

New multi split screen effects

Posted by schrauber - 29 May 2020 08:15

"Quad split screen, simply".

[EDIT] Regular download page: www.lwks.com/index.php?option=com_kunena&func=view&catid=7&id=188603&limit=15&limitstart=270&Itemid=81#190016

EDIT: This revised version should now be compatible with all versions of Lightworks.

It is a single effect with 4 inputs

Features:

- Fast (low GPU load)
- Easy handling if you only need a standardized layout without cropping etc.

Maybe 5 of these effects can be used to create a 16x multiscan? (4 effects with 4 inputs = 16 and additionally an effect that combines the outputs of the 4 effects). But I have not tested that.

Few setting options:

"Scale" changes the distance between the screens by scaling them, always keeping them fixed in their corners. In this simple effect, this setting is designed for static purposes only. Slow keyframing would make 1-pixel jumps of the edges visible.

For dynamic scaling I recommend the effect "Quad split screen, dynamic zoom", which uses a sophisticated edge interpolation.

The background color is adjustable. If Alpha is set to 0, the Background can be replaced in a subsequent effect (e.g. "Blend").

I'll probably post the "Quad split screen, dynamic zoom" effect here next week.

[EDIT] Archive, **old** original download in the attachment (not recommended because this file is no longer maintained in this post):

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Re: New multi split screen effects

Posted by hugly - 29 May 2020 09:09

FWIW

The Corona virus has invented a boom of split screen videos created by amateurs. The video shared recently elsewhere shows up to 40 windows on one frame.

Out of curiosity and since my computer has the necessary power and resources, I just tried to use a straight forward approach with only 40 clips synced by TC in a multicam bin and created a multilayer sequence with 40 tracks. That works. As soon as I started adding and adjusting DVE's the sequence got corrupted, effects disappeared and the timeline ruler shows question marks, all without a crash.

I think the Lightworks memory management isn't prepared to create something like the above in a simple and straight forward manner.

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Re: New multi split screen effects

Posted by jwrl - 29 May 2020 19:01

Nice effect, but I'm curious. Why are you passing the samplers in to the shader? Since you know what they are and have no means of changing them, why not just include them in the shader?

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Re: New multi split screen effects

Posted by schrauber - 29 May 2020 19:48

I had used the much more complex "Quad split screen, dynamic zoom" effect as a basis, and quickly tried to create this simple version.

Apparently there are some code residues left. ☺

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Re: New multi split screen effects

Posted by jwrl - 29 May 2020 20:25

Looking at the rest of the code it's obvious that it's a cut down - now that I know!!! Especially since you say quite clearly at the head of the effect "Work in progress, change to simple version".

The word "Prototype" should have been a clue too.

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Re: New multi split screen effects

Posted by schrauber - 06 Jun 2020 16:17

Quad split screen, dynamic zoom

schrauber wrote:

.. For dynamic scaling I recommend the effect "Quad split screen, dynamic zoom", which uses a sophisticated edge interpolation..

I'll probably post the "Quad split screen, dynamic zoom" effect here next week.

Here's the effect :

[EDIT] Regular download page: www.lwks.com/index.php?option=com_kunena&func=view&catid=7&id=188603&limit=15&limitstart=270&Itemid=81#190019

(The original looks better than this Youtube version.)

The text in this video was created with the standard Lightworks effect and optimized with the advanced features of this quad screen effect:

- Special Frame Edge Interpolation (always active in this effect).
- Antialiasing (optional)
- Alpha softness (optional)

Standard Features:

- Quad split screen with the possibility to highlight a selected screen by zooming.

This will automatically minimize the other three screens.

You can choose which screen should be highlighted by zooming.

"**Highlighted**" zooms the selected screen, and minimizes the other three screens in sync. For dynamic zooming please use keyframing.

"**Base Scale**" changes the distance between the screens by scaling them, always keeping them fixed in their corners.

[EDIT] Archive, **old** original download in the attachment (not recommended because this file is no longer maintained in this post).

For the basic functionality you can leave the following options in the default settings.

But if you want more, or want to optimize the quality..

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Re: New multi split screen effects

Posted by schrauber - 06 Jun 2020 18:27

Enhanced features:

The background color is adjustable.

By default, the alpha slider of the color settings panel is ignored.

If you want to use a different background (image, background effects or video), you can use the Transparent mode and replace the transparency with your background in a downstream effect.

