USER MANUAL

## HOW TO USE THE LED MATRIX SOFTWARE

V.1.1

SUMMARY

INTRODUCTION

This user guide presents the basis and main uses of the software. This chapter explains how to create different kinds of LED matrices (DVI, DMX/ARTNET and DMX 3D), how to create and configure effect buttons and how to perform multiple selections and mixing on your matrix.

Users can quickly and cumulatively add different effects and layers to create their customized effect rendering. The manual also explains how to perform a show live and how to use the timeline synchronization.

PRESENTATION

By default, 4 windows are displayed after the software is started: Effects, Matrix view, Selections and Transitions.

Each window can be resized, moved, superposed, detached, linked and unlinked with a simple drag and drop to create your own working environment. Each configuration is saved.
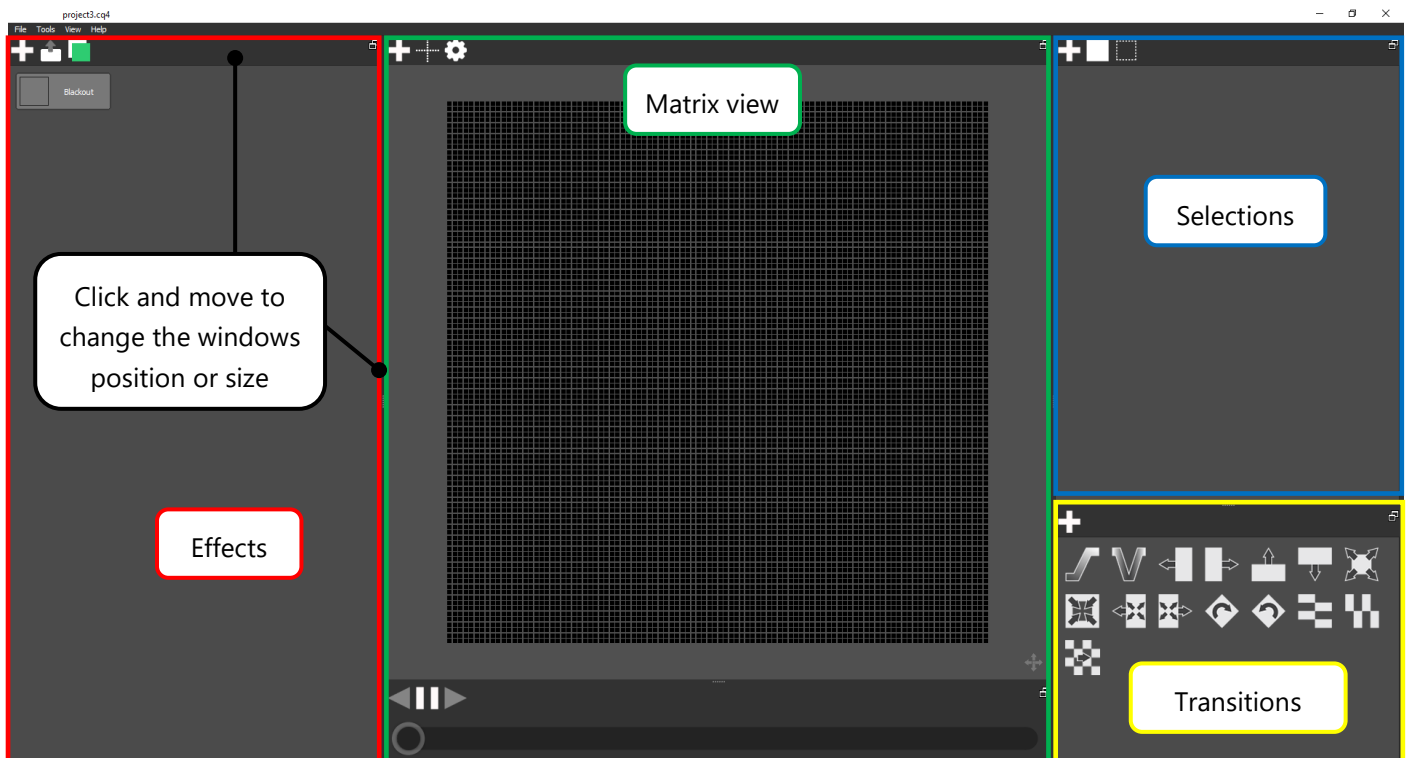
CREATE A MATRIX

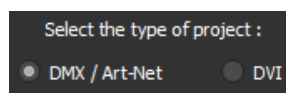To create a new matrix click on « File » menu and choose « New ».

Import Scenes and/or Transitions from the previous project
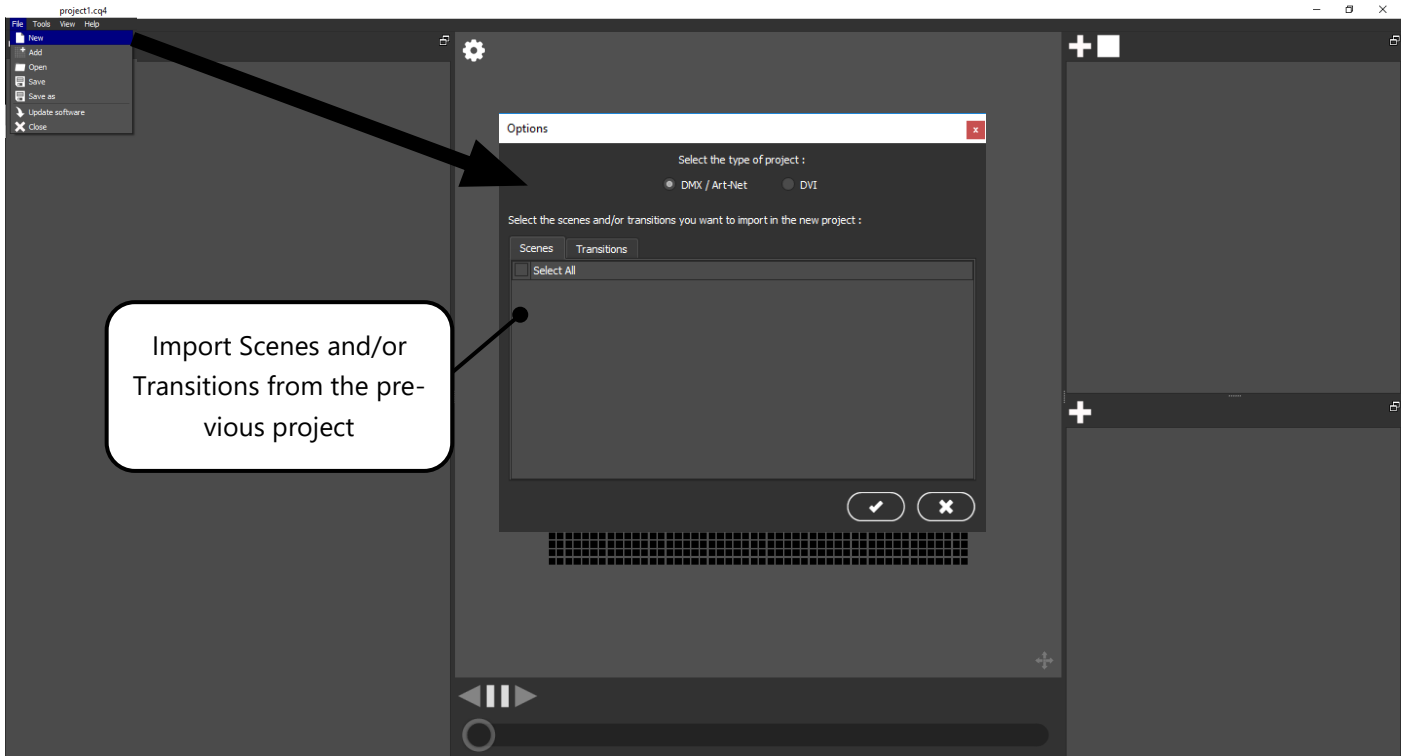
You can select a DMX/ARTNET or DVI type of Matrix:

Note: Projects can't have DVI and DMX Matrix type together in the same project.

