

DVC3 User Manual

English

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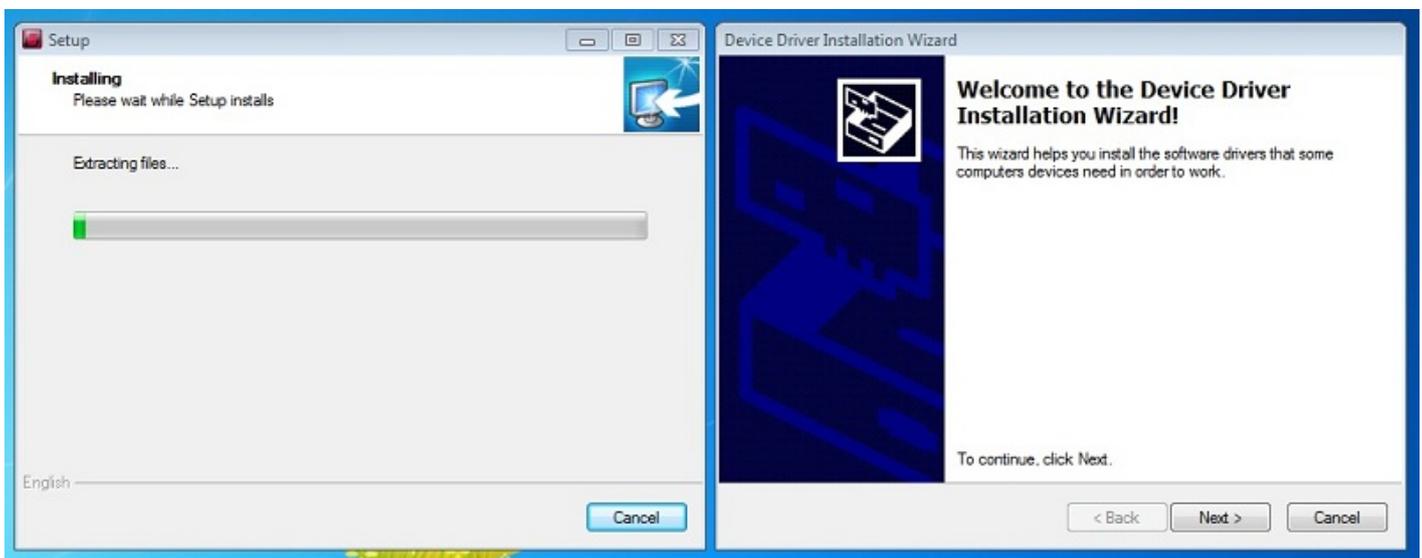
1. Getting Started

1.1. Installation

The first thing to do is to download DVC3 from the website. If you do not have access to an internet connection, insert the CD. It is always best to check the website first to make sure your installation is up to date.

Follow the on screen instructions to install the software.

The drivers for your USB-DMX interface will be installed with the software. If windows throws up any messages, always click [Yes] [Continue] or [Next].

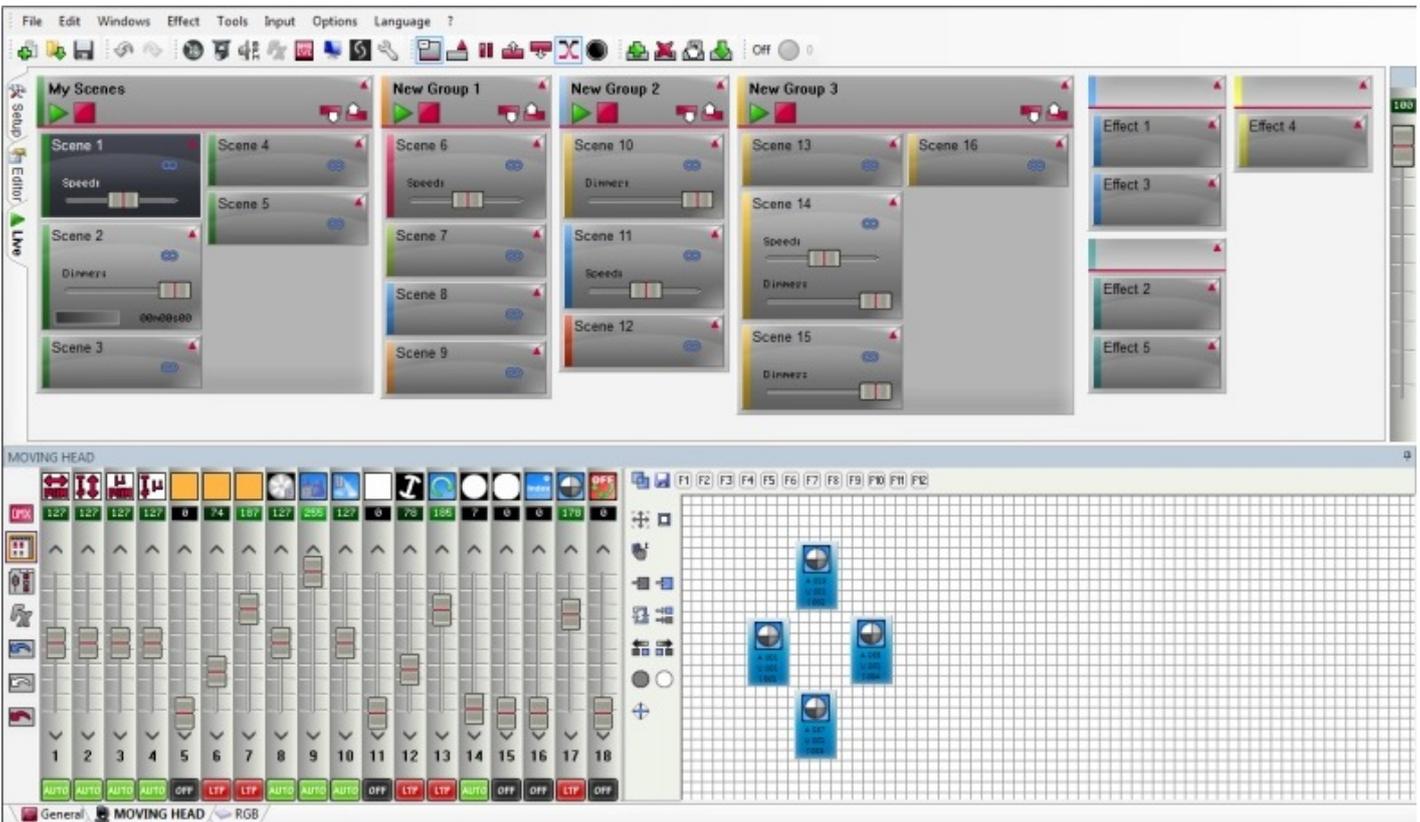


Once the software has been installed, connect your USB-DMX interface. Windows may install a second set of drivers. Wait until you see a bubble noting that the driver installation is successful and start the software.

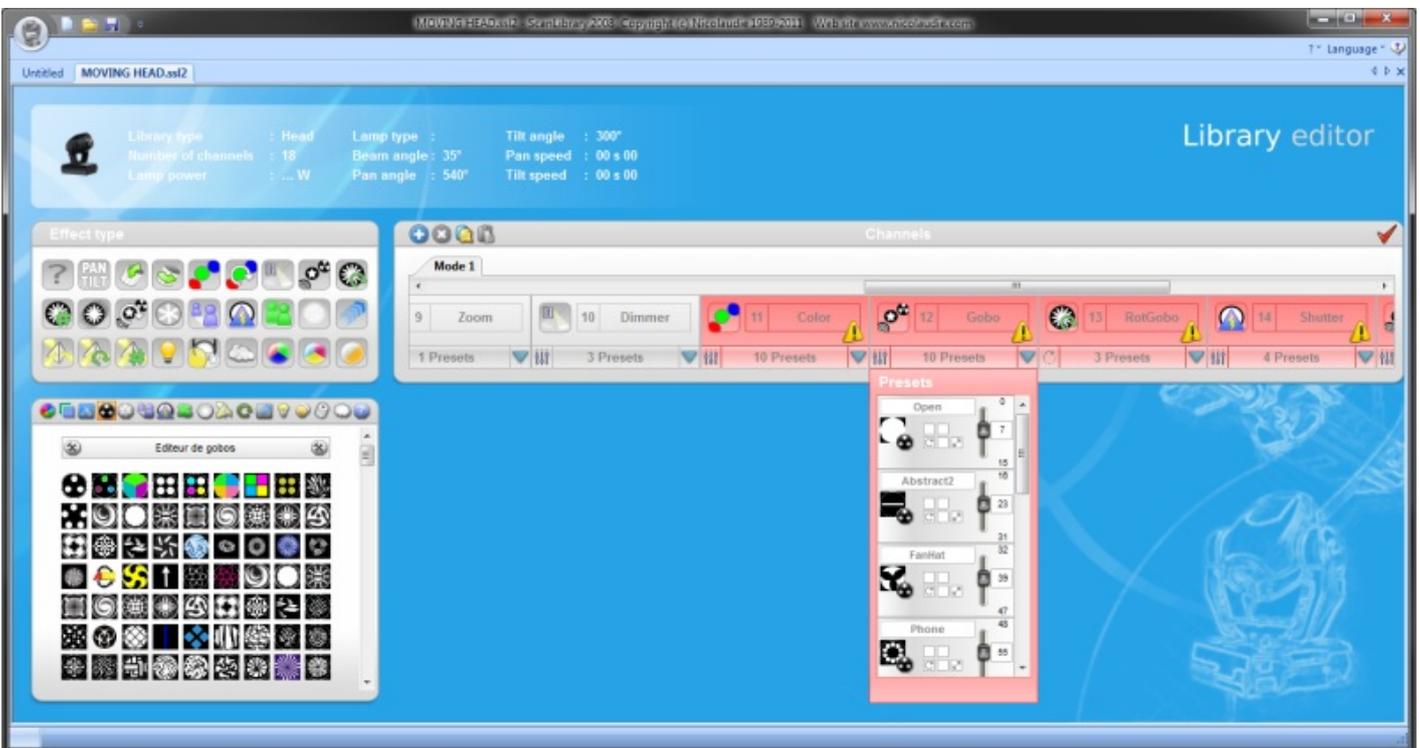
1.2. What's Included

There are 4 applications included.

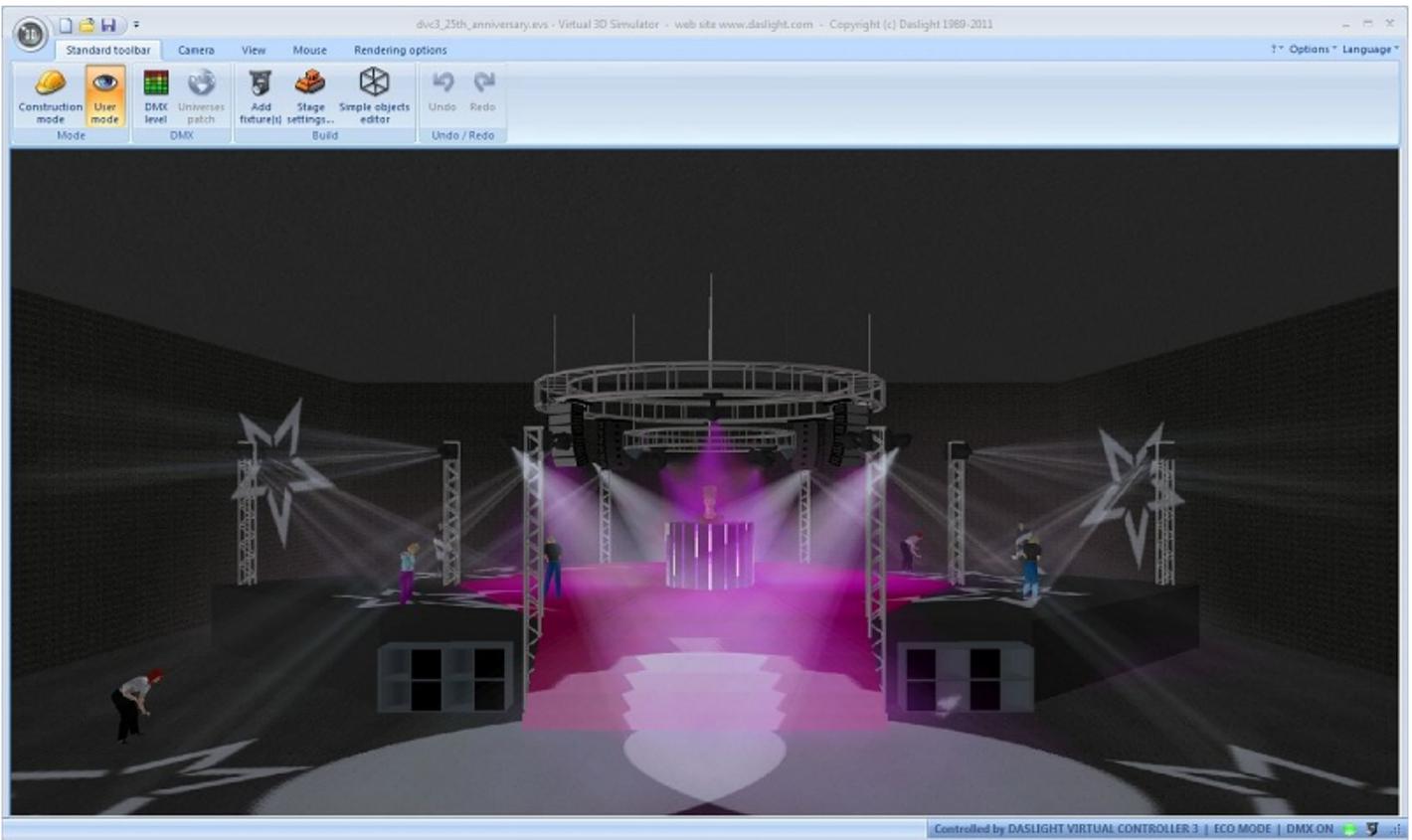
The control software: where programming is made



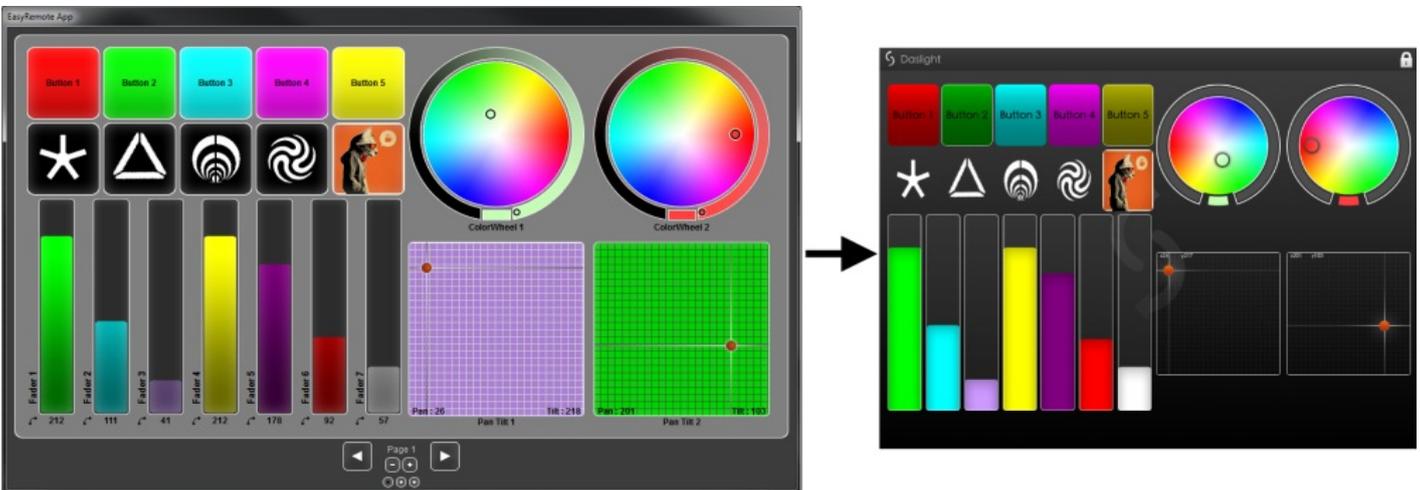
Scan Library: where fixture profiles can be created. A fixture profile contains all information about a particular lighting fixture (number of channels, what the channels do etc). This is required so the control software knows everything about the lighting fixture it is controlling



Virtual 3D Simulator: where you can visualize your lights in 3D, allowing you to program away from the show



Easy Remote: Where you can design a customized screen to use as a remote. This tool can be used on a touch screen and sent to an iPad



1.3.Setup

The setup tab allows you to add your lighting fixtures. Click the patch icon to add your fixtures.



The fixture profiles appear on the left. If your lighting fixture is not in the list, you will need to make your profile with the Scan Library editor, or send us a profile request.

Select your lighting fixture and drag and drop it onto the patch table. In this example, we have 4 moving heads and 4 RGB panels. If you want to add a lot of lights, select the starting address and number of fixtures and then click Patch. Once done, hit ok. The fixtures will be added to the show.

Patch manager

Fixtures

- generic
 - cmv
 - laser
 - moving head
 - par 36
 - par 56
 - par 64
 - rgb
 - rgba
 - rgbw
 - rgby
 - scanner
 - single channel
- _varied
- abstract
- ac lighting
- acd lighting

RGB.ss12

Universe: DMX universe 1

Address: 85

Matrix

Count: 1

Patch

U 01		U 02		U 03		U 04		U 05		U 06		U 07		U 08		U 09		U 10		U 11		U 12		U 13		U 14		U 15																			
MOVING HEAD																		18 19		MOVING HEAD																											
36 37						MOVING HEAD												54 55				MOVING HEAD																									
RGB 72 73												RGB 75 76				RGB 78 79				RGB 81 82				RGB 84 85				RGB 87 88				RGB 89 90				RGB 91 92				RGB 93 94				RGB 95 96			
97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128																
129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160																
161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192																
193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224																
225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256																
257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288																
289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320																
321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352																
353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384																
385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416																
417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448																
449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480																
481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512																

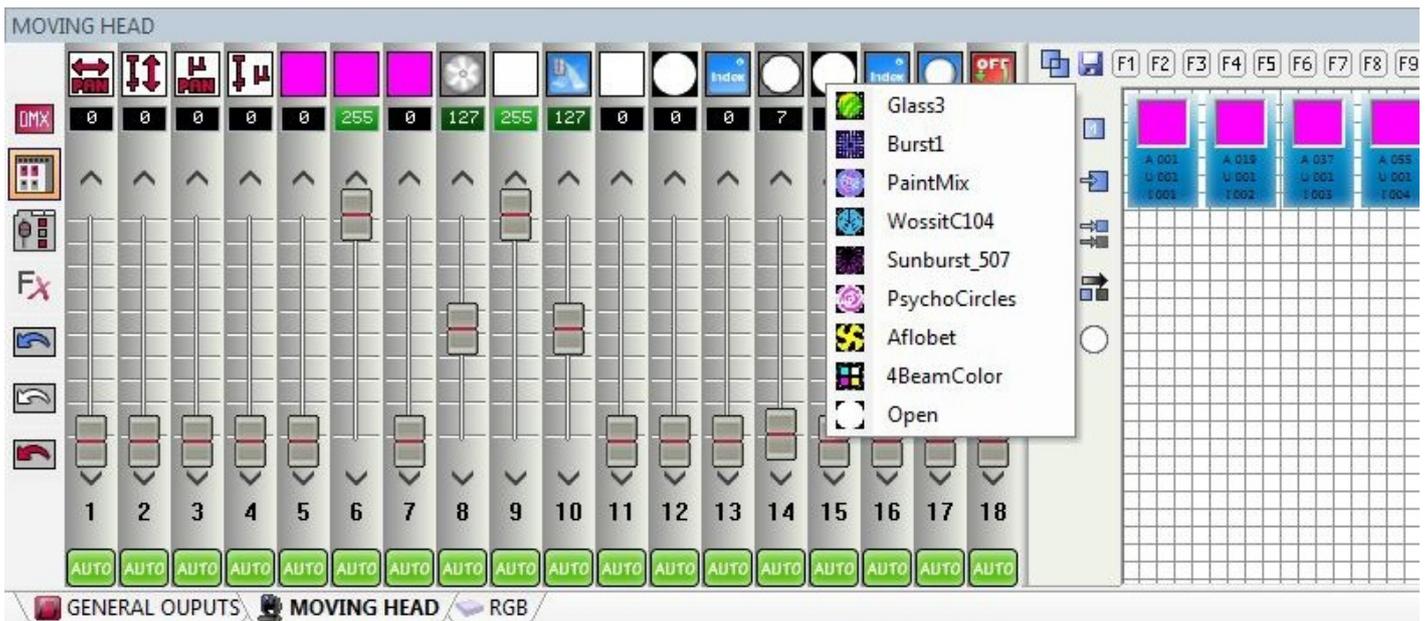
The next step is to address your actual lighting fixtures so they can differentiate themselves from each other. This is normally done using dip switches or a digital LED display. If your fixture has dip switches, select the fixture you want to address and copy the dip switch diagram.



Notice that a tab has been created at the bottom of the screen for each fixture type. To test that your fixtures are correctly addressed:

- select the fixture tab
- highlight the fixtures by clicking them or dragging a box around them (like selecting files in a folder)
- move the faders on the left to change the channel values

You can drag a channel fader up and down with the mouse, or you can right click at the top of a fader to jump to a preset.



