

# USER MANUAL

## HOW TO PATCH PROFILES (LIBRARIES)

V1.5.1

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## INTRODUCTION

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

Patching fixtures means assigning a DMX channel address to corresponding software profiles. The DMX address can be chosen from 1 to 512 according to the universal DMX standard. All DMX controllers, including DMX software, send DMX data to the fixtures 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.

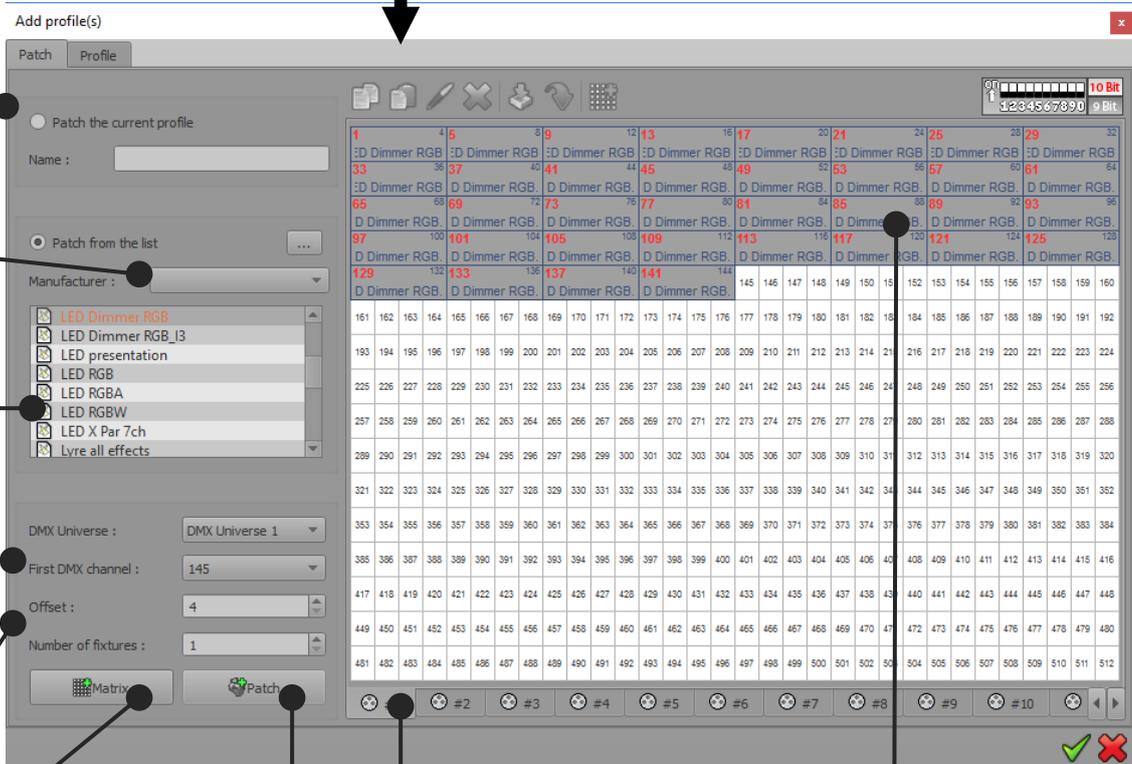
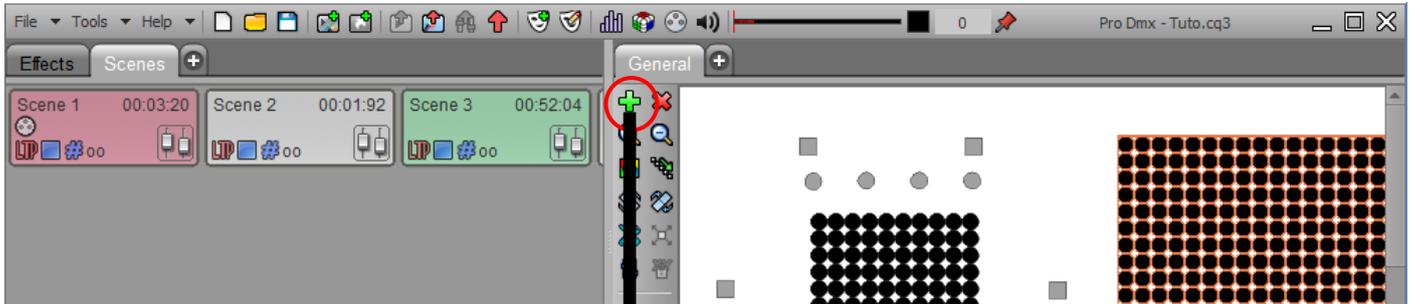
You must start the software before you begin patching profiles and make sure you have some profiles available.



