# jit.gl.freeframe

*jit.gl.freeframe* is a 32-bit Max Jitter external for Windows that can be used to load <u>FreeframeGL</u> plugins within Jitter.

It is similar in concept to <u>jit.freeframe</u> which is designed for Freeframe 1.0 plugins, but provides for texture inputs and OpenGL processing by the plugin.

## loadeffect

load the given plugin name

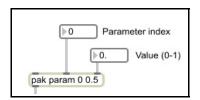
jit.gl.freeframe rwindow @loadeffect FFGLHeat

## param

parameter name or index and it's value. For example, the plugin FFGLHeat has one parameter named "Heat" and it's index is 0. You can use param heat 0.5 or param 0 0.5

jit.gl.freeframe rwindow @loadeffect FFGLHeat @param heat 0.5 or jit.gl.freeframe rwindow @loadeffect FFGLHeat @param 0 0.5

The index is useful when linked to a parameter selection control.



#### reload

rescan for new effects. This is useful if new effects are copied into the effect folder during a session.

## dim

set output dimensions (only for a source plugin). The output dimensions for an effect plugin are the same as the incoming texture. Also this is ignored if an input texture is available and the resolution of both effect and source plugins is linked to the size of the incoming texture.

### effectlist

outputs a list of all plugins in the plugin folder from the RH outlet. The list is terminated with "end".

#### For example:

```
effectlist FFGLBrightness
effectlist FFGLHeat
effectlist FFGLMirror
effectlist FFGLTile
effectlist FFGLTime
effectlist end
```

## paramlist

outputs lists of parameters for the loaded plugin from the RH outlet.

The parameter list is is formatted as "paramlist - index - value - display - name".

**index** is the zero-based index of the parameter for the number of parameters available.

**type** is the parameter type as defined by the Freeframe specification :

0	boolean	Checkbox
1	event	Button
2	red	Slider - Floating point values 0.0-1.0
3	green	"
4	blue	11
5	x position	11
6	y position	11
10	standard	п
100	text	Text character array

Plugins will usually have only parameter types 0, 1, 10 and 100.

display is an alternate display value for parameters whose "real value", as understood by the parameter, lies outside of the range 0-1.

For example the real value might be 0.4 in the range 0.0-1.0, but the display value might be 40 in the range 0 - 100.

**name** is the name of the plugin parameter.

The list is started with the key word "done 0" and terminated with the key word "done 1". The first entry of the list is "numparams" or the number of parameters that the plugin has.

For example for the FFGLHeat plugin with one parameter:

```
paramlist done 0
paramlist numparams 1
paramlist param 0 10 0.500000 "0.500000" "Heat"
paramlist done 1
```

# paramdialog

activates a parameter dialog. This allows the plugin parameters to be changed by the user. Controls are provided for all parameter types including text.

For example for the "FFGLTile" plugin with two parameters :



The dialog supports a maximum of 30 plugin parameters.

# bypass

bypass effect and hand on input texture

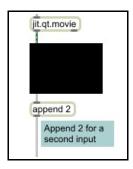
## Texture input

A texture can be provided for Effect plugins to process. The example help patch illustrates a texture produced from a matrix :



The external will also accept matrix input as well as texture input. The matrix is converted to a texture within the external.

Two texture inputs can be connected for plugins that use two textures. The second texture can be connected to the LH input just as the first. However to distinguish between them, the second input has an additional argument. For example with a first texture or matrix input a second matrix input can be provided:



### Installation

"jit.gl.freeframe.mxe" can be copied into the folder for jitter externals. For example :

"..\Program Files\Cycling '74\Max Runtime 6.1\Cycling '74\jitter-externals"

or some similar path for the version of Max installed.

FreeFrame plugins must be located either in the same folder as the patch or in:

"..\Program Files\Common Files\Freeframe"

Create this folder if it does not exist. On 64-bit systems the "Program files (x86)" folder is searched first and then "Program Files".

No other paths specific to Freeframe host applications can be used. The only folder of the Max search path used is that of the patch itself.

# Operation

An example help patch is provided which demonstrates how to use the "effectlist" and "parameter dialog" as well as texture inputs. Example Freeframe plugins are provided from the <a href="Freeframe">Freeframe</a> SDK distribution.

### Contact and License

Contact us at <a href="mailto:spout.zeal.co">spout.zeal.co</a>

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