



# USER MANUAL

## HOW TO CREATE SCENES & PROGRAMS

V 1.7.0

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## INTRODUCTION

This chapter describes how to easily and quickly create Steps, Scenes and Programs with the software.

Steps, Scenes and programs are the basis of the DMX programming. You must understand what there are and how they respectively work before programming your show.

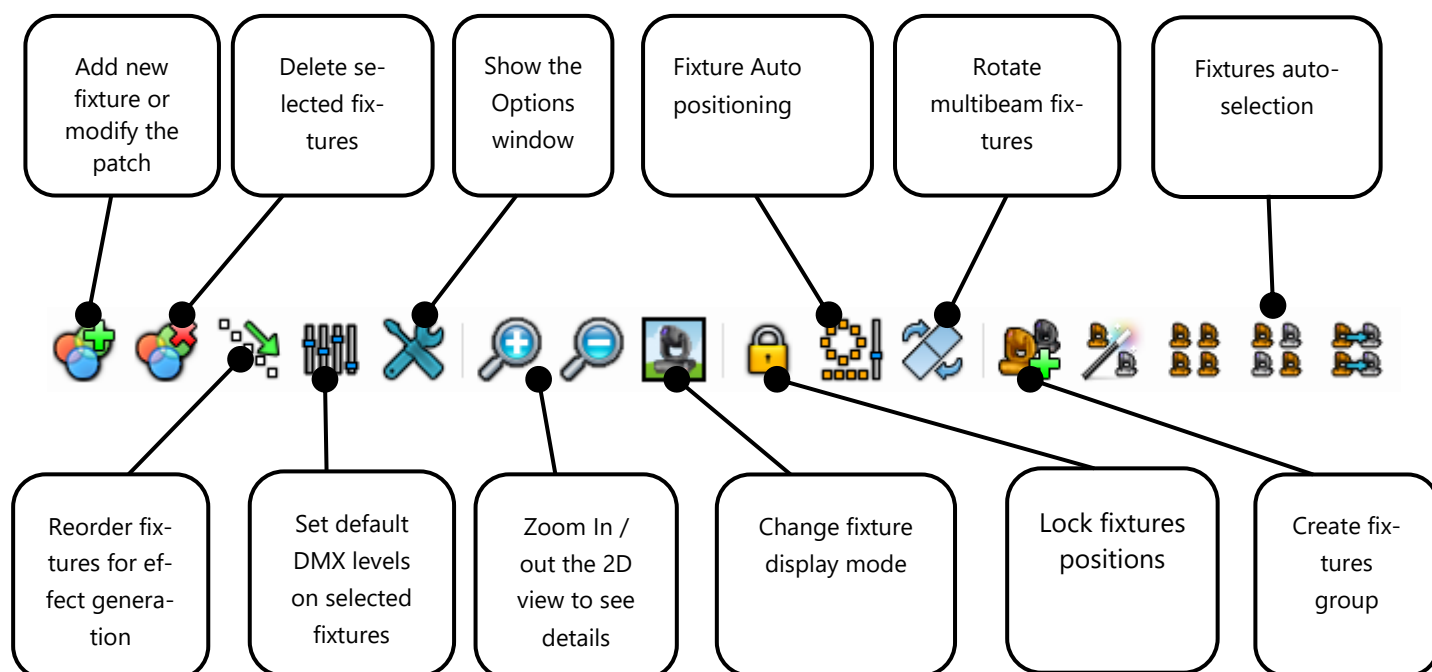
You must start the software and apply the DMX Patch before beginning to create Scenes and Programs. Please refer to the user manuals **How to create Profiles** and **How to Patch Profiles**.

## PATCH AND CONTROL

Efficient programming requires a good patch, and a good patch always starts with good profiles. Make sure that your profiles are correct and match the lighting fixtures of your project. Last but not least, you must carefully check if all the DMX addresses you assigned in the software patch match the lightings fixtures themselves.

Please refer to the user manuals **How to create profiles** and **How to Patch Profiles** to learn everything about these two preliminary stages. When the patch is done, you should test it and check that the fixtures are well responding to the software commands.

## FIXTURES 2D VIEW MENU

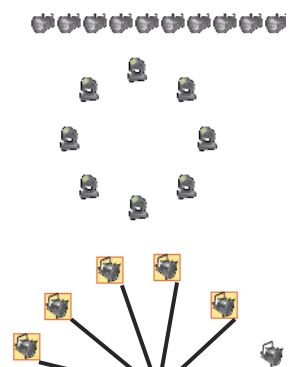


## FIXTURE SELECTION

In the 2D area you can select / unselect the fixtures by clicking on their pictograms

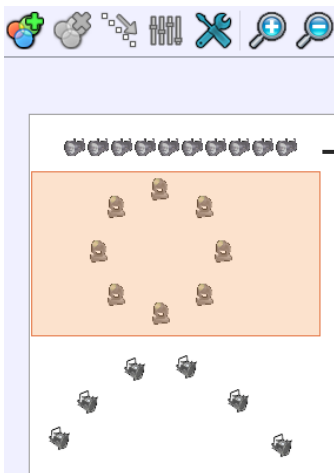


Click on a fixture item to select it

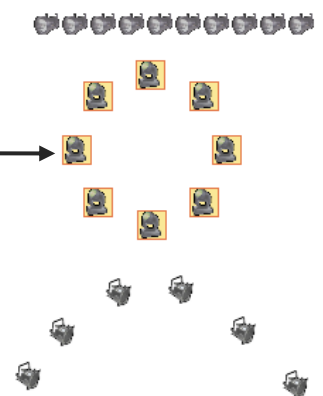


Hold CTRL+Click for multiple select

You can also select them by drawing a selection zone. Unselect all of the fixtures by clicking anywhere on the 2D area.



Click on anywhere in the 2D view, hold down the left mouse button, then draw your selection zone. Release the mouse, all the fixtures under that zone will be selected.



When the lock position is activated, you can unselect fixtures by clicking the item a second time.

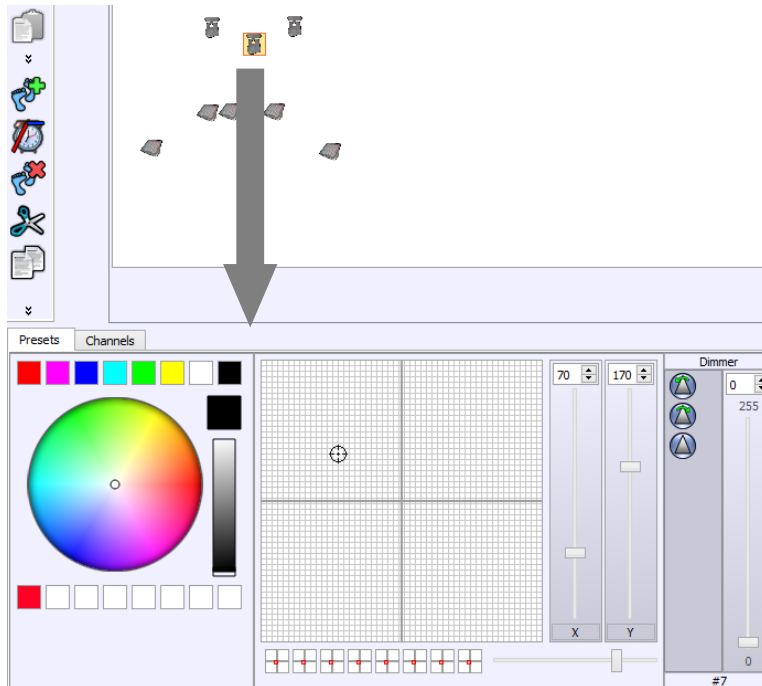


**DMX levels and presets values are activated only on the selected fixtures in the 2D area. Make sure that you select the right fixture every time.**

## CHANNELS AND PRESETS WINDOW

The DMX controls window appears under the 2D area. There's two possible types of controls display: the Preset display mode and the Channels display mode.