1.4.Editor

Programming a scene

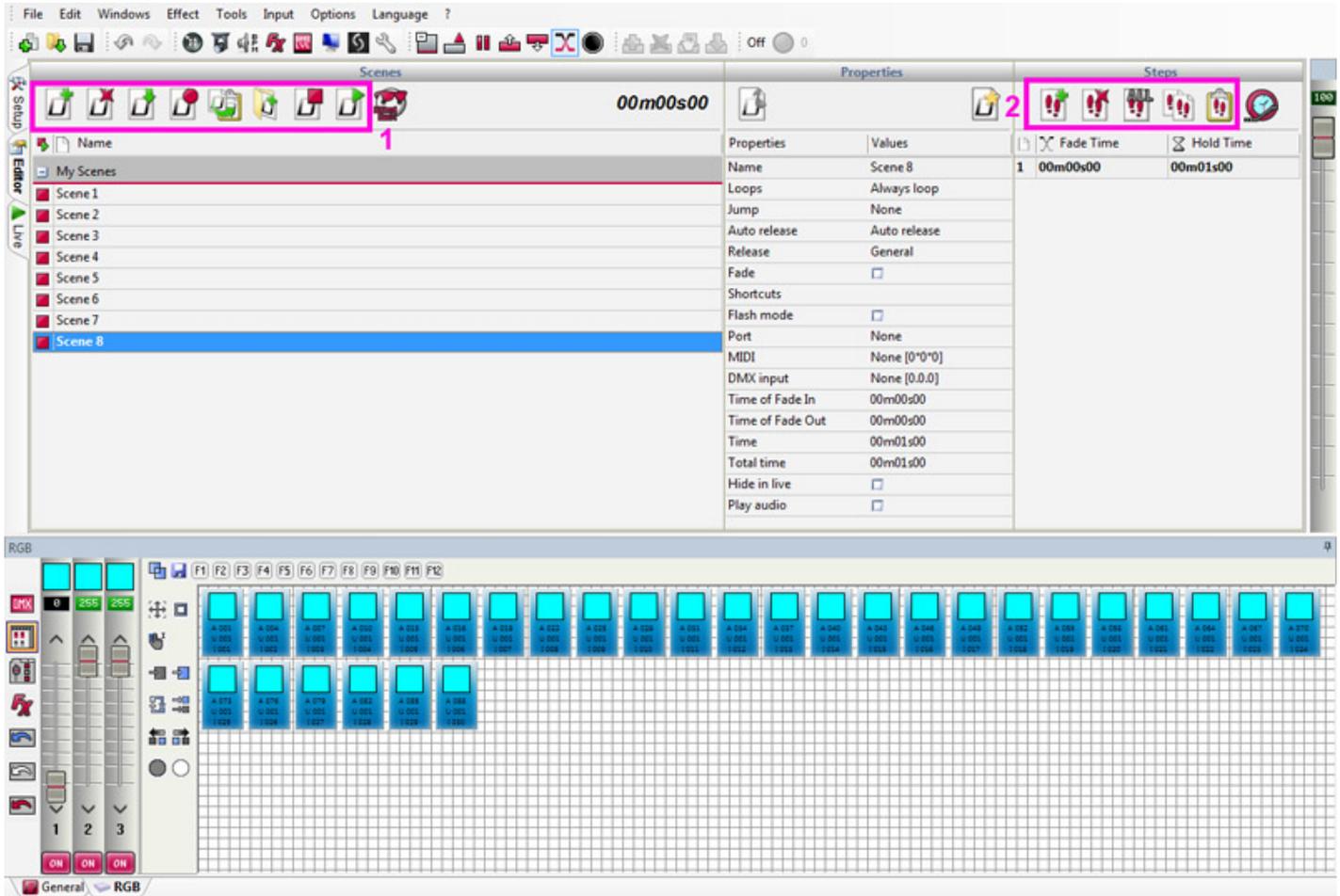
The editor is where the programming is made. Before clicking the editor tab, make sure you have added your lighting fixtures and have successfully tested them using the channel faders on the setup tab.

Programming is made using scenes and steps. Imagine a step as a "snapshot" or "look". Each scene can contain many steps with fade and wait times to create a dynamic moving or color changing pattern.

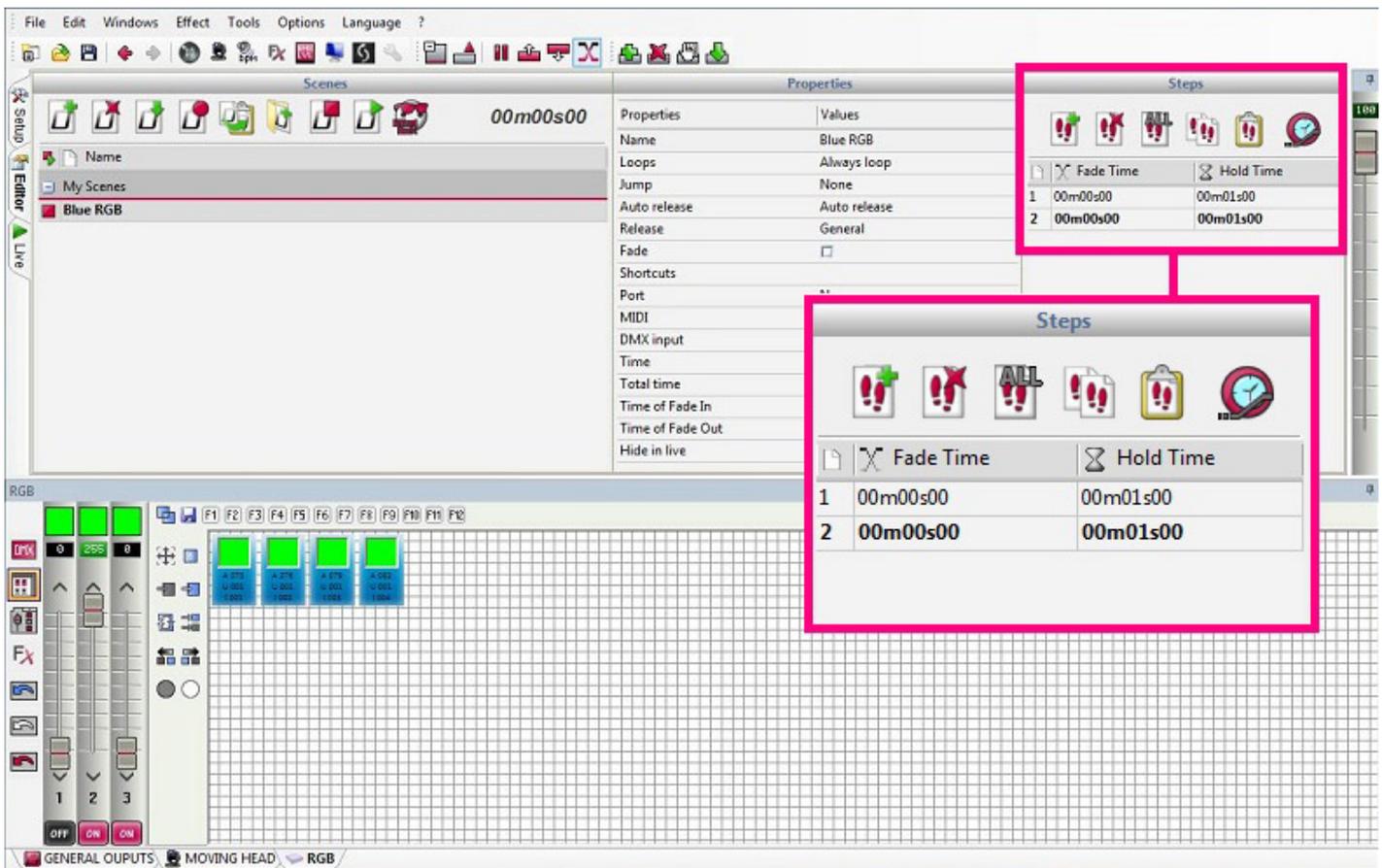
Scenes can be created, duplicated and removed here(1).

If you have any fixtures selected when you click the [New scene] button, the light beam will automatically be opened. If you click [New scene] and no fixtures are selected, all channels will remain at 0.

In this example we have a scene with 1 step and the RGB panels set to blue.

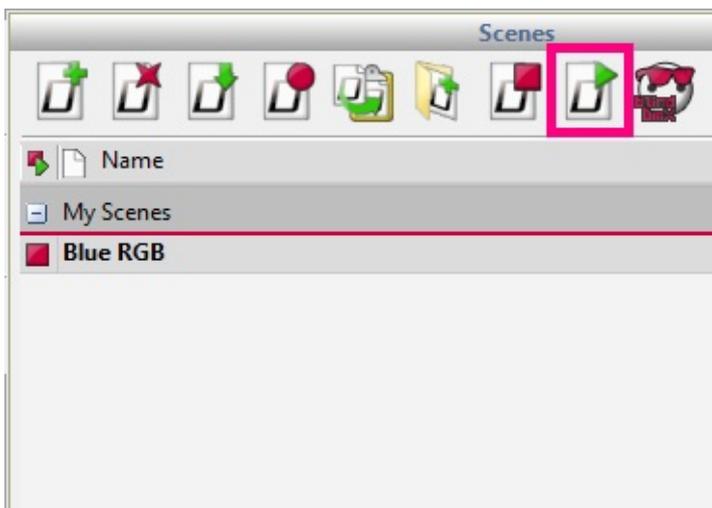


Steps can be created, duplicated and removed here (2). In this example we have 2 steps, in step 2 the lights are green. Notice that the fade time is set to 0 and the hold time is set to 1.



A scene can be played by clicking here or by double clicking the scene.

Double click a step to change the fade or hold time. In this example a fade time of 1 second has been added.



Scene Properties

Scene properties can be changed here. Most of these properties are simple to understand, however there are a couple of important properties:

Release Mode- by default every time a scene is switched on, the previous scene will be switched off.

Sometimes it is useful to stack scenes, for example you could have a scene which changes the color and a scene which makes the light darker and you may want to control these independently. To do this, change the release mode to OFF.

MIDI- this allows you to trigger the scene with a MIDI controller. Make sure your controller is connected, click inside the MIDI box and press the corresponding button on the MIDI controller. If the pairing is successful you should see the MIDI controller or note values (channel*controller number*controller value).

Properties	
Properties	Values
Name	RGB Bleu
Loops	Always loop
Jump	None
Auto release	Auto release
Release	General
Fade	<input type="checkbox"/>
Shortcuts	
Flash mode	<input type="checkbox"/>
Port	None
MIDI	None [0*0*0]
DMX input	None [0.0.0]
Time of Fade In	00m00s00
Time of Fade Out	00m00s00
Time	00m04s00
Total time	00m04s00
Hide in live	<input type="checkbox"/>
Play audio	<input type="checkbox"/>

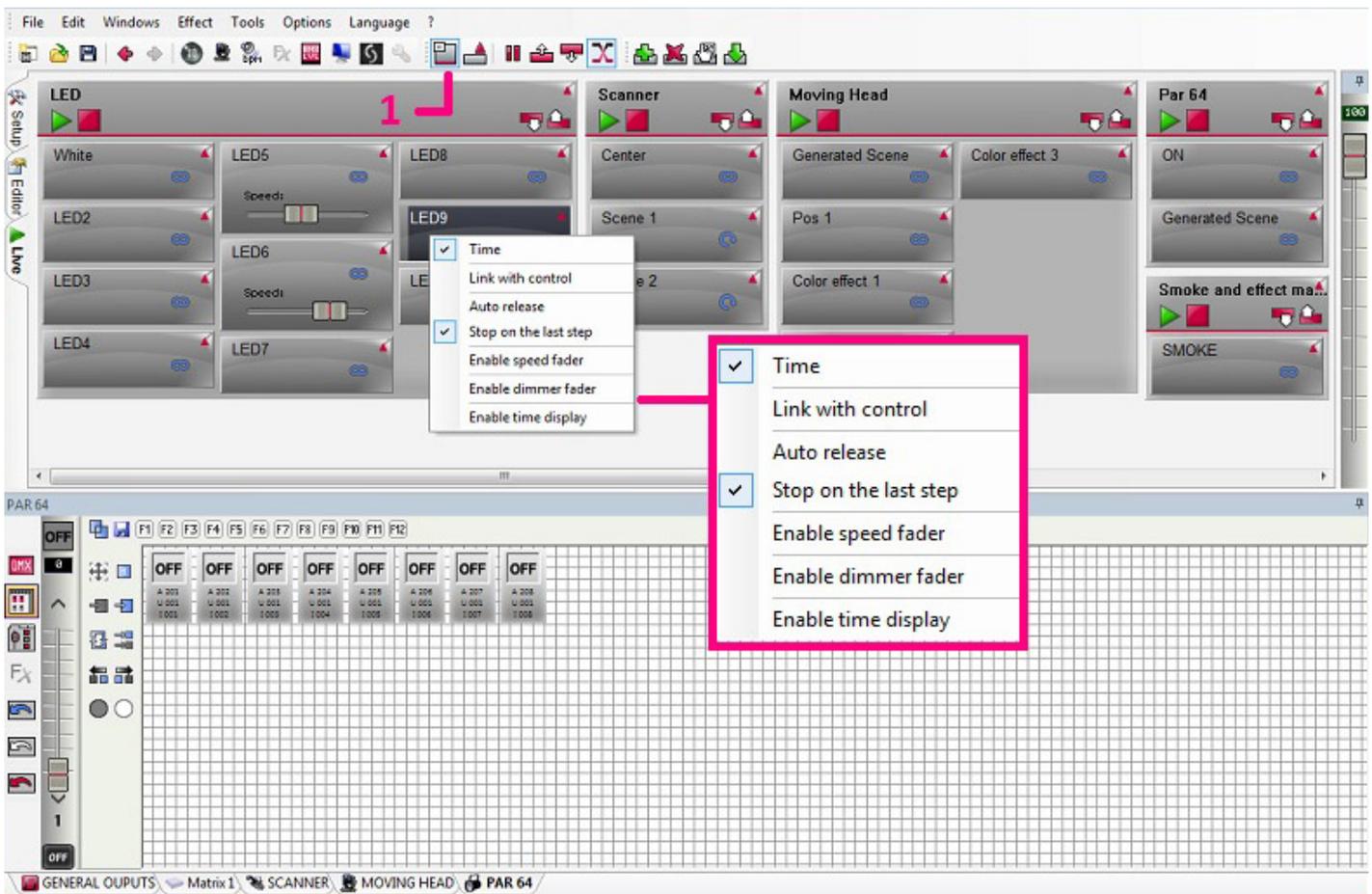
1.5.Live

Scenes

This is where you control your show. All scenes programmed on the editor tab will appear here. Click [here\(1\)](#) to organize your scenes into groups (groups are created on the editor tab).

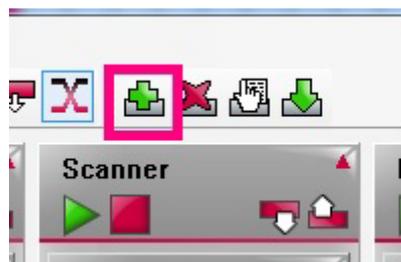
By right clicking a scene, additional LIVE properties can be set:

- Add a dimmer fader to control the brightness of the scene
- Add a speed fader to speed up or slow down a dynamic pattern
- Add a volume fader to control the volume of a media associated to the scene
- Tell the scene to follow the output from the Audio Analysis instead of using the fade and wait times



Effects

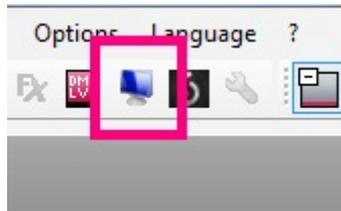
Effects are similar to scenes, except they just store 1 single step. Effects are useful for quickly and simply capturing a live look. They can also be used to trigger a scene or audio track. [Click here to create an effect.](#) Any live edits you have made will be saved within the effect.



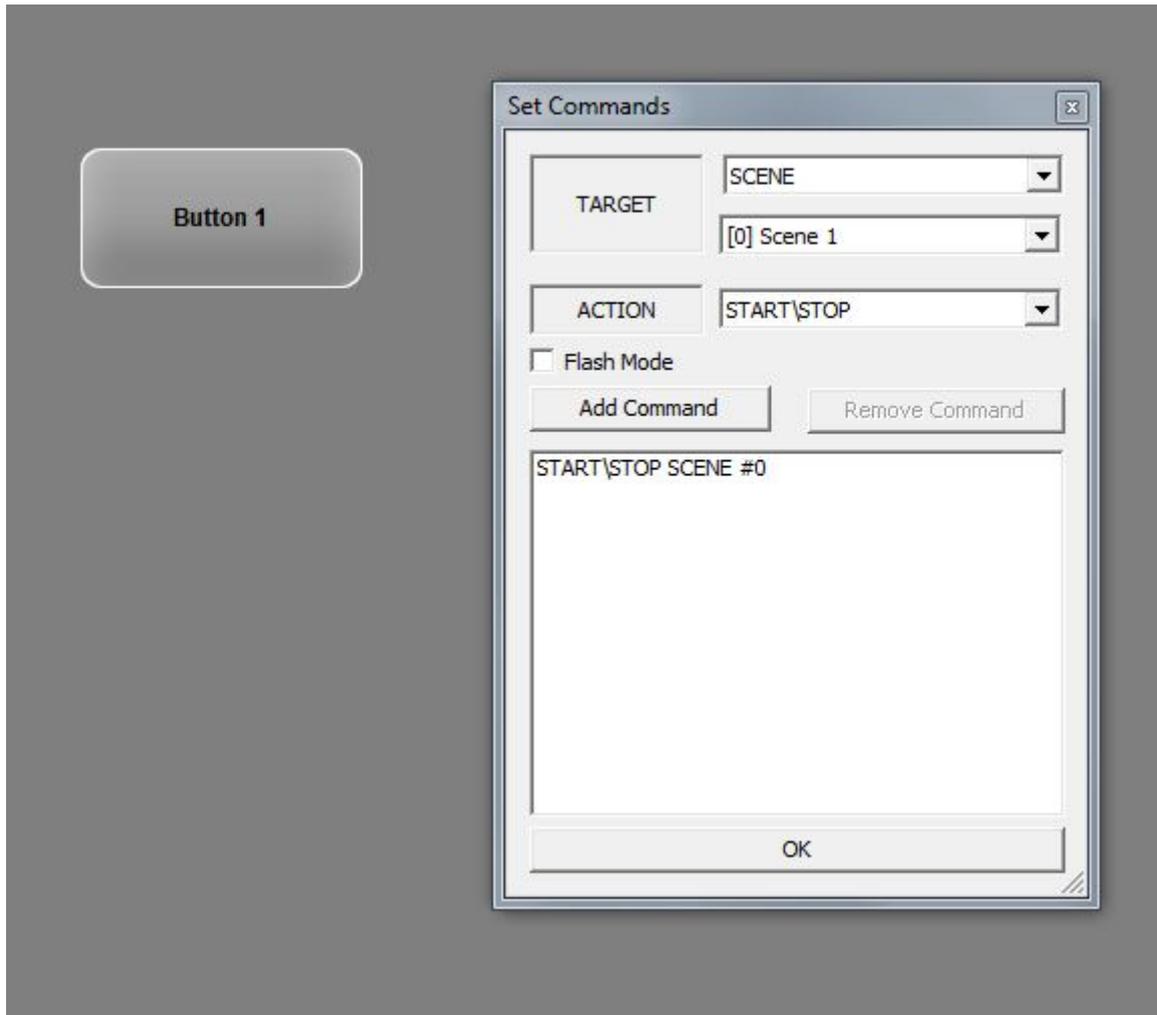
1.6.Easy Remote

Easy Remote App

With the Easy Remote app, you can create a custom LIVE screen design. This can be used as a full screen controller on your computer, or can be sent to an Apple or Android smartphone or tablet. [Click here to start the Easy Remote app.](#)



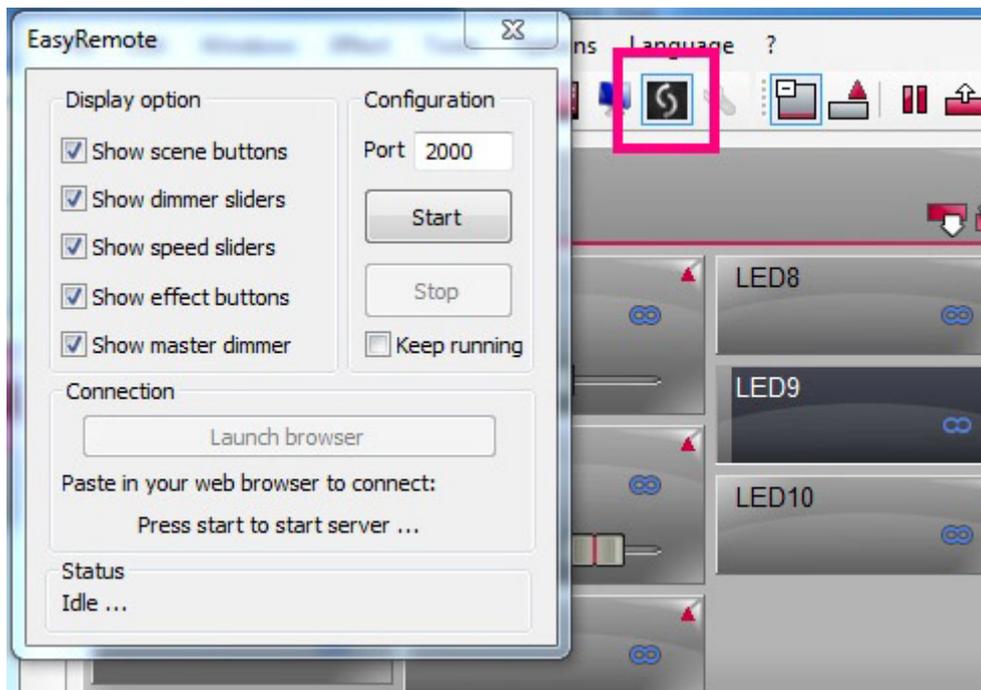
Right click to create a new button. Once a button has been created, choose a command. You can also create faders to control the speed and dimmer of a scene, or to control an output channel directly. It is also possible to add color wheels and pan/tilt grids.



To use Easy Remote with an tablet or smartphone, make sure your tablet/smartphone and laptop are connected to the same local network and download Easy Remote from the app store. When you open the app, you will see a list of DMX software applications detected on the network. Select your application and watch as your Easy Remote screen is recreated!

Easy Remote Web

For those who don't have an Apple or Android device, Easy Remote web can be used with any device with a browser and a WiFi connection. Click here to start Easy Remote web. Click "Start" then "Launch browser" or copy the text here into your browsers address bar. A web page of your live screen will be generated automatically.



2.Introduction

2.1.What is DMX?

DMX is a lighting control system. It allows you to control any DMX compatible lighting fixtures.

DMX is normally connected in serial using a 3 or 5 pin XLR cable. It is connected to the output of the lighting controller and is then daisy chained through each fixture.

You can connect up to 32 devices in a chain. If you need to connect more, you must use a DMX splitter.



There are 512 channels in a DMX universe. Each lighting fixture can use anywhere between 1 and 512 channels. For example a moving head might use 6 channels: X,Y,Dimmer,Shutter,Color and Gobo.

Each lighting fixture must be given a DMX address. This is so the controller knows which fixture to control. If you have 4x 6 channel moving heads, the addresses could be 1, 7, 13 and 19.

For more information on DMX and where it is from, see the DMX university at DMXSoft.com

2.2.What is DVC3 and what hardware do I need?

