

# USER MANUAL

## HOW TO PATCH PROFILES (LIBRARIES)

V1.7.1

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## INTRODUCTION

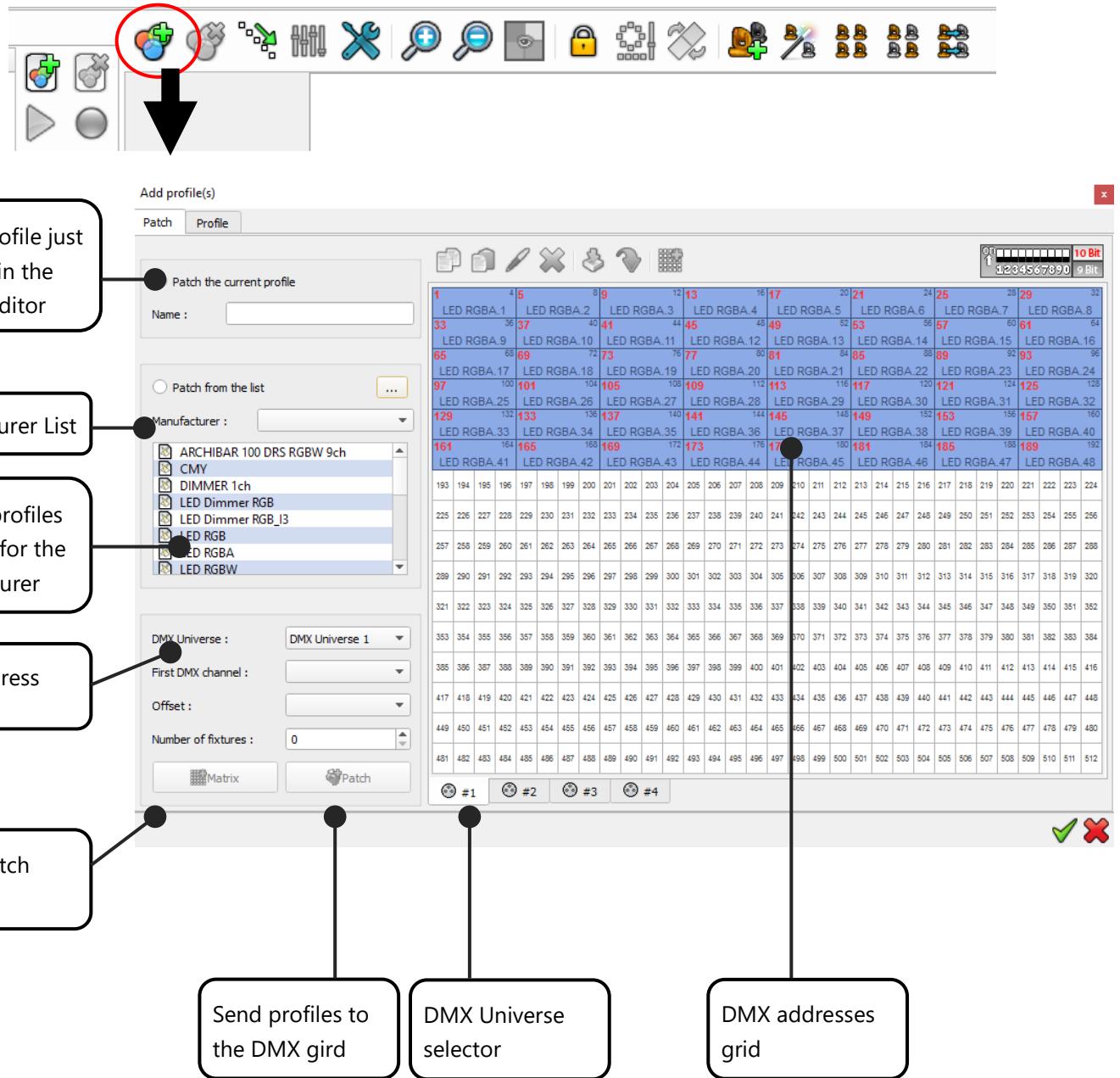
This chapter describes how to easily and quickly Patch fixtures profiles with the **Patch Manager**.

Patching fixtures means assigning a DMX channel address to corresponding fixture profile. The DMX address can be chosen from 1 to 512 according the universal DMX standard. All DMX controllers, including DMX software, sends DMX data to the lights using up to 512 DMX channels. The first DMX channel number assigned to a profile in the software must match the DMX address on the lighting fixture itself.

You must start the software before you begin patching profiles and make sure you have some profiles available.

## OPENING THE PATCH MANAGER

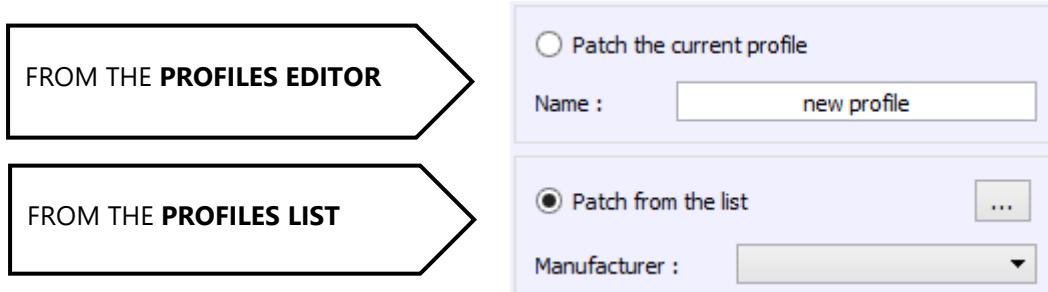
Click the Add button, the Patch Manager will show up and you can update the Patch in this window.



The patch manager window is divided in 2 sections. The left area is for profiles catalog and information. The right area is the DMX addresses grid where the effective address of the profiles is shown. **The first DMX channel number assigned to a profile in the software must match the DMX address on the lighting fixture itself.**

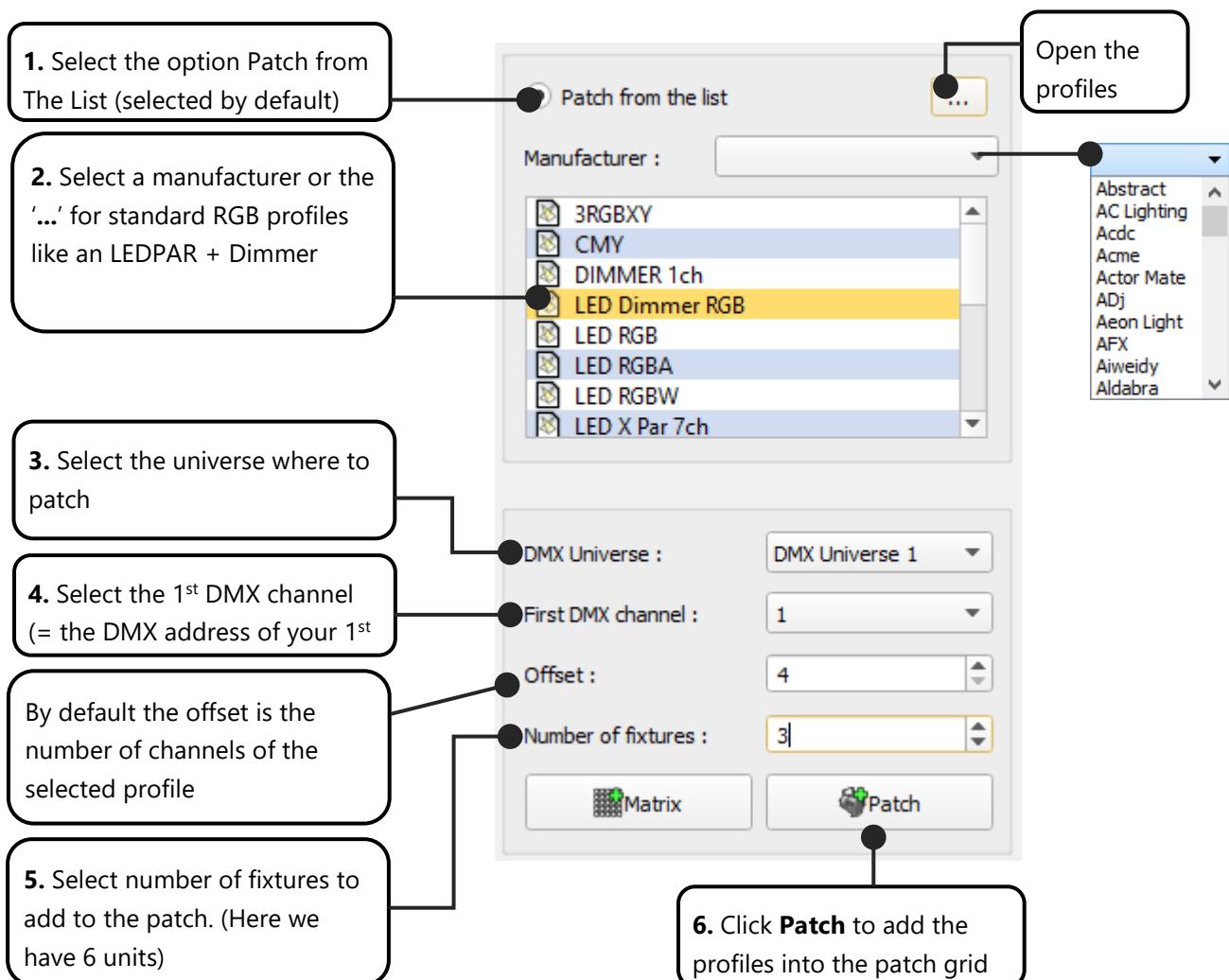
## ASSING PROFILES TO THE PATCH

There are 2 ways to add profiles to the patch and organize your patch to match your actual physical lighting fixture's DMX addresses:



## PATCH PROFILES FROM THE LIST

From the list, you can patch existing profiles files provided in the software. Follow those 6 steps:



Here is the result. You can see the 6 LED Dimmer RGB's profiles consecutively patched from address 1 on DMX universe 1. The first fixture starts with DMX address 1 and the five others will follow starting at the next available DMX channel.

1	4	5	8	9	12	13	16	17	20	21	24	25	26	27	28	29	30	31	32
ED Dimmer RGB																			
33	34	35	36	37	38	39	40	41	42	43	44	45	45	47	48	49	50	51	52
53	54	55	56	57	58	59	60	61	62	63	64								
65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
85	86	87	88	89	90	91	92	93	94	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								

### Patch DMX addresses grid – DMX Universe 1

Click **OK** to validate  
the patch

1 fixture = 1 address



It is not possible to patch several fixtures on the same channel. When channels receive a profile, you cannot patch over it. You can use the key CTRL and SHIFT for an advanced selection.

## PATCH PROFILE FROM THE PROFILE EDITOR

You can add a freshly created profiles by using the Profile Editor. If you want to create a profile refer to the user manual [How to Create Profiles](#).

