
MOTIONROCKET

Launchpad

Clip Server and CG Software
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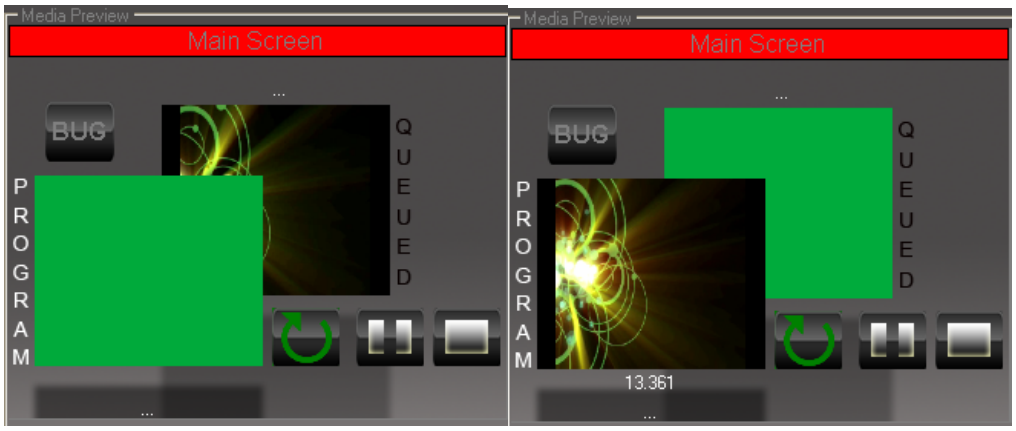
Overview:

Launchpad is a clip server and CG (Character Generator) designed to host pre-rendered graphics to LED displays and external video equipment.
The system provides three output channels which can have separate content.
All output channels are DVI; other video formats can be achieved by using third-party converters such as the DSDI-20 (DVI to HD-SDI) by Doremi Labs.
Video equipment located down-stream of the Launchpad system should, as best practice, be HDCP compliant and have a fully developed EDID profile.
Equipment without EDID can be used in conjunction with an EDID emulator such as the DVI Detective by Gefen.

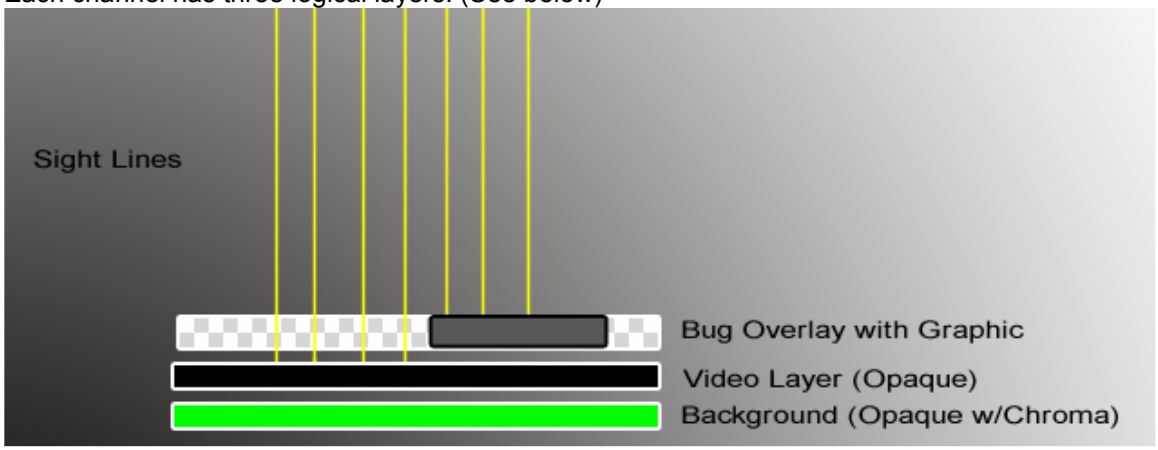
The system will support 150 media buttons per page. A media button can be a video, image, overlay template, playlist or audio clip.

Each output channel has a two windows; “Queued” and “Program”. When a media button is clicked, the media is loaded into Queued and when that media item is clicked a second time it is moved immediately to Program and begins playing. Pressing the spacebar will move all queued clips into program on ALL channels.



To stop a running clip, you may press the Stop button on the individual channel, the Stop ALL media button (located on the left side of the interface), or press ESC to stop all channels.

Channel Layers:
Each channel has three logical layers. (See below)



The background layer is 100% opaque and will either be black in color or a user-defined chroma color.

The video layer is played on top of the background layer. It covers the entire background layer and will scale any video to the entire area.

The Bug Overlay layer is above the video layer and is 100% transparent.

The image seen above represents a video covering the chroma background with a Bug Overlay displaying a grey box. Note the sight lines, (represented by the vertical yellow lines) these depict the fact the an element showing on the Bug layer will cover any lower level.

