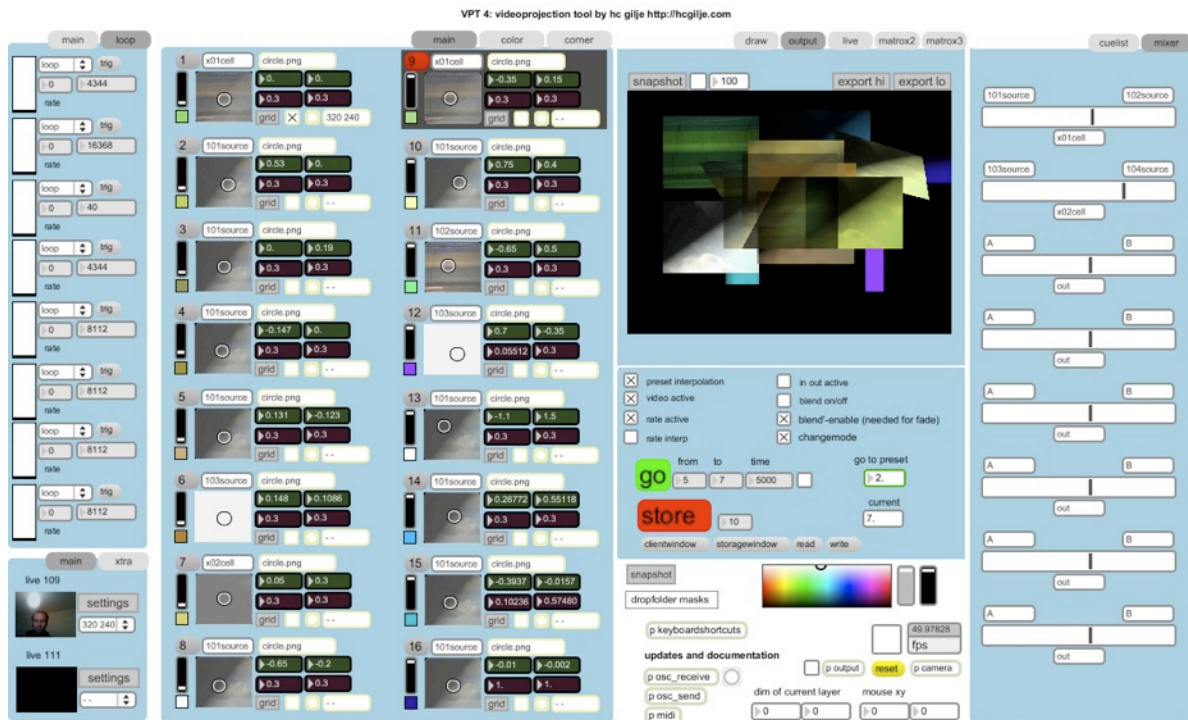


**VPT 4.0**  
Video Projection Tool  
<http://hcgilje.com>  
september 2009



The interface has changed quite a bit from 3.1, I have used tabs to fit more information in one window.

New in this version:

16 layers (previously 8)

2 live sources (previously 1)

8 A-B mixers (previously 0)

greatly improved MIDI and OSC capabilities

enhanced interface

monitor preview for 2ndmonitor (single screen, matrox 2x or 3x), live camera.

lot's of bug fixes and more efficient code.

This document covers the changes from version 3.1 to 4.0.

There are also short video tutorials describing the new features of VPT 4.0

To learn about the basic use of VPT and to learn about the features not covered in this document (presets, cuelist, creating masks, osc setup,++) read the manual and watch the video tutorials for VPT 3.1.

