



portman<sup>TM</sup>  
custom lights

P1 Mini

User manual

PRELIMINARY

## **Welcome!**

Dear User,

Thank you for choosing our P1 Mini. We are proud of delivering you the highest quality, the greatest design and the real passion with our product. Each fixture in Portman P range is different, but all of them ensure you the best performance and support your creativity.

If you have any questions, suggestions or require additional information contact us at: [support@portmanlights.com](mailto:support@portmanlights.com)

**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL  
CAREFULLY BEFORE YOUR INITIAL START-UP!**

© 2016-2019 Portman Lights Sp. z o. o. All rights reserved.

The information and specifications are subject to change without notice. Portman Lights Sp. z o. o. disclaims liability for any injury, damage, direct or indirect loss, consequential or economic loss or any other loss occasioned by the use of, inability to use or reliance on the information contained in this user manual.

**Table of contents**

Welcome!.....2

Table of contents.....3

Safety information .....4

Technical specification .....7

Fixture Overview.....8

Preparation for use.....10

Operation modes.....13

Menu .....15

DMX Chart.....18

## Safety information

**WARNING** This product is for professional use only! It is not for household use.

P1 Mini presents risk of lethal or severe injury due to heat, electric shock, fire or falls. Intense and flashing light could trigger epileptic seizures. Read this manual before your initial start-up and follow the safety information in this manual and engraved on the fixture.

Every person involved with the installation, operation and maintenance of this device has to be qualified and experienced with operations on stage lighting fixtures.

Before your initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

Please consider that damages caused by manual modifications to the device are not subject to warranty.



**CAUTION!** Keep this device away from rain and moisture!



**CAUTION!** Be careful with your operations! With a dangerous voltage you can suffer an electrical shock when touching the fixture and wires!



**CAUTION!** During the operation the fixture surface becomes hot. Allow the device to cool approximately 30 minutes prior to manipulating with it. Keep a minimum 0,7 meter distance from flammable materials to all exterior surfaces of the fixture .



**CAUTION!** Avoid looking directly into the light source (meant especially for epileptics)!



**CAUTION!** Unplug mains lead before opening the housing, installing the lamp or the fuse. Allow the device to cool approximately 1 hour prior to manipulating with it.

### Protection against electrical shock

- Disconnect the fixture from AC power when not in use.
- Disconnect the fixture from AC power before any operation.
- Do not remove the rear cover. There are no user-serviceable parts inside.
- Always ground the fixture electrically.
- Use only the wires attached to the kit.
- Use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault protection.
- Do not expose the fixture to rain or moisture.
- Replace the lamp or fuse only as described.

### Protection against burns and fire

- Never operate when the fixture is damaged or some part is missing.
- Do not touch surface when the fixture is in operation. The exterior of the fixture can reach temperatures up to 100°C (212°F). Allow the fixture to cool approximately 30 minutes before any operation.
- Replace the lamp when it becomes defective or worn out.
- Never attempt to bypass the fuse. Always replace defective fuses with ones of the specified type and rating.
- Keep all combustible and flammable materials (for example fabric, wood, paper) at a distance of at least 1 meter away from the fixture. Do not cover the fixture when in operation and when it is hot.
- Do not modify the fixture.
- Do not operate the fixture if the ambient air temperature exceeds 45°C (113°F).
- Do not operate the fixture after extreme change of surrounding environment temperature. Allow the fixture to acclimate for at least an hour before operating.

### Protection against falls

- Use only professional tripods and clamps to mount the fixture. Ensure, that the clamp or tripod is designed to withstand the weight of the fixture.
- Ensure that the structure intended for installation can hold at least 10 times the weight of all installed devices.
- Ensure that all fixtures are attached correctly to the structure, after having checked that the housing is firmly closed and all screws are tightly fastened and use an approved means of secondary attachment such as a safety cable.
- Block access below the work area whenever installing or removing the fixture.

## Protection against eyesight damage and epileptic seizure

- Do not stare directly into the light sources. Never look at an exposed lamp while it is lit.
- Provide advance notice that flash light is in use.
- Avoid long cycles of rapid flashing light.
- Always use safety glasses to protect your eyes when changing a lamp or opening front cover.

## Technical specification

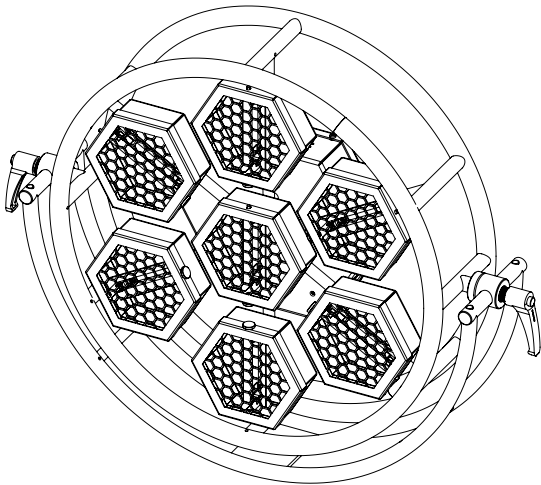
|                   |                                                                                             |
|-------------------|---------------------------------------------------------------------------------------------|
| dimensions        | 778 x 620 x 172 mm                                                                          |
| weight            | 12,5 kg                                                                                     |
| input voltage     | 100 - 240V 50Hz/60Hz                                                                        |
| power consumption | 90W                                                                                         |
| light source      | 3W 1800K filament + 10W RGBW                                                                |
| color temperature | 1800 K (filament) + 6300K (glow white)                                                      |
| luminous flux     | TBA                                                                                         |
| CRI               | >90                                                                                         |
| beam angle        | 94°                                                                                         |
| DMX channels      | 19 - 50                                                                                     |
| DMX modes         | 5                                                                                           |
| connectors        | 2 x 5pin DMX<br>1 x AC Neutrik powerCON TRUE1 (inlet and outlet)                            |
| other features    | built-in dimmers<br>built-in display and buttons<br>built-in macros<br>WDMX module optional |



