Sport In The Box Support

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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.

👔 Screen controllers						
	Main					
C) 🕄 🕥 🕑					

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:

🗱 Templates
SCB Countdown
SCB Lineup 22 players
SCB Namepres
SCB Next Homegame
SCB Othermatches
SCB Referees
SCB Results
TV Countdown
TV Lineup
TV Name Presentation
TV Next Home Game
TV Othermatches
TV Referees
TV Results
- 💽 🔁 🔳

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.

10	Ed	it event button Scoreb	oard	x
Z	y I	Button text:	Scoreboard Trigger ID: 6	
l	2	Button image:	🗲 action 💌 🔍 📖	•
E	•	Keyboard shortcut:		×
			Enter keys above. To delete - press X.	
	8	Console triggers:	None	•
>		Main		
l~		Scoreboard		
	~	💷 Main		
		stow templat	e: SCB Results	
	>	💷 Top		
	>	📑 Back		
Þ		Banner		
>	÷	QuickButtons		
Þ		Video Windows		
		Combined Output: Do	nothing	
Þ	Ļ.	Video inputs		
	(111)	External triggers		×
	- 2	Select action type:	Show template	-
	8	🖇 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.

Scenes 3: Scenes			
📕 Match mode	0.60	\bigcirc	₽
📕 Full video mode	0.60	\diamond	ዏ
🔁 🕄 🔳			

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.	. 意 Source	2	Х		W	н		Crop X	Crop Y	Crop W	Crop H
1	Main	Main	-	0	0	768	432	1	0	0	1,280	720
2	Scorebo	Scoreboard	d	768	0	240	332	\checkmark	0	0	240	332
3	Banner	Banner		768	332	240	100	\checkmark	0	0	240	100
	Source											
1	💼 Source:											
	🕟 Visibility: Visible											
	👕 Trans	parency: 100	% 🔿									÷
Ľ	()) Volum	2: 100%	Ξ									÷
2	K Y	Width	Heig	ht								
0	0	726	432									
70	68 0	240	332									
76	68 33	2 240	100									

Select *full-screen* mode and set values to

	🜉 4: Layers in scene: Full video mode												
	📖 Elem	💼 Source	x		W	н	۰	Crop X	Crop Y	Crop W	Crop H		
1	Main	Main	▼ 0	0	1,280	720	1	0	0	1,280	720		
2	Scorebo	No source	0	0	1,008	432		0	0	1,280	720		
3	Banner	No source	0	0	1,008	432		0	0	1,280	720		
	_												
	Source												
	Source:												
	🕟 Visibility: 📃 Visible												
	Transparency: 100% 🔿 —												
E	(1) Volume: 100% 🗢 🗌 🕀												
	Video size (Source format 1280x720 @ 60)												
	♦ X: 0												
	() Ү:		0 🗘	1 Heig	ht:		72	20 🗘					
	Angle: 0 C No crop												

Χ	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.

Image: Source of constant is custom Image: Source of constant is custom Image: Source of constant is custom Image: Source of constant is custom Image: Source of constant is custom Image: Source of constant is custom Image: Source of constant is custom Image: Source of constant is custom Image: Source of constant is custom Image: Source of constant is c	🗾 1: Video format		t	2: Layers	s				review				2
Image: Wideo format: Custom Image: Custom<	Enable	On									0.000		
Image: Width: 1008 Image: Height: 432 Image: Frame rate: 50 Image: Background: black Image: Background: 0.60 Image: Background:	Video format: Custom	•			d								0 16:51 0
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3: Scenes 4: Layers in scene: Match mode Match mode 0.60 0 Image: Complexity of the state of the st	Background: black	1	G										00:04:12:34
Full video mode 0.60 Image: Main Main 0 0 768 432 Image: Main 0 1,280 2 Scoreboard 768 0 240 332 Image: Main 0 0 240 <	a: Scenes			4: Layer:	s in scene: Matd	h mode							
2 Scorebo Scoreboard 768 0 240 332 🕢 0 0 240	🙈 Match mode	0.60 🕁 🕹		📖 Elem	Source	X		Y	W	н 🧠	Crop X	Crop Y	Crop W
	📕 Full video mode	0.60 😽	1	Main	Main	0)	0	768 4	32 🔽] 0	0	1,280
3 Banner Banner 768 332 240 100 🗹 0 0 240			2	Scorebo	Scoreboard	768	1	0	240 3	32 🔽] 0	0	240
			3	Banner	Banner	768	3	32	240 1	00 🔽] 0	0	240

Create VideoWindow

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



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

Window	
Mame:	Led Screen
🧙 Source:	CombinedOutput 🔹
	Format: W: 1008, H: 432
Screen:	Screen 1 (Generic PnP Monitor)
↔ x:	859 🗘 😝 Width: 1,008 🗘
÷ Y:	453 ‡ 1 Height: 432 ‡
Visible:	🗹 🦳 Border: 🔲
on top:	Keep aspect ratio:
🗂 Brightness: 100%	⊖ ,
Use color correction	Color correction

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.

Group 🔨	1		
🥖 Match mode		Add new Quick But	ton last in group
Full video mode	Ĵ		

Change scene and make *QuickButton* to start playlist.

Þ		Video Windows
L	_1	Combined Output: Activate scene Match mode
Þ		Video inputs
L		External triggers
	•	Network computers
L		
L		
L		
ſ		
		Select scene: Match mode

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



Result should look like that.