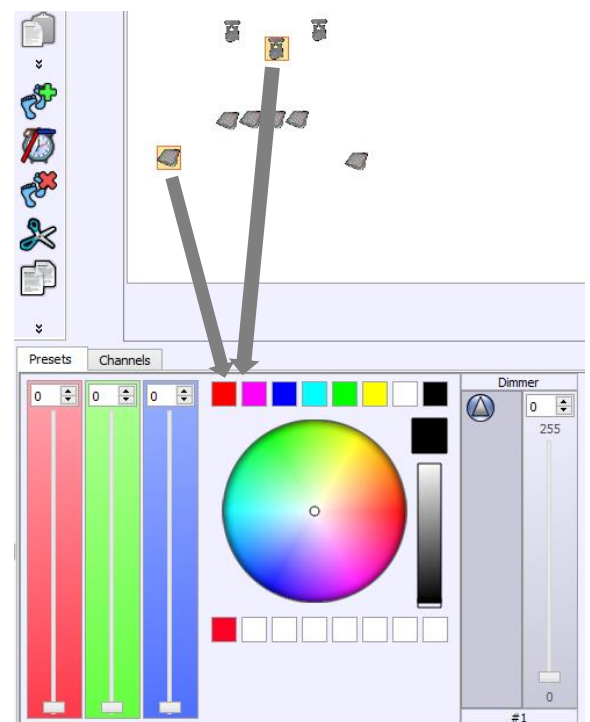
### PRESETS WINDOW



When you select a fixture, its channels and pre-sets appear in the presets panel located just below the 2D area. (You can see all the profile's channels that were earlier defined using the Profile Editor)

If you select 2 or more different fixtures with different profiles then the software will only display the common channels. For example, if you select 2 different fixtures with a RGB function, the software will show the RGB color pallet. If the 2 fixtures have both a Pan and Tilt, the software will display the Pan and Tilt pallet. But if only one of them has RGB color, the software won't display the RGB Color pallet. Commons channels are shown others are hid.

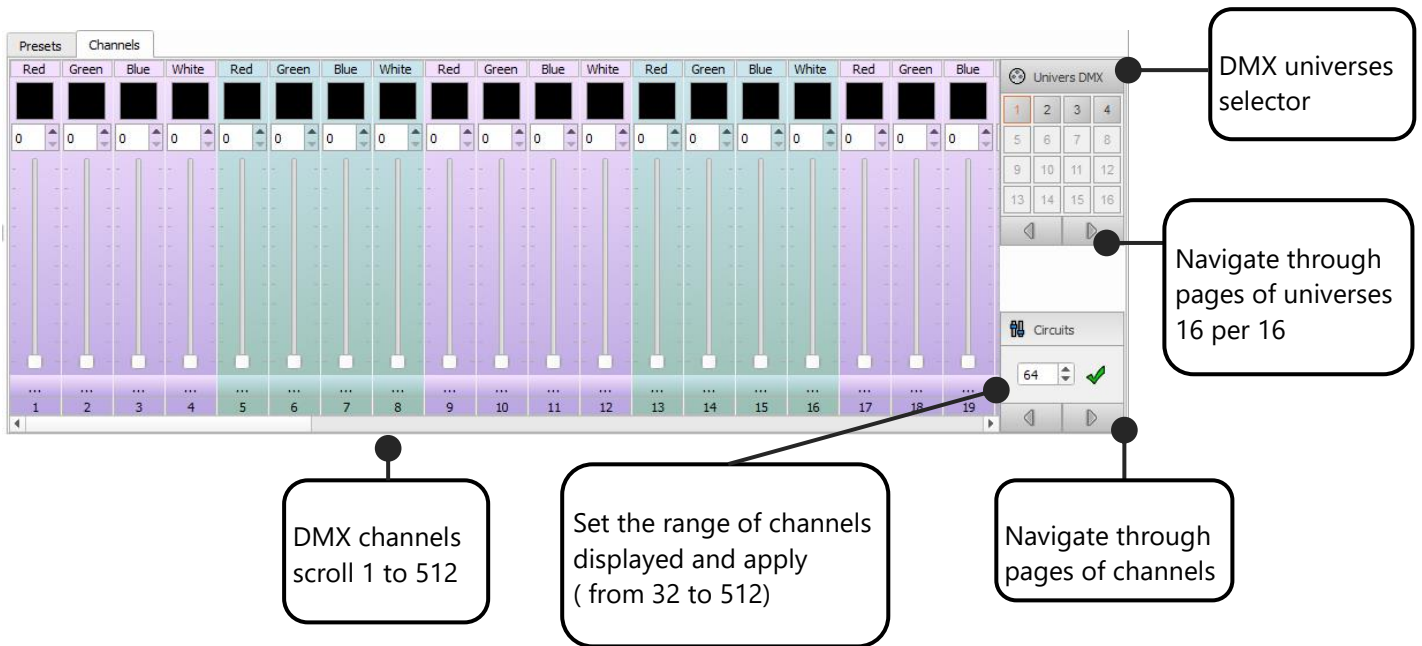
The types of commons channels who can be displayed are: RGB, CMY, RGBY, RGBA, Pan, Tilt, Dimmer, Focus, Iris and Zoom.



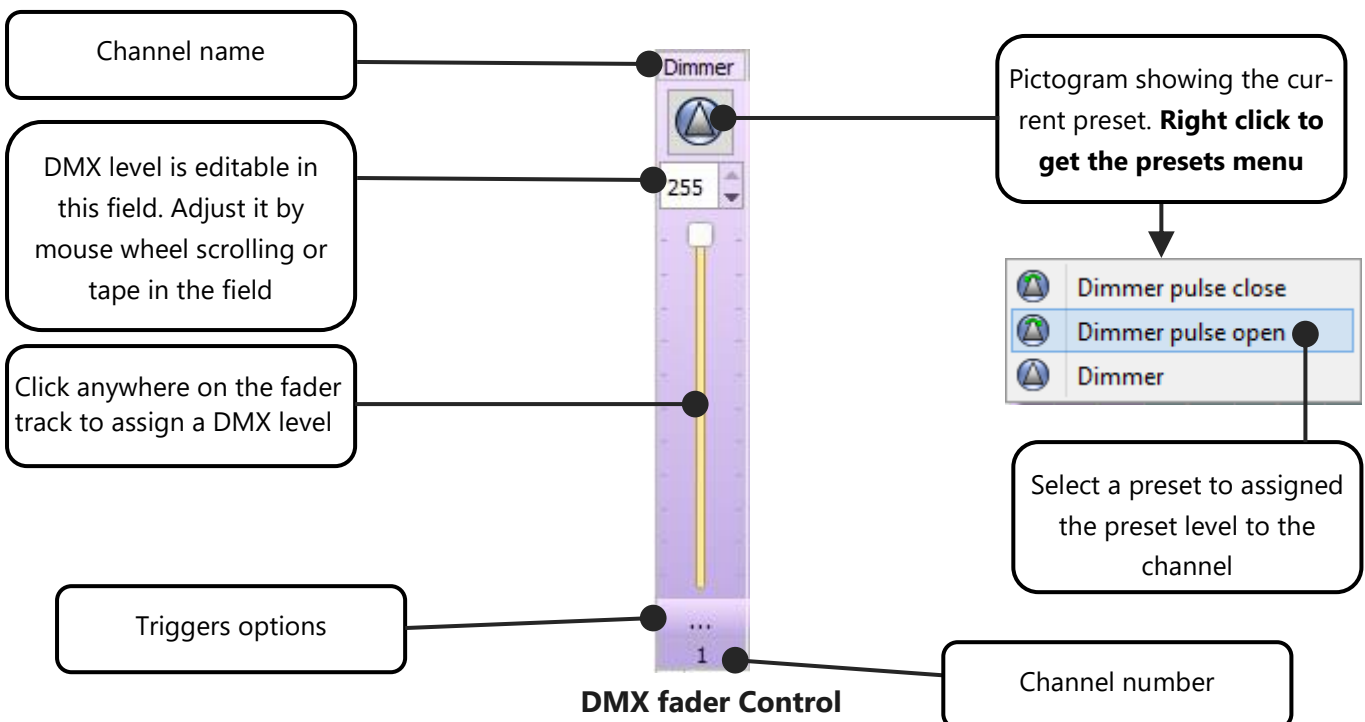
## CHANNELS CONTROL WINDOW

The Channel mode shows a traditional fader board for each of the 512 DMX channels. The software can manage 128 DMX universes of 512 channels each so users have the possibility to switch from 1 universe to another.

