

## ROXX NEO



USER MANUAL

## CONTENT

### 1. Safety Informations

|   |   |
|---|---|
| 1.1. General Preventive Measures                            | 4 |
| 1.2. Regulations for equipment that connects to power mains | 5 |
| 1.3. Technical warnsigns and explanation                    | 6 |

### 2. Introduction

|               |   |
|---------------|---|
| 2.1. About us | 7 |
| 2.2. NEO      | 7 |

### 3. General Product Information

|                        |   |
|------------------------|---|
| 3.1. Scope of delivery | 8 |
| 3.2. Control Functions | 8 |
| 3.3. Features          | 8 |

### 4. Installation & Setup

|                                       |    |
|---------------------------------------|----|
| 4.1 Physical Installation and Rigging | 9  |
| 4.2 Connections                       | 10 |
| 4.2.1. AC Power                       | 10 |
| 4.2.2. DC Power                       | 10 |
| 4.2.3. DMX Connection                 | 11 |
| 4.2.3.1. Cable Connection             | 11 |
| 4.2.3.2. Wireless Connection          | 11 |
| 4.3 NFC (Near Field Communication)    | 13 |

### 5. Operation

|   |    |
|---|----|
| 5.1 Start up                                | 14 |
| 5.2 Control Display                         | 14 |
| 5.3 Display Short Cuts                      | 14 |
| 5.4 Configuration                           | 16 |
| 5.4.1 Set DMX Start Address (Direct Access) | 16 |
| 5.4.2 Selecting DMX Mode                    | 16 |
| 5.4.3 Stand Alone                           | 17 |
| 5.4.4 Slave Mode                            | 24 |
| 5.4.5 Settings                              | 24 |
| 5.4.5.1 Reset functions                     | 28 |
| 5.4.6 System Info                           | 29 |

### 6. Accessories

|                       |    |
|-----------------------|----|
| 6.1. Magnetic Filters | 30 |
| 6.2. More accessories | 30 |

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## 7. Technical Data / Diagrams

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|   |    |
|---|----|
| 7.1 Technical drawings and measurements                         | 31 |
| 7.2 IP Rating   | 32 |
| 7.3 Technical Data  | 33 |
| 7.4 Section Chart / DMX-Charts / Color Macro Charts / CCT Chart | 35 |
| 7.5 RDM Templates   | 66 |

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## 8. Troubleshooting

---

67

## 9. Manufacturer's Declaration

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68

## 1. SAFETY INFORMATION

### 1.1. General Preventive Measures

- 1.1.1. Please read, understand and follow the instructions.
- 1.1.2. Store the instructions and information in a safe place.  
Best solution is the ring binder provided by ROXX.
- 1.1.3. Follow all safety warnings. Under no circumstances remove safety warnings or other information from the equipment.
- 1.1.4. Don't use the equipment for any other intended purpose or manner.
- 1.1.5. Use only stable and compatible stands and/or brackets. Especially when fix installed.  
Make sure the wall brackets are properly installed and safe. Make sure the device is securely installed and cannot fall.
- 1.1.6. Check the safety regulations applying for your country before and during installation.
- 1.1.7. Keep the device away from heat! Don't place/install near heaters, ovens or any source of heat.  
Make sure that the device always is efficiently cooled and cannot overheat.
- 1.1.8. Always guarantee that ventilation and cooling slots are clean and not blocked.
- 1.1.9. Item must be away minimum 20cm from anything around and above it.
- 1.1.10. Do not use this device close to water.
- 1.1.11. Do not expose this equipment to flammable materials.
- 1.1.12. Make sure that no objects can fall into the device.
- 1.1.13. Only use this device with the accessories recommended by the manufacturer.
- 1.1.14. Always check the equipment for housing damages, so that no water can enter the device.  
No containers containing liquids of any kind should be place on top of the unit.
- 1.1.15. Opening or modifying this device is only allowed by authorized and qualified persons.
- 1.1.16. All cables need to be checked after connecting the device in order to prevent damage or accidents.
- 1.1.17. Make sure that the device is transported safe and packed proper in order to prevent damage of any kind.
- 1.1.18. Once you notice improper function of your device due to damage, electric shock or anything similar, immediately unplug the unit from the mains outlet and contact our service department.
- 1.1.19. Clean the device with a dry cloth.

- 1.1.20. Observe all disposal laws applicable in your country. Especially for the packaging.
- 1.1.21. Plastic bags are not a toy! Keep away from children!
- 1.1.22. Please note that changes or modifications which are not approved by the party responsible for compliance will void the user's authority to operate the device.