Video tutorials are available online

## OPENING THE PATCH MANAGER

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



Patch profile just created in the profile editor

Manufacturer List

Fixture profiles available for the manufacturer

DMX Address settings

Select the offset between two profiles

Matrix patch settings

Send profiles to the DMX grid

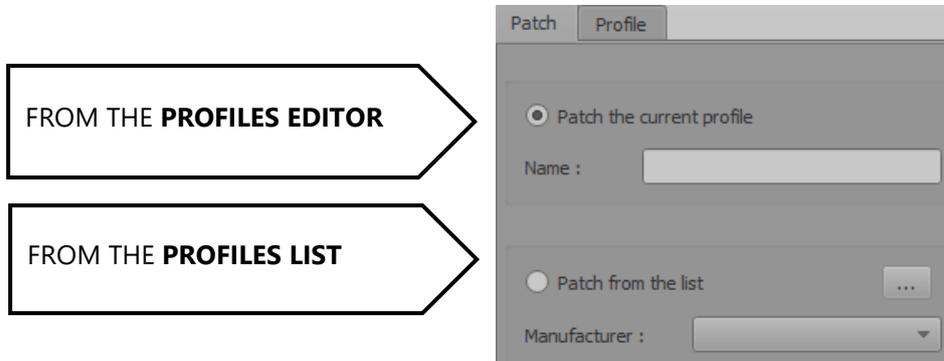
DMX Universe selector

DMX addresses grid

The patch manager window is divided in 2 sections. The left area is for profiles catalogue and information. The right area is the DMX addresses grid where the effective addresses of the profiles are placed. **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 of 512 channels 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 profile files provided in the software. Follow those 6 steps:

1. Select the option Patch from The List (selected by default)

2. Select a manufacturer or the '.' for standards profiles like RGB, LED PAR +, Dimmer....

3. Select the universe where you want to patch

4. Select the 1<sup>st</sup> DMX channel (= the DMX address of your 1<sup>st</sup> fixture)

5. Select number of fixtures to add to the patch. (Here we have 6 units)

By default the offset is the number of selected channel

Open the profiles

Patch from the list

Manufacturer :

- LED Dimmer RGB
- LED Dimmer RGB\_13
- LED presentation
- LED RGB
- LED RGBA
- LED RGBW
- LED X Par 7ch
- Lyre all effects

DMX Universe : DMX Universe 1

First DMX channel : 491

Offset : 7

Number of fixtures : 1

Matrix Patch

- Abstract
- AC Lighting
- Acdc
- Acme
- Actor Mate
- ADj
- Aeon Light
- AFX
- Aiweidy
- Aldabra
- Alkalite
- Allido Light
- American Pro
- Anolis
- Antari
- Apogee
- Apollo
- arc-pad

6. Click **Patch** to add the profiles into the patch grid

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

The screenshot shows the 'Add profile(s)' window with the 'Patch' tab selected. On the left, there are options to 'Patch the current profile' or 'Patch from the list'. Under 'Patch from the list', a dropdown menu shows several profiles, with 'LED Dimmer RGB' selected. Below this, the 'DMX Universe' is set to 'DMX Universe 1', 'First DMX channel' is '25', 'Offset' is '4', and 'Number of fixtures' is '1'. The main area is a grid of DMX addresses from 1 to 512. The grid is organized into columns for profiles: Dimmer, RGB, Dimmer, RGB, Dimmer, RGB, Dimmer, RGB, Dimmer, RGB. The first fixture is at address 1, and subsequent fixtures are at addresses 5, 9, 13, 17, and 21. The interface includes a bottom bar with a green checkmark icon for validation.

**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 a same channel. When channels already receive a profile, you cannot patch anything 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 profile by using the Profile Editor. If you want to create a profile, refer to the user manual [How To Create Profiles](#).

The image shows a software interface with a dialog box titled "Add profile(s)". The dialog has two tabs: "Patch" and "Profile". The "Patch" tab is selected. The dialog contains the following elements:

