SOFTRON
record stream play

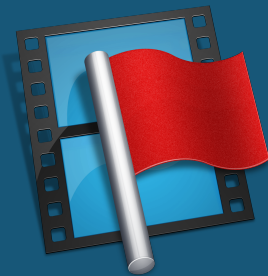# Multicam Logger 2

User Manual

Multicam Logger is a useful post-production tool that allows a user to log all of the different angles (or inputs) used in a live multi-camera production. It records which input the director has selected on his video mixer and when an input is changed.

Multicam Logger thus creates a multicam clip for Final Cut Pro X, Final Cut Pro 7 and Adobe Premiere Pro using the logs and the files recorded by any type of video recorder. The purpose is to use the resulting media to edit a final version of the production which could include necessary corrections.

Very little setup is required, and usage is quick and easy. The purpose of this manual is to guide users through the procedures necessary to get the best use out of the product.

New in Multicam Logger 2

Multicam Logger introduces a number of new features and improvements (and is available as a free upgrade to Multicam Logger 1 users):

- The QuickTime API is no longer in use in the application, opening it up to the MXF wrapper (while still maintaining compatibility with the QuickTime wrapper).
- We have updated the User Interface to be compatible with Apple's Nightshift mode.
- Support for Timecode Systems' UltraSync BLUE.
- Support for NewTek's TriCaster.
- Support for Elgato's Stream Deck controller (see **Using the Elgato Stream Deck Controller** section, below)
- Integration with REST API. You may now control Multicam Logger from a web page via REST API. You can use REST API to start and stop logging and to create Markers:
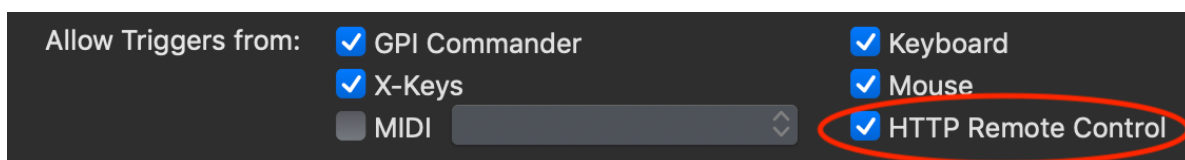
Important Note: Multicam Logger does not record any video, but rather logs changes in camera angles and allows associated clips to be formed into mutlicamera clips in Adobe

Downloading, Installing, and Licensing Multicam Logger

Downloading and Installation

Multicam Logger can be downloaded directly from our Downloads page on our Softron website. It will download as a zip file that when opened will reveal the Multicam Logger application file.

Upon installation the application will be in Demo Mode. In Demo Mode, the application will be fully functional, but only up to 10 camera angles will be logged.

Licensing and Activation

Licenses for Multicam Logger can be purchased from one of our many resellers throughout the world, or can be purchased directly from our online store.

Licenses for Softron applications can either be on a serial number (that's the default), or on a USB dongle (if you purchased the dongle option). If you own a serial number you will need to activate it. Instructions on serial numbers activations can be found here: https://softron.zendesk.com/hc/en-us/articles/207695747-HOW-TO-Activate-a-serial-number

Make sure you read the instructions on when to deactivate a serial number as they can only be activated on one computer at a time. So you will not be able to activate it on a second computer if it is still active on another one.
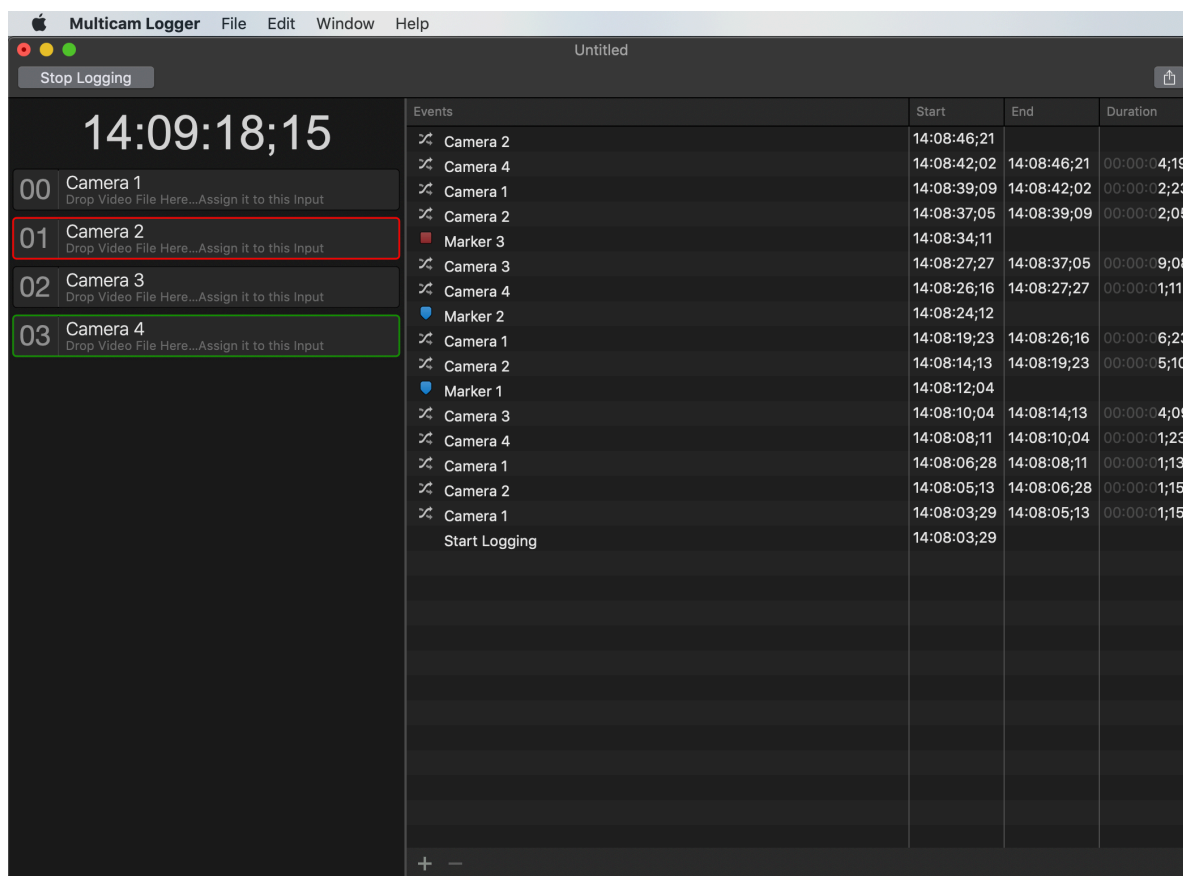
If you own a dongle, simply connect it to your computer and start Multicam Logger.