The software have 3 fader colors : light grey for neutral channels (no profile associated), and two other colors to distinguish the odd and even fixture channels.



D

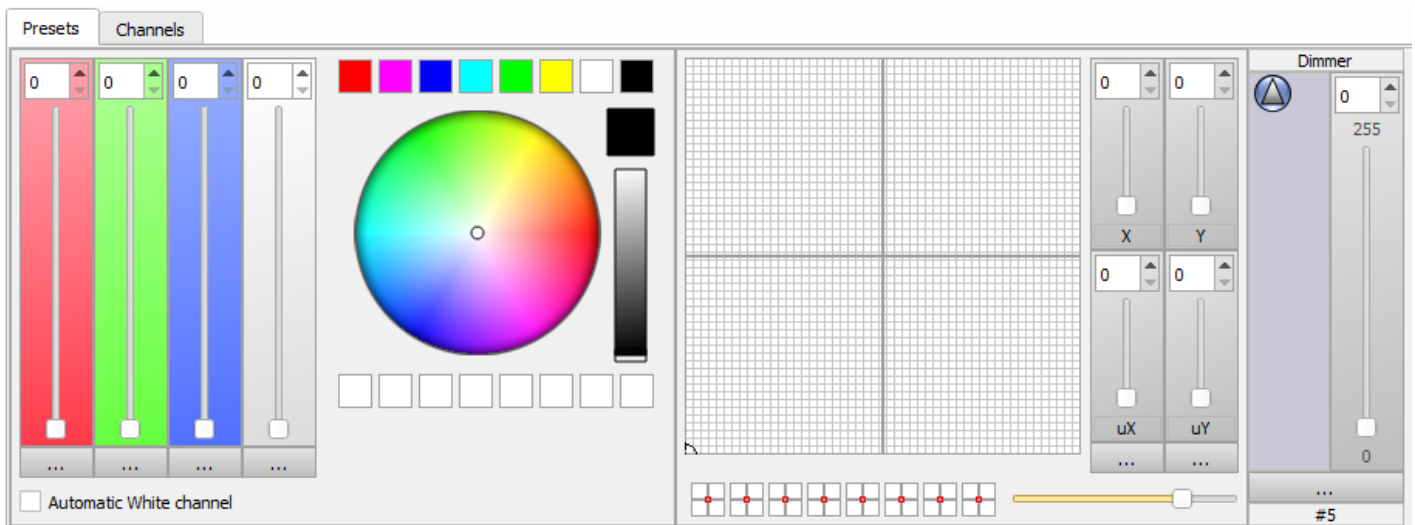


## THE PRESET DISPLAY MODE

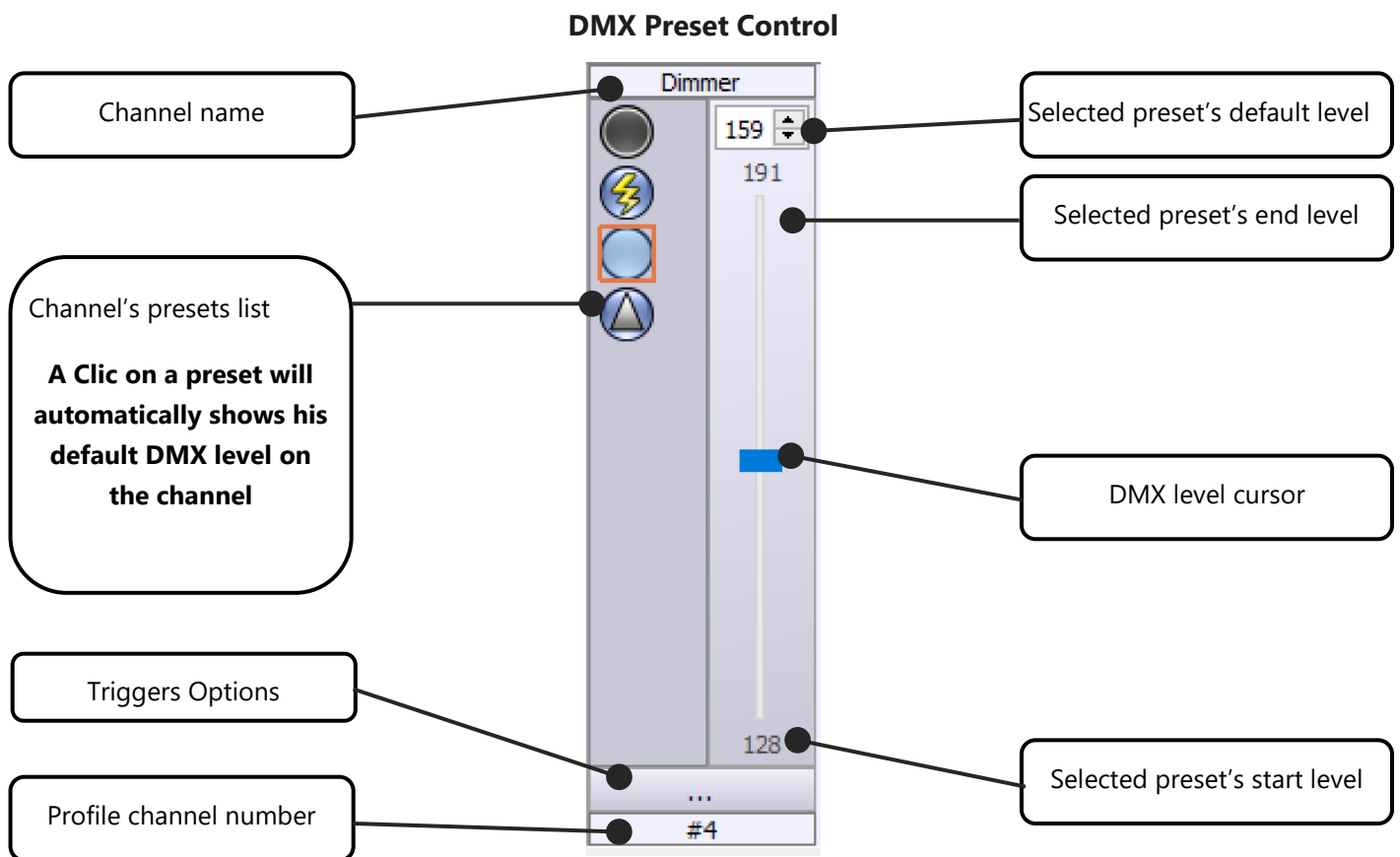
The second and most convenient control mode is the Preset mode. It's the software's default control mode. It provides a board containing palettes who mix cursors and presets menus, embedding powerful tools like RGB /CMY color mixing palette and the Pan&Tilt palette.



**If no fixtures are selected, no presets can be shown and then the presets board stays an empty window.**



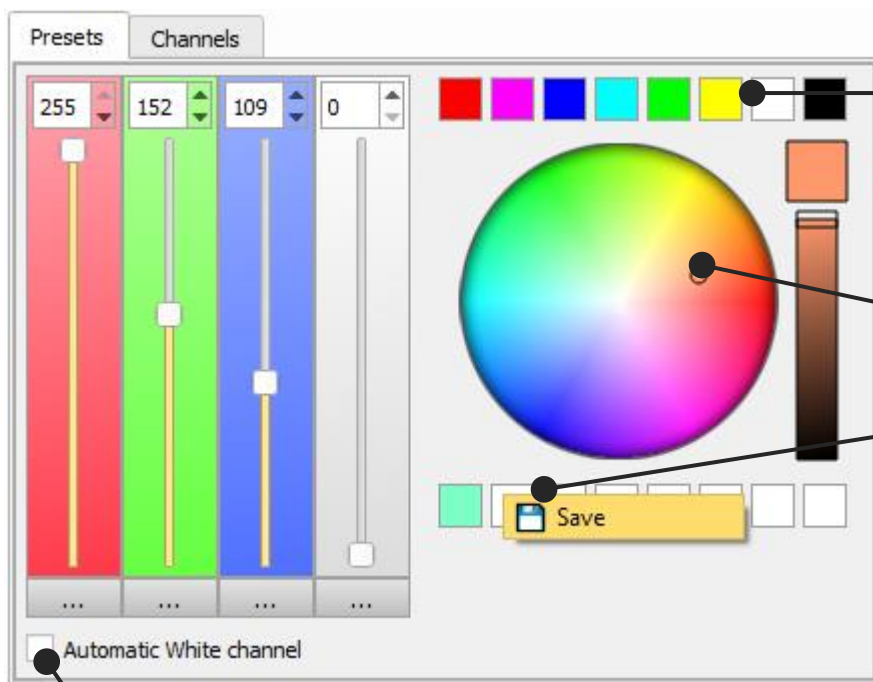
**NOTE:** The Preset Mode is very convenient as it automatically manages different DMX Universes while in the Channel mode, users shall switch manually from one universe to another. In this way, users should only focus on selecting the right fixtures in their 2D Zone.