## **1.2 Regulations for equipment that connects to power mains**

- 1.2.1. If an earthing contact is available in the used power cord, it must be used in combination with a power outlet, providing a protective ground. In no circumstances should the protective ground be deactivated.
- 1.2.2. Do not switch on the device immediately after it has been in strong different temperatures, especially after transport. Let the device acclimatize to the temperature in the room of usage first to prevent moisture and condensation.
- 1.2.3. Verify that the correct voltage and frequency are available in the area of operation, before connecting the unit to the mains outlet.
- 1.2.4. If the plug doesn't fit in your mains outlet, contact your electrician.
- 1.2.5. Make sure your power cord/adaptor/connector does not show signs of kinks/warps or is being stepped on.
- 1.2.6. Always disconnect the unit when not in use or being cleaned. Don't pull on the cord to disconnect. Only touch power connections with dry hands!
- 1.2.7. Don't switch the unit on/off rapidly. This may cause damage.
- 1.2.8. If a fuse needs to be replaced, ALWAYS make sure that exactly the same fuse will be used (type and rating). Repeatedly blown fuses need to be checked by an authorised service technician.
- 1.2.9. In the risk of lightning strike all units need to be unplugged from the mains in order to prevent damage.
- 1.2.10. During installation there must be a voltage free condition.
- 1.2.11. The device needs to be cleaned and serviced regularly and will credit this with a longer life cycle. Dust, dirt, moist, water, smoke, nicotine or anything similar inside the unit will cause damage/malfunction.
- 1.2.12. The unit needs to have at least 0,5m distance to anything flammable.
- 1.2.13. You have to make sure that any electrical installation applies to the laws of your country. Correct power cables and applying standards have to be used.

### 1.3. Technical warnsigns and explanation



In order to prevent the risk of an electric shock, under no circumstances remove the cover/back or open the unit in any way! No user serviceable parts are inside. Service, maintenance and repairs should only be done by qualified service personnel or the manufacturer.



Dangerous uninsulated voltage inside the device can cause an electrical shock when opened by unqualified personnel.



Important operating and maintenance instructions apply!



Do not operate this device in tropical climates.



CAUTION! Intense LED light source! Risk of eye damage. Do not look into the light source



The housing surface of the spotlight can heat up to temperatures as high as 70 °C in regular use. Ensure that it is not possible to come into contact with the housing unintentionally. Always allow sufficient time for the lamp to cool down before dismantling, carrying out maintenance work or charging etc..



#### IMPORTANT INFORMATION!

- This is a product which has been developed for professional usage in event technology. It is not suitable as a household lighting.
- NEVER stare, not even temporarily, directly into the light source.
- Don't use magnifiers or any other optical instrument to look at the beam.
- The effects of this device, especially the stroboscope effect, can cause problems for sensitive people or may even cause epileptical seizures.

## 2. INTRODUCTION

### 2.1. About us

The name ROXX® came easily.

Combined with the concentrated knowledge and many years of experience, our three founders, who have been leaving their mark in the event and lighting industry for many years already, came together in 2020 to start this outstanding venture.

Product development, sales and marketing as well as the exceptional know-how and the profound rooting in the field of the professional lighting technology belong to our core competences and therefore guarantee extremely innovative and reliable products, excellent support and professional service in every aspect.

Designed & developed in Germany

ROXX® products are developed and designed in Germany. Always in tight consultation with our customers and experts who will eventually be working with these tools. This ensures innovative, easy-to-use and performance-oriented solutions, which provide added value for our customers.

Made to last

Recommended for permanent outdoor use, most ROXX® products feature additional corrosion protection and enhanced IP66 equipment protection, thereby providing that crucial extra for a wider range of applications. In addition to architectural or theme park applications, even fixed installations in coastal or offshore areas with high salt exposure can be reliably implemented over long periods of time.

### 2.2. NEO

Illuminate your world with NEO, a cutting-edge lighting fixture that combines unparalleled performance with versatility and convenience. With 24 x 40W RGBL LEDs, NEO generates an astounding 37.690lx @ 5m, calibrated at 5600K, ensuring your space is bathed in brilliant light. Crafted with precision, the fixture features a specially developed 10° TIR lens, ensuring high illuminance even over extended distances while guaranteeing seamless color mixing for captivating displays. Enhance your lighting setup further with optional magnetic filters, offering a range of circular and elliptical beam angles, along with a smoked clear filter tailored for impeccable camera applications.