Define X, Y and Z dimensions. When Z value is 2 or more, then the matrix become 3D

Rename the matrix

Profiles List

Select the kind of fixture (RGB, RGBW)

Open Profile editor to create new profile

Select the first DMX address and the first channel of the first fixture

Choose 1 of the patch mode between the 3 modes

Draw fixture path / Display real Size / Centre position

Open a folder to import a profile

Select your order of fixture addressing

Move the camera with left click and zoom with right click or mouse scrolling

Validate to create the Matrix

Notice about the Patch modes :

1st mode "Easy": The easy mode allows to create quickly and easily a standard DMX matrix with a quick and automatic addressing option, it can create a 2 or 3 Dimension matrix in few clicks.

2nd mode "Custom": The custom mode offers the possibility to customize the shape of your matrix. It is possible to reorder the selected pixel of the matrix and change their addresses manually, pixel order can be also customized and reorder as well. In custom mode, a 3D matrix can be created with a Z axe superior of 1 and a customized shape will be repeat on the Z Axe and the Z axe levels.

 3rd mode "Strip": The strips mode is to create a led strips patch line by line, each strips and led can be moved, each line of led can be curved and addressed as desired. This patch mode works only in 2D.

3D MATRIX

Setup a Z dimension of the current matrix to create a 3D matrix.
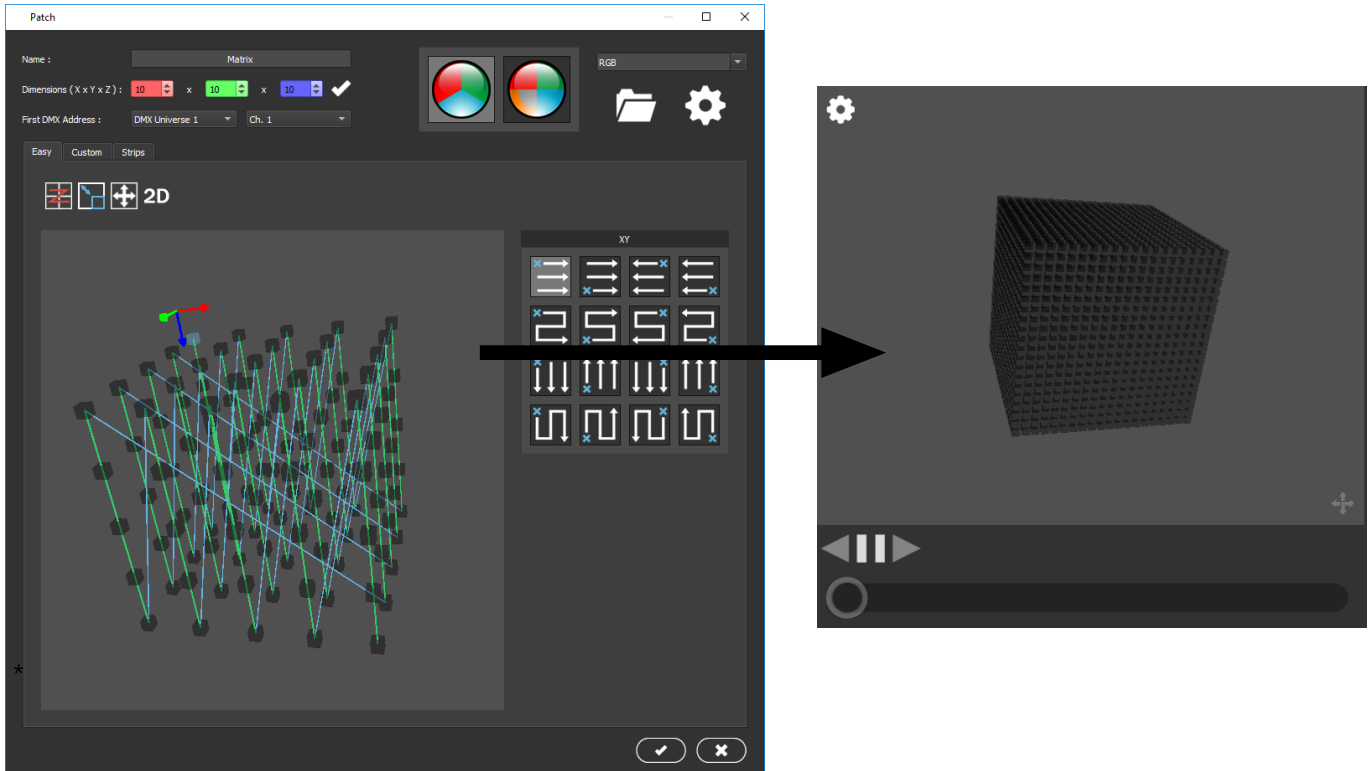
CUSTOM
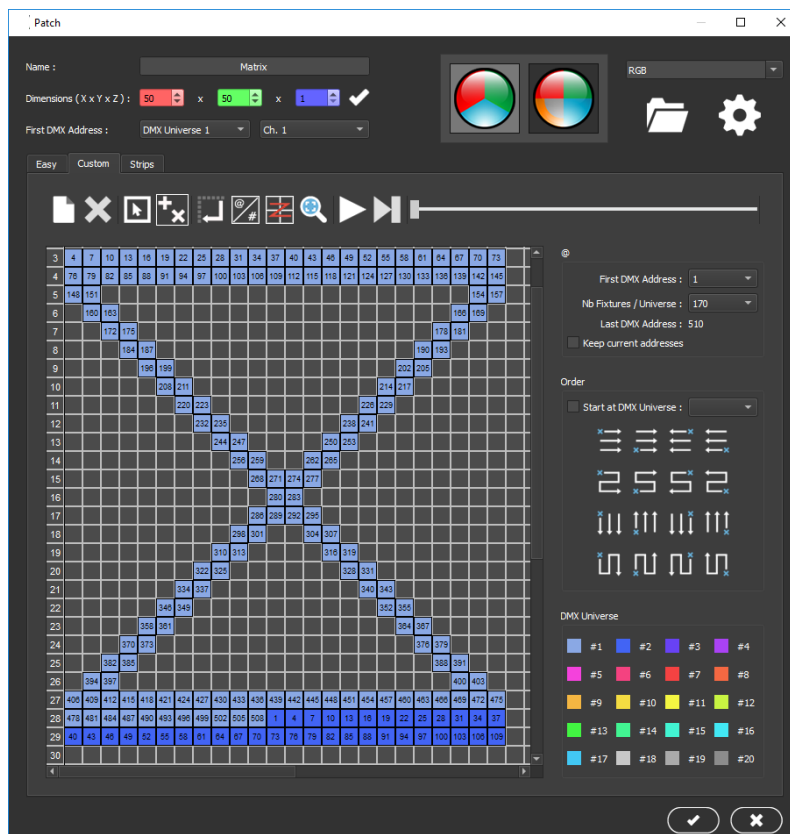
STRIPS
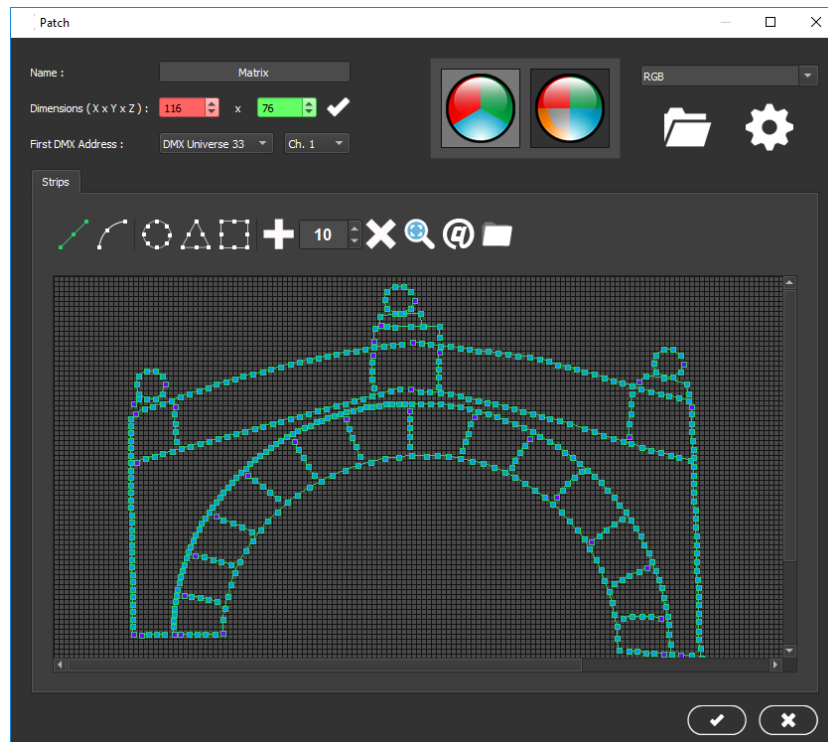
DVI MATRIX