All links to download of software, documentation, updates are available at

<http://hcgilje.wordpress.com/resources/video-projection-tools/>



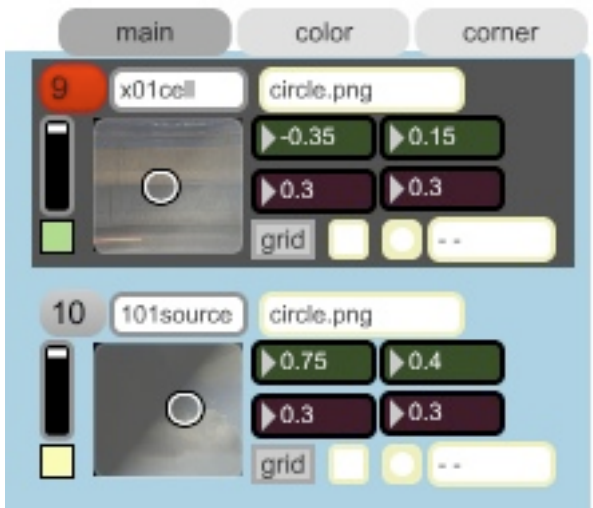
### The source modules

the moviesource interface and livesource has two tabs, most of the time you will only need to use the main tab.

There are a few twists to the moviesource module to conserve space: To drop a folder of videos drag it directly onto the dropdown menu.

To activate a moviesource (or livesource) click on its name, a green background appears.

There is a small preview monitor for each module, to activate it just click inside the monitor (not on the number), and click again to freeze the image (recommended to save cpu). You can adjust the rate of the video clip by dragging on the number in the preview monitor, or go to the second tab, where you also find the other loop settings. Between the module name and the video dropdown menu there is another dropdown menu, for the resolution to be sent to the layers. The more layers you use, the more important it will be to adjust the resolution, or else your computer will slow down (at least mine). So if you have a layer covering just a fraction of the output screen, it is no point using 640x480 if the layer size is only 160x120.



### The layers interface

the layers interface has three tabs:  
 the main tab contains almost all the controls  
 the color tab gives control over color and saturation  
 the corner pin tab gives you control of the cornerpin settings.

The main tab contains two dropdown menus at the top, one for selecting source, either the movie, live or draw sources or the new mix sources.

The second dropdown menu is for the mask. Drag your mask folder onto the menu to update it. If you use the same mask folder for each layer I would recommend dropping your folder on the "dropfolder masks" box below the preset section, which updates all the layers.

The small square below the layer fader reflects the colour tint of the layer. The trackpad next to the layer fader is for x-y positioning, but also serves as a monitor of what is playing in the layer. To update this click on the snapshot button which you find just below the preset section.

The number boxes are for x y position and x y scale.

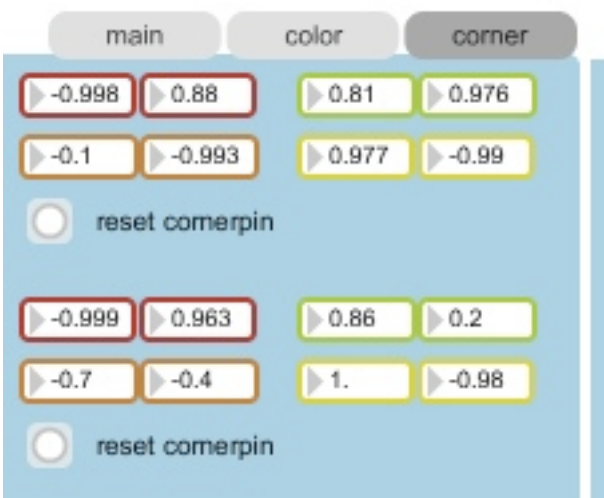
Below them you find a grid button, this might be useful when positioning and tweaking the layer.

Next to it is the activate mask toggle. The button next to it makes it possible to read a mask from file instead of using the dropdown menu.

Finally, there is a dropdown menu for setting the resolution for the mask. As mentioned in the source section, it is smart to keep the resolution as low as possible without compromising the quality, to keep a decent frame rate.