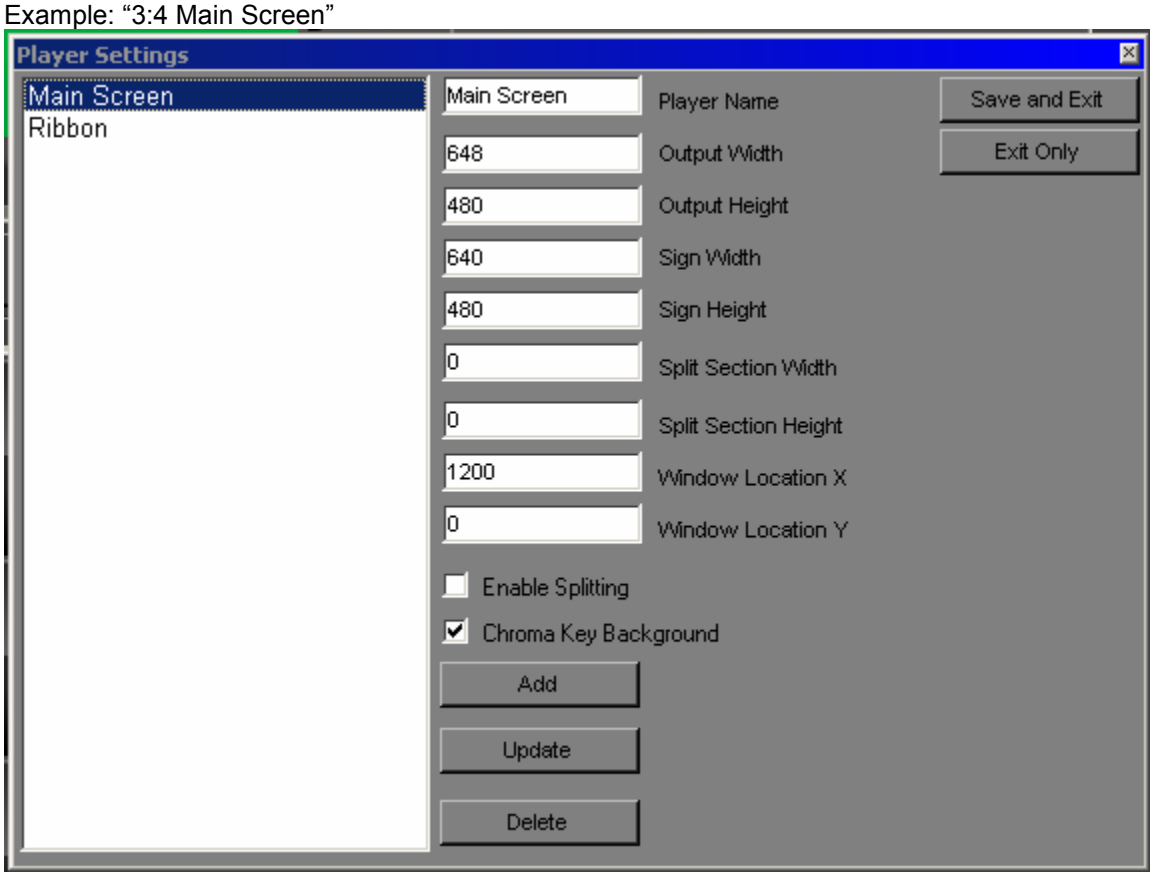
Operation \ Startup:

The application can be started by clicking the Launchpad Icon normally located on the desktop.

Setup \ Setting up Display Output:

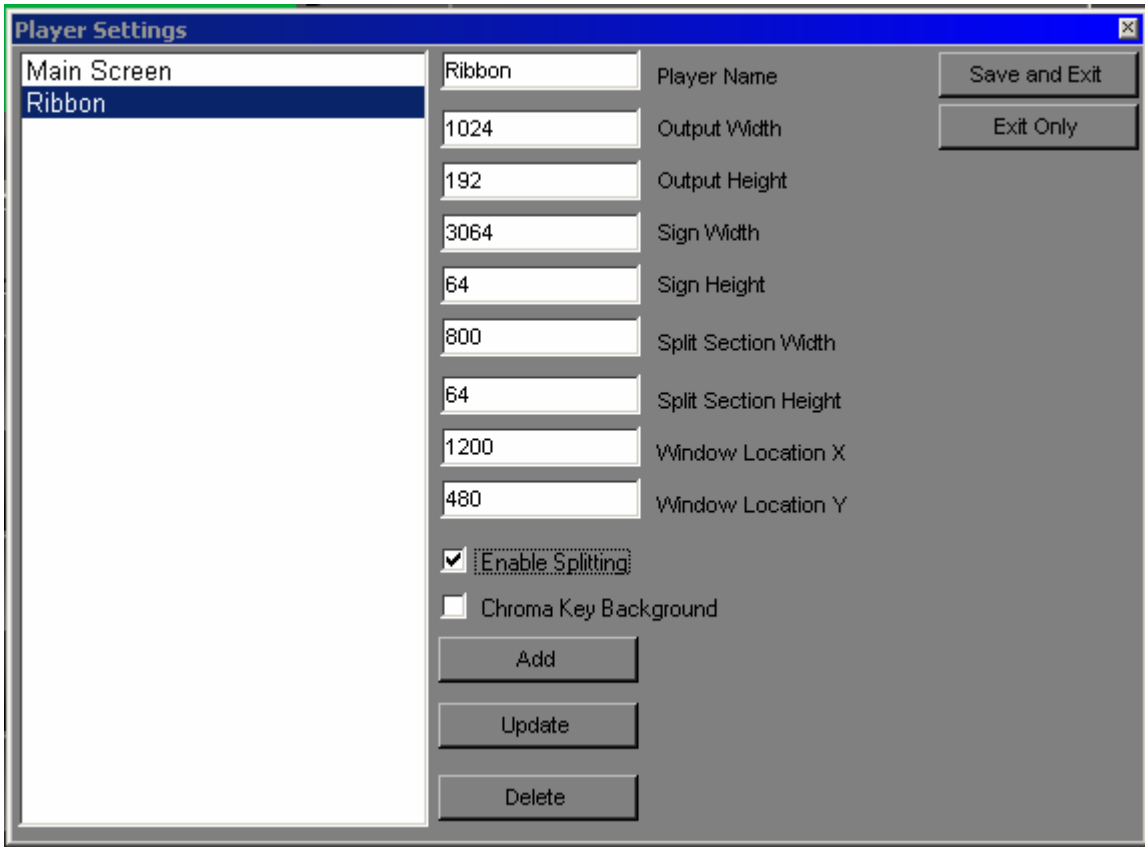
Display output channels are normally setup during installation of the system, but as a reference, the output window settings are located under toolbar item “Display Settings”
The system supports up to 3 output windows.
‘Ribbon’ or ‘facia’ displays can be configured to be ‘remapped’ or ‘split’ real-time by defining their split width and split height.

