

Variant Systems Group



ENVIVO REPLAY

User Manual v2.0

For software versions 2.0.0.68 - 0.110

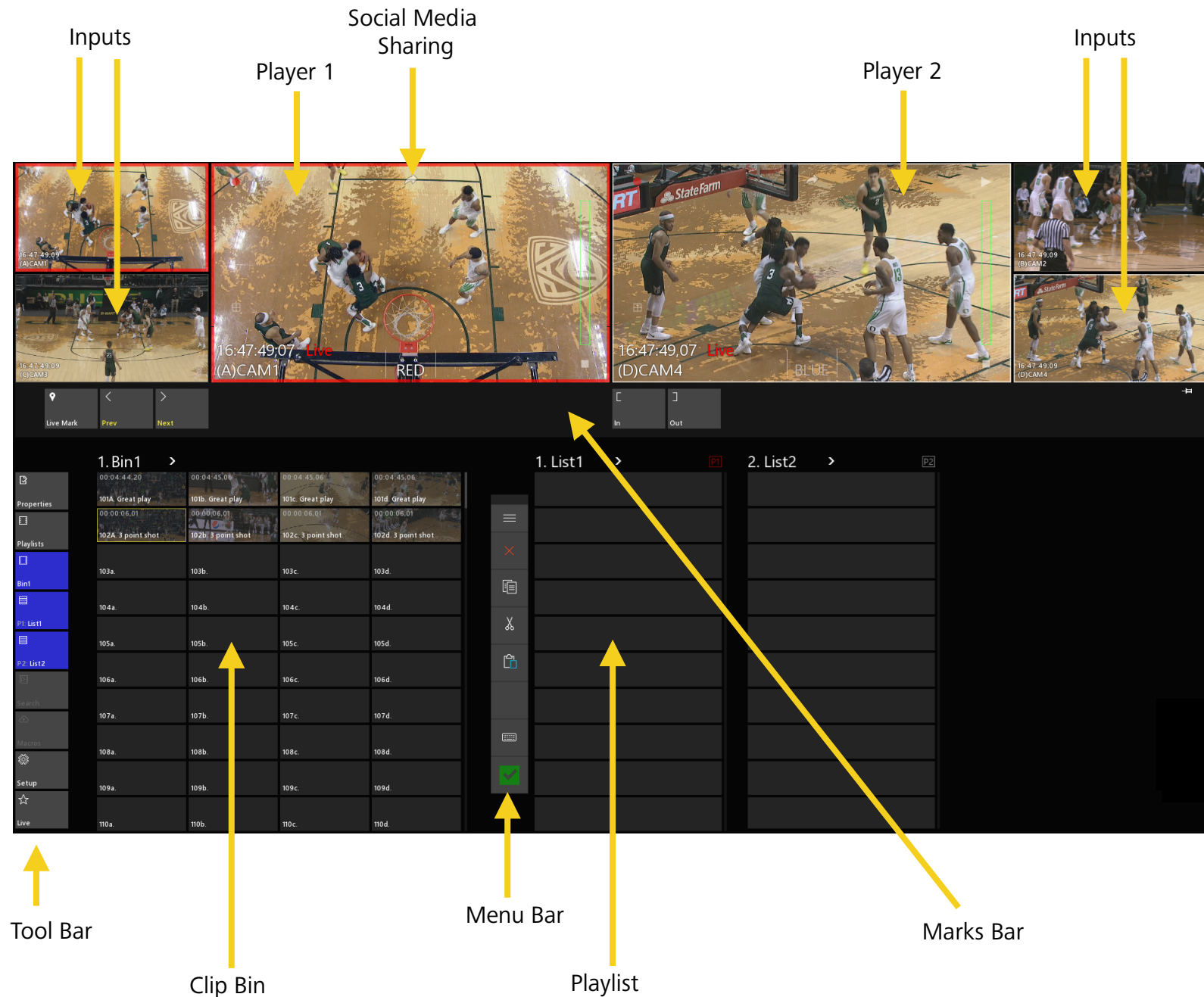


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Envivo Replay User Interface Layout

The main UI layout allows for multiple Clip Bins and Playlists to be viewed at the same time, as well as, some useful tools from the Tool Bar. When more than 4 Inputs are used the UI will change in appearance. If fewer than 4 Inputs are used, the layout below remains the same, yet the inputs will be greyed out and timecode data eliminated.



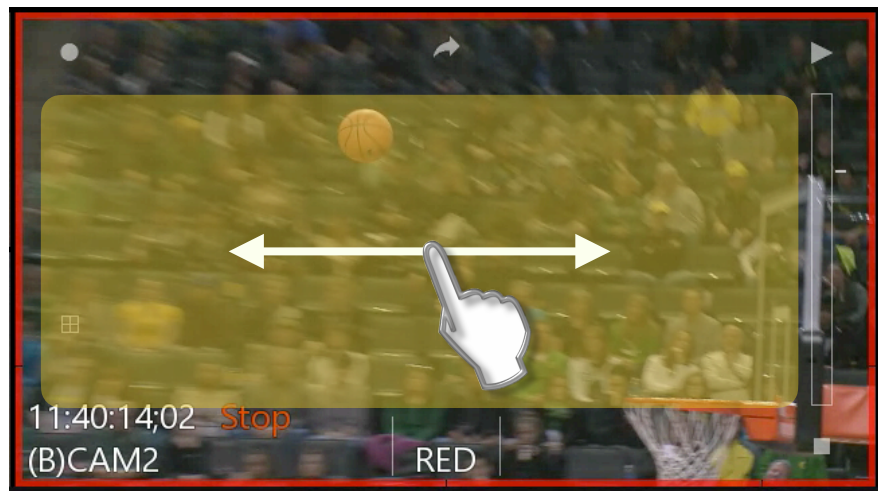
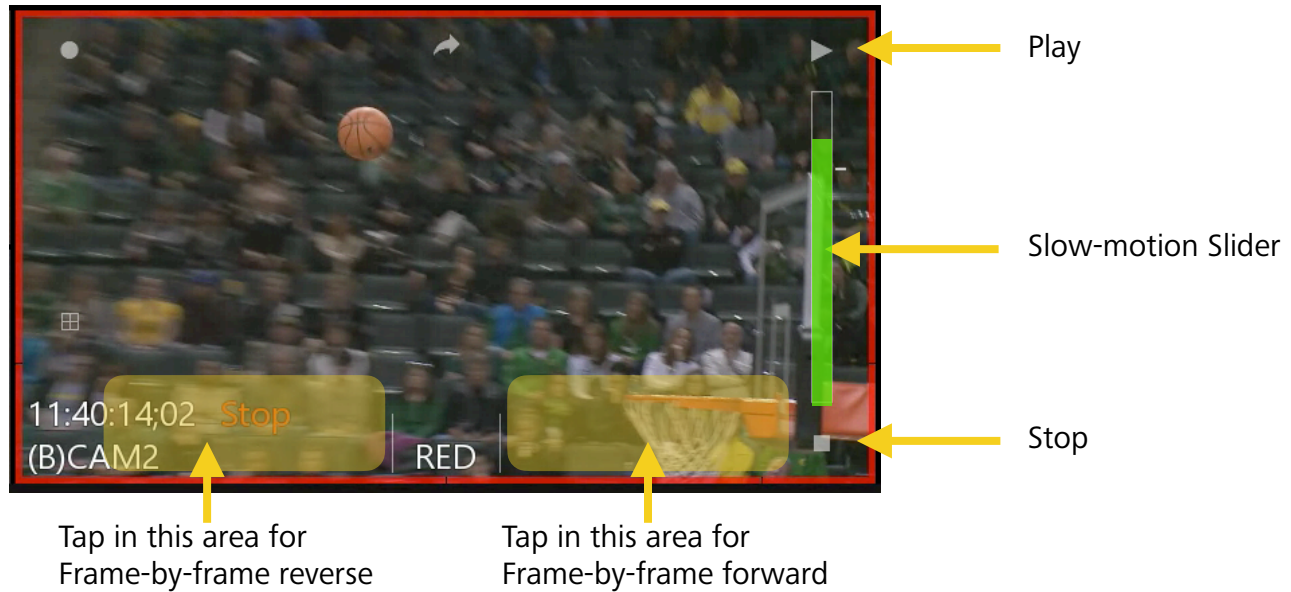
Gang both Players together by touching both at the same time.
To un-gang select only one player by touching it.

To "load" an input to a player, simply touch the input you want.
A good operational habit is to first touch the Player and then any of the inputs.

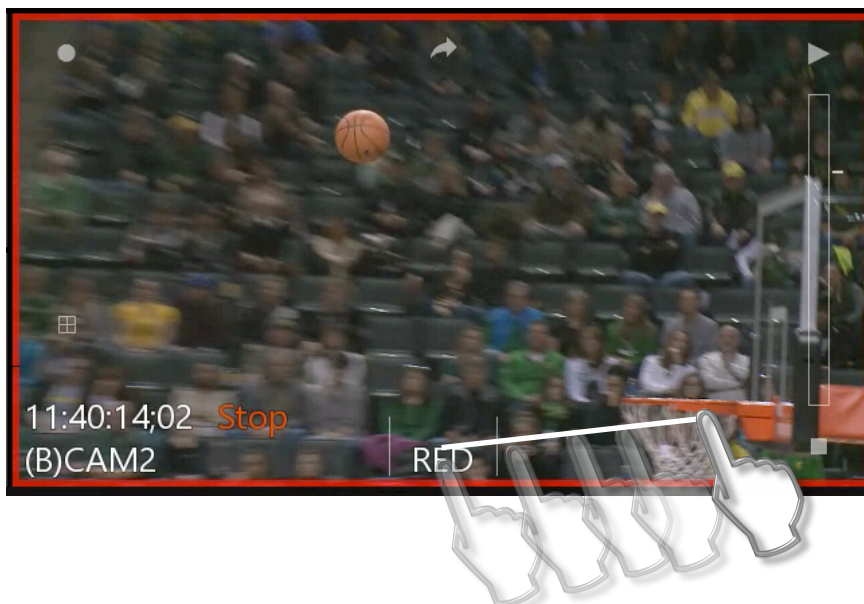
Note: the system begins recording immediately at startup.

Playing a Clip or Replay of Live Content

Touch the function that you want to execute.



Swipe gesture backwards or forwards for "Jog" control of the content.



Shuttle control originates from between the two center lines as a Drag and Stretch function.

The longer the stretch, the faster the shuttle.

Slow-motion Control

The Slider bar allows for slow-motion control from 0-100% speed.

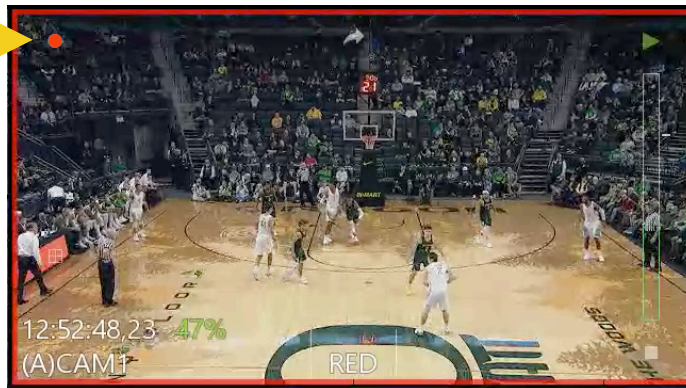


Slide up to increase speed

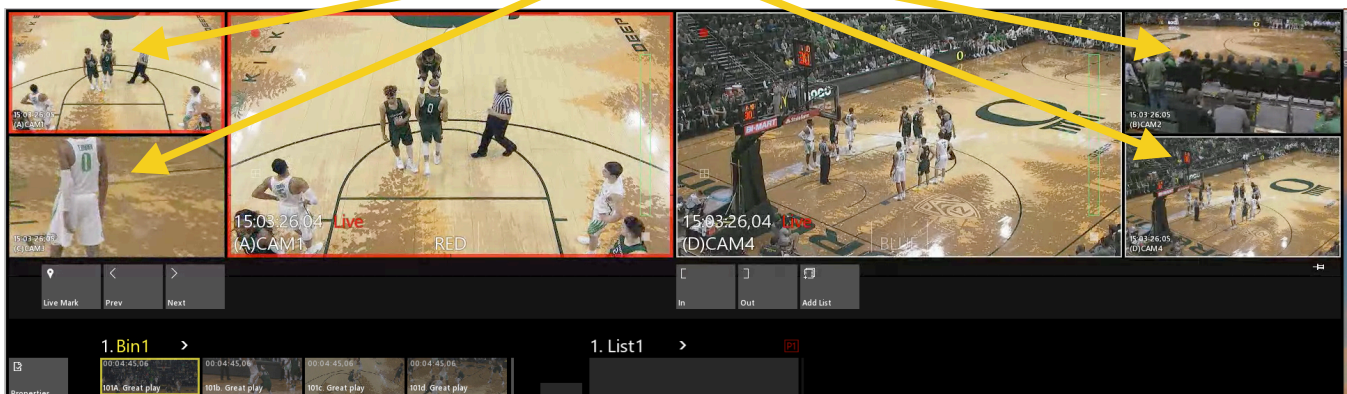
Slide down to decrease speed

Indicates speed range

Return to "Live" button, stays on the selected angle and returns to the live recording.



Or select from any of the live inputs by touching them.



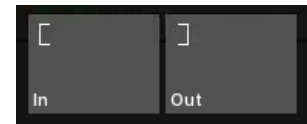


Making a Clip

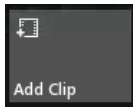
Find the beginning of the content you want to save as a clip. Press “Mark In”

Find the end of the content that you want to save. Press “Mark Out”

(These are right below the player window that you are controlling.)



Press add clip.

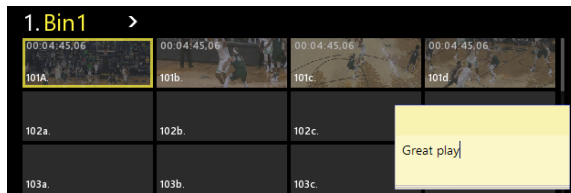


Or select an empty slot and touch where you want it to go.



Naming a Clip

Select the clip that you want to name, and just start typing on the keyboard.



(The notepad can be moved to anywhere on the display.)

A notepad will pop up and the text you are typing will be entered.

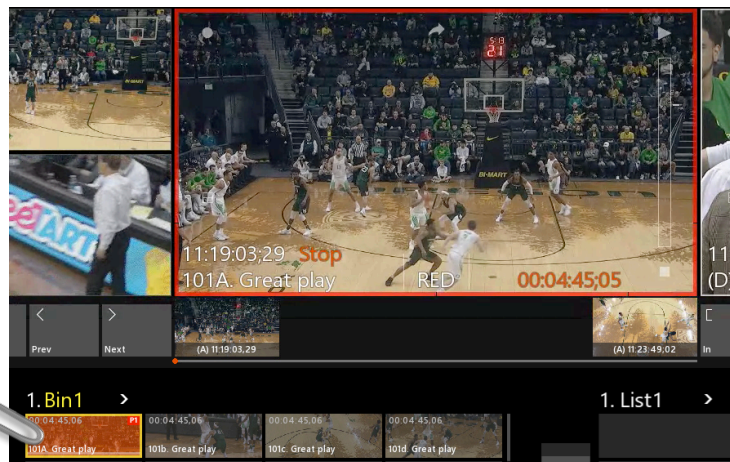
Press “Return or Enter” to name the clips. Notice, it named all clip angles the same. To change the name of any of the clips independently, select the next angle and start typing. After pressing “Return” or “Enter” only the selected angle will be renamed.



Cueing a Clip

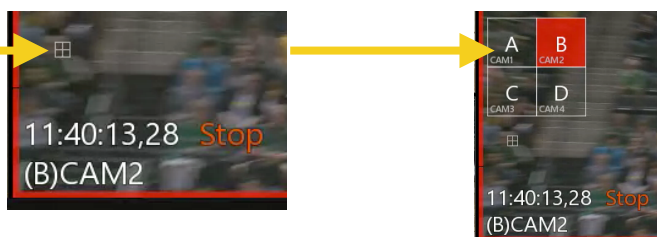
Double-tap or double-click a clip that you want to cue. It will load into the Player channel that has the thick boarder around it.

It is a good operational habit to first select the Player and then double tap the clip to cue it.



Reminder:
Player-1 is RED boarder
Player-2 is WHITE boarder

To change the angle of a cued clip, touch the “Angle Selector” button from the player window.

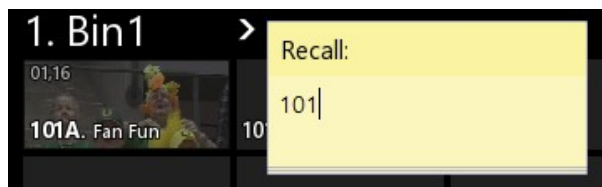


The selector can be moved to anywhere on the display.

Then touch to select from any of the available angles. Touch the “Angle Selector” button again to hide it.

Cueing a Clip with a Number

An **option** to cue content is to type the Numeric Address of the item with a keyboard. In the example below, simply typing 101 and then ENTER results in the clip being cued to the active Player.



Typing only 3 numbers recalls the first angle of the clip.

To recall a clip and specific angle, you may use letters:

101a, 101b, 101c, 101d...

or four numbers may be used:

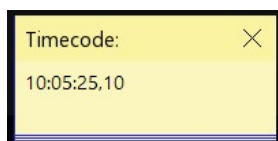
1010, 1011, 1012, 1013,...

Return to Recording - When the Clip Was Created

Sometimes, after an operator has created a clip, they may want to return to WHEN the clip was created at that exact time. A clip may be used to reach the point in time from when it was created.

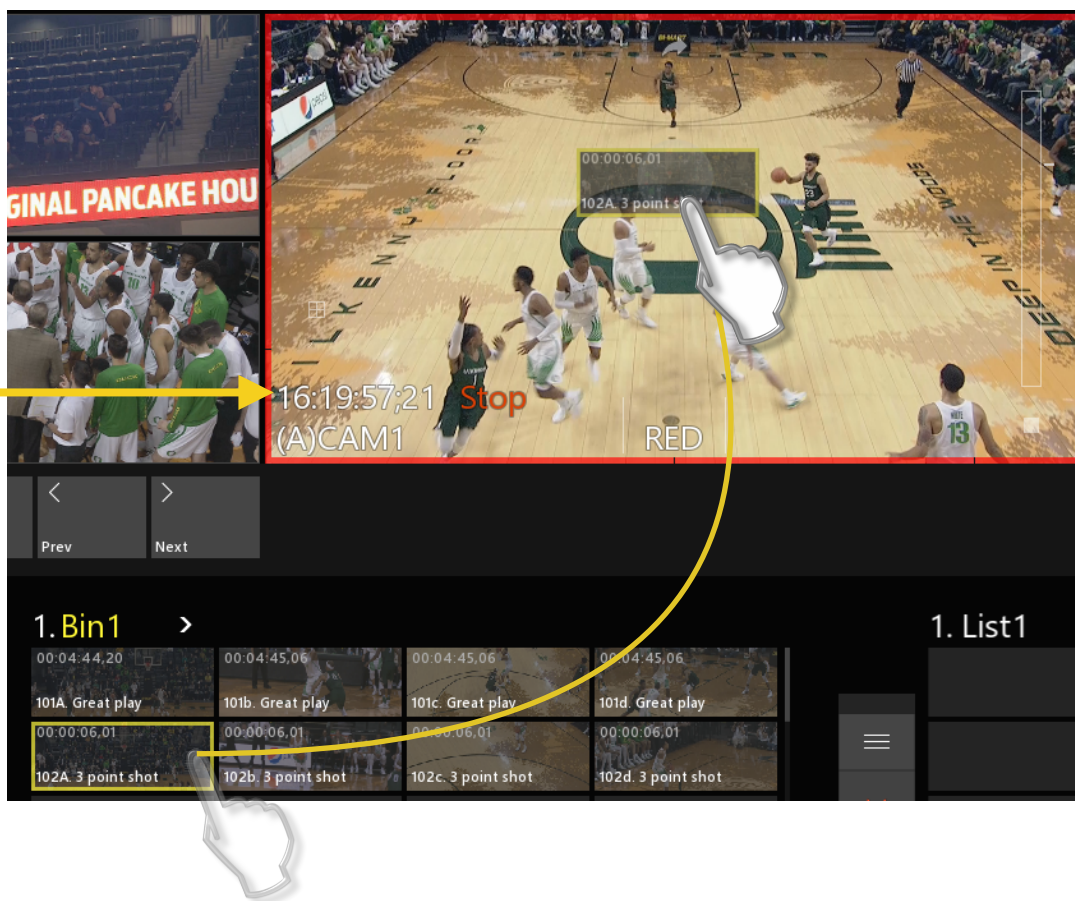
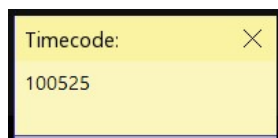
GoTo Timecode

Option: Click on the Timecode in the player window and a notepad will open.



Enter the time you want to Goto, and press "enter".

Note, it is not required to enter punctuation.



Drag the clip from the Clip Bin and drop it onto a Player. The system will use the Clip's In-point as a point of reference on the Record Train and snap to that moment in time, and even the Input Angle will match the Angle that was dropped on the Player.

New clips can be created from the same time period, by using the "In" and "Out" buttons.

Note: If the content has been consumed by the record loop, the system will cue to as close as possible to the original clip's timecode, therefore, the head of the record loop.

Adjusting In and Out Points for a Clip

Cue a clip. Shuttle or Jog to where you want to update the In or Out point.



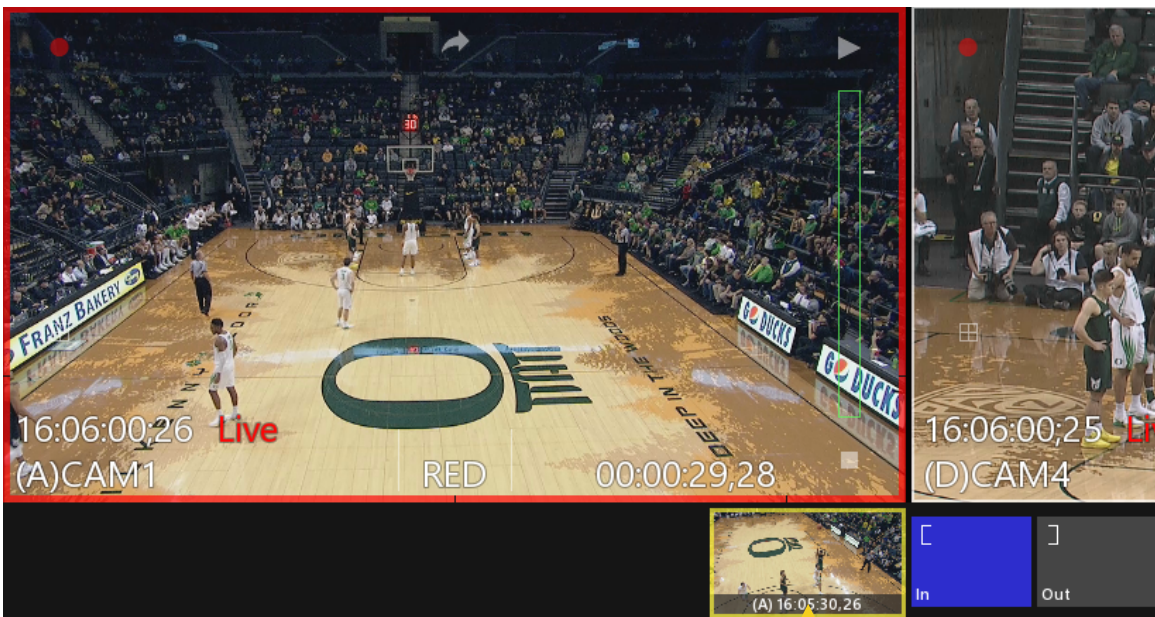
Simply use the “Mark In” or “Mark Out” button to set a new point.



↑ Option: Drag the “bead” to scrub quickly between the In and Out points.

Adjusting In and Out Points During Live Recording

During a Live Recording, at any time you may update the In and Out points by touching them.



Double tap the In or Out THUMBNAIL to jump to that point in time.
If you update the In-point to a timecode AFTER the Out-point, the Out-point will be deleted and a new In-point and Thumbnail are created.

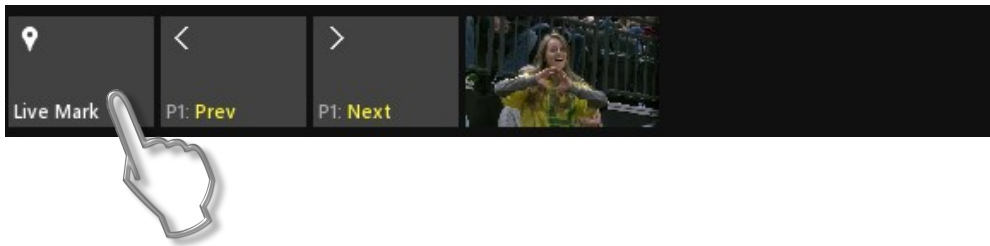
Only after touching “Add Clip” or an empty Slot in a Clip Bin, will a clip be created.
It is possible to create a clip by only using an In-point or an Out-point, and the system will use the (User Setup) Default duration to create the clip’s needed In or Out point.

Guardbands in the User Setup may be used to establish a “maximum In” and “maximum Out” that will be also be preserved when the clip is created. Guardbands are limited to 30 seconds.