NEO boasts a CRI/Ra and TLCI higher 85, ensuring accurate color reproduction that breathes life into your surroundings. Four controllable segments provide unparalleled customization, empowering you to tailor your lighting to suit any scenario. Built to withstand the elements, NEO has a certified IP65 rating, making it suitable for both indoor and outdoor use. The additional DC input allows for easy connection to standardized battery packs, transforming the fixture into a mobile powerhouse for on-the-go lighting needs.

The integrated CRMX transceiver and Bluetooth module offer seamless wireless DMX setup according to industry standards, along with direct control via the intuitive ROXX.APP, streamlining your workflow and enhancing efficiency.

Experience hassle-free addressing and configuration with NEO's integrated Near Field Communication (NFC), even when fixture power is not available. This innovative feature revolutionizes your daily work processes, making light setup faster, easier, and more satisfying than ever before. The specially developed copper heat pipe cooling system ensures stable luminous intensity, even in high ambient temperatures. With temperature-controlled fan modes, including fan-off mode for silent operation, NEO is ideal for any stage, TV, and film application. The fixture offers linear CTC control from 2000K to 10,000K, ensuring versatility for any lighting scenario. The user-friendly 2" TFT display, complemented by backlit buttons, provides direct access to dimmer, CCT, gels, app control, and CRMX functions, simplifying operation for users of all levels.

Designed with convenience in mind, NEO features integrated handles on both the head and yoke, allowing for comfortable transportation. Multiple mounting locations offer creative rigging options, while 16-bit dimming control ensures smooth, perfect fades for seamless transitions. Experience seamless transitions with 16-bit dimming control, ensuring smooth, perfect fades every time. Plus, adjustable PWM frequencies up to 25kHz guarantee flicker-free operation, providing optimal lighting conditions for any shoot.

## 3. GENERAL PRODUCT INFORMATION

### 3.1. Scope of delivery

⊕ 1x NEO

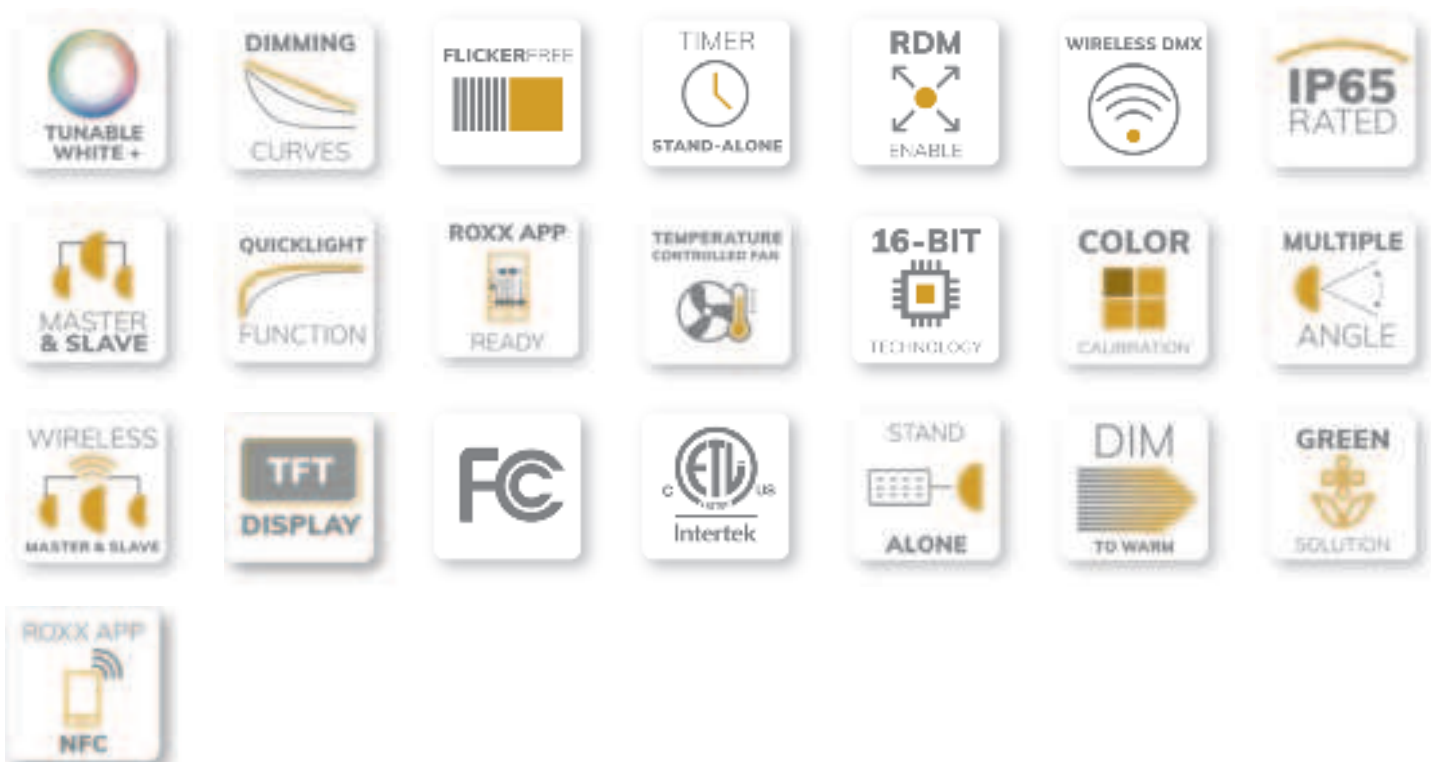
⊕ Power cord with plug (EU country specific, if not ordered differently)