Example: “3:4 Main Screen”



In this example, a standard 3:4 aspect ration screen is being defined.
The display width (in pixels) is 640 and the height is 480. The output dimensions are the same.
Split values are 0.
Window location is 1200,0.
This example display is also being setup to show a chroma-key color when it is not actively playing.
This would be keyed out by the scaler or video switcher later downstream.

Example: “Ribbon Display”

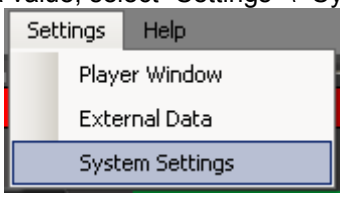


This example is of a LED Ribbon or Facia display.
This display is 3064 wide and 64 pixels high.
The primary difference between a ribbon display and a standard display is the ‘splitting’ values. We are splitting the videos at pixel 1024 in the example to allow the LED hardware to capture all the pixels from one 1024x768 desktop resolution.
Notice the fact that the output height is 192 pixels. This is taking into account the fact that the video (3064 wide) will be split into 3, 1024px wide strips. Thus taking up 192 pixels high (64x3).

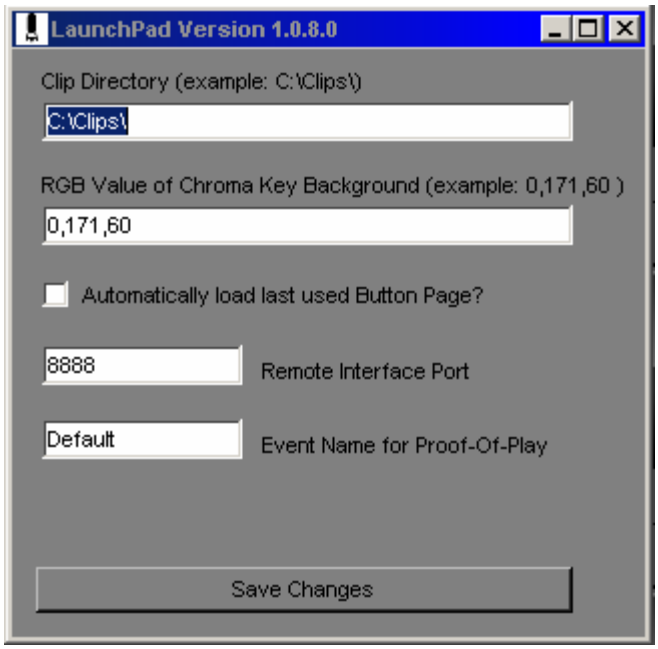
Setup \ Define Chroma Key:
To review how to enable an output to use chroma-key colors, see previous page.

A chroma-key color is used by video equipment to define parts of the video to treat as transparent; Similar to a “Green Screen” effect seen during a weather forecast.
Any display output enabled for chroma-key, will show the defined color when it is not playing ack any fuill screen graphic and will layer any ‘Bugs’ or ‘Data Templates’ on top of the chroma-key value.

To define the system-wide chroma value, select “Settings” \ “System Settings”



The chroma value is defined as RGB vales from 0 to 255



Setup \ Define Clip Directory:

Any file imported into the system will be copied into the Clip Directory.
This directory is defined in the “Settings” \ “System Settings” form seen above.

Setup \ Automatically Load Last used Button Page:

This option will load the last used Button Page on software startup.