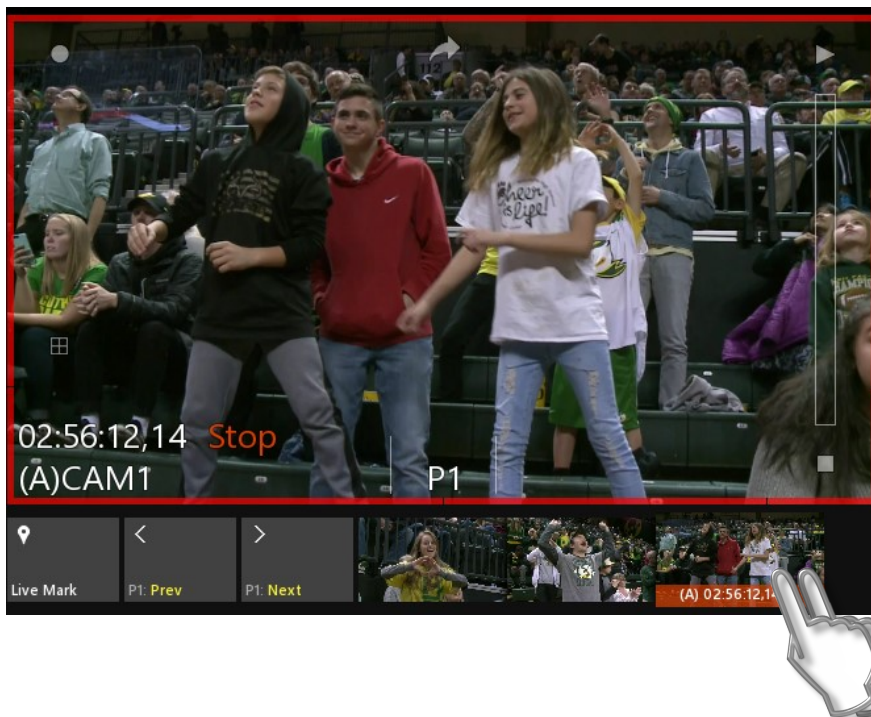


Live Mark Bar

The “Live Mark” bar lets you mark important moments without having to make a clip.

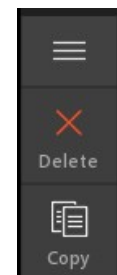
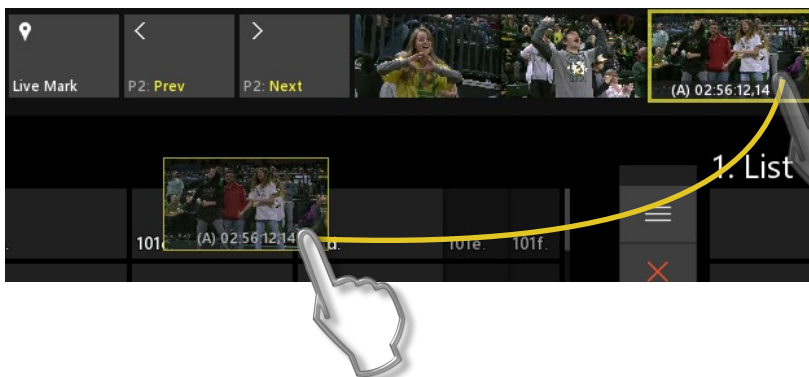


Click “Live Mark” at any time and this will create a Time Stamp and thumbnail reference below the Player window. The mark is referenced to the last input that was active in the Player. Therefore, if angle “C” was the last live input, the Live Mark will create a mark for angle “C”.



Click “Live Mark” as many times as you would like. Double click a thumbnail to load the Recording into a player.

Drag the Thumbnail to an empty slot to create a clip. Clips will be created with Default durations and Guarband lengths.

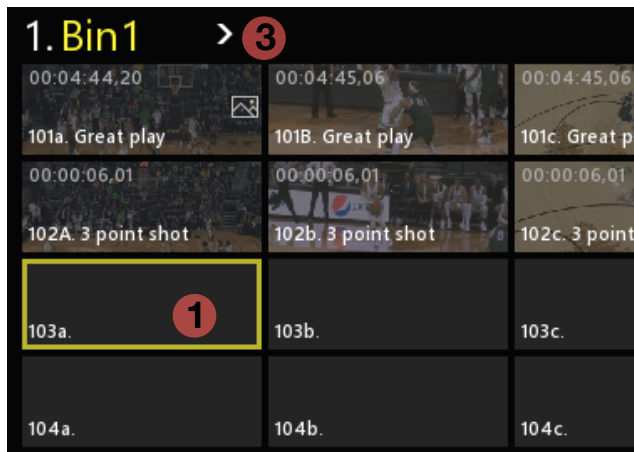


Use the Red X (delete) button to delete any selected Live Marks.

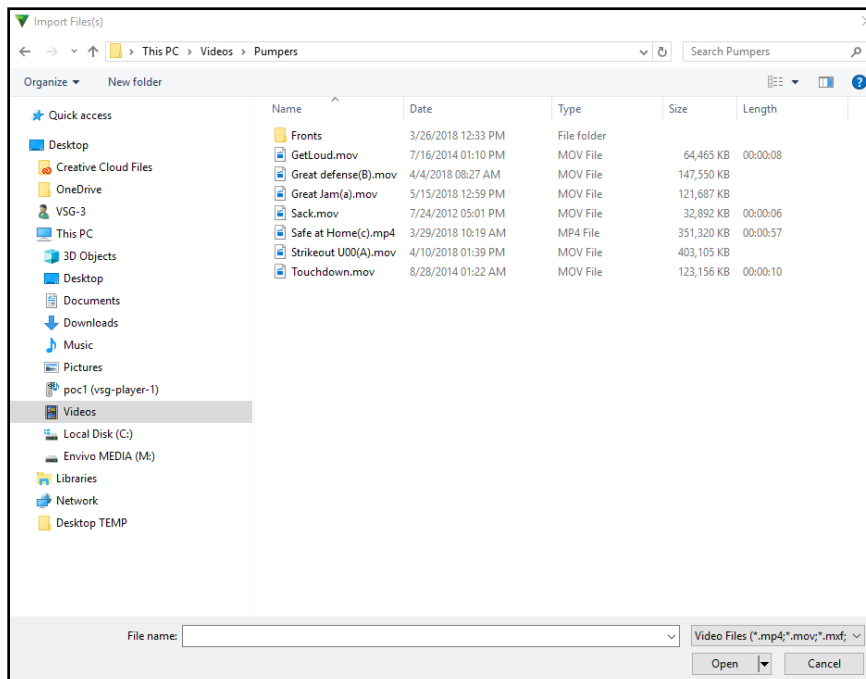
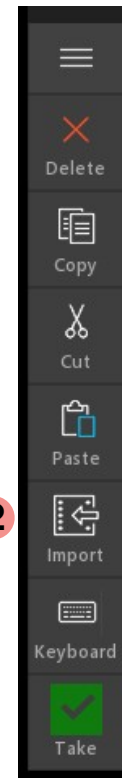
Option: Use CTRL+“Live Mark” to make a thumbnail mark for a live input that you have cued to a moment.

Importing a Clip

Importing content as a clip is a very simple process. Nearly any type of video format can be imported for play back. Multiple clips may be selected for import at the same time.



- 1 Select an empty "slot" in a clip bin
- 2 Click the "Import" icon in the MENU Bar
- 3 The Drop Down Menu provides an Import option



Windows Explore opens.
Select the clips for import and click "Open".

Note: 4k clips are not supported, and will not import



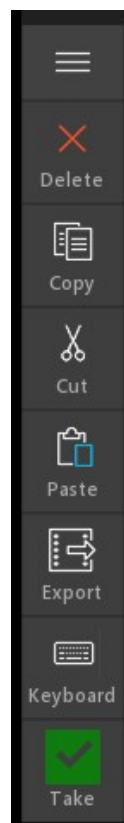
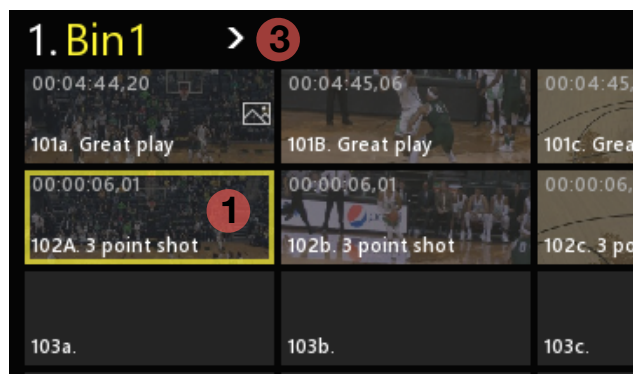
- 4 As the import begins,
a thumbnail is created and a white
arrow shows import in progress.

Once import is complete,
the arrow will disappear.

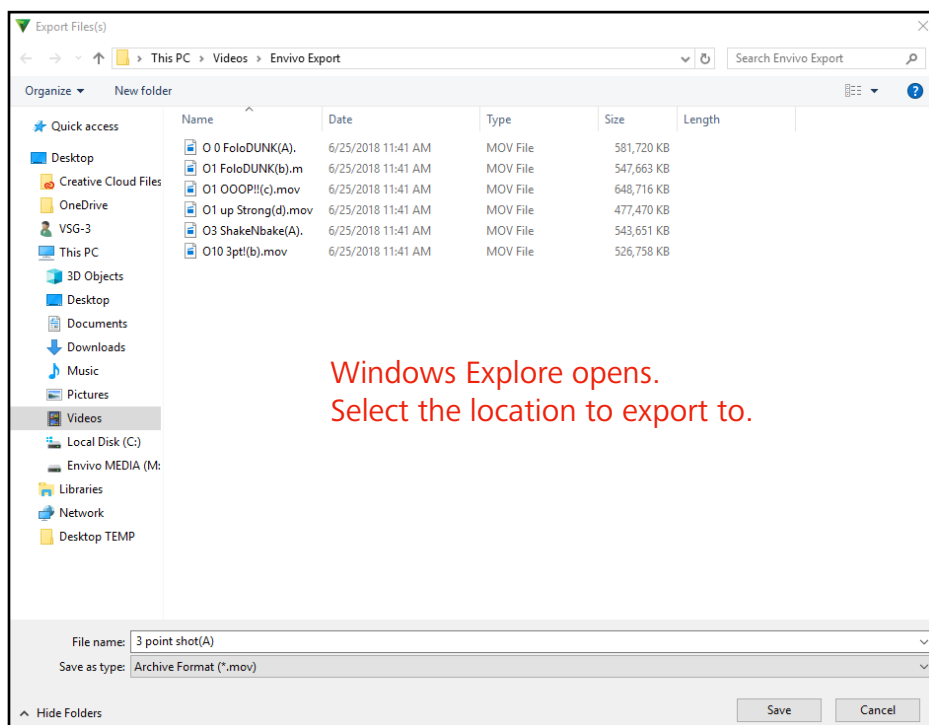


Exporting a Clip

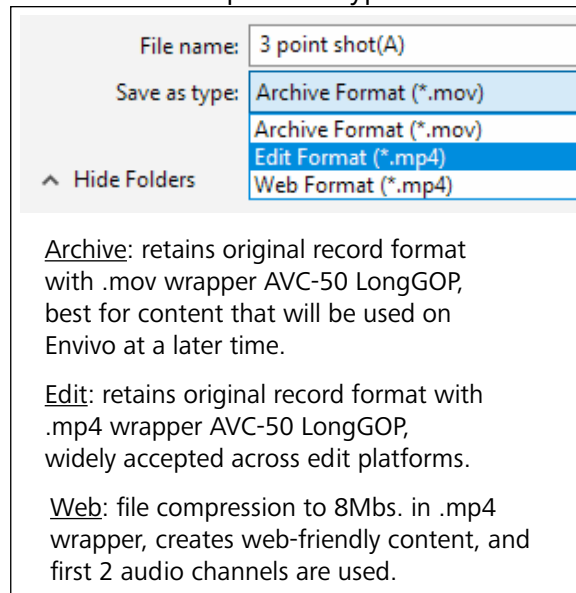
A single clip, or group of clips may be exported to any location that the system has Read/write permission to.



- 1 Select a clip or group of clips in a clip bin
- 2 Click the "Export" icon in the MENU Bar
- 3 The Drop Down Menu provides an Export option



Choose an export file type:

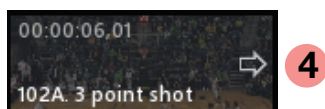


Click "Save"



- 4 As the Export begins, a white arrow on the thumbnail shows export in progress.

Once export is complete, the arrow will turn clear.





Properties of a Clip

The Tool Bar has many functions and some may be greyed out due to being in development.

Clip: 101A. Great Play

101A. Great Play 101b. Great Play

101c. Great Play 101d. Great Play

101e. Great Play 101f. Great Play

Make Primary Set Thumbnail Edit...

Clip Name: Great Play Clip Speed: 100%

Loop: Off

The "Edit..." button launches the Layers window. See "Graphic Layer Edit Tool."

The Properties Tool will change based on what has been selected. A Live input will offer different property choices than a clip or playlist.

You may also select from the various Pages of the property items such as

- 1 Video Page and
- 2 Layers Page (see "Working with Layers")

Properties of a clip offer functions such as

- 3 Update the thumbnail to a preferred frame.
- 4 naming a clip
- 5 enabling the loop of a clip and
- 6 setting the speed of a clip when it gets cued or placed in a playlist.

Working with Layers

You will find this function available for clips in bins, clips in playlists, and live inputs.

Clip: 101a. Great play

Select the "Layers Page" icon

1

2

3

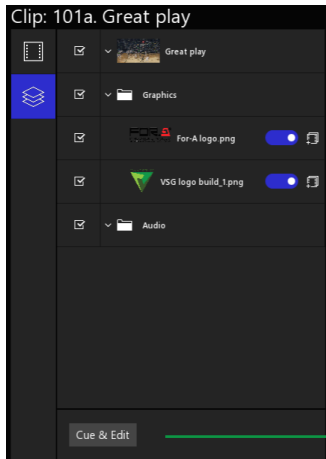
4

Cue & Edit

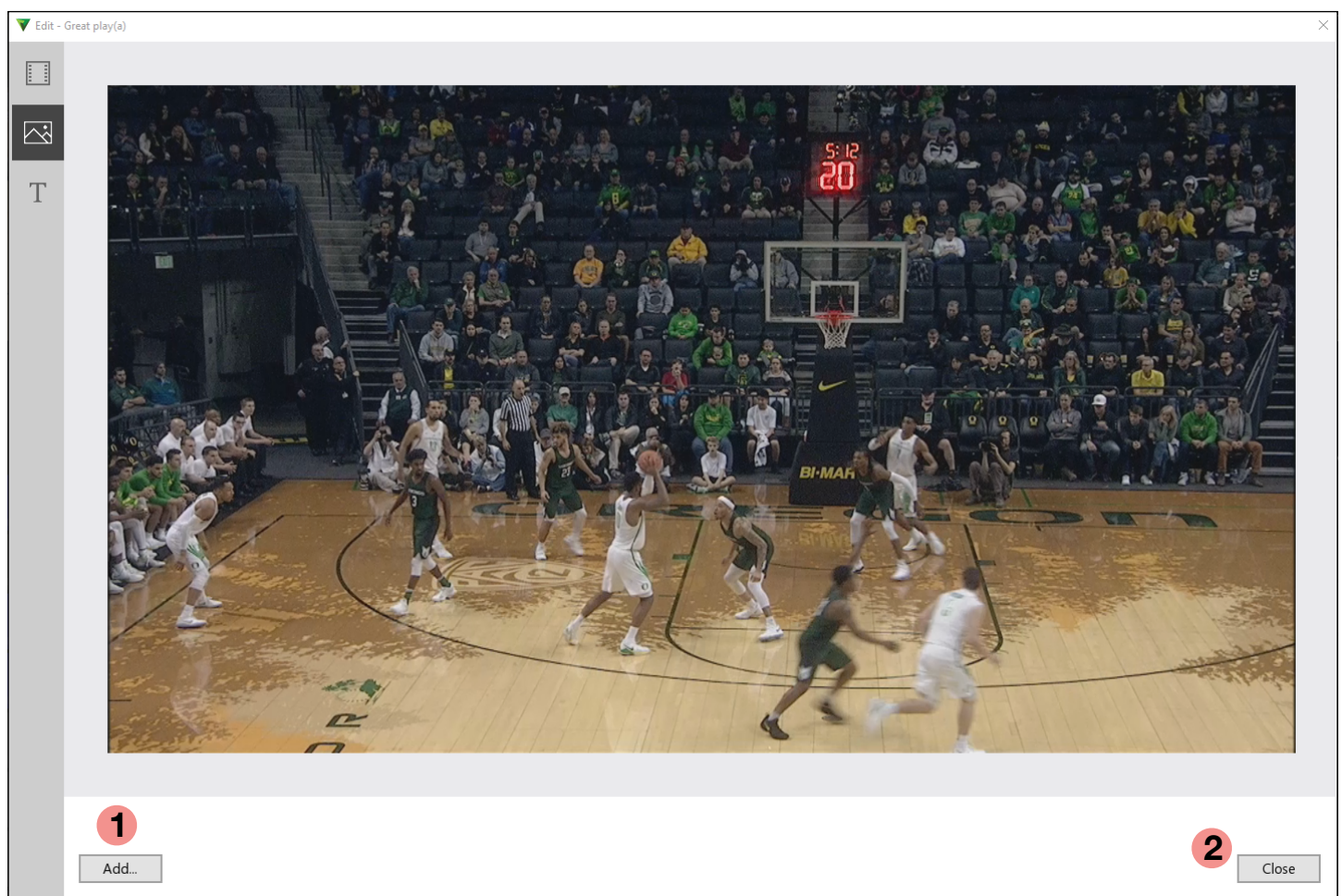
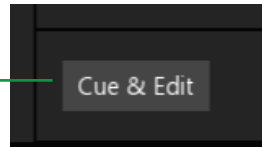
- 1 Uncheck the box to disable the graphic layer, check the box to enable the graphic layer.
- 2 Toggle on (blue) if you want playlists and copies of the clip to include the graphic layer.
- 3 Uncheck to disable audio for the clip. Check the box to enable clip audio.
- 4 Launches the Graphic Layer Edit Tool. (see "Graphic Layer Edit Tool")

Graphic Layer Edit Tool

You will find this function available for clips in bins, clips in playlists, and live inputs.



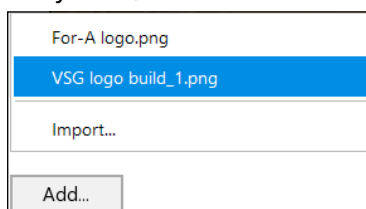
Select the "Cue & Edit" button, this will cue the select clip angle to the In point.



- 1** Gains access to graphic layers on the system, even if they need to be imported.

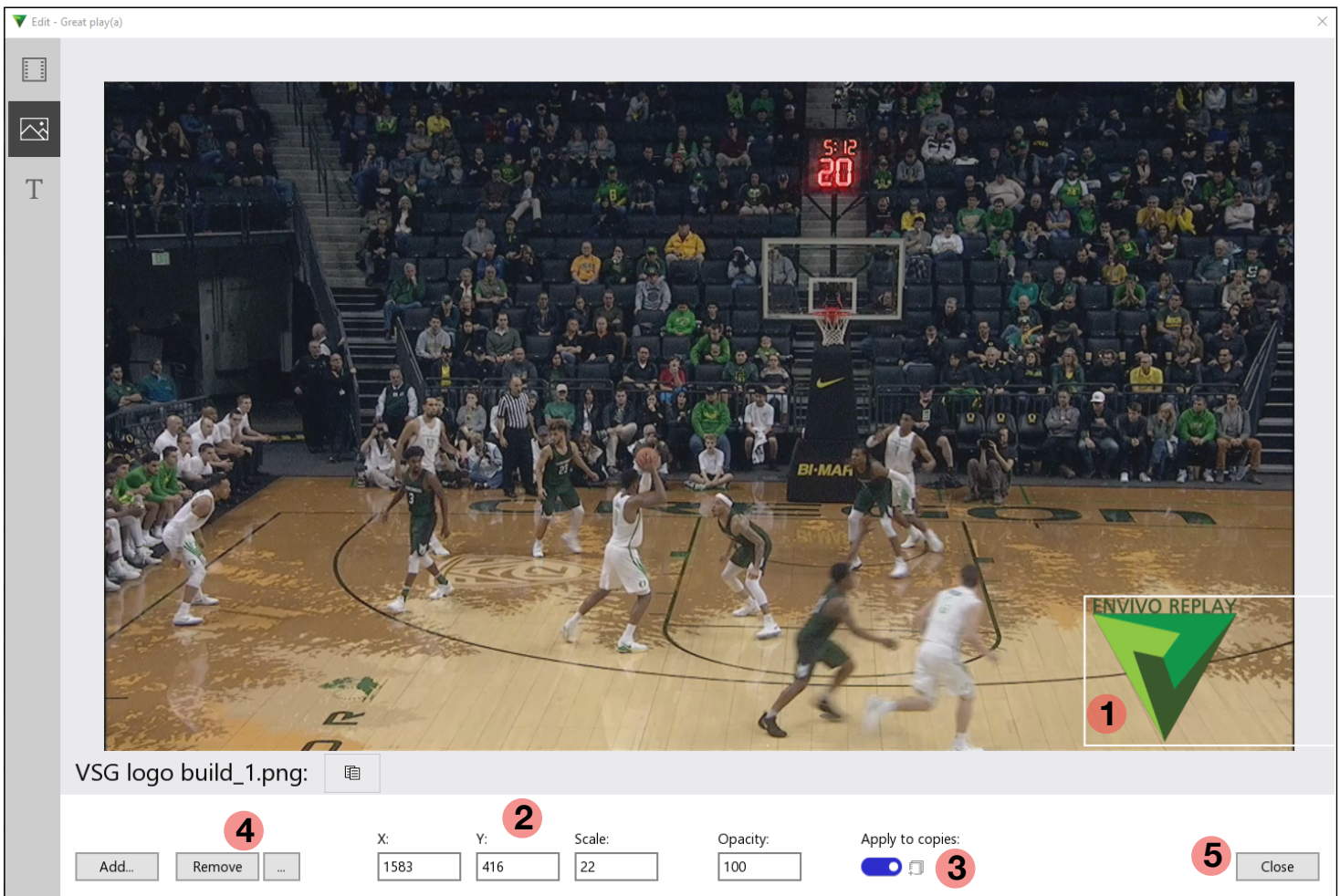
When selecting "Import..." Windows navigation opens to locate .jpg, .bmp, or .png files.

Imported files will be added to the Graphics Folder on the Media Drive. Once imported, they will show on the "Add..." list.

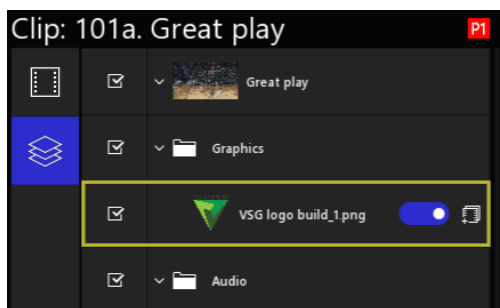


- 2** Closes the window.

Graphic Layer Edit Tool (cont.)



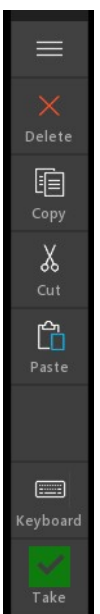
- 1 With two fingers, pinch to squeeze or expand the graphic. Use one finger to position it.
- 2 Manually enter information as an option to guarantee an exact style.
- 3 Enable (blue) that if copies are made or the clip is added to a playlist, the graphic will persist.
- 4 Remove the selected graphic layer. The "... " allows complete removal of the graphic from all instances on the system, including removal from the Graphics folder on the Media Drive.
- 5 Close the window to apply changes and continue.



Note: The system will show up to 3 Graphic Layers at a time, even if more have been applied.

Option: Select the Graphic Layer and use Keyboard commands to Copy (Ctrl+C) and Paste (Ctrl+V) the graphic to other clips in bins or clips in playlists.

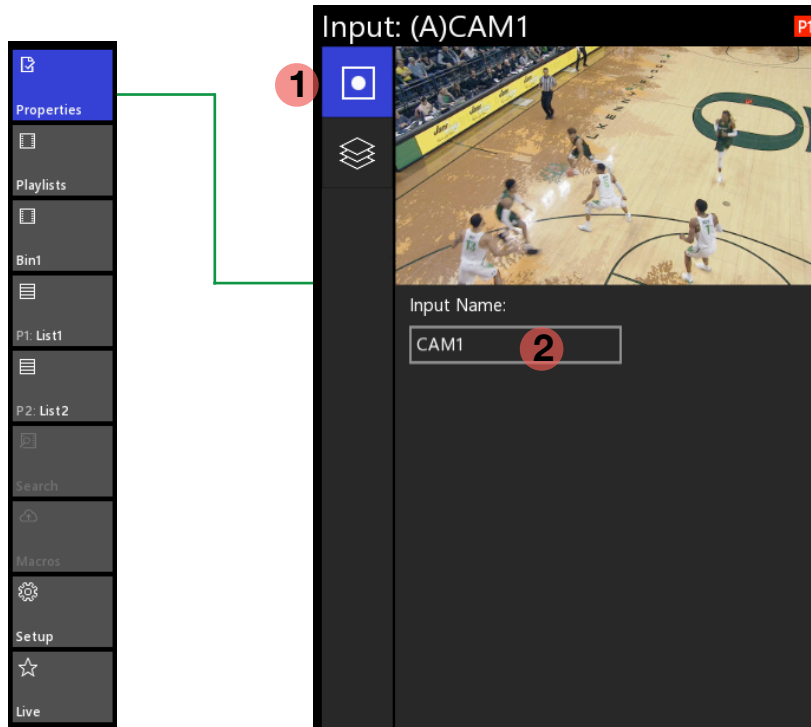
Delete →
Copy →
Cut →
Paste →



Another option is to use the MENU Bar and use the buttons to Copy/Paste or delete.