Overview of Multicam Logger

The top portion of the Multicam Logger User Interface includes
- the **Timecode** (center of the left panel)
- the "**Export Multicam**" button (just below the current Input Device),
- and the "**Start/Stop Logging"** button, to the left of the UI, just above the timecode.

Below that, the UI is divided into two panels.
- the **Switcher Sources Panel** on the left, where the available inputs on your production switcher will be displayed.
- The **Logging and Markers Panel** on the right, where angle changes are logged.

Setting up Multicam Logger

Select the Timecode Source

First you will need to choose your Timecode Source at the top of the preference window and set it up:
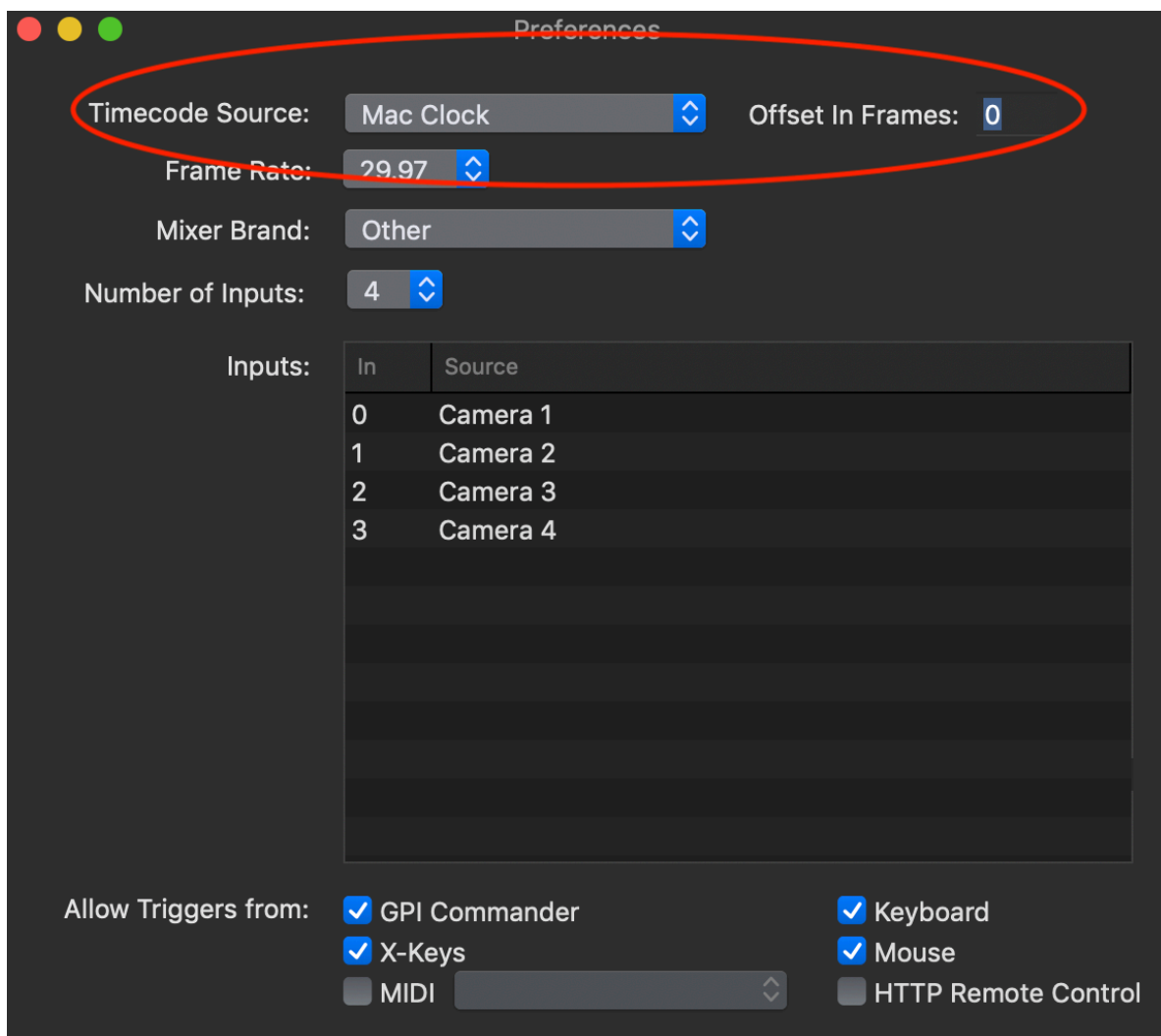
With Multicam Logger, you can use multiple TC sources:

- "**Mac clock**": uses the built-in clock of the Mac
- "**MovieRecorder**": If you are recording your camera ISOs with MovieRecorder, and that MovieRecorder receives a valid TC, you can connect to that MovieRecorder in order to receive its TC.
- "**Audio LTC**": uses an audio input of your Mac. You will be able to use any of the audio inputs that are usually available for your Mac, the same that are available in your System Preferences > Audio > Input. You can use the built-in audio inputs, or use a simple USB audio device for example. If a valid Audio LTC timecode is provided in the audio input, we will make sure to decode it. See the following article for more recommendations and common mistakes with Audio LTC.

- **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.

Recommendations on timecode sources

The timecode source that you will use is very important of course, because it will have an impact on how sync you will be to the switches. We recommend using either Audio LTC or "Timecode Systems" as the most accurate timecode sources.

And of course you need to make sure that your video recording solution:

- uses the same timecode source (if not Multicam Logger won't be able to synchronize the angles)
- that timecode is recorded in the video files and that Multicam Logger will be able to read them. Before doing a whole production, run a quick test to make sure that we support the files you are recording and we can accurately retrieve the TC.

You can read more on the setup of Timecode Sources here:

https://softron.zendesk.com/hc/en-us/articles/207695237-HOW-TO-Setup-timecode-sources

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Select the switcher to be used

Once you have setup your timecode source, you will need to configure how you connect to your production switcher to retrieve information when the director takes an input.
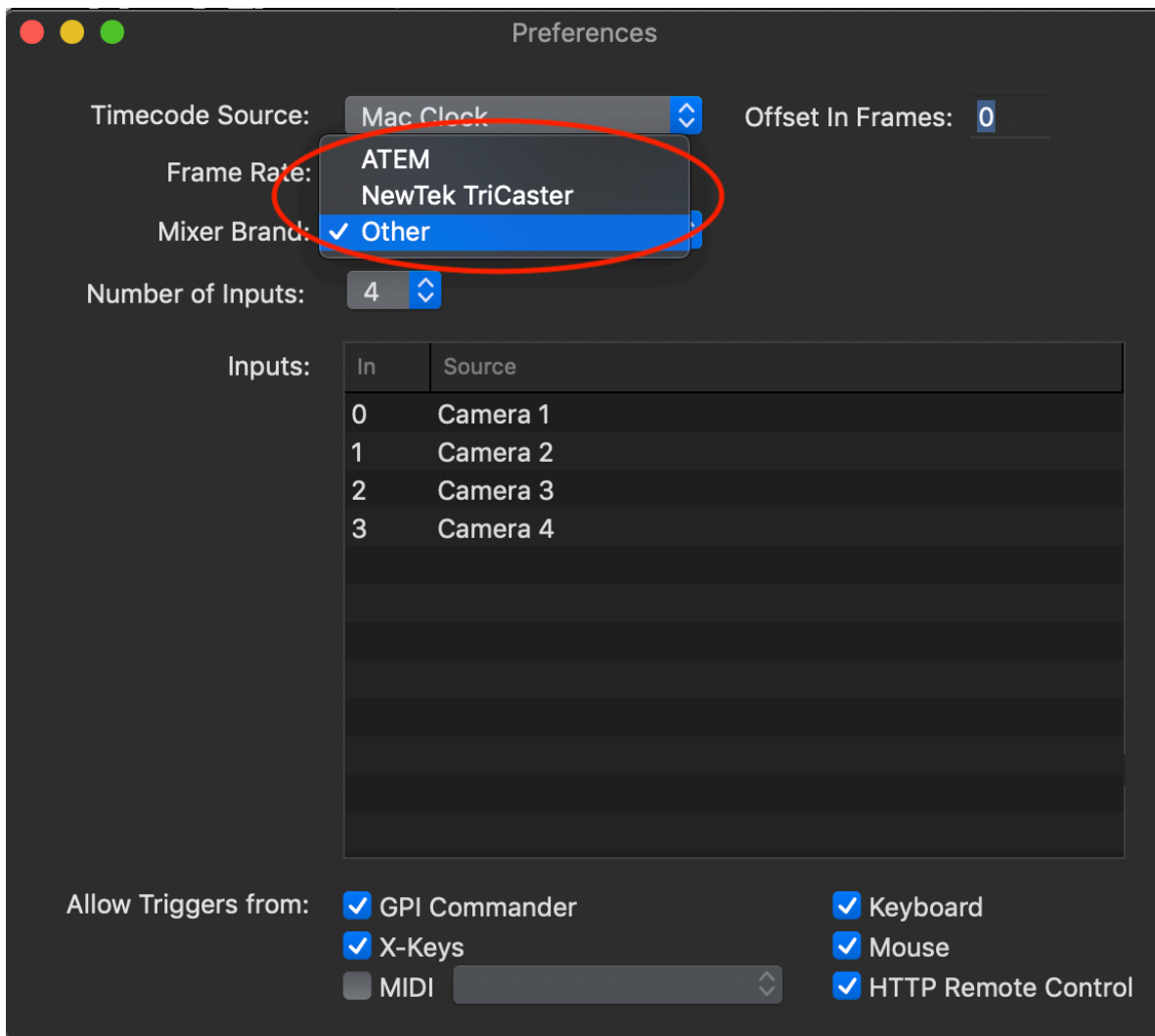
There are also different solutions here:

- With a **Blackmagic-Design ATEM** or **NewTek TriCaster,** you will connect to the switcher simply using the network
- With **other brands** and:
  - if it has **GPI/Tally outputs** you will connect those to our GPICommander box.
  - If it has **MIDI output** (Some Roland models have), you will be able to use them

You can read more about differences between the ATEM and GPI here:

https://softron.zendesk.com/hc/en-us/articles/207695267-Controlling-a-Softron-application-from-a-Production-Switcher

About the "Allow Triggers from" options

At the bottom of the window, you can see checkboxes this sets what kind of interface can change the selected input in the user interface. If you are using an ATEM and don't want the user to be able to change the input from the software, disable the Keyboard and Mouse checkboxes. If you don't do that, it means that the user can change the input used for program on your ATEM.

Setting up an ATEM or TriCaster Production Switcher

If you are using an ATEM or TriCaster Production Switcher, first make sure that you download and install the applicable software. Note that you will have to install the same software version than the one installed on your ATEM or TriCaster. Once this is done, enable the checkbox in front of the "ATEM Production Switcher" or "NewTek TriCaster," as applicable. This will show an additional line where you will be able to enter the IP address of your Production Switcher, and then click on "Connect". Once connected it should show a "Connected" status, and you can then choose which ME you want Multicam Logger to monitor.

For example (the procedure is essentially the same for the ATEM and TriCaster):
It will also retrieve all the available inputs (with their name) on your switcher so there is nothing else to setup and you are ready to start logging.
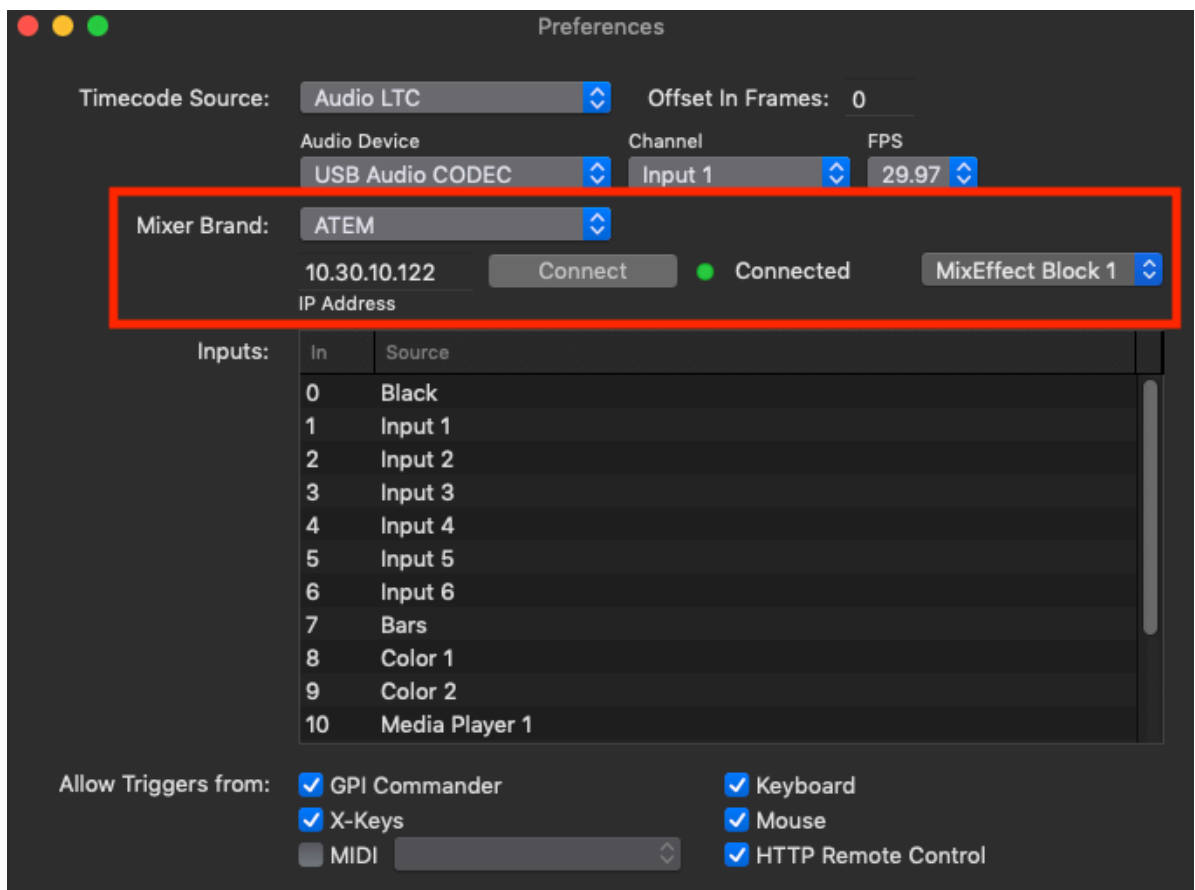
If it does not connect to the ATEM, check that the IP address is correct, and that the ATEM software installed on your Mac matches the firmware on your ATEM. If not then either download the appropriate software from Blackmagic-Design's website, or update the ATEM firmware.