The software can be used to create a show played on a screen using a DVI (Digital Visual Interface) output or a video player.

Define the new matrix dimension

Validate to configure the Matrix

ADD A NEW DMX MATRIX OR EDIT AN EXISTING MATRIX

In your current project it is possible to edit or create/add a new matrix.

Create a new DMX matrix (same process as before)

Right click on a matrix and select Edit
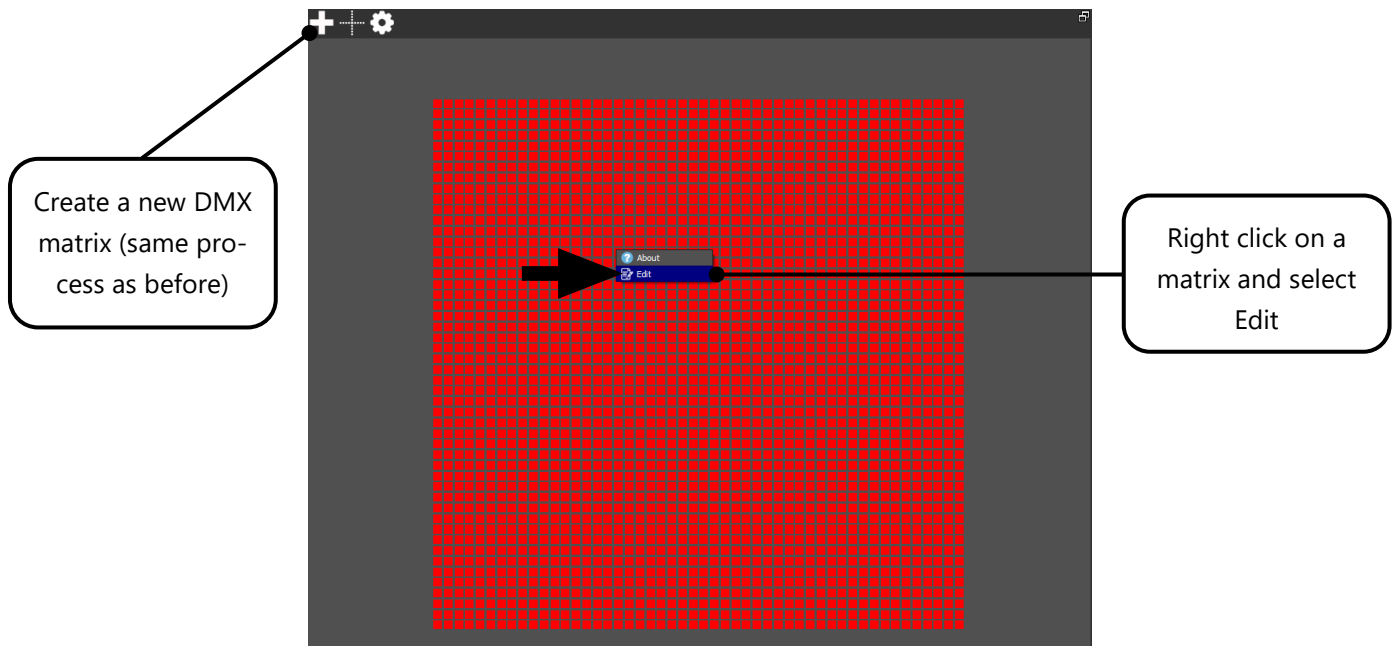
The additional matrix configuration will be added in the current project and users can work on a multiple matrix environment.

CREATE PERSONAL PROFILE

If your fixture does not use some RGB or RGBW channels, then you can create your own profile.

