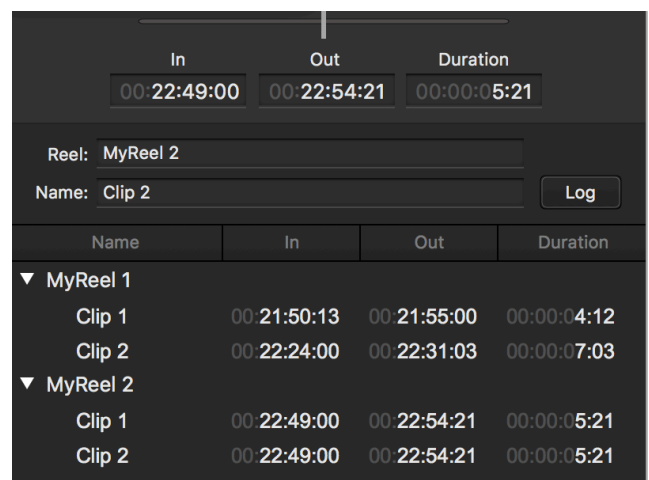| Keyboard	Action
J	Go backwards (press multiple times to go quicker)
K	Pause
L	Go forward (press multiple times to go quicker)

Logging Clips

To log clips, first set in and out points of a clip to capture. You can either simply enter TC values in the in/out/duration fields or you can control the VTR, check the in and out points you need and use either:

- the on screen buttons
- **[ ]**
- keyboard shortcuts:

Keyboard	Action
I	Set an in point
O	Set an out point
shift + I	Go to an in point
shift + O	Go to an out point
alt + I	Clear the in point
alt + O	Clear the out point

Once you have set in and out points, enter a Reel Name, and a Description.

Then click on "Log" or use the keyboard shortcut "alt + L". Note that all clips will be arranged by "Reel":

10.3.3. Batch Capture

Once you have created all the clips you want to capture, at the bottom of the window, click on "Capture all". Note that you can capture just a few clips by selecting them and then clicking on "Capture Selection". MovieRecorder will start capturing the first reel in the list.

When the source is capturing, a few things will happen:
- the VTR area will be greyed out (you can not control anything during that process)
- on the Viewer will be displayed a "Lock" instead of the stop/pause/record so you can
- not stop inadvertently the recording (right-click on the viewer to unlock)
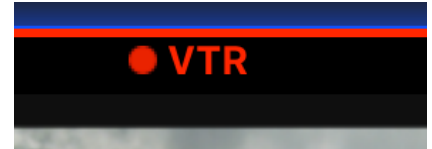
Also, when cueing the tape, this will be shown on top of the viewer:

And when it is currently recording a clip, it will show this:

During and after the recording, the clips will change the status in the list:

- A red REC icon when it is recording
- A green checkmark when it was captured without errors
- A yellow attention sign when it was captured with errors (drop frames, …)
- A red attention sign when it was not captured at all (TC not found, destination not valid, etc)

| Name	In	Out	Duration
▼ MyReel 1			
✓ Clip 1	00:21:50:13	00:21:55:00	00:00:04:12
● Clip 2	00:22:24:00	00:22:31:03	00:00:07:03
▼ MyReel 2			
Clip 1	00:22:49:00	00:22:54:21	00:00:05:21
Clip 2	00:22:49:00	00:22:54:21	00:00:05:21
—	Abort Capture		

If you have entered multiple Reel names, MovieRecorder will ask you each time to enter the new tape. Note that you should not even need to click on "continue", as MovieRecorder will detect when a new tape is inserted and continue by itself.

You can abort the capture at any time by clicking on the "Abort Capture" at the bottom of the VTR Area.

10.3.4. Clear Status and Reveal in Finder

After the recording, you can change the status of the clips from recorded to unrecorded by right-clicking on the list and selecting "ClearStatus".