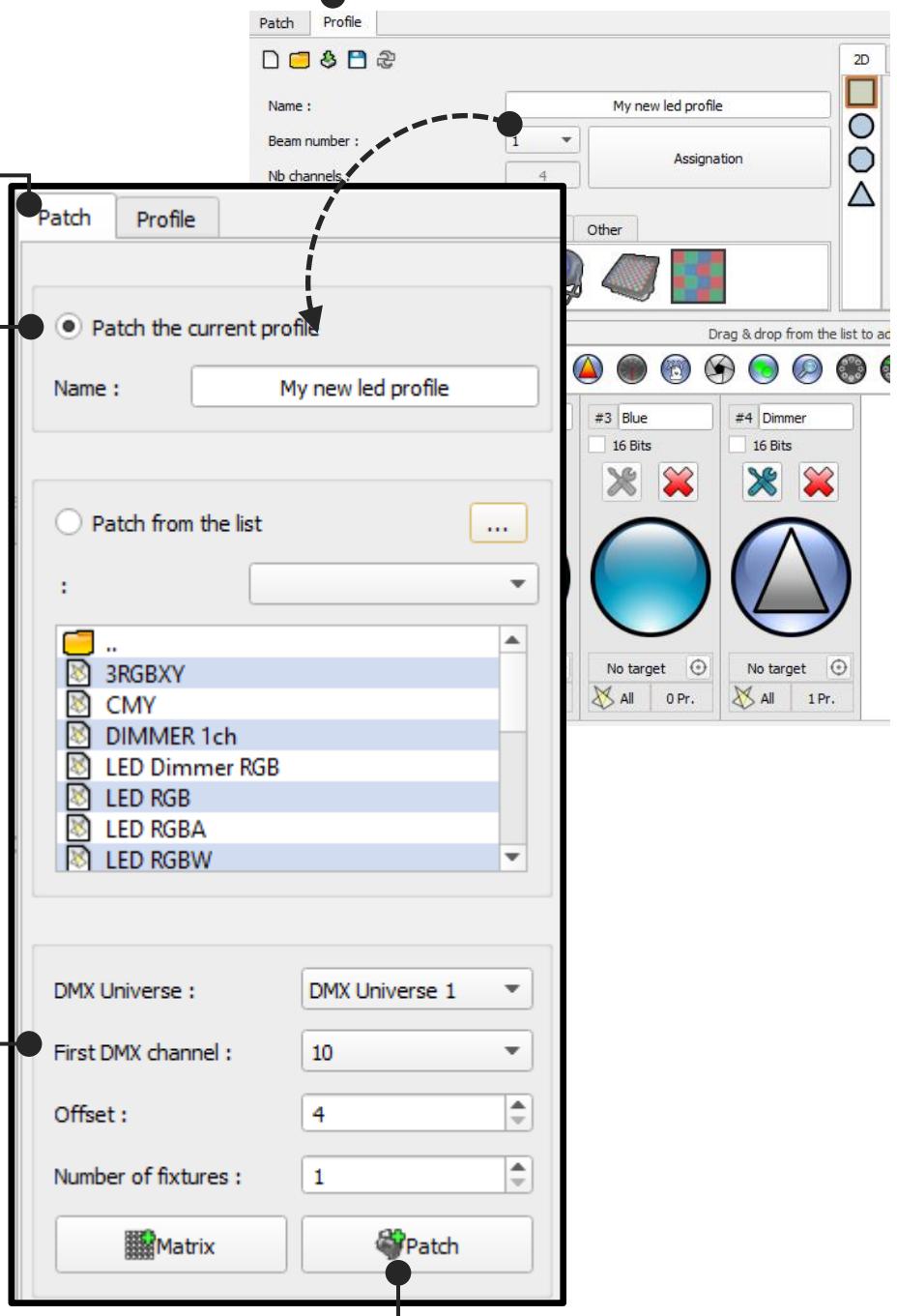
1. Create a fresh new profile in **Profile tab**

2. Return to the **Patch tab**

3. Select Patch the current profile

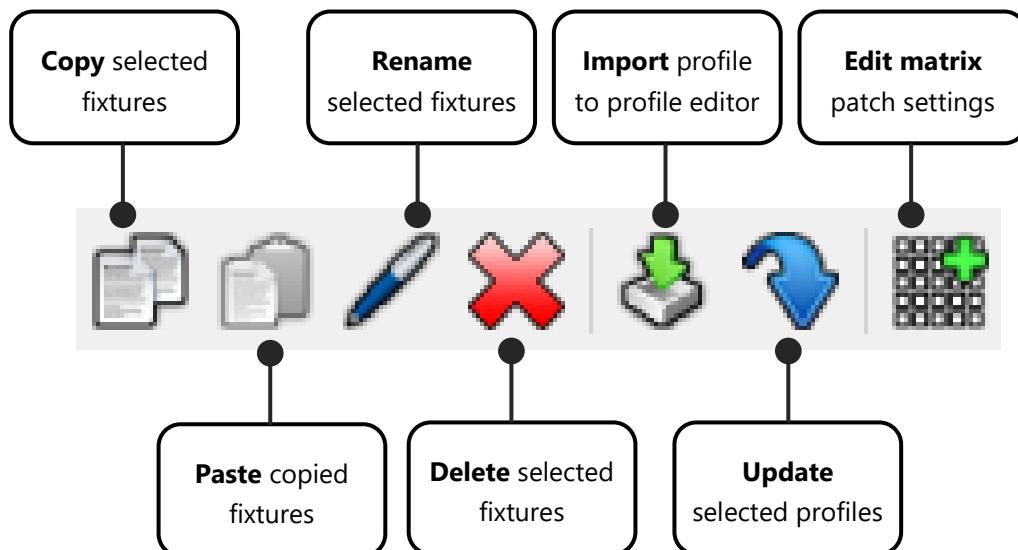
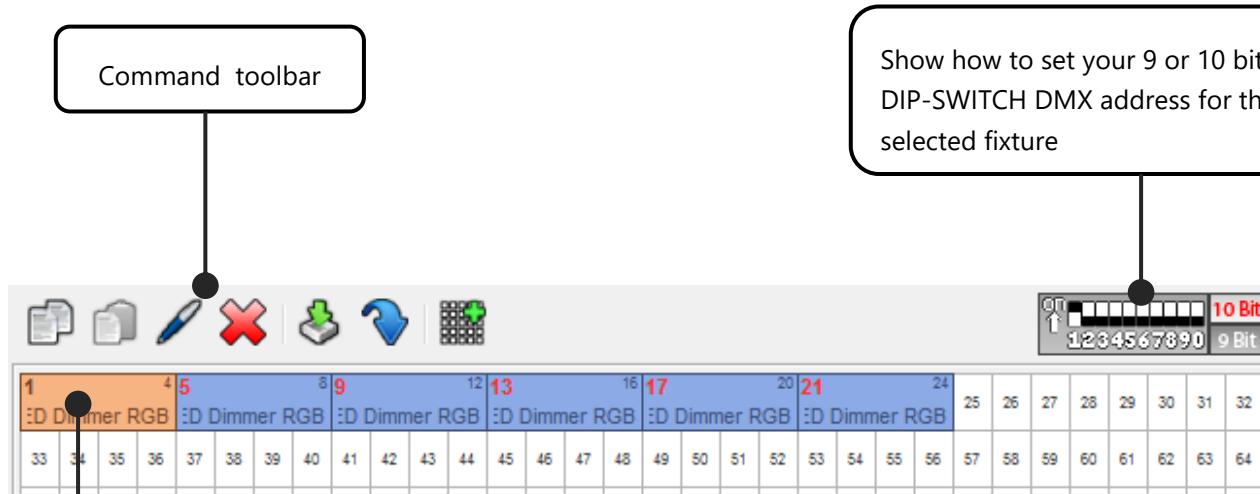
4. Select the **DMX universe** with the **1st DMX channel** where you want to patch and then choose the **number of fixtures** to insert

5. Click **Patch** to insert profile into the patch.



## PATCH COMMAND TOOLS

At the top of the DMX grid you'll find a command tool bar. This is accessible only if there are one or more patched fixtures and at least one of them has been selected.



## UPDATE A PROFILE IN THE PATCH

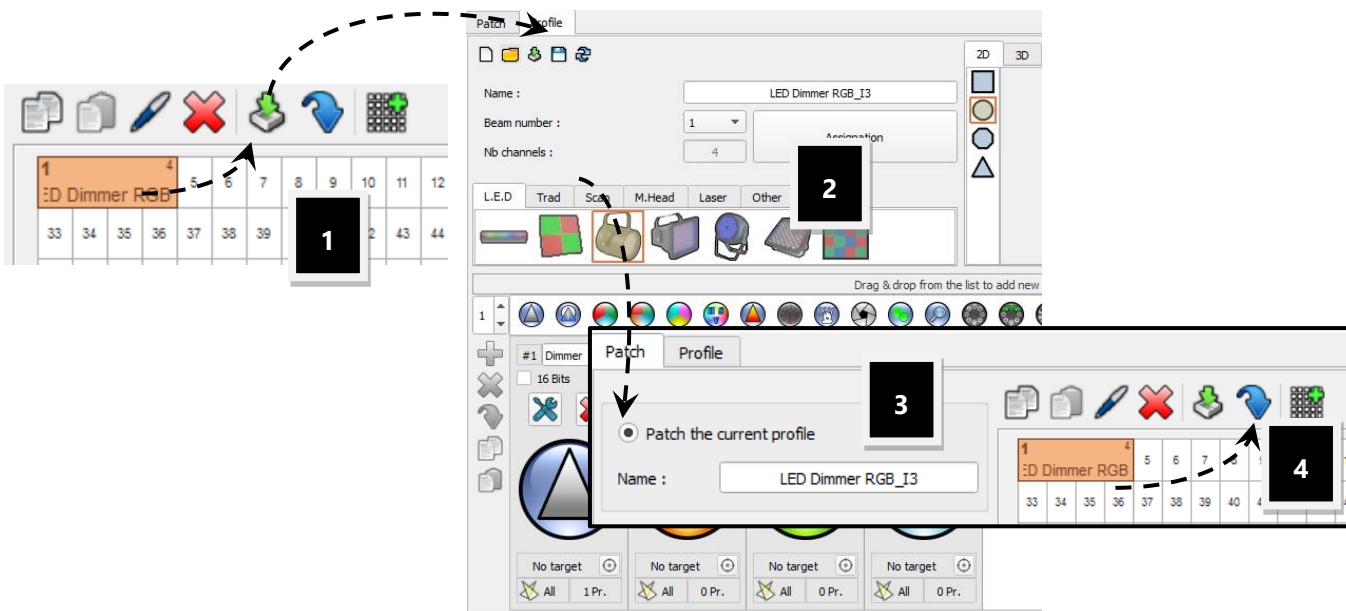
A profile can be updated from the profile list or directly from the current edited profile. The new profile need to have the exact same number of channels. You can modify profiles with the profile editor (Profile Tab) and update it in the patch area. Follow the steps to do it:

**Step 1:** Select the profile that needs to be updated in the patch grid area.

**Step 2:** Edit it and modify it in the profile editor tab.

**Step 3:** Return to the patch tab and select the freshly modified profile.

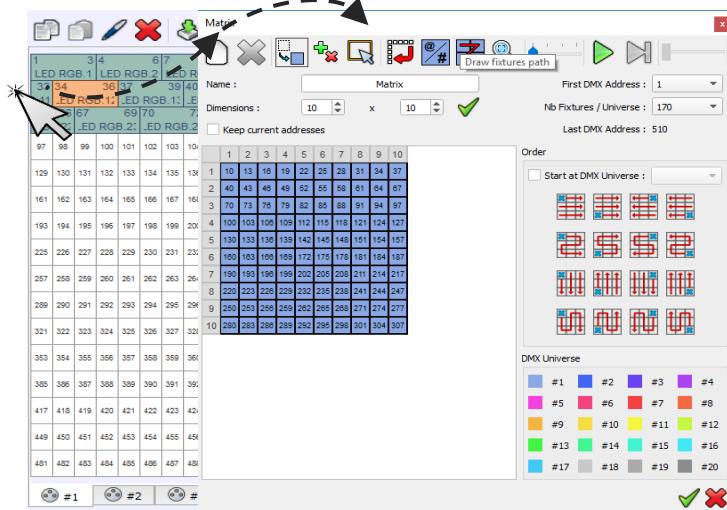
**Step 4:** Click Update.