Properties of an Input

Each input may have different properties than the others.

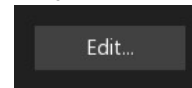


Select the Properties Tool and then touch an input.

Then chose the **1** Input Page

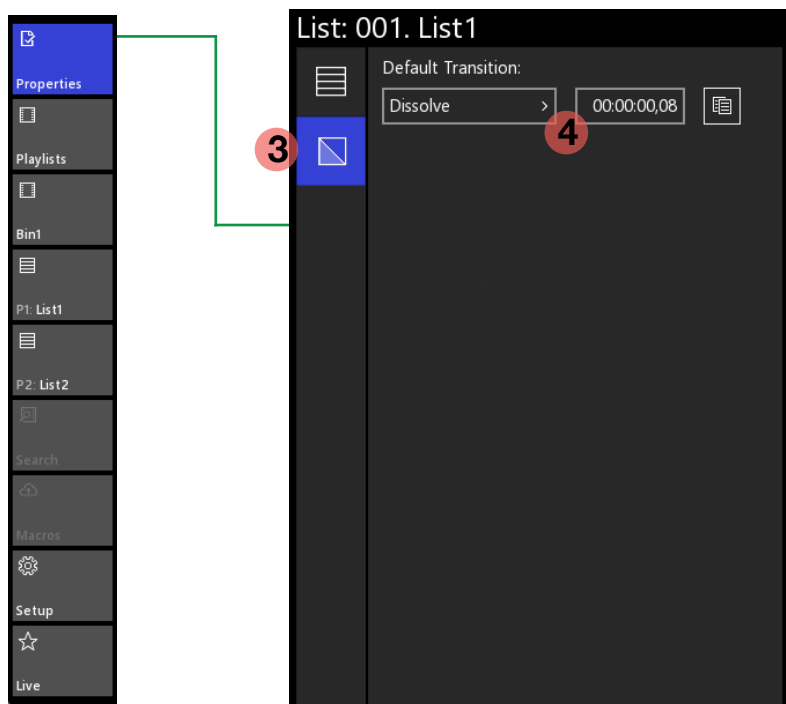
The name of the input can be changed by selecting **2** and typing a new name

The "Edit..." button launches the Layers window. See "Graphic Layer Edit Tool."



Properties of a Playlist

As content is added to a playlist, the properties of a Playlist may offer additional settings.



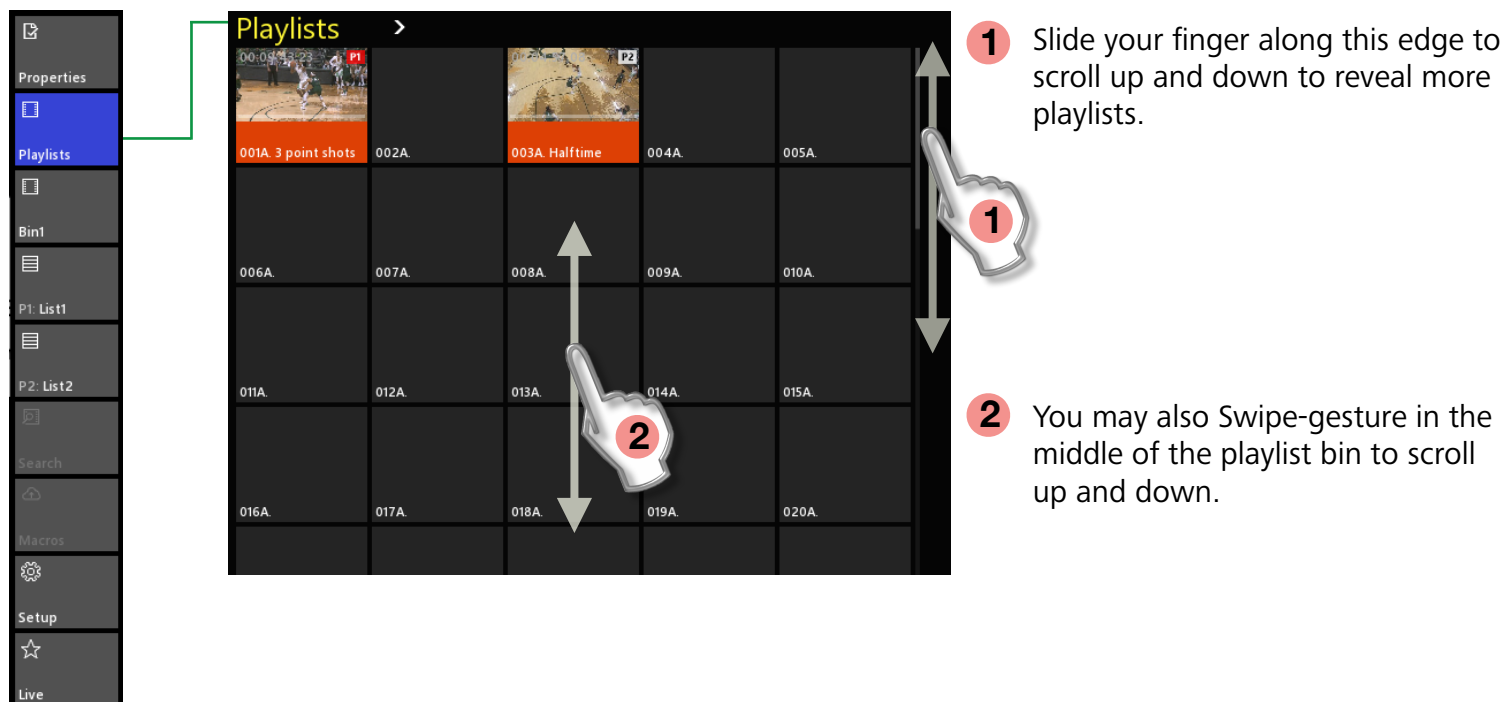
Select the Properties Tool and then select a playlist from the Playlist Bin.

Choose the **3** Transition Page

and make a choice **4** for dissolve and transition duration. These choices will affect new clips added to the playlist.

Playlist Bin

By default, when Envivo Replay is launched, Playlist Bin is listed as a tool. Below it is the first Clip Bin.

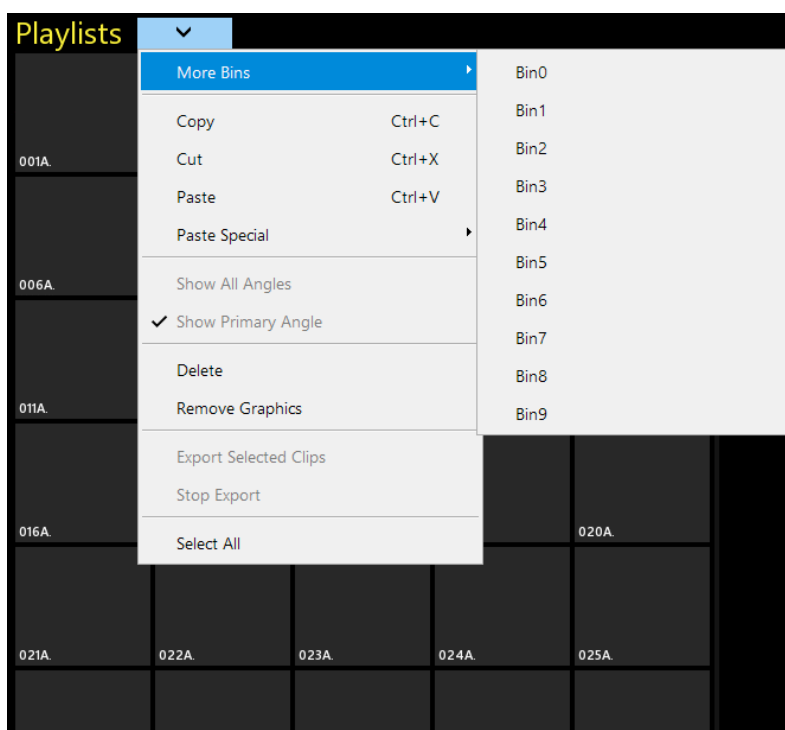


Playlist Menu Arrow

One way to change from Playlists to show Clip Bins is to use the drop down menu arrow.

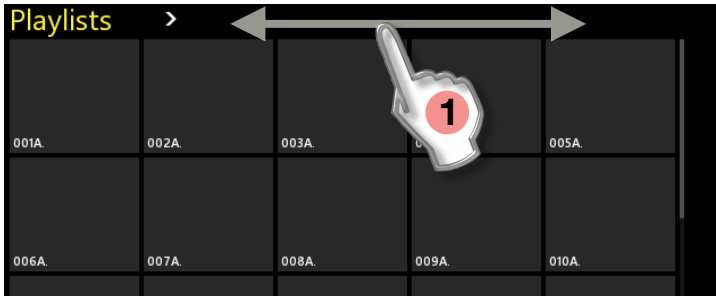
Bin "0" is the Playlist Bin.
There are 9 more bins dedicated to storing clips. Cut/Copy/Paste may be used between bins and between the Playlist Bin and Clip Bins.

Clip Bins cannot be renamed, however, each playlist may be named just like clips can.



Changing Bins

Another way to change from one bin to another is to swipe across the top of the bins.



- 1 Scrolling from right to left or left to right will reveal additional bins.

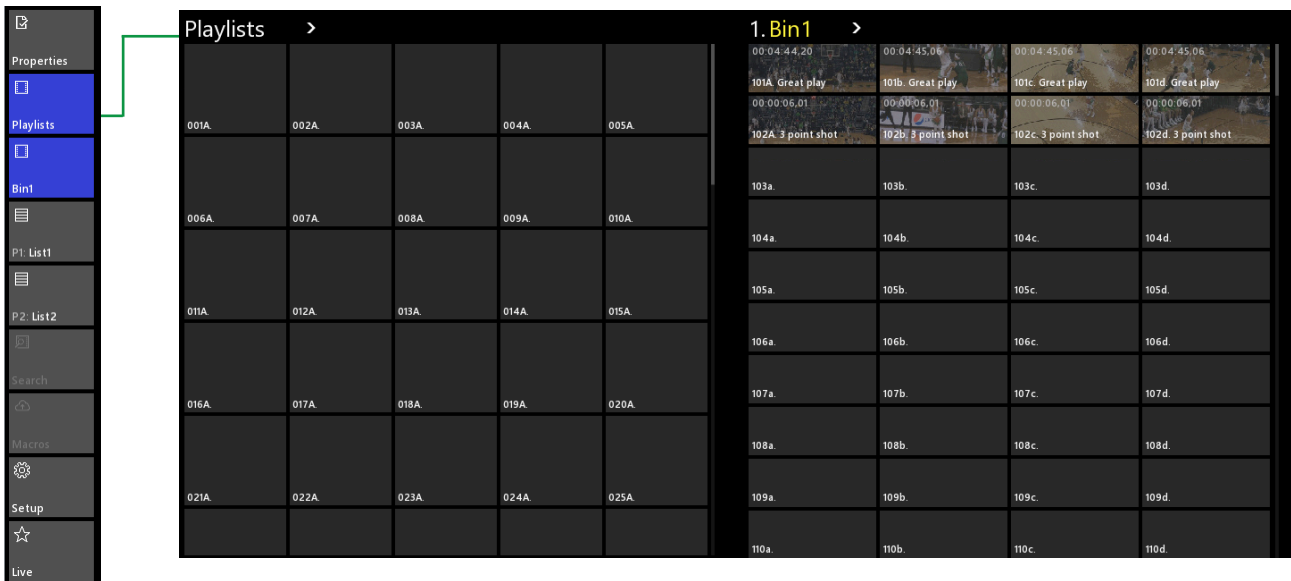
Playlist Bin is the farthest left and Clip Bin 9 is the farthest right.

Option: type the number of the Bin you want to display, and ENTER, will take you there.

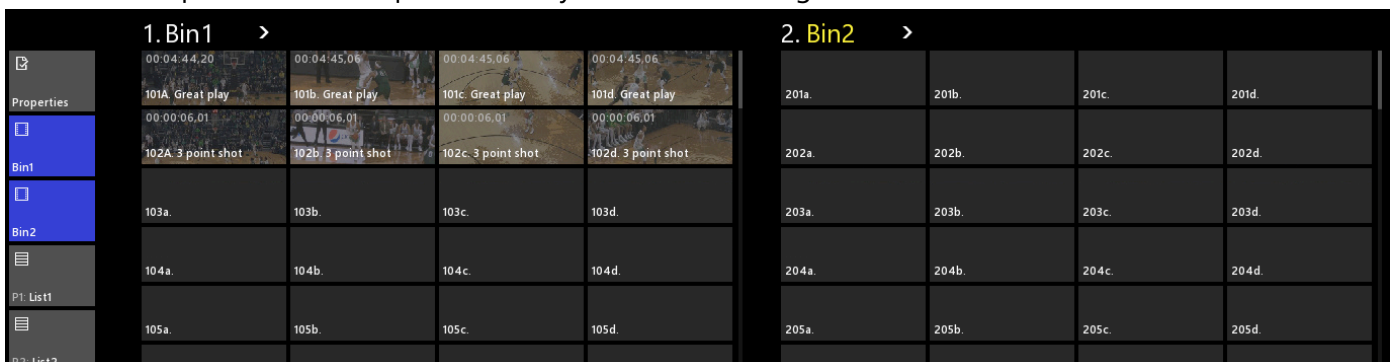


Multiple Bins

A Playlist Bin and Clip Bin can be shown at the same time.

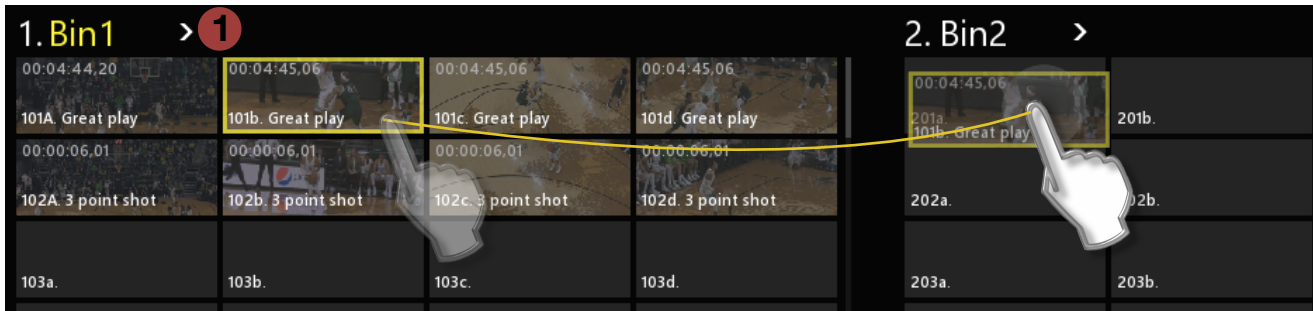


Or two bins can be shown at the same time.
Just swipe across the top of the bin you want to change.



Dragging Clips Between Bins

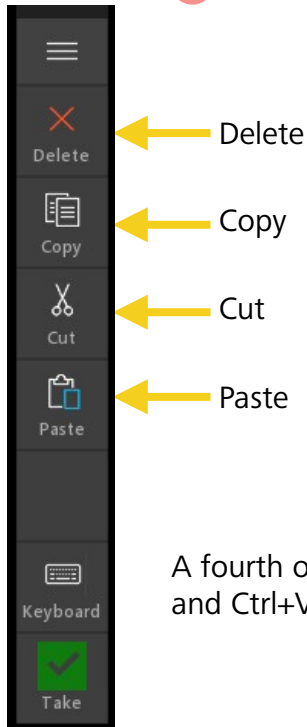
Select a clip and drag it from one bin to another. This action is the same as Cut/Paste.



Multiple clips may be moved at the same time by selecting one to begin with, holding the “Shift” key and selecting the last clip in the group to be moved. Click and drag the FIRST clip in the Group to the new location, even if it is in the same bin. Holding the “Control” key while making the selection will keep those clips in the order they were selected prior to the Cut/Copy/Paste function.

Another option is to use the Bin Drop Down Menu **1** and utilize Cut/Paste or Copy/Paste functions.

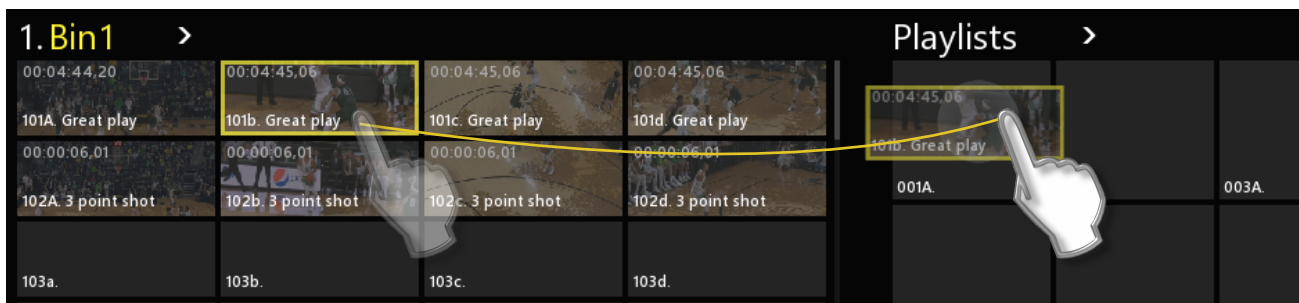
A third option is to use the MENU Bar and select a function.



A fourth option is to use Ctrl+C, Ctrl+X, and Ctrl+V keyboard commands.

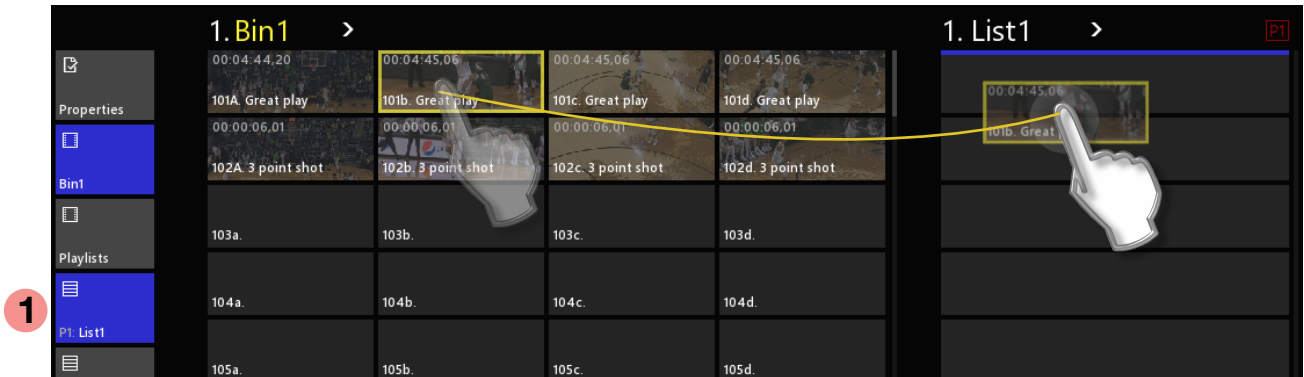
Drag Clips to Playlists

A clip or group of clips may be dragged directly onto a Playlist. The clip(s) will be added to the end of the playlist.



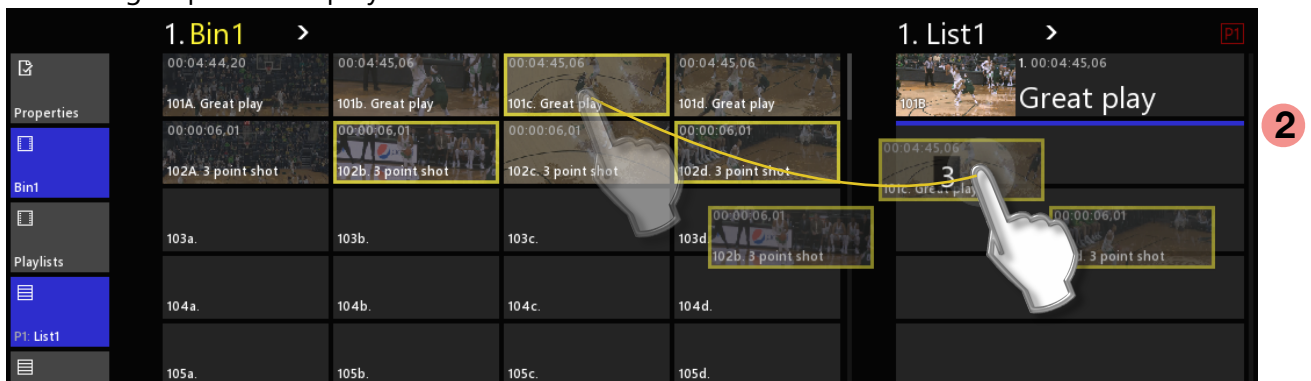
Building Playlists

Select a clip and drag it from the bin to a Playlist.

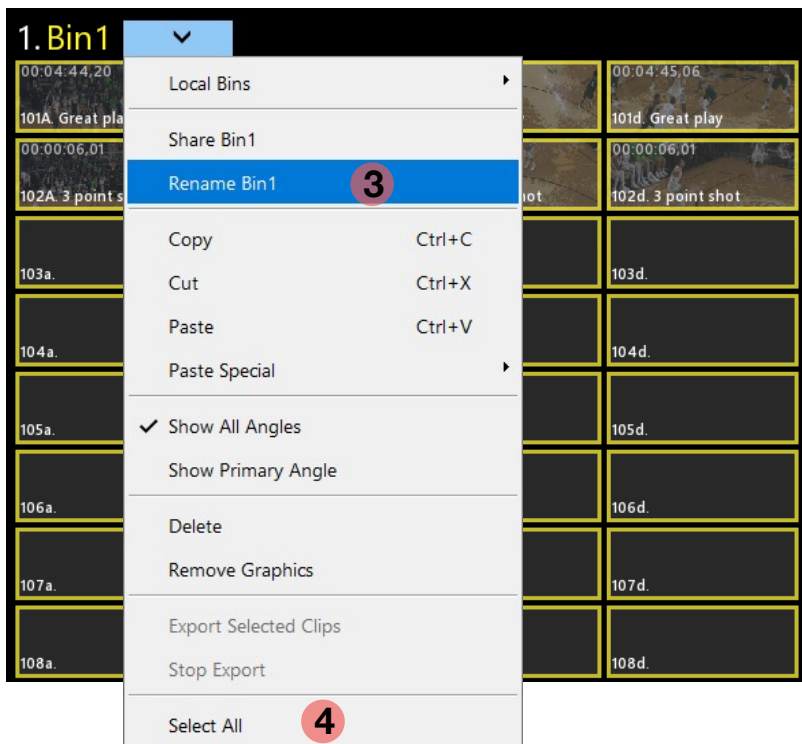


- 1 Select a List from the Tool Bar to reveal the list you are going to add clips to.

Hold down the "Control" key on the keyboard to make specific clip selections and move them as a group into the playlist.



- 2 The blue line in the playlist tells you where the clips will be added.

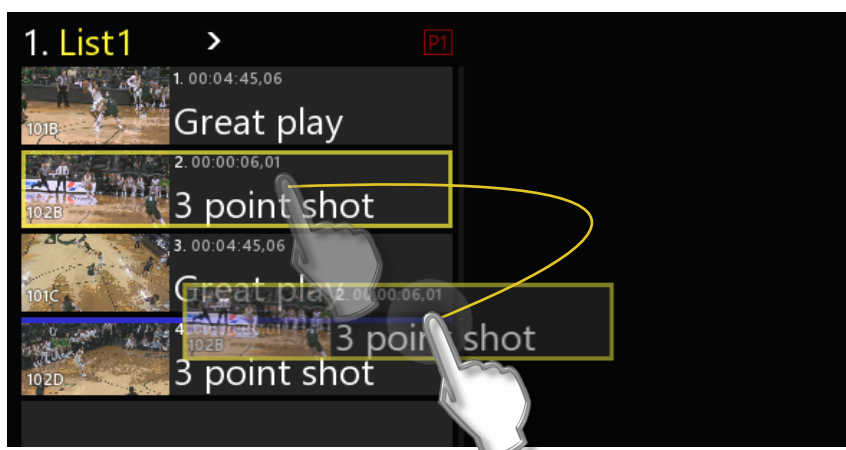


- 3 Rename a bin by selecting and typing a new name. To revert back to the Bin1 name, delete all characters from the text entry field, and press Enter on keyboard.

- 4 Select All in the Bin Drop Down Menu is another option to quickly select all clips in the bin and add them to the playlist with either keyboard commands or by using the Menu Bar.

Changing the Order of Clips in a Playlist

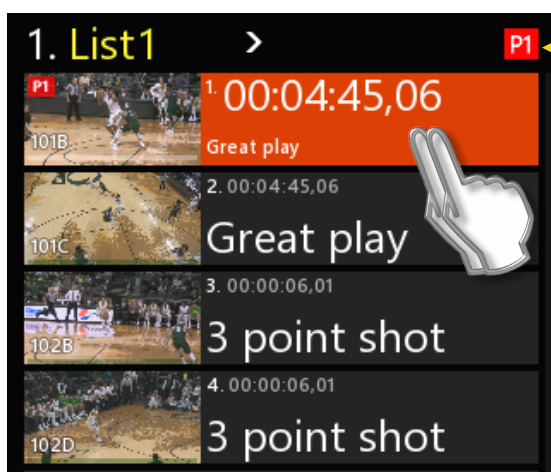
At any time, you may drag a clip and change the order it will play in the playlist. Begin by selecting the clip and moving it slightly left or right.



