

# Sport In The Box Support

Knowledgebase > Combined Output > How to create CombinedOutput Stadium LED

## How to create CombinedOutput Stadium LED

Dmitri Peredera - 2023-10-23 - Comments (0) - Combined Output

This example will create a stadium LED screen with two modes. Screen size is 1008X432PX with a frame rate of 60 fps.



*Match mode* with a CombinedOutput that has three parts: camera, scoreboard and banner.



Into or *full screen mode*, where video is playing at the full screen.



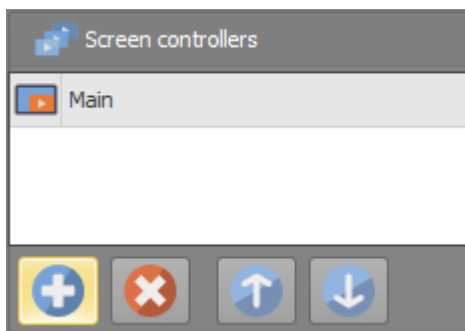
Because the intro video will be shown on the main screen, it will be stretched.

So, either the video should support stretching, like abstractions (snowflakes, lights, plexus). Or be produced in the same format as a Main screen.

Preparation

### ScreenController

Go to the settings and select \*Main\* ScreenController and change fps to 60.



Press *add* button and add ScreenController for Scoreboard, set video format to custom and 240x332 at 30 fps.

Add another ScreenController for banner with the size of 240x100 at 30fps.

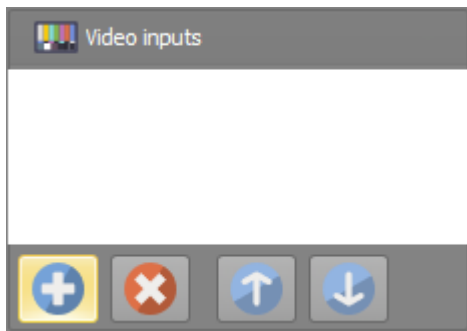
ScreenController	Description
Main	1280x720 @60, camera and introduction videos
Scoreboard	240x332 @30, player picture and match information on the right side.
Banner	240x100 @30, ads (get event) and club logos.

Frame rate of the scoreboard and the banner are reduced to save resources because the content is mostly static.

Files, played on screen should generally match format with the ScreenController format.

## Video inputs

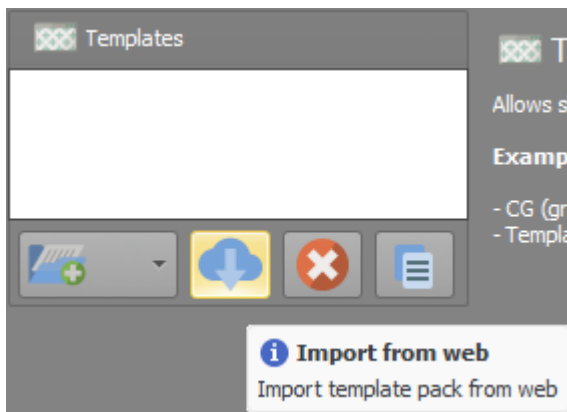
Go to the *VideoInputs* and press add button to add camera.



If the camera is no available, use any kind of file in playlist instead.