When the preset is selected the main cursor can move from the start to the end DMX level of the preset (refer to the user manual: **How to create Profiles**). You can click on the Preset a second time to unselect it and return to the DMX level 0.



## The Color mixing palette for the RGB, RGBW, RGBA and CMY channels:



Primary colors shortcuts set

The palette can save customized colors:

**1** Choose your color with the palette

**2** Right-click on a color room to save the color.

Next, you will be able to recall the saved colors by clicking the rooms.

Check the option to have the values of the White channel calculated automatically

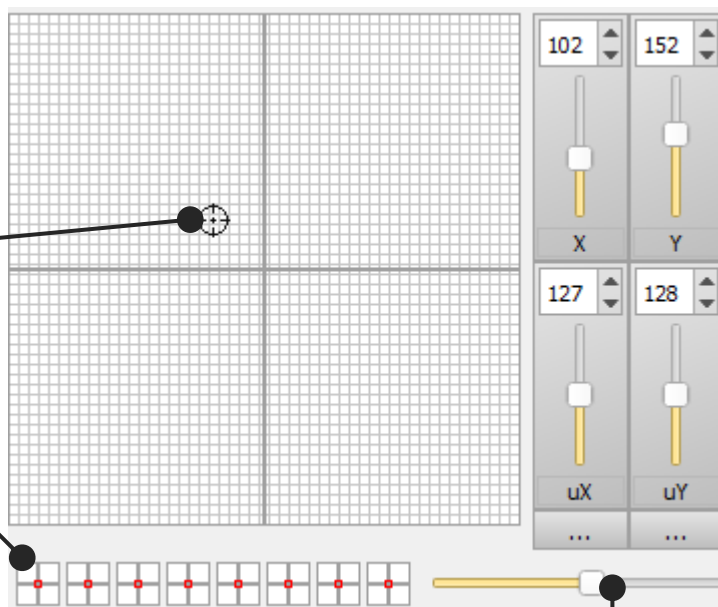
## The Pan and Tilt palette for the XY channels:

The palette can save customized positions:

**1** Choose your position with the palette

**2** Right-click on a position room to save the XY location.

Next, you will be able to recall the location by clicking the rooms.



Adjust the mouse accuracy to get finest XY positioning.

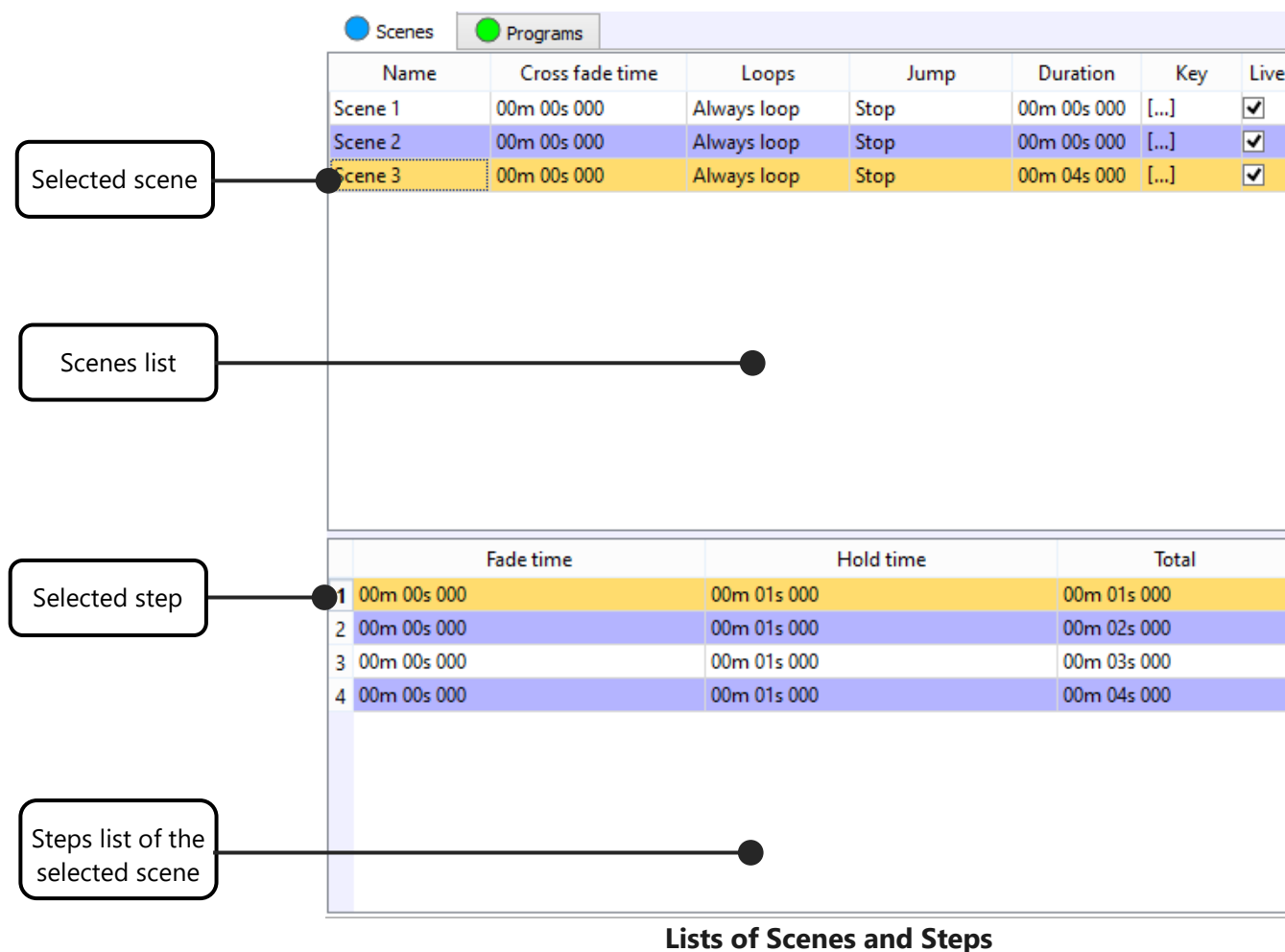
## USING SELECTIONS AND PRESETS

By selecting the fixtures in the 2D area and using the Presets commands you can see your lightings fixtures reacting and changing state. That means that the DMX communication is well established and that the software is communicating with your system. It is very useful to use the selections and presets to do your lighting system's checking.

Now that everything is working well and that you are familiar with the fixtures selection as well as the control windows, you can start creating scenes and programs for the show.

## STEPS, SCENES, PROGRAMS AND SEQUENCES

Before continuing to read the manual, it is important to know everything about the technical vocabulary used. Here the software uses **Steps** and **Scenes**. But some DMX controllers may call steps "scenes" and scenes "programs". To avoid any confusions, read the explanations below.



## STEP

A Step is a DMX memory that can record a fixed DMX level per channel. Each step records the 512 channels of each DMX universe you are using. For example, if you connect 2 interfaces you will have two universes so 2 times 512 channels available (1024). Each step has the capacity to record 1024 (2\*512) DMX levels.