We're offering a wide range of professional accessories (optional). Please see under menu 6 or at our website [www.roxxlight.com](http://www.roxxlight.com)

### 3.2. Control Functions

- 3CH CCT, 3CH RGB, 6CH RGB, 8CH RGB, 19CH RGB, 23CH RGB, 4CH DIRECT, 8CH DIRECT, 9CH DIRECT, 21CH DIRECT, 26CH DIRECT, 17CH HSI, 16CH PURE, 29CH PURE, 28CH FULL ACCESS, 44CH FULL ACCESS
- Stand Alone Functions including cinema effects, various auto programs, customisable scenes, CCT, LEE adjusted color macros and custom color templates
- 6 extra display controls for direct access of wireless settings, dimmer, CCT, color & user definable functions
- Master & Slave (by DMX and Wireless DMX)
- Wireless DMX (Lumenradio CRMX®)
- ROXX App - Bluetooth 5.0
- ROXX NFC App - Near Field Communication

### 3.3. Features





## 4. INSTALLATION & SETUP

### 4.1 Physical Installation and Rigging

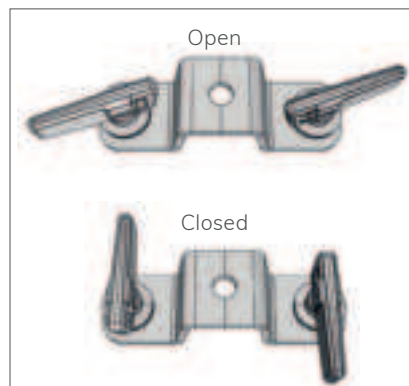
ROXX NEO may be installed in any orientation. For this purpose the product provides several options:

#### Standing:

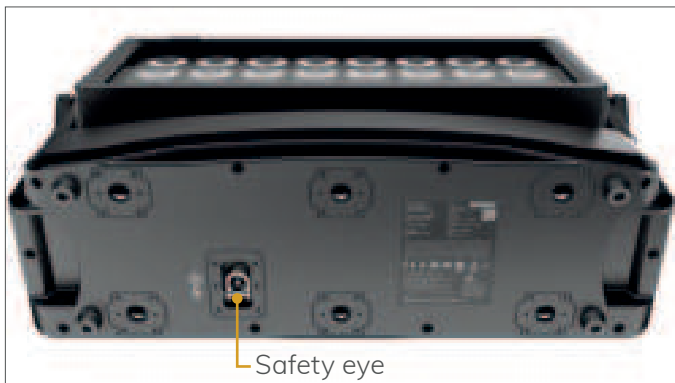
The fixtures is equipped with 4 rubber feet. It allows the luminaire to be used in floor application. With its integrated rubber feet it's designed to ensure a secure stand on every plane surface with 220° tilt movement of the fixtures head.