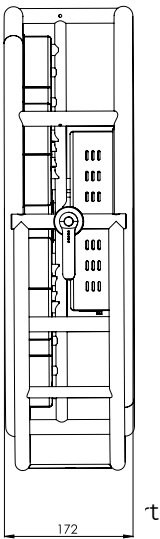
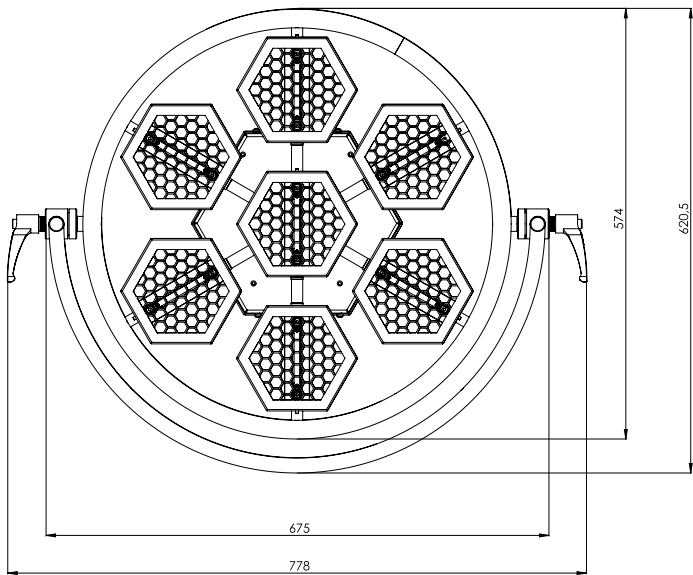
Appliance class I

IP 20

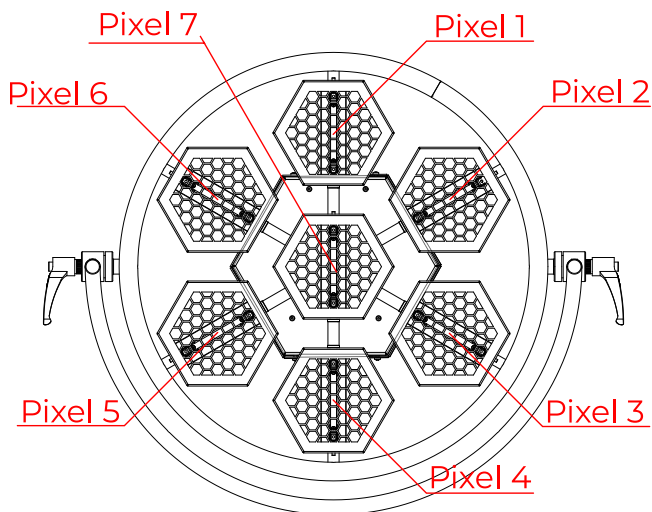
Fixture Overview



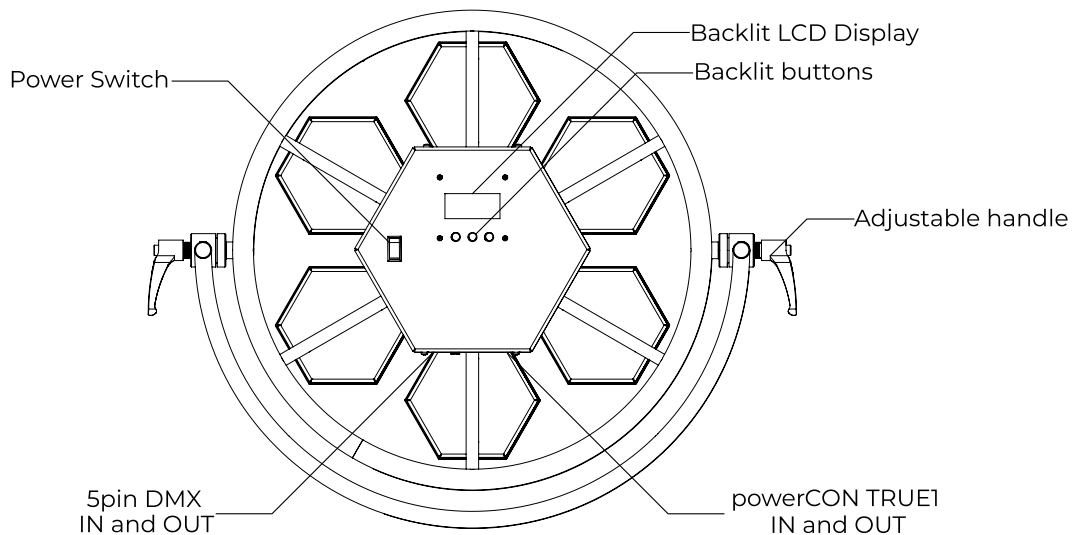
Dimensions



## Pixels order



## Back view



Kit content

- 1 x Portman P1 Mini
- 1 x AC power wire (powerCON TRUE1)
- 1 x User manual

Preparation for use

AC power connection

The Portman Custom Lights P1 Mini must be installed at 100-240V and 50/60Hz. Fixture automatically detects the alternating current frequency. To turn on the fixture simply plug in the powerCON TRUE1 and set the power switch to “ON”. Use only high quality 3 x 2.5 mm<sup>2</sup> or larger mains power cords. Inspect all the power feed cables for damages before use. Make sure to always connect the fixtures to a protected circuit with appropriate electrical ground. Do never connect the fixture to a dimmer plug, even if it supplies proper current.