Setting up other switchers
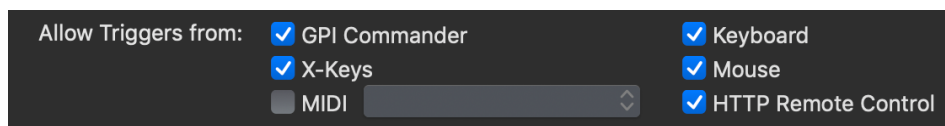
Using GPI/Tally outputs

If your switcher has GPI/Tally output, you will be able to connect to it using through the use of our GPICommander box. GPICommander can retrieve GPI triggers and connects to your Mac with USB. Additionally to your Multicam Logger license, you will thus need to purchase a GPICommander. More info on GPICommander can be found on our website: http://softron.tv/products/gpicommander
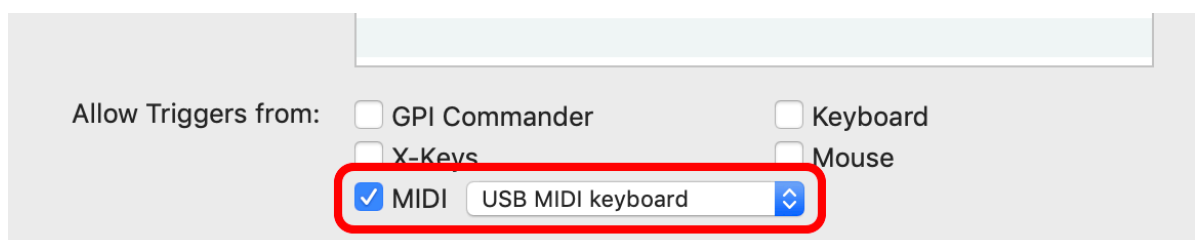
To setup with GPI, the first thing to do is to verify that your production switcher can indeed output GPI triggers when the director takes an input on program. You should refer to your switcher's user manual for that.

Then make sure to cable properly the GPI outputs of your switcher to the GPI inputs on your GPICommander box. And finally verify that the GPICommander box receives the triggers and that is properly connected you could start the application GPICommander (that you can download from our website), and see that the "inputs" checkboxes are triggered accordingly.
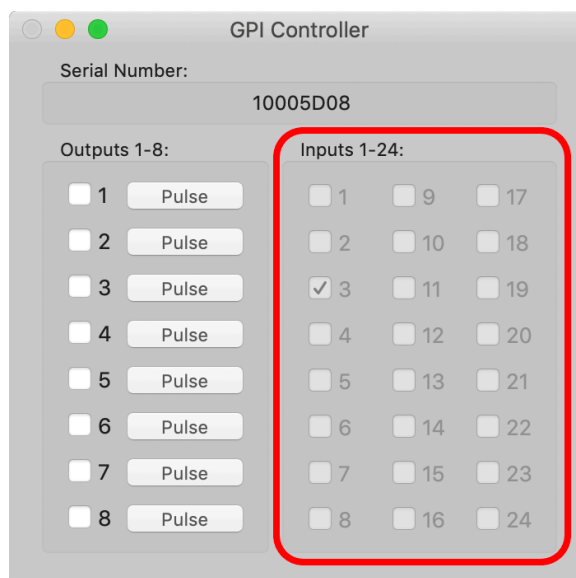
Once you can see the inputs triggered when you change inputs on your switcher, you can start Multicam Logger and make sure in preferences that the GPICommander box is checked:

Then make sure to select the number of inputs your switcher has:

Once you have selected the number of inputs, you can change the name of these inputs. Note that because GPICommander has max 24 inputs, you will be limited to 24 inputs, but that's already a large number. Your switcher will also have to support 24 GPI outputs.