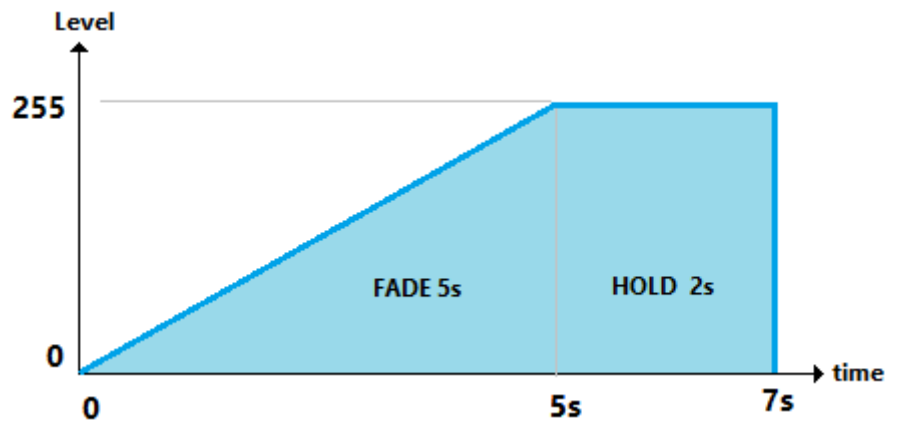
Steps also include an Hold Time and a Fade Time.

The Hold time is the duration that steps maintain the DMX levels when it's played.

The Fade Time is the duration that steps take to fade and reach the DMX levels when it's played.

Example: A step with channel 1 set to level 255, 2 seconds of hold time of and 5 seconds of fade time will play like this:

The starting DMX values are 0, so the DMX level will fade from 0 and reach 255 within 5 seconds, then the step will maintain the level 255 for 2 seconds.



The steps list links up several steps that you create one after one and makes the scene show.



Some traditional DMX desks use the word Scene instead of Step. But the functions and the results are exactly the same.

## SCENE

Scenes have not the same functions than steps. A scene cannot record DMX levels so it must use steps for that. Consequently, scenes must contain at least one step to be operational. In fact, when you play a scene you are playing the steps contained in that scene.

Only one scene can play on the same time. Starting a new scene it will stops the current playing one.

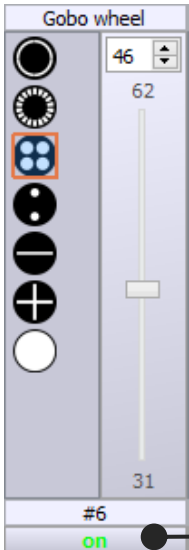


Some traditional DMX desks use the word Program instead of Scene. But the functions and the results are exactly the same.

## PROGRAM

A Program is similar to a Scene but it take some nuances.

First of all, a program cannot be recorded in the stand alone interface. You can play it live only.



To be effective, the DMX channels to be controlled with a program need to be activated to be able to manage the DMX levels. We speak about active channels in a program. Unused channels in a program are considering as inactive channels. They are ignored when program is playing. All channels can be set in ON/OFF mode (active/inactive) and will use the latest priority when the user plays multiple programs.

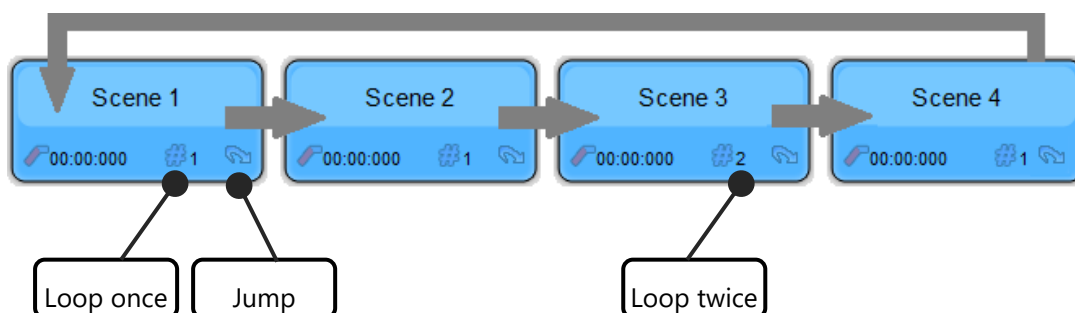
Thanks to that you can play several programs in a same time acting like layers. Therefore, for a given lighting fixture you can manage its effects across multiple programs. (start strob, fix a color, make a black out by closing the shutter...)

Another difference is that programs cannot jump to another program.

Mode ON = Active channel

## SEQUENCE

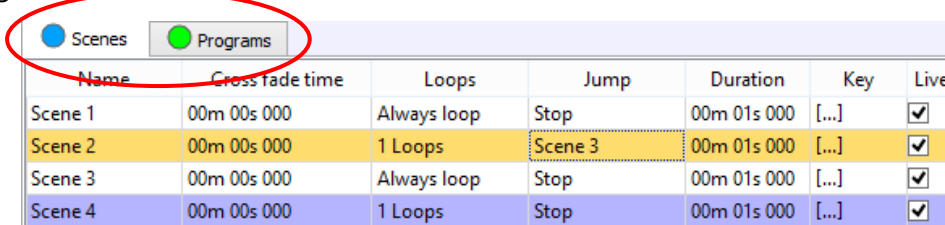
A Sequence is an organisation of several scenes that play consecutively, jumping from one to another.



Only scenes can be sequenced, this is not possible with programs.

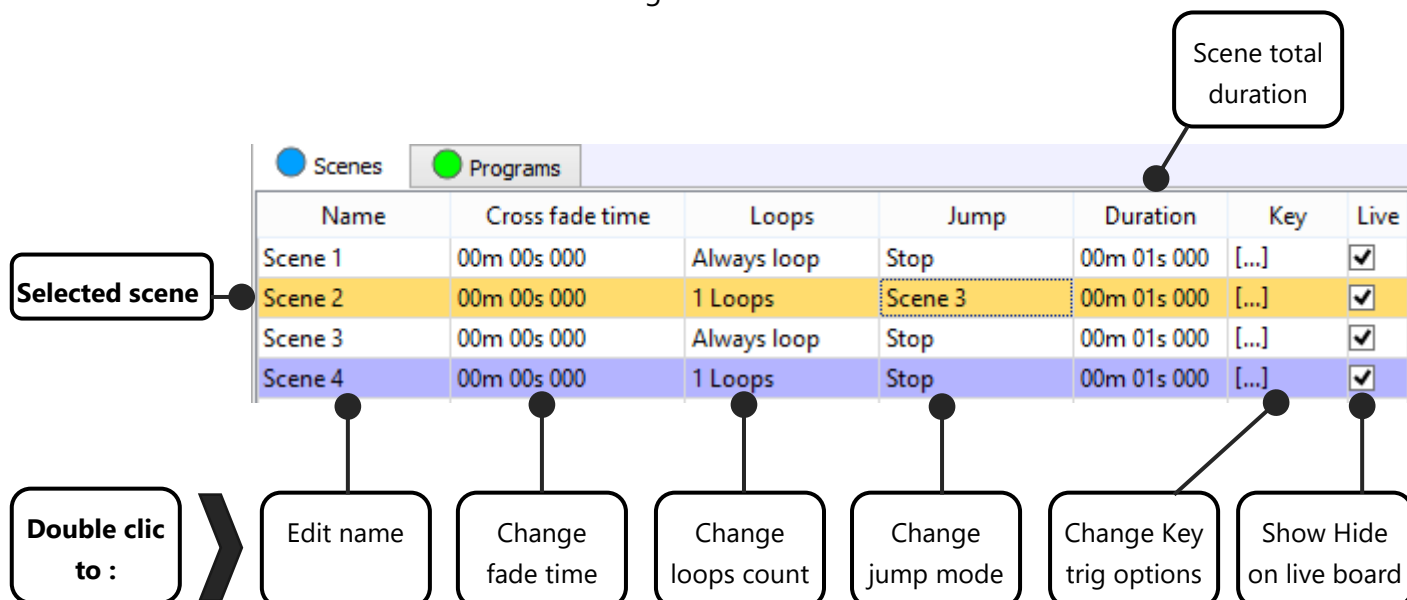
## CREATING AND SAVING SCENE AND PROGRAM CONTENTS

The list of Scenes is located on the top left section of the screen. To display scenes and programs, just select the corresponding tab:



Name	Cross fade time	Loops	Jump	Duration	Key	Live
Scene 1	00m 00s 000	Always loop	Stop	00m 01s 000	[...]	<input checked="" type="checkbox"/>
Scene 2	00m 00s 000	1 Loops	Scene 3	00m 01s 000	[...]	<input checked="" type="checkbox"/>
Scene 3	00m 00s 000	Always loop	Stop	00m 01s 000	[...]	<input checked="" type="checkbox"/>
Scene 4	00m 00s 000	1 Loops	Stop	00m 01s 000	[...]	<input checked="" type="checkbox"/>