Again, the blue line in the playlist shows you where the clip will be moved to.

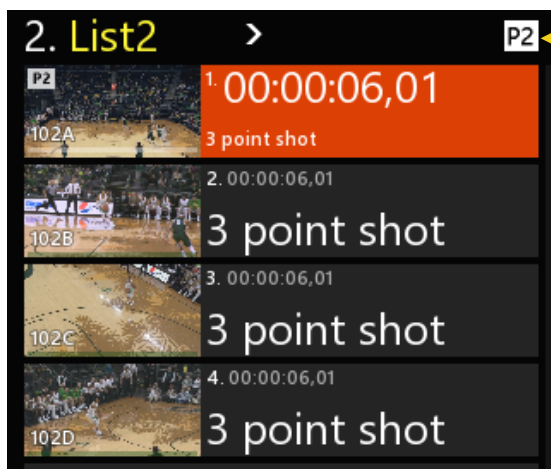
Cuing a Playlist

Double tap the first clip in the Playlist. This will load the playlist in to the Player.



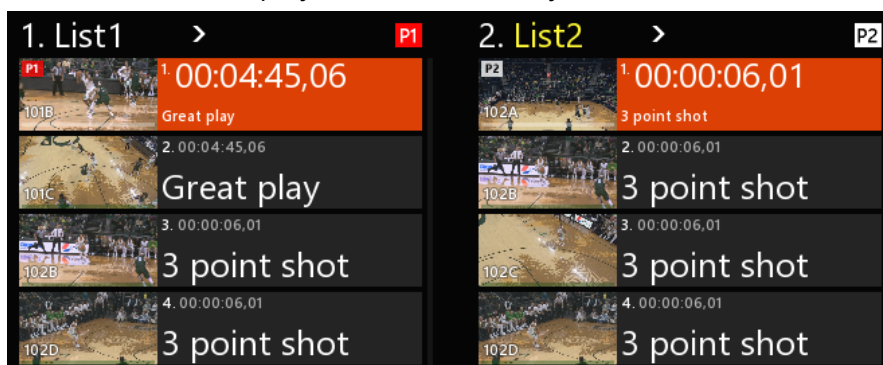
Notice the icon in RED in the corner above the playlist. This alerts you to the Player that the playlist will play on. In this example, "List1" will play on Player-1.

(Note: Triple-click on the "List1" name will cue the playlist to the first clip in the list. This mimics three presses of the LIST button on the Slow-mo Controller.)



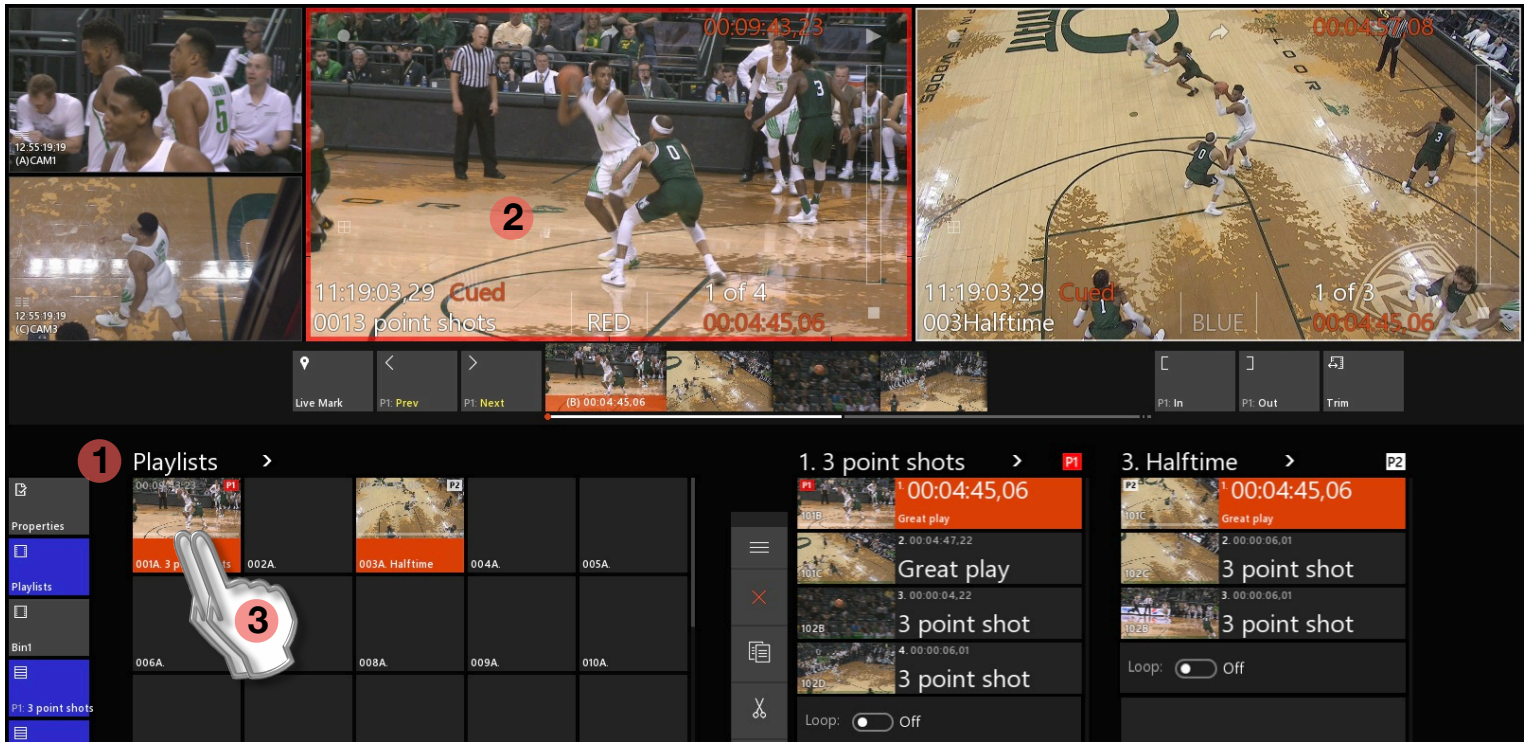
The icon in WHITE in the corner above the playlist, alerts you that "List2" will play on Player-2.

Two playlists shown side by side.



Cuing a Playlist (option)

A fast way to access and cue playlists (instead of swiping across the top of a playlist) is to display the Playlist Bin. **1** You will have access to all 99 playlists.



- 2** Select the Player channel that the Playlist is to be cued on by touching it.
- 3** Double-tap the playlist in the Playlist Bin. This will load it and cue the first clip in the playlist on the targeted player.

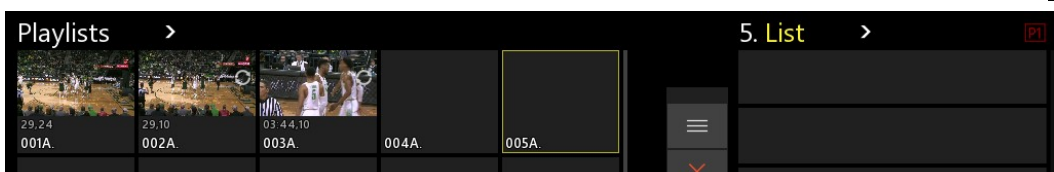
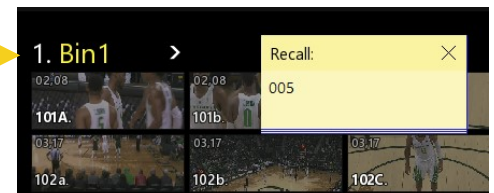
To load the other Player channel with a playlist, again, first touch the Player you want and then double-click the desired playlist in the Playlist Bin.

(Note: a Playlist can be named with the same method as a clip. Select the Playlist in the Playlist Bin. Begin typing on the Keyboard to name it, and press Enter on the keyboard.)

Cueing a Playlist with a Number

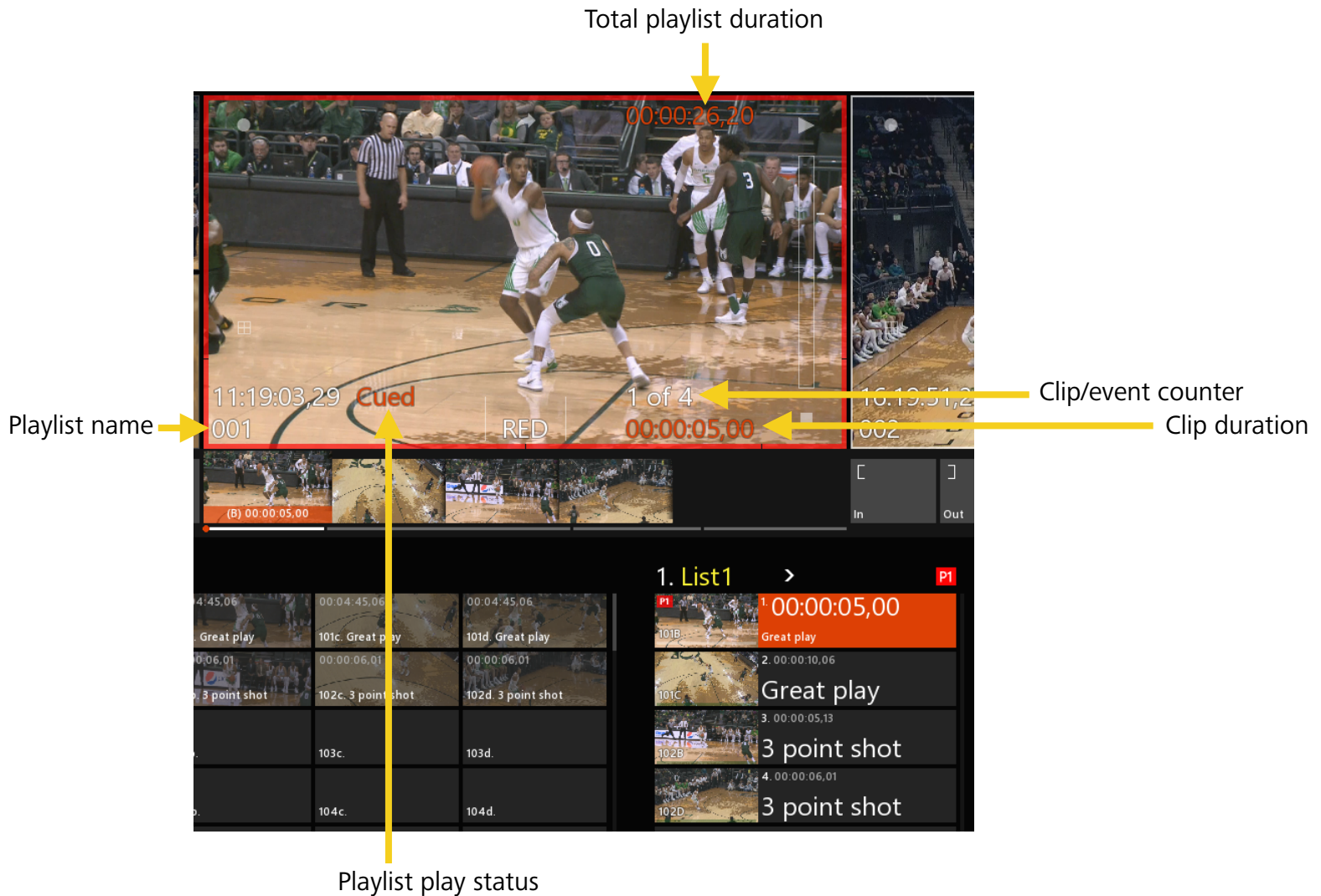
Playlists in the Playlist Bin start with 001 being the first Playlist and 099 being the last.

With either a Bin, Clip, or Playlist selected (it should be yellow in color) → type the number of the playlist and hit "Enter" on the keyboard. This will jump directly to the playlist displayed and also open the Playlist Bin.



Display Information of a Playlist

When a playlist is cued, the information is displayed on the Player to help you make decisions.

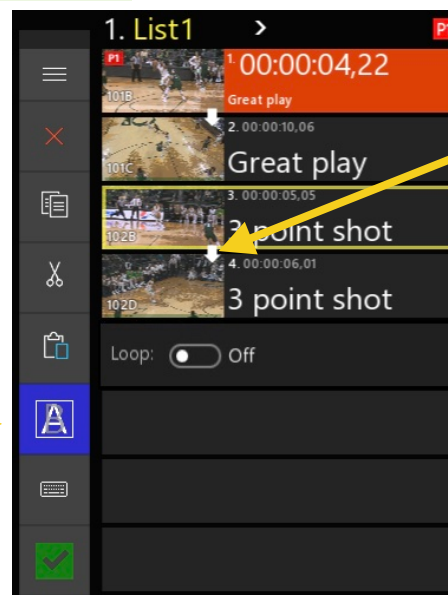


Add Transitions to Clips in a Playlist

Select the clip that you want to add an "out-going" transition to, this will add it to the end of the clip you have selected.

Select the "Add Transition" button from the Menu Bar.

Note: a clip must first be selected for this icon to appear.

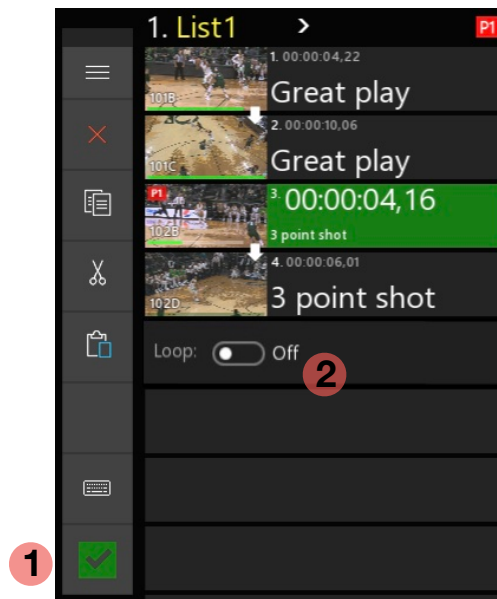


A white arrow is added to alert you that a transition has been added.

At any time you may toggle the "Add Transition" button to remove an existing transition.

Manually Advancing a Playlist

While a playlist is playing you may manually advance the playlist to the next clip event by touching the green checkmark **1** "Take" button.

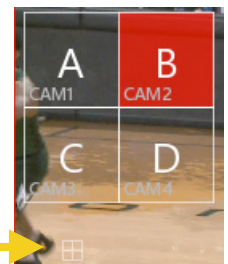
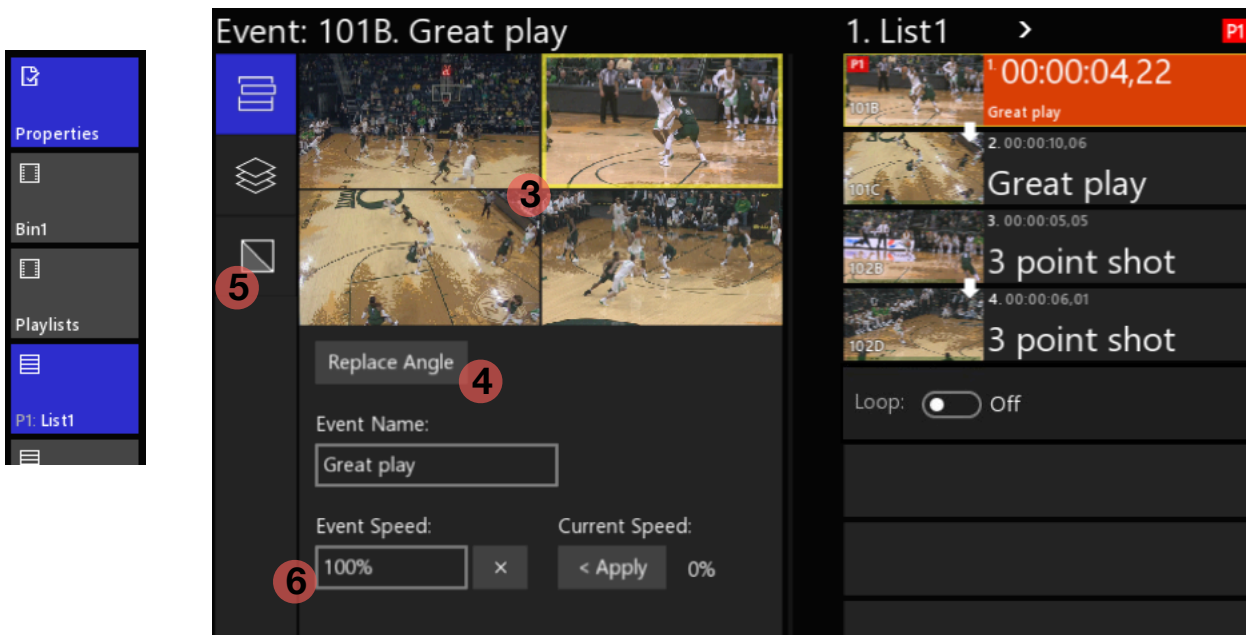


Playlist Loop

- 2** If you want the playlist to continually Loop, enable the Loop function for this playlist.
Note: The playlist will "cut" from the last clip to the first clip in the list and will not dissolve.

The "Take" button is very powerful and allows you to jump to anything that is selected. It can be any clip in a playlist, a clip in a Clip Bin, or even another playlist.

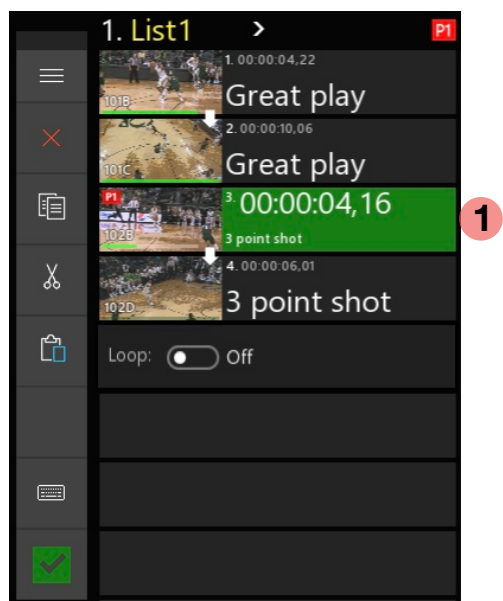
Properties of a Clip in a Playlist



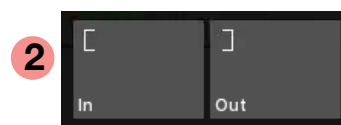
- 3** One way to change the angle of a clip in the playlist is to select a different angle from one of the thumbnails, and then touching **4** "Replace Angle". Another way is to cue the clip in the playlist and use the "Angle Selector" button in the Player window.
- 5** Select the Transition tab to modify playlist transitions.
- 6** Change the speed of a clip by entering a percentage value 1-800%
OPTION - select the clips in a playlist and use "Ctrl R" on the keyboard to enter a play Rate value.

Editing a Clip in a Playlist

Besides moving clips around in a playlist, it is common to want to change the In and Out points of clips in a playlist. This can be done without ever affecting the original clip in the Clip Bin.



OPTION: use the Controller Panel. See "Wedge Controller" in the Appendix (VAR+In = Clear In, and VAR+Out = Clear Out) allows in-playlist editing.



- 1 Cue the clip in the Playlist to be edited.
- 2 Use the "In" or "Out" buttons to make the clip shorter.
- 3 To make clips longer (by using guardband material) Select the "Trim" button. It will turn blue. You now may scrub into the content prior to the In-point and after the Out-point. Use the "In" or "Out" button to set new points.

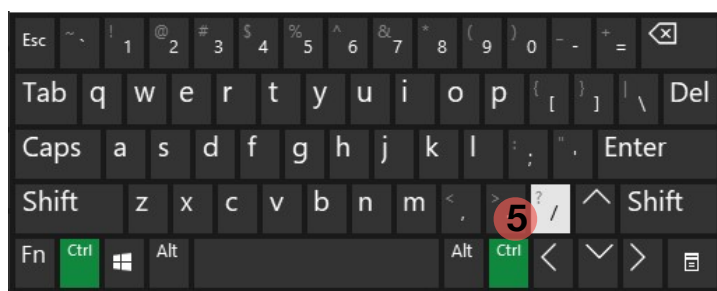
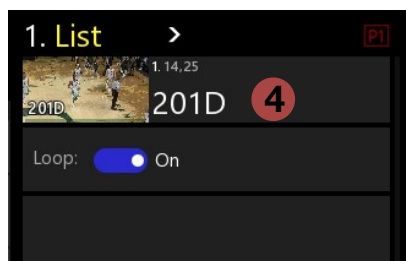


Click "Trim" again to exit Trim mode, or by selecting another clip in the playlist will also exit Trim mode.

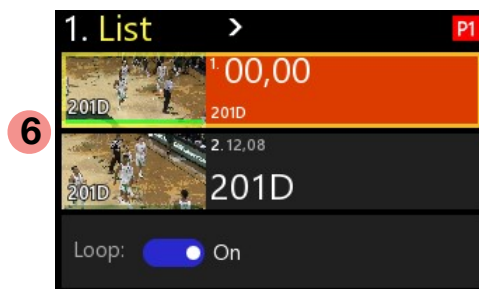
Dividing a Clip in a Playlist

Sometimes, there are multiple parts of a single clip that the operator would like to use but does not want to be required to add the same clip multiple times to the playlist, and then forced to modify the In/Out points for each one. Dividing a clip in a playlist is the quickest way to cut up a single clip into multiple parts.

- 4 Cue the Clip in the Playlist and Jog or scrub to where that section should end.



- 5 Use " Ctrl / " on the keyboard to create a Divide Clip (cut) point.

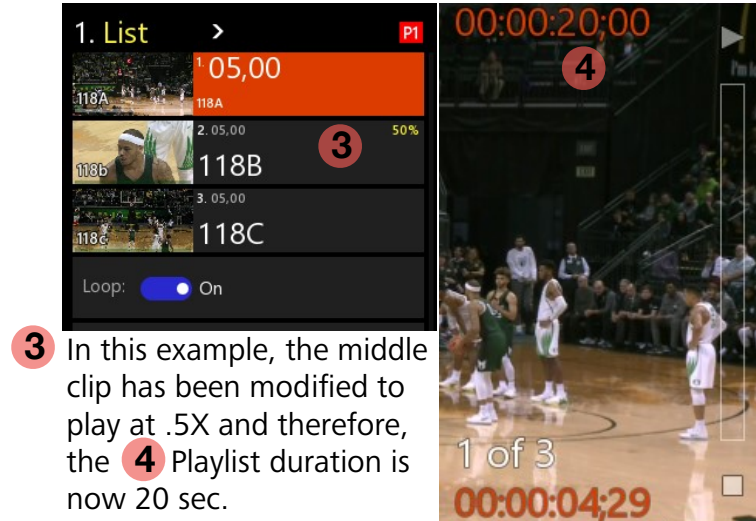
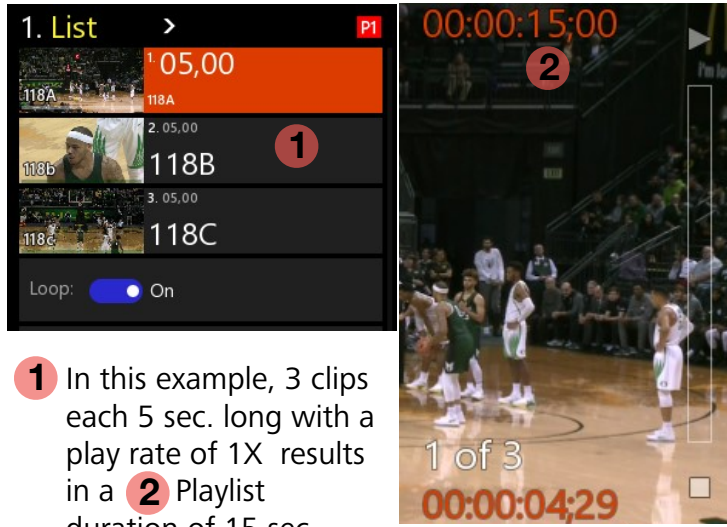


- 6 This results in two clips (with the same name) or two parts of the original clip. You may now edit the In/Out point of each part. You may repeat "Divide Clip" multiple times.