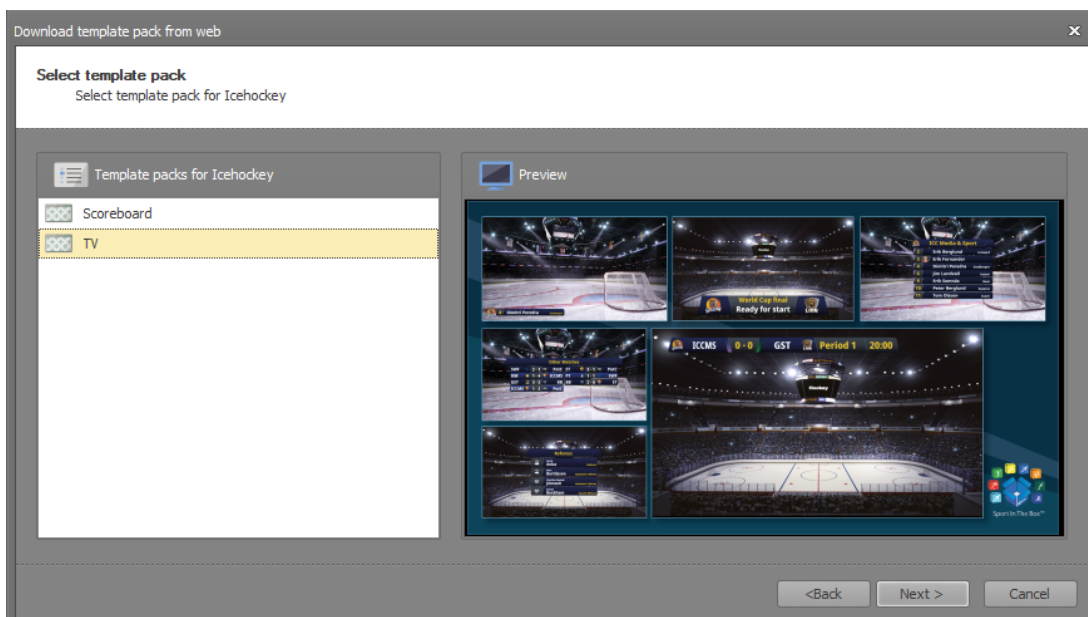
## Templates

Add template packs from web by pressing the cloud button.

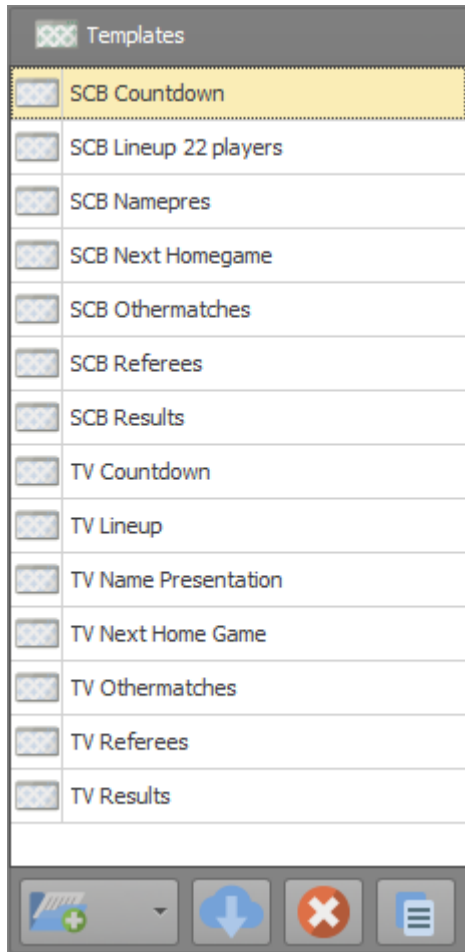


Scoreboard pack is for showing graphics in full screen. TV packs are for overlay graphics.

Import both packs.



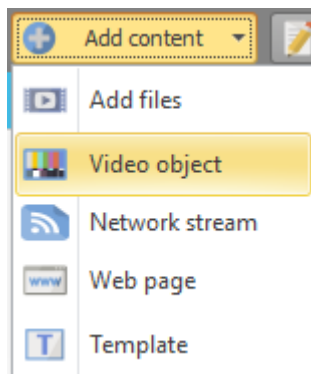
After the import is complete, template list should look like that:



Add files to ScreenController

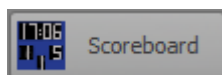
### Main

In the *Main* screen, press `_add content_` button and add video input or file.