From the patch tool window, just click to this icon ⚙ to open the profile editor.
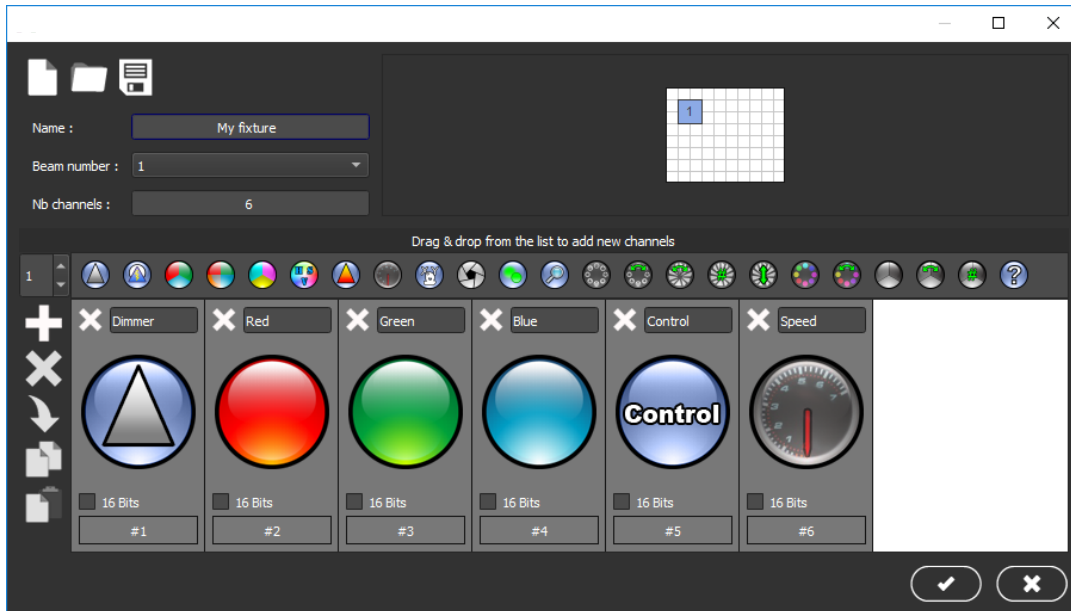
You can easily create a new fixture profile using drag from the list of common channel icons and drop from into the area under the list.

By default, when you save your profile it is in the Root Profile folder of the software installation directory.

On each matrix configuration, the software can play effects on multiple cell selections. It is possible to save several selections and recall them quickly.

It is possible to use different shapes of selections instead of scare or rectangle as default one, a personal picture can be also use as a new shape of selection.
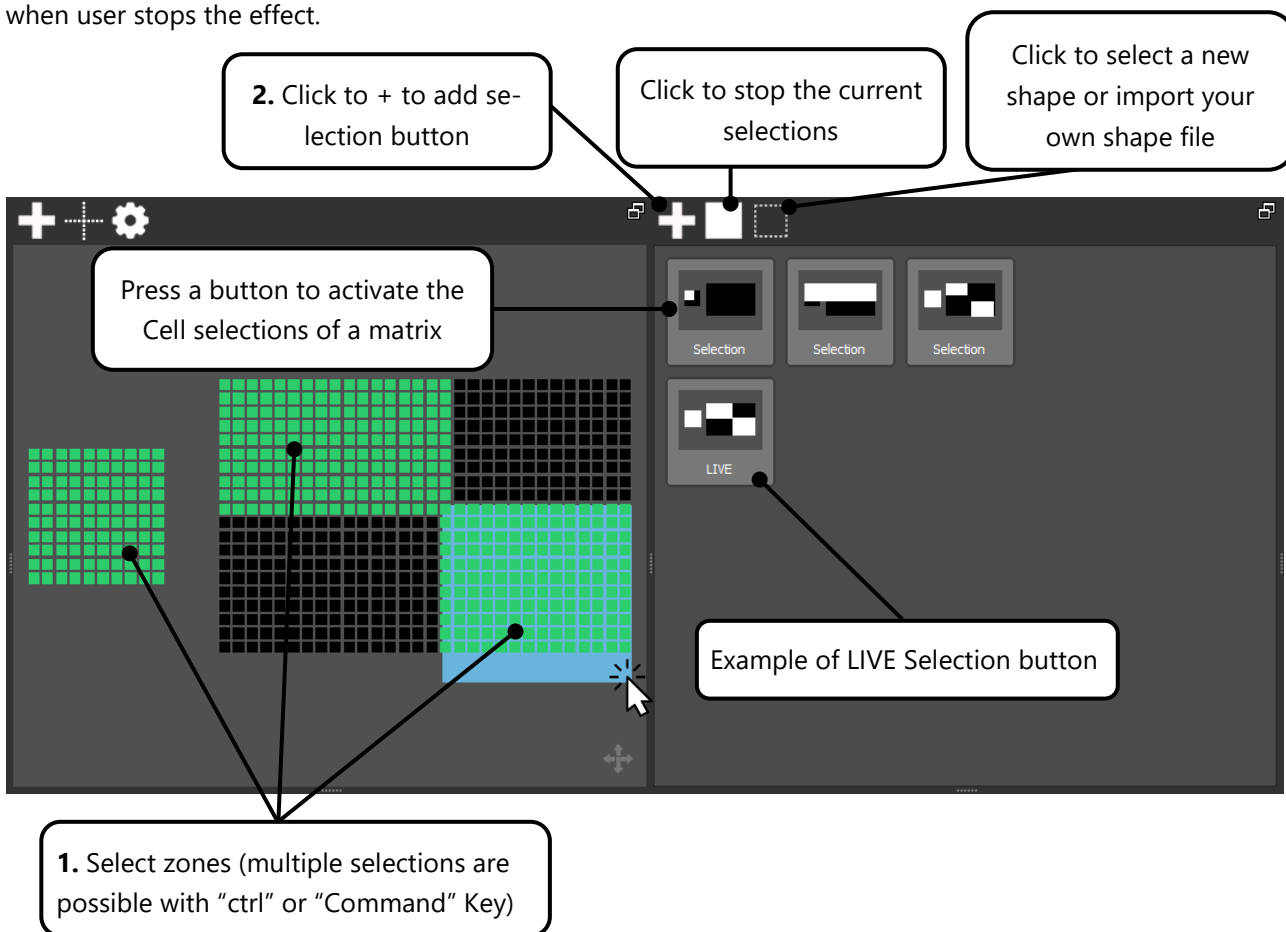
When an effect is playing on a new selection (that has not been saved previously), the software creates a "Live selection" automatically in the selection list. The selection is also linked to the effect. The selection will disappear automatically when user stops the effect.

2. Click to + to add selection button

Click to stop the current selections

Click to select a new shape or import your own shape file

Press a button to activate the Cell selections of a matrix

Example of LIVE Selection button

1. Select zones (multiple selections are possible with "ctrl" or "Command" Key)

ADD A BUTTON AND CREATE AN EFFECT

The buttons play personalized effects on your selections. Each button can play multiple effects at the same time on the cell selections.