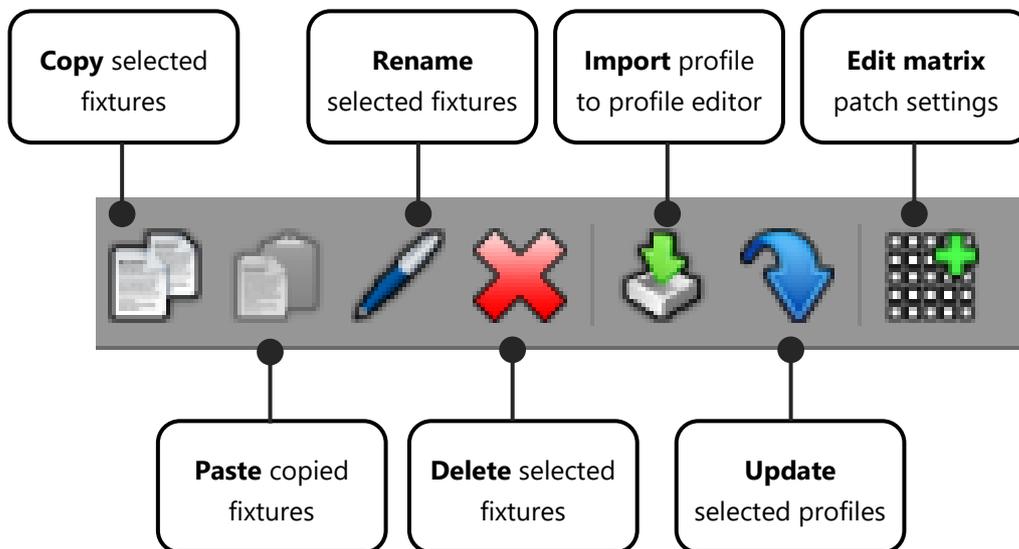
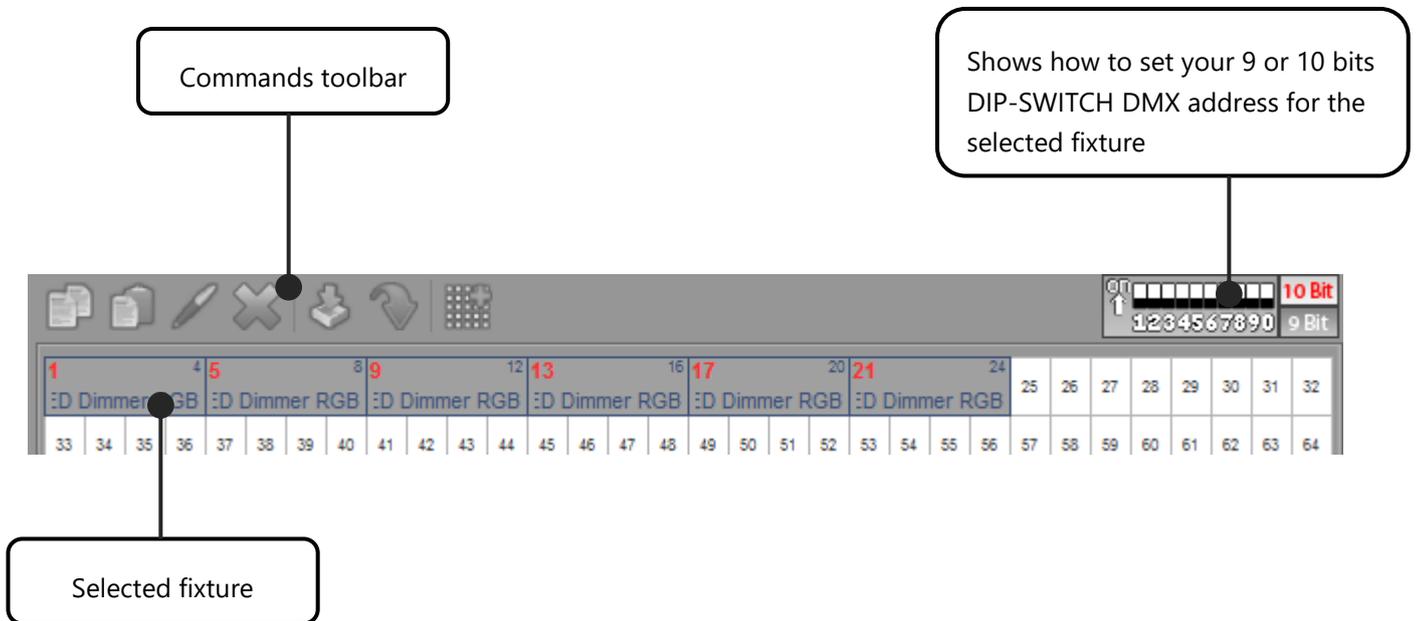
- Radio button:  Patch the current profile
- Text field: Name : My new led profile
- Radio button:  Patch from the list
- Dropdown menu: Manufacturer :
- List of profiles:
  - 01Spot LED 7ch
  - 2pan2tilt
  - 6CUBE-FX 14ch
  - 6CUBE-FX 16ch
  - ARCHIBAR 100 DRS RGBW 9ch
  - Carrée 2D
  - CMY
  - Cold White & Cold Warm
- DMX Universe : DMX Universe 1
- First DMX channel : 1
- Offset : 4
- Number of fixtures : 1
- Buttons: Matrix and Patch

Five callout boxes provide instructions:

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** 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 commands tools bar. They are accessible only if there is one or more patched fixture and if at least one of them has been selected.