### Scoreboard

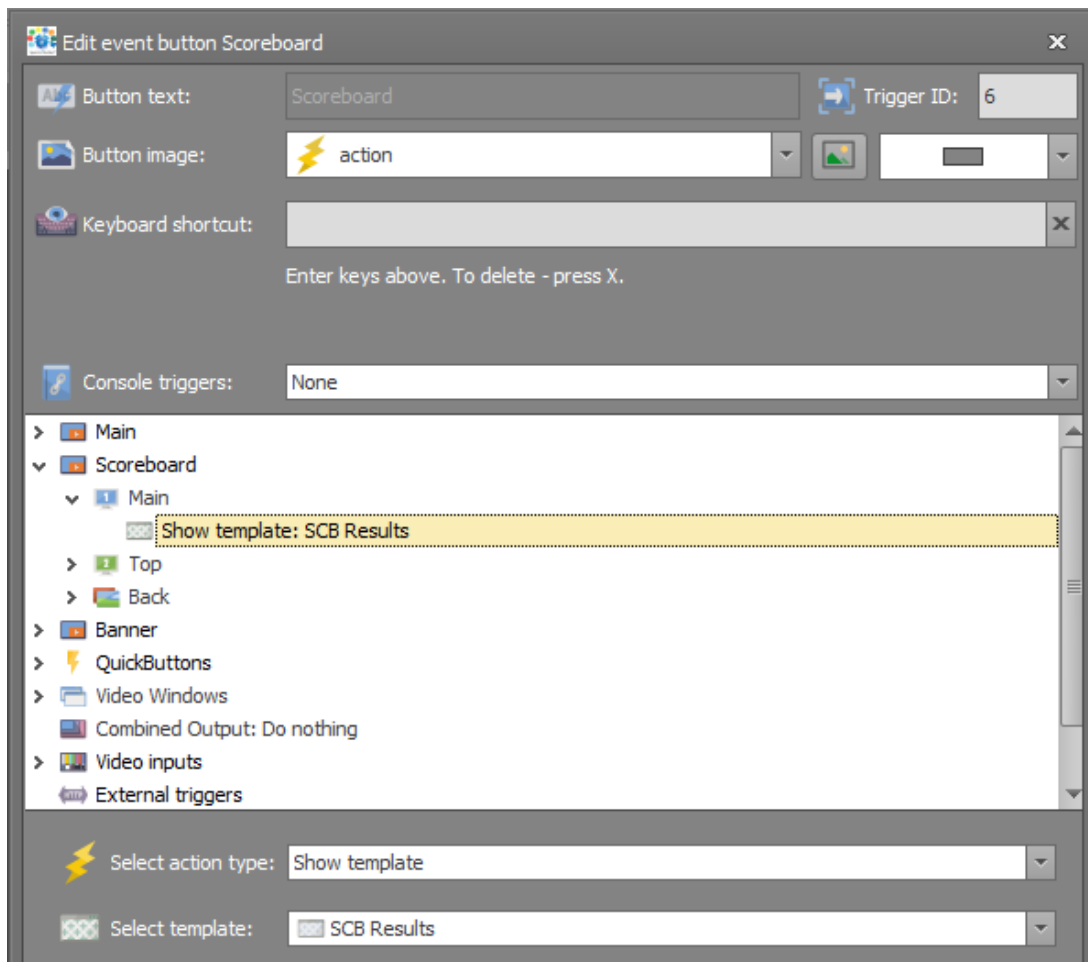
Configure *QuickButtons* to show templates.



Edit *Scoreboard* button with right mouse button menu and make it *Show template* on *Main*

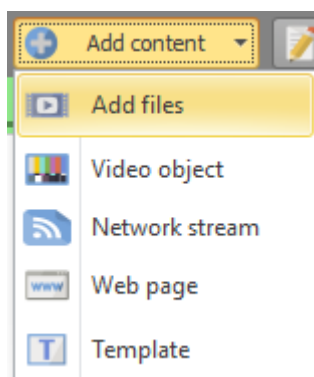
layer of the *Scoreboard* screen.

Select template *SCB Results*.

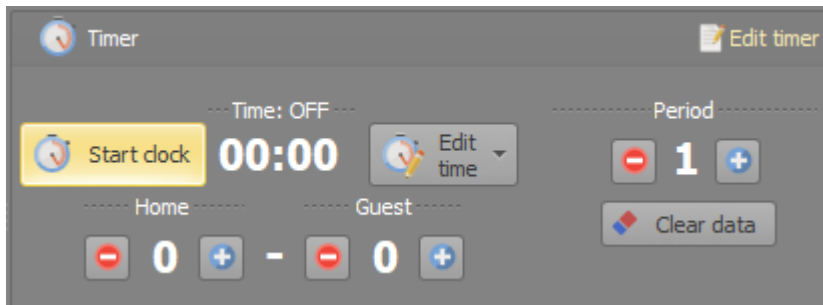


## Banner

Go to the *Banner* screen and add some small files like ads or images.



Press *Start clock* button for countdown to start.



In case the *Timer* panel doesn't look like one above, press the *Edit timer* button and select console *Internal clock*.