Setup \ Remote Interface Port:

When Launchpad is being controlled by a third-party application of hardware, this is the TCP/IP port on which it should listen. NOTE: Windows Firewall settings will need to reflect this value!

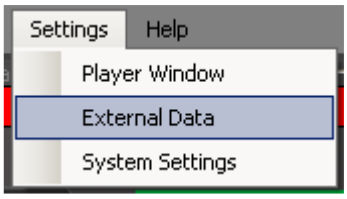
Setup \ Event Name for Proof-Of-Play:

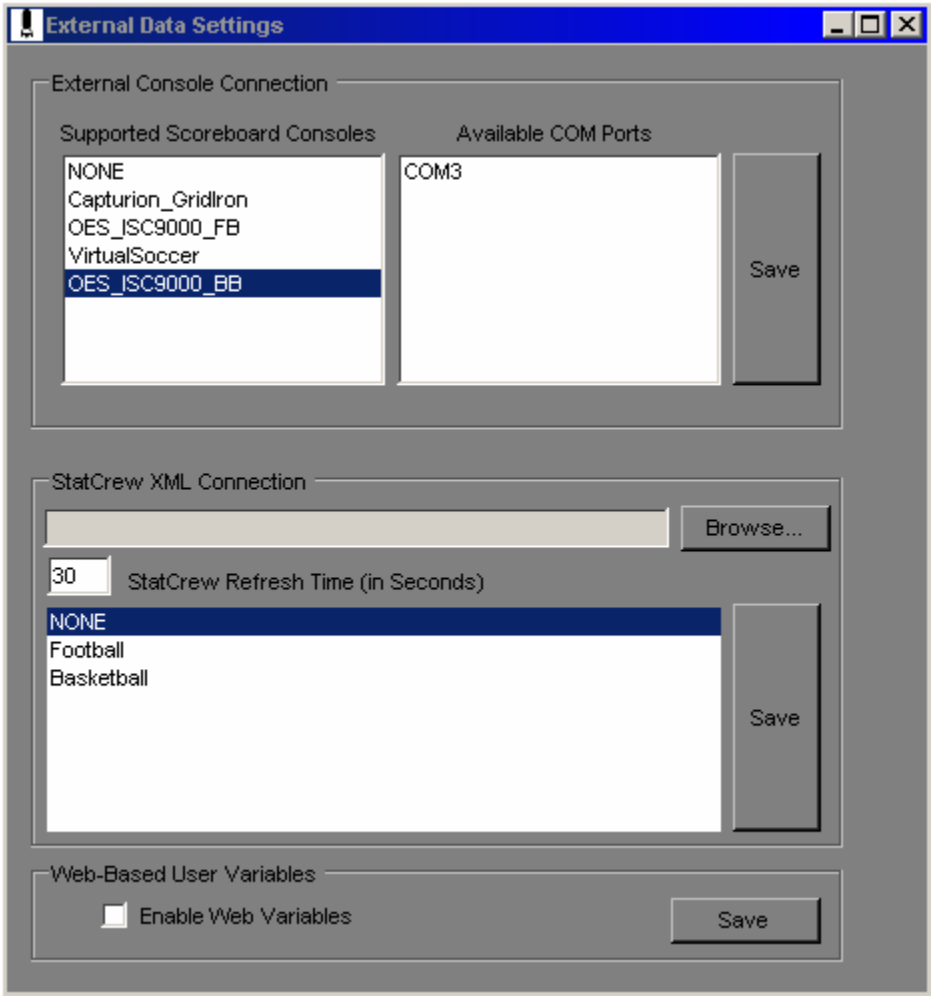
Launchpad logs all played media into a mySQL database. The EventName value is used as the database table name. This is used when the user wants to start a New Event in the database.

Setup \ Define External Data Sources:

Launchpad offers variables which can be used within Data Templates on any screen output. The source of the text displayed in place of the variables can come from a variety of sources.

The sources supported by your version of Launchpad can be seen in the menu “Settings” \ “External Data”.





External Consoles
In this example screen, the supported scoreboard consoles are listed. User must select their scoreboard console and the serial port which is connected to that console

StatCrew
StatCrew statistics software can be supported by mapping a drive within windows and saving a path to the StatCrew XML data source. The StatCrew Refresh Time value is used to define the delay between XML read requests.

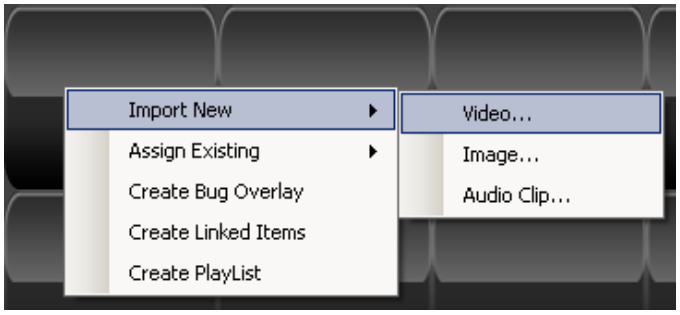
Web Variables
Launchpad can be configured to run IIS and host an ASP webpage which allows users to enter text values for variables or select from user-created lists (such as a team roster)

Virtual Scoreboards
Launchpad also features custom ASP based virtual scoreboards.