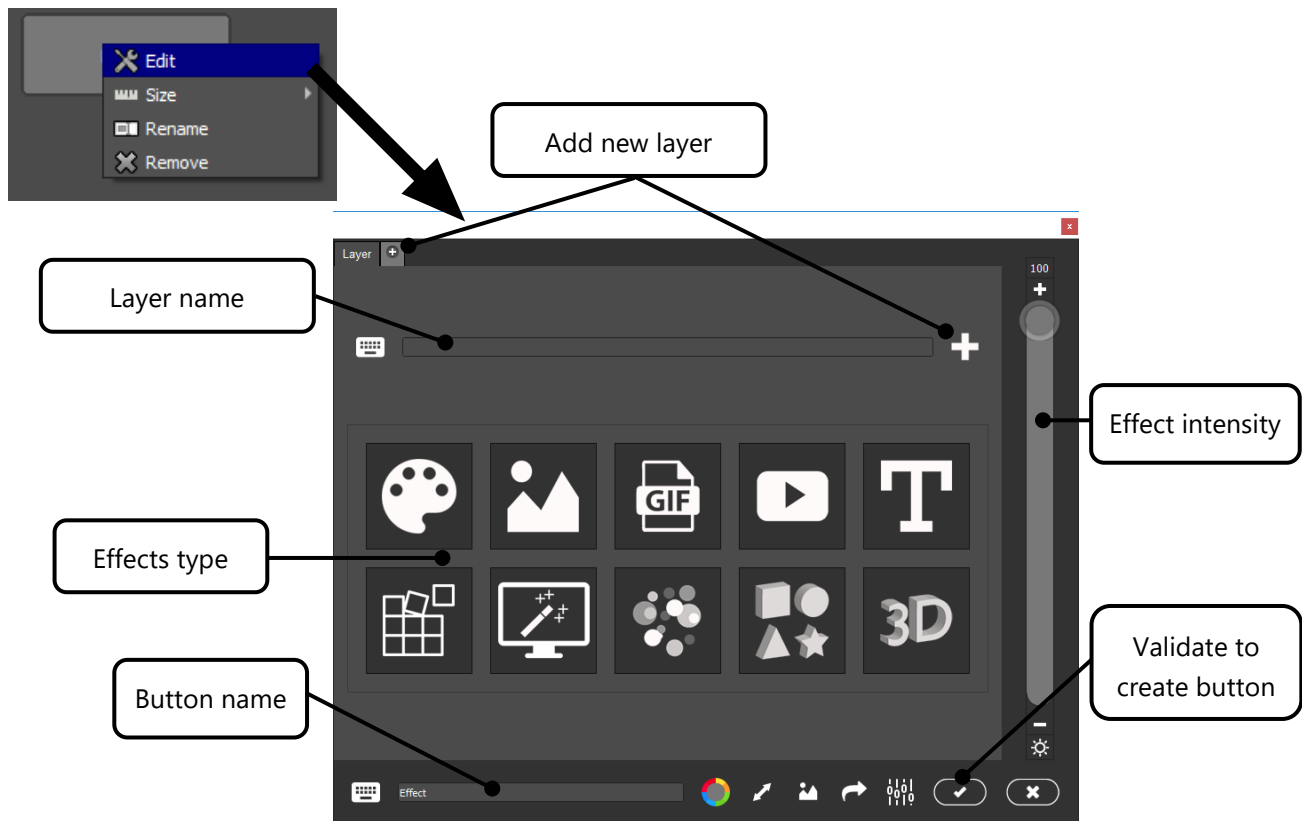Click to release all activated effects

Click to change priority of the effect. On the current selection, the effect plays in front or behind another effect.

Click to add a new effect button

Click on the button to Start or Stop the effect

Blackout　Effect
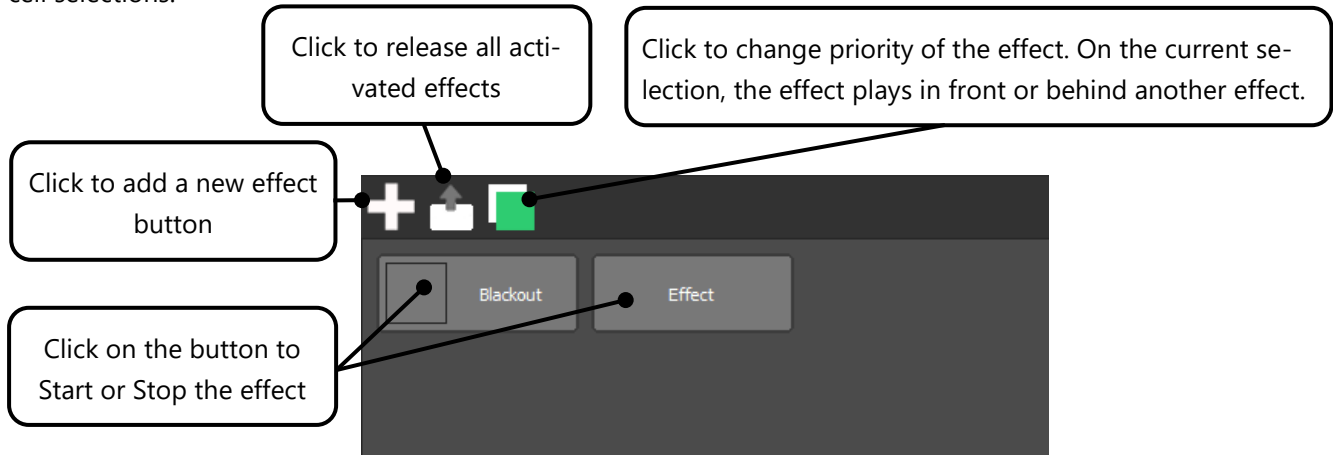
Right click on a button and select « Edit » to setup the button.

Note: Each button can receive one or several layers of effects to create great rendering.

Edit
Size
Rename
Remove

Add new layer

Layer name

Effect intensity

Effects type

Validate to create button

Button name

Display a screen keyboard. For touch screen computers.

Button colour

Button size

Change the button picture. Users can customize each button and replace the default picture with another one.

Open the Trigger setting. Each button can be called.

Control other DMX channels. If you use a fixture with extra channels different than RGB colors, then all channels (other than RGB) can receive a fixed DMX level when the effect is played.

DIFFERENT TYPE OF EFFECTS

COLOR : Play a single colour.

STATIC : Play a picture (.jpg .jpeg .bmp .png .tif .tiff). It is possible to select and display a part of the picture.

GIF : Play a GIF animation (ordered by family, Anim, Black and white...). You can import and play your own animated GIF file. The software will search the file name in the Media directory if the file is not found.

VIDEO : Play a video file. You can import your personal video files. Format supported : .avi .m4v .mov .mp4 .mpg .vob .wmv .dvx .divx .mkv .mpeg .xvid .flv .swf). The software will search the file name in the Media directory if the file is not found.

TEXT : Setup and display your own text message. You can configure the direction, font, size, colour, speed and offset of the text.

SHAPES : Play a standard graphic animation. Effects are more basic and dedicated for archi-tectural and building facade.
For each animation, you can adjust different settings like size, speed, colors, fade, direction, intensity, etc...).

GRAPHIC : Play some graphical animations from a huge number of effects. Size and speed can be changed. You can choose Audio or standard play mode according to the Audio Beat synchronization and Audio intensity analysis.