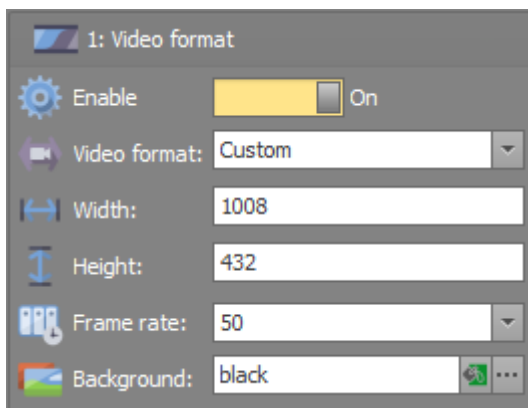
Configure *CombinedOutput*

Go back to the settings and select *Combined output*.

Enable *CombinedOutput* and set width to 1008 and height to 432 pixels.

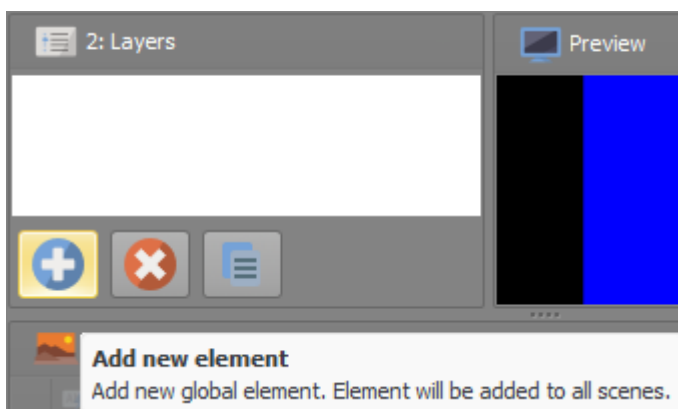
Format of the output should match the size of LED screen.

All sizes are recalculated when the canvas format is changed, so video format should be set first.

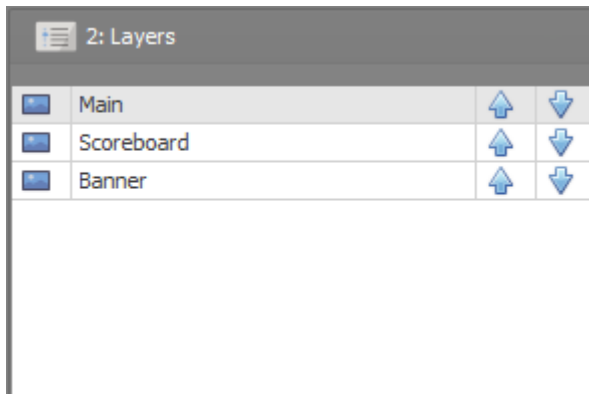


Create views and layer

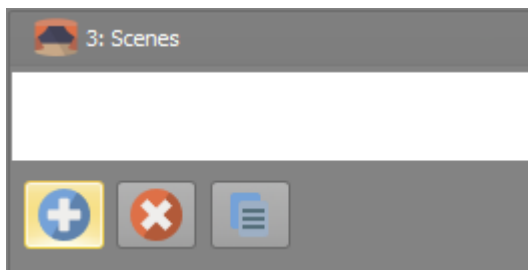
Press *Add new element* button and add new element for each source.



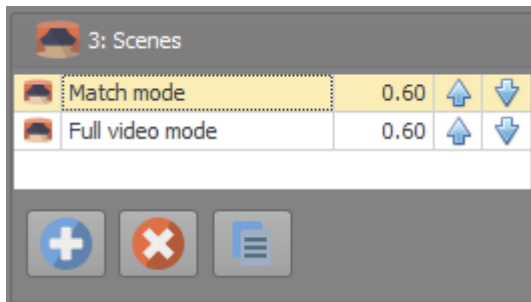
Name elements by clicking on element name and name elements: main, scoreboard, banner.



Switch to the scenes and press *Add scene* button to add two scenes.



Name scenes *Match mode* and *Full video mode*.



Change elements

Each element is created on each scene, but values can be different.

At this point, there should be three elements that looks exactly the same.

Element values can be changed either in elements grid or in property editor.