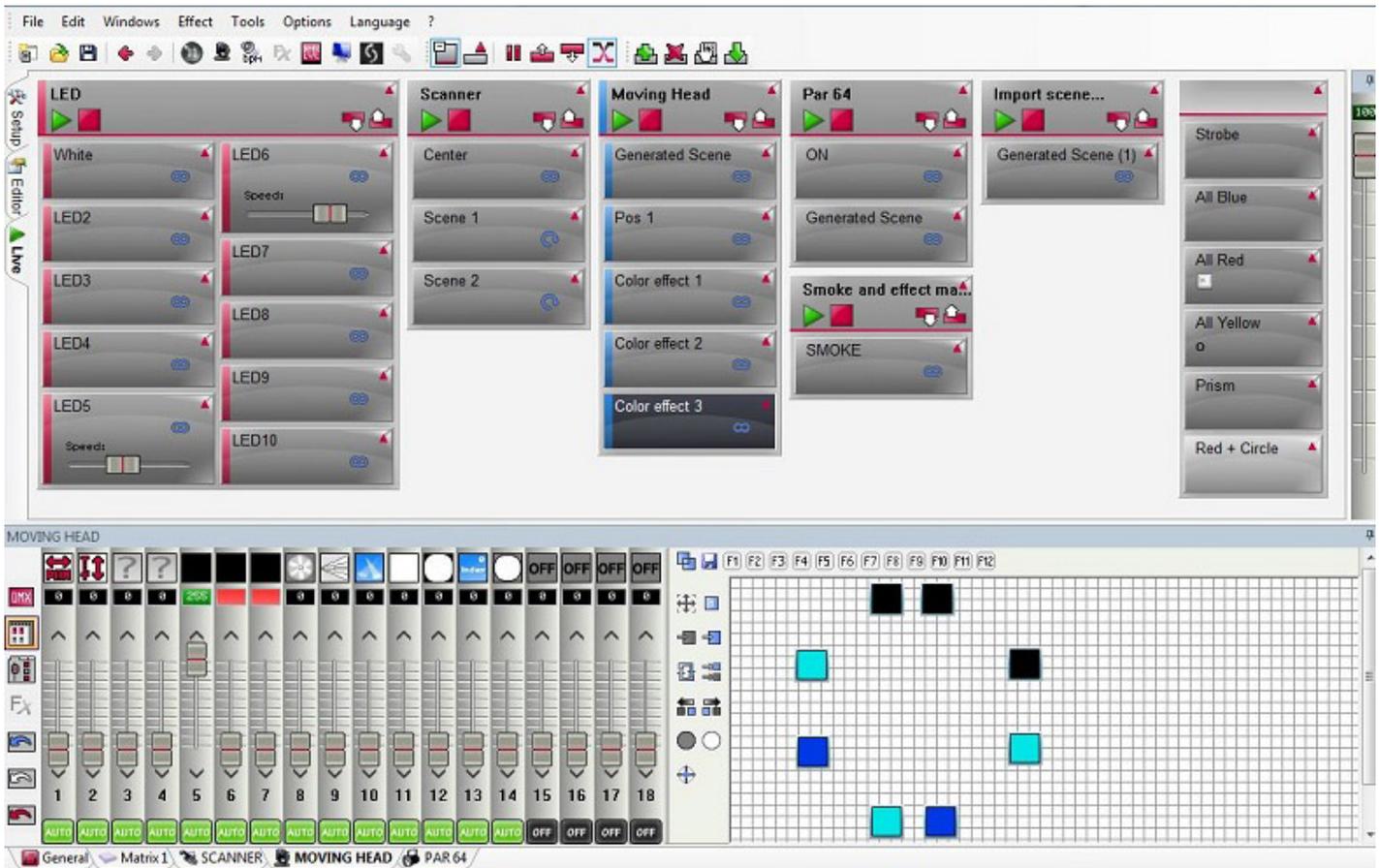
Daslight Virtual Controller 3 is a DMX lighting control software package. It has been designed to be used in clubs, mobile discos and small scale touring shows. The aim was to create an application that would be simple and intuitive to use.

The software is free to download but requires a DVC3 USB-DMX interface. It is not possible to use a 3rd party USB-DMX interface with DVC3. Certain software features may be disabled depending on what interface you have connected. Check the interface specification for more information.

2.3. What's new in Daslight Virtual Controller 3?

Here is an overview of some of the new features in DVC3.

The software features an updated user interface with a new design.



SSL2 fixture profiles are now supported. SSL2 profiles hold more information about a lighting fixture and allow more advanced control such as multi-beam and RGBW. It also allows for a more accurate 3D visualisation.

Drag and drop to move groups.

Blind DMX allows you to edit scenes while not effecting your current DMX output.



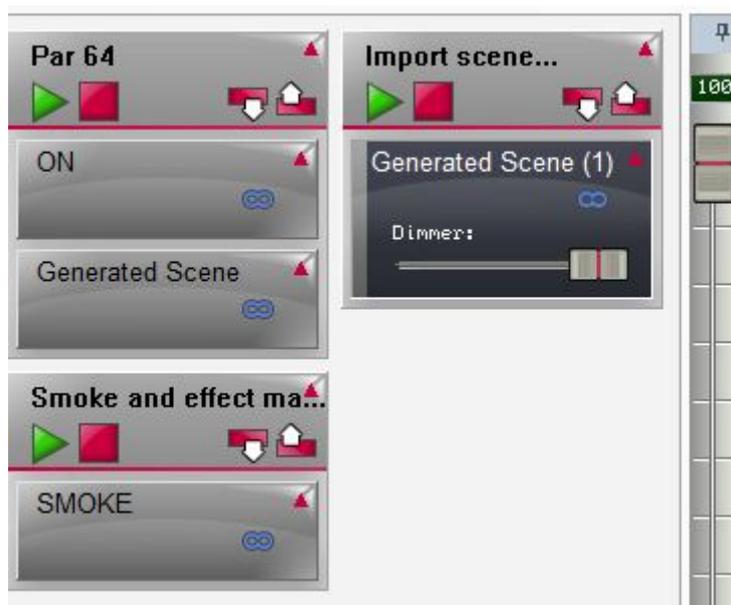
The scene properties dialog keeps the user interface cleaner by only showing the properties of the selected scene. You can choose which properties to set when a new scene is created by clicking the 'Save as default properties' button.

Properties	
Properties	Values
Name	Color effect 3
Loops	Always loop
Jump	None
Auto release	Auto release
Release	Off
Fade	<input checked="" type="checkbox"/>
Shortcuts	
Port	None
MIDI	None [0*0*0]
DMX input	None
Time	00m01s88
Total time	00m01s88
Time of Fade In	00m00s00
Time of Fade Out	00m00s00
Hide in live	<input type="checkbox"/>

Change the color of scenes, effects and groups.



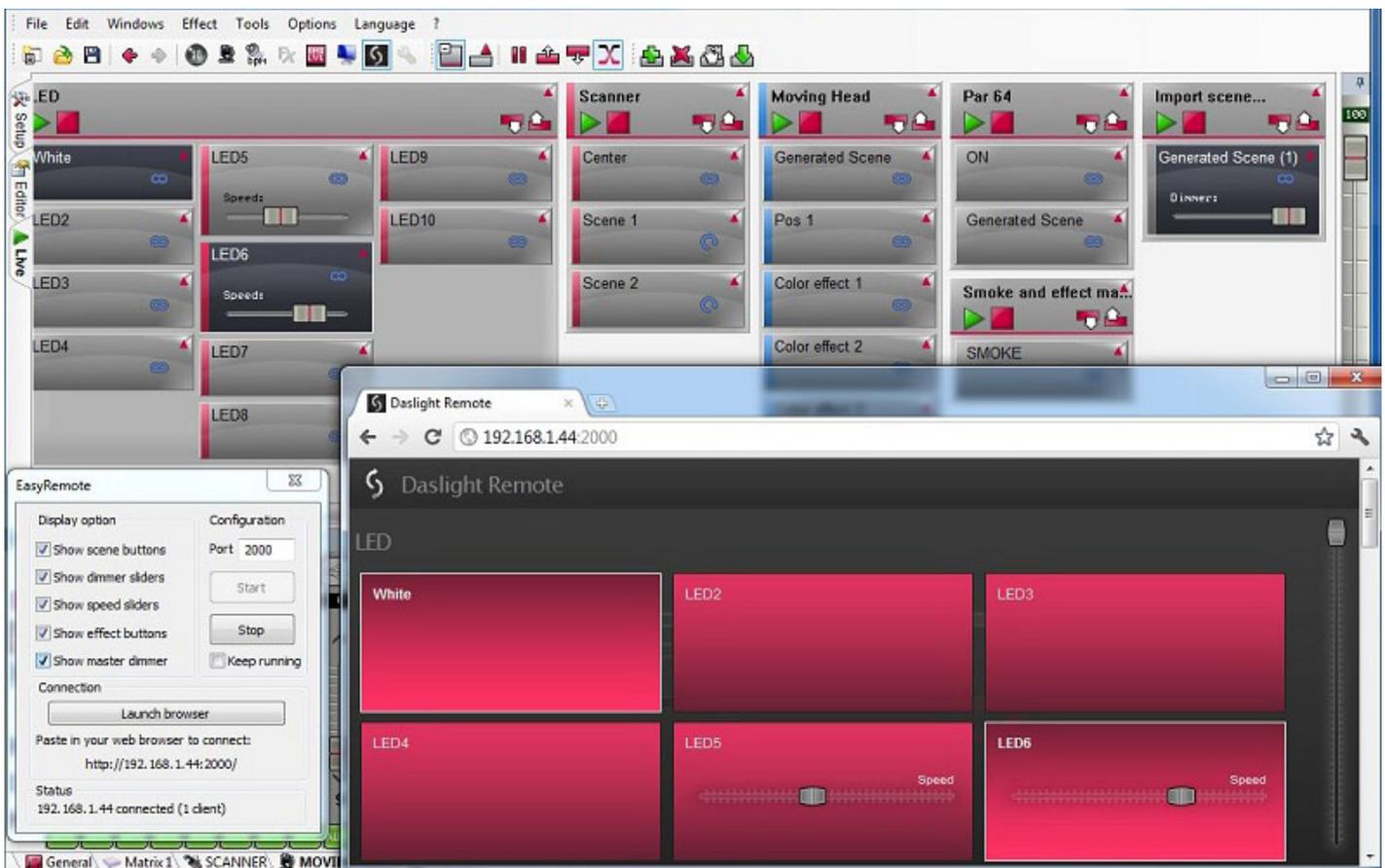
Possibility to control the dimmer of each scene along with a master dimmer for the full show.



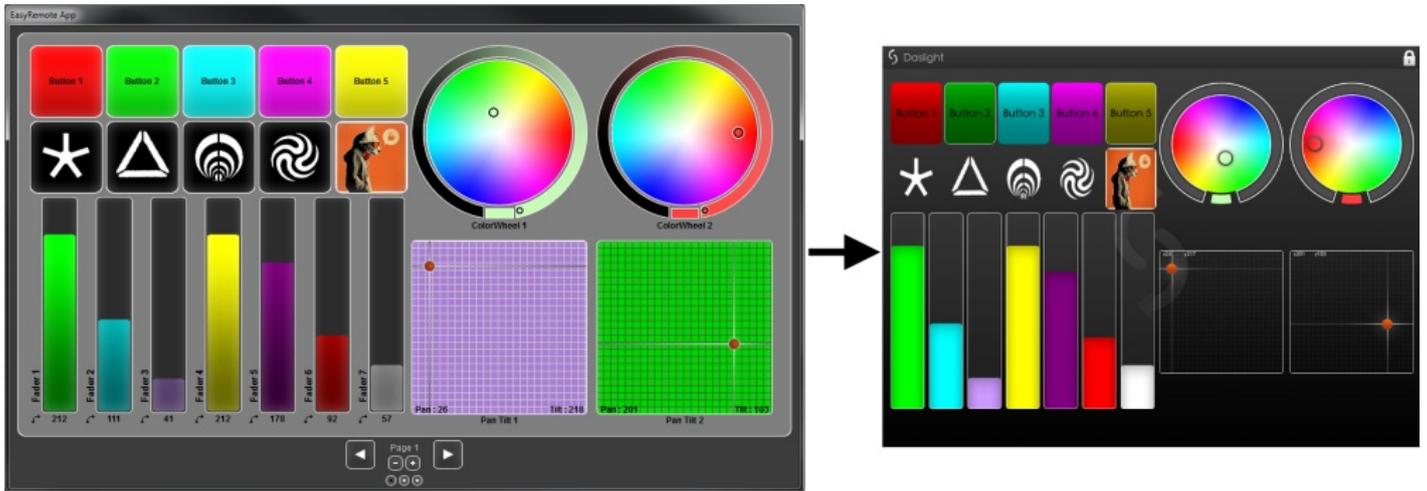
An OFF channel state. When the channel is OFF no value will be triggered. When the channel is ON with the fader set at 0, 0 will be sent allowing for easy creation of a blackout button for example.



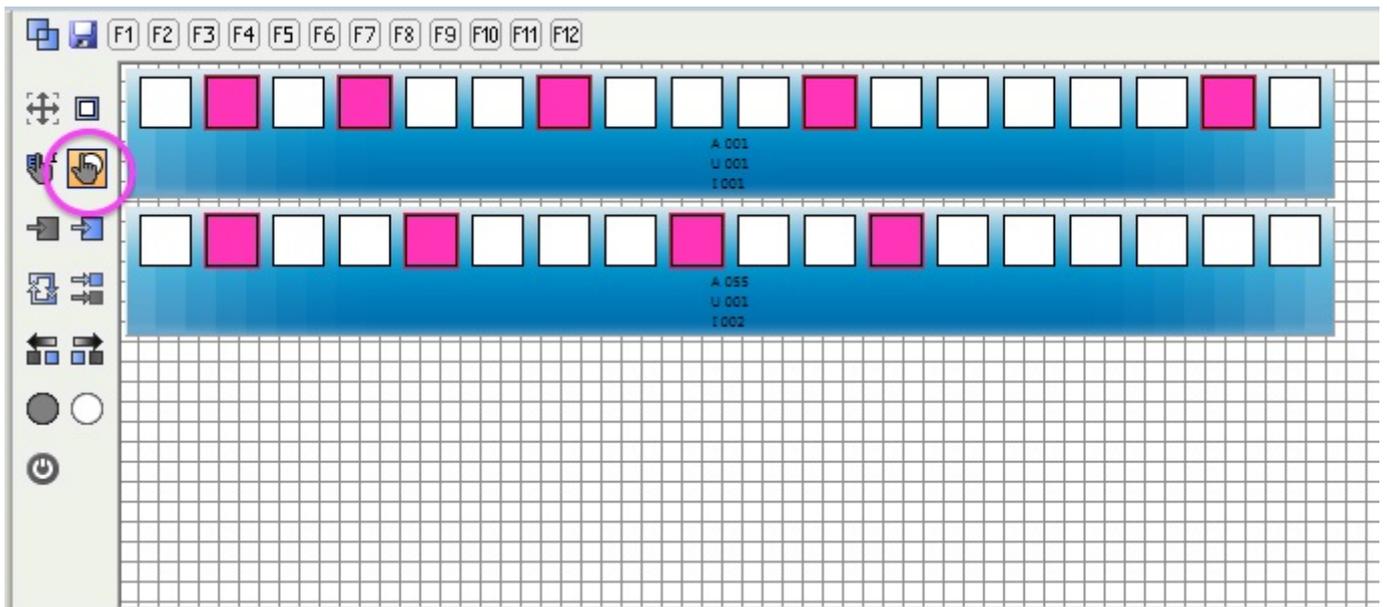
Easy Remote Web sends your live screen to your internet browser allowing you to control your lights from anywhere on your network and from any device with an internet browser.



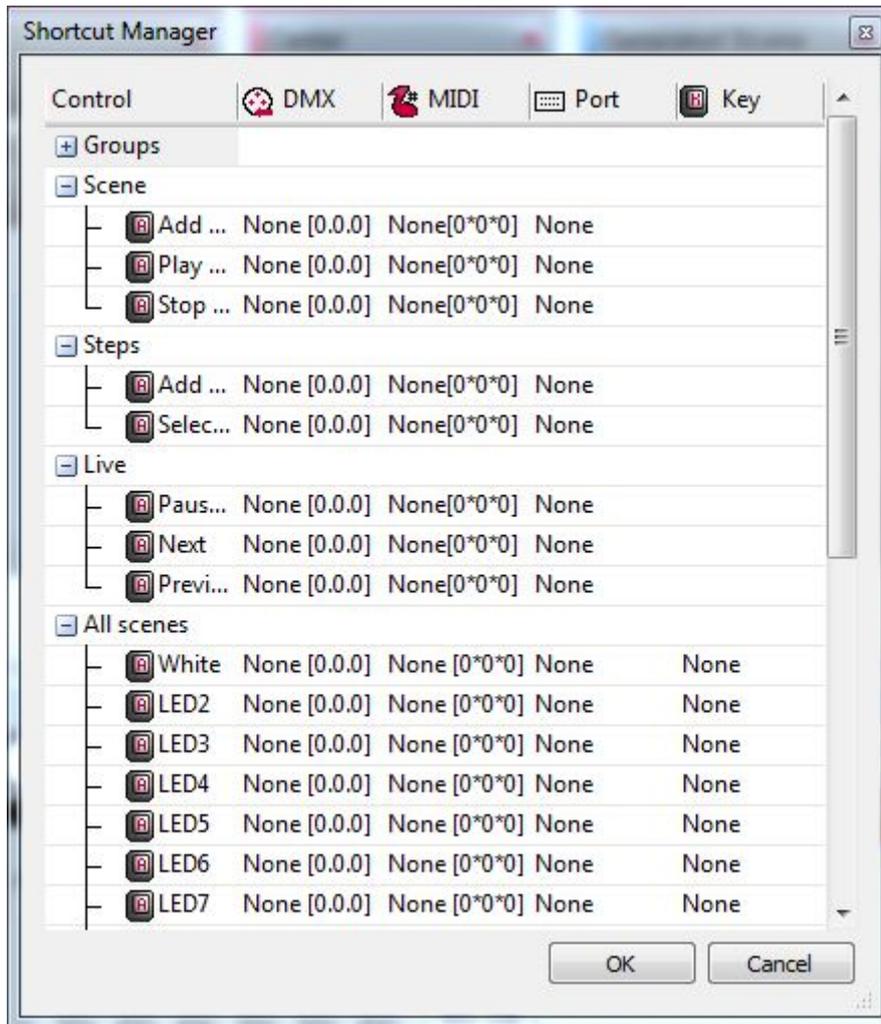
The Easy Remote designer (formally DVS) allows you to create a custom screen. It is now possible to pair buttons, faders, color wheels and pan/tilt grids to almost any software function. the designer also automatically links to the Easy Remote app for Apple and Android smartphones and tablets.



Manage multi-beam lighting fixtures such as LED bars. Effects can be played across all beams and individual beams can be selected here.



Other new features include relative pan/tilt, undo/redo and a larger selection of DMX/MIDI/port/keyboard shortcut assignments.



3.Setup

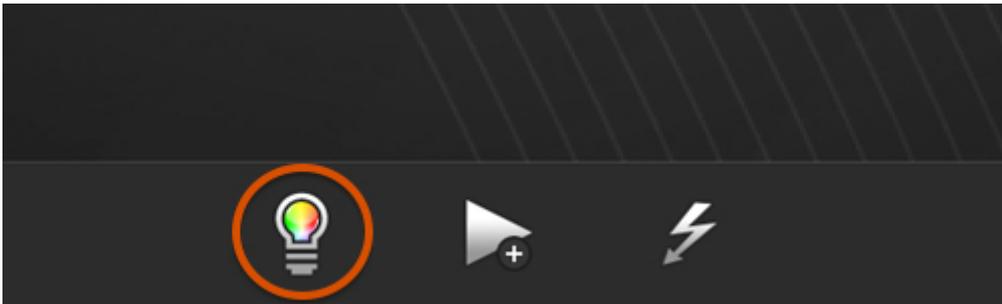
3.1.Fixture Profiles

All of the attributes of a DMX device are saved in a special file called the "Fixture Profile" or .SSL2 file. The more accurate the fixture profile, the easier it will be to program your lighting. If you have an incomplete fixture profile, the software will not understand the lights you want to control and therefore make it difficult for you to program your lighting fixtures.

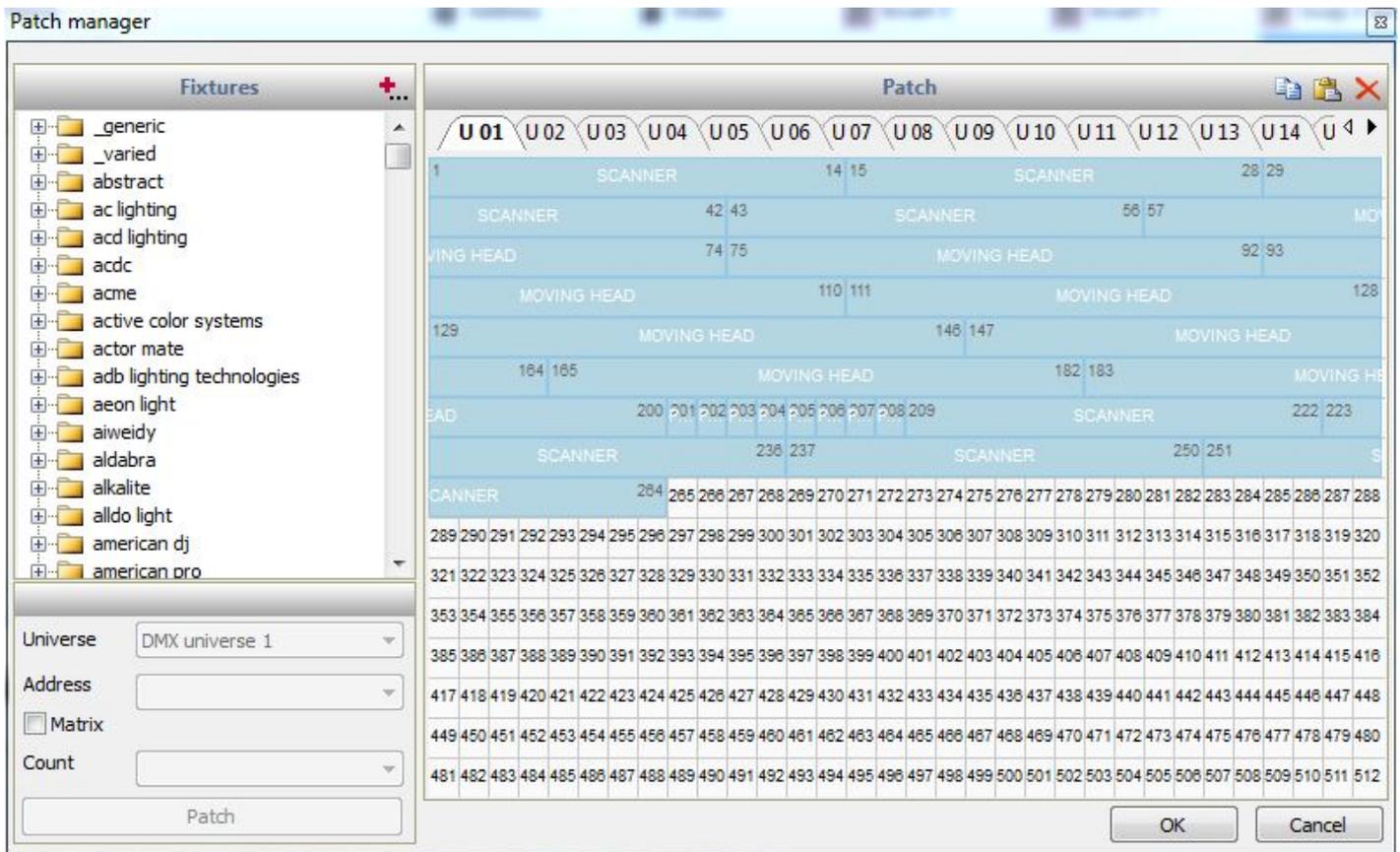
There is a profile for almost every fixture on the market. Fixture profiles can be created and edited with the "Scan Library" editor software. For more details on how to make Scanlibrary profiles, see the Scan Library topic and have a read of Words of Wisdom TIP 5 at dmxsoft.com.