The scene's commands ribbon is located on the right of the scene list and allow these actions:

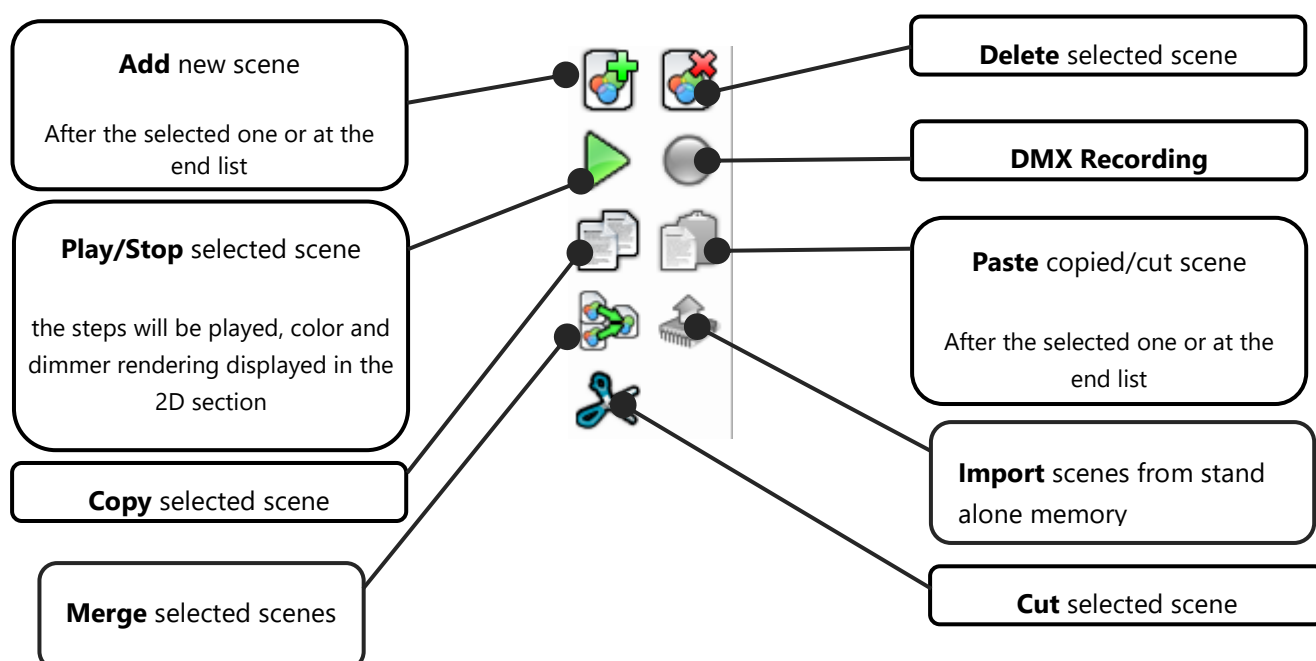


Name	Cross fade time	Loops	Jump	Duration	Key	Live
Scene 1	00m 00s 000	Always loop	Stop	00m 01s 000	[...]	<input checked="" type="checkbox"/>
Scene 2	00m 00s 000	1 Loops	Scene 3	00m 01s 000	[...]	<input checked="" type="checkbox"/>
Scene 3	00m 00s 000	Always loop	Stop	00m 01s 000	[...]	<input checked="" type="checkbox"/>
Scene 4	00m 00s 000	1 Loops	Stop	00m 01s 000	[...]	<input checked="" type="checkbox"/>

**Double clic to :**

- Edit name
- Change fade time
- Change loops count
- Change jump mode
- Change Key trig options
- Show Hide on live board

Scenes have settings options that can be configured:



- Add new scene**  
After the selected one or at the end list
- Delete selected scene**
- DMX Recording**
- Play/Stop selected scene**  
the steps will be played, color and dimmer rendering displayed in the 2D section
- Paste copied/cut scene**  
After the selected one or at the end list
- Copy selected scene**
- Import scenes from stand alone memory**
- Merge selected scenes**
- Cut selected scene**

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**Fade time:** This time can also be named Fade In Time, the DMX level will fade to reach the first step of the scene within the fade time duration; double click on the dedicated field to change the values.

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**Loops:** Each scene always loops by default. That means that when the last step of the scene has finished playing, the scene comes back to play the first step and go on until the end of the loop number.

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**Jump:** By default the field is empty meaning that the scene stops playing when the loop number is reached. You can also choose to pause on the last step and keep playing his dmx levels. But also choose to jump to the next scene automatically or to a specific existing scene.

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**Key trigger:** show up a setting window to assign various triggering possibilities for the scene. A few more options like playing a sound with the scene or customizing the live board scene's button. Read more about trigger options in the dedicated chapter below

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**Live:** If you check the box, allow you to display or not the scene button in the "liveboard"

Modifications done in the field and tabs are immediately applied. Adding scene, creating step and settings choices are easy to use. Don't forget to save your show regularly.

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**DMX recording:** Allow when the device is connected in DMX IN to record steps directly from the DMX signal received in the software

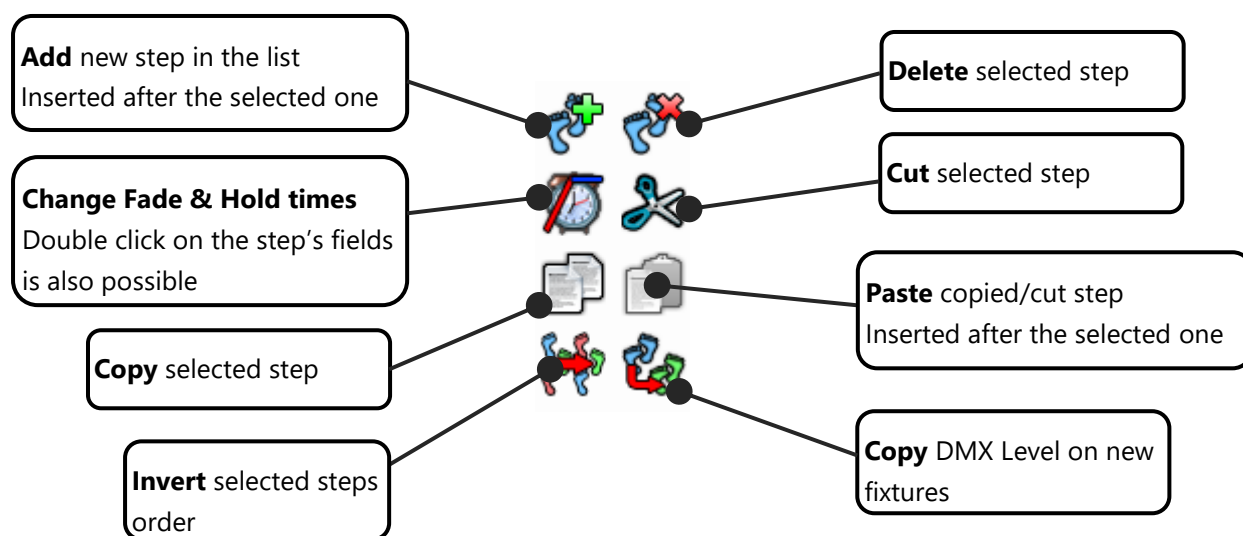


Add a new Scene, create its DMX content with the steps and work on it by adjusting its options. You will see how easy it is. The changes made in the scene section are recorded automatically but take care to save the project often for a strengthened security.

## CREATING AND SAVING STEP CONTENTS

A Step records the DMX levels, which we name "the DMX content" of a scene. There is a single step in a static scene and multiple steps in a dynamic scene. Steps records the DMX levels according the user fixture selection and actions on the presets and channels control boards. Each user modification done has an impact on the step content.