Note that you can also select "Reveal in Finder" to show the captured clip.
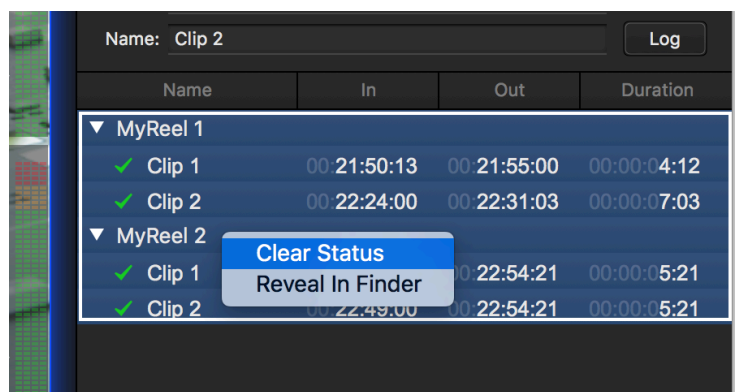
14. Saving and Restoring Configurations
Not available in OnTheAir Video Express.

After setting everything up for a production, you may want to use the same configuration for a future event. Doing so is as simple as clicking "MovieRecorder > Save Configuration As…" This will bring up a pop-up window to enter and save the name of the Configuration.

The next time you need that, or a similar, configuration, you can pull it back by clicking on "MovieRecorder > Restore Configuration", and then clicking on the desired configuration.
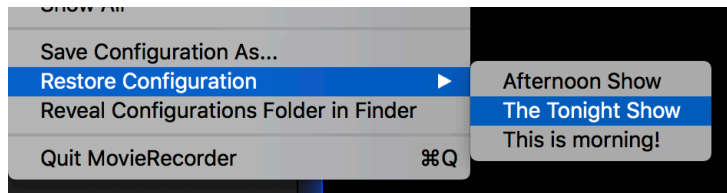
A pop-up window will appear allowing you to select which parts of the configuration you would like to recall: the sources, Destinations, AV Presets, Viewers Layout, Scheduled Events, and/ or the VTR Batch List.
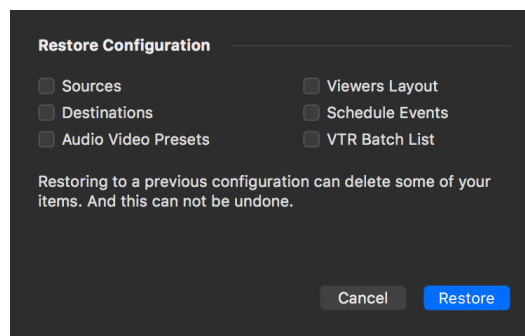
After you select the desired items, click on the "Restore" button and MovieRecorder will reconfigure itself to meet those requirements. The next time you request that same configuration, the pop-up window will appear again, with the same items enabled (though you may disable individual items if you desire), and you can quickly restore that configuration again.

You may also wish to find where the Configuration file is kept, and can do so by clicking on "MovieRecorder > Reveal Configurations Folder in Finder".
Below is a screenshot depicting the location of the Configuration commands:

15. When Something Goes Wrong...

While we strive to ensure that MovieRecorder is as stable a platform as is humanly possible, there is a lot of interaction between our software and other pieces of your workflow (your MacOS, video card drivers, switchers, etc.), and so we must constantly evolve our product to adapt to changes made in those applications. As such, bugs do sometimes sneak up on us. Should any issues arise while using MovieRecorder, the first place to look for answers to potential causes is our white pages on our Softron Support Desk website.

Keeping an eye on the **Performance Gauges** in the Activity & Logs window (accessed via "Window >Show Activity & Logs Window") is also a valuable resource.

The Performance Gauges show the performance of your computer as it runs the application, and may prove a useful indicator as to what could be causing issues. See our Troubleshooting: The Log Window Explained article for details.

And also keep in mind that for the life of the product your application includes our support service. The best way to reach us is via "Help>Contact Support" in the user interface of the application (see below for image). Through that button you can collect the technical logs from the application and open a support ticket on our Support Desk. It is important that when opening a ticket that you supply as much information as possible, including the date and time of the incident(s).