3.2.Patching Fixtures

Lighting fixtures can be added by clicking here.



Select your fixture from the list on the left. Fixture profiles can be created with the Scan Library editor and can also be requested from our website. Drag and drop the fixture from the left onto the DMX address grid or double click a profile to automatically patch it to the next available address. Multiple profiles can be patched by selecting the start address and number of fixtures, then by clicking 'Patch'.



Matrix patch

Fixtures can be patched into a matrix by clicking the matrix checkbox. After clicking patch, the matrix patch dialog will appear.

- Drag and drop a fixture to change its position
- Click 'Advanced positioning' to change the fixture order
- In the 'Advanced positioning' dialog, you can also change the "primary matrix". This is useful if you have sub-groups of fixtures or multibeam fixtures within the matrix. With the primary matrix, you can determine the size and positioning of a group of beams within the larger matrix.



3.3. Fixture Properties

Once a lighting fixture has been patched it will appear in a list. The following information is displayed.

- Fixture name : give your fixture a name for reference
- Fixture address range : the address to give your fixture is the first value of this range
- Fixture index : this determines the order in which effects are applied to your fixtures
- Invert X and Y / Swap X and Y : inverts/swaps the values of any X and Y channels of the selected Moving Head or Scanner
- Fade : if this is not checked, the fixture will not respond to any fade commands between scene or steps. To remove all fade commands from all color and gobo wheels, select the fixtures and click the 'No Fade On Wheels' button

Fixtures							
U1 U2 U3 U4 U5 U6 U7 U8 U9 U10 U11 U12 U13 U14 U15 U16 U17 U18 U19 U20							
Name	Address	Index	Invert X	Invert Y	Swap X and Y	Fade	
SCANNER							
MOVING HEAD							
MOVING HEAD	< 057 - 074 >	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
MOVING HEAD	< 075 - 092 >	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
MOVING HEAD	< 093 - 110 >	3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
MOVING HEAD	< 111 - 128 >	4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
MOVING HEAD	< 129 - 146 >	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
MOVING HEAD	< 147 - 164 >	6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
MOVING HEAD	< 165 - 182 >	7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
MOVING HEAD	< 183 - 200 >	8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
PAR 64							

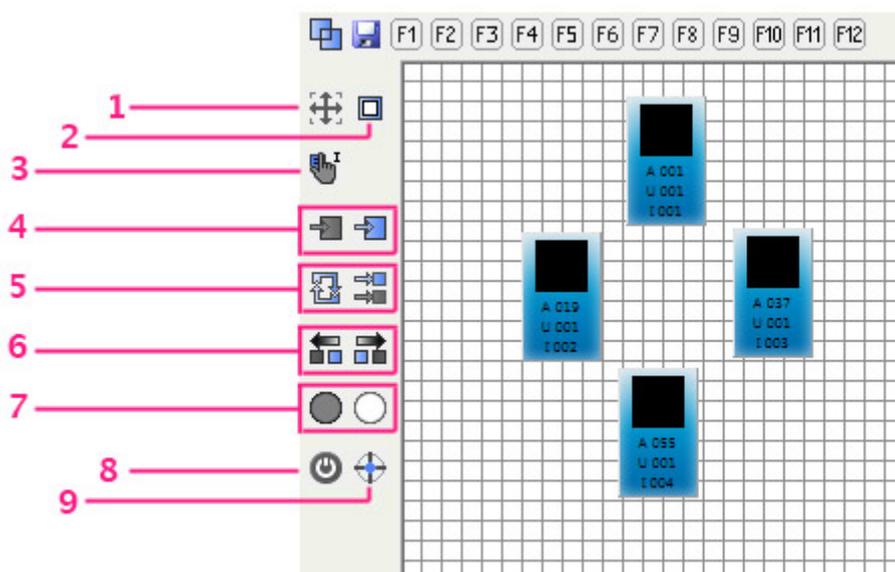
4. Editor

4.1. Arranging Lighting Fixtures

All lighting fixtures of the same type are displayed within the fixture window. In the default view, each rectangle represents a lighting fixture. When a fixture is selected, the most recently edited beam state will be shown (for example, the gobo or color). Underneath, the DMX address is displayed along with the DMX universe and the fixture index. Fixtures can be selected with the mouse and multi-selections can be made by holding ctrl and clicking, or by dragging a box around the fixtures (this works the same way as selecting file icons within a folder).

The icons to the left allow you to quickly select and move fixtures, along with a few other useful functions:

1. Change the fixture position on the grid
2. Change the fixture view
3. Change fixture index. The index determines the order in which an effect is applied. For example if you want to create a chase which goes backwards, click this button and select the fixtures in reverse order
4. Select all / de-select all fixtures
5. Invert the selection of fixtures / Select all odd fixtures
6. Increment and decrement the fixture selection
7. Open / Close the light beam. When the beam open button is pressed, all default presets will be activated. When controlling a moving head these normally include shutter open, iris open and dimmer open
8. Set the mode to off. This will disable the channels of the selected fixtures. They will be ignored when the scene is activated. If you want to force value 0 (for example, for a blackout), set the channel to ON and the value to 0
9. Move all fixtures to the center. This will set the X and Y channels to the center on a moving head or scanner



Fixture Grouping

Fixture selections can be saved using the F1 - F12 buttons across to top. To save a fixture selection:

- Make a selection
- Press the save icon
- Press one of the 12 F buttons

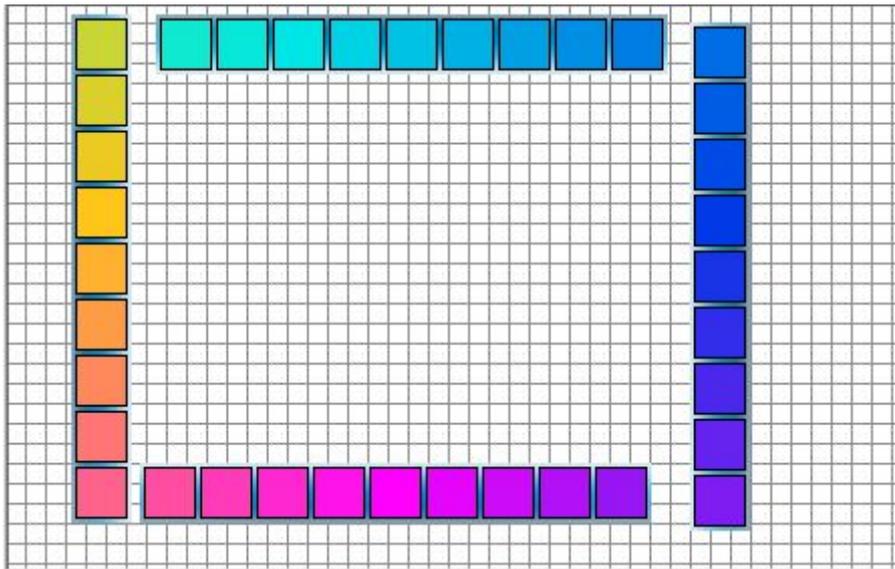
Saved groups can be selected by clicking one of the F buttons with the mouse or by pressing one of the F keys on your keyboard.

Clicking the top left icon toggles between single and multi-selection of group buttons. When multi-selection is enabled, group buttons will stack. When single selection is enabled, every time a group is selected, the previously selected group will be released.



Fixture rotation

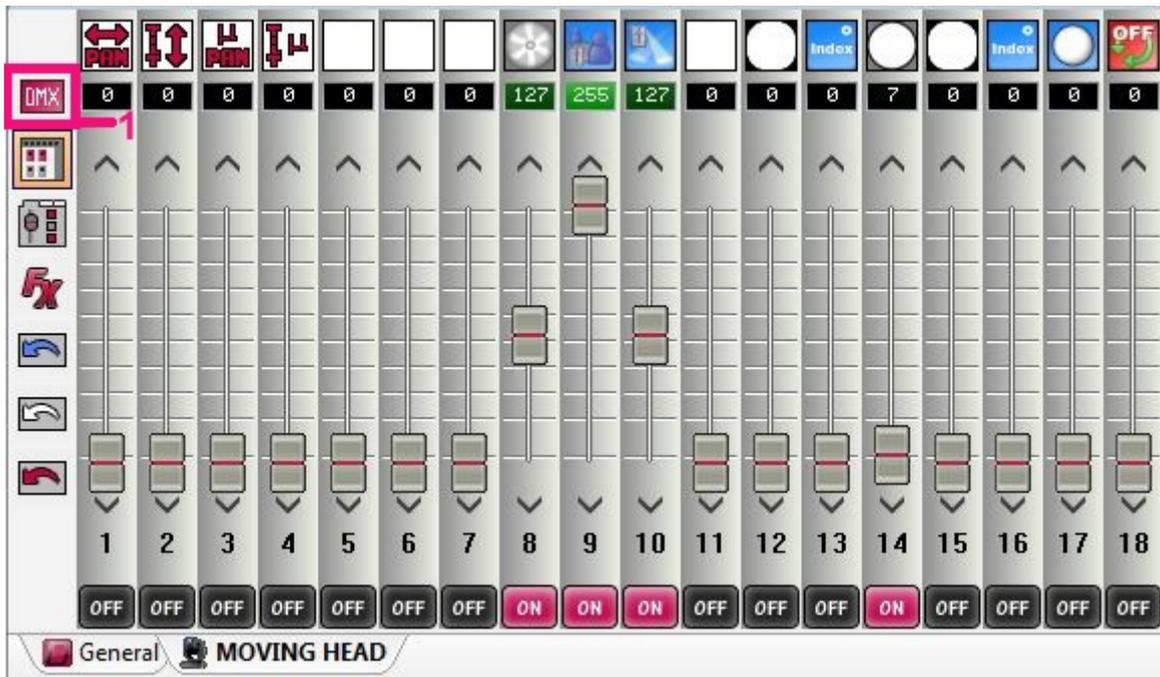
Multibeam fixtures can be rotated by right clicking the fixture and selecting the rotation angle.



4.2. Controlling Lighting Fixtures

Controlling with the faders

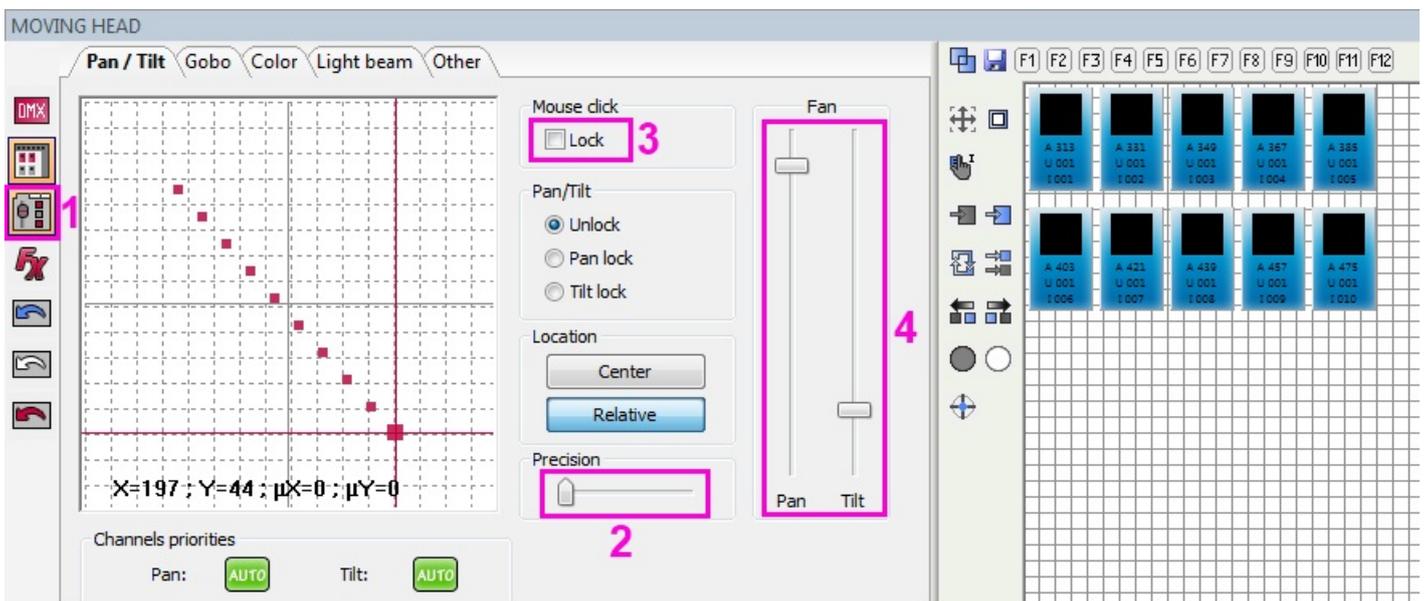
Once you have selected the lighting fixtures you want to control, move the channel faders to set the DMX values. Click the arrows above and below each fader to increment/decrement the DMX value by 1. You can jump to a preset by right clicking at the top of the channel. You can jump to a DMX value or % by double clicking the number box at the top of the channel fader. Click here (1) to toggle the display between DMX and % values.



Controlling with the Palette

The palettes allow quick access to particular properties. Click here (1) to access the palettes. All channels are arranged into categories.

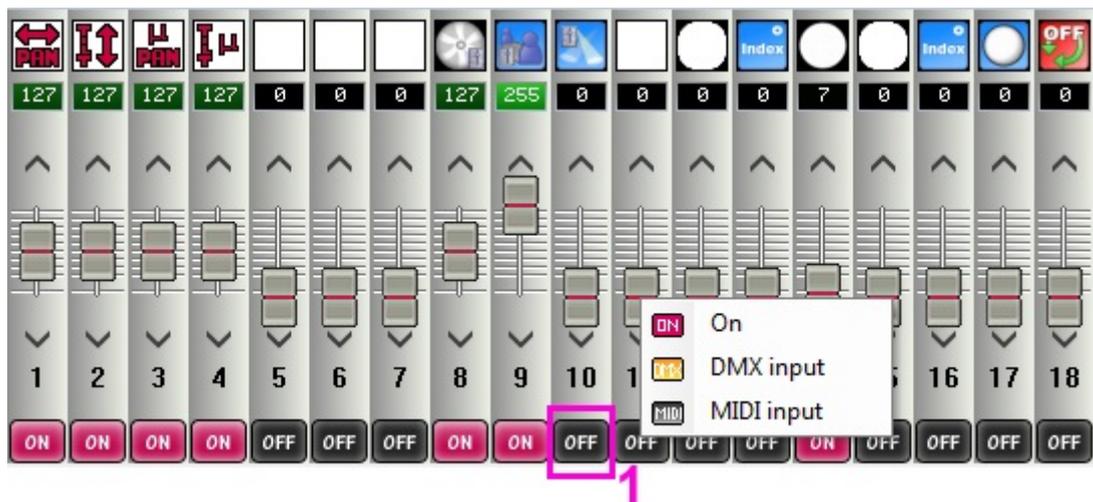
The pan/tilt palette allows you to quickly set the position of a moving head or scanner. Left click anywhere on the grid and move the mouse to select a position. The mouse sensitivity can be adjusted using the precision fader (2). Right click on the grid to jump to a particular position. If the Lock checkbox (3) is checked, the left mouse button must be clicked before and after a position has been set. The pan and tilt lock radio buttons allow you to easily move the fixtures in one axis. Clicking the center button sets all lighting fixtures to the center. If you have several fixtures selected which are positioned in different places, you can move them together by clicking the Relative button. You can create a pan/tilt fan effect by selecting the fixtures you want to use for the effect and moving the two fan faders (4).



Channel States

Notice that as you move a channel fader, the channel will switch ON. It is important to understand that if a channel is switched OFF, the channel will be ignored. In the example below, channel 10 (dimmer) is off. If you have a scene where the dimmer set to 255 and you activate this scene on top, the dimmer will not go to 0. For this to happen, you must switch the channel ON and set the fader to 0.

To control a channel with MIDI or DMX, right click the channel (1) to view all available states or left click the channel to toggle through the states.



4.3.Creating Scenes

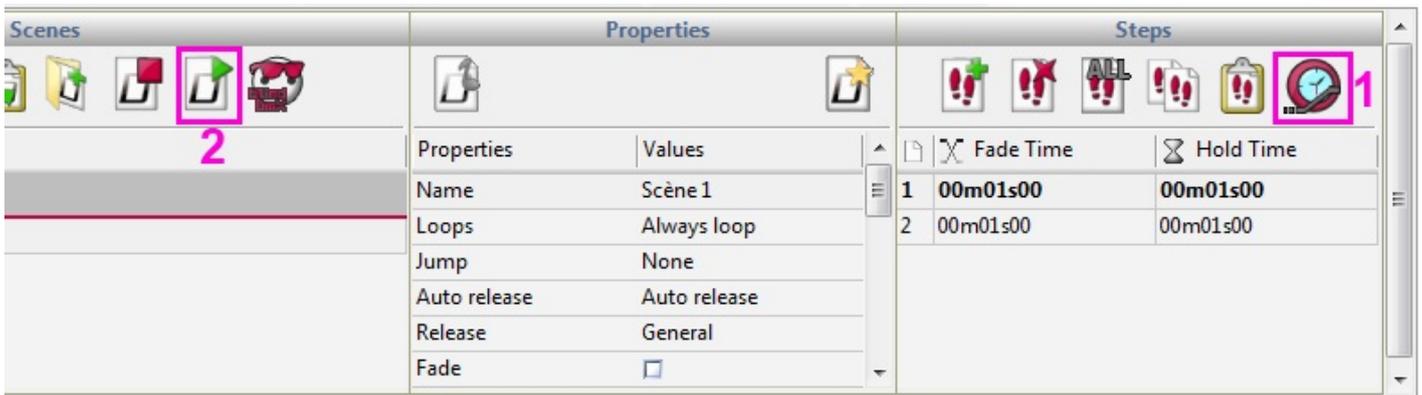
Scenes and Steps

Almost all lighting programming is made using scenes and steps. A step is a "look". Each step stores a DMX value between 0 and 255 for each DMX channel. The DMX values are stored within the selected step as the channels are modified. Many steps put together with fade and hold times make a scene. The hold time is the time each step will wait before moving onto the next step and the fade time is the time it takes for each step to fade to the next.

In the example below we have a scene with 2 steps both with a fade and hold time of 1 second. The lights will hold on blue (step 1) for 1 second, then will fade to red (step 2) over 1 second, then will hold on red for 1 second, then will fade back to blue over 1 second.

Steps can be created, removed, copied and pasted. To select more than one step, hold ctrl and select the desired steps. To select a range of steps, select the first step in the range, hold shift then select the final step in the range. Whilst holding shift or ctrl, double click a step to alter the fade or hold time. You can also set the fade/hold time of more than 1 step by clicking the "Set Time" button (1).

To play a scene, click the play button (2) or double click the scene name within the scene list.



Scene Properties

All properties of the selected scene can be viewed here. It is also possible to add columns to the scene list by right clicking the top of the list and selecting a property.

Clicking on the "Save as default properties" button (1) will set the current properties to default properties for all the next new scene.

Name Used to identify a scene and is shown on the LIVE screen

Loops Determines how many times a scene will repeat

Jump Determines which scene will play after the scene has finished

Auto Release Determines if the scene will pause on the final step or will switch off once the scene has finished

Release Mode GENERAL : The scene will be released when another scene is activated. GROUP: The scene will be released if another scene within the same group is activated. OFF : The scene will never be automatically released. ALL EXCEPT GROUP: The scene will be released when another is activated which is not within the same group

Fade Activate or deactivate fade in time and fade out time of the scene.