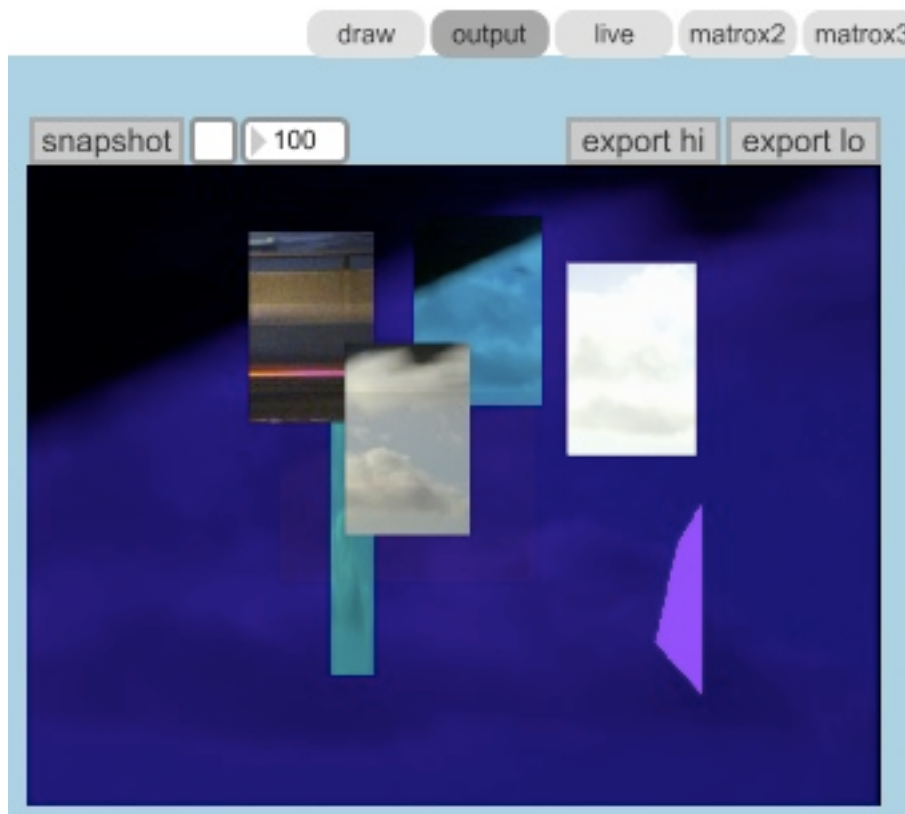
The color tab contains a swatch and saturation fader. There is also a master colorswatch beneath the preset section.



The cornerpin tab contains the four corners with x-y values and a reset button.

To make a layer active you can no longer use the number keys. You either click directly on the layer number. It turns red, and the whole frame of the layer turns dark grey. You can move between layers using the up and down arrows on the keyboard.

There are two reasons for making a layer active, either to use the on-screen corner-pin feature (which works as before), or to make use of the /active attribute through osc or midi (see the midi section).

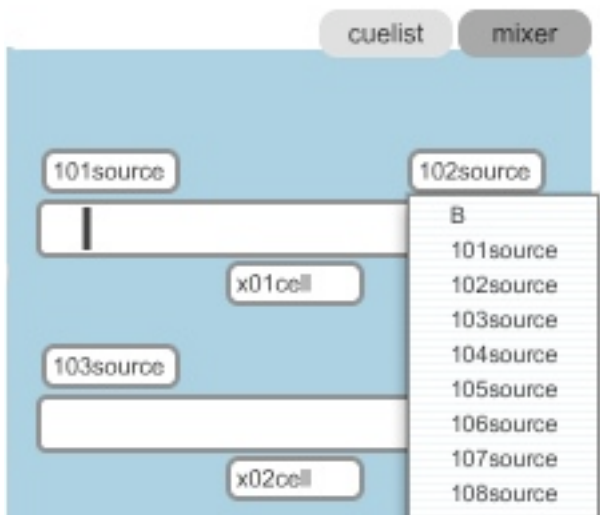


What used to be the draw module is now a combined monitor for the draw module, output preview (including matrox x2 and x3) and live input monitor.

The output preview also offers the possibility to export the output as a mask, making it possible to make complex masks by building shapes with the different layers, export it as mask (as PNG with alpha mask), and import back into VPT as a single mask.