#### Hanging:

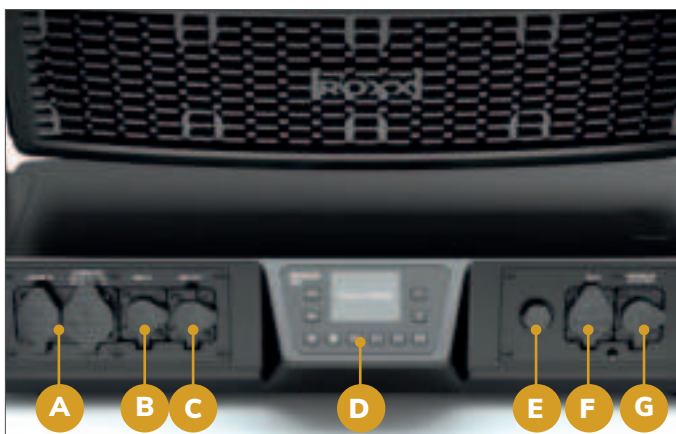
On the bottom 3x Camlock 1/4 turn connectors are installed. Here it's possible to click in the ROXX Omega Bracket ST (optional accessory) equipped with any suitable clamp.



Insert the two fasteners and turn each 90° clockwise to lock them. Please be sure that the fasteners are turned fully and snapped in.



### 4.2 Connections\*



**A:** IP65 Power I/O connectors with rubber sealing cap. Connect using the provided power cable (when not in use, always close with rubber sealing cap)

**B:** DMX IN

**C:** DMX OUT

**D:** Direct Acces to Dimmer, CCT, Gels, Wireless, Connectivity, User definable controls

**E:** Goretex Valve

**F:** Firmware / USB: when not in use, always close with rubber sealing cap

**G:** DC Power In

**\*Note:**

In order to provide protection from spraying water, in accordance with protection class IP65, special IP65-rated XLR connectors must be used correctly with the DMX input and output sockets, or they must be closed using the rubber sealing caps. When connected correctly, or when sealed correctly with the rubber sealing caps, the POWER IN and POWER OUT sockets are protected from spraying water, as in accordance with IP65.

#### 4.2.1. AC Power

The NEO operates on any 100–260 V, 50/60 Hz AC mains power supply with a maximum power consumption of 988W. Connect the fixture to AC power using the supplied cable or a similar one with Neutrik powerCON TRUE1 NAC3FX-W or a compatible type, to ensure the correct ingress protection (IP).

For temporary installations, the mains cable must be fitted with a grounded connector intended for exterior use. The fixture must be grounded/earthed and be able to be isolated from AC power. The AC power supply must incorporate a fuse or circuit breaker for fault protection.

| Wire Color (EU models) | Wire Color (US models) | Conductor      | Symbol |
|------------------------|------------------------|----------------|--------|
| Brown                  | Black                  | Live           | L      |
| Blue                   | White                  | Neutral        | N      |
| Yellow / Green         | Green                  | Ground (earth) | ⊕ or ⊥ |



**Warning!**

Read “Safety Informations” starting on page 3 before connecting the fixtures to AC mains power!  
Do not connect the fixture to an electrical dimmer system, as doing so may cause damage that is not covered by the product warranty!

#### 4.2.2 DC Power

ROXX NEO provides a 4-pin DC power input and enables the fixture to run on external battery power under the here below listed technical requirements:

DC Battery Voltage Range: 24-34V

Battery Mode Light Output: The maximum Output from NEO is limited according to the continuous discharge current from your battery and needs to be defined inside the menu under the item Battery Runtime:

9-12A : 200W max. Output

13-16A: 300W max. Output

17-20A: 400W max. Output

Requirements for your DC power cable:

Up to 13A - 2x1,5mm<sup>2</sup>

Up to 26A - 4x1,5mm<sup>2</sup>

Battery Runtime:

Battery Runtime can be selected from Off (maximum Output) to 1-8hours runtime. The fixtures calculates the output automatically according to your pre-selected Battery pack (100Wh, 190Wh, 290Wh) and the colors in use.

| Level 1  | Level 2                                      | Level 3   | Level 4  | Level 5                                  |
|--|--|---|--|--|
| <b>Menu</b><br><br>DMX Mode<br>Stand Alone<br>Slave<br>➡ Settings<br>System Info | <b>Battery Runtime</b><br><br>➡ 9-12A (200W) | <b>Battery</b><br><br>➡ 100Wh<br>190Wh<br>290Wh | <b>Discharge current</b><br><br>➡ 9-12A (200W)<br>13-16A (300W)<br>17-20A (400W) | <b>Runtime</b><br><br>Off<br>➡ 1-8 hours |

### 4.2.3 DMX Connection

The NEO is fully controllable by DMX (USITT DMX512-A standard, based on RS-485) and RDM. It can be connected using either DMX cables or via the built-in LumenRadio CRMX wireless system.