Shortcuts Assign a keyboard shortcut to activate the scene. Several shortcuts can be assigned

Port Assign a dry contact port to activate a scene (see the port triggering topic for more information)

MIDI Assign a MIDI message to trigger a scene (see the MIDI topic for more information)

DMX Input Trigger the scene with a DMX message (see the DMX Input topic for more information)

Time of fade in The length of the fade in

Time of fade out The length of the fade out

Time The length of the scene

Total time The complete length of the scene including any scene fades

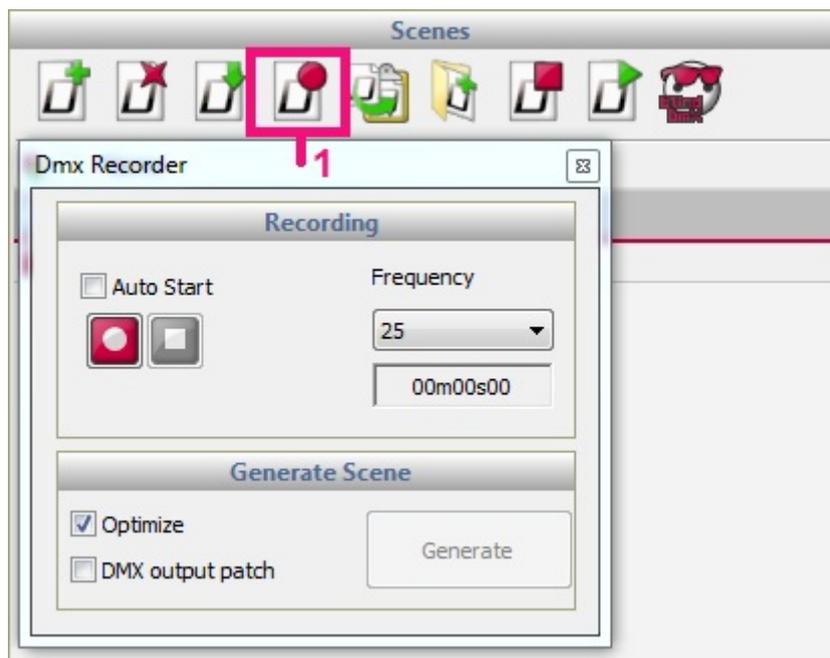
Hide in live Does not show the scene on the live tab

Play audio - Set an audio file for the scene. When this option is checked, click on the "Multimedia" button (2) to select the audio file.

Properties	
	
Properties	Values
Name	Scène 1
Loops	Always loop
Jump	None
Auto release	Auto release
Release	General
Fade	<input type="checkbox"/>
Shortcuts	
Flash mode	<input type="checkbox"/>
Port	None
MIDI	None [0*0*0]
DMX input	None [0.0.0]
Time of Fade In	00m00s00
Time of Fade Out	00m00s00
Time	00m04s00
Total time	00m04s00
Hide in live	<input type="checkbox"/>
Play audio	<input checked="" type="checkbox"/>

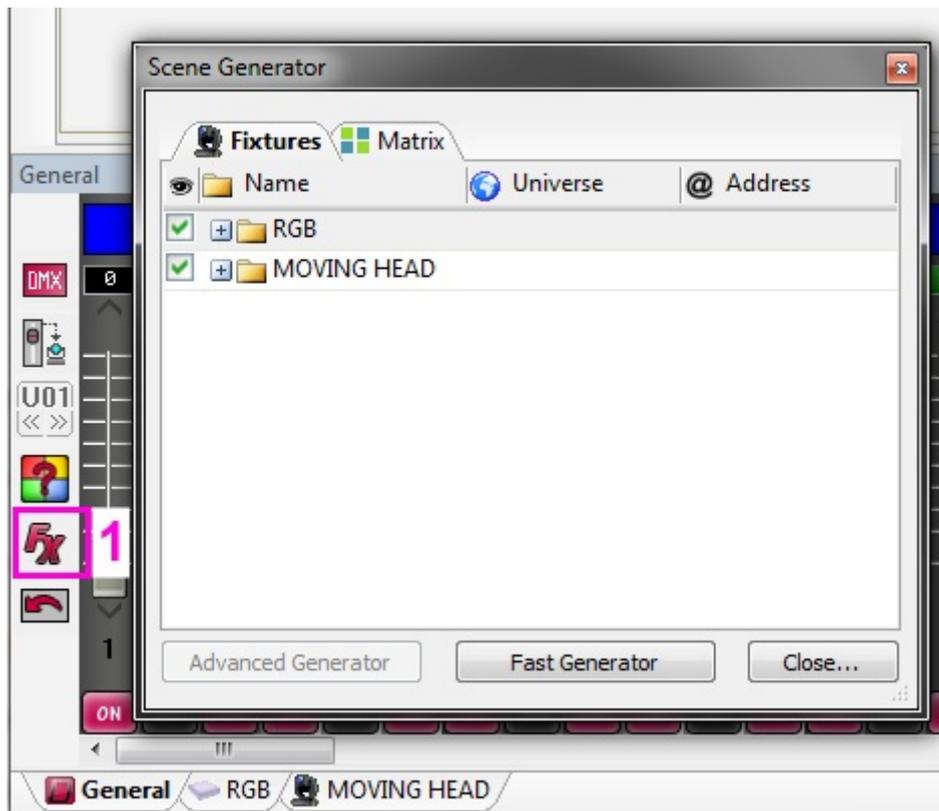
DMX Recorder

It is possible to record the input from a DMX desk by clicking here (1). Select the frequency at which you would like to record the DMX input. A greater frequency gives a greater accuracy but produces larger scenes. The software output DMX at 25 frames per second so there is no need to capture DMX at a higher frequency than this. Auto start will start the DMX recording automatically when the DMX input value changes. Once you have captured the DMX input, click generate to generate the scene. If Optimize is checked, any repeating steps will be merged and a hold time will be set.



4.4. Effects Generator

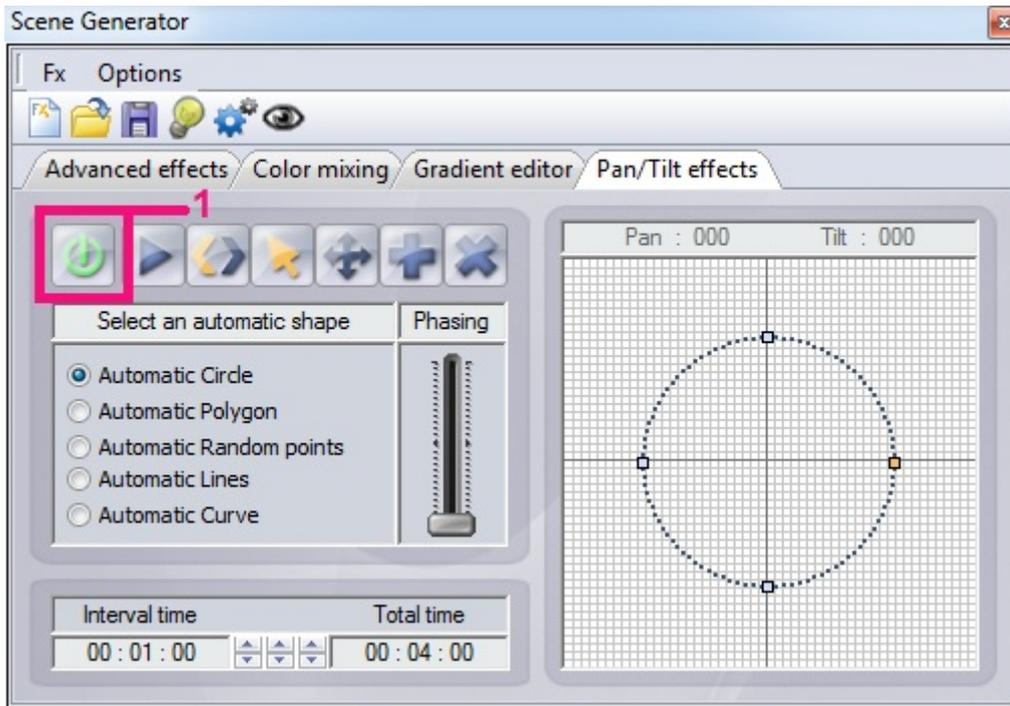
The effects generator allows you to create dynamic scenes without the need to manually set each step. To create a scene with the effects generator, select the fixtures you want to use in the effect and then click here (1) to open the effects generator. The Effects generators interface will adapt itself to the fixture you are controlling. For example, the pan/tilt effects tab will not appear unless you are controlling a moving head or scanner. If the effects generator is opened when the General tab is selected, there is an option to select which fixtures should be included within the effect. There is also the option to use a Fast Generator to create a quick effect.



Pan/Tilt Effects

This tool allows you to quickly and easily create moving patterns. Start by switching the unit on (1). Select the shape you would like to create and the number of points. Use the light beam on button at the top to temporarily view the light beam as you build your sequence.

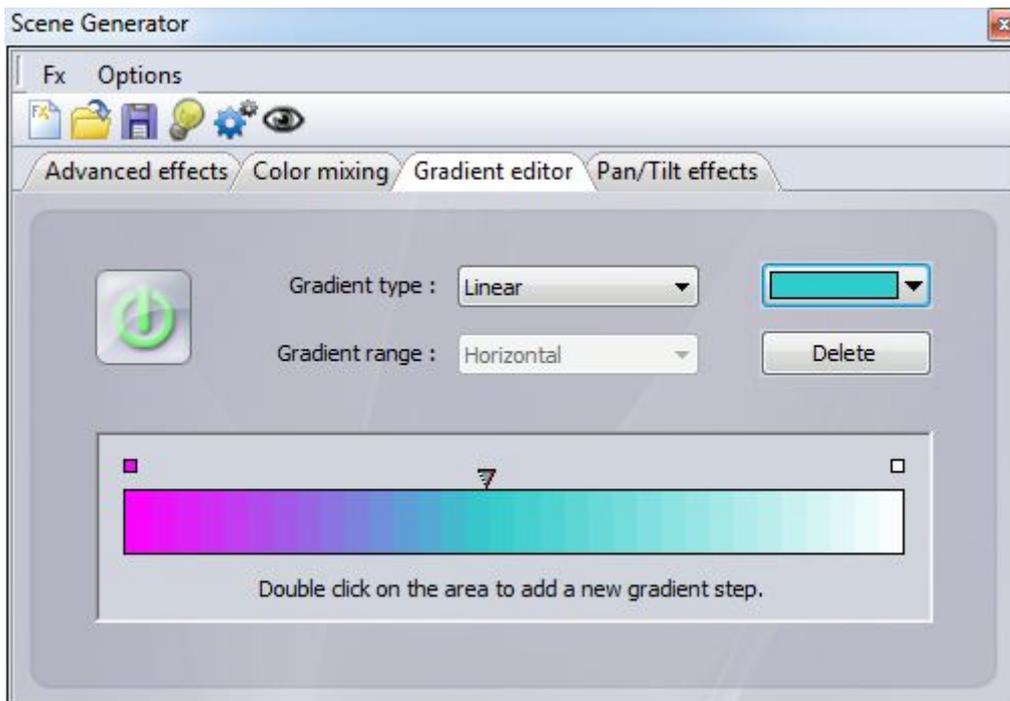
- Switch the effect on/off
 - Play the sequence
 - Forwards/Backwards
 - Select and move points
 - Move all points together and resize the movement area
 - Add points to create a more complex shape
 - Remove points to create a more simple shape
 - Add a delay to each fixture
 - Change the interval time between each point to speed up/slow down the effect
- You can change the starting position by right clicking the yellow target and dragging it around the shape.



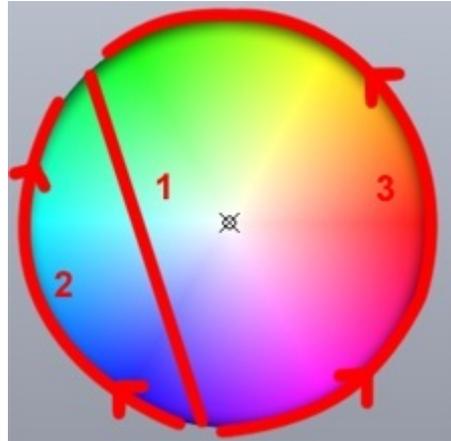
Gradient Editor

The gradient editor can be used to make a static gradient across a set of fixtures.

- Switch the effect on
- Select the small square on the left and choose a color from the combo box at the top right Do the same for the color on the right of the gradient.
- Double click on the gradient strip to add a new gradient point
- Click the triangle to change the color of a gradient point and drag the triangle to move the gradient point. Select a triangle and click delete to remove a gradient point



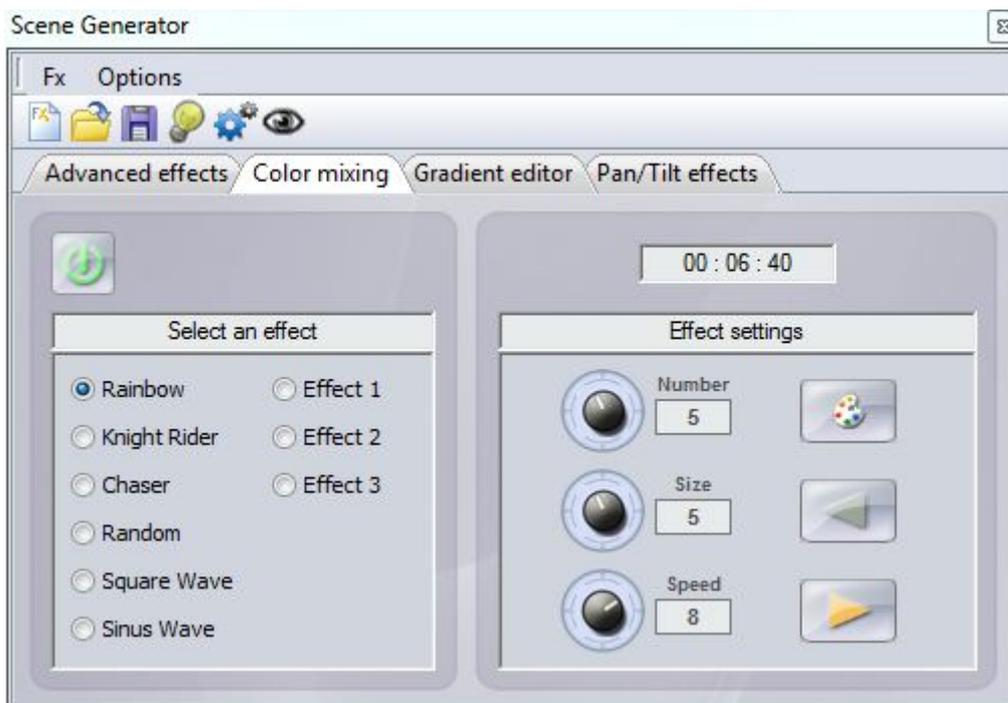
The gradient type determines how a color will move to the next. HSL stands for Hue, Saturation, Luminance. Linear (1) will move smoothly between 1 color and another, HSL shortest (2) will find the shortest way to move from one color to the next and HSL Longest (3) will take the longest way. For example to create a gradient which goes around the full color wheel, you could set a start and end color as the same color and use the HSL longest option.



Color Mixing

Use this tool for a quick and straightforward way to create dynamic color mixing effects. Choose the effect type on the left and set the properties on the right.

- Effect Type: choose from 9 effect types
- Number: Specifies the number of colors (this is not always adjustable). Select the color palette button to change the colors
- Size: Set the size of the effect
- Speed: Make the effect faster or slower
- Arrows: Click the arrows to set the direction of the effect



Advanced Effects

The advanced effects tool allows you to assign a waveform onto a channel. Select the channel on the left and then select the waveform type from the combo box in the top right.

-Time: The time of the effect can be set below the waveform

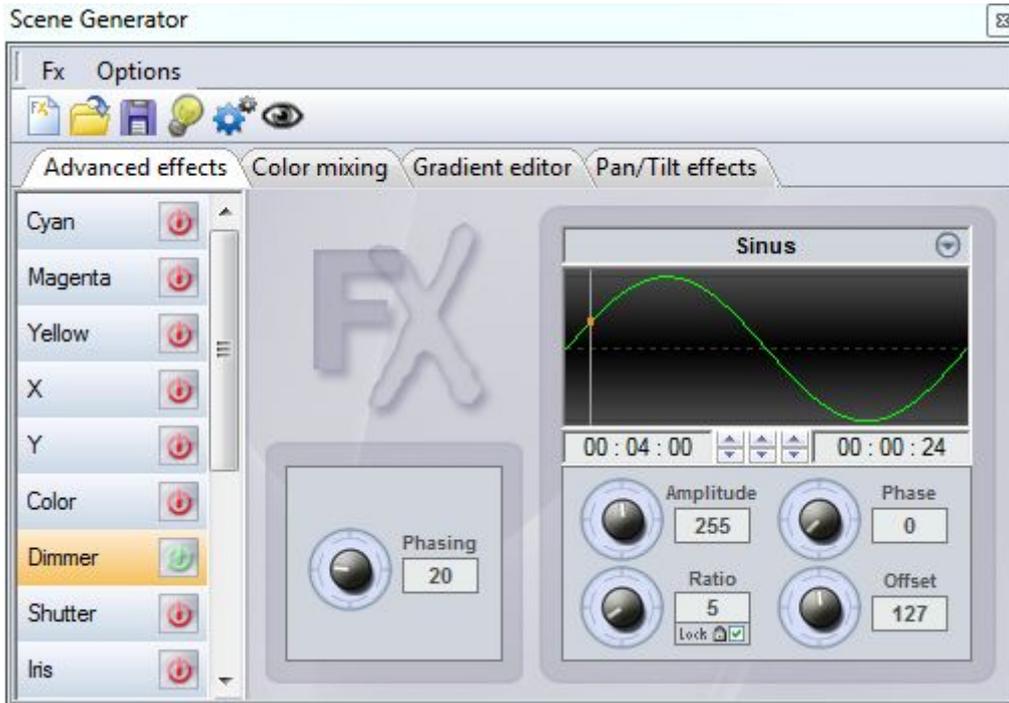
-Phasing: Sets a different starting position for each lighting fixture

-Amplitude: Stretches the wave on the Y axis

-Ratio: Stretches the wave on the X axis. Select the lock checkbox to lock the ratio to each wave cycle

-Phase: Moves the wave forwards and backwards to set the starting point

-Offset: Moves the wave up and down



Matrix Effects

This tab will only appear if you have a matrix of fixtures selected when the effects generator is opened. Select the + icon to create a matrix effect. Double click the layer to change the name and select the effect type from the type combo box. The following effects are available:

Color- Choose the color by selecting the color icon in the top right

Picture- Choose jpg, bmp or gif images by selecting the yellow folder icon

Video- Choose an avi video by selecting the yellow folder icon

Gif- Choose an animated gif image by selecting the yellow folder icon

Effect- Select from one of five color mixing effects specially designed for displaying on a matrix

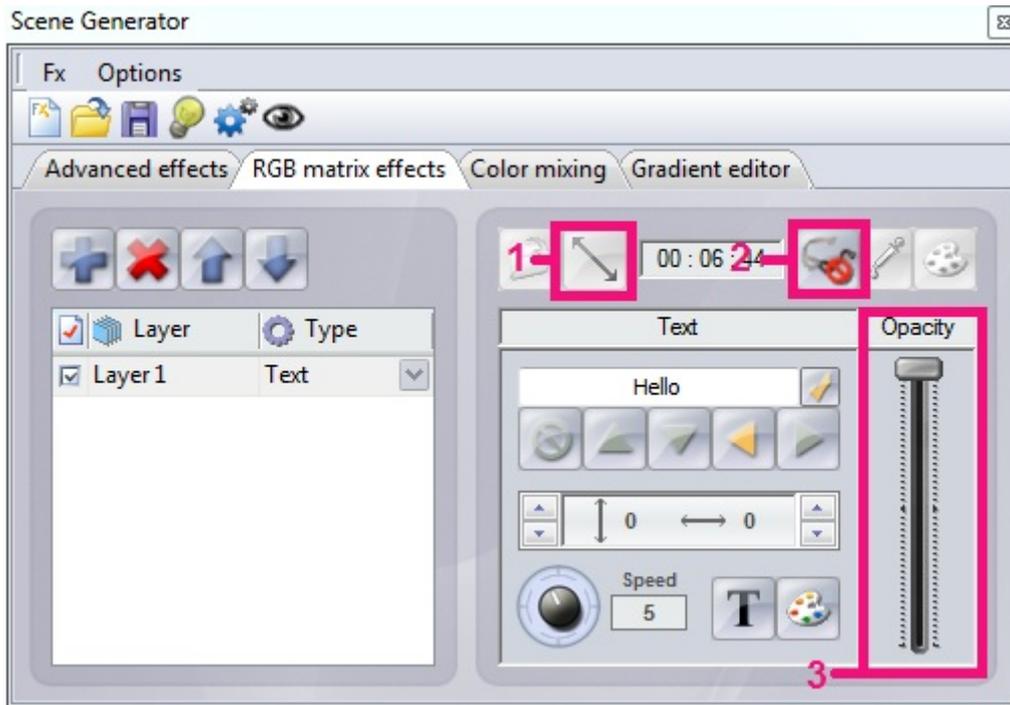
Text- Allows for text to be displayed on a matrix. Type the text and select the tick icon. Use the arrows to set scrolling text and change the default horizontal and vertical position using the 2 selectors at the bottom. The speed of the scroll can be selected in addition to the font and color.

Other properties

Keep proportions (1): This allows for the image, video or gif proportions to be set to the size of the matrix

Mask (2): Here you can set a color to be transparent (useful when using several layers). Use the Pipette to select a color

Opacity (3): This fader allows the transparency of the selected layer to be set (useful when using several layers)



Generating an Effect

Click the cog icon to generate an effect. If you are generating an effect to be written to a stand-alone interface with limited memory, you can compress the effect by selecting options->sequence generating parameters.

5.Live

5.1.Controlling Your Show

Click the **Live** tab to enter Live mode. This is where the show is controlled. Clicking any scene button will activate it and depending on the release mode setting will deactivate other playing scenes. Scenes can be assigned colors by right clicking and selecting a color.

It is possible to change the speed or brightness of a scene. To do this, right click the scene and select **Enable speed fader** or **Enable dimmer fader**.

If you want to change any of the scene properties without navigating back to edit mode and halting your show, right click the scene and select **Properties**.



Scene Groups

Groups can be created to organize similar scenes. Groups are also useful for creating cue-lists. Click here (1) to show the groups. All scenes within a group can be assigned a color by right clicking the group and selecting a color. Use the play and stop buttons to play through a group (make sure the **Number of Loops** and **Jump** properties have been set correctly if you want to automatically jump through a group). Use the previous at next icons next to the group name to jump through the scenes manually.

Tip: To create a GO button (commonly found on a traditional desk), right click the NEXT icon and select **Link with control**.

Selecting the arrow in the top right corner of the group header will collapse the group. Clicking here (2)

will collapse all groups.