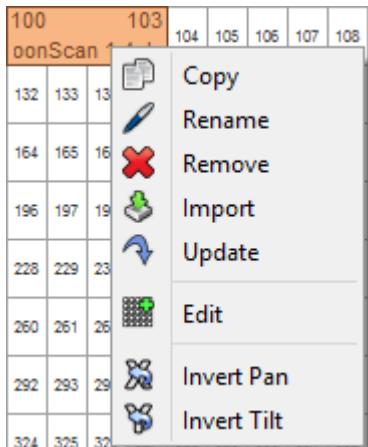
**⚠️ The new profile must have the same number of channels to replace the old one!**

## EDIT AND UPDATE A MATRIX IN THE PATCH

You can edit and update a matrix configuration by selecting only one fixture's item of a matrix, in the DMX grid. Select one fixture and click 'Matrix Edit'



## INVERT THE PAN AND TILT CHANNELS



Right clicking over the fixture's item will show up the local menu where you can inverse the pan and tilt. This feature is useful to synchronize beam movements when the lighting fixtures are positioned upside down across the stage.

## CHANGING PROFILE DMX ADDRESSES

A DMX address designates the first DMX channel number used by a fixture. Therefore the DMX channel number assigned to a light in the software's patch must match the DMX address on the lighting fixture itself. The profile's channels features must also match DMX chart of the lighting fixture itself.

1	3	4	6	7	9	10	12	13	15	16	17	18	19	20	21	22
LED RGB.1	LED RGB.2	LED RGB.3	LED RGB.4	LED RGB.5												
33	34	35	36	37	38	39	41	47	43	44	45	46	47	48	49	50
65	66	67	68	69	70	71	73	75	76	77	78	79	80	81	82	83
97	98	99	100	101	102	103	105	106	108	109	111	112	114	115	117	118
129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	150

You can use drag and drop to move a profile across the DMX grid to a new DMX address. Select one or several profiles (they will be highlighted in orange), then move them to a new DMX address. If you already have created scenes and programs, the address modification will be applied directly to each scene and program. In this way your show content will manage all the new addresses easily and conveniently.

**Tips :** you can also drag and drop a profile across different DMX universes, using the Universe Tabs.

## CREATING A LIGHTING FIXTURE MATRIX

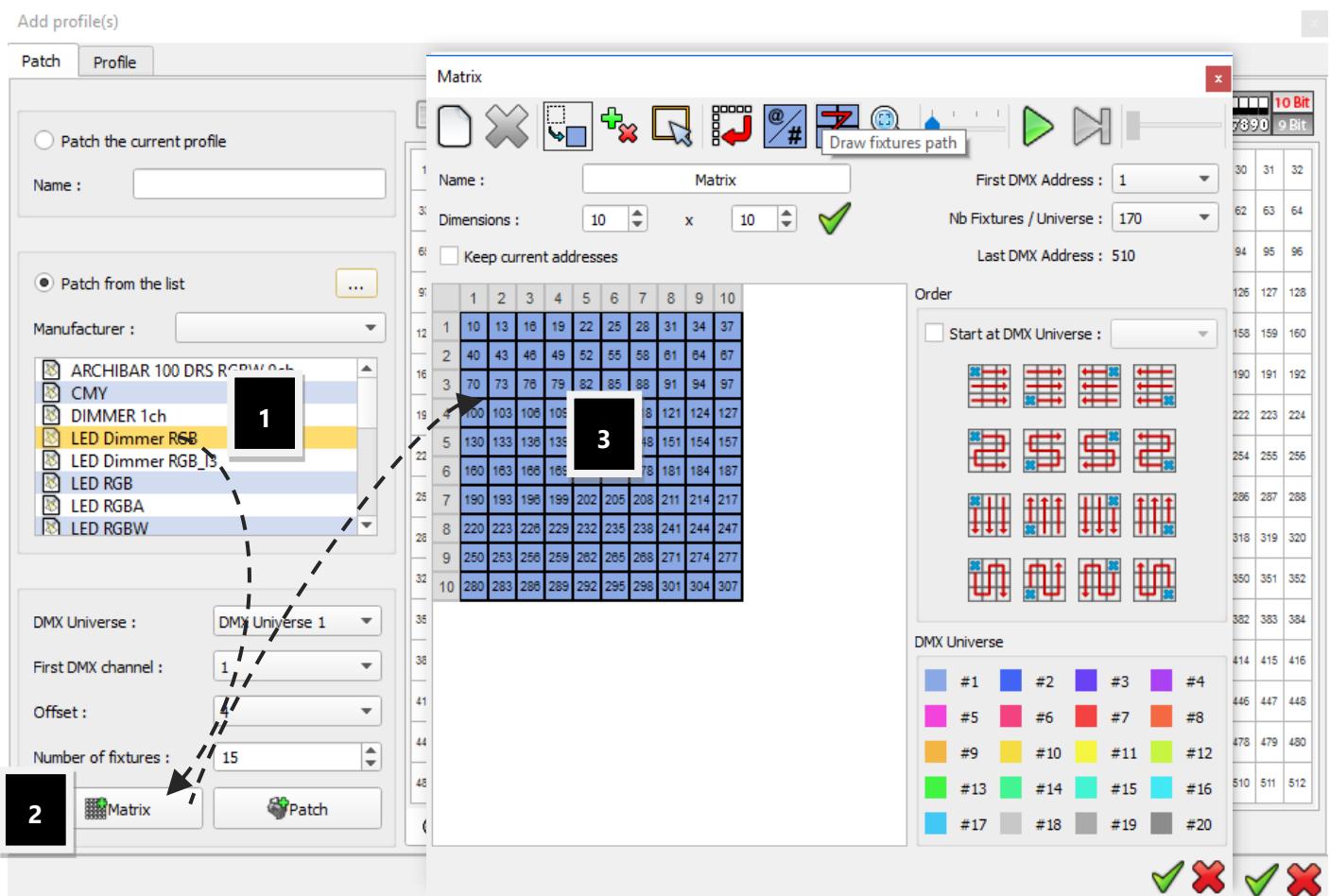
You can setup your lighting fixtures as a matrix. This configuration will give you more options to generate visual effects with the tool effects generator, included in the editor mode. Matrix mode is mainly used with LED/RGB lighting systems, but it can operate with dimmers too.

The Matrix Editor has been created to allow users to create any possible matrix and manage pixels configuration. If the lighting system installation is fixed and if you are not allowed to change the DMX addresses physically, our tool helps to reproduce exactly the same patch and DMX wiring like is set your lighting system.

**Step 1:** Select a Profile from the Current or from the List

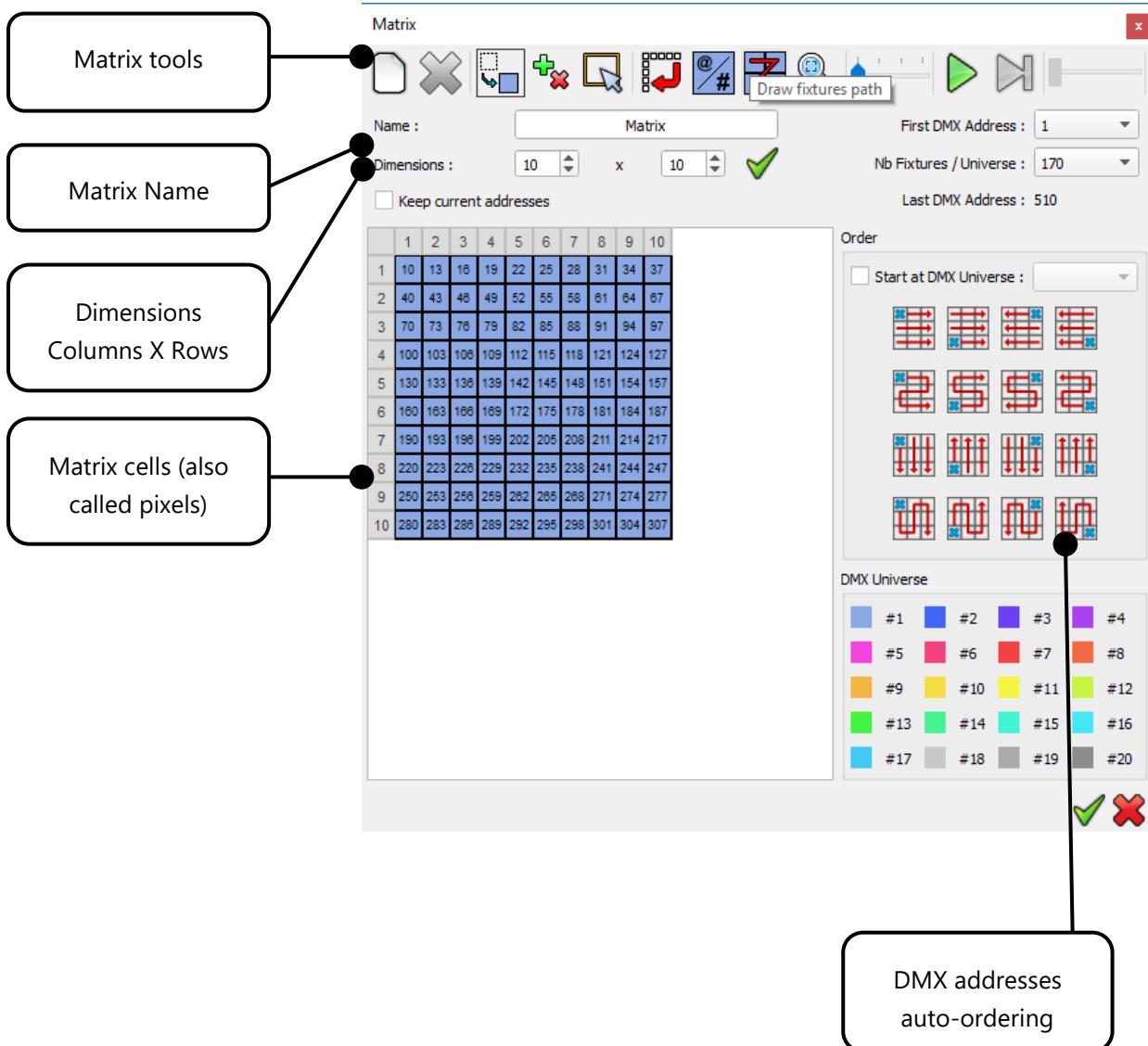
**Step 2:** Click the Matrix option to open matrix manager

**Step 3:** Setup the matrix

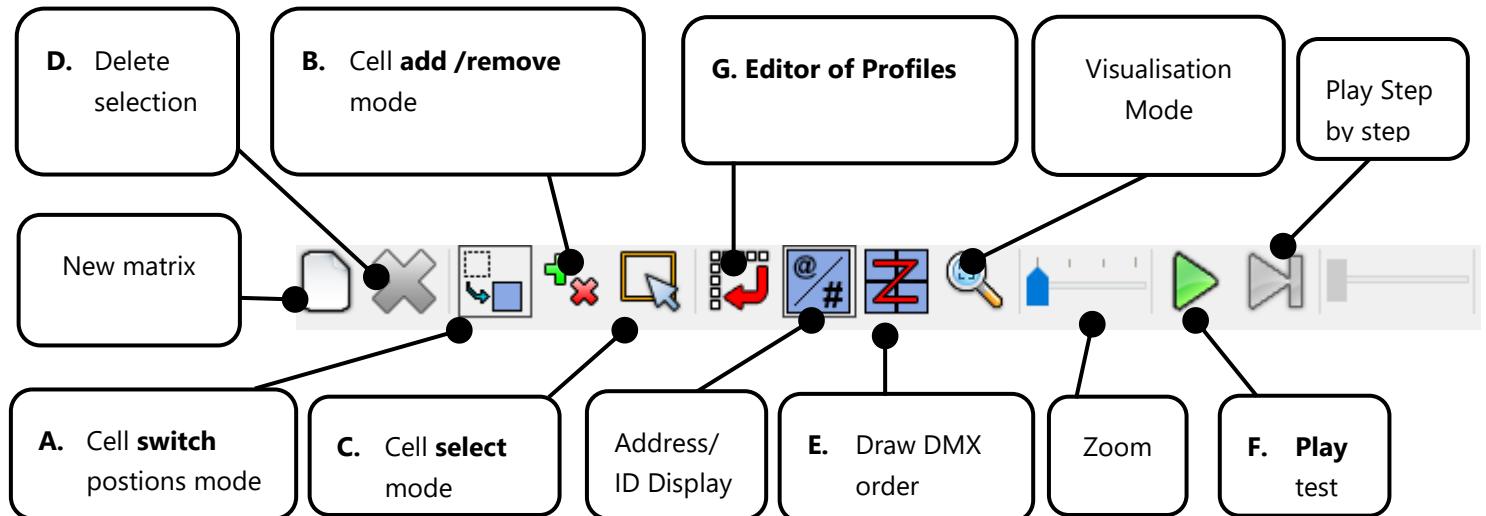


You need to ensure you have enough free DMX channels to create a large matrix.