Operation \ Supported Media Types
Video: AVI,MPG,MOV
Image: JPG,BMP
Bug Overlay Graphics: PNG (ALPHA), BMP, JPG, PNG SEQUENCE
Audio: WAV and MP3
NOTE: Launchpad will automatically stretch any graphic to the output size.

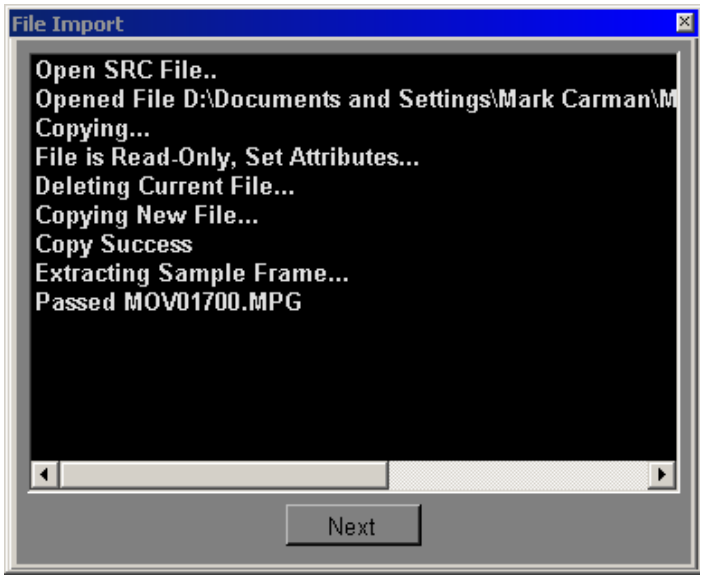
Operation \ Adding New Media

The main screen features 4 pages of 45 buttons. A button acts as the linkage between a media item and an output channel. A button can hold a video, full screen graphic, audio clip, overlay template, or a 'linked button' (explained later)

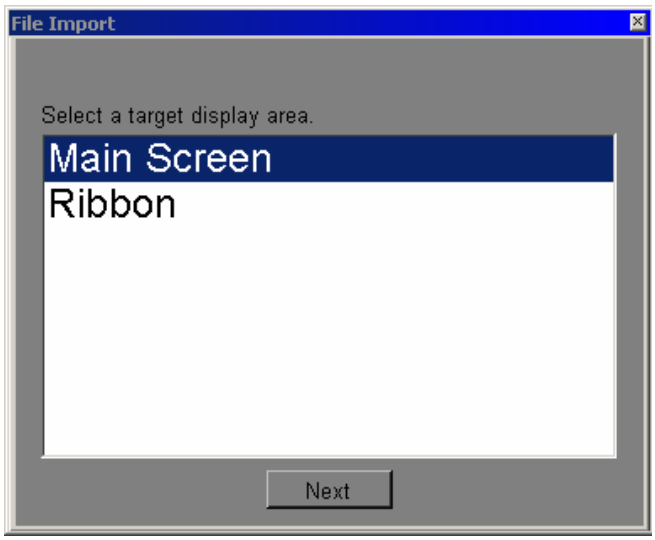


To import a new clip, right click the desired button and select "Import…" then select the type of media you desire to import "Video", "Image", or "Audio"

A file open dialog box will appear, select your file…

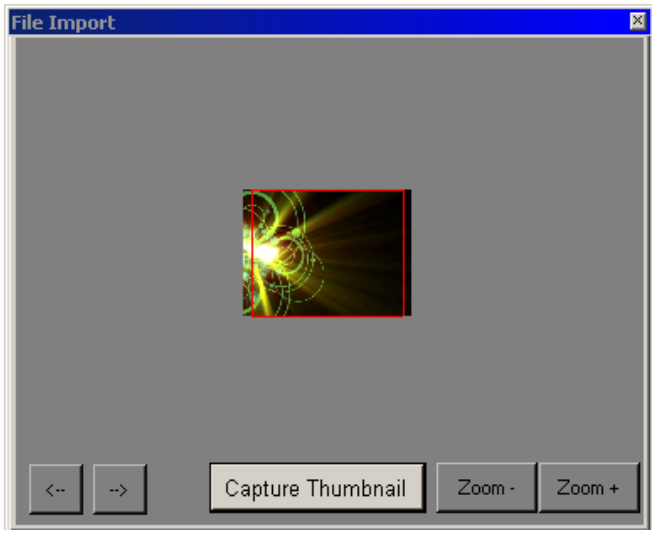


After you have selected the clip, Launchpad will make a copy of that media to the Clip Directory.
If this process is successful, you will see this form.