Scene Properties

Right click a scene to modify the properties. The following options are available:

Color: Change the color of the button ribbon. Note that if the buttons group is colored, the group color will override the scene color. To disable this, disable 'Group color' in the group menu

Time: Choose between time and BPM (see the audio triggering topic)

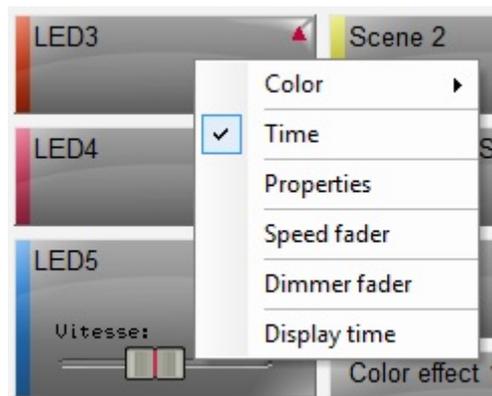
Properties: Opens the scene properties window and allows you to adjust the same properties which can be found on the Editor screen (the scene must be deactivated before this option will appear in the menu)

Speed Fader: Displays a fader on the button which allows the speed of the scene to be adjusted

Dimmer Fader: Displays a fader on the button which allows the brightness of the scene to be adjusted

Volume Fader: Displays a fader on the button which allows the volume of the media associated to the scene to be adjusted (a media must be associated to the scene before this option will appear in the menu)

Display Time: Display the current running time of the scene



Other Live Functions

There are a selection of other live functions available from the toolbar:

Display groups: Shows and hides groups

Compact mode: All groups will be minimized

Pause: The entire show will be paused

Previous/Next: Every activated scene will jump to the next

Fade: Enables/Disables fading for the entire show

Blackout: Closes the dimmer and shutter of all fixtures

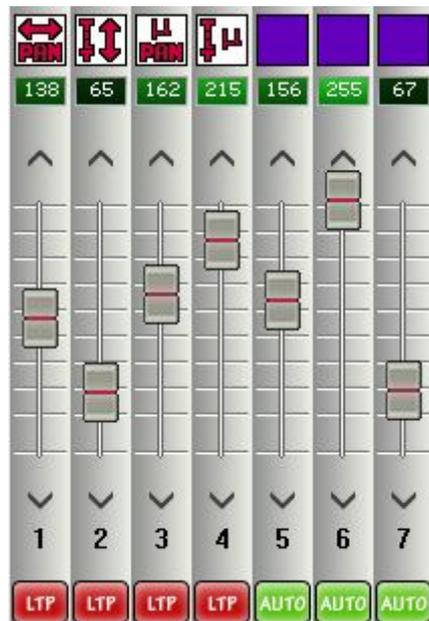


5.2.Live Actions

The software allows you to make changes during a show which have not been programmed. For example, maybe you want to override the pan and tilt channels on a moving head fixture to follow a performer on stage, or perhaps the performer has asked for all the lights to be made pink which has not been pre-programmed!

An edit which has been made in Live mode is called a 'Live Action'. To create a live action, start by selecting the lighting fixtures you want to edit and then change the preset. Notice that the AUTO mode will automatically change to LTP (Latest Takes Priority). This means that the latest action will take priority. If a scene is activated which uses the channel, the channel will output the scene value, if the channel is modified manually, it will override the scene.

If LTP is clicked, it will change to HTP (Highest Takes Priority). This means that the software will output whichever value is the highest (the scene or the manual fader adjustment).



Resetting a Live Edit

To reset a live edit, right click at the bottom of the channel or preset you want to reset and select AUTO. If several edits have been made, it is possible to reset a group of live edits at once. There are 3 colored arrow buttons to do this:

Blue Arrow: Resets the live actions of the selected fixtures

White Arrow: Resets the live actions of the preset window which is currently being shown. For example, this is useful if you want to remove all gobo edits at once.

Red Arrow: Resets all live actions. This is a quick way to clear everything and revert back to the pre-

programmed show.



5.3.Effect Buttons

An effect button takes a live edit and saves it for use later on in the show. To create an effect, first create a live edit (as described in the previous topic), then click here (1) to create an effect button. You will be presented with the following dialog:

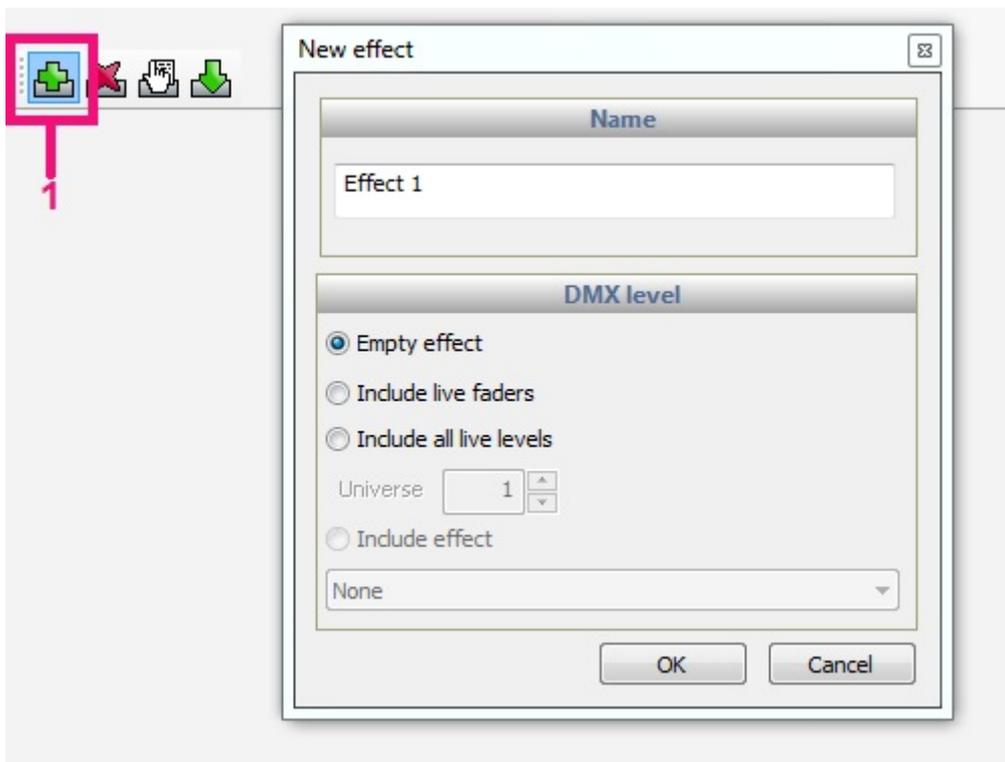
Name: Choose a name for the effect button

Empty Effect: Creates an empty effect button

Include Live Faders: Takes the value of any edited fader and saves it inside the effect button

Include all Live Levels: Sets all faders to LTP and saves the current value of each fader

Include Effect: Take levels from another effect



Effect Properties

Once an effect has been created, the effect properties dialog will automatically appear:

General: Change the name of the effect

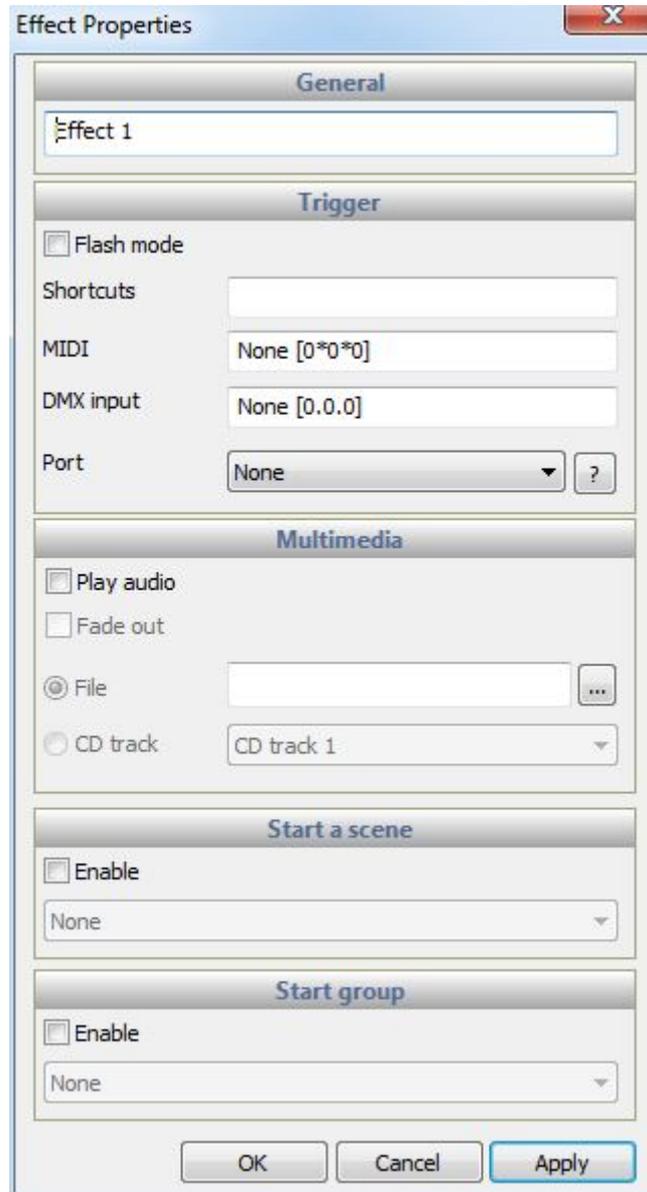
Trigger: Set external trigger commands for the effect

Multimedia: Trigger an audio or video file from the effect button

Start Scene/Start group: A scene or group can be started when the effect button is activated

To modify the contents of an effect, open the effect properties window, modify the appropriate channel values and then click 'Apply'.

Notice that when the effect properties window is open, all channel faders will return to 0, except for the channels being used inside the effect. The faders will be marked with 'EFF'. This helps to identify which information is being stored inside the effect. All changes made whilst the effect window is open will be applied to the effect. To remove a channel from the effect, click 'EFF' to set the mode back to 'OFF'.



It is possible to import data from another project by selecting the import effect button.



6.Triggering

6.1.Easy Remote Designer (formerly DVS)

The Easy Remote designer is a powerful tool which allows you to design your own interface. The interface can be opened automatically in full screen and locked. The Easy Remote screen can also be synchronized with an iPad or Android tablet using the Easy Remote app over WiFi.

Click [here](#) to open the Easy Remote designer.

Adding Objects

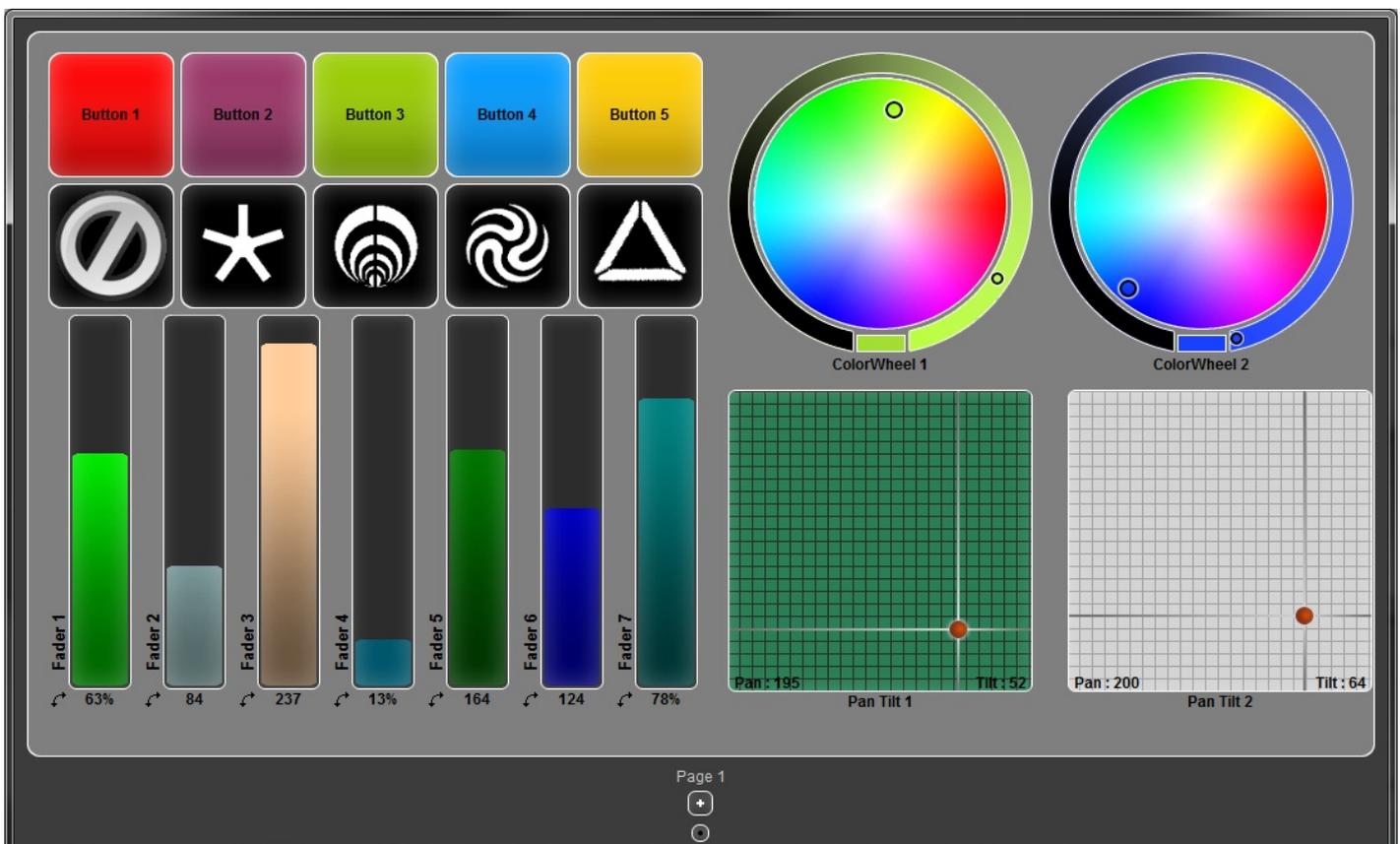
Almost all functions are accessed by right clicking. Buttons, faders, text labels, XY grids and color wheels can be added. Selecting 'Add Button (fast)' or 'Add Fader (fast)' allows you to quickly add a button or fader without assigning a command.

Objects can be moved by holding control and dragging the component, and resized by holding shift. Make sure that 'Lock Objects Positions' is unchecked first.

Once an object has been added, it must be paired with an action inside the show. To do this, right click the object and select 'DVC Commands'.

Target: Set whether you want to control a fixture, fixture family, scene, effect, group or global property

Action: Set whether the selected function should toggle, start, stop, speed up, slow down or reset



Other Functions

New/Open/Save/Save As: Manage the Easy Remote design files (.era)

Resize and rearrange: automatically sets each objects size to the default and auto-arranges to take up the minimum amount of space

Lock objects positions: Prevents the user from moving or resizing objects

Background settings: Choose a background color or load an image

Grid: Display a grid and enable snapping to help keep objects aligned

Screen settings: Keep the Easy Remote designer on top of all over windows, force full screen and minimize the designer to the taskbar

Lock: Allows you to lock the app in full screen and from editing with a password. If the password has been lost, close the Easy Remote app and open the dvs.ini file with a text editor.

Shut down computer: Allows you to shut down the computer directly from the Easy Remote screen, even if a password has been set.

iPad and Android Tablet

With the Easy Remote app for iPad and Android tablet, it is possible to send an Easy Remote design to the tablet and control it over WiFi. The app can be downloaded for free from the Apple App store and Google Play.

Connect the app and PC to the same WiFi network, or create an a computer to computer network.

Information on creating a computer to computer network can be found here:

<http://windows.microsoft.com/en-us/windows-vista/Set-up-a-computer-to-computer-ad-hoc-network>

Once the network has been set up, make sure the Easy Remote designer is open and open the Easy Remote app. The app will automatically detect all instances of the Easy Remote designer. Simply select the instance you want to connect to and the screen will be automatically built and linked.

6.2.Easy Remote Web

Easy Remote Web is a tool which has been designed for users who are not using an Android or Apple device. This tool allows you to control your show through a compatible web browser.

1- Click here to open the Easy Remote Web tool

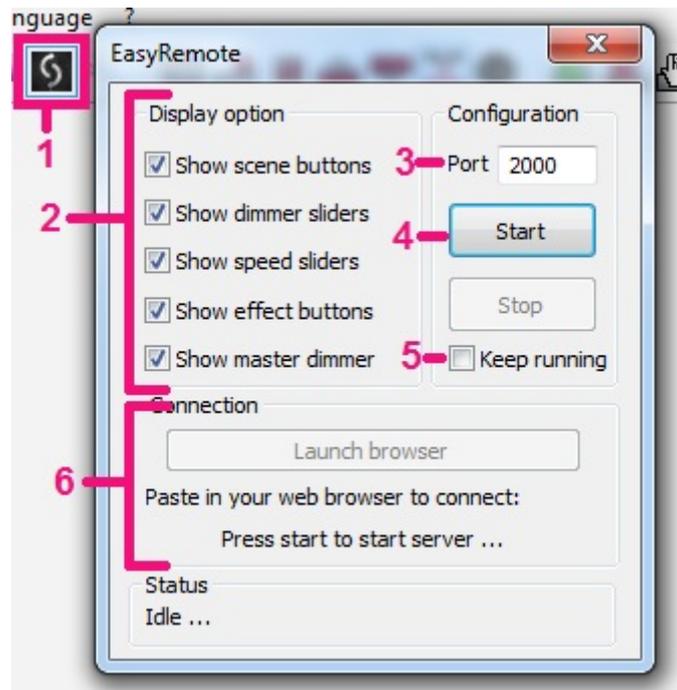
2- Choose which objects you would like to include within the browser

3- Select the port you would like to use and make sure that it is not blocked on your router

4- Click 'Start'

5- Click 'Keep Running' if you would like the web page to still be available after the Easy Remote Web tool has been closed

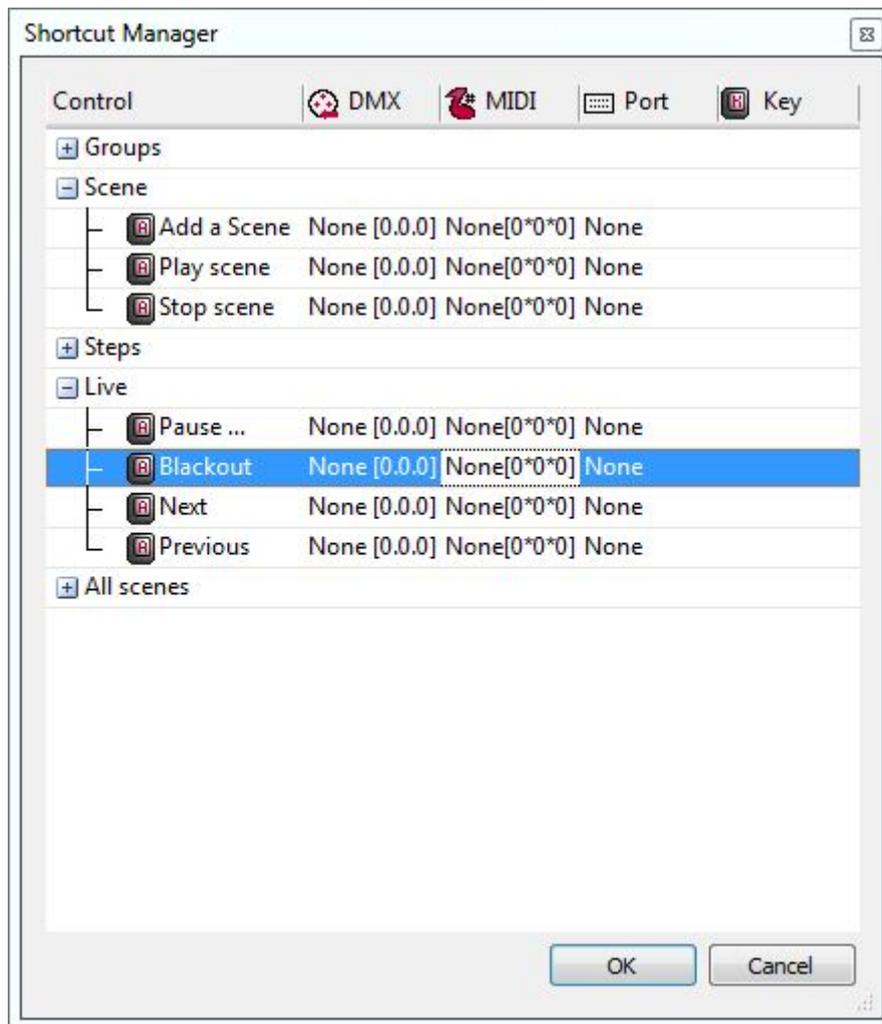
6- Copy the web address from here and click launch browser to test



6.3.MIDI

It is possible to control almost any Live software function from a MIDI controller using MIDI note and cc messages.

To trigger a command, open the Shortcut Manager from the tools menu, double click the relevant MIDI cell and trigger the appropriate command from the MIDI controller. Triggers can be set for scenes from the properties window.

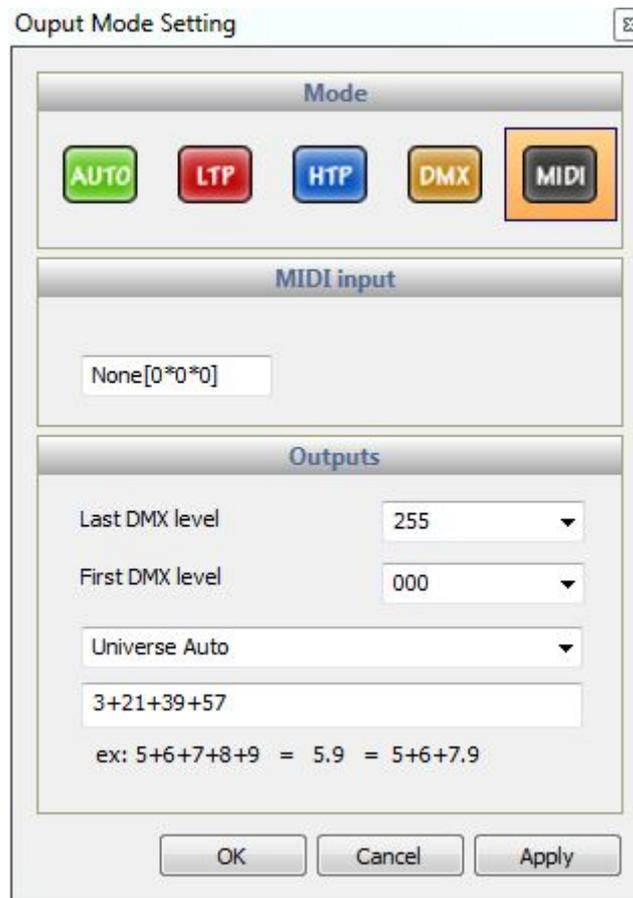


Channel Fader Control

It is also possible to control the DMX channel faders from a MIDI controller. To set this up:

- Right click the bottom of a channel fader and select MIDI input
- Click inside the MIDI input cell and trigger the appropriate command from the MIDI controller
- Select the fixtures you want to control in the group window (note: even if a channel is assigned to a MIDI command, the fixtures must be selected before the MIDI control will work)

When the output faders are being controlled by MIDI in Live, they work as LTP (latest takes priority). When the MIDI command is triggered, the channel fader will immediately be under MIDI control and will override any value pre-programmed in the activated scene. If a scene is later activated, the channel fader will be overridden by the scene if the state is not set to OFF.