PARTICLES : Play customized particles, rain and explosion effects. it is possible to configure the shape, color, number, gravity, size and setup other parameters of the effects.
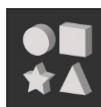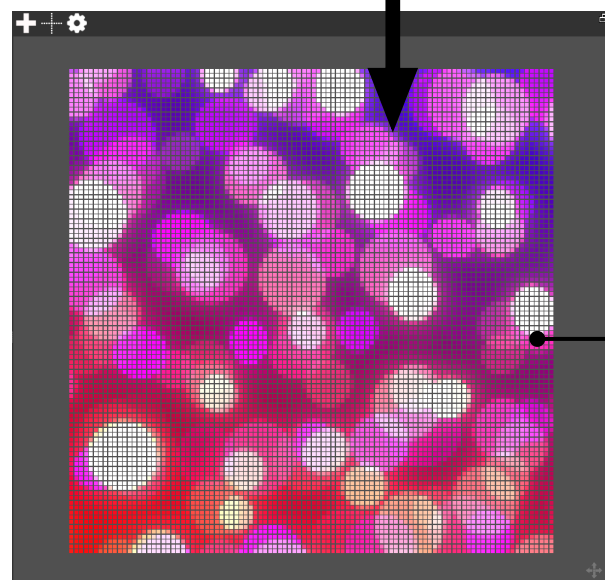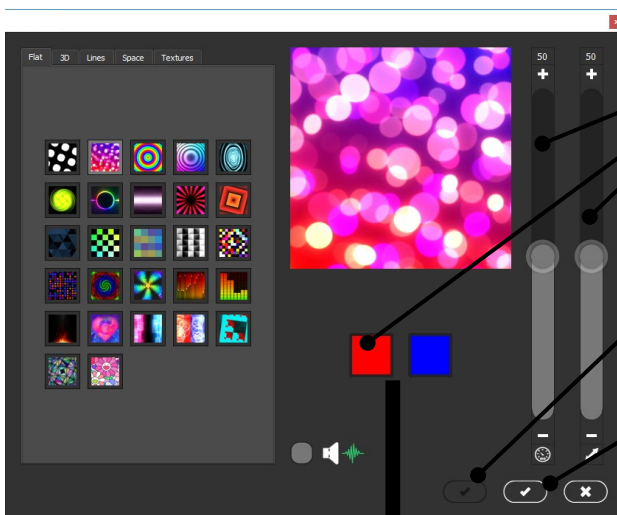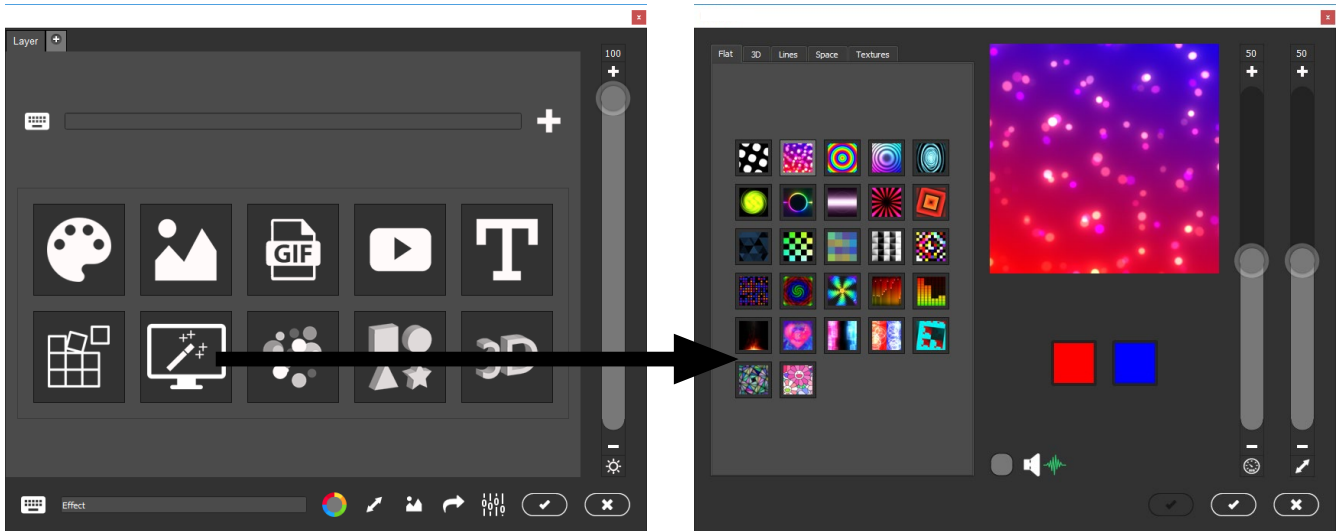
3D : Create your own and customize 3D object animation with colors, rotation, size, positions, fade and duration.

3D MATRIX : You can setup a 3D effect. This effect is available with 3D matrix only.
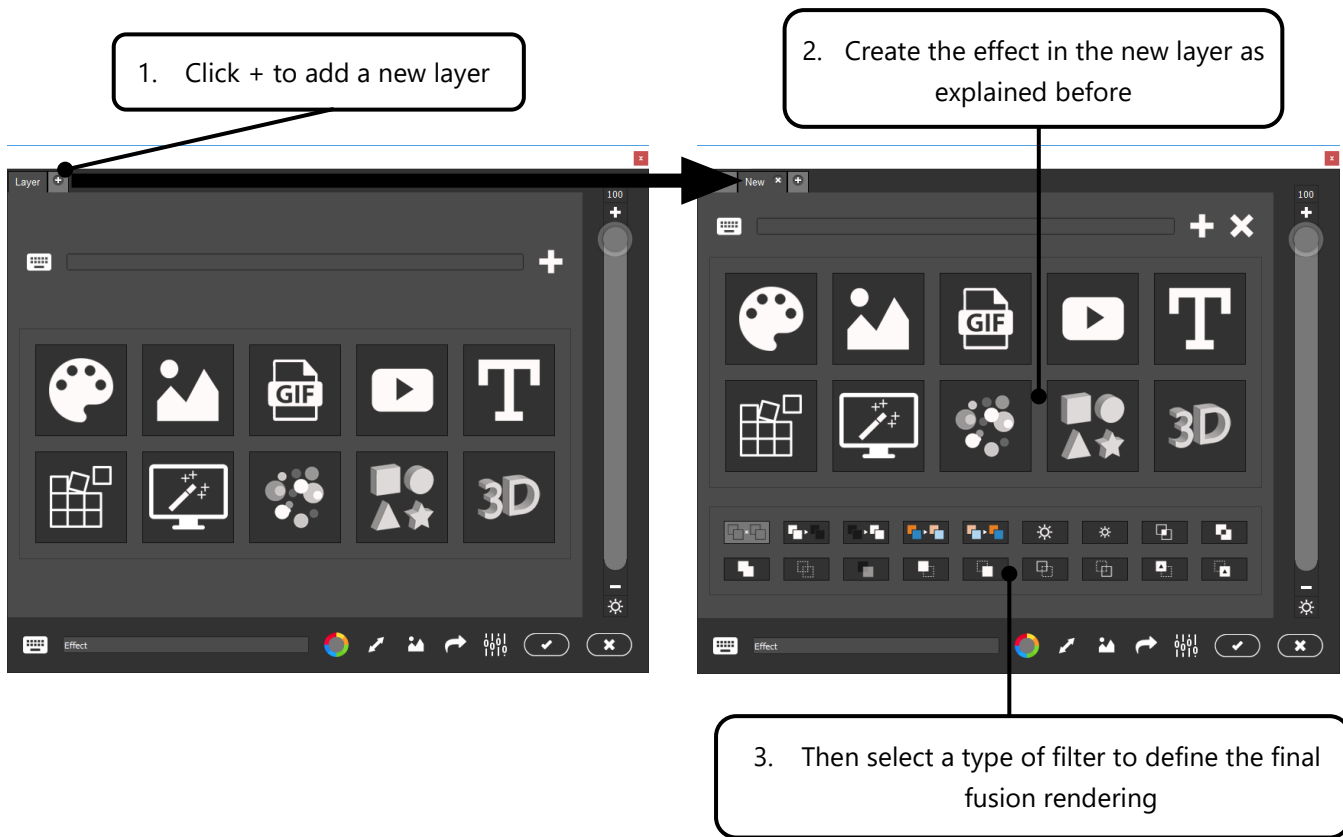
To create and setup a custom effect, select the desired effect and edit its settings. Then you can configure the effect with the available parameters.