Only qualified electricians in accordance with all known electrical regulations can install the fixtures.

The P1 Mini comes with power input cord terminated with powerCON TRUE1 on one end and tube connectors on the other end. Follow the rules from table below to assemble power plug to the wire:

| Connection |   | EU wires     | US wires              |
|------------|---|--------------|-----------------------|
| Live       | L | Brown        | Black                 |
| Neutral    | N | Blue         | White                 |
| Earth      | ⊕ | Green/Yellow | Green or Green/Yellow |



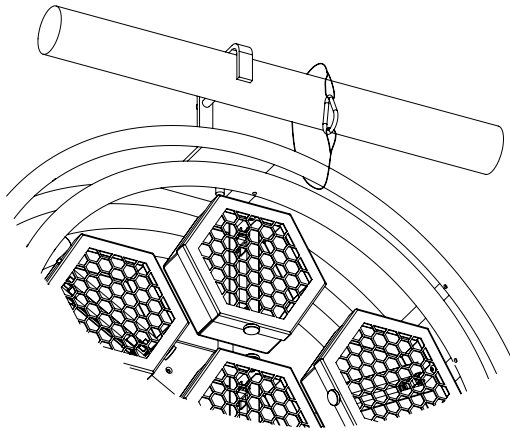
**CAUTION!** Do not use the power cord without a plug attached!

REMEMBER! Only qualified person can change or install the plug!

## Installation

Before mounting the fixture read and follow the safety recommendations indicated in the Safety Information.

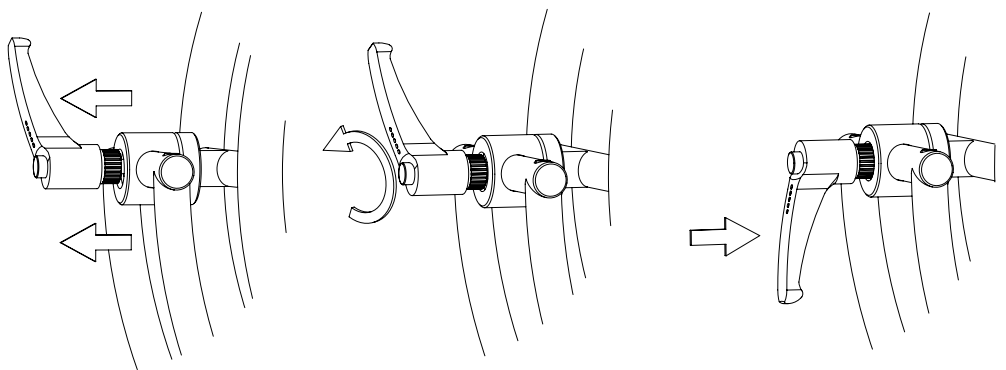
The Portman P1 Mini may be installed on a tripod or on a clamp. The fixture has 13 mm (0,512 in) hole for a spigot, rigging clamp or a screw. Before rigging operations make sure, that the structure onto which you are mounting the fixtures can withstand the weight of all of the fixtures. Check if there is enough room for ventilation, configuration and maintenance in a location where you want to place the fixture. You must secure every hanged fixture with appropriate safety wire.



**REMEMBER!** Always secure hanged fixture with safety wire!

To adjust the position of the fixture when aiming it to the desired angle, use the side handles. Loosen them by turning them counterclockwise before adjustment and set the desired angle. Tighten the handles after adjusting the position by turning them clockwise. Operate handles carefully and manually only. Tools can damage them. Always double check if the fixture's handles are tightened properly.

You can easily change the orientation of tightened handles to make your rig look even better. Gently pull the tightened handle to disengage its teeth and rotate it into the desired orientation. By releasing the handle the return spring automatically engages the teeth.



## Operation modes

The Portman P1 Mini can work in two operation modes: Regular and Macro. Regular mode is designed to work with DMX signal and Macro mode is designed to operate the fixture manually, without external controlling signal. However the DMX signal has got the highest priority and the fixture always reacts to connected DMX signal regardless the operating mode.

| Operation mode     | Regular                                                                       | Macro                                  |
|--------------------|-------------------------------------------------------------------------------|----------------------------------------|
| DMX wire connected | reacts to DMX                                                                 | reacts to DMX                          |
| WDMX connected     | reacts do WDMX                                                                | doesn't react to WDMX                  |
| DMX disconnected   | keeps last DMX frame, or turns off all lighting sources (depends on settings) | gets back to last macro/manual setting |
| Power turned on    | all lighting sources off                                                      | gets back to last macro/manual setting |
| Main screen        | address setting                                                               | macro number setting                   |

There are three ways to operate the fixture in the Regular mode. You can use DMX wire, onboard manual control or WDMX to control the fixture(if the WDMX card is installed). You can link the P1 Mini to a DMX controller using a 5 pin DMX wire, or Wireless Solution Sweden hardware (if WDMX card is installed). You can control each channel individually whether with a DMX controller or a manual control build in the fixture. The P1 Retro Lamp has got only one 7-channel DMX personality and it does support RDM. In Regular mode fixture does not remember manual settings after reset.

To remember manual settings after reset you have to use Macro mode. You can set any lighting scene using manual control section in the fixture's menu or play build in macros. The fixture always switches to DMX when DMX wire connected. After disconnecting DMX in Macro mode fixture always gets back to last macro/manual setting.