## UPDATE PROFILE IN THE PATCH

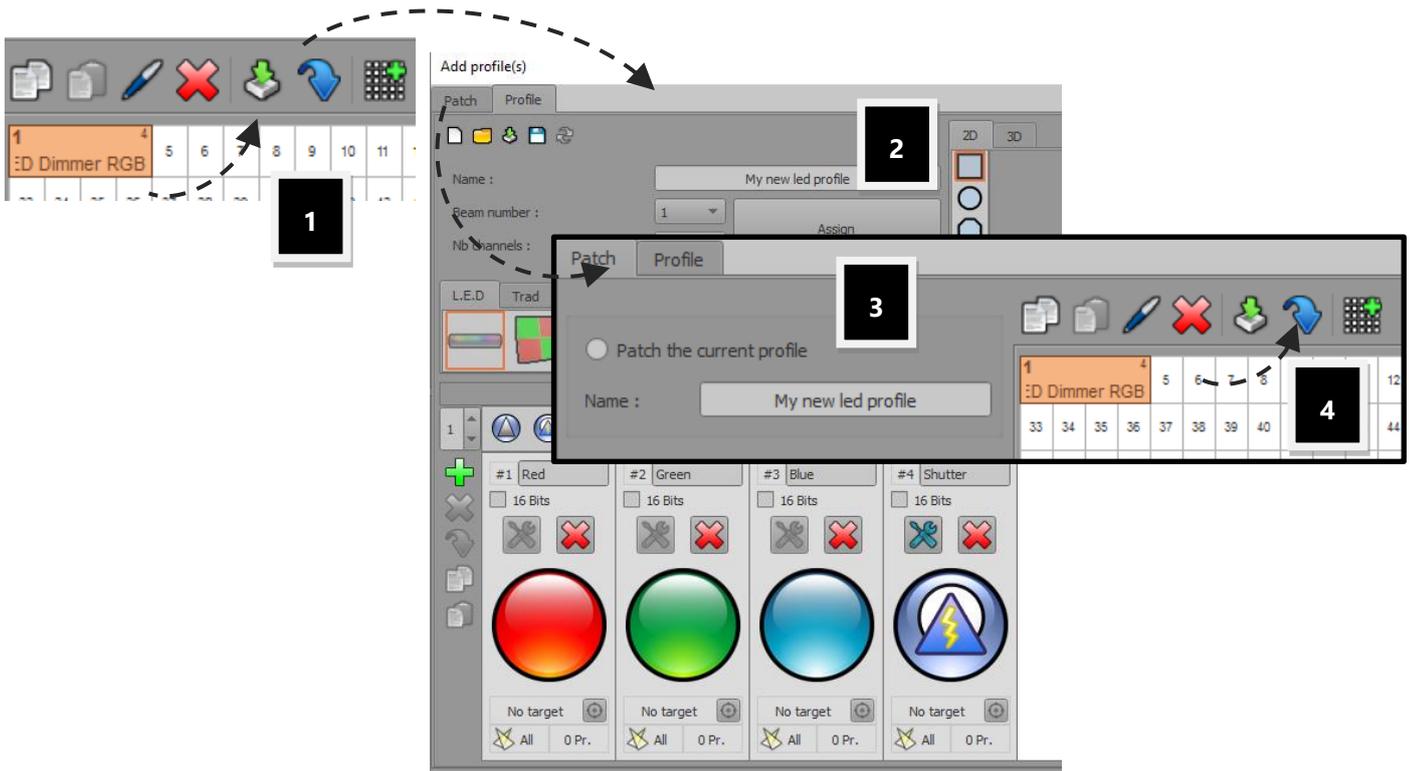
A profile can be updated from the profile list or directly from the current edited profile. The new profile needs to have the exact same number of channels. You can modify profiles with the profile editor (Profile Tab) and update it in the patch area. Follow these steps to do it:

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

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

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

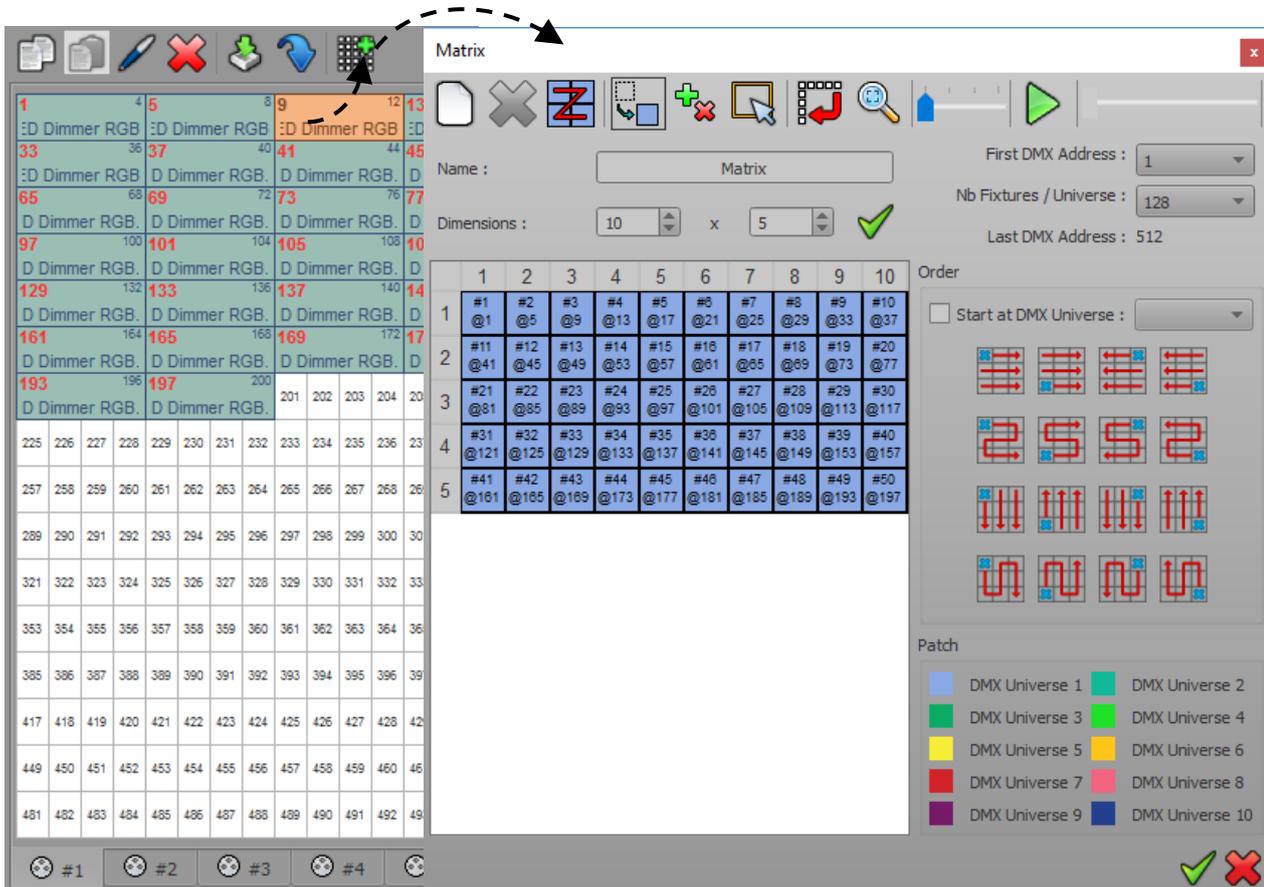
**Step 4:** Click Update



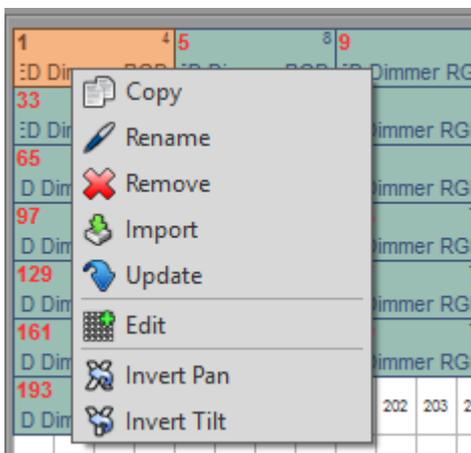
**The new profile must have the same number of channels to replace the old one**

## 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 click over the fixture's item will show up the local menu where you can invert 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. Of course, the profile's channels features must also match DMX chart of the lighting fixture itself.

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	34	35	36	37	38	39	40	41	42	43	44	45	46	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

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.

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

## CREATING A LIGHTING FIXTURES 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 pixel 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 the identical patch and DMX wiring to match the rig.