Using MIDI

If your switcher has MIDI output, make sure to connect it to your Mac (using for example a USB MIDI device). When connected, enable the "MIDI" option and choose the MIDI device in the popup menu:

Then, as for GPI, select the number of inputs your switcher has and name the Sources accordingly. Then you need to "teach" Multicam Logger to know which MIDI note correspond to which input. For this, click on the "Learn" button next to the input (a "Waiting for a MIDI note" message will appear), and then push on the corresponding input button on your switcher. That particular note will now trigger the change to the specified input to be logged.

Using Multicam Logger

Recording video

Multicam Logger is a software that "only" logs at what timecode an input was used on a production switcher, and then later on exports an XML that can then be imported in an editing software to create Multicam clips and sequences.

But it does NOT record video. And of course you will need to have video recorded, otherwise we won't be able to create those Multicam clips obviously. You can record the camera ISOs with our software MovieRecorder, that's the best option because our software is the best ingest solution around ;-). But you can record on any recording solution that you want (even on the camera itself). All you'll have to do is assign the clips to each "angle" in the user interface later on. See the "Assigning" section below for that part.

Logging

Once you are set up, you can create as many documents as you want. Note that the number of inputs and their name is saved with the document, so if you change those settings in the preferences, it will be changed only for the next document created.

Once you have your document, you may want to save it wherever you want and start logging. Simply click on the "**Start Logging**" button (upper left corner) to begin logging your camera angle changes. The first notation to be logged will be the time the logging started.

Any time an input is changed, the Source in the Source Panel will be outlined in red to indicate the currently selected device, and the Source Name will also show in the upper right corner next to a "pinging" red dot, just above the Marker Panel. The selected source will be noted in the Logging Panel, as well as the time the angle change occurred. When a new Source is selected, the log will be updated to include the time the angle changed, and the next Source will be logged. Every time the angle is changed it will be thus logged.
Note that the communication between the ATEM switcher and Multicam Logger is bi-directional: the inputs can be changed via the switcher or through Multicam Logger (by double clicking on the desired input device), and the change will be logged.

By clicking the "+" button on the Marker Panel, or by clicking on the "M" key on your keyboard, you may log a Marker. The position will be notated, and the name of the marker will be "Marker X," which you can change by double clicking on the Marker Name, and a blue shield icon will be shown on the left of the name.

By clicking "Option-M," the Marker Name will instead have a red square next to it.   This is typically used as a "To-Do" marker, and the user can create notes.

If you have no intention of entering Markers, you may hide the Marker Panel by clicking on the shield icon in the bottom right corner.

Once production is finished, simple click the "**Stop Logging**" button in the upper left corner, and the last item to be logged will be "Stop Logging" and the time the action occurred.

Assigning recorded videos to "angles"