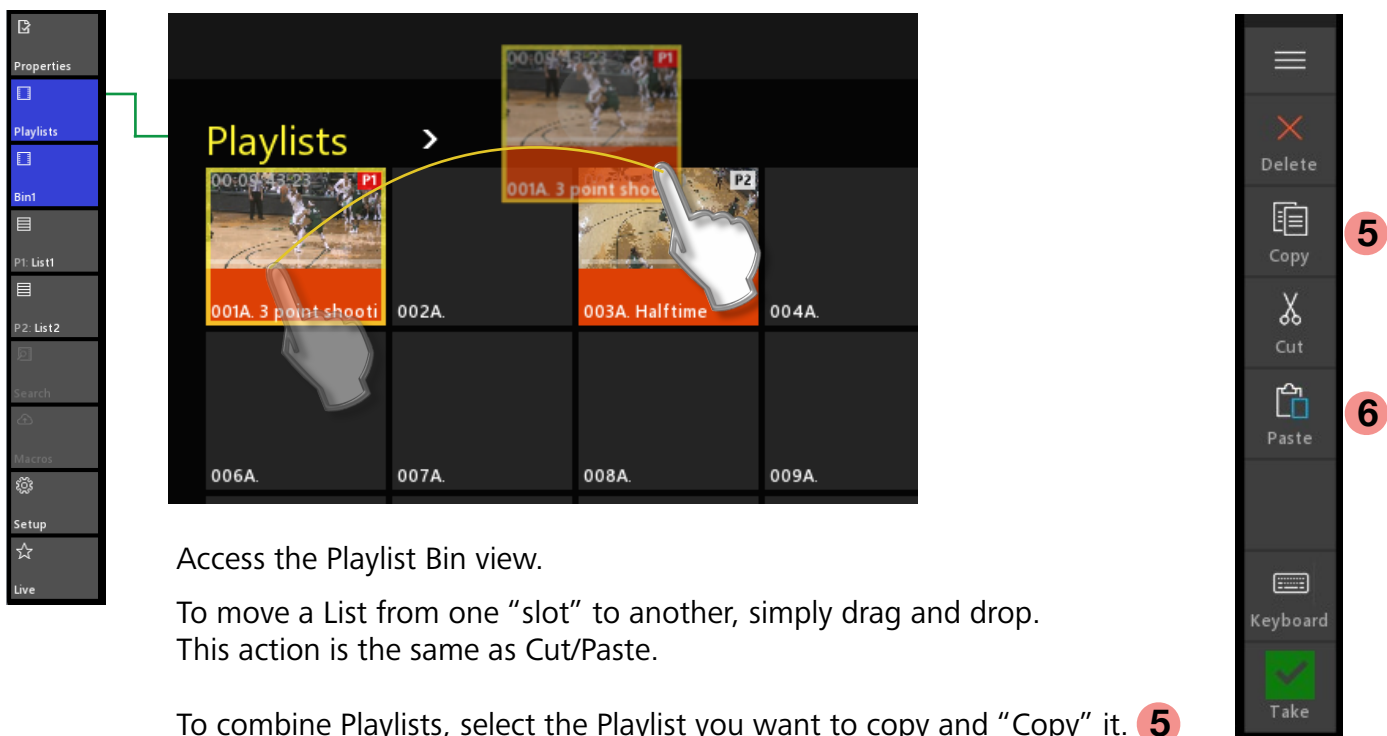
Speed Changes in Playlist

As mentioned before, you may modify the playback speed of a clip in a playlist by either using the properties of clip in a playlist or using " Ctrl R " to enter a play Rate. Making speed changes will affect the Time Remaining display data for the playlist.

Playlist length is determined by the duration of each clip from IN point to OUT point as well as the speed of the clip.



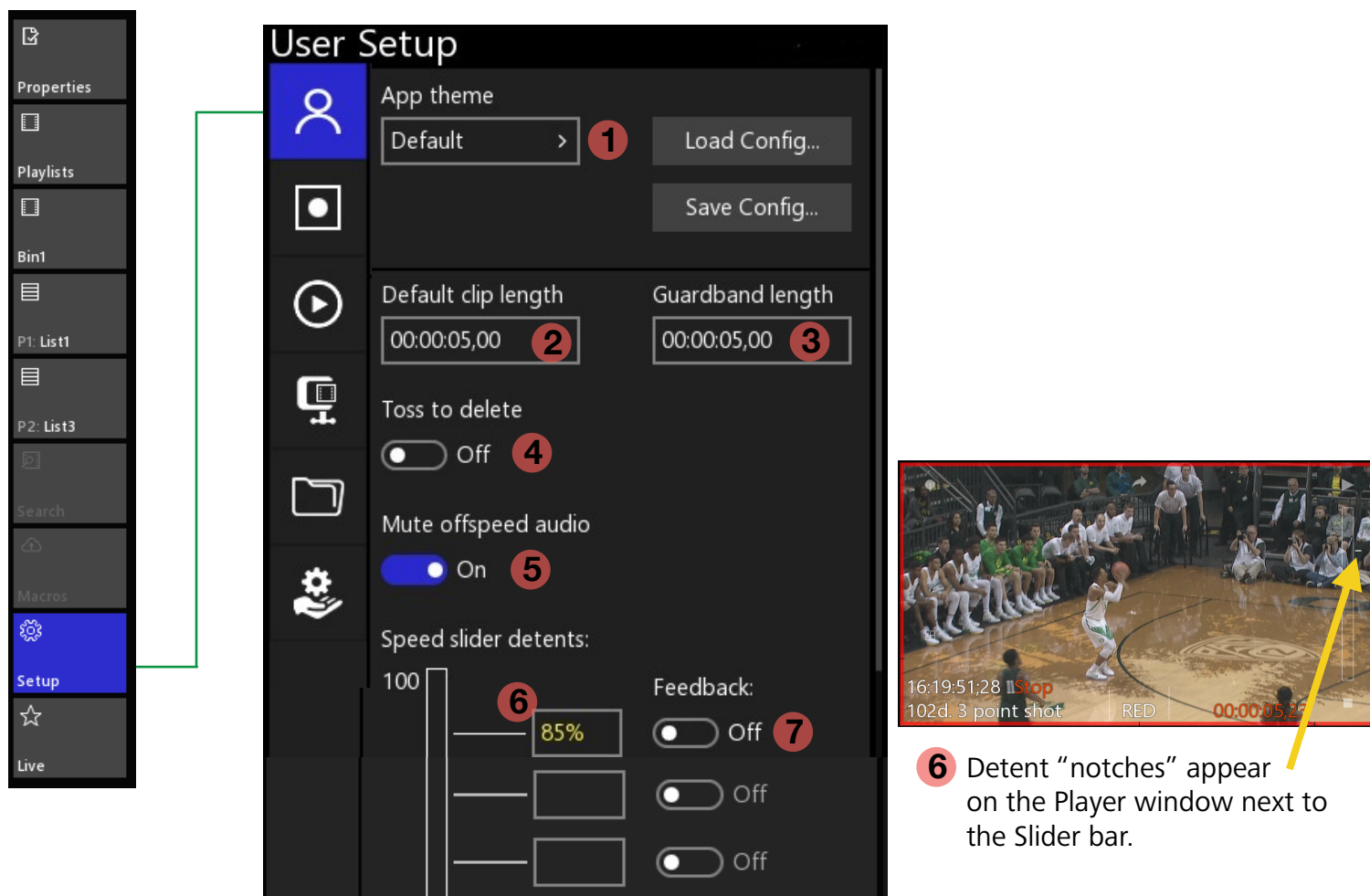
Combining Playlists



This will combine the playlist by adding the incoming clips to the end of the target playlist.

Setup / User Setup

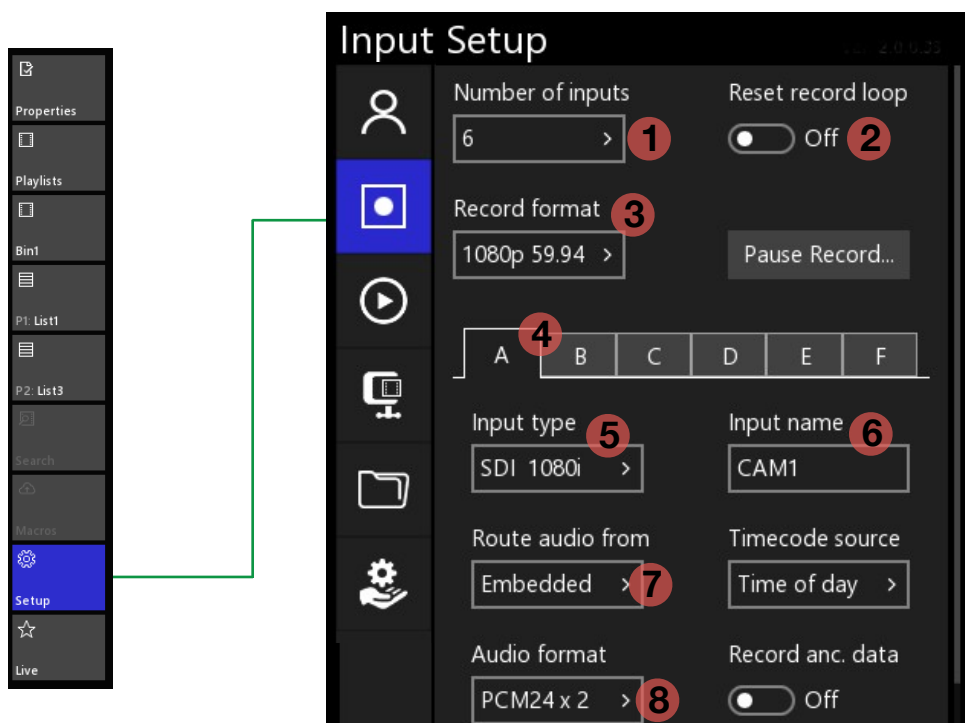
The User Setup page allows for users to customize some of the operations. Changes are instant and settings will remain the same upon each application restart.



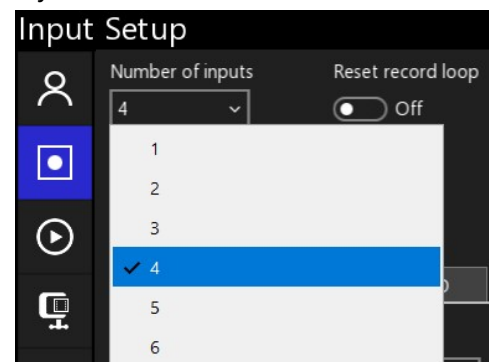
- 1** Allows the User to load a specific "Theme" or Load/Save a configuration. A restart of the App is required.
Note: Themes are licensed modes of operation within the Application.
- 2** Sets the default clip length when only the "IN" or "OUT" button is used to create a clip.
- 3** Sets the Guardband length (the amount of content created both prior to the "IN" and after the "OUT" point).
- 4** Allows for "Toss" gesture by selecting a clip and swipe-tossing it off of the display to throw it away. This will delete clip content from Clip Bins. A clip tossed out of a playlist will not delete the original clip in the Clip Bin.
- 5** Turns off audio during playback if the speed is not 100% speed. Clips played at 99% or below and 101% and above, the audio will be muted.
- 6** Enter speed values to impact Slow-motion slider detents. A lower value cannot be entered in a box above a higher value.
- 7** Feedback enables Haptic feedback that is built into the "Brick" slow-motion controller. Haptic feedback will trigger when the detent value is achieved. (*Note: Not available in Wedge Controller.*)

Setup / Input Setup

The Input Setup page allows for modifications to the system. Some choices will have instant affect, while others may require an Envivo Replay application restart.



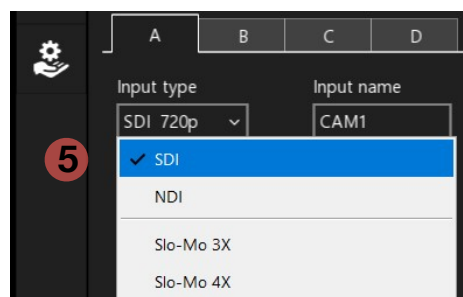
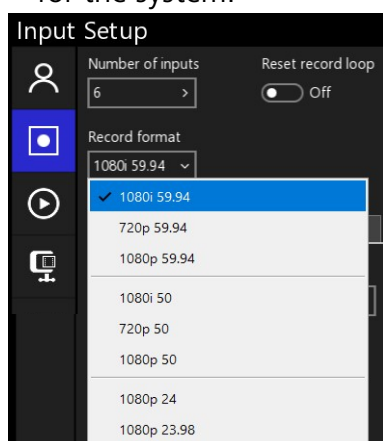
- 1 Choose the number of inputs you want to record.



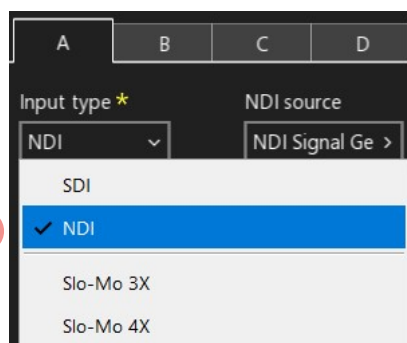
- 2 Reset the record loop will delete the Record Trains from the Media Drive on the next Application restart.

Clips and Playlists will remain in Bins and will not be deleted upon record loop reset.

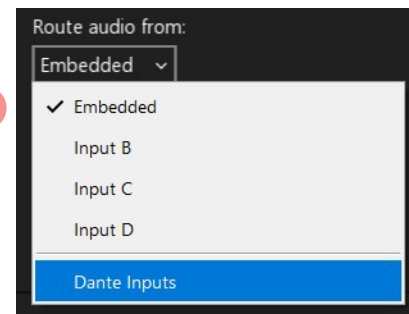
- 3 Choose the record format for the system.



NDI selection may require an App relaunch to see NDI sources.



7



7

Select where Embedded audio is to be recorded from, or select Dante Audio Inputs. All inputs may record the same input source. (For DANTE Settings, SEE "Input Setup - DANTE Audio")

8

Choose the number of audio tracks to record, from 2,4,8, or none.

- 4 Selects the input channel you want to modify.

- 5 Informs you what the current input format is coming into the system, and allows NDI or Super Slow-mo selections.

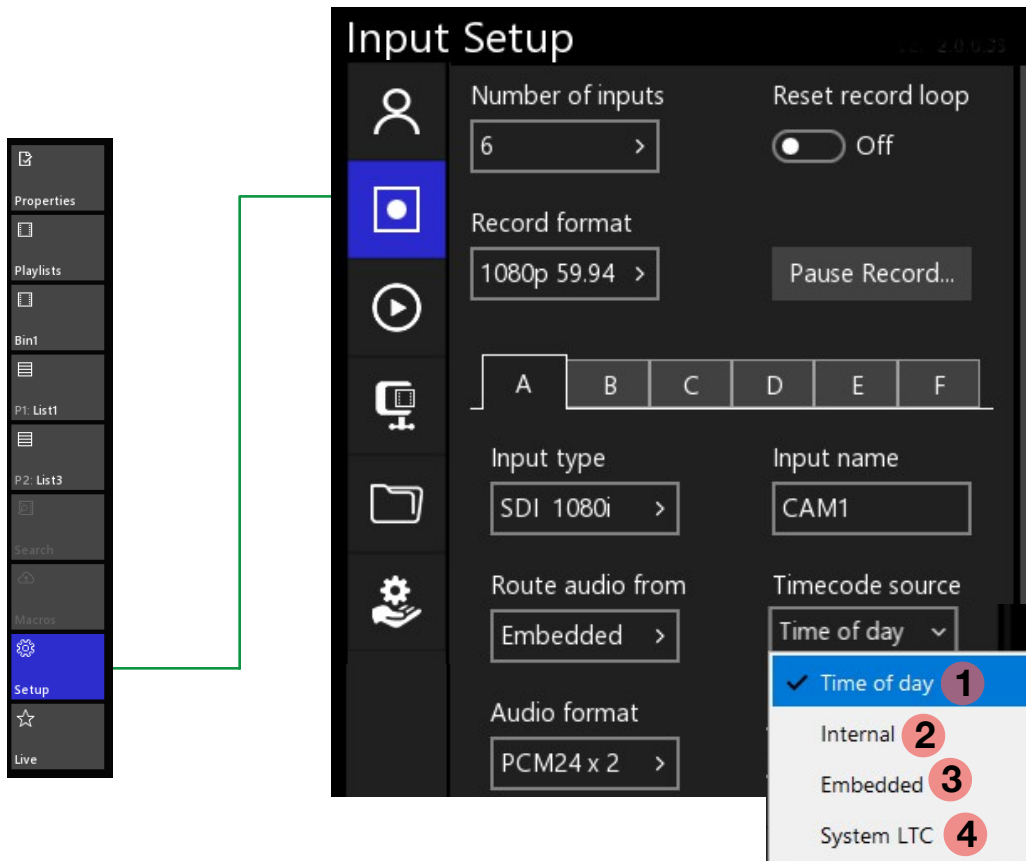
5

6

Name the input channel. This updates the name on the Display as well as the "Angle Selector" button.

Setup / Input Setup - Timecode

To modify the Timecode source that is to be used for each record channel.



Note: Changes made, affect the record channel immediately and do not require a restart.

- 1** Time of Day: based on the internal Windows Clock that the PC runs on.
(Note: Do NOT change PC Clock while running Envivo. Exit first, set the clock, and launch the App.)
- 2** Internal: Starts counting up from 00:00:00 when the application was launched, acts as counter time. Counts up to 24:59:59:29 and then rolls over to 00:00:00 after 24hrs of recording.
- 3** Embedded: The timecode source that is delivered in the VITC data track of each video input.
- 4** System LTC: Analogue timecode input, "Line-in" input to the motherboard. Use an XLR to 3.5mm adapter (not included) to convert the signal.

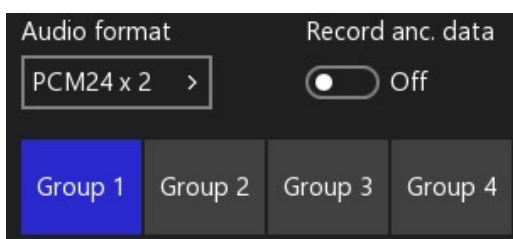


4



(not included)

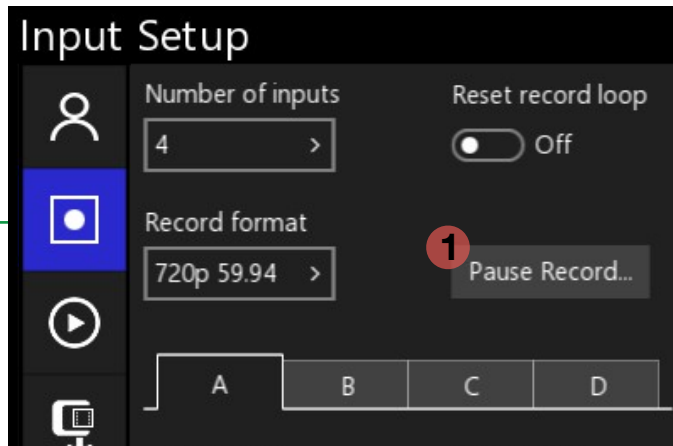
Setup / Input Setup - Group Audio



Each Group represents 4 channels of embedded audio.
If 8 channels of audio are enabled, any two groups may be selected.

Setup / Input Setup - Pause Record

To Pause the recording and continue to use Envivo Replay, select "Pause Record..."



- 1** Select the "Pause Record..." button. This will reveal a Question Box.



- 2** Choose "Yes" to stop recording on the inputs.

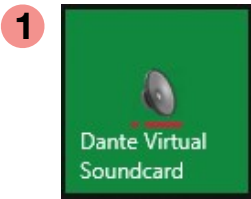
NOTE: You will still have full use of clips, playlists, and you may create clips from content that was previously recorded and is part of the Record Train.

- 3** To Resume recording and append the record train, select "Resume Record" in either the Input Setup panel, or by clicking on one of the UI input windows.

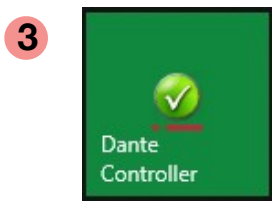


Setup / Input Setup - DANTE Audio

Prepare Dante Audio for use in Envivo Replay.

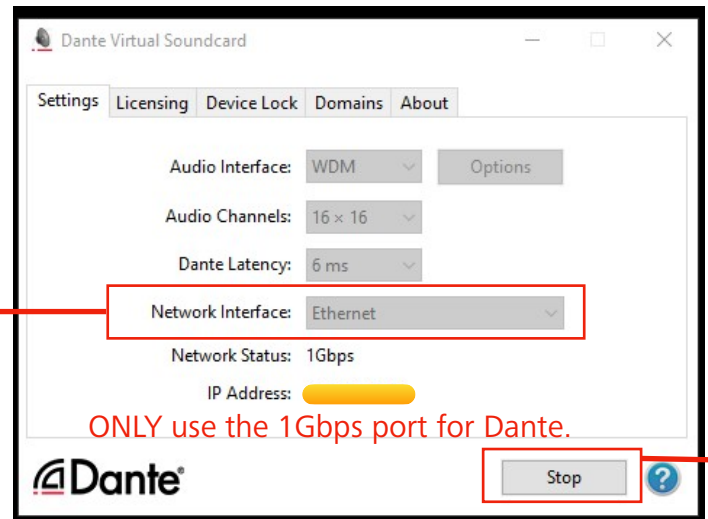


From the Windows Start Menu launch the Dante Virtual Soundcard.



From the Windows Start Menu launch the Dante Controller.

2



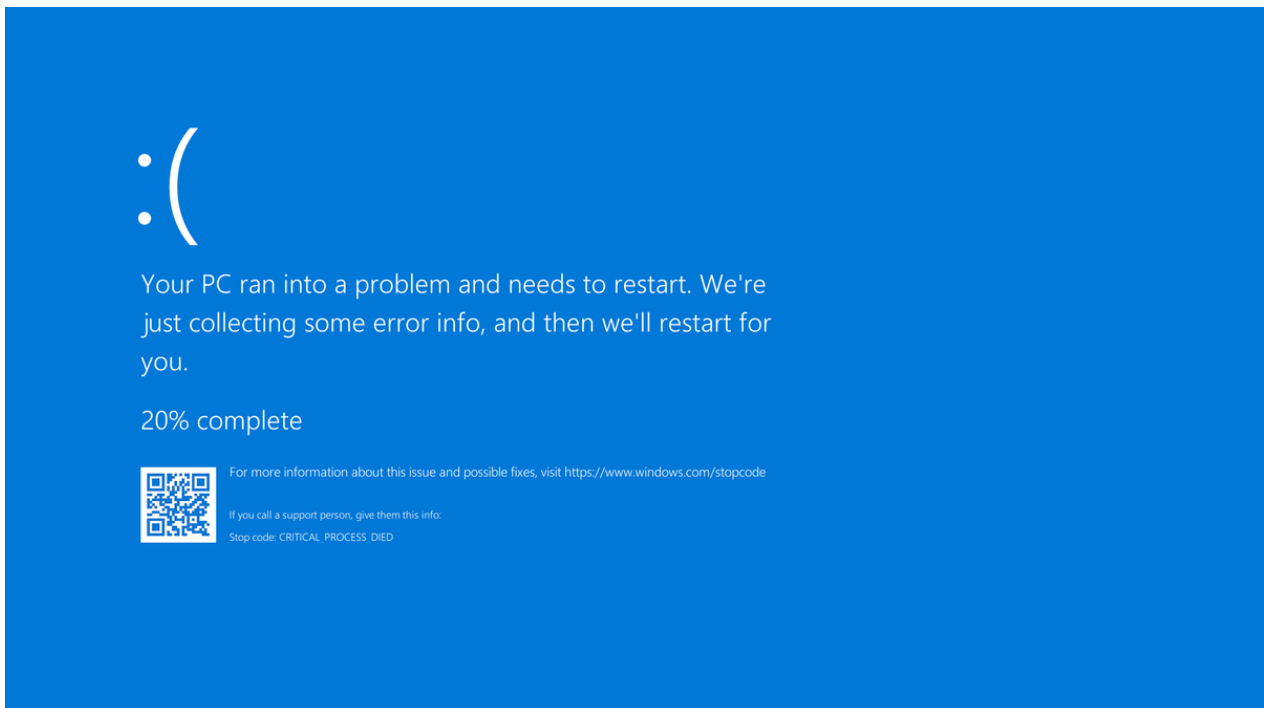
ONLY use the 1Gbps port for Dante.

Verify these settings are correct and then close the DVS window. (NOTE: IP Addresses vary between systems.)
(NOTE: Do not START/STOP the Dante Virtual Soundcard while running Envivo Software. It may result in a freeze of the User Interface Video.)

Do NOT use the 10Gbps Port for Dante Audio.
Audinate (the company) does not yet support 10Gig.

10Gbps is reserved for networking between Envivo systems.

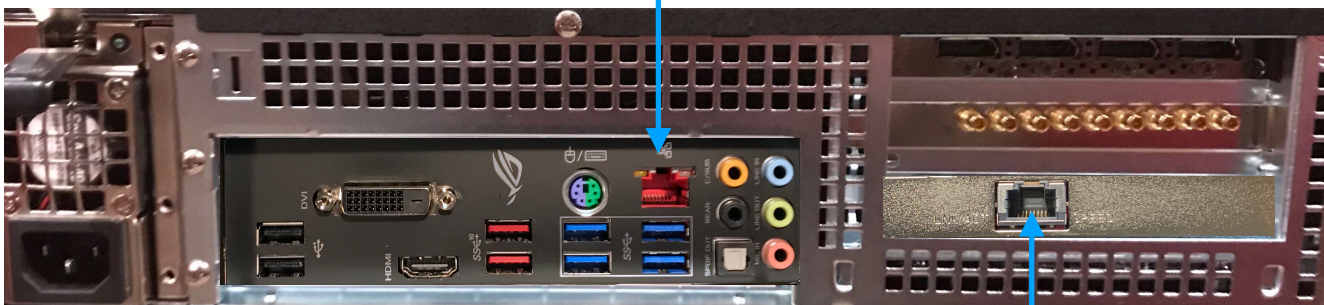
Using 10Gbps NIC with Dante can result in a Windows BLUE SCREEN.