**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

The screenshot displays the 'Matrix' editor interface. On the left, the 'Add profile(s)' panel is visible, with the 'Profile' tab selected. A list of profiles is shown, and a dashed arrow labeled '1' points to the 'Matrix' button at the bottom. The main 'Matrix' panel shows a 10x10 grid of cells, each containing a fixture ID and its DMX address. A dashed arrow labeled '2' points to the 'Matrix' button, and another dashed arrow labeled '3' points to the center of the grid. On the right, there are controls for 'Name', 'Dimensions' (10 x 10), 'First DMX Address' (1), 'Nb Fixtures / Universe' (128), and 'Last DMX Address' (512). Below these are 'Order' and 'Patch' sections with various icons and a legend for DMX Universes 1-10.



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

Matrix Tools

Matrix Name

Dimensions  
Columns \* Rows

Matrix cells (also called pixels)

DMX address auto-ordering

Name : Matrix

First DMX Address : 1

Nb Fixtures / Universe : 128

Last DMX Address : 512

Dimensions : 10 x 10

	1	2	3	4	5	6	7	8	9	10
1	#1 @201	#2 @205	#3 @209	#4 @213	#5 @217	#6 @221	#7 @225	#8 @229	#9 @233	#10 @237
2	#11 @241	#12 @245	#13 @249	#14 @253	#15 @257	#16 @261	#17 @265	#18 @269	#19 @273	#20 @277
3	#21 @281	#22 @285	#23 @289	#24 @293	#25 @297	#26 @301	#27 @305	#28 @309	#29 @313	#30 @317
4	#31 @321	#32 @325	#33 @329	#34 @333	#35 @337	#36 @341	#37 @345	#38 @349	#39 @353	#40 @357
5	#41 @361	#42 @365	#43 @369	#44 @373	#45 @377	#46 @381	#47 @385	#48 @389	#49 @393	#50 @397
6	#51 @401	#52 @405	#53 @409	#54 @413	#55 @417	#56 @421	#57 @425	#58 @429	#59 @433	#60 @437
7	#61 @441	#62 @445	#63 @449	#64 @453	#65 @457	#66 @461	#67 @465	#68 @469	#69 @473	#70 @477
8	#71 @481	#72 @485	#73 @489	#74 @493	#75 @497	#76 @501	#77 @505	#78 @509	#79 @513	#80 @517
9	#81 @521	#82 @525	#83 @529	#84 @533	#85 @537	#86 @541	#87 @545	#88 @549	#89 @553	#90 @557
10	#91 @561	#92 @565	#93 @569	#94 @573	#95 @577	#96 @581	#97 @585	#98 @589	#99 @593	#100 @597

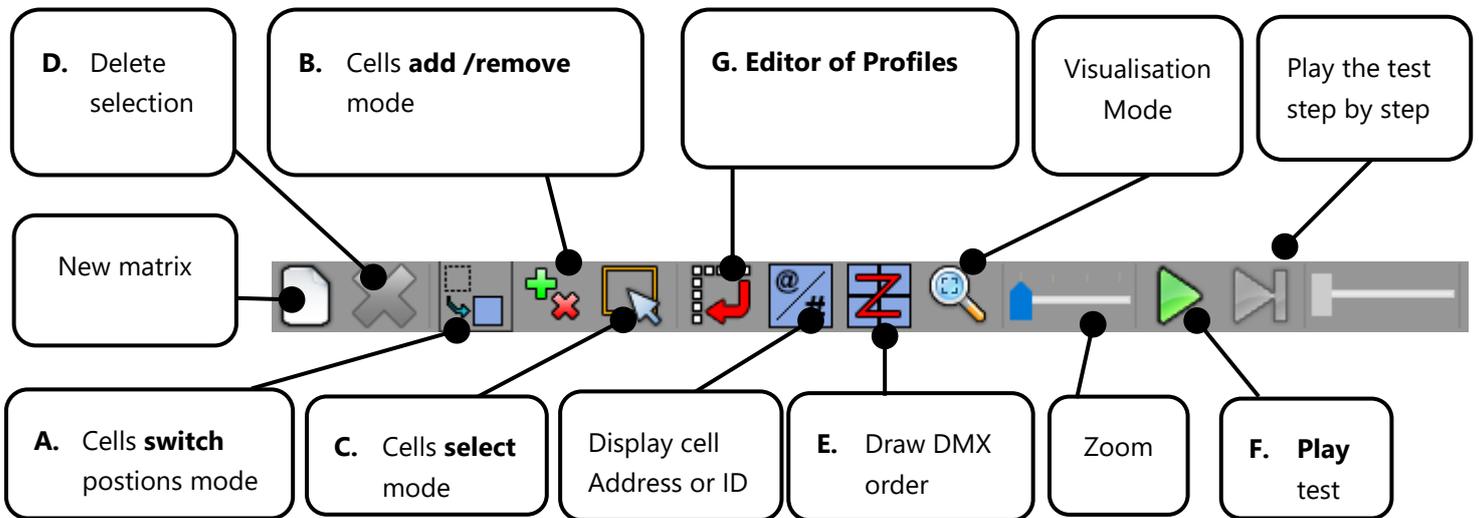
Order

Start at DMX Universe :