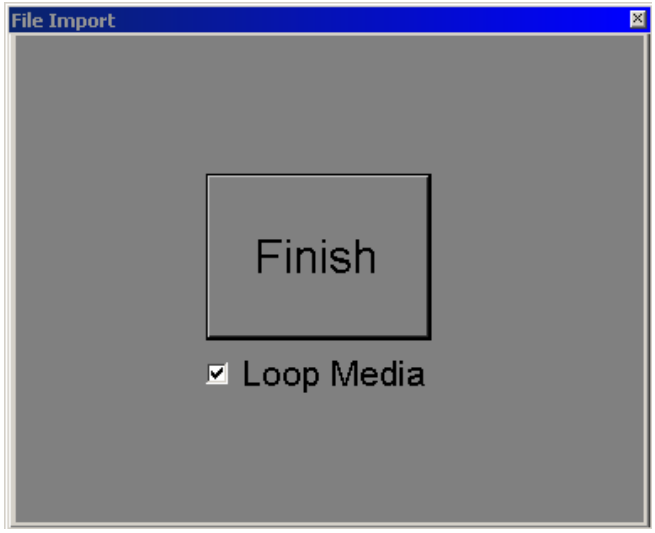
If there is more than one channel setup on Launchpad, you will need to define on which output you intend to use this media clip.

Select the output name and click next.



The button you initially selected will show a thumbnail of your media item. To generate this thumbnail, use this form.

The video can be dragged to an area of the frame that is visually specific to that clip, you may zoom in or out, and you may also advance forward into the clip if the clip starts with a black frame.



Click Finish to complete the import.

Note: A video can either be set to loop automatically or to only play once.

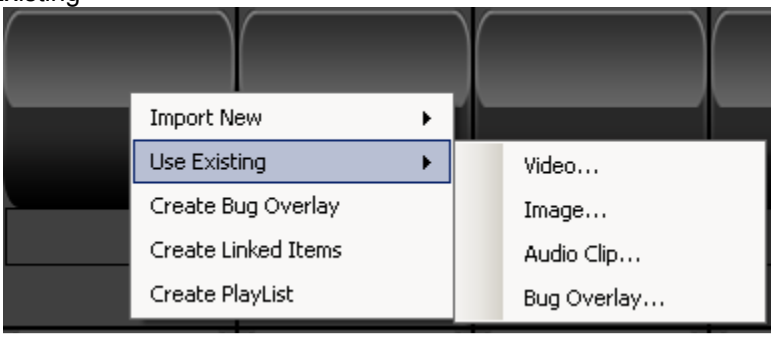
Loop Media is set to True by default.

Import Complete.

Note: The text description seen on the button is the file name and the COLOR of the text matches the title bar of the target output channel.

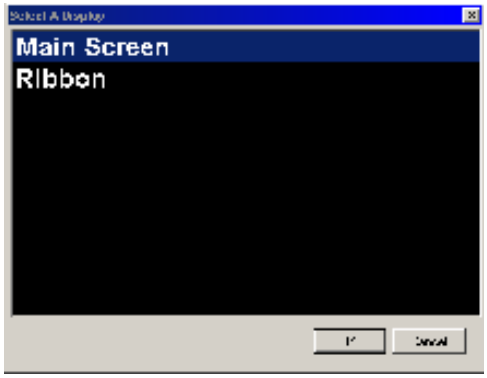
Operation \ Referencing Previously Loaded Media

Once a clip has been imported into the system, it stays in the media repository.
User may reference a previously loaded piece of media by right Cliking an unused button and selecting “Use Existing”



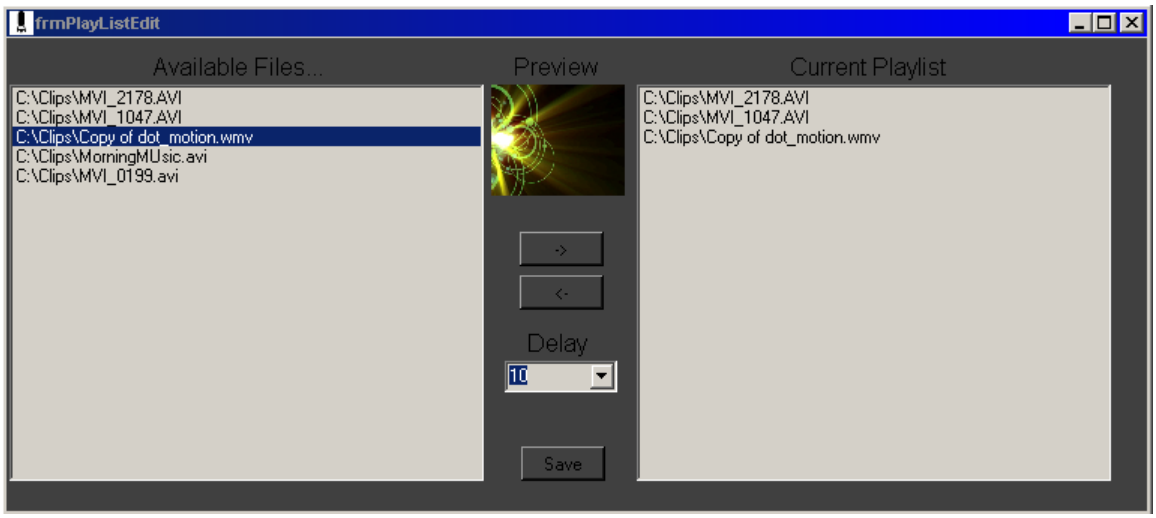
Operation \ Creating Playlists

A button may also be used to recall a pre-built playlist.
To create a playlist, right click an unused button and select “Create Playlist”
You will be prompted to name the playlist. It is recommended that you use a descriptive name which will be easy to recognize later, such as “PreGameRibbonAds”.