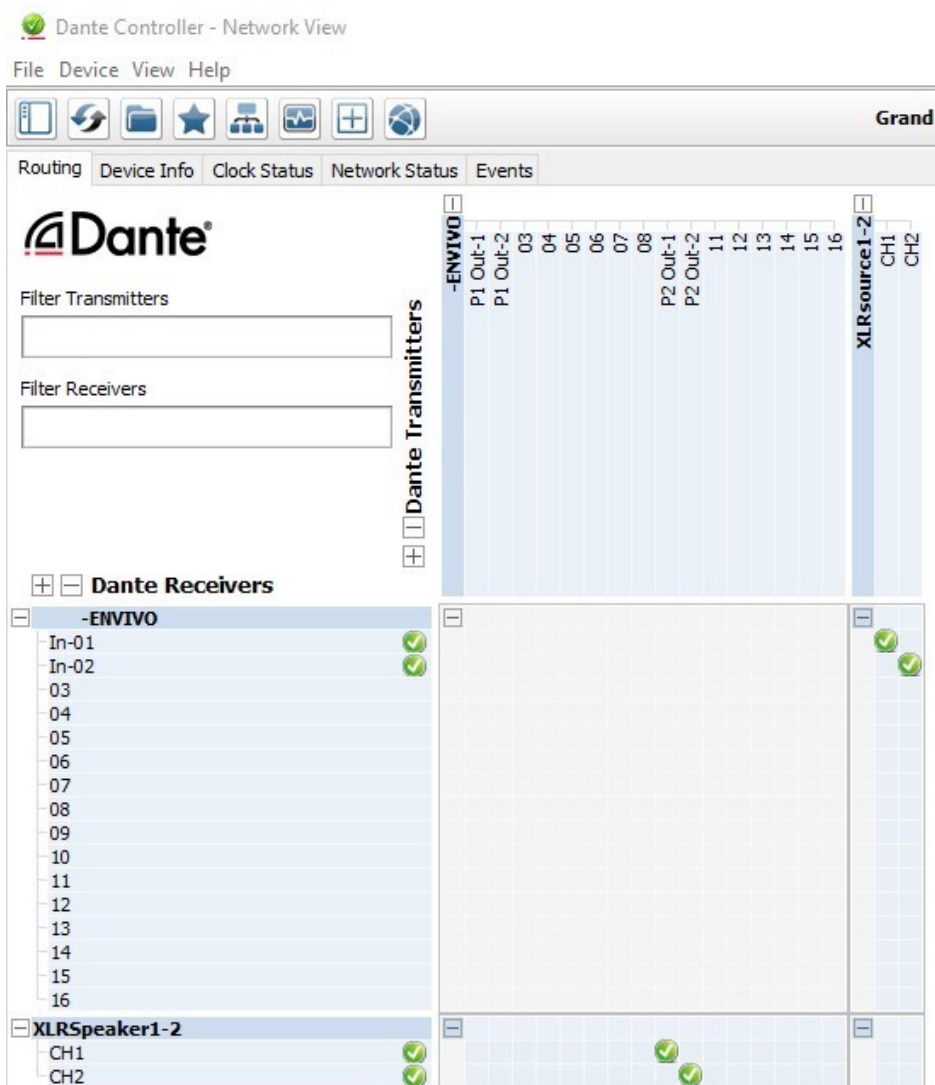
Setup / Input Setup - DANTE Audio

Prepare Dante Audio for use in Envivo Replay.

Networking or
Dante Audio



Networking
** DO NOT USE
with Dante Audio **



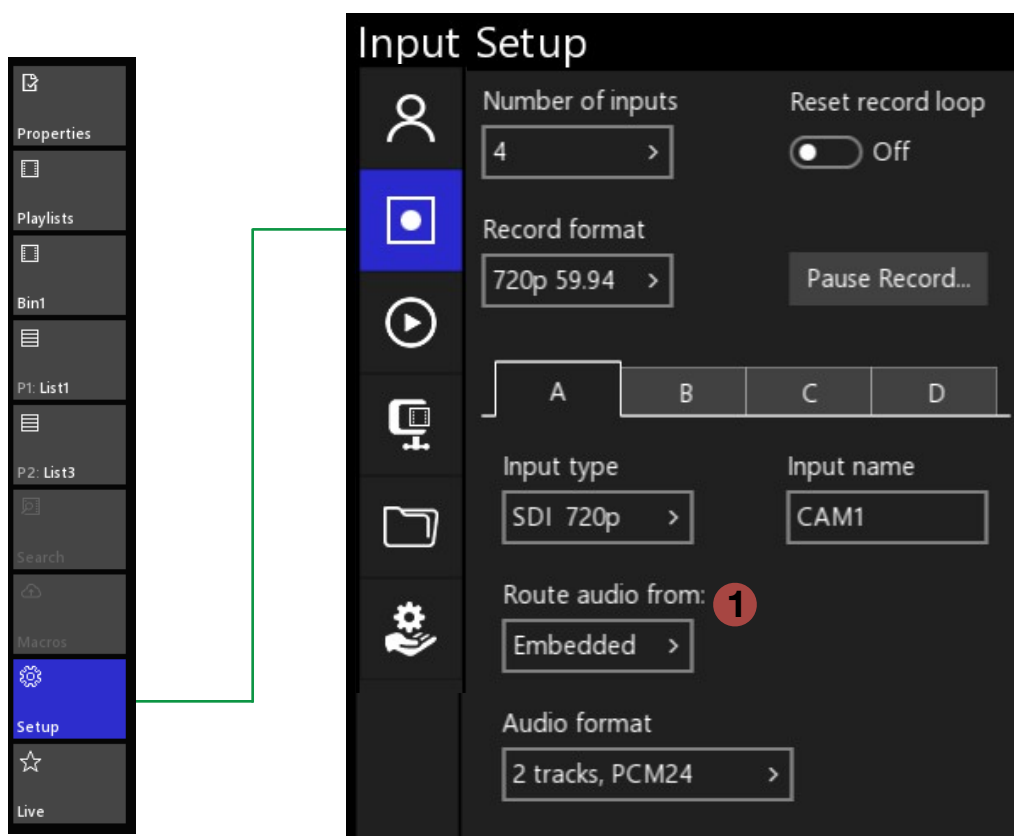
With assistance from Engineering,
verify the Dante crosspoint are
correctly checked.

Close the Dante Controller window
when finished and return to Envivo.

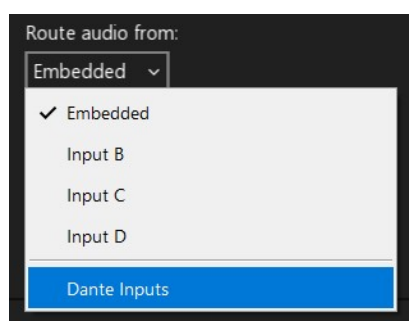
Setup / Input Setup - DANTE Audio

Once Dante is setup, Envivo will retain the settings for the next time the application is started.

*Always be aware of changes that may have been made to the Dante Matrix.

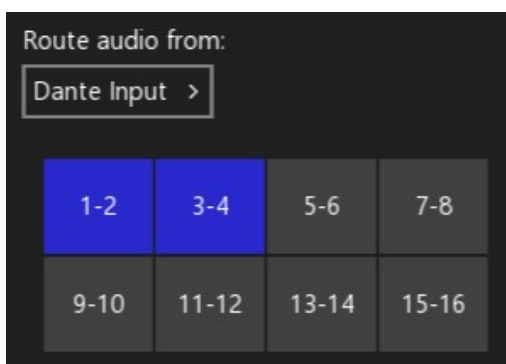


1 Select Dante Inputs



An application restart may be required for changes to take affect.

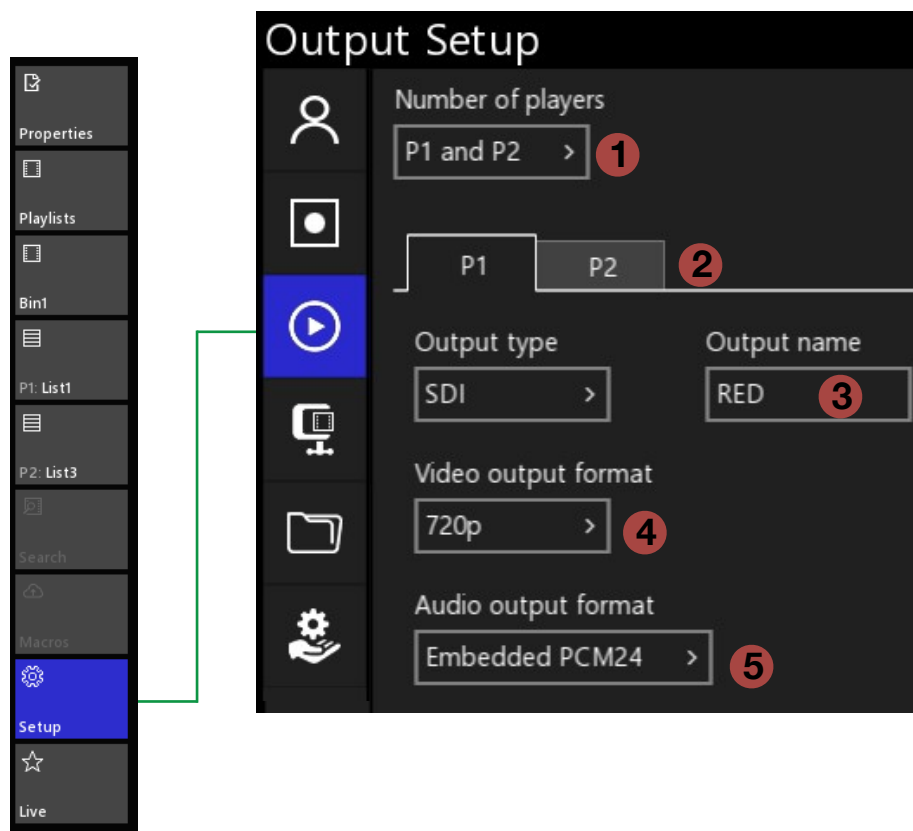
2 Select the pairs of Dante Inputs to record for that video input. Up to 4 pairs may be selected.



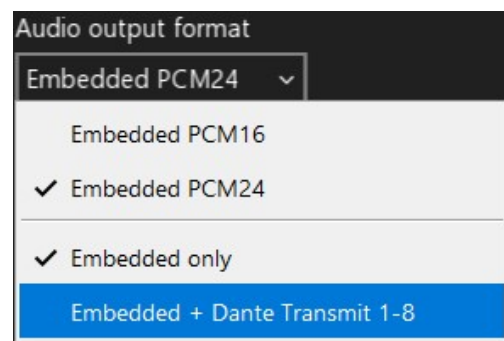
Regardless of the order that the pairs are selected, the lowest numbered pair will be designated to the first two channels for that input and so on.

Setup / Output Setup

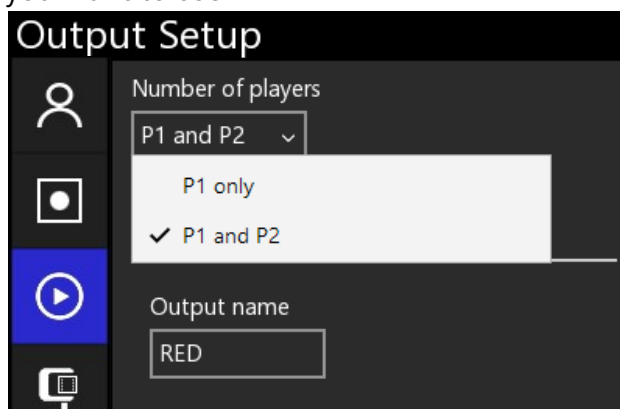
The Output Setup page allows for modifications. Some choices will have instant affect, while others may require an Envivo Replay application restart.



- 2** Select the Player channel you want to modify.
- 3** Allows you to label the Player channel on the Display screen.
- 5** Choose the audio output format, SDI or Dante Audio.



- 1** Choose the number of players you want to use.

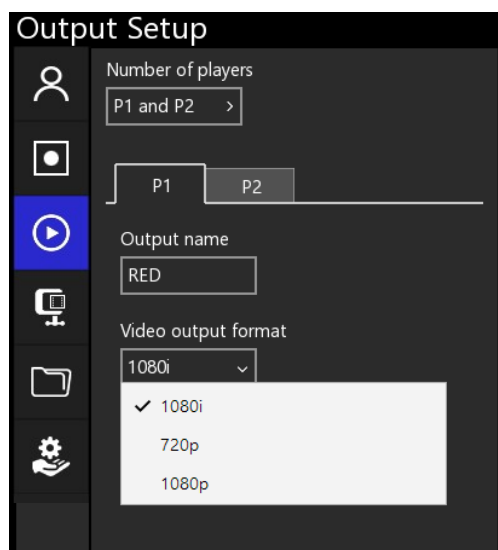


An application restart may be required for changes to take affect.



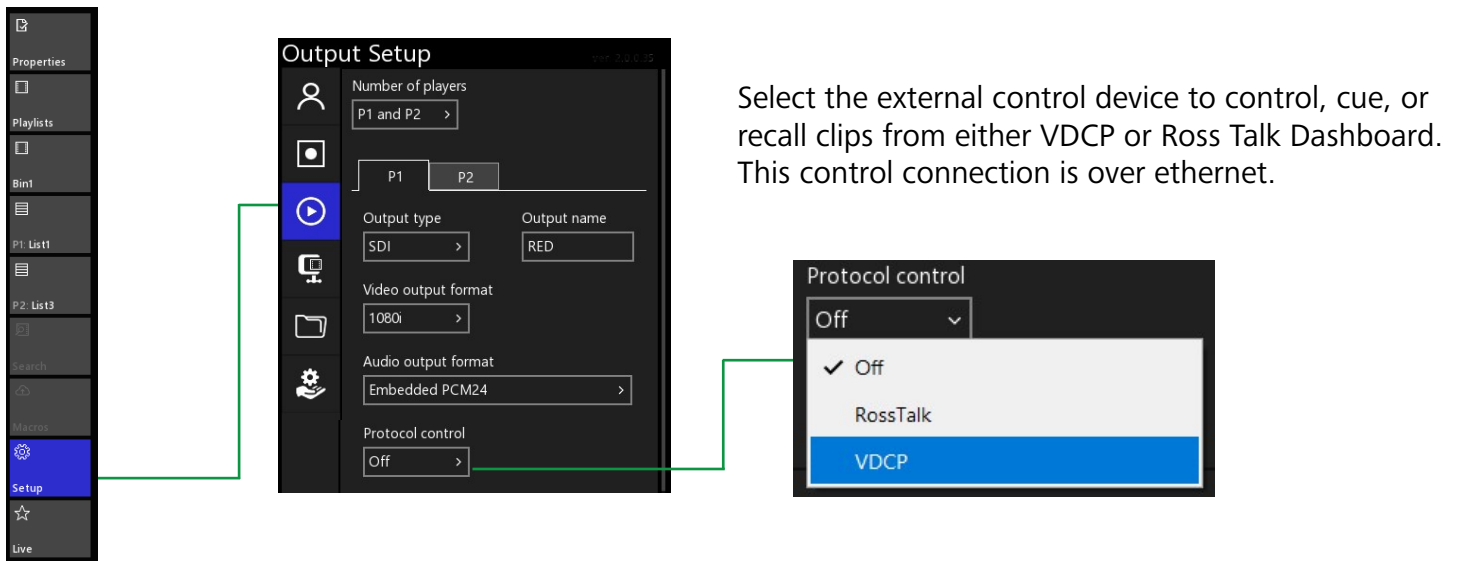
Service Page.
Shows active licenses and
System Serial Number.

- 4** Select the output video format. An application restart will be required to make the format change. (For NDI, See "Output Setup - NDI")



Each Player channel may be different from the other.

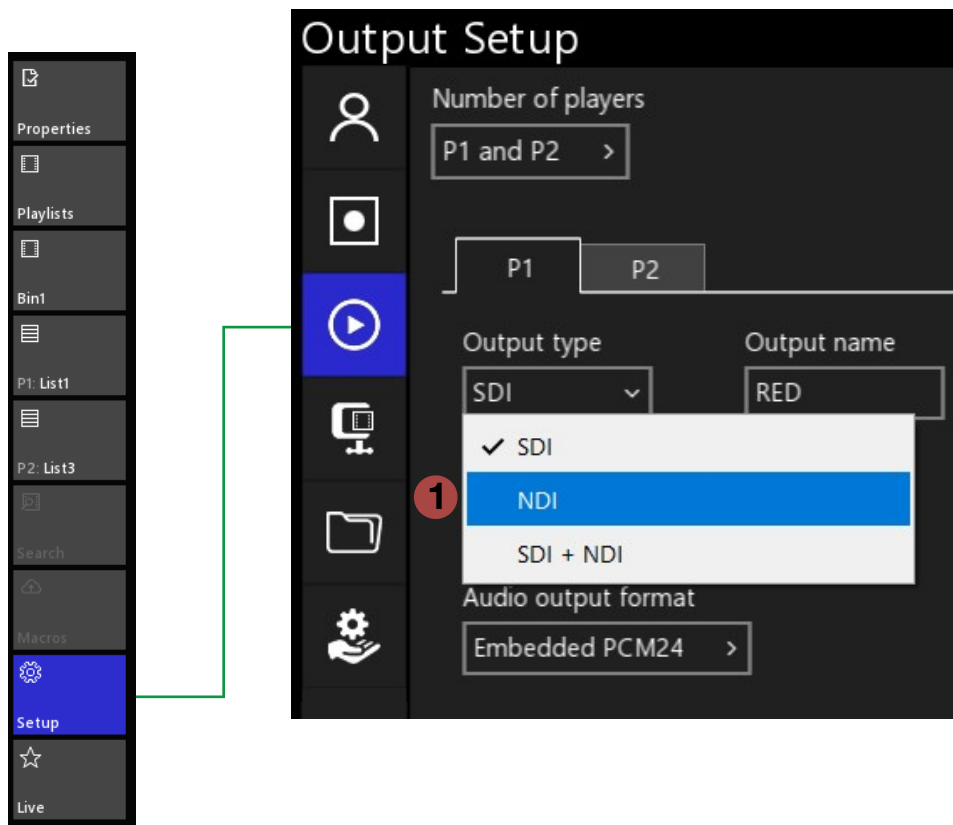
Setup / Control Protocol



Select the external control device to control, cue, or recall clips from either VDCP or Ross Talk Dashboard. This control connection is over ethernet.

Setup / Output Setup - NDI

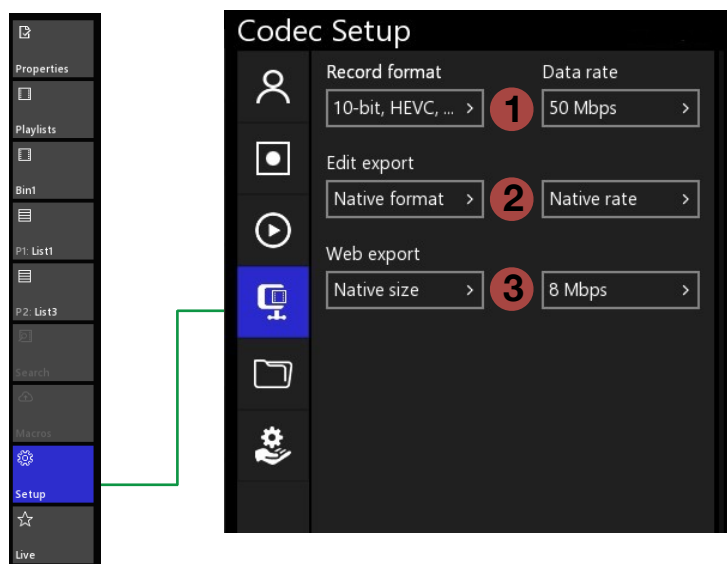
Enable the NDI output and make it available as a source to other NDI compliant products.



1 Choose the Output selection to be either NDI or SDI + NDI.

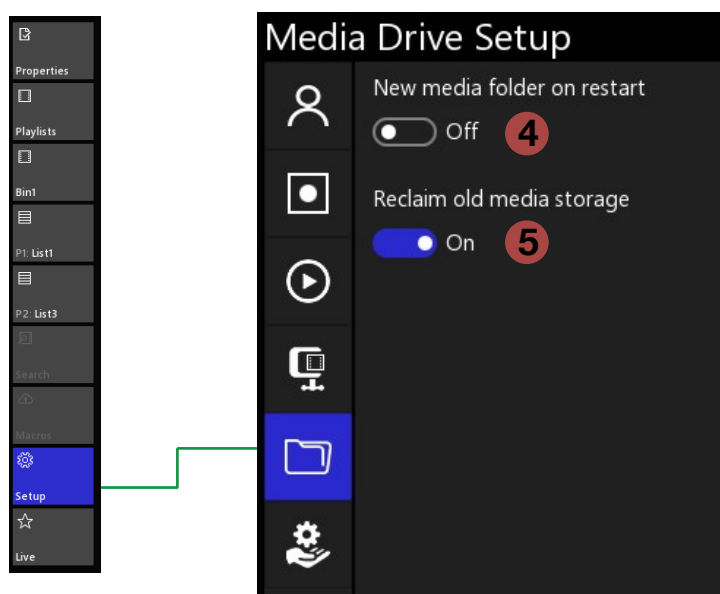
2 Restart the Envivo App to make the Envivo outputs available to other NDI enabled products.

Setup / Codec Setup



- 1 Choose the Record format HEVC* 4:4:4 or H.264 4:2:0 and the Bit rate. A restart is required. (*Note: HEVC only supported on RTX GPU hardware.)
- 2 Choose the Export format and rate to use. Native format uses the same format as the Record format.
- 3 Choose the Web export format and Bit rate. Native size utilizes 1920x1080. All web formats are H.264 4:2:0

Setup / Media Drive Setup



- 4 Choosing to enable "New media folder on restart" will discontinue using the current media folder and rename it with the date and time upon exiting the Envivo app. When the application is relaunched and new media folder is created with empty Bins, Lists, and Record Trains.
- 5 Enabling "Reclaim old media storage" allows the system to First utilize record train storage that is shared with a systems that has the Envivo Studio application installed before overwriting Envivo Replay's Record Trains. Disabling this, preserves Envivo Studio's Record Trains.

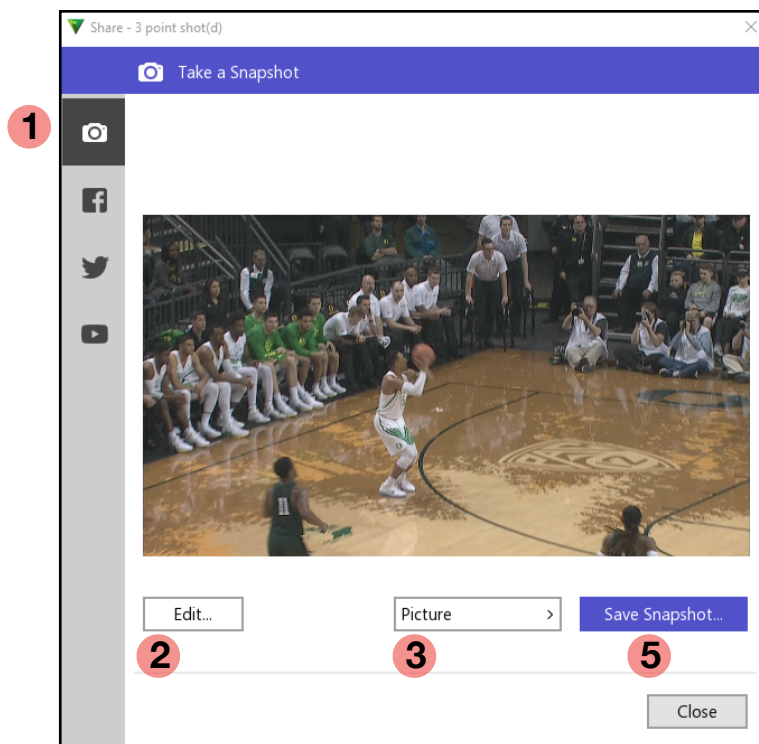
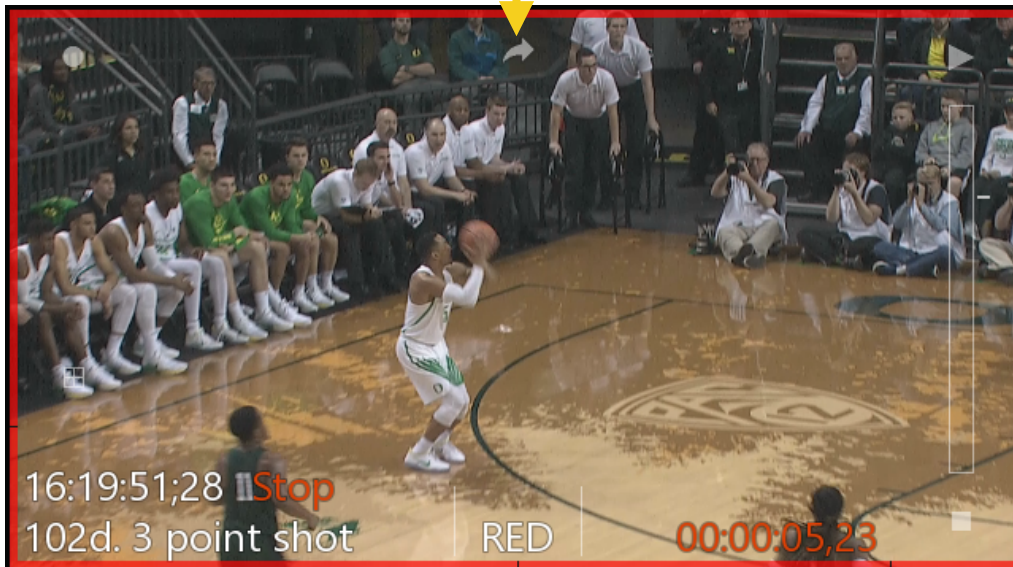


Social Media Sharing

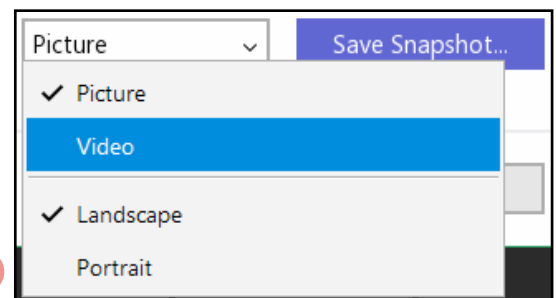
Sharing still images, clips, and playlists with social media outlets is built into the Envivo Replay Player windows.