Effect parameter, adjust the values to configure

Validate to close and save the current effect

Validate to confirm and return to the layer windows

You can see in live and from your matrix preview all the changes apply in the effect setting

LAYERS AND FUSION

Layers allow you to mix different effects in one button and display several effects on one render. it is possible to create plenty of effects with the fusion of the effect layers. For example, you can create a Text effect with some particles in the background. Multiple layers can be merged to have a complex and beautiful effect.

1. Click + to add a new layer

2. Create the effect in the new layer as explained before

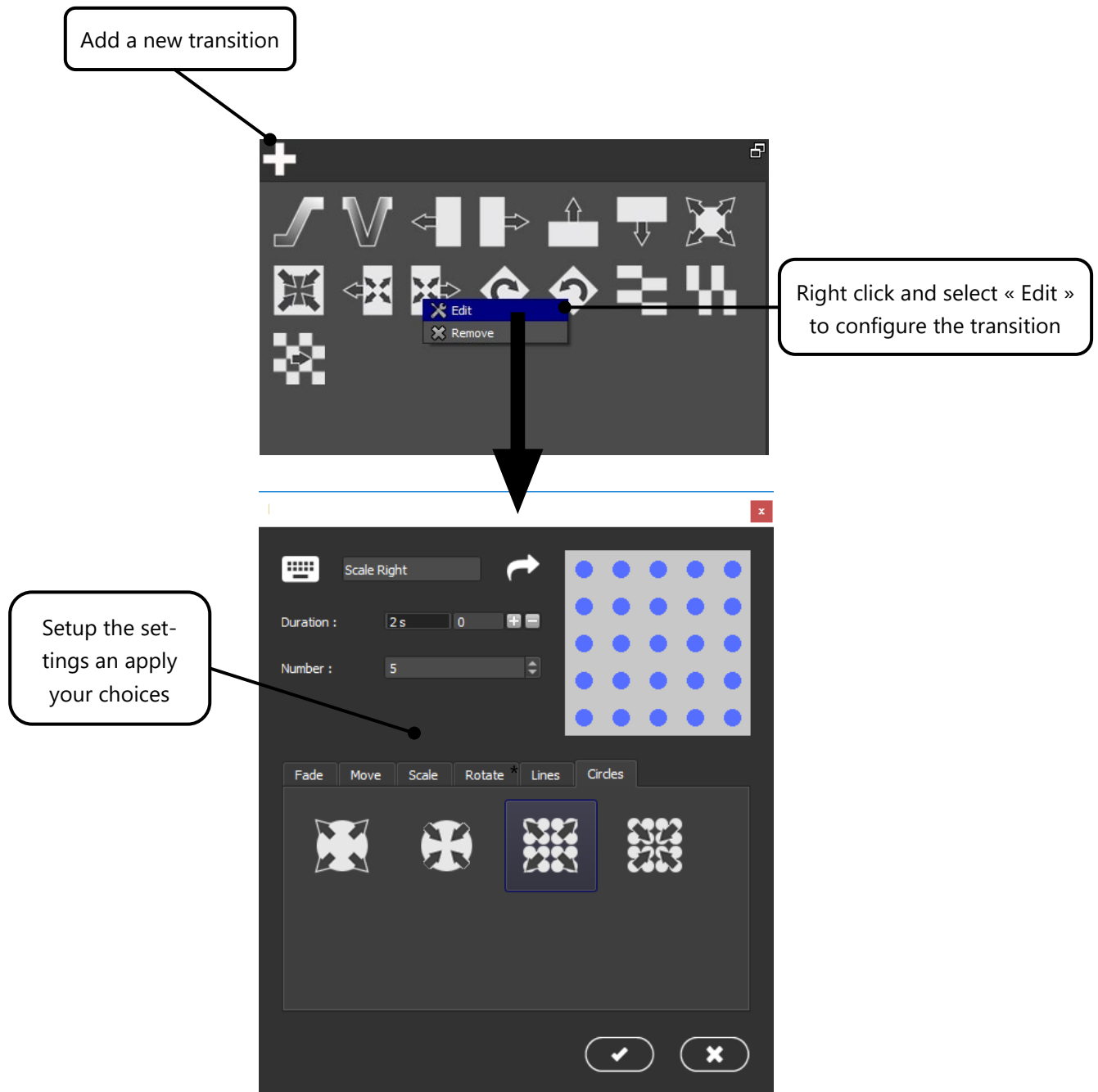3. Then select a type of filter to define the final fusion rendering

Filters allow multiple type of effect merging and fusion. You can see the results in real time from the matrix preview when you select one of the filters in the list.

TRANSITIONS

A transition is a gradual change from one graphic state to a different graphic state.

You can create a transition between 2 different effects to display a smooth gradual transition. You can set up a transition to start, stop an effect and crossfade between 2 different effects to move smoothly to the next or previous effect. By default, the software creates a list of transitions, but it is possible to create additional personalized transitions.

Add a new transition

Right click and select « Edit » to configure the transition

Edit
Remove

Setup the settings an apply your choices

Scale Right

Duration : 2 s 0

Number : 5

Fade | Move | Scale | Rotate * | Lines | Circles

Each play and stop action using the effect buttons will display the selected transition.

Note: Your transition will remain active until you change the type of transition.
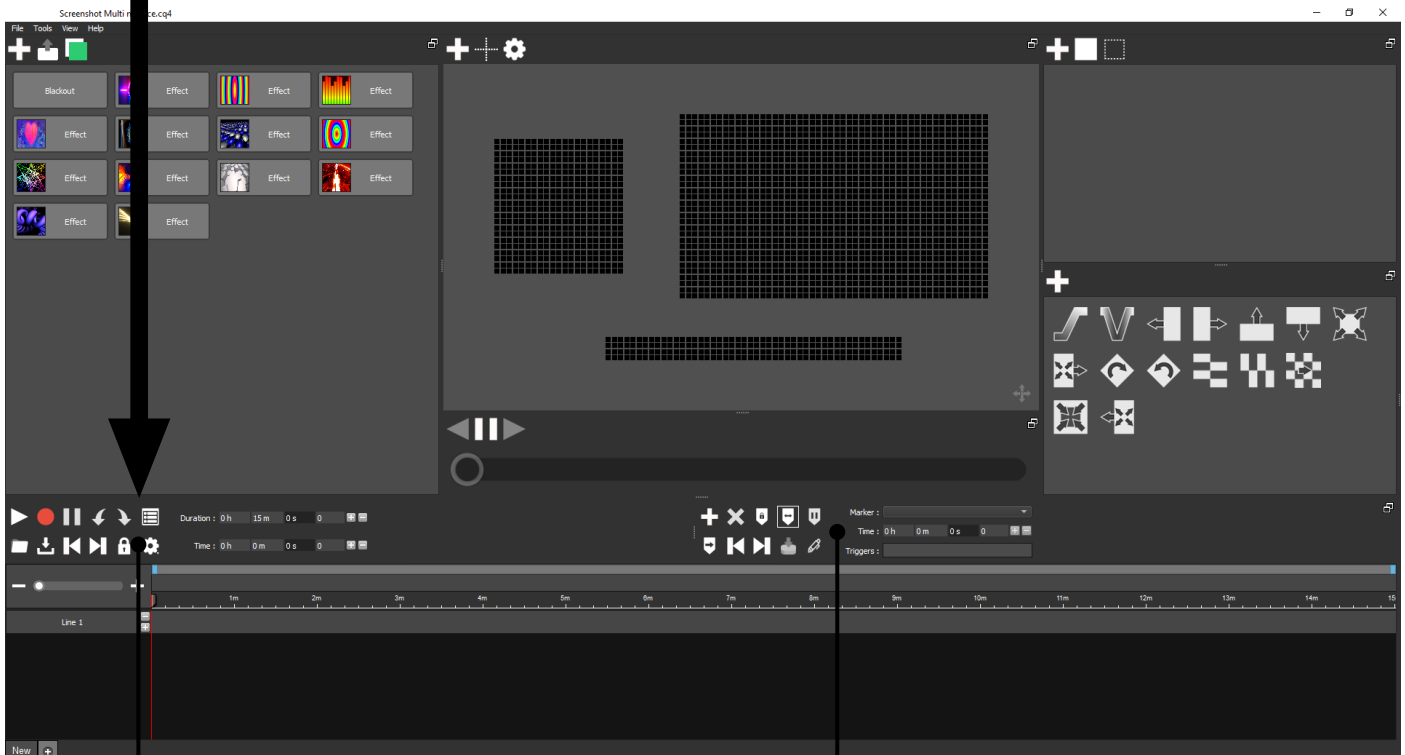
TIMELINE