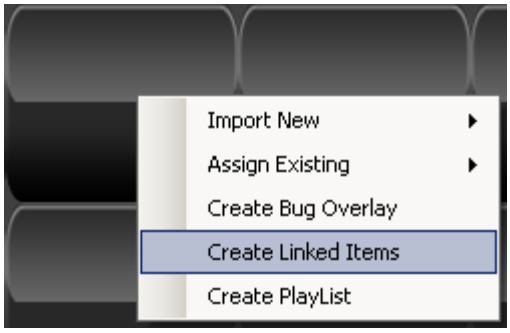
If your system has more than one channel configured, you will be prompted to define the target output channel. This is used to filter the media currently available in the currently loaded button page. This is important because a playlist can only be used on one channel.

To create the playlist, select a media item from the left list and move it to the right list using the arrow buttons in the middle of the form.
A thumbnail of the media will appear to help verify you have selected the correct media item.
Each item in the playlist will have a delay applied. This is the period of time lapsed before the next item is played.
NOTE: Videos will be played once in their entirety. Only still images will have the default delay value applied.


frmPlayListEdit
Available Files...
C:\Clips\MVI_2178.AVI
C:\Clips\MVI_1047.AVI
C:\Clips\Copy of dot_motion.wmv
C:\Clips\MorningMUsic.avi
C:\Clips\MVI_0199.avi
Preview
->
<-
Delay
10
Save
Current Playlist
C:\Clips\MVI_2178.AVI
C:\Clips\MVI_1047.AVI
C:\Clips\Copy of dot_motion.wmv

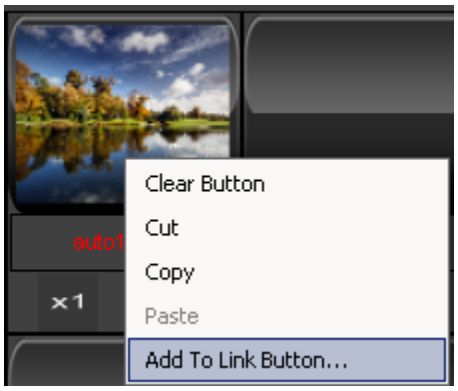
Operation \ Creating Linked Buttons

There are occasions where it would be helpful to call different clips on different channels with one click, an example would be a “Touchdown” moment where the user desires a certain video playing on one channel a second video playing on another channel and a certain audio clip. Linked Buttons allow you to create this.

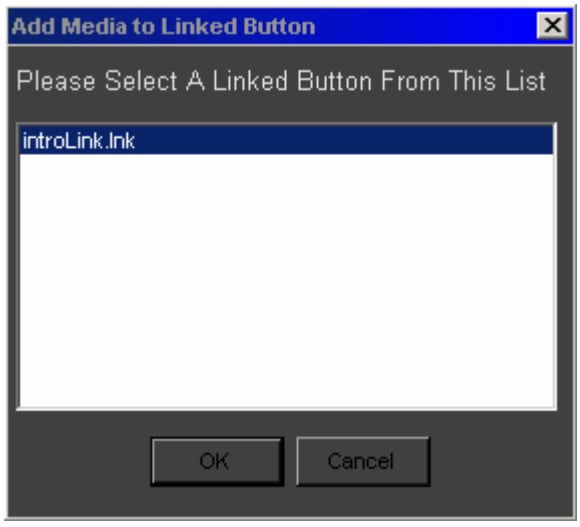


To create a linked button, right click an unused button and select “Create Linked Items”

A single Linked button can act as a linkage to one video or graphic, one overlay template PER CHANNEL and one audio clip.

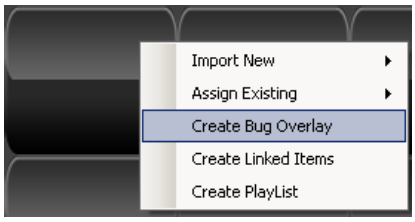


After a Linked Button has been created, an item can be assigned to the linkage by right-clicking the media button and selecting “Add To Link Button…”



Select Link Button

Operation \ Creating Bug Overlays (Data Templates)
Overlay Templates or "Bugs" are displayed in front of any full screen videos or graphics.
They can be displayed on top of the chroma-key color if a chroma-key color has been defined.



To create a Bug, right click an unused button and select "Create Bug Overlay".

You will be prompted to name the Template. Choose a name that is descriptive of the intended use of the overlay, such as "GameClock_LowerThird" or "HomeStats".

Image Properties: Used to scale an image used in the template

Text Properties: Used to change the color of the text fill or outline. If "Plain Text" is being used, the Text field is used to define the value of the text shown.
Font is used to define or change the text font.