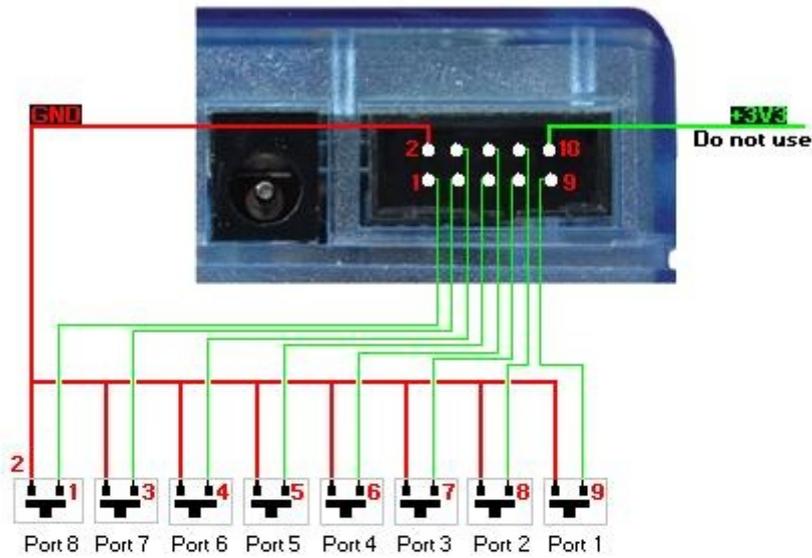
6.4.DMX

Channel faders and several software functions can be controlled from a DMX input. First of all, check that your DMX interface has a DMX input connector. Some interfaces require a gender changer for this. Make sure 'DMX Input' is checked within the 'Options' menu and then open the 'Interface Manager' to configure the DMX input (see the 'Multiple DMX Universes' topic for more information).

6.5.Ports

Some USB-DMX interfaces have a HE10 socket which is a 10 pin socket mounted on the rear of the interface. Scenes can be triggered by connecting these pins with the ground pin both in Live and in Stand Alone. Any device can be connected through a relay such as a panel of buttons, a light sensor, IR detector or HF receptor.

There are 8 ports which can be used to trigger 8 scenes, or the ports can be compined in binary to trigger up to 255 scenes. The ports are dry contact and only a momentary contact is required to trigger a scene. Scenes are not deactivated when the port is released. The diagram below demonstrates which pins needs to be bridged to create a trigger.



	Port 1 1	Port 2 2	Port 3 4	Port 4 8	Port 5 16	Port 6 32	Port 7 64	Port 8 128
Address 1	ON							
Address 2		ON						
Address 3	ON	ON						
Address 4			ON					
.....
Address 254		ON	ON	ON	ON	ON	ON	ON
Address 255	ON	ON	ON	ON	ON	ON	ON	ON

Components to buy to make the cable	Pictures	Ref. Farnell	Ref. Radiospares
HE10 Connector female 10 pins (quantity 2)		636034	454-2362
Ribbon cable (Quantity 1m or +)		148011	246-8133

Connection
to keypad 4 buttons

**Here is the description of the
connection.**

Only 5 wires are required to use the 4 buttons of the keypad, but we advise to connect the 10 wires of the ribbon cable.

Connection
to DMX interface



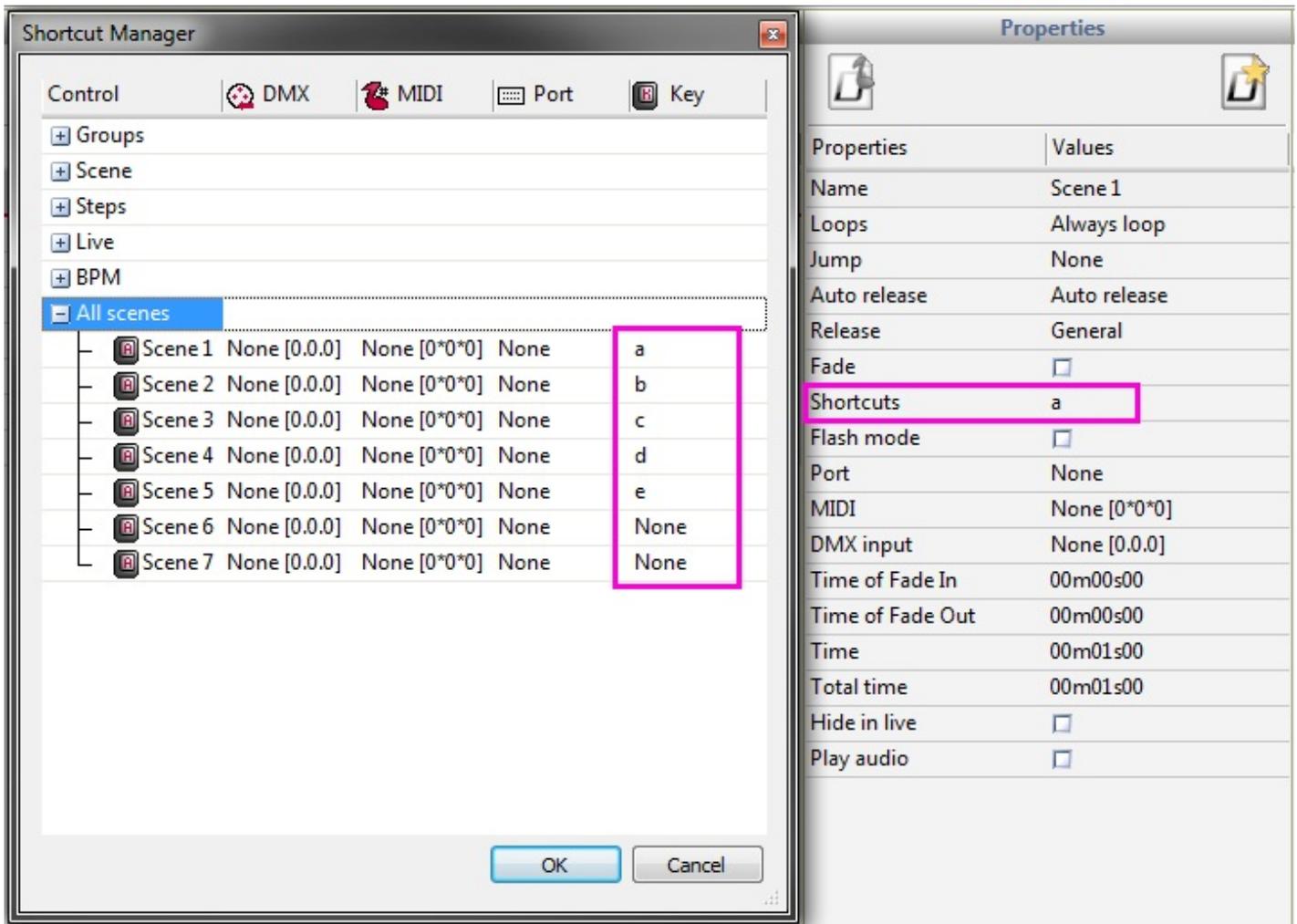
Storm Interface - Keymat
14 Bentinck Court, Bentinck Road, West Drayton,
UB7 7RQ, England
Tel: +44 (0)1895 431421 Fax: +44 (0)1895 431132
Email: sales@keymat.com

Storm Interface USA
364 Pennsylvania Avenue, Suite 202,
Glen Ellyn, Illinois, 60137, USA
Tel: 630 469 2981 Fax: 630 469 2975
Email: sales.usa@storm-keypads.com

www.storm-keypads.com

6.6.Keyboard

Scenes can be triggered from a computer keyboard. Keyboard triggers can be assigned within the shortcuts window by typing one or more characters into the 'Keys' field, and in the scene properties window by typing one or more characters into the 'Shortcuts' field.



6.7.Clock/Calendar

Some USB-DMX interfaces contain an internal clock and calendar which can trigger scenes in stand alone (this function is not available in Live). The time and date can be set within the stand alone window. See the stand alone topic for more information.

The image shows a software dialog box titled "Scene 1". It is divided into three sections: "General", "Trigger", and "Date & Time". The "Date & Time" section is highlighted with a pink border. In this section, the "Enable" checkbox is checked. Below it, there are radio buttons for "Appointed time", "Repetition", "Everyday", "One day", and "Settings...". The "Repetition" radio button is selected. To the right of the "Repetition" radio button, there are time selection fields: "From" (10:00), "to" (23:59), and "Repetition" (00:10). Below these are "Month" and "Day" selection fields, each with "From" and "to" sub-fields, all currently set to "All". At the bottom of the dialog are "OK", "Apply", and "Cancel" buttons.

6.8.Audio

The audio analyzer is an advanced BPM (beats per minute) detection tool which allows you to synchronize your lighting to the music in 2 different ways.

- By calculating the average BPM of an incoming audio signal and sending a message to the control software at a constant beat
- By calculating the pulse of an incoming audio signal and sending a message to the control software each time a volume threshold is reached

The BPM is represented by the Red LED and the Pulse represented by the green LED. To set a scene to follow the BPM or pulse, right click the scene.

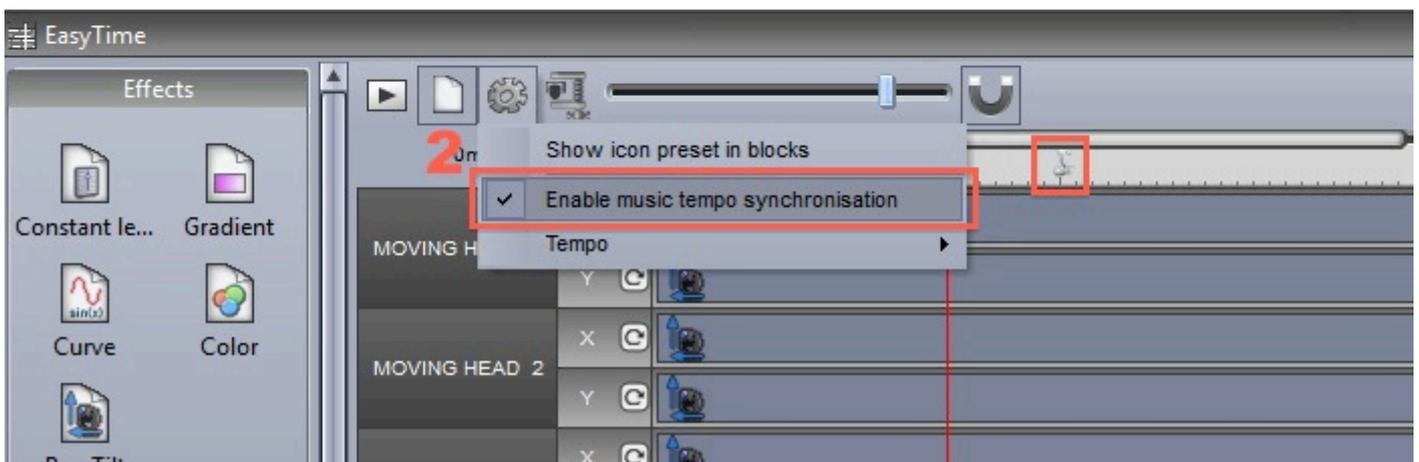
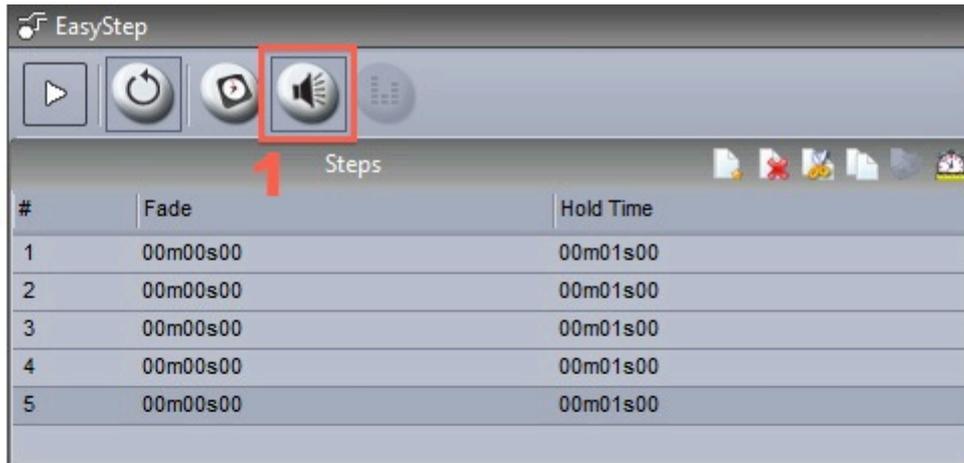
BPM on step: Changes step each time a BPM message is received

BPM with fade: The same as BPM on step, except that the fade times are played between each step. If the BPM message comes before the fade is over, the next step will be triggered and the fade interrupted

BPM on scene: The scene will be re-triggered from the beginning each time a BPM message is received

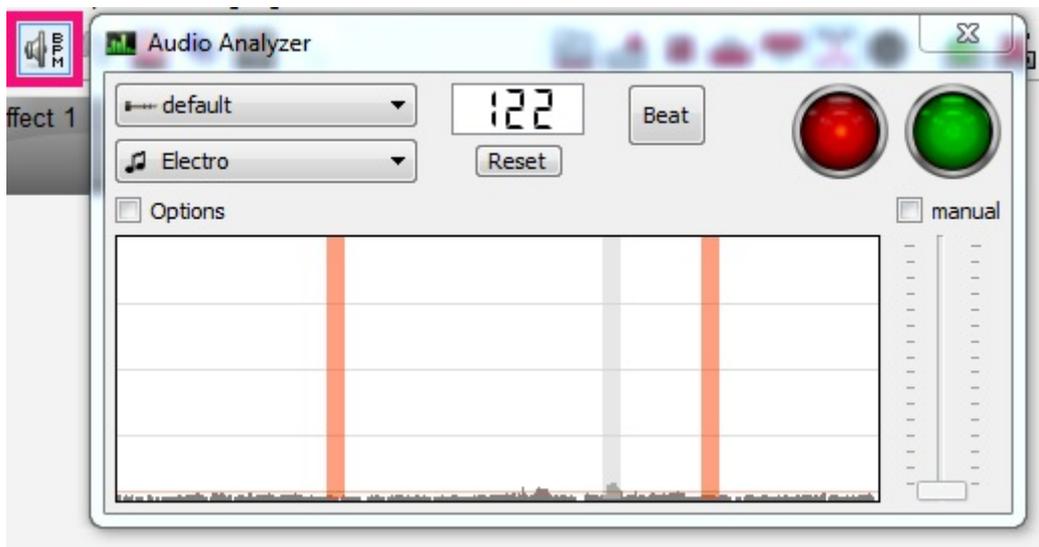
Pulse on step, pulse with fade, pulse on scene: The same as BPM, except that the pulse message will be

read.



Click here to start the Audio Analyzer.

To begin with, select the input connection and type of music. Select manual and adjust the fader on the right if pulse detection requires a manual threshold to be set. As long as there is a healthy input signal, the Audio Analyzer should work well without any other settings to be adjusted.



Advanced Settings - Filters and Presets

To access the advanced settings, select the 'Options' checkbox. The following settings are available:

Presets- All settings can be saved into a preset. To save a preset, select 'Add'

Name- enter a name for the selected preset (the default presets cannot be renamed)

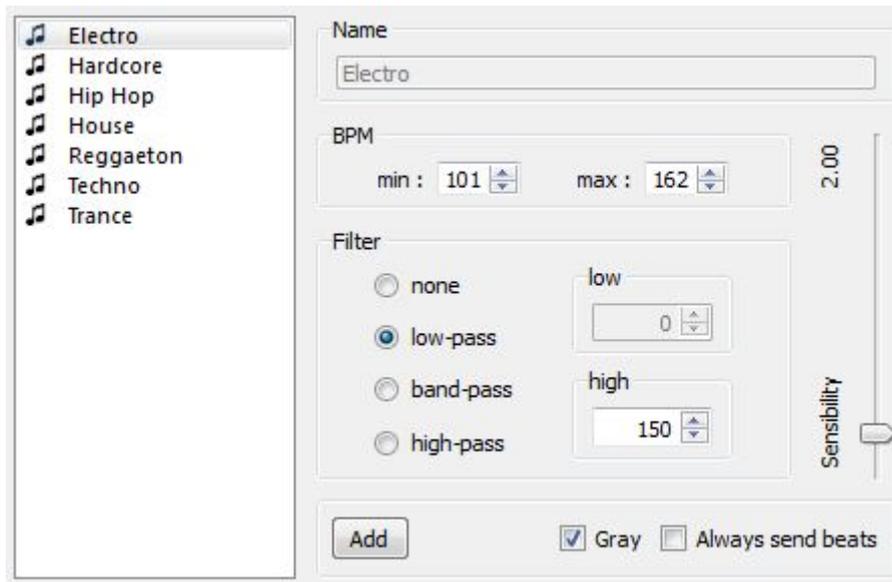
BPM- Set the minimum and maximum BPM to be detected

Filter- Tell the Audio Analyzer to only analyze certain frequencies. For example, to just listen to the bass frequencies, add a low-pass filter of 150Hz or less

Always send beats- The Audio Analyzer will carry on sending the BPM, even when there the music stops

The Audio Analyzer calculates the BPM by detecting peaks in the audio. The peak is calculated by taking a small sample of the incoming audio signal (a few milliseconds), calculating the average volume level and comparing this to the average volume level across a larger sample (a few seconds).

Sensibility- The sensibility determines how many times higher the small sample level must be then the larger sample level to be marked as a peak. For example, if the sensibility set to 2 and the average volume is 20%, then the incoming signal must reach 40% to be marked as a peak. Decreasing the sensibility will allow for more peaks to be detected and setting a higher sensibility will detect less peaks but will generally be more reliable. Highly compressed music requires a lower sensibility.



Advanced Settings - Durations

Average- Sets the length of the larger sample window to calculate the average volume level

BPM- How long to wait before outputting a different BPM

Normalization- If the audio input is very quiet, the Audio Analyzer will turn up the volume level after the amount of time set. For example, the default value is set to 5 seconds, therefore the volume level will be analyzed over a 5 second period. If the highest level over this period is 50%, then the input level will be multiplied by 2

Normalization %- Sets the threshold for when to normalize. By default, this value is set to 50%, so if the average volume is above 50% it will not be normalized

Stop detection / %- If 'Always send beats' is not checked, the Audio Analyzer will stop sending beats to the control software after the specified time when the volume level is below the % specified. By default, if the volume drops below 4% for over 0.5 seconds, the Audio analyzer will stop sending beats. If there is a lot noise on the audio input, it is advisable to increase this level

Durations					
Average :	<input type="text" value="2.00"/>	s	BPM :	<input type="text" value="10.00"/>	s
Normalization :	<input type="text" value="5.00"/>	s	when volume level is below :	<input type="text" value="50.00"/>	%
Stop detection :	<input type="text" value="0.50"/>	s	when volume level is below :	<input type="text" value="4.00"/>	%

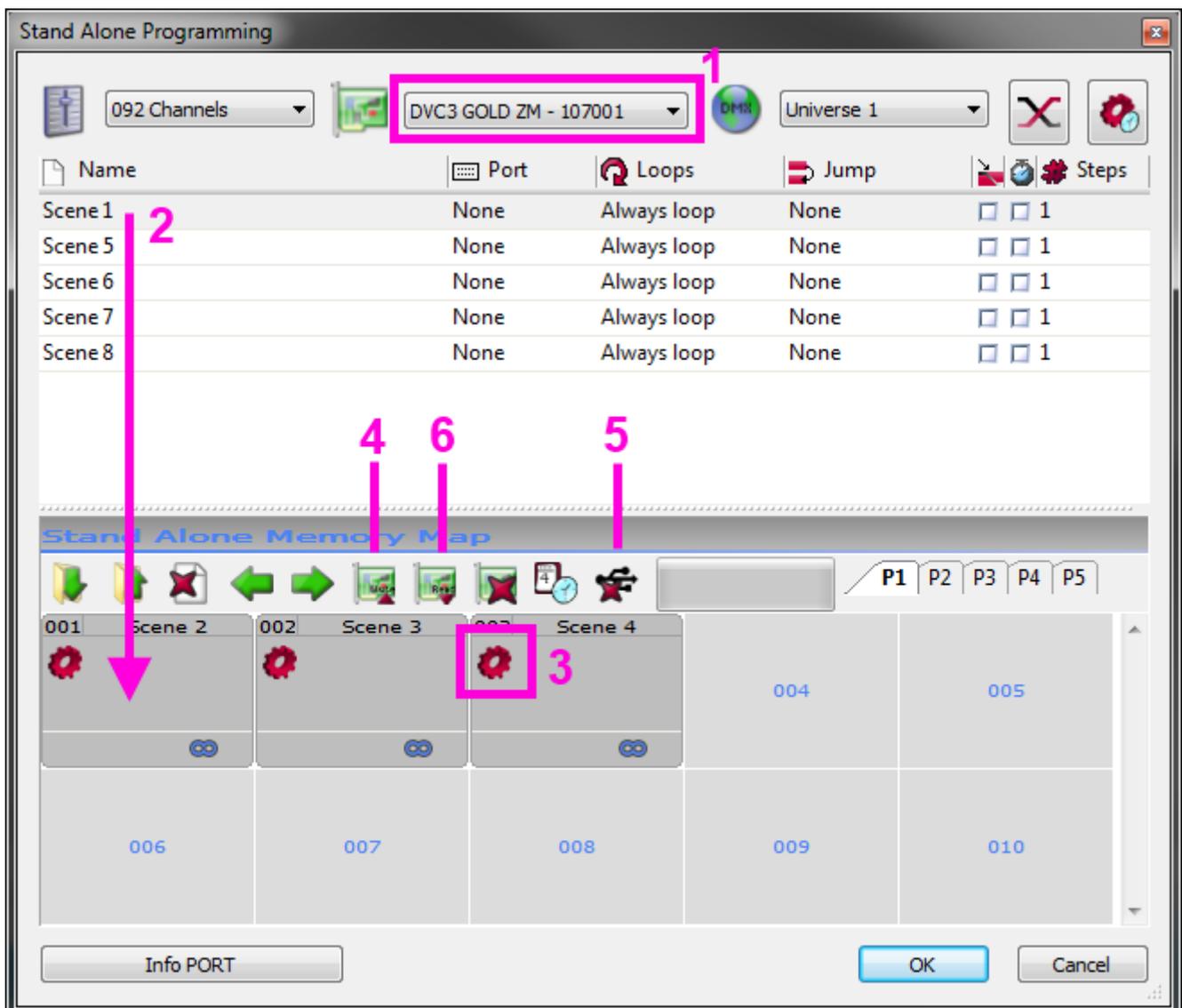
7. Other Information

7.1. Stand Alone

Some USB-DMX interfaces contain stand alone memory. Scenes can be programmed in the control software and stored inside the interface. This can be useful as a backup, for an architectural install or as an alternative to control the lighting when a computer is not available, for example perhaps there could be a scene with everything 100% for the cleaners.