There is a snapshot button in the three output monitors, click on it to update the image in the monitor. To get a regular update activate the toggle and adjust the refresh rate (100-1000ms). It is not recommended to keep this on during performance (on slower computers at least).

The live module can be a monitor for either one of the livesources, select it from the dropdown menu, and turn the monitor on. You still have the option to use an external window for the livesources if you want a larger preview monitor. You find this in the 2nd tab of the livemodules.



### The mixer

The cuelist has moved to the right hand side of the interface and hasn't changed, but it shares the space with the new mixer rack, containing 8 A-B crossfade mixers.

Simply select input sources from the dropmenus (the moviesources, livesources and draw/textmodule) and select destination module (x01cell-x16cell) underneath the crossfade bar. Select the corresponding source in the layer you want the crossfade output to appear.



Below the preset section there are a few things which affect all the layers: the snapshot button (to get a snapshot of the content of each layer), the global dropfolder for masks, the master colorswatch, as well as master saturation and master fade.



Next to the "p output" box there is a toggle which is useful if you for some reason don't use a second monitor. It removes the menubar when you go into fullscreen on your main monitor. This is useful for installations for instance.

Between the "p output" and the reset button there is an anonymous button which might be very useful. Clicking on it makes the application check the location of VPT on your hard drive, and then updates the folder path for the movie sources and mask sources. So now you can use the default location of the video and mask folders inside the VPT folder, without having to drag them into VPT every time you start up the application.

The path check is also done at startup, so this is just a backup button in case it is not initialized (sometimes too many things happen at once when starting up).

1 midichannel  
 9 cc  
 value  
 <- doubleclick to select port



shift-click to save a setup,  
click to retrieve

1	active	pos_x	/active/pos_x \$1	-2.	2.
2	active	pos_y	/active/pos_y \$1	-2.	2.
3	active	scale_x	/active/scale_x \$1	0.	1.
4	active	scale_y	/active/scale_y \$1	0.	1.
5	active	x1	/active/x1 \$1	-1.	1.

### midi and osc.

The midi and osc capabilities have expanded, almost all parameters are accessible via osc or midi.

The midi module has become much more useful. Doubleclick on it to have a look. I assume you have already adjusted the midi settings (in the file menu). Doubleclick on the "midiin a" box to select your midisource from the dropdown menu.

Try sending midi from your device. If the midi setup is correct you should see some numbers changing.

Some midicontrollers are configured with a different midi channel per controller. If this is the case the midichannel numberbox will change if you adjust different knobs/faders on your device. Then you should click on the radiobutton next to it to activate it.

If your controller sends out different cc values per controllers, the second number box will change. If this is the case, click the radiobutton next to the cc number box.

(and of course, most midi devices are configurable, so you can make it work with either midichannel or cc values)

The rest of the window is mainly a long list to help you map your midi device to control different parameters.

The first column is the cc number or midi channel.

The second column is the destination, which is either a layer (1-16 or the active layer), moviesource or mixermodule.

The third column is the parameter you want to control, so for layers that would be pos, scale, cornerpin, fade, for moviesource rate, for mixermodule crossfade.

The fourth column shows the destination and parameter formatted for OSC.

Note: It is possible to create impossible combinations (for instance destination moviesource, parameter pos\_x), but the worst thing that happens is that nothing happens.



The last two columns maps the incoming MIDI values (0-127) to the range needed for the different parameters.

For fade and mix this would be 0. to 1., for cornerpin values -1. to 1., the other parameters are flexible, pos and scale could be -2. to 2., etc. You need to set this manually.

The good thing is that you don't need to do this everytime you open VPT: There is a preset bank in the top right corner. It comes with two presets, one with mappings to the fades on each layer, the other to access all the parameters of the active layer.

So if you choose preset 2 in the preset bank, you will see that the 12 first controllers start with the /active destination, which means the second attributes (pos, scale, fade and the corner pins) work on the active layer, making it quite easy to make adjustments on the active layer using a midi device.

You select a preset by clicking on the circles, you save a preset by shift-clicking on a circle. If you create any presets you will be asked to save these when you close VPT, with a suggested name of midi (with a xml extension).