The software includes a timeline tool to manage lighting synchronization with Audio and video media files. Effects in the timeline are represented with blocks which have a start time and adjustable duration setting.

Also, The Timeline tool allows you to insert several audio and video blocks that could be synchronized with effect blocks. Users can trigger effects with accurate synchronization to create a complete show including the display of media files. There is no limit to the number of effect line numbers.

Go to « View » -> « Timeline » to display the Timeline tool.
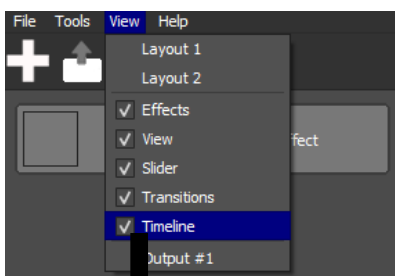
Like all other windows in the software, the timeline tool can be resized, moved, superimposed and detached from its original position.


General parameter toolbar

Time marker toolbar or Block toolbar according to the current block selection

1. **Choose a selection of pixels**
2. **Add a transition to the timeline if needed with a drag and drop action**
3. **Add an effect button to the timeline with a drag and drop action**

Hold Shift + Click (command + Click) on the effect button, drag the effect over the timeline and drop the button to the position of the line. Adjust the duration and position of the Effect block.

Choose a selection or group of pixels
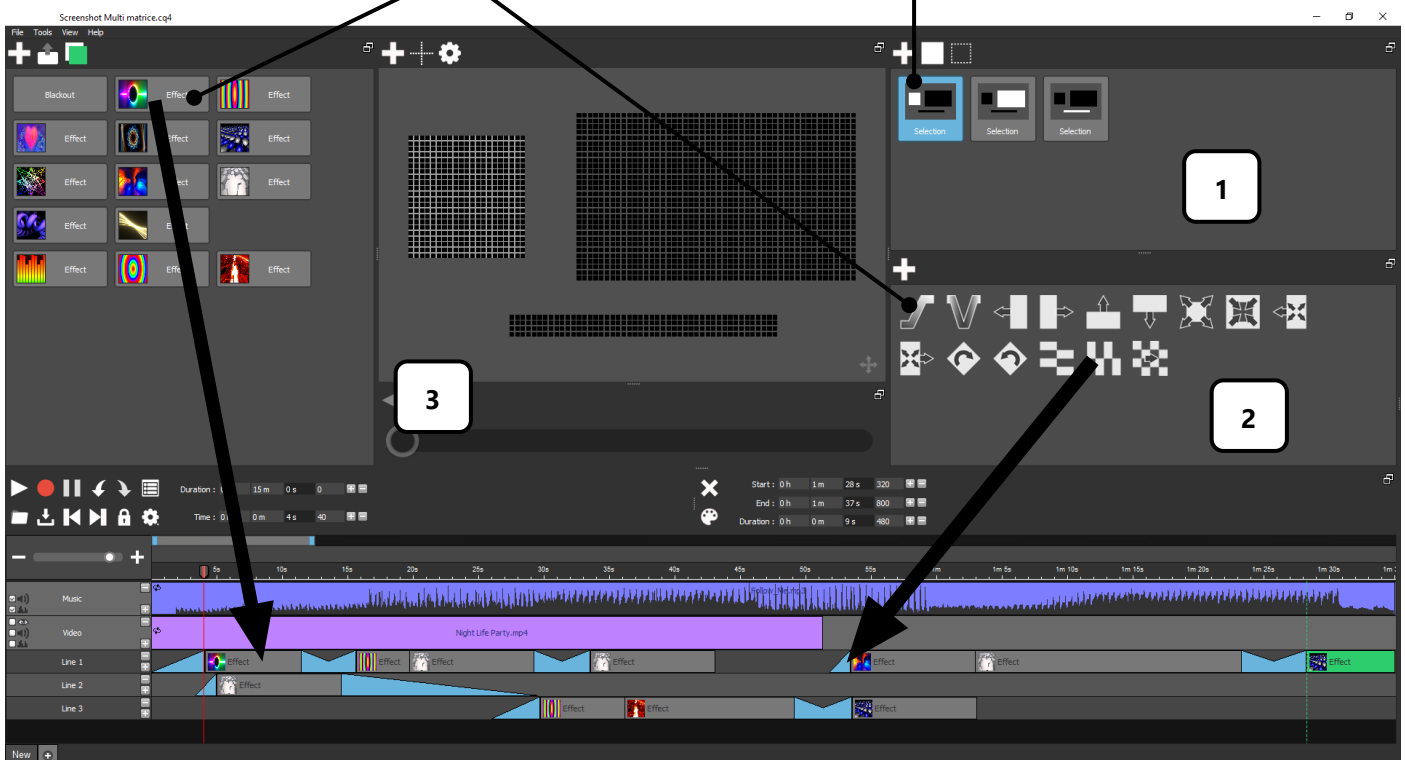
Note :

Transition block must be linked with an effect block to play.

Each effect button dragged to the timeline can be linked with a different selection.

All Blocks can be resized as needed with the mouse or with a Duration and Time value.

Select the menu « Tools » -> « Options » to displays Options windows and click to the Art-Net page.

Network selection, choose the correct network used for the Art-Net signal

Node details and parameters

Assign the software DMX universes to the selected node's port(s) of the node

Choose the type of output signal

Art-Net speed and signal performances (Keep default values and use only if it is necessary)

 Refresh Node in the list and display all the detected nodes connected on the network.

 Add a new Node manually in the list

 Delete the selected Nodes

 Edit the parameters of the current node