Select match mode and set value to

4: Layers in scene: Match mode

	Elem...	Source	X	Y	W	H		Crop X	Crop Y	Crop W	Crop H
1	Main	Main	0	0	768	432	<input checked="" type="checkbox"/>	0	0	1,280	720
2	Scorebo...	Scoreboard	768	0	240	332	<input checked="" type="checkbox"/>	0	0	240	332
3	Banner	Banner	768	332	240	100	<input checked="" type="checkbox"/>	0	0	240	100

Source

Source:

Visibility:  Visible

Transparency: 100%

Volume: 100%

**X Y Width Height**

0 0 726 432

768 0 240 332

768 332 240 100

Select *full-screen* mode and set values to



4: Layers in scene: Full video mode

	Elem...	Source	X	Y	W	H		Crop X	Crop Y	Crop W	Crop H
1	Main	Main	0	0	1,280	720	<input checked="" type="checkbox"/>	0	0	1,280	720
2	Scorebo...	No source	0	0	1,008	432	<input type="checkbox"/>	0	0	1,280	720
3	Banner	No source	0	0	1,008	432	<input type="checkbox"/>	0	0	1,280	720

Source

Source:

Visibility:  Visible

Transparency: 100%

Volume: 100%

Video size (Source format 1280x720 @ 60)

X:  Width:

Y:  Height:

Angle:   No crop

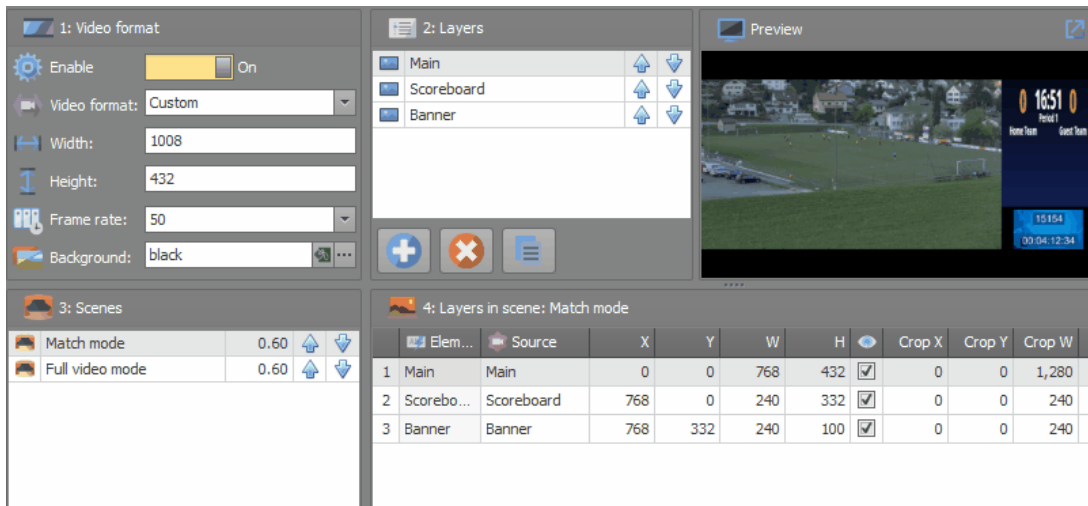
**X Y Width Height**

0 0 1280 720

0 0 1008 432

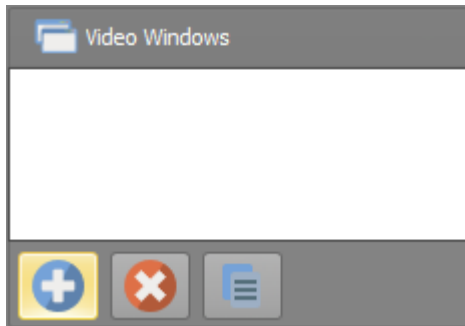
0 0 1008 432

At full-screen, only main element is visible, help mixer by changing **visible** to **false** for elements that are not shown.