Click the Sharing icon

Note: it is assumed the system has an internet connection to post to the content directly to Social Media sites.

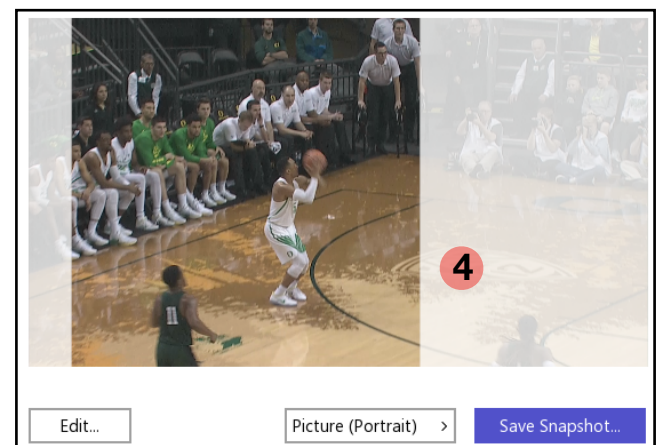


- 1 Choose the Social outlet to publish to. Snapshot saves to a system location.
- 2 Add or remove Graphic Branding.



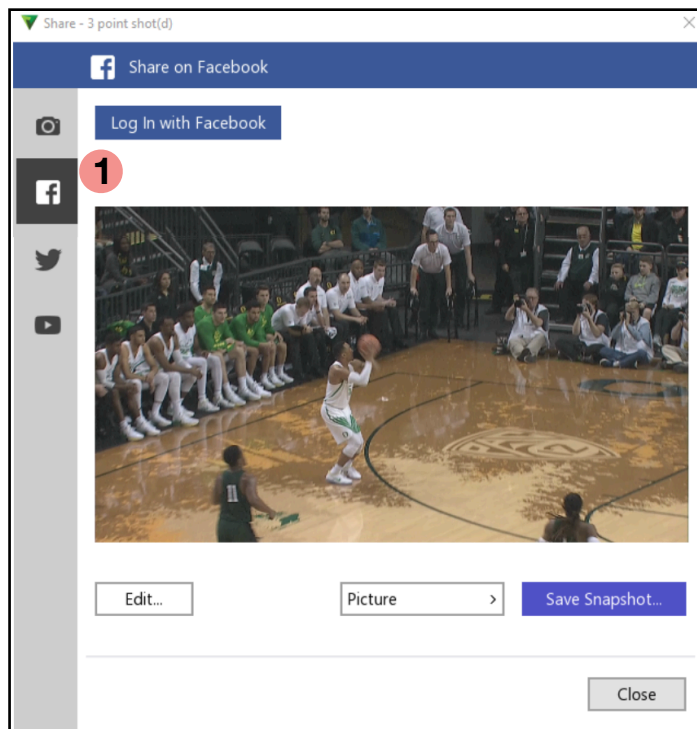
- 3 Choose from a still image or moving video. Choose Landscape or Portrait mode.

- 4 In Portrait mode you may reposition the screen to extract the correct image.
- 5 Save the image or Close the window.



Social Media Sharing - Facebook

Registering publishing authorization with Facebook.



All Facebook posting accounts registered by Envivo **MUST** be Group or Business accounts already established with Facebook and you have Administrator permission to publish. **PRIVATE** accounts cannot be registered.

- 1 Registering for the first time, the user is presented with Log In button.

Register with Facebook

In a web browser:

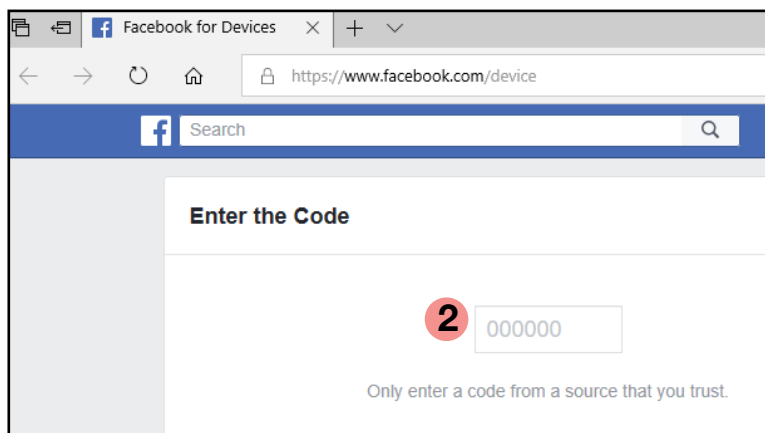
1. Log into the appropriate Facebook account
2. Navigate to <https://www.facebook.com/device>
3. Enter this code: 43VHC4C8
4. Press OK to continue

OK

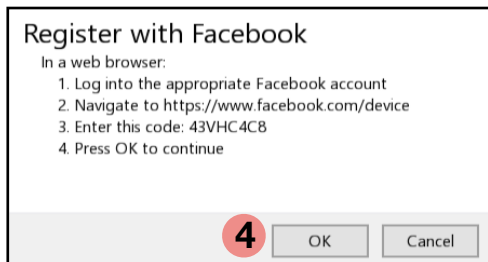
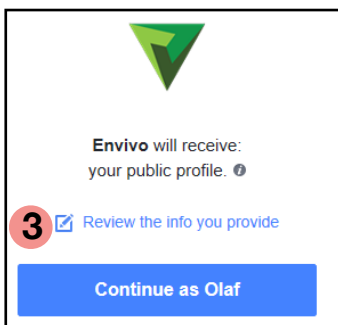
Cancel

Internet Explorer automatically launches to the Device Registration Page.

- 2 Enter the Code, given by Envivo Replay, into the browser's box.



- 3 Review and select appropriate choices



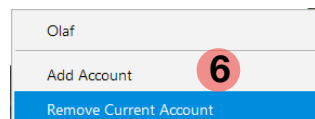
- 4 Click "OK" to finalize registration.



- 5 Add a description prior to publishing.

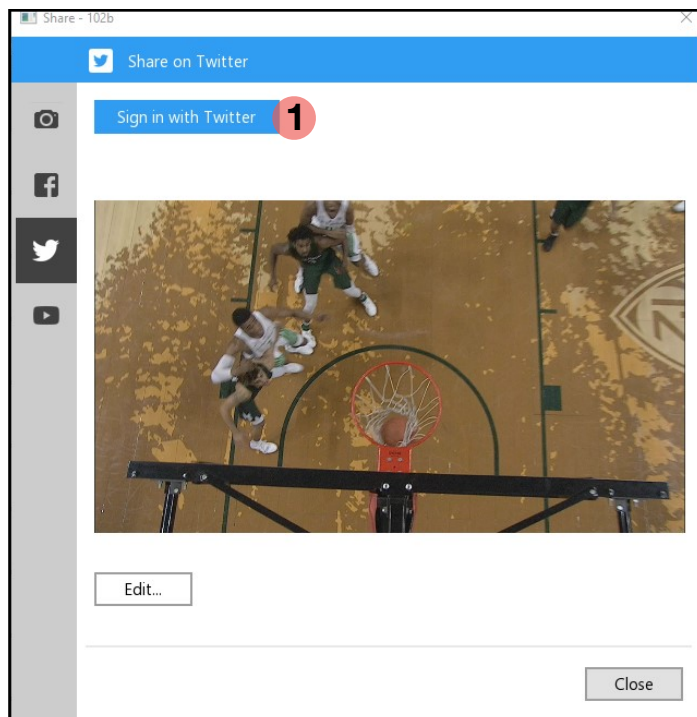
Note: Multiple accounts may be added and then selected from, click the icon.

Registration will remain active until the account is deleted.



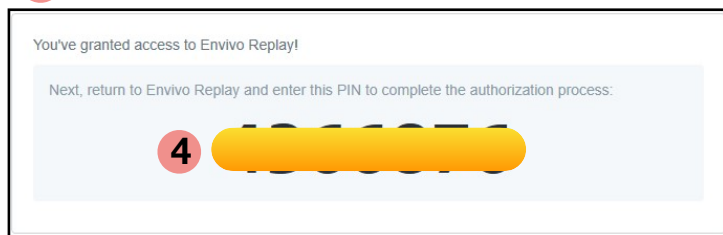
Social Media Sharing - Twitter

Registering publishing authorization with Twitter.

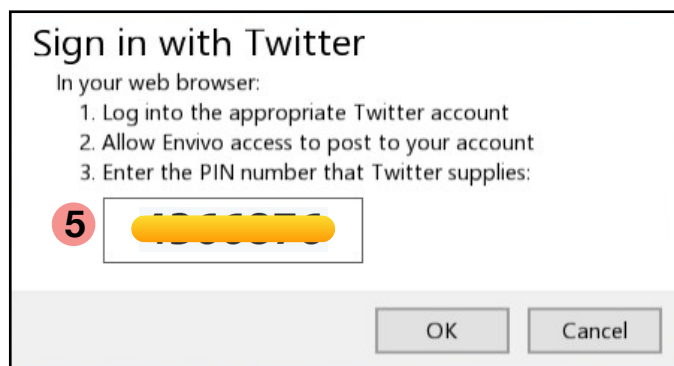


- 1 Registering for the first time, the user is presented with Sign In button.

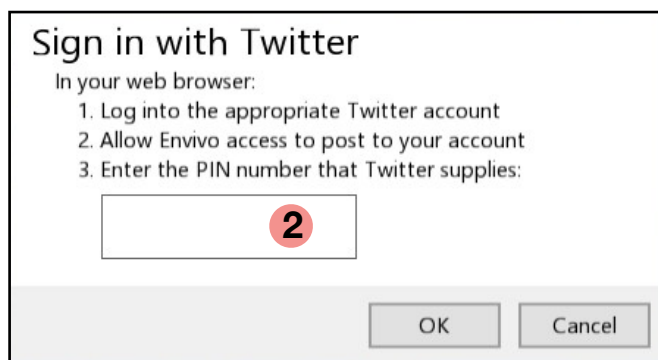
- 4 You are presented with a code...



- 5 Enter the code into the box on Envivo.

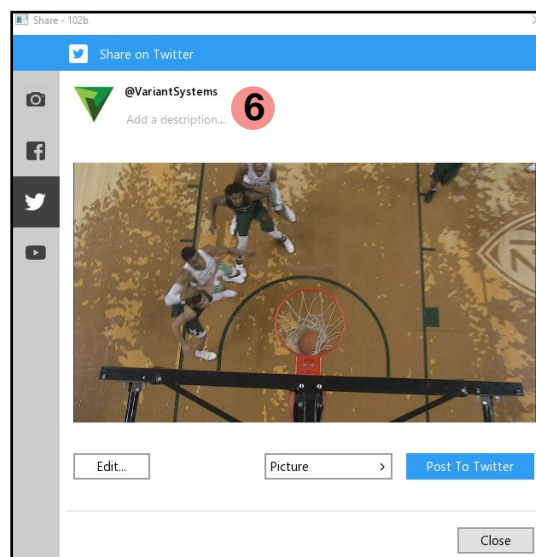
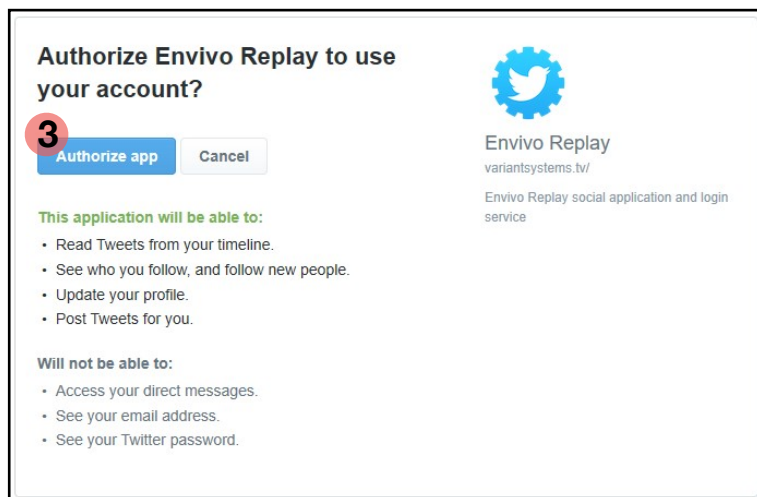


Click "OK" to finalize registration.



- 2 This code is provided once you Authorize the App.

- 3 Internet Explorer automatically launches to the Device Registration Page. You may need to log into Twitter First.



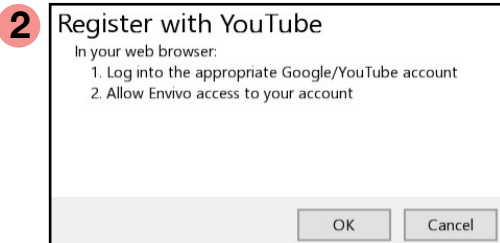
- 6 Your account name is now shown for posting.

Social Media Sharing - YouTube

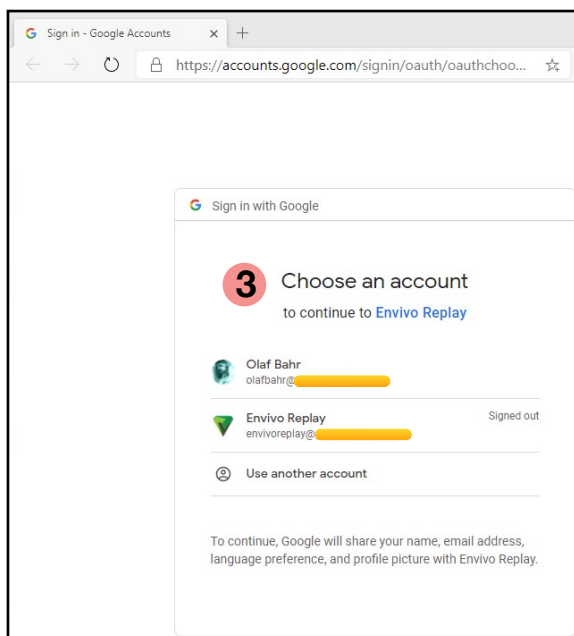
Registering publishing authorization with YouTube.



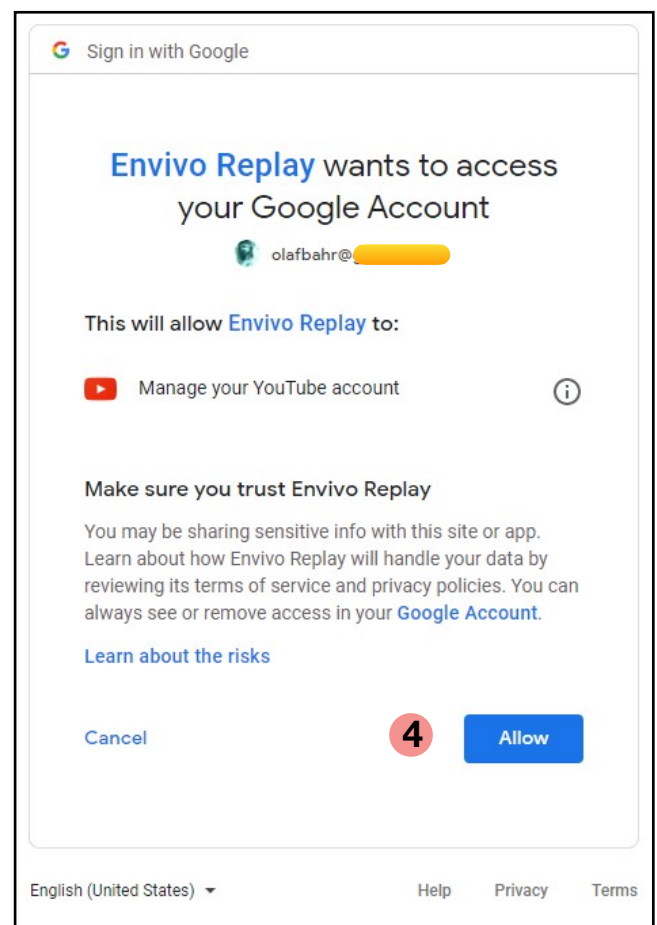
- 1 Registering for the first time, the user is presented with Sign In button.



- 2 The Web Browser will automatically Launch.



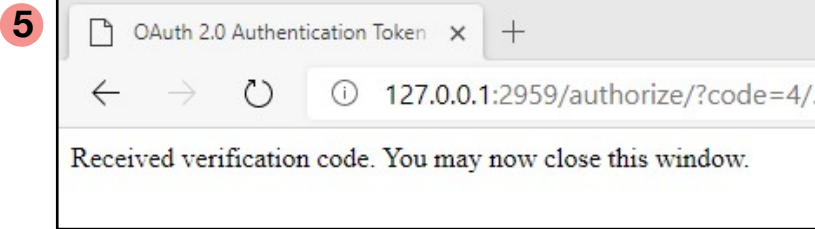
- 3 Select an authorized account to sign in.



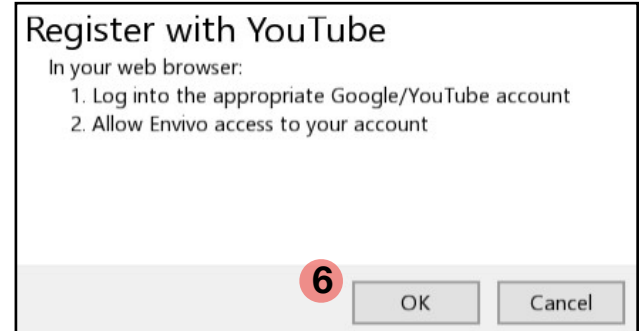
- 4 Click "Allow" to finalize registration.

Social Media Sharing - YouTube

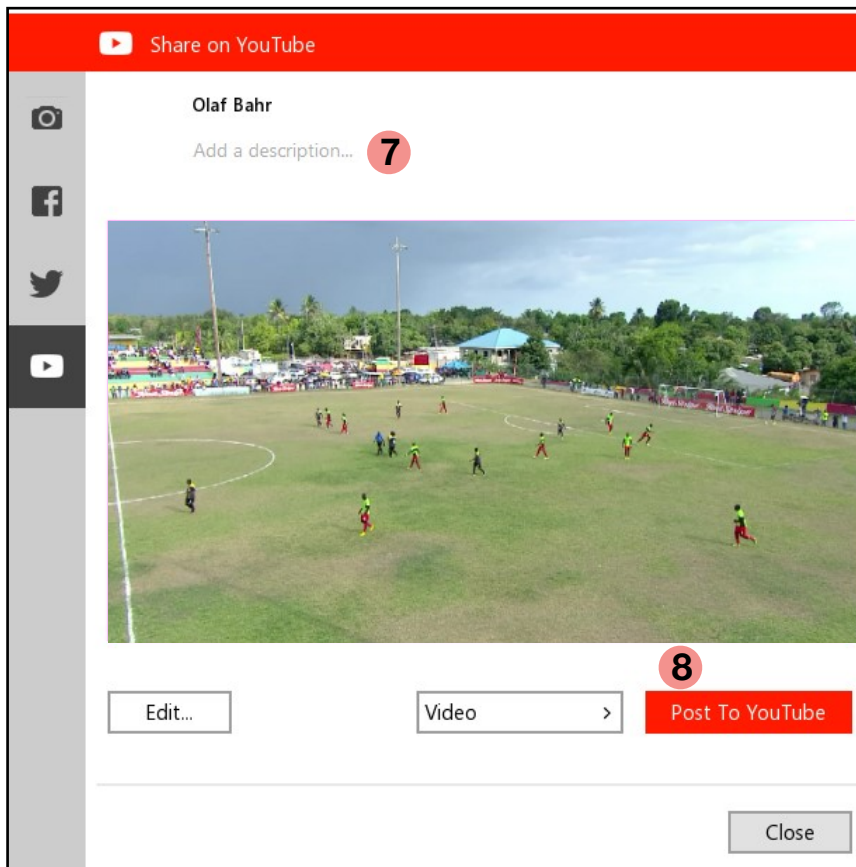
Registering publishing authorization with YouTube.



- 5 The Web Browser will show confirmation, and close the Web Browser window.



- 6 Click "OK" to close the Registration and begin using the Social Media interface.



- 7 Type to add a description prior to posting the video.


- 8 Click "Post" to upload the video to your YouTube channel.

Click "Close" to close the Social Media Interface.

Live Tool Settings

The Live Page in the Toolbar allows for some added functionality as impacts Live inputs and outputs.

Note: when holding down the Ctrl button on a keyboard, the "Take" button will change to "Push" or "Flop" mode.

- 1 Alerts you to which player is actively selected and which input angle is currently feeding the input.
- 2 Quickly allows to enable or disable Graphic Branding layers on Live inputs. Click the "eye".
- 3 Enable or disable transitions between live sources, replay angles, and when the "Take"  button is used.
- 4 "Push" or "Flop" button (depending on the setting in the Live Pull Down Menu) when pressed.

P2 content will Push to P1

P1 content will Push to P2

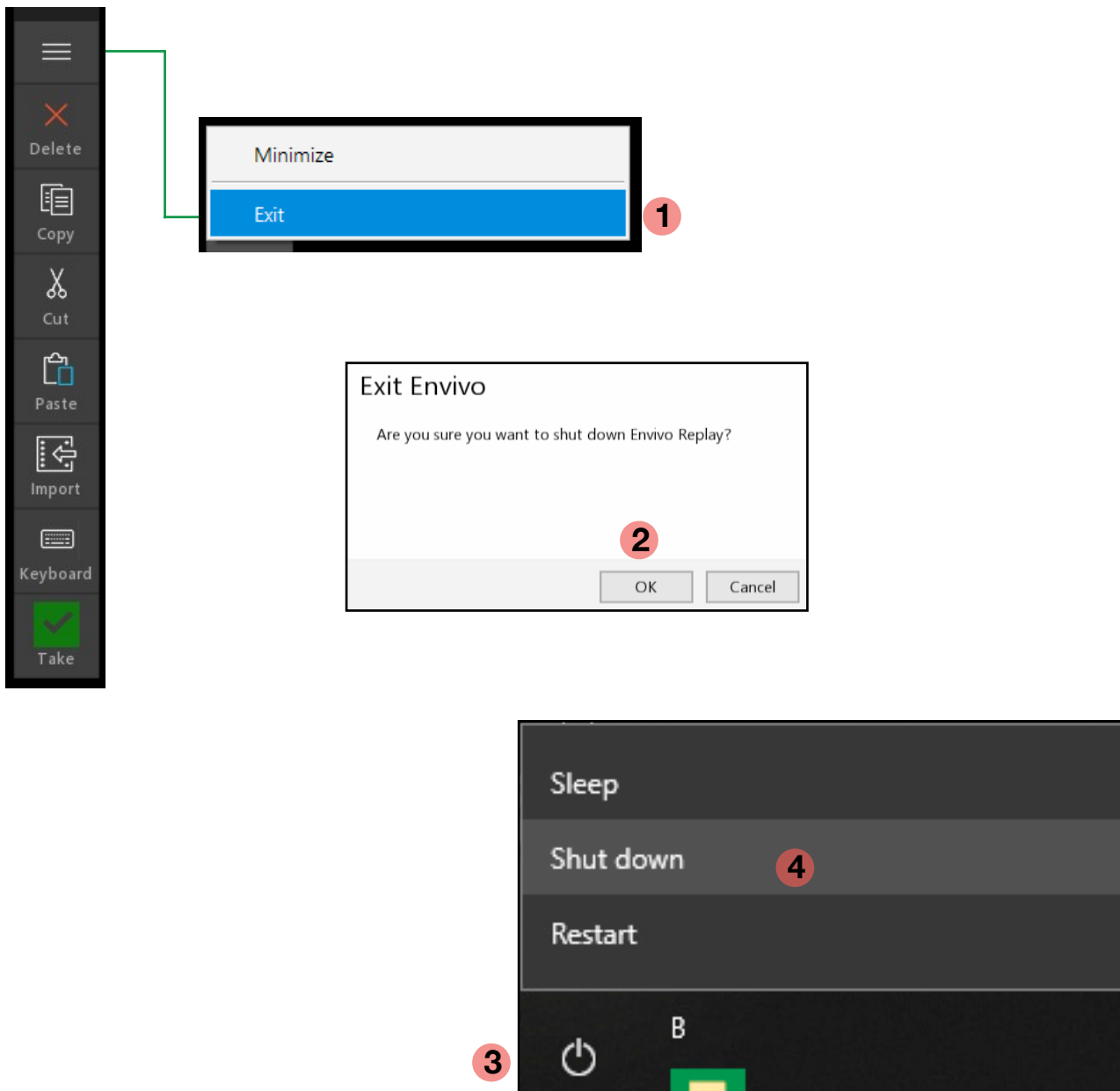
P1 content will Flop with P2

- 5 Alerts you to Player 2 status similar to what was just covered for Player 1.