You can choose the Name and the Dimensions of the matrix. For the matrix Dimensions, the first value is the number of columns and the second value is the number of lines. If you change one of the values, the number of cells will be automatically updated. Here is a configuration with 10 columns and 10 rows.



## MATRIX TOOL BAR



**A:** Drag and drop a cell to switch the 2 cells positions in the matrix and their DMX addresses.

**B:** Delete or add a cell of the matrix by clicking over the cells.

**C:** Select a part of the matrix. Hold the key CTRL + click cells or draw a selection rectangle over the cells.

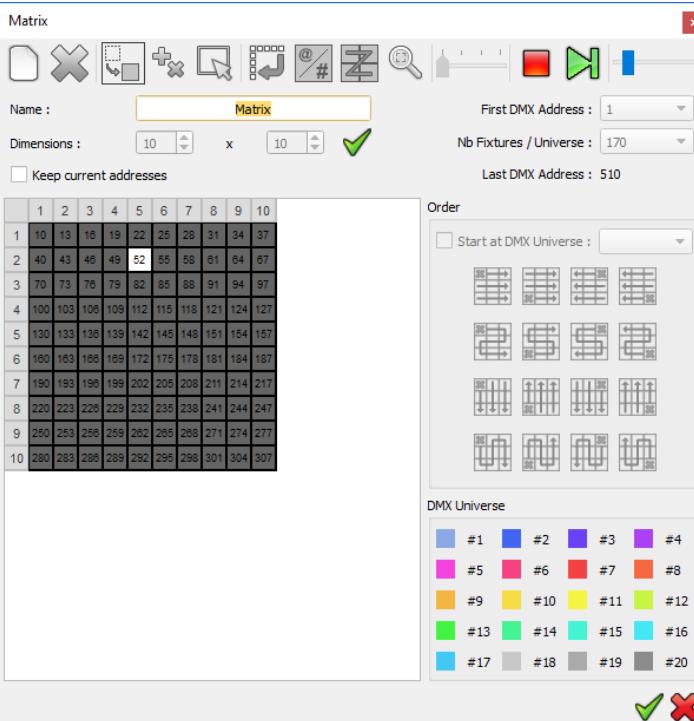
**D:** Remove the fixture from the matrix of the selected cells.

**E:** Draw the fixture addresses ordering path over the matrix cells.

**F:** Play a general test to check your matrix patch.

**G :** The Profile editor allows users to configure the Multi Beams of their fixtures. The modification will only be effective in the Matrix. To set up a modification by default, you shall go back into the profile editor.

## SIMULATE AND CHECK DMX ADDRESSES

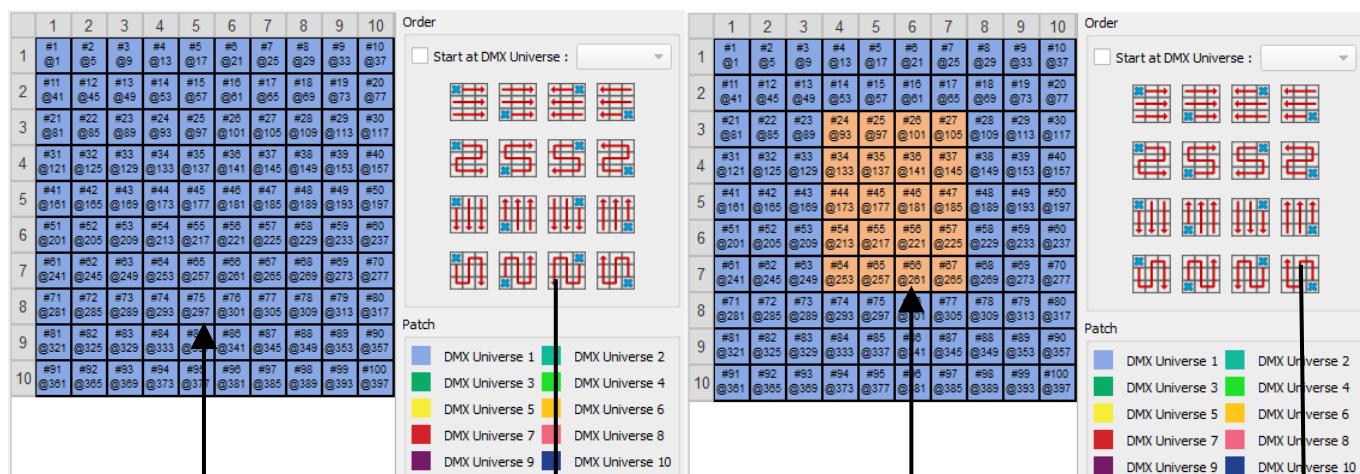


When you use the Play tool, your lighting fixtures will turn on automatically one by one according the order you have set them up. With this option you can check if your DMX patch matches the lighting fixtures themselves. The opening beam option will depend on the default DMX preset of each profile's channel. The Dimmer, Shutter and Iris channels must have a correct default preset. For RGB, each channel will be set to their maximum intensity.

You can scroll through the steps by clicking on the Next button:

## ORDERING THE MATRIX'S CELLS

You can define the fixture DMX addresses in a logical order over all or selected part of the matrix pixels. There are 16 possible configurations (from left to right, right to left, up to down, etc...). Choose the one that matches your lighting rig order (using pixel selection or global). After selecting a configuration, all the DMX addresses will be arranged to match the chosen configuration.



## MODIFY MANUALLY SOME CELLS DMX ADDRESSES

#1 @1	#2 @4	#3 @7	#4 @10	#5 @13	#6 @16
#11 @31	#12 @34	#13 @37	#14 @40	#15 @43	#16 @46
#21 @61	#22 @64	#23 @67	#24 @70	#25 @73	#26 @76
#31 @91	#32 @94	#33 @97	#34 @100	#35 @103	#36 @106
#41 @111	#42 @114	#43 @117	#44 @120	#45 @123	#46 @126

You can reorganize the matrix with a simple drag and drop from one light position to another. The light position order in the matrix and the DMX channel of the light will change. This is a very useful troubleshooter in case mistakes appear on the installation and you need to repatch several fixtures.

## REMOVE FIXTURES FROM THE CELLS

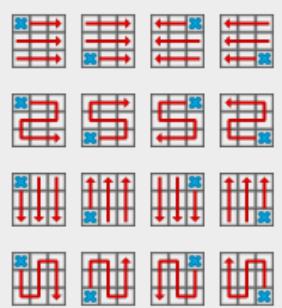
#1 @1	#2 @4	#3 @7	#4 @10	#5 @13	#6 @16	#7 @19	#8 @22	#9 @25	#10 @28
#11 @31	#12 @34	#13 @37	#14 @40	#15 @43	#16 @46	#17 @49	#18 @52	#19 @55	#20 @58
#21 @61	#22 @64	#23 @67	#24 @70	#25 @73	#26 @76	#27 @79	#28 @82	#29 @85	#30 @88
#31 @91	#32 @94	#33 @97	#34 @100	#35 @103	#36 @106	#37 @109	#38 @112	#39 @115	#40 @118
#41 @121	#42 @124	#43 @127	#44 @130	#45 @133	#46 @136	#47 @139	#48 @142	#49 @145	#50 @148
#51 @151	#52 @154	#53 @157	#54 @160	#55 @163	#56 @166	#57 @169	#58 @172	#59 @175	#60 @178
#61 @181	#62 @184	#63 @187	#64 @190	#65 @193	#66 @196	#67 @199	#68 @202	#69 @205	#70 @208
#71 @211	#72 @214	#73 @217	#74 @220	#75 @223	#76 @226	#77 @229	#78 @232	#79 @235	#80 @238
#81 @241	#82 @244	#83 @247	#84 @250	#85 @253	#86 @256	#87 @259	#88 @262	#89 @265	#90 @268
#91 @271	#92 @274	#93 @277	#94 @280	#95 @283	#96 @286	#97 @289	#98 @292	#99 @295	#100 @298

With the Remove option, you can delete fixtures from the matrix configuration.

First, you must select the fixture that you want to remove with the selection tool.

#1 @1	#2 @4	#3 @7	#4 @10	#5 @13	#6 @16	#7 @19	#8 @22	#9 @25	#10 @28
#11 @31	#12 @34	#13 @37	#14 @40	#15 @43	#16 @46	#17 @49	#18 @52	#19 @55	#20 @58
#21 @61	#22 @64	#23 @67	#24 @70	#25 @73	#26 @76	#27 @79	#28 @82	#29 @85	#30 @88
#31 @91	#32 @94	#33 @97	#34 @100	#35 @103	#36 @106	#37 @109	#38 @112	#39 @115	#40 @118
#41 @121	#42 @124	#43 @127	#44 @130	#45 @133	#46 @136	#47 @139	#48 @142	#49 @145	#50 @148
#51 @151	#52 @154	#53 @157	#54 @160	#55 @163	#56 @166	#57 @169	#58 @172	#59 @175	#60 @178
#61 @181	#62 @184	#63 @187	#64 @190	#65 @193	#66 @196	#67 @199	#68 @202	#69 @205	#70 @208
#71 @211	#72 @214	#73 @217	#74 @220	#75 @223	#76 @226	#77 @229	#78 @232	#79 @235	#80 @238
#81 @241	#82 @244	#83 @247	#84 @250	#85 @253	#86 @256	#87 @259	#88 @262	#89 @265	#90 @268
#91 @271	#92 @274	#93 @277	#94 @280	#95 @283	#96 @286	#97 @289	#98 @292	#99 @295	#100 @298

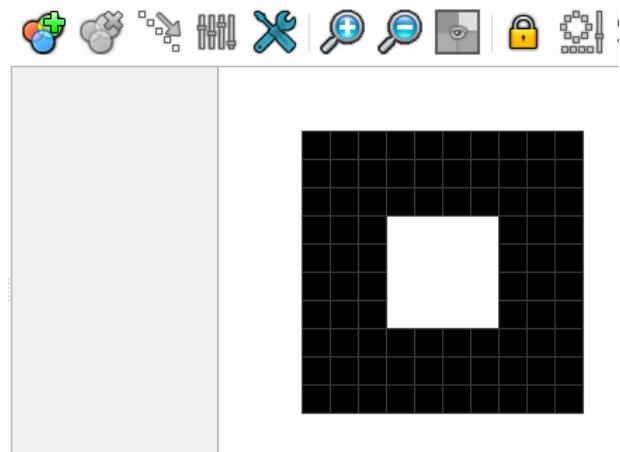
Then you can create a hole in the matrix field and free up some channels.