## RDM

RDM (Remote Device Management) is an enhancement of DMX 512 protocol and allows the bi-directional communication between DMX consoles and fixtures. It works simultaneously with DMX 512 and on the same lines and wires. RDM is not affecting non-RDM devices in a line, however non-RDM devices can disrupt communication with console. RDM allows you to change the fixture's options (such as DMX address)

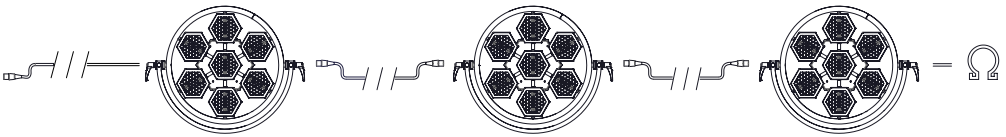
without even touching neither ladder or fixture's buttons. P1 Mini fully supports the RDM standards.

## Manual operation

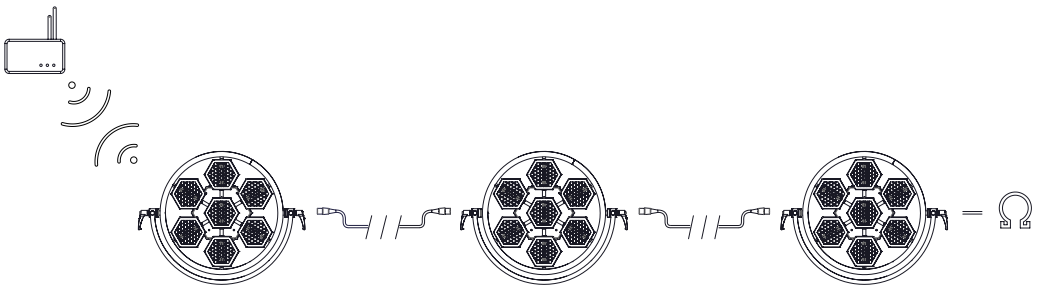
The fixture works in manual operation when it's not receiving DMX signal whether wired or wireless. You can adjust the brightness of all filaments at once from main screen, or you can control each source individually from the "MANUAL CONTROL" option in the menu (refer to the "Menu" chapter to learn how to manually control channels). To enter menu simply hold enter for 2 seconds.

## DMX 512 modes

The fixture automatically switches into DMX mode after receiving DMX data. To learn how to change the DMX address or signal source (wired or wireless) refer to the “Menu” chapter. When the fixture works in the wired DMX mode You can daisy chain fixtures using 5 pin DMX wires. When daisy chaining remember, that you can connect up to 32 devices per DMX 512 universe. Always terminate the DMX 512 line. Put the 120  $\Omega$  terminator into last device’s DMX OUT XLR socket.

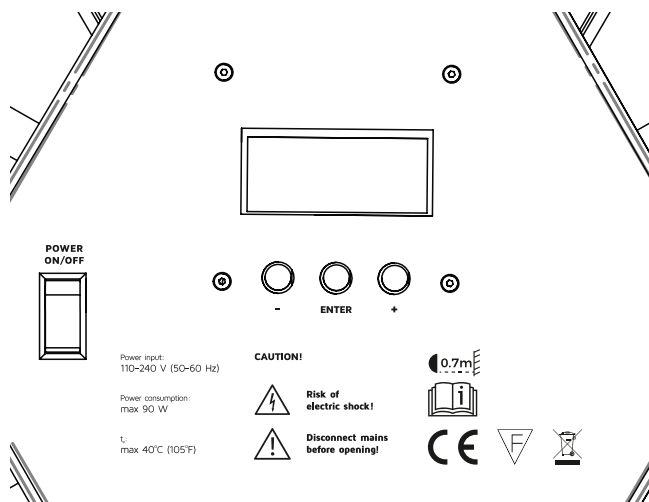


When the fixture works in the wireless mode (only when WDMX card is installed) it is receiving DMX 512 signal from Wireless Solution Sweden transmitters and can send the signal throughout the 5 pin DMX OUT XLR socket. You can put the fixture with WDMX card installed as a first fixture in a line and use it as a WDMX receiver. The P1 Mini supports bi - directional WDMX TRX module. It means, that the fixture supports RDM in wireless mode too. To link P1 Mini with W-DMX transmitter first use "UPAIR ALL WDMX DEVICES" option from menu, than turn the scanning mode on in the transmitter. Transmitter will link with all unlinked devices. For more detailed information please refer to your transmitter's user manual.



## Menu

Navigation buttons are located under the LCD display on the back panel. To enter the menu hold enter button for 2 seconds. To navigate the menu use the “+” and “-” buttons. To exit the menu from any level hold enter button for 2 seconds or use the exit function. For confirming simply push the enter button.