To begin with, open the 'Stand Alone Programming' dialog from the 'Tools' menu. If this window is empty, there is no stand alone compatible interface connected.

- 1- Select the interface you want to use
- 2- Drag and drop the available scenes from to top area to the memory map in the bottom area
- 3- Click here to select stand alone settings.
- 4- The memory can be written here
- 5- Clicking here will put the interface into stand alone mode and disconnect it from the control software
- 6- The memory can be read from the interface here



7.2. Multiple DMX Universes

The interface manager can be accessed from the tools menu. It displays information on compatible USB-DMX interfaces which are connected. Here you can view the interfaces serial number, set which connections will be used for a DMX input and output and patch a software universe number to an output.

The "Interface types" buttons allows you to choose which type of interface you want to control. The available options are :

- Demo : no interface will be detected
- USB : only USB plugged interface will be detected
- Ethernet : only interface on the network will be detected
- All : all types of interface will be detected



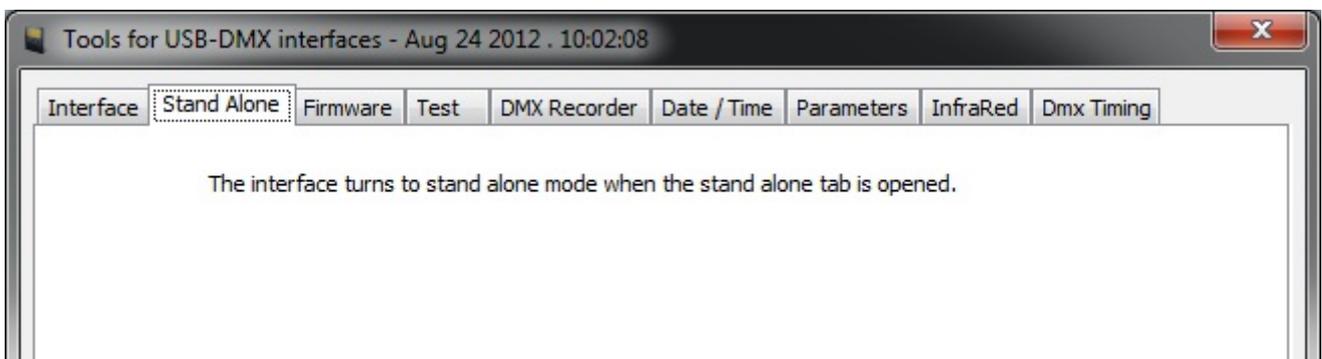
7.3. Hardware Configuration - Tools

A set of tools is available to help you maintain your hardware. You can access these tools from the software installation folder. The tools are compatible with the SUIDI5,6,7,8 and touch sensitive interface products.

The interface tab shows us which product we have connected, along with the serial number.



If you wish to test your product in stand alone whilst it is connected to your computer, click the stand alone tab.



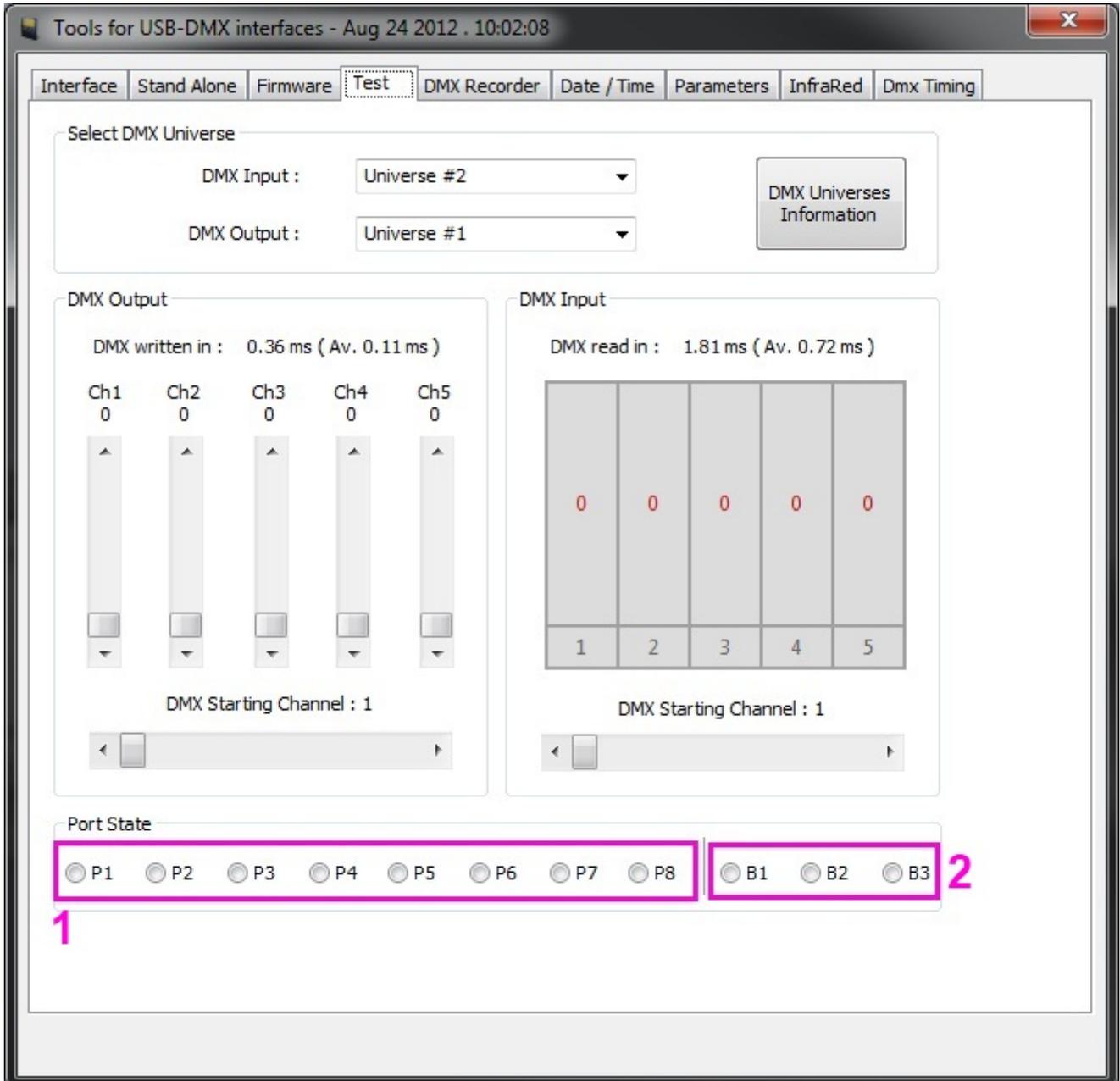
The interface firmware can be updated here. The firmware is stored inside the interface and upgrading it

is a common fix to a wide variety of problems.

The DMX input and output can easily be tested on the **Test** tab. If your interface has two DMX connections, connect the output with the input.

If your interface is working correctly the input values on the right should change as you move the faders on the left.

The buttons on your interface can be tested here(1) and if you are using the rear ports, these can be tested here(2).

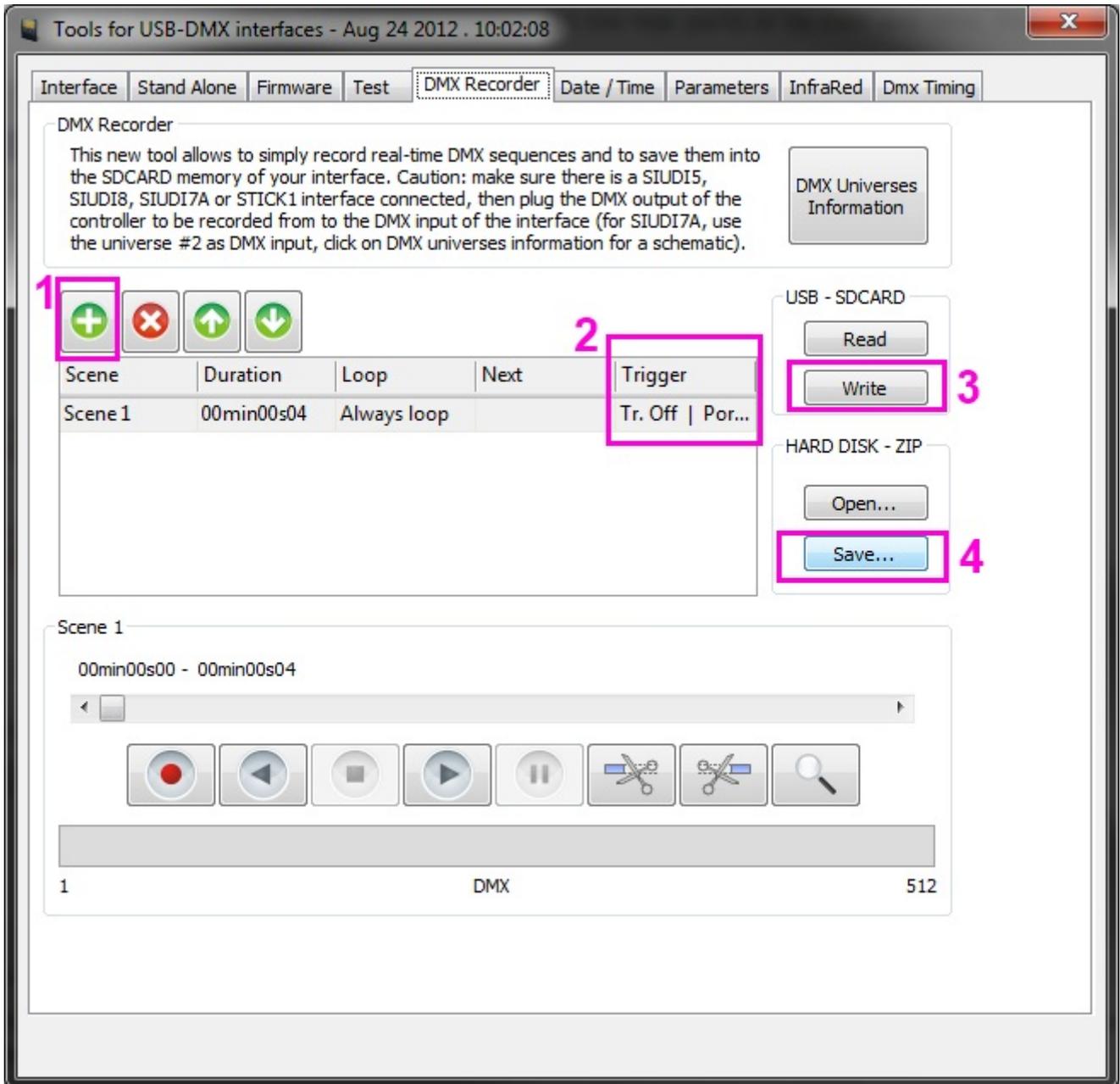


If you have a show on a DMX desk, you can transfer this directly to your USB-SD interface using the DMX Recorder tool.

Click here(1) to create a new scene and then simply click record. If you want to trigger your scenes with

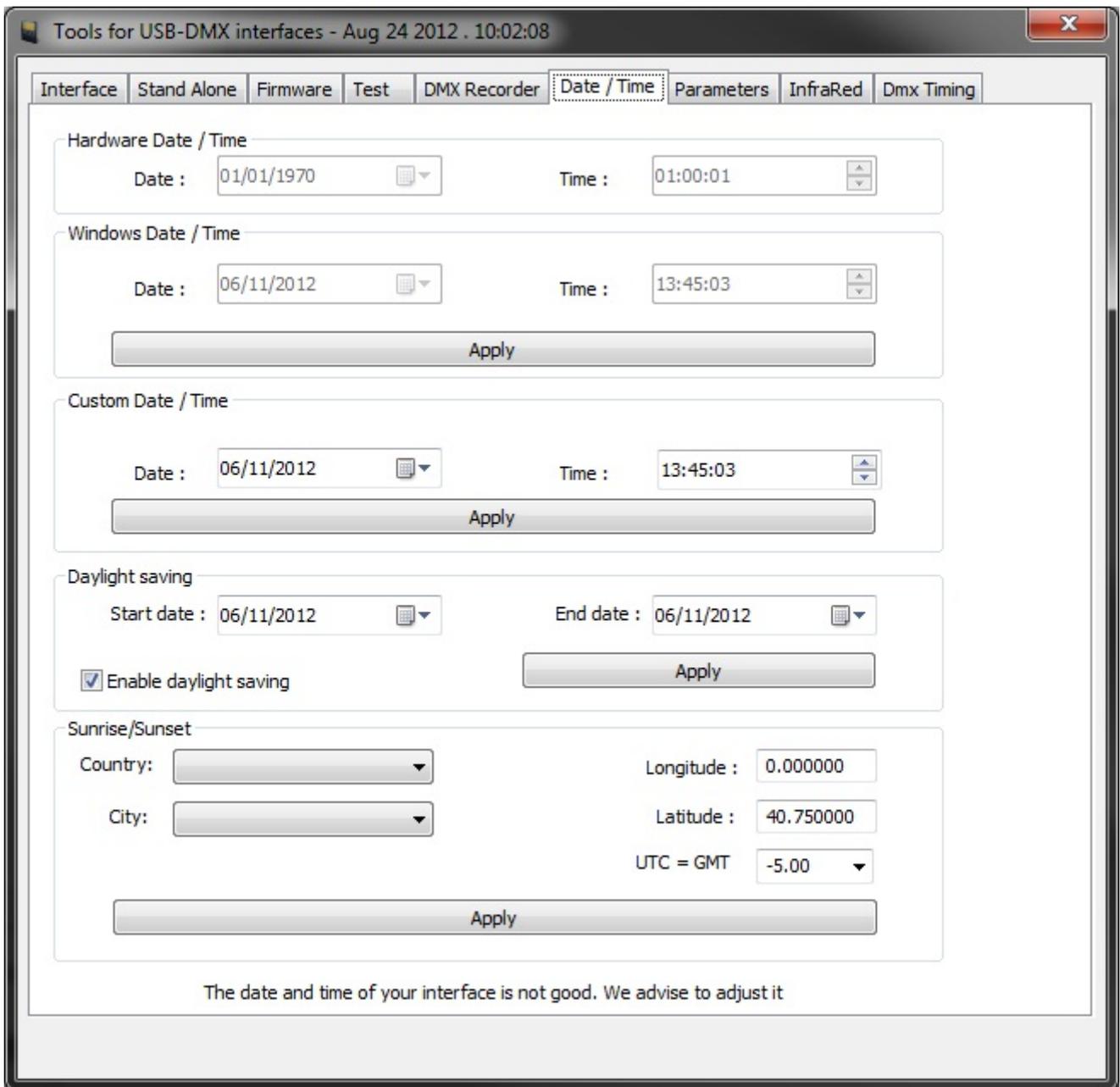
the rear ports or by date and time, the triggers can be set up here(2).

Once you are happy with your recording, click here(3) to write to the interface memory, or click here(4) to write to the hard disk for later use.

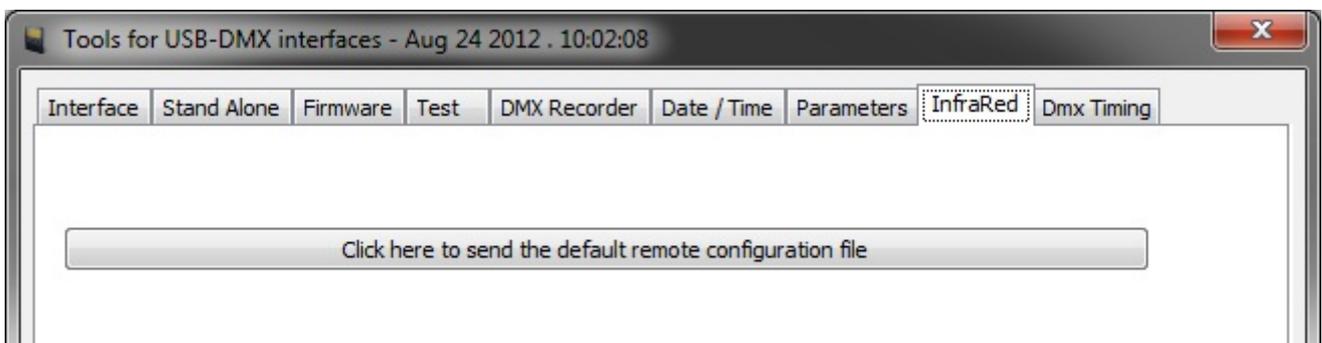


Some interfaces have an internal clock and calendar. You can update this by synchronizing it to the Windows clock and calendar, or by selecting a custom date and time. You can also set a start and end date for the internal clock to automatically move forward one hour.

If you have a compatible interface connected, you will be able to set a location. This will allow for the triggering of scenes at Sunrise and Sunset.



The infra red tab allows you to send the default remote configuration so the unit can be used with one of our official remote controls.

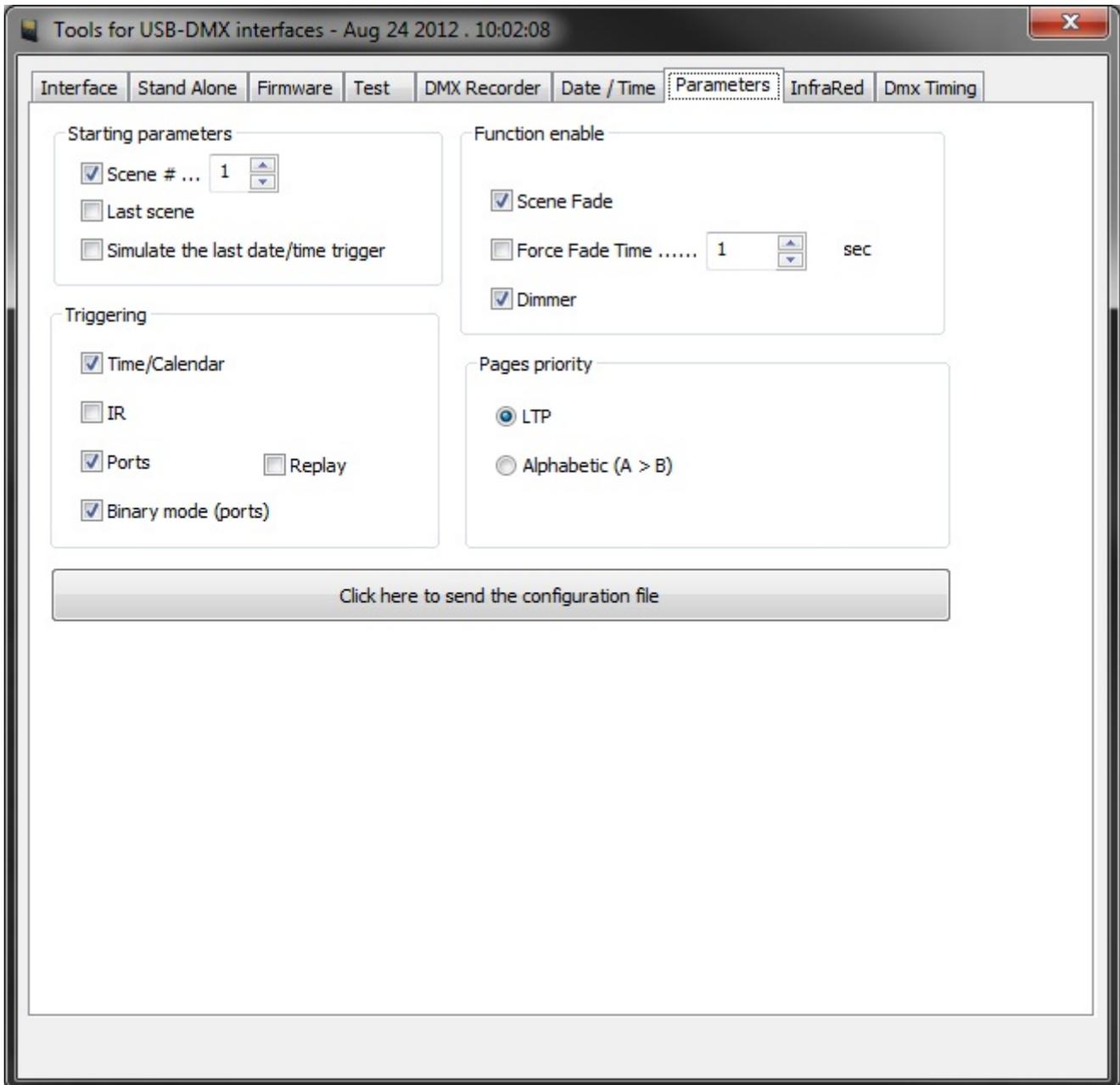


The starting parameters group allows you to set the default state of the interface when it is first switched on. The Triggering group allows you to disable functions which are not needed or help troubleshoot a

problem.

Functions such as the Dimmer fader on the touch sensitive interfaces can be disabled within the Function Enable group. If you have a multi page interface connected, the page priorities can be changed. LTP means that the last scene you activate will always take priority over the rest.

Once you have adjusted your settings, click at the bottom to send the configuration file over to the internet. Note that your interface may disconnect from the USB for a few seconds.



7.4. Further Support

For further support, check out the video tutorials and forums available on our website. If you cannot find an answer to your question here, send us a mail or call us and we would be happy to help!