The Step commands tools ribbon is located on the right of the Step list and allow these actions:



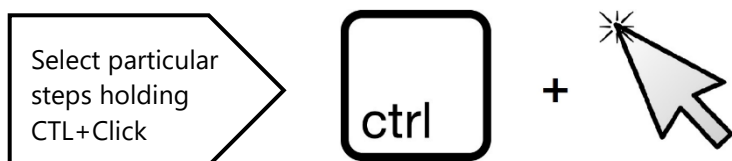
	Fade time	Hold time	Total
1	00m 00s 000	00m 01s 000	00m 01s 000
<b>Selected step</b> 2	00m 01s 000	0 m 5 s 0	00m 07s 000
3	00m 02s 000	00m 04s 000	00m 13s 000

**Edit times**  
Double click on field

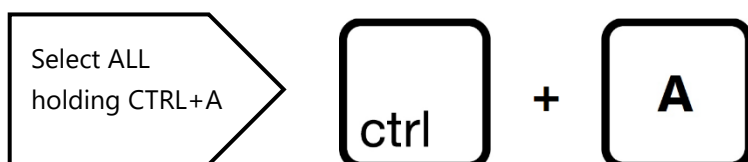
It is very user friendly to build the scenes content linking up several steps. Add a step, select fixtures and adjust the DMX level from the presets or channels control boards. You can see effect on your lighting system. Then choose how long you want to fade to this step DMX levels state and how long you want to hold it. Then you can create the next step by repeating the same process. You can get a preview of your steps sequence with the play button of the scene commands ribbon.

## STEPS MULTI-SELECTION

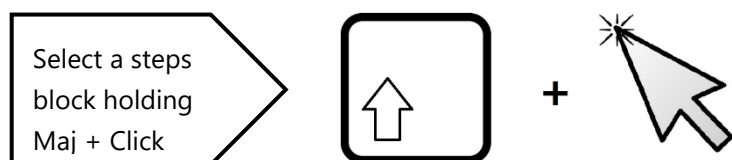
Multi-selections are possible in the list of steps this is how to handle them using **CTRL** or **SHIFT** keys and the **mouse**:



	Fade time	Hold time	Total
1	00m 00s 000	00m 01s 000	00m 01s 000
2	00m 00s 000	00m 01s 000	00m 02s 000
3	00m 00s 000	00m 01s 000	00m 03s 000
4	00m 00s 000	00m 01s 000	00m 04s 000
5	00m 01s 000	00m 05s 000	00m 10s 000
6	00m 02s 000	00m 04s 000	00m 16s 000



	Fade time	Hold time	Total
1	00m 00s 000	00m 01s 000	00m 01s 000
2	00m 00s 000	00m 01s 000	00m 02s 000
3	00m 00s 000	00m 01s 000	00m 03s 000
4	00m 00s 000	00m 01s 000	00m 04s 000
5	00m 01s 000	00m 05s 000	00m 10s 000
6	00m 02s 000	00m 04s 000	00m 16s 000



	Fade time	Hold time	Total
1	00m 00s 000	00m 01s 000	00m 01s 000
2	00m 00s 000	00m 01s 000	00m 02s 000
3	00m 00s 000	00m 01s 000	00m 03s 000
4	00m 00s 000	00m 01s 000	00m 04s 000
5	00m 01s 000	00m 05s 000	00m 10s 000
6	00m 02s 000	00m 04s 000	00m 16s 000

When multiple steps are selected, don't forget that all the user actions will affect them. You can for example select all the steps with CTRL+A, then go to change the hold time with 2 seconds for all the selection and then select some fixtures and change some DMX levels, like assigning a 100% dimmer for all the steps. The new dimmer's DMX level will be automatically applied to each of the selected steps.

The software manages all the DMX manipulations, so you can easily create the scenes and programs, and perform your shows quickly. The effect generator included in the software guide you for an optimal result. Refer to the "*How to use the Effect Generator*" manual for more informations about this tool.



## PREVIEW OPTIONS

This software benefits from a highly intuitive interface: throughout the programming process, users can have an overview of the effects they apply in the 2D Zone, as well as in the 3D zone.

### 2D ZONE

To have an instant visualisation of your actions, select the fixtures in the 2D Zone and click on "type of drawing" next to the "zoom options" until you get the following icon :

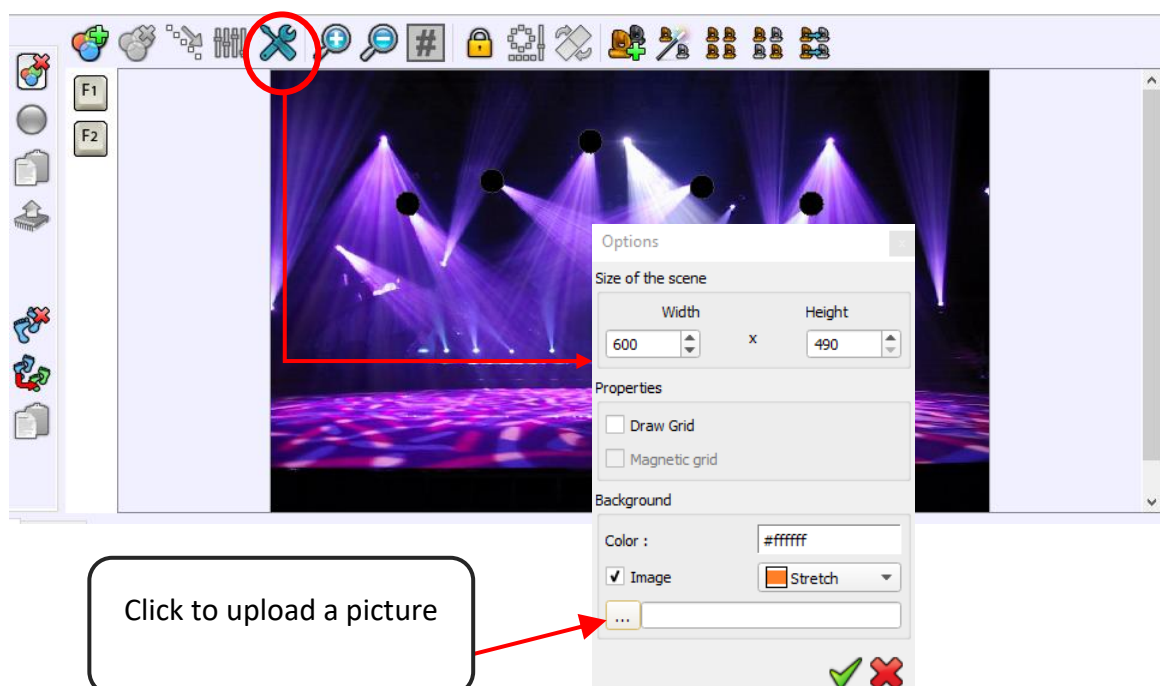


Type of drawing tool

You can then watch the color effects operating on your fixtures in the 2D Zone, as well as in the 3D screen.

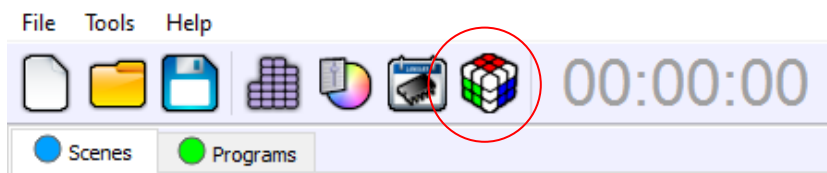
**Tips:** In order to prepare your show in the most realistic conditions, you can add a picture to the background of the 2D Zone.