## Menu map

| Main section      | Level 1              | Level 2       | Level 3 | Description                                                                                                                        |
|-------------------|----------------------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------|
| ADDRESS:          | DMX ADDRESS          |               |         | Sets up the DMX start address                                                                                                      |
| PERSONAL SETTINGS | DMX MODE             | SIMPLE        |         | Sets up the DMX mode. Refer to DMX chart for DMX channels order.                                                                   |
|                   |                      | STANDARD      |         |                                                                                                                                    |
|                   |                      | STANDARD FINE |         |                                                                                                                                    |
|                   |                      | PIXEL         |         |                                                                                                                                    |
|                   |                      | PIXEL FINE    |         |                                                                                                                                    |
|                   | DMX INPUT            | WIRED         |         | Changes the DMX input to wired (default). In this mode fixture is receiving DMX signal from the DMX IN 5 pin XLR socket.           |
|                   |                      | WIRELESS      |         | Changes the DMX input to wireless. This mode works only when WDMX card is installed. Fixture is receiving DMX data from WDMX card. |
|                   | OPERATING MODE       | REGULAR       |         | Changes the fixture's operating mode. Refer to Operation Modes chapter for more info. Regular is default                           |
|                   |                      | MACRO         |         |                                                                                                                                    |
|                   | DIMM CURVE           | LINEAR        |         | Changes dimming curve of filaments. Halogen mode is emulating behavior of halogen using also glow sources. Linear is default.      |
|                   |                      | LOGARYTHMIC   |         |                                                                                                                                    |
|                   |                      | HALOGEN       |         |                                                                                                                                    |
|                   | RESET ALL TO DEFAULT | CONFIRM       |         | Resets all the options to default values.                                                                                          |
| WDMX SETTINGS     | PAIR DEVICES         | PAIRING MODE  |         | Switches device into pairing mode to connect it with Wireless Solution Sweden WDMX transmitters.                                   |
|                   | WDMX INFO            | WDMX INFO     |         | Shows WDMX card info.                                                                                                              |
| RDM INFO          | MANUFACTURER         |               |         | Shows the name of the fixture's manufacturer.                                                                                      |
|                   | DEVICE NAME          |               |         | Shows the fixture's name given by manufacturer.                                                                                    |
|                   | DEVICE LABEL         |               |         | Shows the fixture's name given by user.                                                                                            |
|                   | RDM ID               |               |         | Shows the fixture's RDM unique ID number.                                                                                          |

|                   |               |               |                        |                                                     |
|-------------------|---------------|---------------|------------------------|-----------------------------------------------------|
|                   | FIRMWARE LPU1 |               |                        | Shows actual firmware version of LPU1 board.        |
|                   | FIRMWARE LDB1 |               |                        | Shows actual firmware version of LDB1 board.        |
| MANUAL<br>CONTROL | FILAMENTS     | ALL FILAMENTS | 0 – 100% BRIGHTNESS    | Sets all filaments dimmer value                     |
|                   |               | FILAMENT CH.1 | 0 – 100% BRIGHTNESS    | Sets filament pixel 1 dimmer value                  |
|                   |               | FILAMENT CH.2 | 0 – 100% BRIGHTNESS    | Sets filament pixel 2 dimmer value                  |
|                   |               | FILAMENT CH.3 | 0 – 100% BRIGHTNESS    | Sets filament pixel 3 dimmer value                  |
|                   |               | FILAMENT CH.4 | 0 – 100% BRIGHTNESS    | Sets filament pixel 4 dimmer value                  |
|                   |               | FILAMENT CH.5 | 0 – 100% BRIGHTNESS    | Sets filament pixel 5 dimmer value                  |
|                   |               | FILAMENT CH.6 | 0 – 100% BRIGHTNESS    | Sets filament pixel 6 dimmer value                  |
|                   |               | FILAMENT CH.7 | 0 – 100% BRIGHTNESS    | Sets filament pixel 7 dimmer value                  |
|                   | GLOW          | GLOW DIMMER   | 0 – 100% BRIGHTNESS    | Sets glow all pixels dimmer value                   |
|                   |               | RED           | 0 – 100% RED           | Sets glow red value                                 |
|                   |               | GREEN         | 0 – 100% GREEN         | Sets glow green valuer                              |
|                   |               | BLUE          | 0 – 100% BLUE          | Glow blue value                                     |
|                   | MACRO         | MACRO SELECT  | MACRO NUMBER<br>SELECT | Selects macro                                       |
|                   |               | MACRO SPEED   | MACRO SPEED            | Sets the macro speed                                |
| EXIT              |               |               |                        | Exits from main section of the menu to main screen. |

Red values are editable.

DMX Chart

I. Mode Simple

| DMX channel | Parameter                | Description                            |
|-------------|--------------------------|----------------------------------------|
| 1.          | Dimmer Main Source Ch. 1 | Pixel 1 filament 8 bit dimmer 0 – 100% |
| 2.          | Dimmer Main Source Ch. 2 | Pixel 2 filament 8 bit dimmer 0 – 100% |
| 3.          | Dimmer Main Source Ch. 3 | Pixel 3 filament 8 bit dimmer 0 – 100% |
| 4.          | Dimmer Main Source Ch. 4 | Pixel 4 filament 8 bit dimmer 0 – 100% |
| 5.          | Dimmer Main Source Ch. 5 | Pixel 5 filament 8 bit dimmer 0 – 100% |
| 6.          | Dimmer Main Source Ch. 6 | Pixel 6 filament 8 bit dimmer 0 – 100% |
| 7.          | Dimmer Main Source Ch. 7 | Pixel 7 filament 8 bit dimmer 0 – 100% |
| 8.          | Red All glow             | Red glow 8 bit on all pixels           |
| 9.          | Green All glow           | Green glow 8 bit on all pixels         |
| 10.         | Blue All glow            | Blue glow 8 bit on all pixels          |
| 11.         | White All glow           | White glow 8 bit on all pixels         |
| 12.         | Dimmer glow              | All pixels glow 8 bit dimmer 0 – 100%  |
| 13.         | Strobe glow              | Glow strobe channel                    |
| 14.         | Strobe Main Source       | Filaments strobe channel               |
| 15.         | Color wheel All glow     | Glow virtual color wheel               |
| 16.         | Macro                    | Macro select channel                   |
| 17.         | Macro direction          | Macro direction channel                |
| 18.         | Macro speed              | Macro speed channel                    |
| 19.         | Control                  | Fixture control channel                |