As said above, Multicam Logger does not record video, so now you'll have to tell where the recorded videos for all angles are located. That's very easy, simply locate the recorded file in the finder and drag and drop it on the "angle":
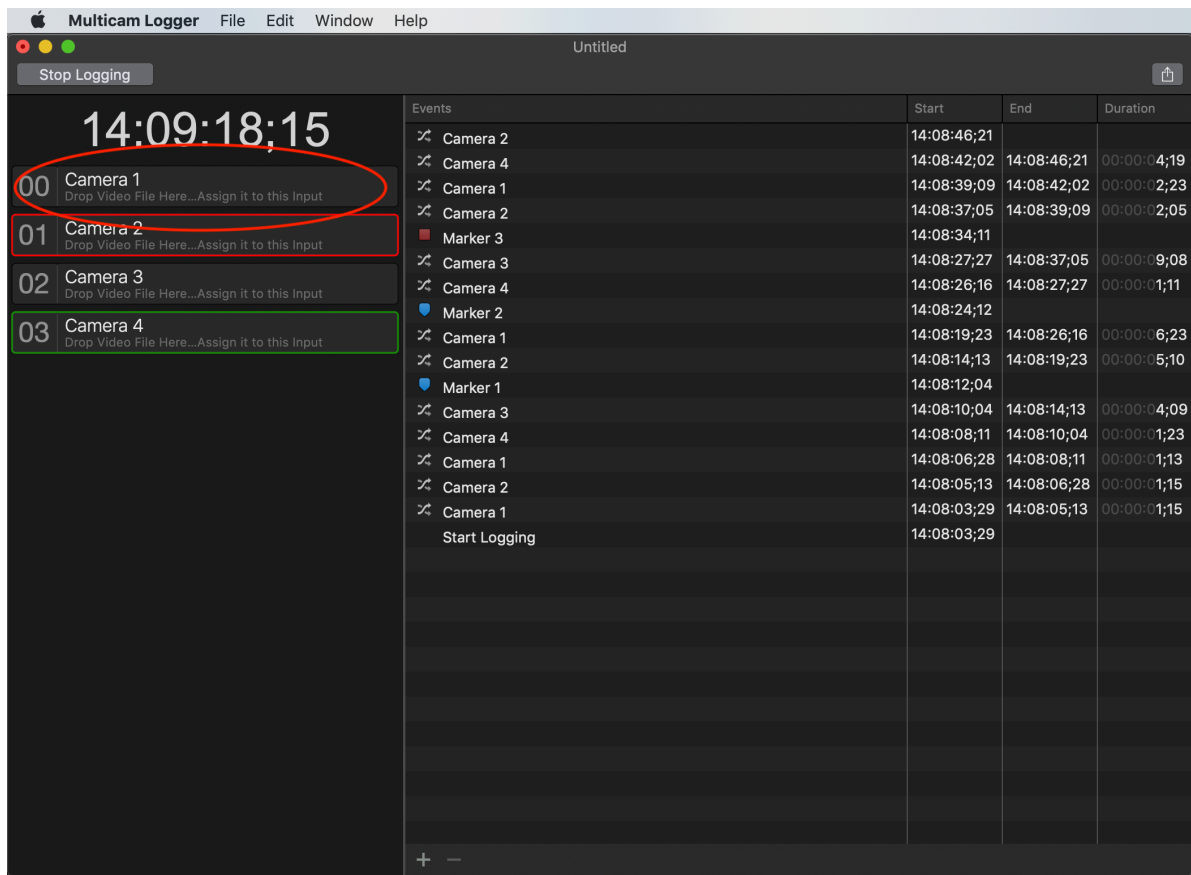
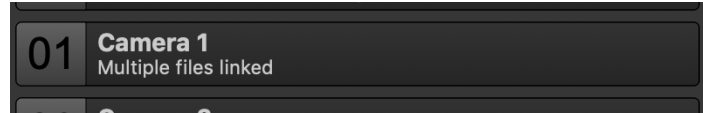Once the file is assigned, you will see it assigned:
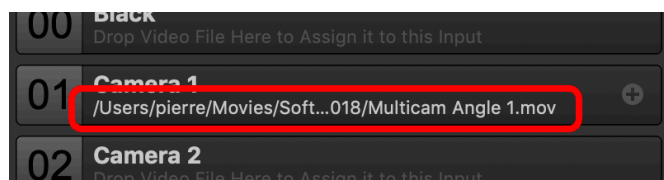
Alternatively, you can click on the + icon on the cell when you hover your mouse, then select the file in the popover window.
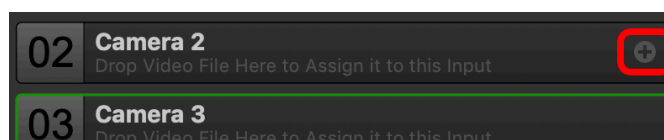
Assigning multiple clips per angle

When you assign multiple clips per angle, Multicam Logger will show something like this:

Note that only Final Cut Pro X supports multiple clips per angle. If you intend to export to Final Cut Pro 7 or Premiere, you will have to use just one clip per angle. IF you recorded multiple clips, you will have to either:

- Import all the files in an editing solution, and export as one file. Make sure that timecode is maintained during export
- Assign just the first clip in Multicam Logger, then import the XML in your editing solution and, there, assign the remaining clips. But you'll have to do the sync manually... And this will not work in Final Cut Pro 7.
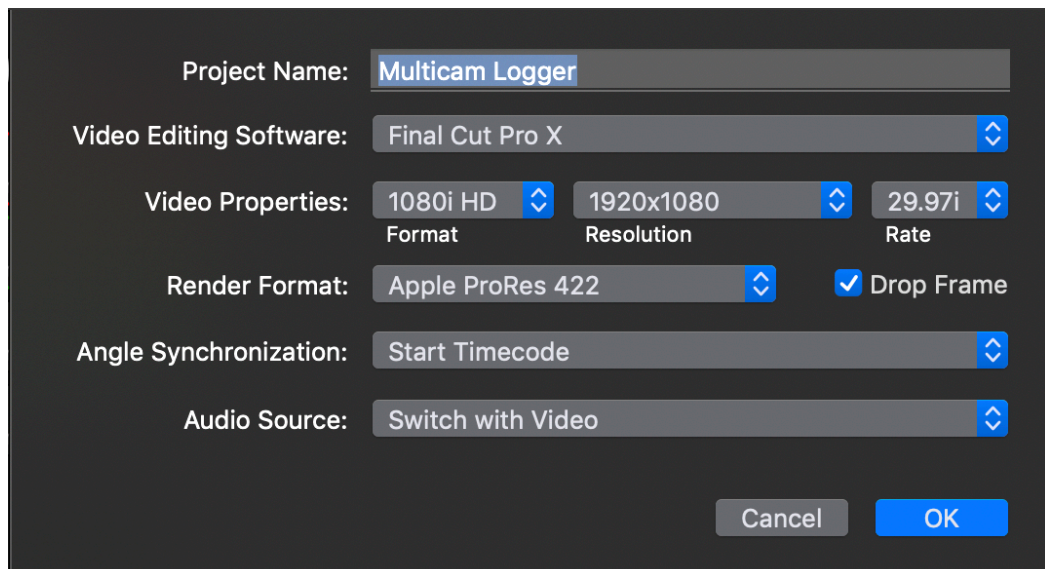
Exporting to the editing solution

Now that you have your document created with the change of angles, maybe a few markers, and you have assigned the video files to all angles, you can export this.