Patch

- DMX Universe 1
- DMX Universe 2
- DMX Universe 3
- DMX Universe 4
- DMX Universe 5
- DMX Universe 6
- DMX Universe 7
- DMX Universe 8
- DMX Universe 9
- DMX Universe 10

## MATRIX TOOL BAR



**A:** Drag and drop a cell to switch the 2 cell 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.

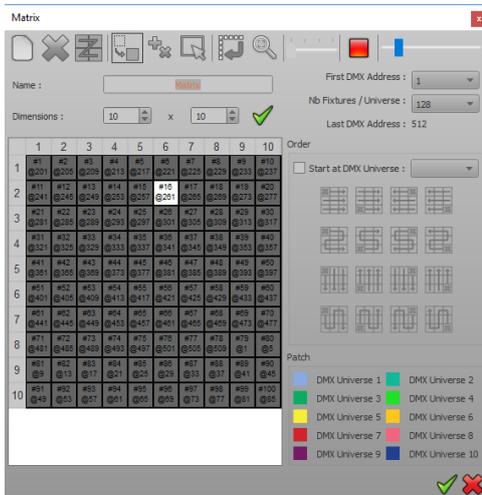
**D:** Remove the fixture from the matrix for the selected cells

**E:** Draw the fixtures addresses ordering path over the matrix cells

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

**G :** The editor of profiles allows users to configure the Beams of their fixture (they must be multi beams). This modification will be effective in the Matrix only. To set up a modification by default, you should go back into the profile editor.

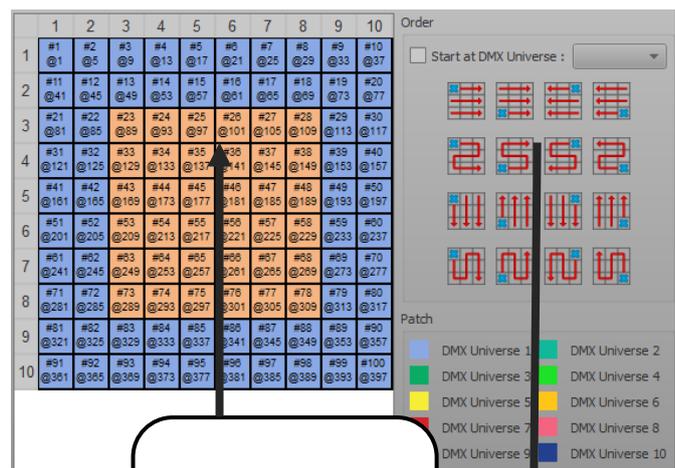
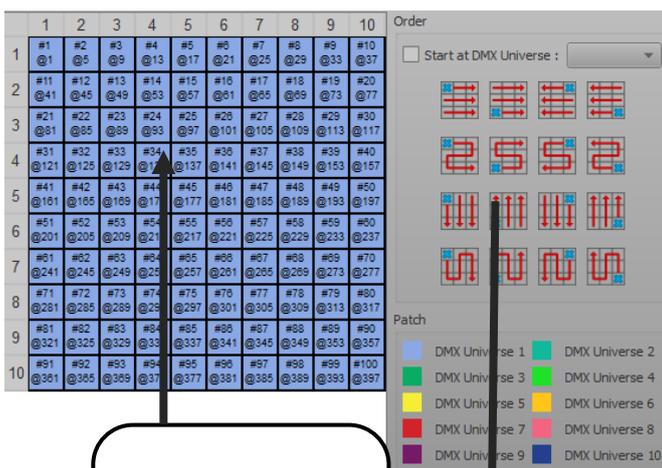
## SIMULATE AND CHECK DMX ADDRESSES



When you use the Play tool, your lighting fixtures will turn on automatically one by one according to 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.

## ORDERING THE MATRIX'S CELLS

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



## MODIFY MANUALLY THE DMX ADDRESSES OF SOME CELLS

#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 @121	#42 @124	#43 @127	#44 @130	#45 @133	#46 @136

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 very useful if there are errors on the installation and you need to reorder several fixtures.