## II. Mode Standard

| DMX channel | Parameter                | Description                            |
|-------------|--------------------------|----------------------------------------|
| 1.          | Dimmer Main Source Ch. 1 | Pixel 1 filament 8 bit dimmer 0 – 100% |
| 2.          | Dimmer Main Source Ch. 2 | Pixel 2 filament 8 bit dimmer 0 – 100% |
| 3.          | Dimmer Main Source Ch. 3 | Pixel 3 filament 8 bit dimmer 0 – 100% |
| 4.          | Dimmer Main Source Ch. 4 | Pixel 4 filament 8 bit dimmer 0 – 100% |
| 5.          | Dimmer Main Source Ch. 5 | Pixel 5 filament 8 bit dimmer 0 – 100% |
| 6.          | Dimmer Main Source Ch. 6 | Pixel 6 filament 8 bit dimmer 0 – 100% |
| 7.          | Dimmer Main Source Ch. 7 | Pixel 7 filament 8 bit dimmer 0 – 100% |
| 8.          | Red 1 glow               | Pixel 1 Red 8 bit                      |
| 9.          | Green 1 glow             | Pixel 1 Green 8 bit                    |
| 10.         | Blue 1 glow              | Pixel 1 Blue 8 bit                     |
| 11.         | White 1 glow             | Pixel 1 White 8 bit                    |
| 12.         | Red 2 glow               | Pixel 2 Red 8 bit                      |
| 13.         | Green 2 glow             | Pixel 2 Green 8 bit                    |
| 14.         | Blue 2 glow              | Pixel 2 Blue 8 bit                     |
| 15.         | White 2 glow             | Pixel 2 White 8 bit                    |
| 16.         | Red 3 glow               | Pixel 3 Red 8 bit                      |
| 17.         | Green 3 glow             | Pixel 3 Green 8 bit                    |
| 18.         | Blue 3 glow              | Pixel 3 Blue 8 bit                     |
| 19.         | White 3 glow             | Pixel 3 White 8 bit                    |
| 20.         | Red 4 glow               | Pixel 4 Red 8 bit                      |
| 21.         | Green 4 glow             | Pixel 4 Green 8 bit                    |
| 22.         | Blue 4 glow              | Pixel 4 Blue 8 bit                     |
| 23.         | White 4 glow             | Pixel 4 White 8 bit                    |
| 24.         | Red 5 glow               | Pixel 5 Red 8 bit                      |
| 25.         | Green 5 glow             | Pixel 5 Green 8 bit                    |
| 26.         | Blue 5 glow              | Pixel 5 Blue 8 bit                     |
| 27.         | White 5 glow             | Pixel 5 White 8 bit                    |
| 28.         | Red 6 glow               | Pixel 6 Red 8 bit                      |
| 29.         | Green 6 glow             | Pixel 6 Green 8 bit                    |
| 30.         | Blue 6 glow              | Pixel 6 Blue 8 bit                     |
| 31.         | White 6 glow             | Pixel 6 White 8 bit                    |
| 32.         | Red 7 glow               | Pixel 7 Red 8 bit                      |
| 33.         | Green 7 glow             | Pixel 7 Green 8 bit                    |
| 34.         | Blue 7 glow              | Pixel 7 Blue 8 bit                     |
| 35.         | White 7 glow             | Pixel 7 White 8 bit                    |
| 36.         | Dimmer glow              | All pixels glow 8 bit dimmer 0 – 100%  |
| 37.         | Strobe glow              | Glow strobe channel                    |
| 38.         | Strobe Main Source       | Filaments strobe channel               |
| 39.         | Color wheel All glow     | Glow virtual color wheel               |
| 40.         | Macro                    | Macro select channel                   |
| 41.         | Macro direction          | Macro direction channel                |
| 42.         | Macro speed              | Macro speed channel                    |
| 43.         | Control                  | Fixture control channel                |