Menu Bar - Exit

Exiting the system and Shutting down.



- 1 From the Menu Bar, touch the 3-lines icon and select Exit.
- 2 From the Popup window, select "OK".
- 3 Once the Application has closed, from Windows Desktop, on the bottom Left, select the "Power" icon.
- 4 Select "Shut down".

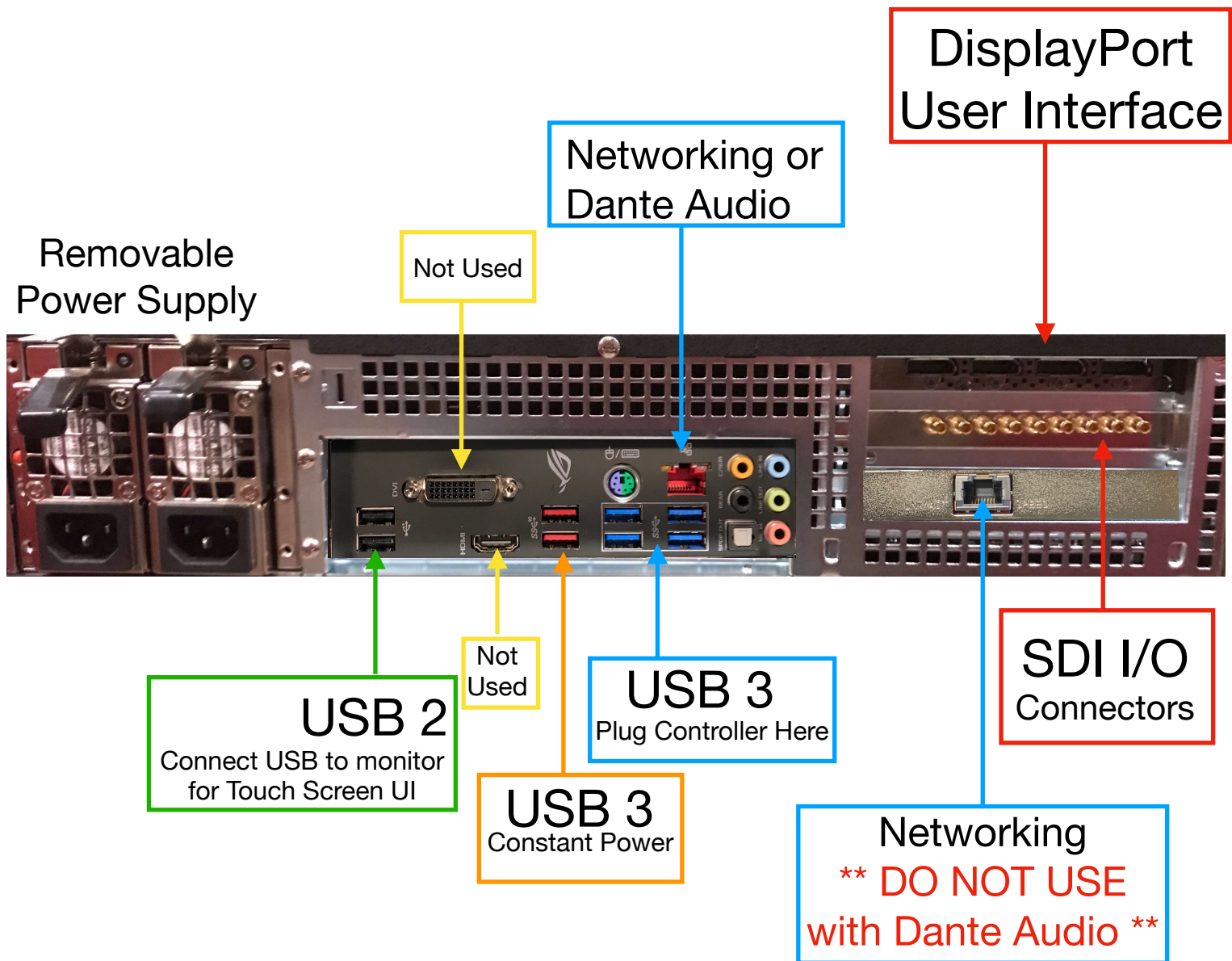
Variant Systems Group



APPENDIX

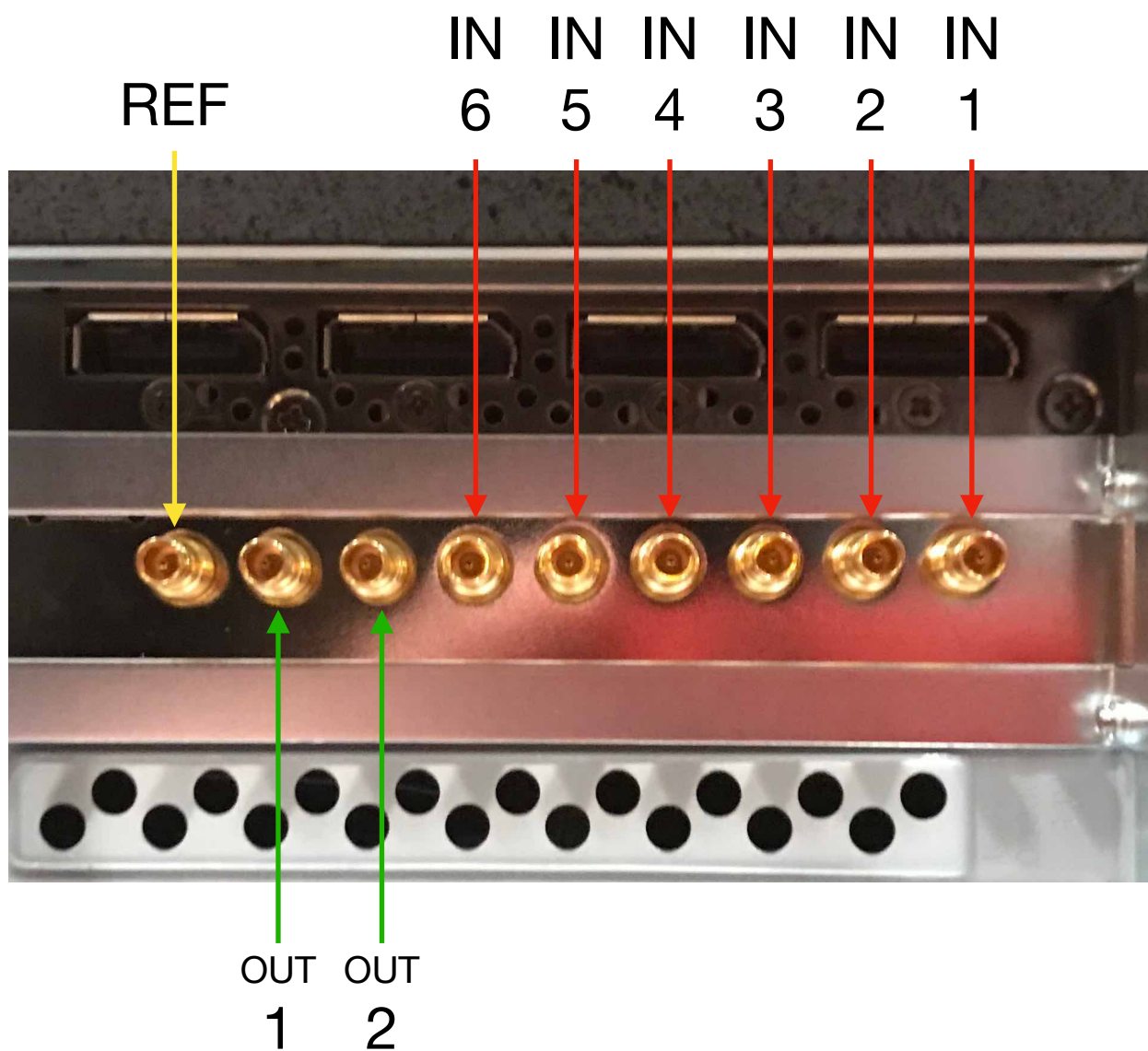
Connections and I/O - 2RU

2RU system back plane.



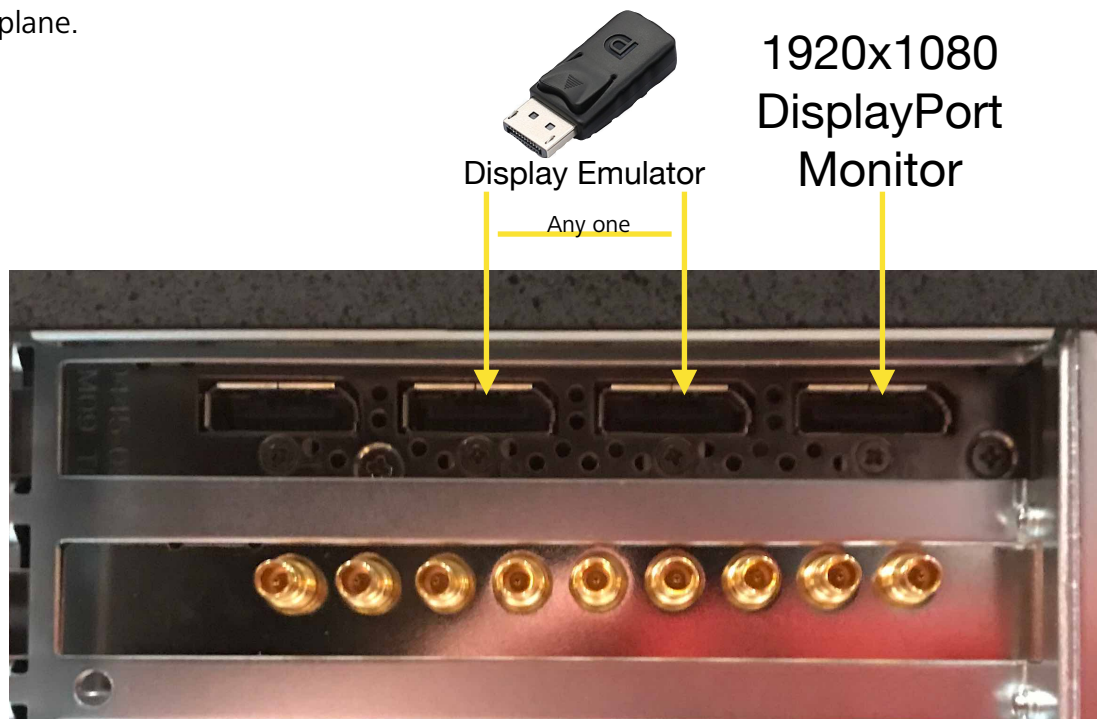
Connections and I/O - SDI

2RU system back plane.



Connections and I/O - Monitor

2RU system back plane.



Note: Use the DisplayPort connection on the far-right for the Envivo Replay user interface.

- 1 First time setup of the system, login to Windows with **only one** monitor connected.
- 2 Before first time use of Envivo Replay, plug in the Display Emulator or a second monitor.

If **only using one monitor**, **ALSO use the Display Emulator** (included) and set up Windows in “DUPLICATE” Mode. If using two 1920x1080 monitors, you may also use “Extend” mode.

The GPU needs to have multiple displays connected in “DUPLICATE” or “Extend” mode. The Windows shortcut to this mode is Windows Key+ p, then select “Duplicate” or “Extend.”

All monitors must be set to 1920x1080.



What does Display Emulator / Dummy Plug do?

It unlocks the full potential of your graphics card hardware.

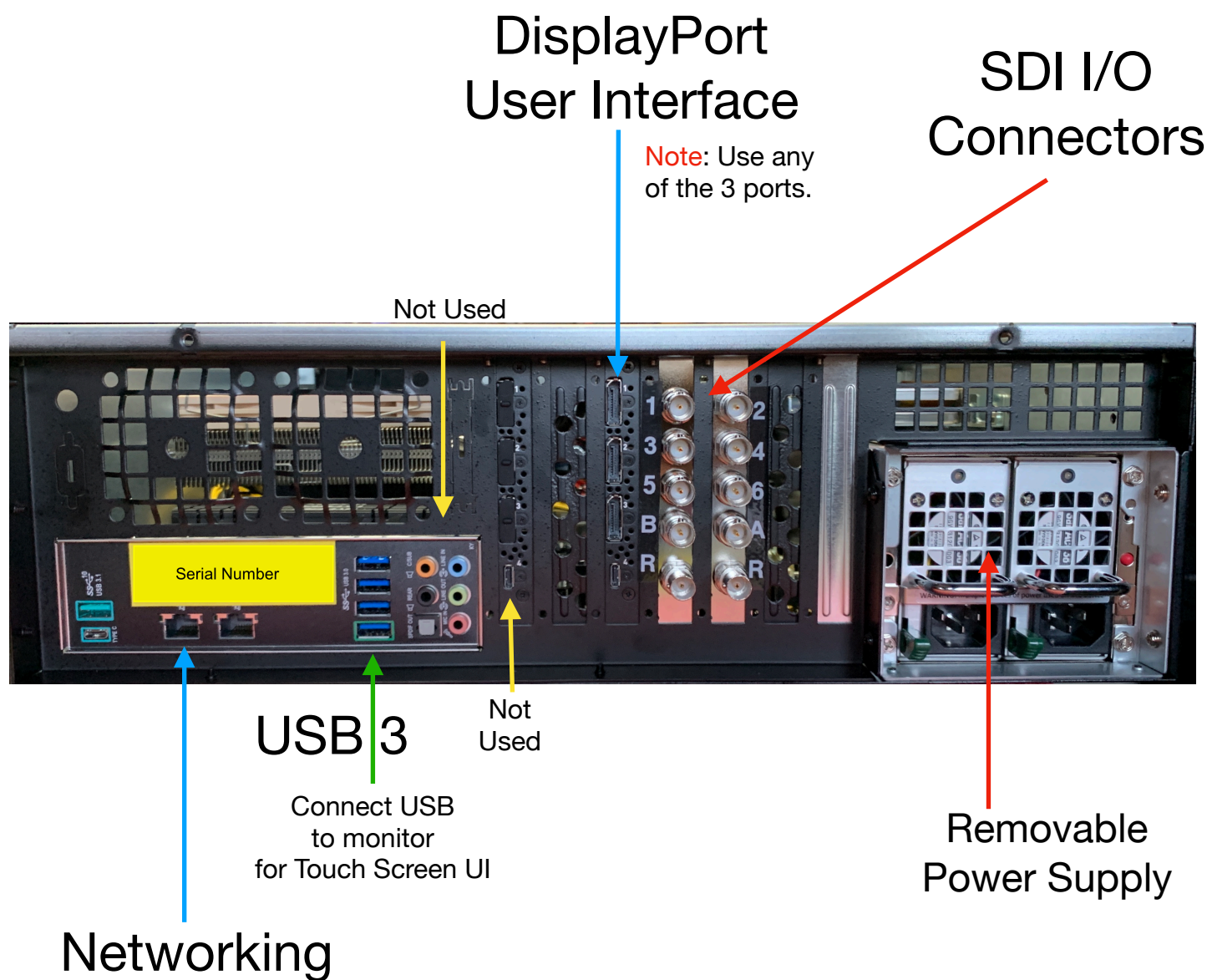
By simulating the presence of an attached display, display emulator allows you to use all of the power and available resolutions locked away inside your graphics hardware, which might otherwise be disabled when there is no screen available.

Why do you need a HDMI / DP Display Emulator?

It appears as a headless ghost display emulator (dummy plug) Once plugged, the PC detects a connected display thus enabling the GPU. With the GPU enabled, it is possible to perform high resolution hardware accelerated rendering.

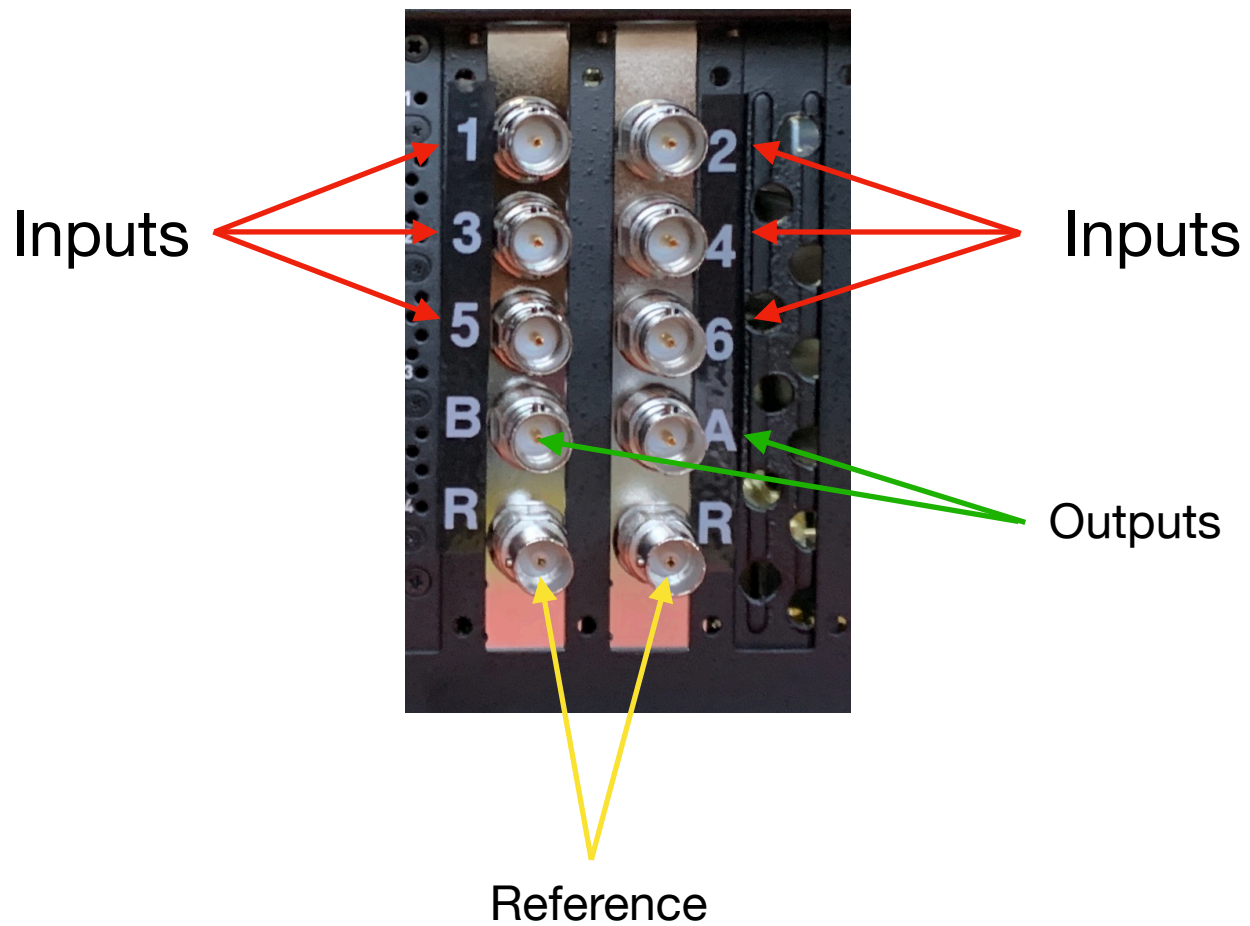
Connections and I/O - 3RU

3RU system back plane.



Connections and I/O - 3RU 12G

3RU system back plane.



Record Duration Estimates

These are some Estimated hours of record time based on 4 channels of record, 8 channels of audio, and ANC data turned off.

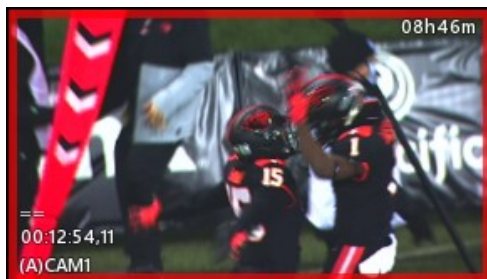
(Note: Actual hours of record will vary depending on the number of clips created and the amount of media stored on the (M:) media drive. [See section below](#))

This table is based on a channel count of 4-records and 2-players

Format	Capacity 960 GB	Capacity 1.92 TB	Capacity 3.84 TB
H.264 25 Mbps + 8 Audio Channels	21.5	43.0	86
HEVC 25 Mbps + 8 Audio Channels	21.5	43.0	86
H.264 50 Mbps + 8 Audio Channels	10.9	21.7	43.3
HEVC 50 Mbps + 8 Audio Channels	10.9	21.7	43.3
H.264 100 Mbps + 8 Audio Channels UHD	5.5	10.9	21.8
HEVC 100 Mbps + 8 Audio Channels UHD	5.5	10.9	21.8

This table is based on a channel count of 6-records and 2-players

Format	Capacity 960 GB	Capacity 1.92 TB	Capacity 3.84 TB
H.264 25 Mbps + 8 Audio Channels	14.35	28.68	57.37
HEVC 25 Mbps + 8 Audio Channels	14.35	28.68	57.37
H.264 50 Mbps + 8 Audio Channels	7.23	14.45	28.9
HEVC 50 Mbps + 8 Audio Channels	7.23	14.45	28.9



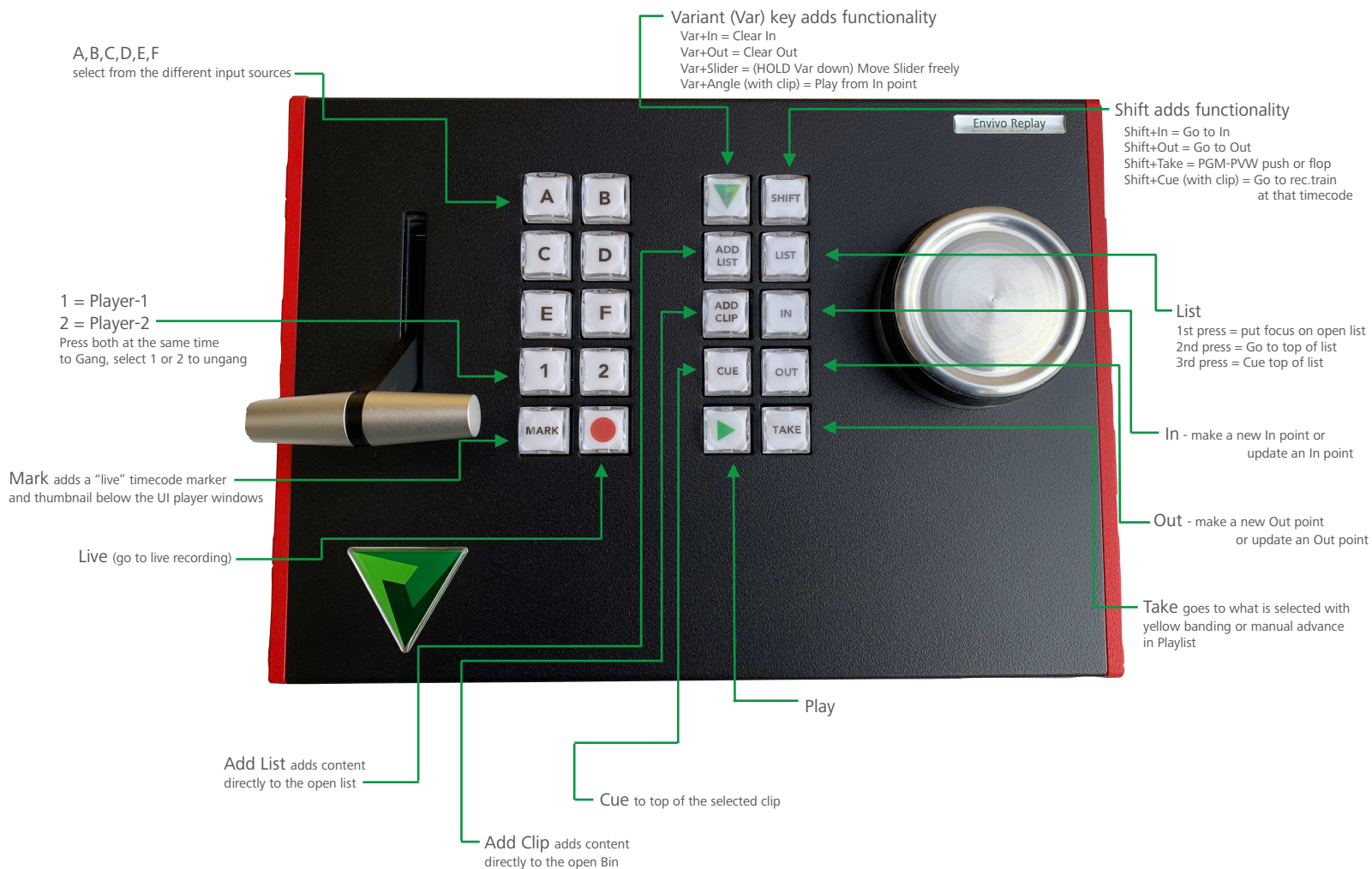
← On the first input (A) window, an estimate of available record loop duration is displayed. The amount is the same for each input.

This estimate is based on the following:

- Media (M:) Drive size and free space
- Number of record channels
- Record Bitrate
- Current amount of clips, playlists, or imported media
- Record loop duration is reduced once clips and transfers have used more than 20% of the disk.

Wedge Controller

Wedge Controller layout of button functions



Variant Systems Group



For more information and video training,
please visit

<http://variantsystems.tv/Support/supportindex.html>