Update: After a value has been changed, click Update to see changes

Transitions: A Bug overlay can either be shown with a fade transition or a cut.
NOTE: If a chroma-key background is being used, the cut transition is preferred because the fade-in / fade-out can let the chroma-key color bleed through the overlay.

Item List:
This area shows each item in the template.
To move or adjust a particular item, select its name from the list.

Items in the template can be layered on top of each other by changing their order in this list. Right click an item and select "Move Up"," Move Down" or "Delete"

Add a picture

Add a PNG Sequence

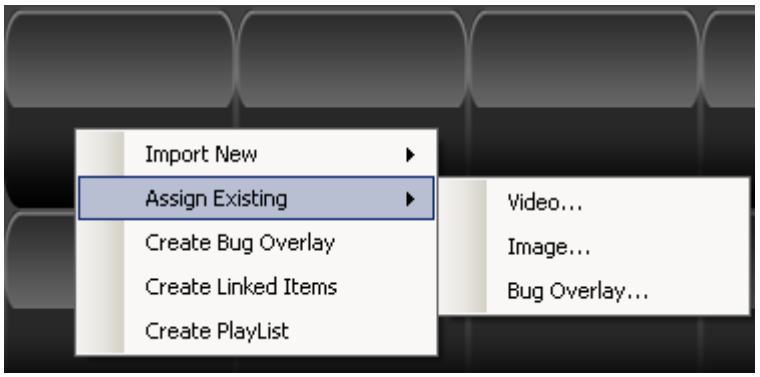
Add Plain Text

This area is where Dynamic data sources are selected.
NOTE: External data option must be configured in toolbar menu item "Settings \ External Data"

Operation \ Saving Button Pages
Button pages can be saved and recalled later. Select “File \ Save Button Page” or “File \ Save Button Page As…”

Operation \ Recalling Saved Button Pages
Button pages can be recalled by selecting “File \ Open Button Page”

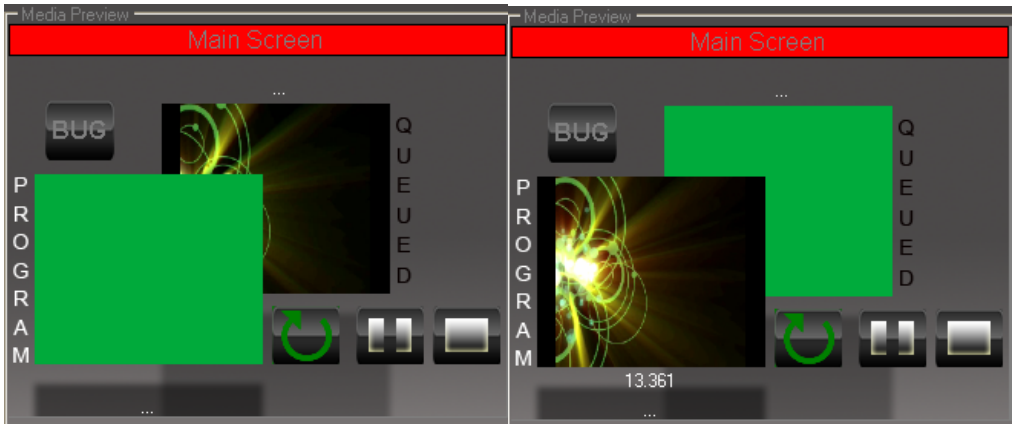
Operation \ Recalling Saved Media
Once a media item has been imported into Launchpad, it is saved in the Clip Directory.



To assign a media item to a button on a new button page that has already been imported, right click the unused button and select “Assign Existing”

If there is more than one channel configured, you wil be prompted to define the target output.

Operation \ Playing Clips
Clicking on a button item will load that button’s media item into the target channel’s Queued window. Depending on the size of the file, this may take 2-3 seconds. During file load, a clock icon is displayed in the Queued window.
Once the clip is Queued, clicking the media button a second time will move the media item into that channel’s Program window and the media will begin playing immediately.



Operation \ Channel Controls
Each channel has individual media controls. These allow the user to pause, restart or stop a clip. Looping can be toggled ON or OFF by clicking the Looping arrow button.
A Bug Overlay can be removed from the channel by clicking the BUG button.
NOTE: Even after a Bug has been hidden by clicking the BUG button, it can be shown again by simply clicking the BUG button again.

Operation \ Recommended Standard Workflow
It is recommended that the Launchpad user build his or her button pages before the intended event.
During the event, Load the next scheduled clip into the Queued Window of the intended output channels.
Once all channels are prepared, press the SPACEBAR to move all channels into program.
Load up next scheduled clips and repeat or press ESC to stop all channels.

FAQs

Does Launchpad support live camera inputs?
No, Launchpad only will playback pre-rendered graphics. Live sources need to be handled by an external key-fill or switcher.

Can I play a DVD from within Launchpad?
No, the content needs to be individual media files.

What file types are supported?
AVI,MPG,MOV,JPG,BMP,PNG Sequence

Can Lauchpad be used to Trim a video's start/stop position?
Not currently

Will Launchpad resize my videos?
Yes, it will resize any video or still image to the intended output window.