### III. Mode Standard fine

| DMX channel | Parameter                     | Description                             |
|-------------|-------------------------------|-----------------------------------------|
| 1.          | Dimmer Main Source Ch. 1      | Pixel 1 filament 8 bit dimmer 0 – 100%  |
| 2.          | Dimmer Main Source Ch. 1 fine | Pixel 1 filament 16 bit dimmer 0 – 100% |
| 3.          | Dimmer Main Source Ch. 2      | Pixel 2 filament 8 bit dimmer 0 – 100%  |
| 4.          | Dimmer Main Source Ch. 2 fine | Pixel 2 filament 16 bit dimmer 0 – 100% |
| 5.          | Dimmer Main Source Ch. 3      | Pixel 3 filament 8 bit dimmer 0 – 100%  |
| 6.          | Dimmer Main Source Ch. 3 fine | Pixel 3 filament 16 bit dimmer 0 – 100% |
| 7.          | Dimmer Main Source Ch. 4      | Pixel 4 filament 8 bit dimmer 0 – 100%  |
| 8.          | Dimmer Main Source Ch. 4 fine | Pixel 4 filament 16 bit dimmer 0 – 100% |
| 9.          | Dimmer Main Source Ch. 5      | Pixel 5 filament 8 bit dimmer 0 – 100%  |
| 10.         | Dimmer Main Source Ch. 5 fine | Pixel 5 filament 16 bit dimmer 0 – 100% |
| 11.         | Dimmer Main Source Ch. 6      | Pixel 6 filament 8 bit dimmer 0 – 100%  |
| 12.         | Dimmer Main Source Ch. 6 fine | Pixel 6 filament 16 bit dimmer 0 – 100% |
| 13.         | Dimmer Main Source Ch. 7      | Pixel 7 filament 8 bit dimmer 0 – 100%  |
| 14.         | Dimmer Main Source Ch. 7 fine | Pixel 7 filament 16 bit dimmer 0 – 100% |
| 15.         | Red 1 glow                    | Pixel 1 Red 8 bit                       |
| 16.         | Green 1 glow                  | Pixel 1 Green 8 bit                     |
| 17.         | Blue 1 glow                   | Pixel 1 Blue 8 bit                      |
| 18.         | White 1 glow                  | Pixel 1 White 8 bit                     |
| 19.         | Red 2 glow                    | Pixel 2 Red 8 bit                       |
| 20.         | Green 2 glow                  | Pixel 2 Green 8 bit                     |
| 21.         | Blue 2 glow                   | Pixel 2 Blue 8 bit                      |
| 22.         | White 2 glow                  | Pixel 2 White 8 bit                     |
| 23.         | Red 3 glow                    | Pixel 3 Red 8 bit                       |
| 24.         | Green 3 glow                  | Pixel 3 Green 8 bit                     |
| 25.         | Blue 3 glow                   | Pixel 3 Blue 8 bit                      |
| 26.         | White 3 glow                  | Pixel 3 White 8 bit                     |
| 27.         | Red 4 glow                    | Pixel 4 Red 8 bit                       |
| 28.         | Green 4 glow                  | Pixel 4 Green 8 bit                     |
| 29.         | Blue 4 glow                   | Pixel 4 Blue 8 bit                      |
| 30.         | White 4 glow                  | Pixel 4 White 8 bit                     |
| 31.         | Red 5 glow                    | Pixel 5 Red 8 bit                       |
| 32.         | Green 5 glow                  | Pixel 5 Green 8 bit                     |
| 33.         | Blue 5 glow                   | Pixel 5 Blue 8 bit                      |
| 34.         | White 5 glow                  | Pixel 5 White 8 bit                     |
| 35.         | Red 6 glow                    | Pixel 6 Red 8 bit                       |
| 36.         | Green 6 glow                  | Pixel 6 Green 8 bit                     |
| 37.         | Blue 6 glow                   | Pixel 6 Blue 8 bit                      |
| 38.         | White 6 glow                  | Pixel 6 White 8 bit                     |
| 39.         | Red 7 glow                    | Pixel 7 Red 8 bit                       |
| 40.         | Green 7 glow                  | Pixel 7 Green 8 bit                     |
| 41.         | Blue 7 glow                   | Pixel 7 Blue 8 bit                      |
| 42.         | White 7 glow                  | Pixel 7 White 8 bit                     |
| 43.         | Dimmer glow                   | All pixels glow 8 bit dimmer 0 – 100%   |
| 44.         | Strobe glow                   | Glow strobe channel                     |
| 45.         | Strobe Main Source            | Filaments strobe channel                |
| 46.         | Color wheel All glow          | Glow virtual color wheel                |
| 47.         | Macro                         | Macro select channel                    |
| 48.         | Macro direction               | Macro direction channel                 |
| 49.         | Macro speed                   | Macro speed channel                     |
| 50.         | Control                       | Fixture control channel                 |

# IV. Mode pixel

| DMX channel | Parameter                | Description                            |
|-------------|--------------------------|----------------------------------------|
| 1.          | Dimmer Main Source Ch.1  | Pixel 1 filament 8 bit dimmer 0 – 100% |
| 2.          | Red 1 glow               | Pixel 1 Red 8 bit                      |
| 3.          | Green 1 glow             | Pixel 1 Green 8 bit                    |
| 4.          | Blue 1 glow              | Pixel 1 Blue 8 bit                     |
| 5.          | White 1 glow             | Pixel 1 White 8 bit                    |
| 6.          | Dimmer Main Source Ch. 2 | Pixel 2 filament 8 bit dimmer 0 – 100% |
| 7.          | Red 2 glow               | Pixel 2 Red 8 bit                      |
| 8.          | Green 2 glow             | Pixel 2 Green 8 bit                    |
| 9.          | Blue 2 glow              | Pixel 2 Blue 8 bit                     |
| 10.         | White 2 glow             | Pixel 2 White 8 bit                    |
| 11.         | Dimmer Main Source Ch. 3 | Pixel 3 filament 8 bit dimmer 0 – 100% |
| 12.         | Red 3 glow               | Pixel 3 Red 8 bit                      |
| 13.         | Green 3 glow             | Pixel 3 Green 8 bit                    |
| 14.         | Blue 3 glow              | Pixel 3 Blue 8 bit                     |
| 15.         | White 3 glow             | Pixel 3 White 8 bit                    |
| 16.         | Dimmer Main Source Ch. 4 | Pixel 4 filament 8 bit dimmer 0 – 100% |
| 17.         | Red 4 glow               | Pixel 4 Red 8 bit                      |
| 18.         | Green 4 glow             | Pixel 4 Green 8 bit                    |
| 19.         | Blue 4 glow              | Pixel 4 Blue 8 bit                     |
| 20.         | White 4 glow             | Pixel 4 White 8 bit                    |
| 21.         | Dimmer Main Source Ch. 5 | Pixel 5 filament 8 bit dimmer 0 – 100% |
| 22.         | Red 5 glow               | Pixel 5 Red 8 bit                      |
| 23.         | Green 5 glow             | Pixel 5 Green 8 bit                    |
| 24.         | Blue 5 glow              | Pixel 5 Blue 8 bit                     |
| 25.         | White 5 glow             | Pixel 5 White 8 bit                    |
| 26.         | Dimmer Main Source Ch. 6 | Pixel 6 filament 8 bit dimmer 0 – 100% |
| 27.         | Red 6 glow               | Pixel 6 Red 8 bit                      |
| 28.         | Green 6 glow             | Pixel 6 Green 8 bit                    |
| 29.         | Blue 6 glow              | Pixel 6 Blue 8 bit                     |
| 30.         | White 6 glow             | Pixel 6 White 8 bit                    |
| 31.         | Dimmer Main Source Ch. 7 | Pixel 7 filament 8 bit dimmer 0 – 100% |
| 32.         | Red 7 glow               | Pixel 7 Red 8 bit                      |
| 33.         | Green 7 glow             | Pixel 7 Green 8 bit                    |
| 34.         | Blue 7 glow              | Pixel 7 Blue 8 bit                     |
| 35.         | White 7 glow             | Pixel 7 White 8 bit                    |
| 36.         | Strobe glow              | Glow strobe channel                    |
| 37.         | Strobe Main Source       | Filaments strobe channel               |
| 38.         | Color wheel All glow     | Glow virtual color wheel               |
| 39.         | Macro                    | Macro select channel                   |
| 40.         | Macro direction          | Macro direction channel                |
| 41.         | Macro speed              | Macro speed channel                    |
| 42.         | Control                  | Fixture control channel                |