Optional mode: *"Transparency. Add Bg & soft edges in downstream effect"*;

This means that in this mode, edge softness is only applied to the alpha (transparency) value, not to the RGB values. Therefore, the softness of edges in this mode is only visible when the transparency is replaced in the subsequent effect (e.g. Blend).

The reason for not applying softness to the visible colors (RGB) in this mode is to avoid double applied edge softness, which leads to better results.

Function of the alpha slider of the color adjustment panel in transparent mode:

"A slider colors soft edges in a transparent setup";

This means for the result after you have replaced the background in the downstream effect:

Alpha slider to 0: The background color set in this effect will be ignored.

Alpha slider to 1: the background color set in this effect colors the edge softness

(this also happens with black or white).

Otherwise, the background color set in this effect will be replaced by another background in the following effect.

Softness:

The edge softness is created in the effect to avoid jerking edges when zooming. For this purpose, you can leave the slider at 0 because the effect automatically calculates a 1 pixel wide edge softness.

If desired, the edge softness can be increased.

"if `Highlighted` at 100%, then partly inactive"

This means that the edge softness of the frame edges of the individual screens is automatically removed smoothly as the zoom approaches 100% in order to achieve a true full screen image. Antialiasing is also scale dependent.

If you have selected the Alpha Softness option, this alpha softness remains active.

Softness modes:

- *"Fast mode; frame edge softness only"*:: Standard mode for low GPU load

- *"Softness of frame edges and alpha edges"*:: Applies an additional alpha softness after mixing the screens. If the frame edges are very soft, this can also make these edges look softer. But for this purpose there is probably more GPU efficient code. The real purpose of alpha softness is when you use media or text effects with transparency.

Alpha softness reduces the visible dimensions of elements. In Alpha mode, be careful not to set the

softness too high, especially for text or small elements. If the alpha softness is greater than the lines of the font, the font becomes completely invisible or transparent.

- *"Quality mode: Antialiasing & Soft frame edges"*: This Antialiasing minimizes interferences, which can occur by minimizing the screens. It usually does not remove aliasing that is already present before the effect.

Relatively high GPU load!

"Quality mode: Antialiasing & Soft edges (frame & alpha)": All softness features and filters active (high GPU load!). In this setting this effect also uses most V-RAM space. With UHD (project resolution or export) about 0.7 GB in addition to the base load of the project. At 1080p less than 0.2 GB additional.

In *"Fast mode"*; much less.

Deactivate inputs:

These switches allow you to quickly and easily remove screens and replace them with the background. This could be useful if a person shown in Screen is temporarily absent. Even if you have not connected all inputs, it is recommended to deactivate these screens so that the effect only takes shared texture coordinates (the position of the pixels) from connected inputs.

I also marked this effect with the status prototype, because I can only test with Windows and the community (you) may still have ideas?

Edit: New cross platform tested version available.

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Re: New multi split screen effects

Posted by Scott Hill - 06 Jun 2020 18:53

Hi Schrauber,

This effect looks terrific, but I am not able to add it into Lightworks. However, your original effect, QuadScreenS, loaded without any problems.

I am using a MacBook Pro with MacOS Catalina, 10.15.3.

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Re: New multi split screen effects

Posted by jwrl - 06 Jun 2020 20:13

If you like, I'll check it out later today to see if I can find any obvious compatibility issues, schrauber. Scott, do you get any error messages when you compile the effect, and if so, what are they? A screen grab would be good if you get errors.

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Re: New multi split screen effects

Posted by Scott Hill - 06 Jun 2020 21:07

Hi jwrl,

Thank you for your help.

Now if I can just upload this screen grab...

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Re: New multi split screen effects

Posted by jwrl - 06 Jun 2020 21:39

Thanks Scott, that will be a big help. I will get onto that a bit later today.

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Re: New multi split screen effects

Posted by Scott Hill - 06 Jun 2020 21:54

No worries - it's not urgent. Still in lockdown here in Southern California! Using the spare time to catch up with some of the new user-created FX.

By the way, I've downloaded many of yours. Thank you!

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Re: New multi split screen effects

Posted by jwrl - 06 Jun 2020 21:57

[EDIT] Ignore what I previously posted here! I looked at the wrong version!

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Re: New multi split screen effects

Posted by Scott Hill - 06 Jun 2020 22:05

It is bringing in the simply version, but not the Dynamic Zoom version.

I don't mean to put you through this. I can wait for Schrauber to have a look at his effect.

Thanks for the effort, however!

Scott

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Re: New multi split screen effects

Posted by jwrl - 06 Jun 2020 22:06

Yes, I know. I opened the wrong version. Blush. I'll check out the real one now.

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