To re-use the free channels, click on one of the 16 order configuration to change the DMX addresses of the fixtures. When the fixture DMX address has changed the newly available addresses will be automatically reassigned to the fixtures following in sequential order. You will then have more channels available after the matrix and should you wish you can decide to increase the size of the matrix and add more fixtures. The Software can manage up to 32 DMX universes in a matrix.

The main advantages here are that you can increase the size of your matrix when you use the free channels and you don't need to change the DMX addresses one by one.

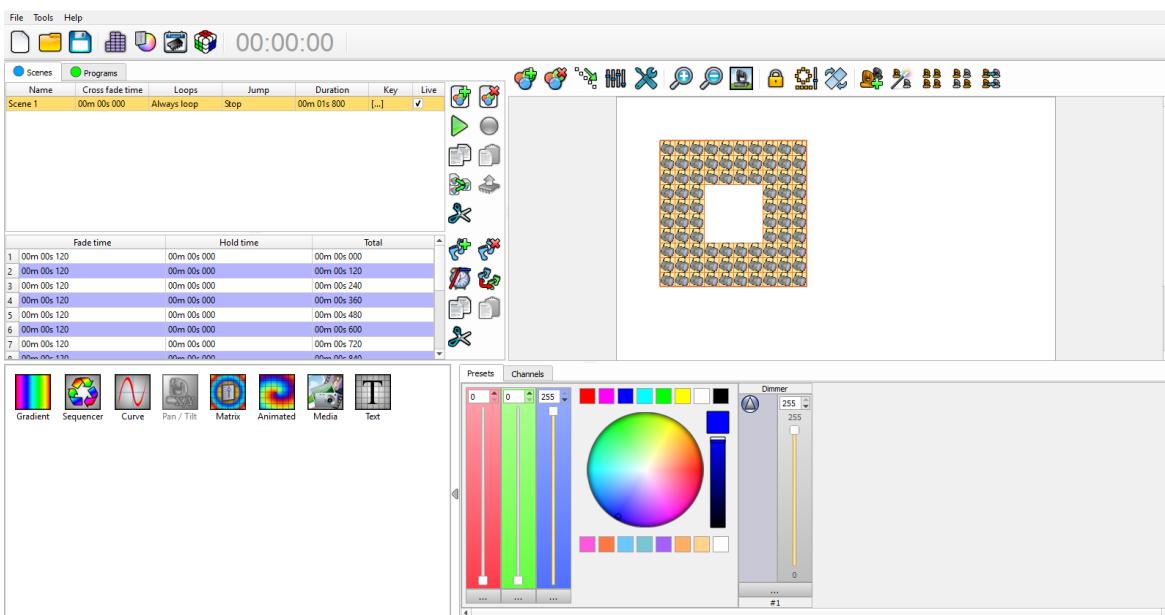
## UPDATING AND MODIFYING THE PATCH



You can change and update the patch anytime you want to remove, add fixtures or change their DMX addresses. Click on the ADD button of the 2D tool ribbon to open the Patch manager again and carry out modifications. The changes will appear in the 2D area of the software after confirmation of the new patch.

If you have created several scenes and you decide to change some DMX addresses, then the content of your scenes and programs will automatically move to the new DMX addresses.

## PATCH CONSEQUENCES IN THE SOFTWARE

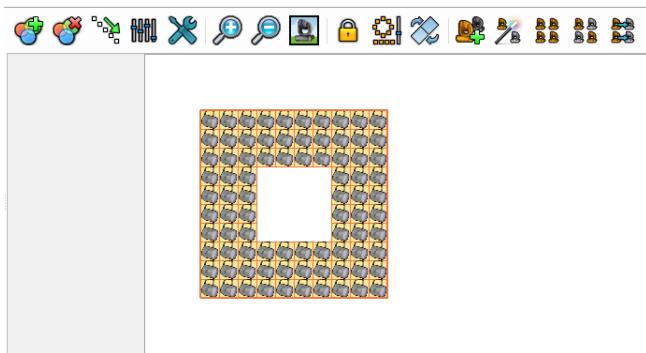


When the Profile and DMX addresses match the lighting fixtures, you can confirm the Patch and click OK. The software uses the patch information and can generate powerful functions that will help you to create your show in a very short time.

All the profiles appear in the Editor Window and their light beam shapes are shown in the 2D Editor area, so it is possible to have a complete view of the project from the 2D software area.

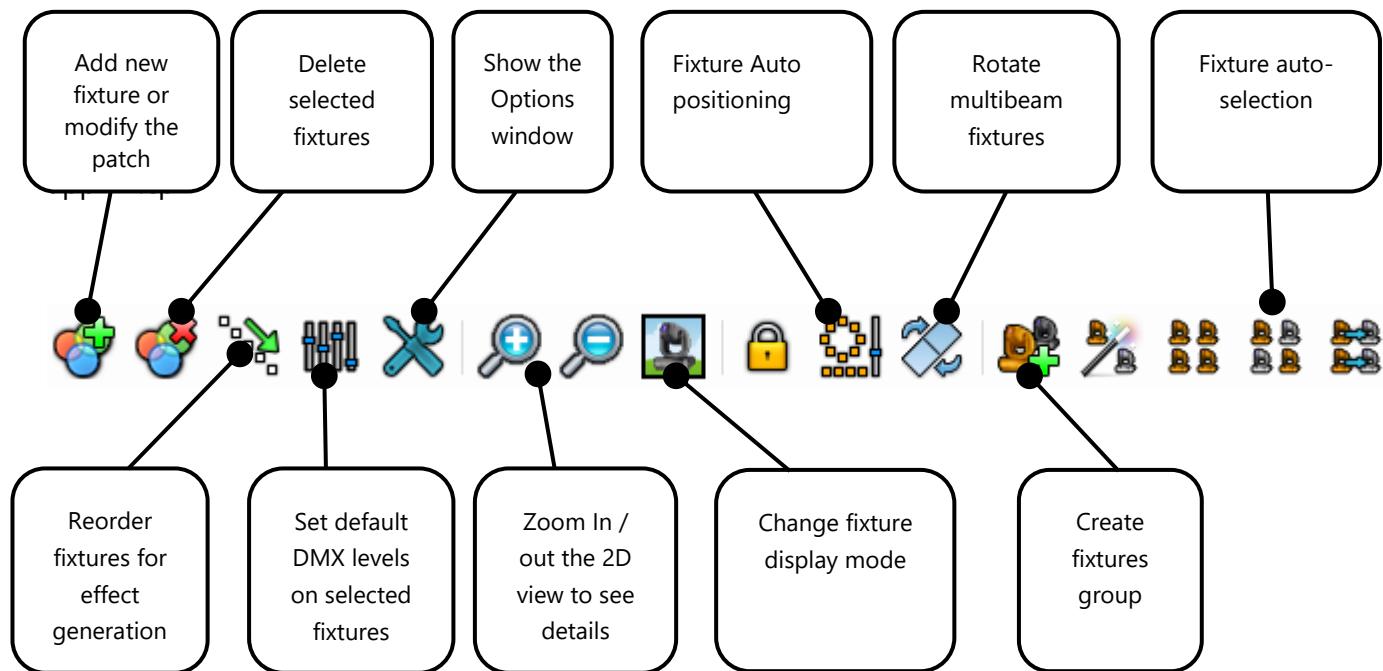
Now the software is ready to work and program your show. When you select fixtures from the 2D area, the fixtures dedicated channels appear below.

## 2D GRAPHIC AREA



The 2D graphic area displays the light profiles. The two default actions of the mouse are to select fixture profiles with a left click and change their position of the selection in the 2D area. To change position, left Click and hold it then move the selection somewhere else. Additional commands are possible in the 2D ribbon.

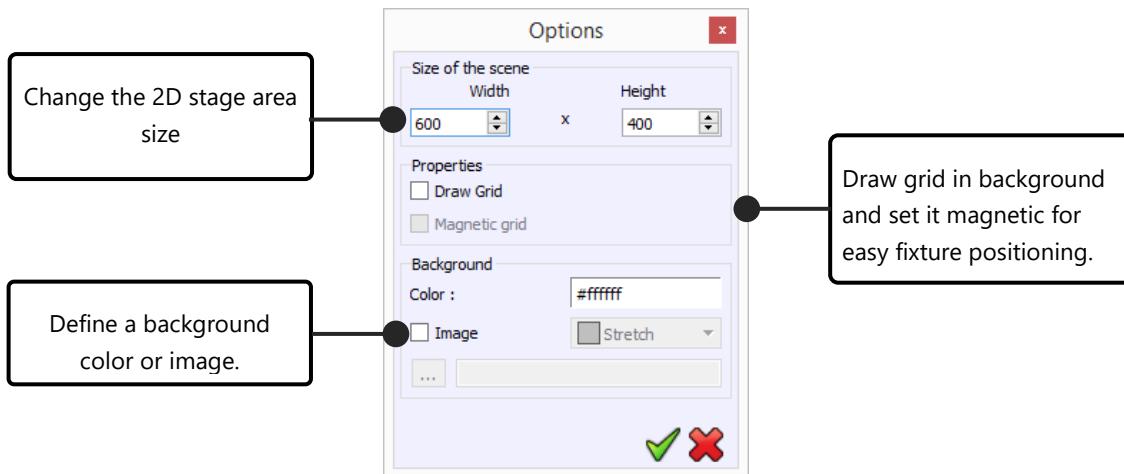
Commands icons of the 2D ribbon tools allows you to:



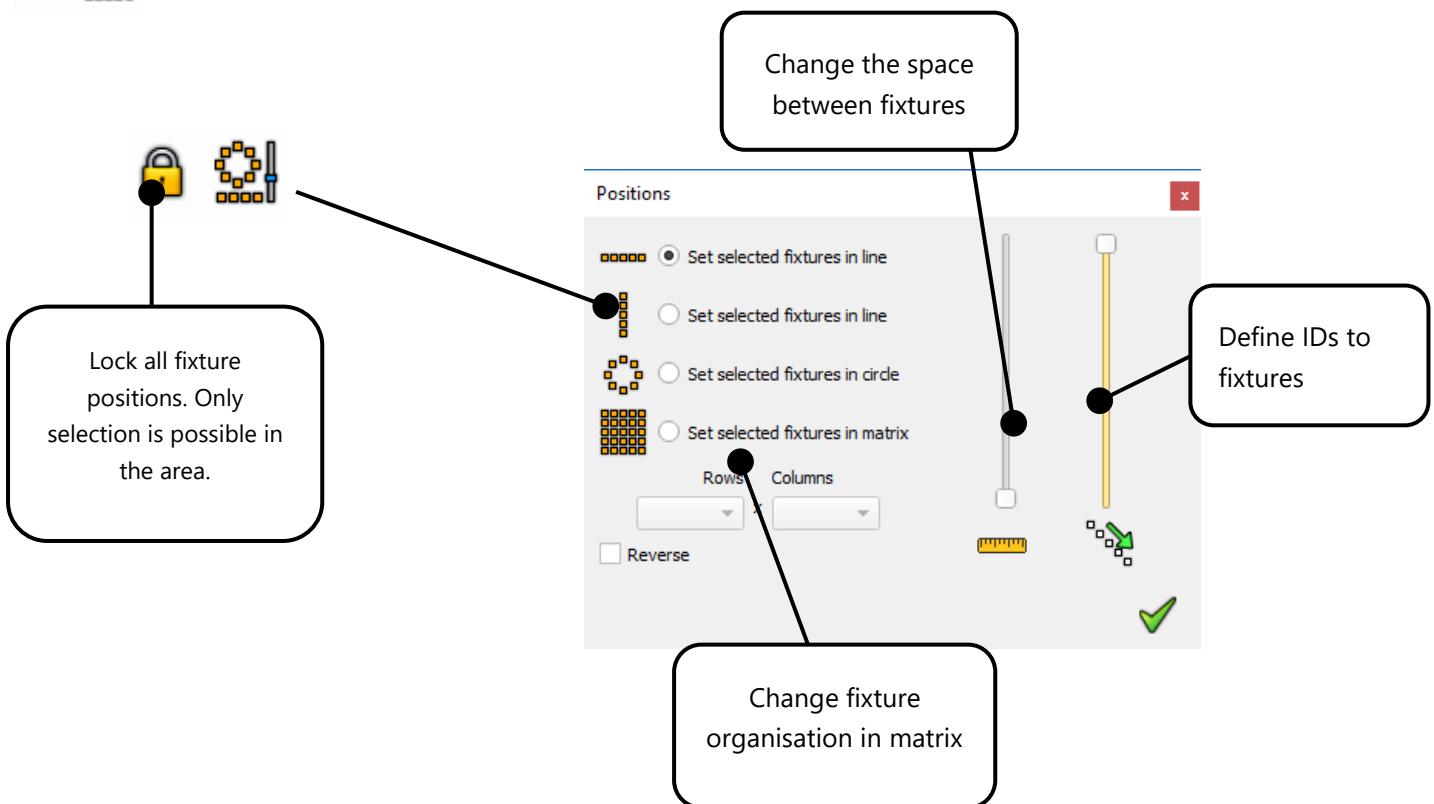


## FOCUS ON THE OPTIONS COMMAND

Select a new color from the color palette to change the background and define an image to the 2D area background. You can display a view of a stage or room and place all the fixtures in their respective locations.

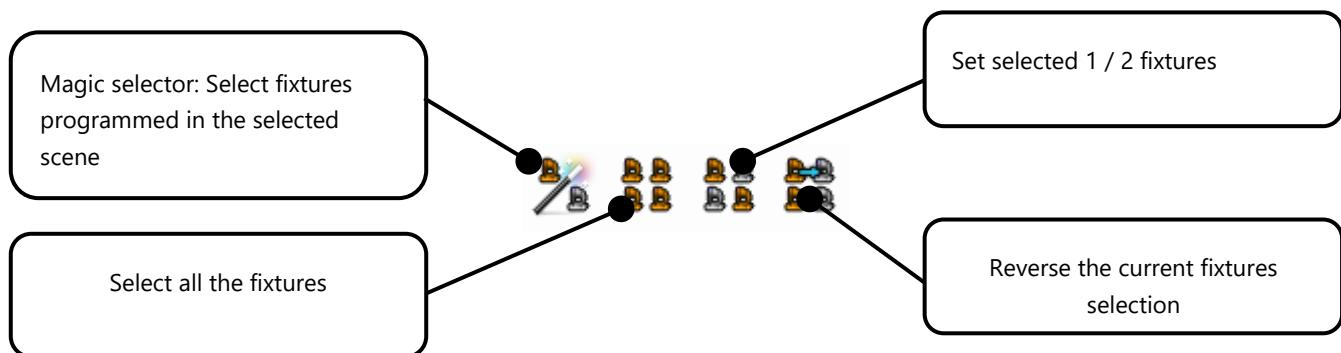


## FOCUS ON THE AUTO-POSITIONING COMMAND



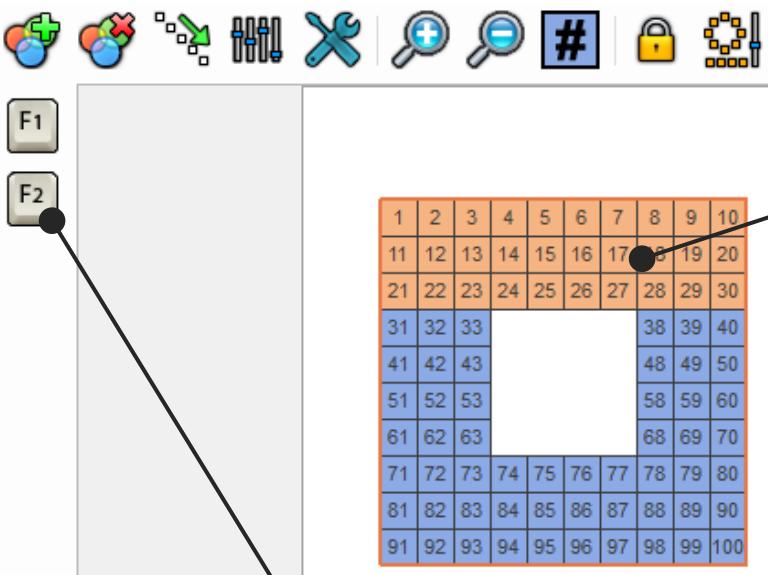


## FOCUS ON AUTO-SELECTING COMMAND



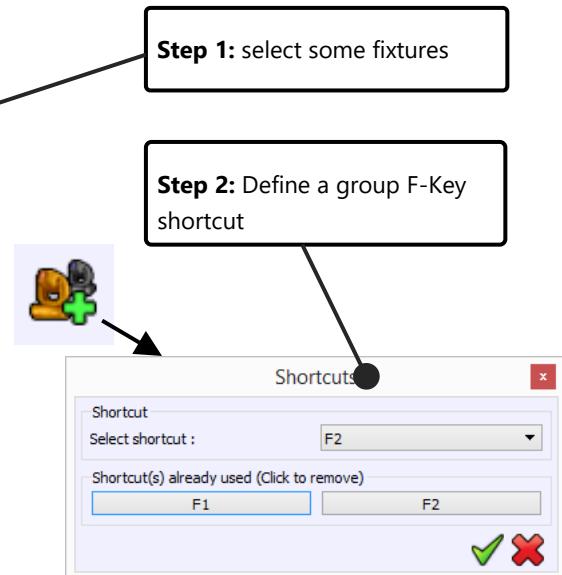
## FOCUS ON GROUP COMMAND

This command allows to record a fixture selection under the F1 to F12 keys of your keyboard. To do that, first select a group of fixtures, then press the Group command and choose the shortcut F-key you want to use to recall your group selection at any time.



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33				38	39	40	
41	42	43				48	49	50	
51	52	53				58	59	60	
61	62	63				68	69	70	
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

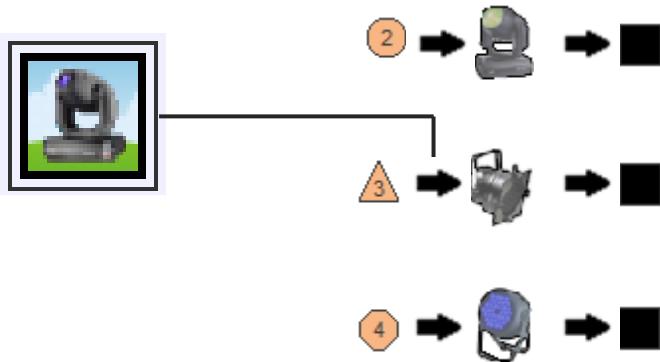
**Step 3:** The group is recorded under key shortcut and a shortcut button automatically appears in the group ribbon. You can click it or use your keyboard to recall the fixtures selection.





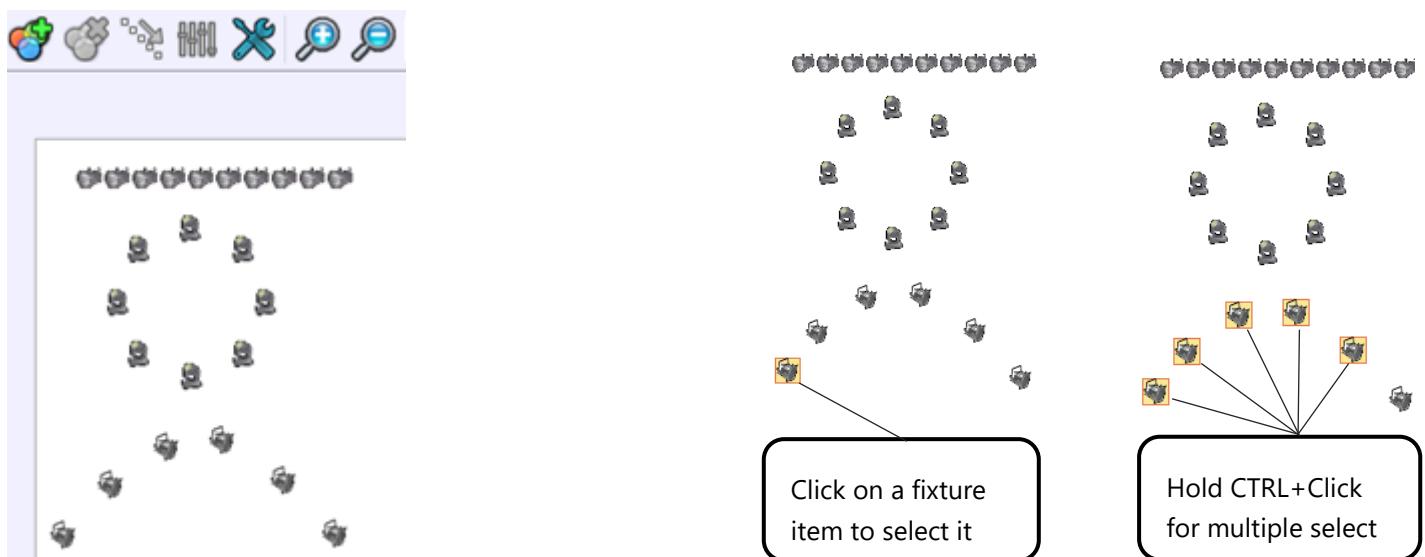
## FOCUS ON FIXTURE DISPLAY MODE COMMAND

Switch between image or shaped icon to display fixtures items. You can choose the fixture's image and the shaped icon in the Profile Editor. (you must update the profile to change the fixture image).

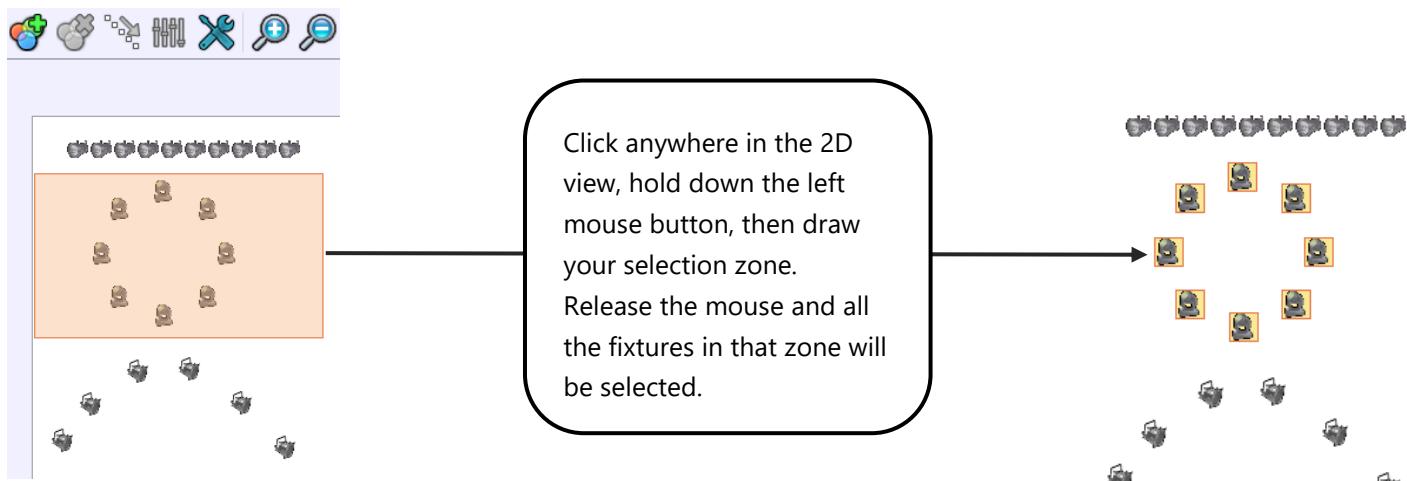


## FIXTURE SELECTION

In the 2D area you can select / deselect the fixtures by clicking on their icons.