## REMOVE FIXTURES FROM THE CELLS

#1 @1	#2 @4	#23 @67	#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	#3 @7	#24 @73	#25 @76	#26 @79	#27 @82	#28 @85	#29 @88	#30 @91
#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

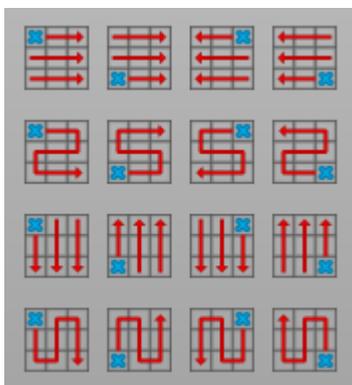
With the Remove option, you can delete fixtures from the matrix configuration.

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

#1 @1	#2 @4	#23 @67	#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	#3 @7	#24 @73	#25 @76	#26 @79	#27 @82	#28 @85	#29 @88	#30 @91
#31 @91	#32 @94	#33 @97					#38 @112	#39 @115	#40 @118
#41 @121	#42 @124	#43 @127					#48 @142	#49 @145	#50 @148
#51 @151	#52 @154	#53 @157					#58 @172	#59 @175	#60 @178
#61 @181	#62 @184	#63 @187					#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

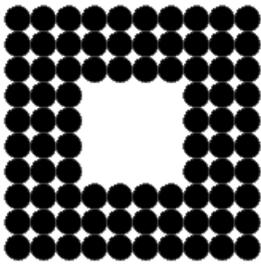
Then you can create a hole in the matrix field and free some channels.

To re-use the free channels, click on one of the 16 order configurations 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 on 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.

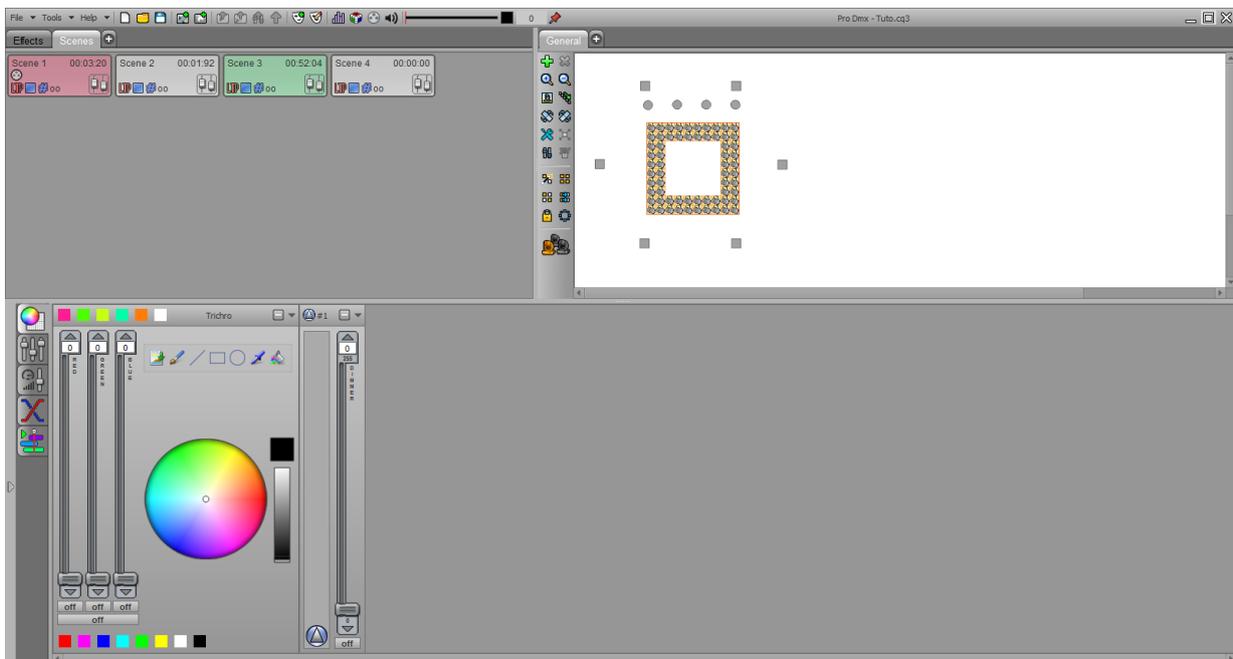
## UPDATING AND MODIFYING THE PATCH



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 Profiles and DMX addresses match the lighting fixtures, you can confirm the Patch and click OK.

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 for you to program your show. When you select fixtures from the 2D area, the fixtures dedicated channels appear below. Now you can 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 perfectly match your fixtures you will save time programming the show and the final visual result will be improved.

The software uses the patch information and can generate powerful functions and specific effects that will help you to create and play your show very quickly.

Just refer to the user manual **How to use the live controls** for perfect programming.