Sport In The Box Support

How to create CombinedOutput Stadium LED with Scoreboard

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This example will create a stadium LED screen with two modes. Screen size is 1280X720PX with a frame rate of 60 fps.

Schematically, it will look like:



And with video:



Match mode with a CombinedOutput that has following parts: live video, scoreboard, small ads and banner.

Preparation

ScreenController

Go to the settings and select *Main* ScreenController and change fps to 60. Same fps will be used for all ScreenController.

For less dynamic content, consider changing fps to 30. For better performance, use fps that can be divided without rest, like: 60, 30, 10.

For the purpose of tutorial, change background color. For production, select *black* or *transparent*.

Press background color drop-down and select *Custom color*.

Select background color from list below and any other that matches your needs.

Press *Add* button and create *ScreenControllers* with data from list below.

ScreenController	Description	color
Live	1280x720 @60, camera and introduction videos.	red
Scoreboard	144x280 @60, scoreboard with points.	green
Ticker	640x40 @60, long line with ads.	blue
Small ads	144x86 @60, small area with ads.	orange

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

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

Add files to *Live*, *ticker* and *small ads* screens. Try to match size and fps of the files to ScreenController.

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*.

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 select 720 50p. Format of the output should match the size of a 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*, *full video mode* and *black*.

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.

Match mode

Select match mode and set value to



Name	Source	x	y	width	height	Visible
Live video	Live	0	0	496	280	true
Small ads	Small Ads	496	194	144	86	true
Scoreboard	Scoreboard	496	0	144	280	true
Ticker	Ticker	0	280	640	40	true

Full video mode

Select full-screen mode and set values to



Name	Source	x	y	width	height	Visible
Live video	Live	0	0	640	320	true
Small ads	Small Ads	0	0	640	320	false
Scoreboard	Scoreboard	496	0	144	280	false
Ticker	Ticker	0	280	640	40	false

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

Black

Select black mode and set values to



Take any sizes and make everything hidden.
Note that animation happens from current state to new values and some animations may look strange.

Name	Source	x	y	width	height	Visible
Live video	Live	0	0	640	320	false
Small ads	Small Ads	0	0	640	320	false
Scoreboard	Scoreboard	0	0	640	280	false
Ticker	Ticker	0	0	640	40	false

Result, without content added, should look like that:



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*



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.