You can also select them by drawing a selection zone



You can deselect all of the fixtures by clicking anywhere on the 2D area.

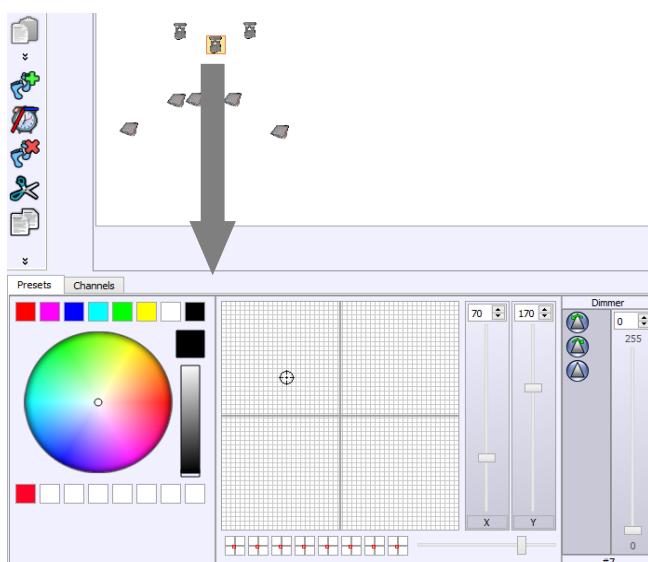


When the Lock position is activated, you can unselect fixtures by clicking the item a second time.



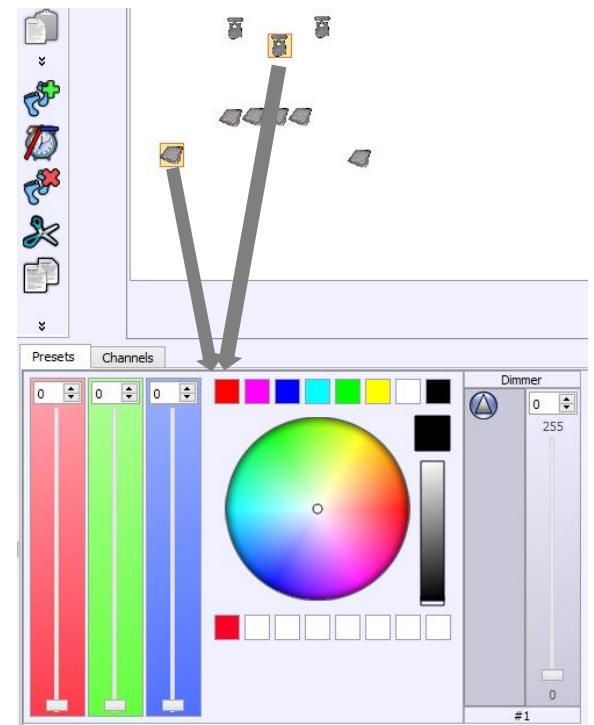
**DMX levels and preset values are activated only on selected fixtures in the 2D area.  
Make sure that you select the right fixture every time.**

### FIXTURE CHANNELS CONTROL PANEL



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

If you select two or more different fixtures with different profiles then the software will only display the common channels. For example, if you select two different fixtures with an RGB function, the software will show the RGB color palette. If the two fixtures have both a Pan and Tilt, the software will display the Pan and Tilt palette. If they both have a dimmer, the software will display the dimmer. But if only one of them has RGB color, the software won't display the RGB Color palette. Common channels are shown, while others are hidden.

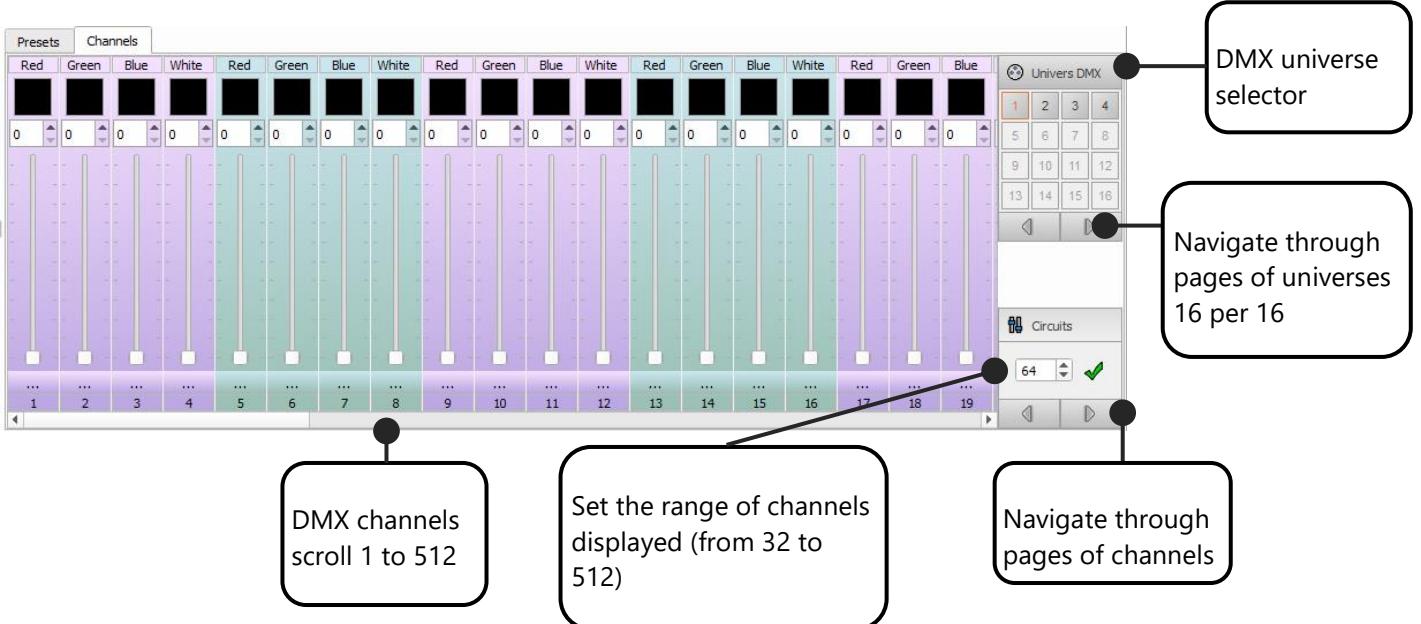


## CHANNELS AND PRESETS WINDOW

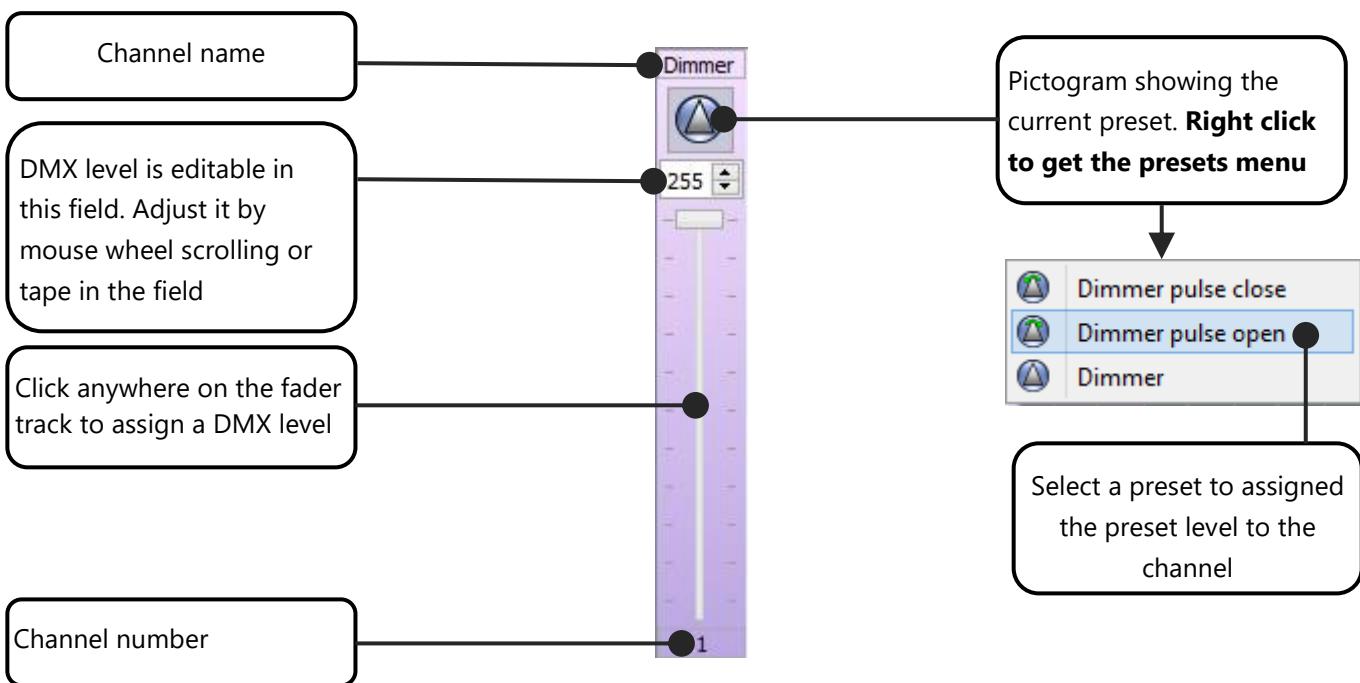
The DMX controls window is located under the 2D area. There are two possible types of control display.

### THE CHANNEL DISPLAY MODE

The Channel mode shows a traditional fader 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 one universe to another. The software has three fader colors : light grey for neutral channels (no profile associated), and two other colors to distinguish the odd and even fixture channels.