Click on the Export Media icon:
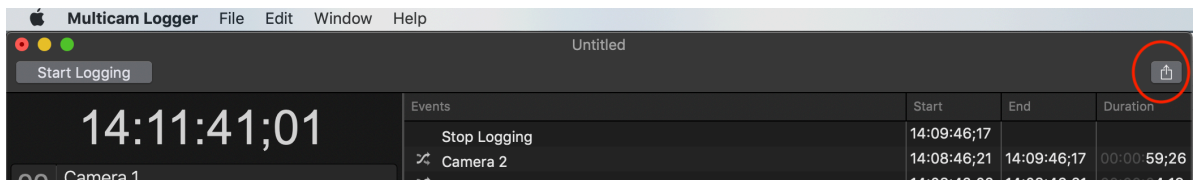
The following window will appear:

Here you may change

- The **Project Name**. By default it uses the name of the Multicam Logger document, but you can change it so the project and sequence in your editing solution have another name.
- The **Video Editing Software**. You can choose Final Cut Pro X, Final Cut Pro 7 or Adobe Premiere. Note that there can be some limitations depending on the editing solution. For example only Final Cut Pro X supports multiple angles per clip.
- The **Video Properties**. This will set the format of the sequence/project created.
- The **Render Format**. This is important only for Final Cut Pro X.
- Whether or not you Timecode is **Drop Frame.**
- The **Angle Synchronization**. Sets how we will make sure to synchronise all the angles together and with the logged timecode in Multicam Logger
  - *Start Timecode*: Is the most recommended way. We will use the timecode information present in the video file to match it with the TC logged. This is the most precise way, and all the other methods should only be used if you don't have timecode recorded in your video files.
  - *Content Created*: (only supported by Final Cut Pro X) If your video file does not have a TC track, if the recording solution had time of day, you may want to use this. Multicam Logger will then use the date and time at which the file was created.
  - *Start Timecode and Content Created*: (only supported by Final Cut Pro X) Uses a mix of the two solutions. First we will search for a timecode track in the file, and if it is not present we will use the creation date/time of the file.
  - *None*: Can be used if you don't have TC info, nor time of day for your files. In that case we will not synchronise anything, we will just place each clip at the beginning of each angle. You will then be able to synchronise everything manually in your editing solution out with a third party tool.
- The **Audio Source**. You can choose if you want the audio source to either:
  - *Switch with video*: in that case when the video switches to a specific input, audio will also be switched to the same input
  - *Be fixed on one angle*: you can then choose the input you want to use that has audio. It is very common that you only have clean audio on one of the inputs. Note that you could use one of the "unused" angle to assign an audio only file if the audio was recorded separately (it will need TC info too)

When you click on "OK", the next window allows you to select:

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- The name of the XML document that will be created and where you want to save it
- An option to set if you want to automatically open the editing software. This option works only for Final Cut Pro X and will automatically import the created XML. Otherwise you will have to manually import it in your editing solution.

Using the Elgato Stream Deck Controller

As of version 2.0, Multicam Logger is compatible with Elgato's Stream Deck Controller. Simply plug the Stream Deck's USB into your Mac, and Multicam Logger will recognize the device. From the Controller you will be able to quickly and easily add Markers or change the Camera angles. The Stream Deck is customizable, as well, so you could add your own features to the device, or label your Markers with labels specific to your needs.
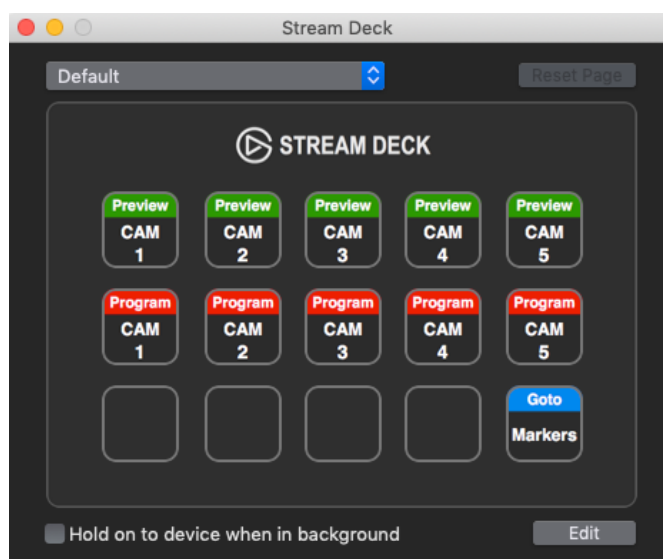
When Something Goes Wrong…

While we strive to ensure that MovieRecorder 4 be 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 utilizing MovieRecorder 4, 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 free support. 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).