Click on "options" to upload a picture:



Click to upload a picture

## 3D configuration

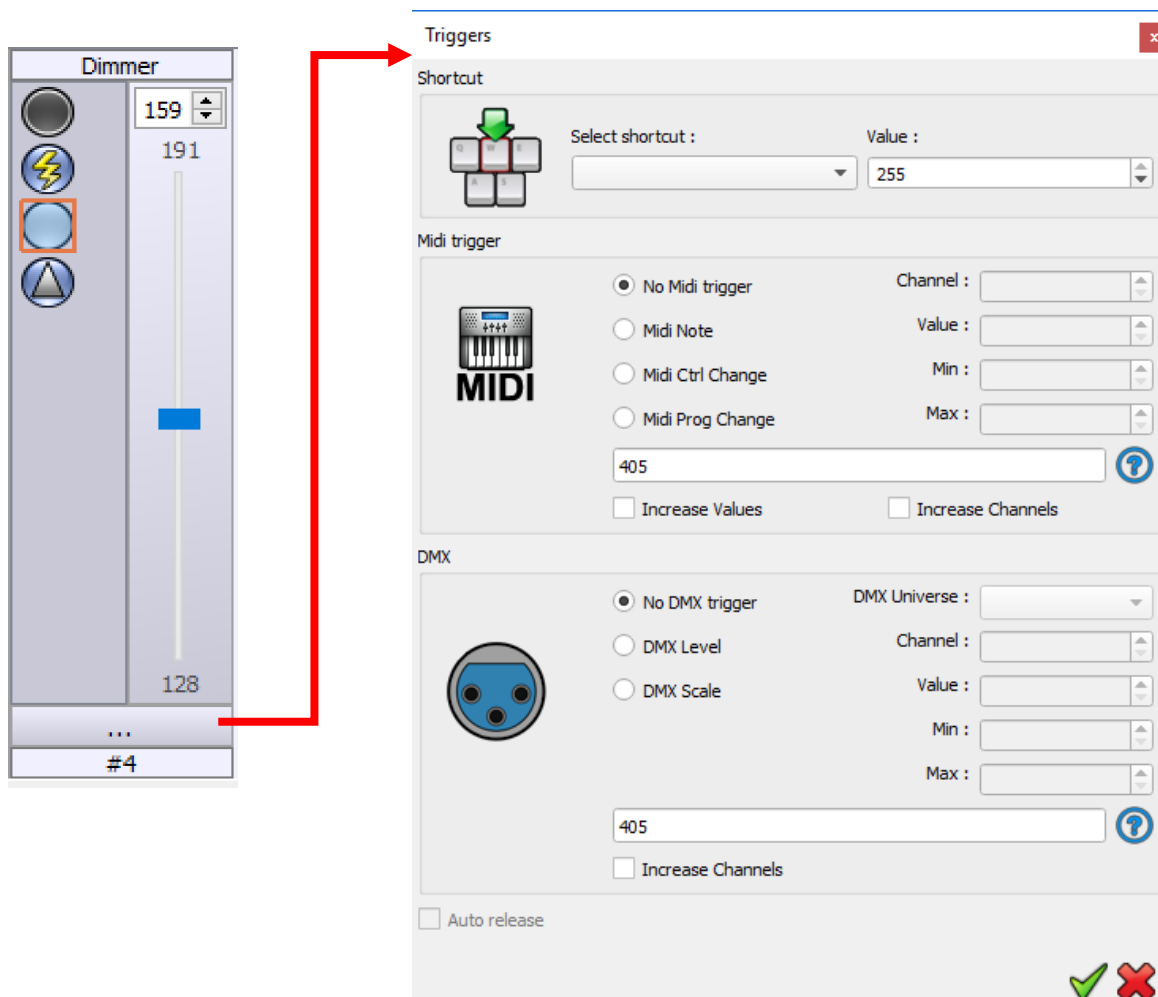


To open the 3D Visualisation screen, click on the cube in the tool bar above the Scenes and Programs list.

Read the Users Manuals of the 3D simulation Software to learn about the numerous 3D functions available.

## TRIGGERS SETTINGS

The software allows users to apply different triggers options. Midi fader, key board shortcuts ... these options can be accessed from both Channel display mode and Preset display mode.



You can also access triggers options from the Scenes and Programs list:

<div> <div>Scenes</div> <div>Programs</div> </div>						
Name	Cross fade time	Loops	Jump	Duration	Key	Live
Scene 1	00m 00s 000	Always loop	Stop	00m 03s 000	[...]	<input checked="" type="checkbox"/>
Scene 2	00m 00s 000	3 Loops	Next	00m 05s 640	[...]	<input checked="" type="checkbox"/>
Scene 3	00m 00s 000	Always loop	Stop	00m 19s 960	[ 3 ]	<input checked="" type="checkbox"/>


## TRIGGERS OPTIONS

Key

Triggers

Media

Shortcut



Select shortcut :

MIDI

☒ No Midi trigger
 ☐ Midi Note
 ☐ Midi Ctrl Change
 ☐ Midi Prog Change

Channel :

Value :

Min :

Max :

DMX

☒ No DMX trigger
 ☐ DMX Level
 ☐ DMX Scale

DMX Universe :


Channel :

Value :

Min :

Max :

SA Triggers



Buttons :

Remote :

External Contacts :

☐ Auto release
 ☒ On / Off

Assign keyboard shortcut

Assign a Midi trigger

Assign a DMX-IN trigger

Assign an interface trigger

Set auto-release mode

ON / OFF mode

Any midi controller desk can be connected to the computer.

Use the DMX input of the interface and assign any input DMX channels as a trigger.

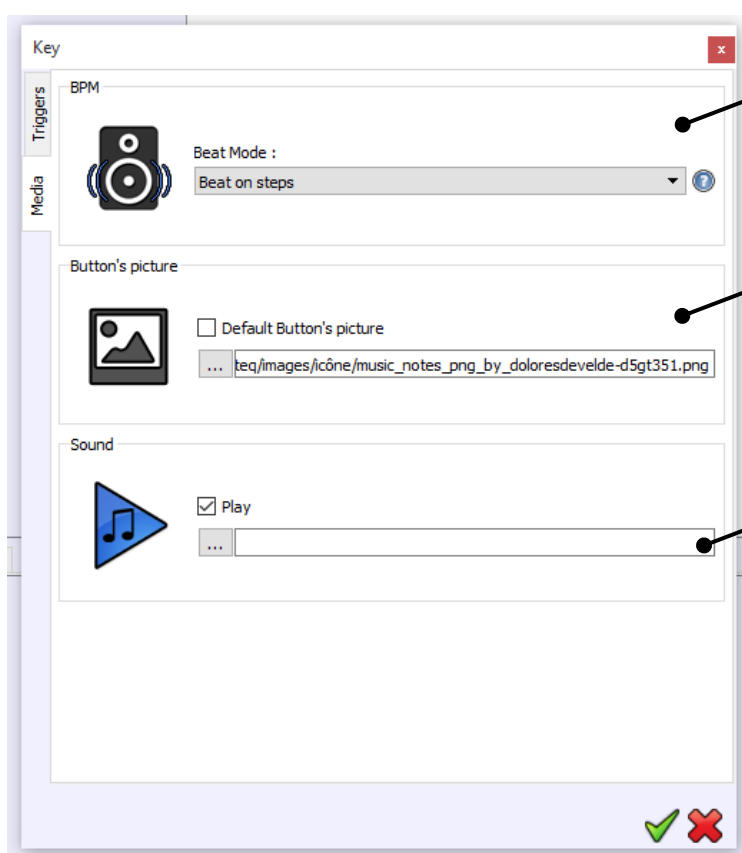
Use the interface buttons, external contacts or IR Remote to as a trigger.

Scene will stop byitself when trigger is OFF (flash mode)

When the option is checked the scene plays at the first trigger and stops at the second

## MEDIA OPTIONS

You can set Triggers Options according to external media, such as an audio folder.



The screenshot shows the 'Key' software interface with the 'Media' tab selected. The interface is divided into three main sections: 'BPM', 'Button's picture', and 'Sound'. Each section has a callout box explaining its function:

- BPM:** A callout box points to the 'Beat Mode' dropdown menu, which is currently set to 'Beat on steps'. The text in the callout is: "Add a BPM detection Mode".
- Button's picture:** A callout box points to the 'Default Button's picture' checkbox and the file path input field. The text in the callout is: "Add a picture to represent the scene or program".
- Sound:** A callout box points to the 'Play' checkbox and the file path input field. The text in the callout is: "Associate a music to a scene or a program".

The 'Key' window has a title bar with 'Key' and a close button. At the bottom right, there are green and red checkmark icons.

### ADD A BPM MODE :

**Beat on steps:** Move steps to steps dry on the beat.

**Beat with fade and hold:** Move steps to steps on the beat keeping hold and fade times.

**Restart on beat:** Play scene on time but restart it from step 1 on each beat.

**Loop on beats:** Scene will keep playing on each beat.

**Beat On/Off:** Start and Stop scene on each beat. (Convenient for shutter effects)

This manual explains the basics of DMX programming. It goes through the scenes and programs creation process in the software. You can also create some amazing visual effects with the Effects Generator tool. To handle this powerful effects engine for RGB colors, dimmer and pan-tilt movements, refer to the manual "*How to use the Effects Generator*".