## V. Mode pixel fine

| DMX channel | Parameter                     | Description                             |
|-------------|-------------------------------|-----------------------------------------|
| 1.          | Dimmer Main Source Ch. 1      | Pixel 1 filament 8 bit dimmer 0 – 100%  |
| 2.          | Dimmer Main Source Ch. 1 fine | Pixel 1 filament 16 bit dimmer 0 – 100% |
| 3.          | Red 1 glow                    | Pixel 1 Red 8 bit                       |
| 4.          | Green 1 glow                  | Pixel 1 Green 8 bit                     |
| 5.          | Blue 1 glow                   | Pixel 1 Blue 8 bit                      |
| 6.          | White 1 glow                  | Pixel 1 White 8 bit                     |
| 7.          | Dimmer Main Source Ch. 2      | Pixel 2 filament 8 bit dimmer 0 – 100%  |
| 8.          | Dimmer Main Source Ch. 2 fine | Pixel 2 filament 16 bit dimmer 0 – 100% |
| 9.          | Red 2 glow                    | Pixel 2 Red 8 bit                       |
| 10.         | Green 2 glow                  | Pixel 2 Green 8 bit                     |
| 11.         | Blue 2 glow                   | Pixel 2 Blue 8 bit                      |
| 12.         | White 2 glow                  | Pixel 2 White 8 bit                     |
| 13.         | Dimmer Main Source Ch. 3      | Pixel 3 filament 8 bit dimmer 0 – 100%  |
| 14.         | Dimmer Main Source Ch. 3 fine | Pixel 3 filament 16 bit dimmer 0 – 100% |
| 15.         | Red 3 glow                    | Pixel 3 Red 8 bit                       |
| 16.         | Green 3 glow                  | Pixel 3 Green 8 bit                     |
| 17.         | Blue 3 glow                   | Pixel 3 Blue 8 bit                      |
| 18.         | White 3 glow                  | Pixel 3 White 8 bit                     |
| 19.         | Dimmer Main Source Ch. 4      | Pixel 4 filament 8 bit dimmer 0 – 100%  |
| 20.         | Dimmer Main Source Ch. 4 fine | Pixel 4 filament 16 bit dimmer 0 – 100% |
| 21.         | Red 4 glow                    | Pixel 4 Red 8 bit                       |
| 22.         | Green 4 glow                  | Pixel 4 Green 8 bit                     |
| 23.         | Blue 4 glow                   | Pixel 4 Blue 8 bit                      |
| 24.         | White 4 glow                  | Pixel 4 White 8 bit                     |
| 25.         | Dimmer Main Source Ch. 5      | Pixel 5 filament 8 bit dimmer 0 – 100%  |
| 26.         | Dimmer Main Source Ch. 5 fine | Pixel 5 filament 16 bit dimmer 0 – 100% |
| 27.         | Red 5 glow                    | Pixel 5 Red 8 bit                       |
| 28.         | Green 5 glow                  | Pixel 5 Green 8 bit                     |
| 29.         | Blue 5 glow                   | Pixel 5 Blue 8 bit                      |
| 30.         | White 5 glow                  | Pixel 5 White 8 bit                     |
| 31.         | Dimmer Main Source Ch. 6      | Pixel 6 filament 8 bit dimmer 0 – 100%  |
| 32.         | Dimmer Main Source Ch. 6 fine | Pixel 6 filament 16 bit dimmer 0 – 100% |
| 33.         | Red 6 glow                    | Pixel 6 Red 8 bit                       |
| 34.         | Green 6 glow                  | Pixel 6 Green 8 bit                     |
| 35.         | Blue 6 glow                   | Pixel 6 Blue 8 bit                      |
| 36.         | White 6 glow                  | Pixel 6 White 8 bit                     |
| 37.         | Dimmer Main Source Ch. 7      | Pixel 7 filament 8 bit dimmer 0 – 100%  |
| 38.         | Dimmer Main Source Ch. 7 fine | Pixel 7 filament 16 bit dimmer 0 – 100% |
| 39.         | Red 7 glow                    | Pixel 7 Red 8 bit                       |
| 40.         | Green 7 glow                  | Pixel 7 Green 8 bit                     |
| 41.         | Blue 7 glow                   | Pixel 7 Blue 8 bit                      |
| 42.         | White 7 glow                  | Pixel 7 White 8 bit                     |
| 43.         | Strobe glow                   | Glow strobe channel                     |
| 44.         | Strobe Main Source            | Filaments strobe channel                |
| 45.         | Color wheel All glow          | Glow virtual color wheel                |
| 46.         | Macro                         | Macro select channel                    |
| 47.         | Macro direction               | Macro direction channel                 |
| 48.         | Macro speed                   | Macro speed channel                     |
| 49.         | Control                       | Fixture control channel                 |