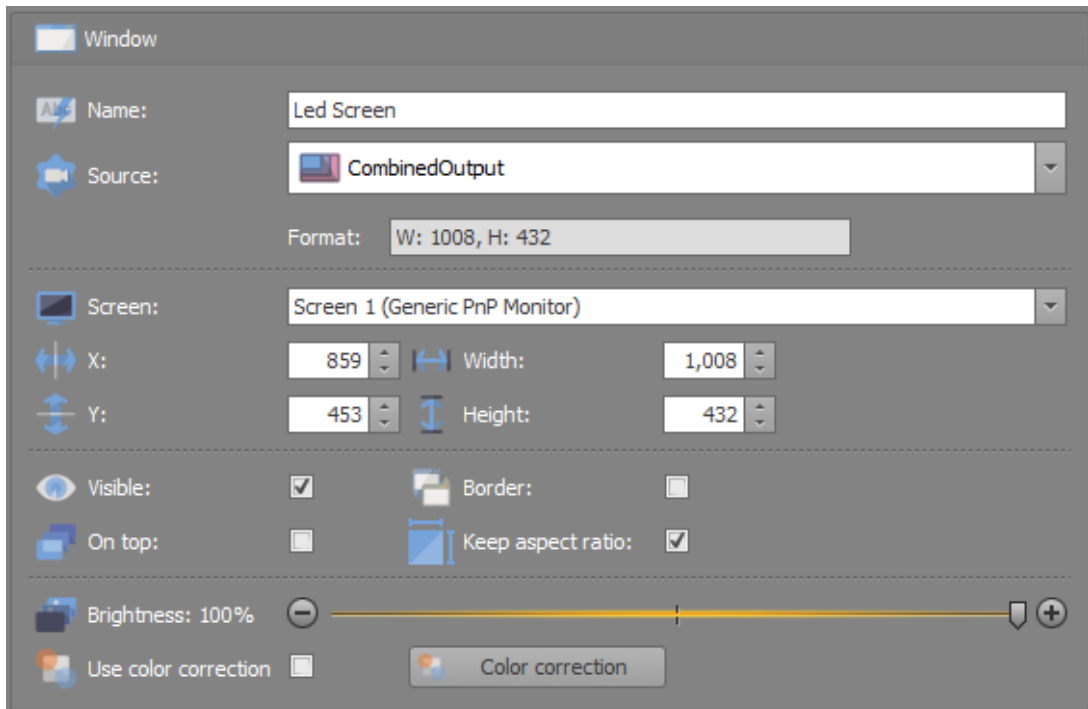


### Create VideoWindow

Go to the *VideoWindows* settings and add windows with *CombinedOutput* as source.



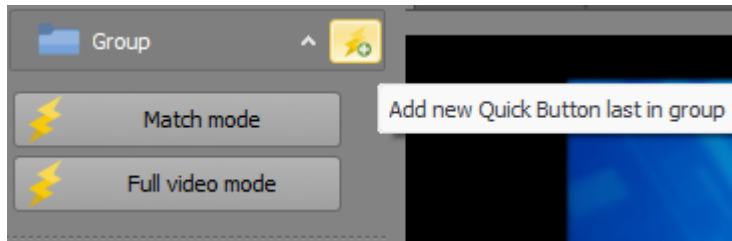
Make window size to match *CombinedOutput* and hide borders. Name it *LED screen*.



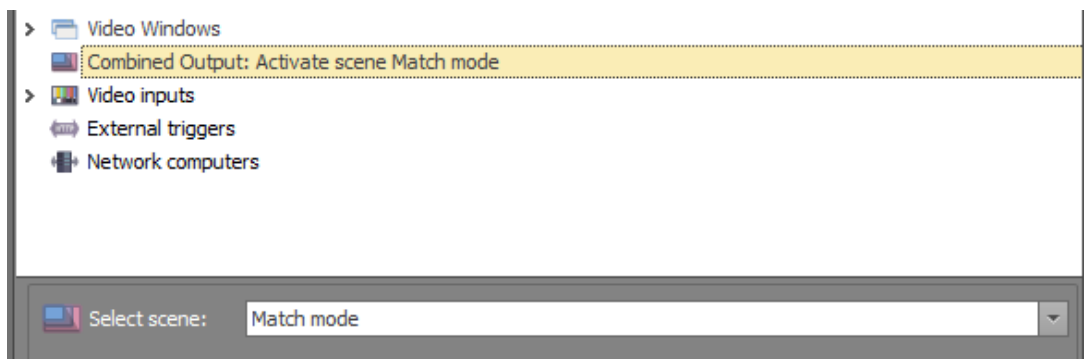
## Configure QuickButtons

Generally, scenes are changed together with to content and *QuickButton* will even start playlists and show graphics.

Press *Add QuickButton* and add button for each scene.



Change scene and make *QuickButton* to start playlist.



Change main preview source to *CombinedOutput* with the right mouse button menu.

Result should look like that.