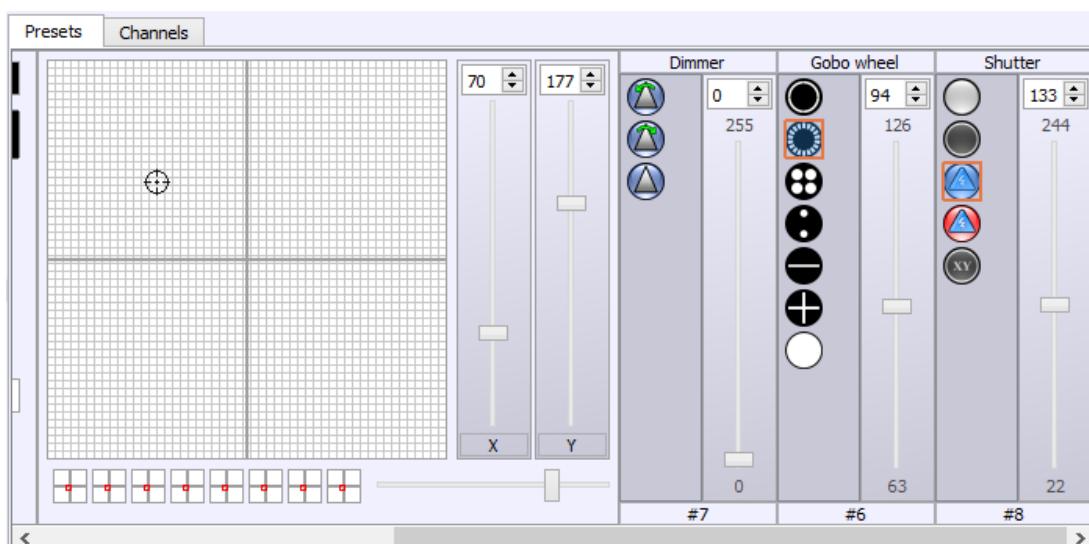
## DMX fader Control

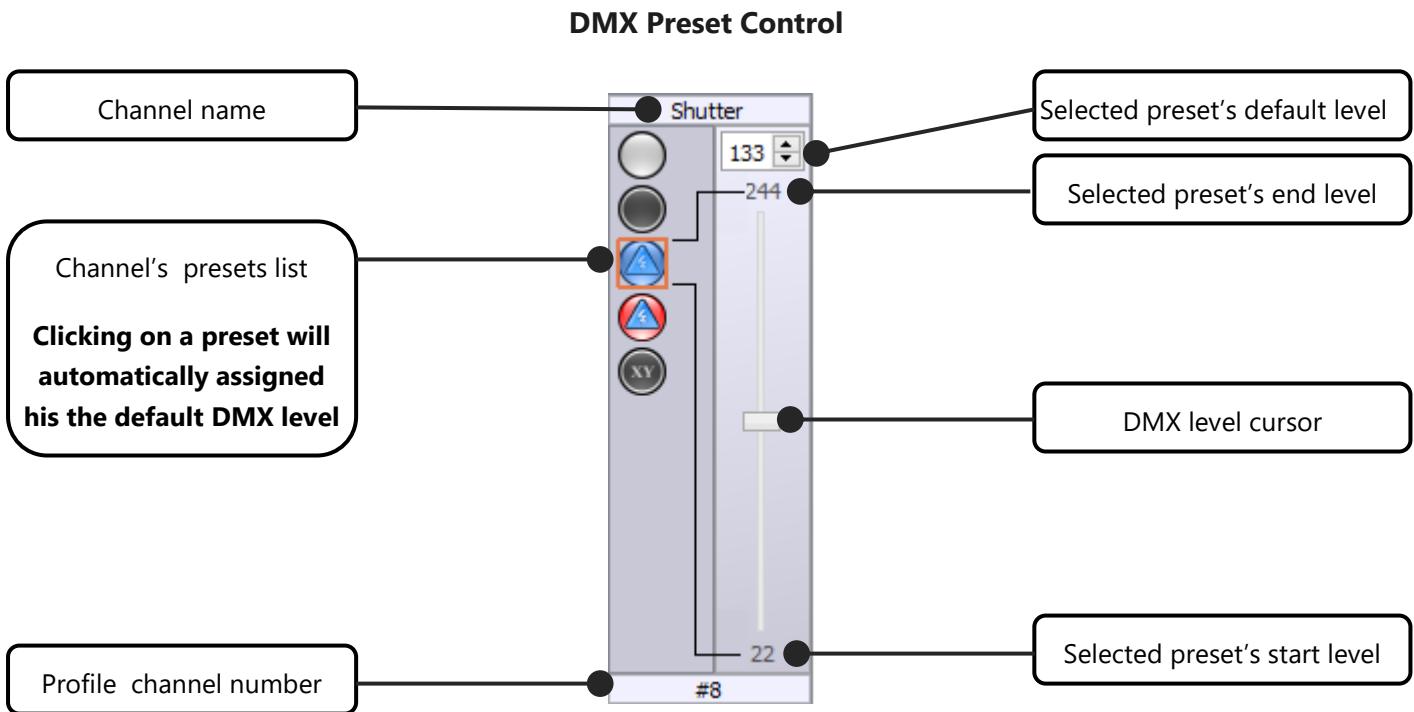


## THE PRESET DISPLAY MODE

The second and more powerful control mode is the Preset mode. It's the software's default control mode. It provides a board containing palettes mixing cursors and presets menus, which embeds powerful tools like RGB color mixing palette and the Pan & Tilt palette.

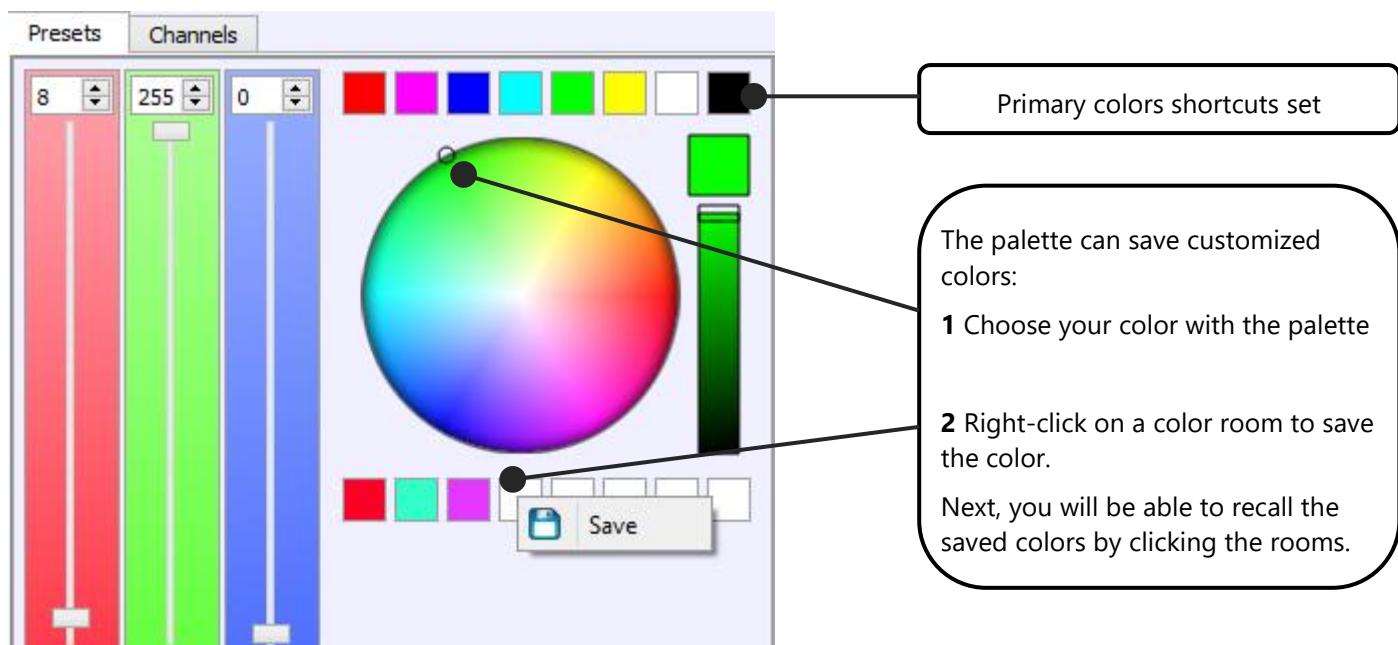
**⚠️** If no fixtures are selected, there are no presets to show and then the presets board is an empty window.



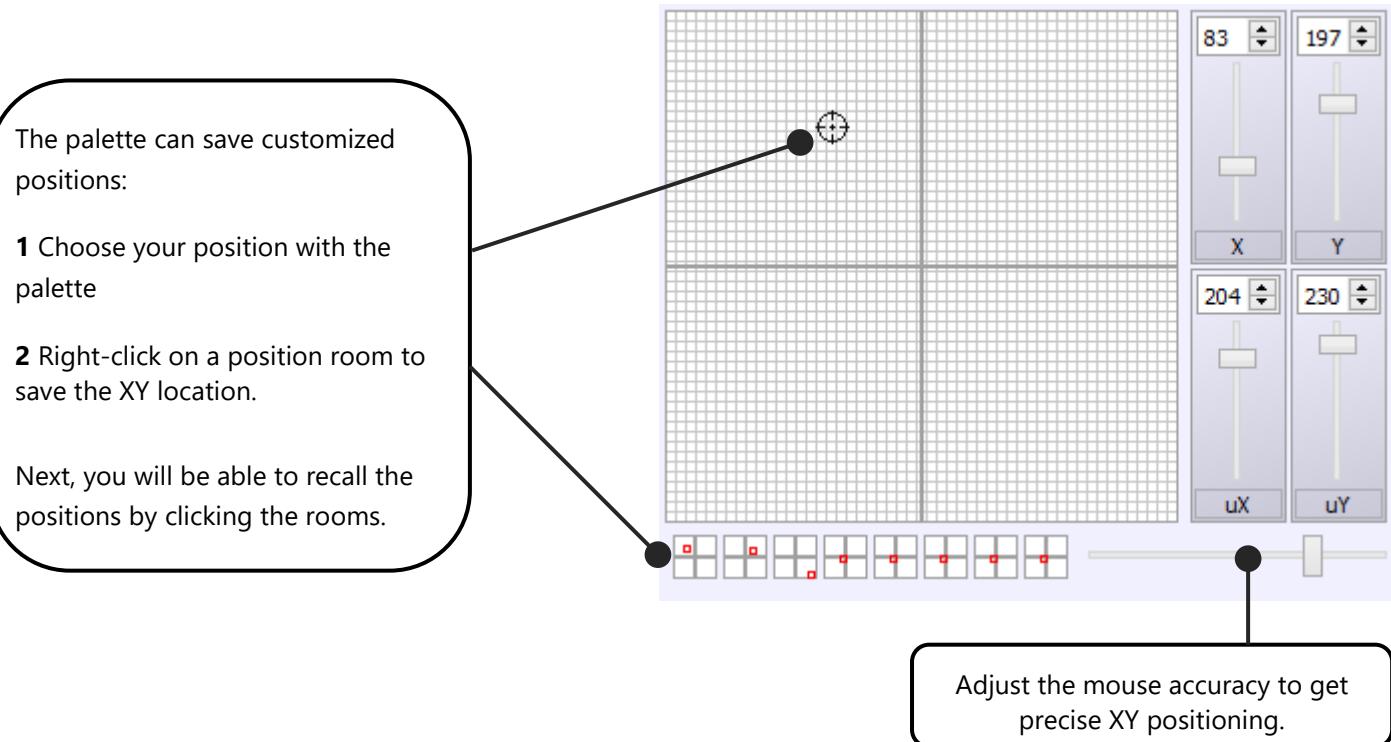


When the preset is selected the main cursor can move from the start to the end DMX level of the preset (refer to the user manual: **How to create Profiles**). You can click on the Preset a second time to unselect it and return to the DMX level 0.

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



The Pan and Tilt palette for the XY channels:



**NOTE:** The Preset display mode automatically manages the DMX universes. You do not need to switch from one DMX universe to another one like in the Channel display mode.

## CREATING SCENES AND PROGRAMS

After successfully patching profiles and becoming familiar with the software commands and controls you can start to program your show. The software uses a very user-friendly method and powerful functions to create the show. Just refer to the user manual **How to Create Scenes And Programs** for perfect programming.

Now you are able to create and update your DMX patch and use the control mode. A good patch with good profiles is the basis of good programming. When the profiles match your fixtures perfectly you will save time programming the show and the final visual result will be much improved. It is now time to learn how to create scenes, programs and sequences.