#### 4.2.3.1. Cable Connection

If using a cabled DMX system, connect the DMX IN cable to the input connector (male 5-pin XLR connector) and DMX OUT cable to the output (female 5-pin XLR connectors).

For outdoor installations, use only IP65-rated XLR connectors.

Use shielded twisted pair cable designed for RS-485 devices. The cables are daisy chained between the fixtures, and up to 32 fixtures can be connected to the same DMX link. Up to 300 meters (1000ft.) of cable is achievable with high quality DMX cables. All DMX links must be terminated in the last fixture by connecting a DMX termination plug to the last fixture's 5 pin DMX out connector.

DMX Termination on last fixture DMX out  
Standard microphone cable is not suitable for transmitting DMX.



#### 4.2.3.2. Wireless Connection\*

NEO is equipped with a LumenRadio™ Transceiver module.

This enables the fixture to work with the following connectivity options:

- ⊕ Working in Receiver Mode: receive wireless DMX- and RDM Signals via CRMX
- ⊕ Working in Transmitter Mode: transmit DMX (1 universe) to other units via CRMX
- ⊕ Full Control via Bluetooth 5.0 and ROXX App

The Fixture is able to send DMX-data received by CRMX or Bluetooth to its physical DMX-Output XLR Connector and hereafter, plugged in by cable, to any DMX-capable unit. For this please enable "Pass to DMX Out" inside Wireless DMX Settings.

NEO can act as a fully operative CRMX Receiver and be paired to an active wireless transmitter (CRMX) simultaneously as being connected to a cabled DMX. The device will prioritize cabled DMX input over wireless DMX and over Bluetooth. A small indicator in front of "DMX", "CRMX" or "BLE" gives an easy overview which protocol is currently active. Please see the display graphics below.

If using a wireless DMX system, ensure that the DMX input and the DMX output are properly sealed. Connect both DMX IN and DMX OUT, or seal, in order to maintain the fixture's IP65 rating.

**\*Note: If you are using XLR for DMX and not Bluetooth we recommend to not connect to Bluetooth unless you need to since it can cause a few dropped DMX packets.**

**BLE and CRMX RX are not available simultaneously.**

- If CRMX RX is enabled and BLE will be enabled after, CRMX automatically changes to TX mode.
- If CRMX TX operating mode is changed to RX, BLE will be disabled automatically.

#### 4.2.3.2. Wireless Connection

19 CH  
RGB

**1**  
Next  
( 20 )

•DMX

|                 |                |  |
|-----------------|----------------|--|
| CRMX            | Disabled       | The indicator infront of "DMX" shows that DMX is active. |
| Operation Mode  | n.a.           |  |
| Linked          | No             |  |
| Receive Reset   | No             |  |
| DMX             | <b>Enabled</b> |  |
| BLE (Bluetooth) | Disabled       |  |

19 CH  
RGB

**1**  
Next  
( 20 )

• CRMX(RX)  
DMX


|                 |                |  |
|-----------------|----------------|--|
| CRMX            | <b>Enabled</b> | The indicator infront of "CRMX (RX)" shows that the fixture is now working in wireless DMX receive mode. |
| Operation Mode  | <b>RX</b>      |  |
| Linked          | <b>No</b>      |  |
| Receive Reset   | Yes            | "(RX)"= CRMX operating mode is set to receive  |
| DMX             | Disconnect     |  |
| BLE (Bluetooth) | Disabled       |  |

19 CH  
RGB

**1**  
Next  
( 20 )

• CRMX(TX)  
DMX


|                 |                |   |
|-----------------|----------------|---|
| CRMX            | <b>Enabled</b> | The indicator infront of "CRMX (TX)" shows that the fixture is now working in wireless DMX transmit mode. |
| Operation Mode  | <b>TX</b>      |   |
| Linked          | <b>No</b>      |   |
| Receive Reset   | Yes            | "(TX)"= CRMX operating mode is set to transmit  |
| DMX             | Disconnect     |   |
| BLE (Bluetooth) | Disabled       |   |

 19 CH  
RGB

**1**  
Next  
( 20 )

• CRMX(RX)  
DMX


|                 |                |   |
|-----------------|----------------|---|
| CRMX            | <b>Enabled</b> | Once the fixture is linked to an external transmitter, the CRMX signal-symbol appears on upper left side. |
| Operation Mode  | <b>RX</b>      |   |
| Linked          | <b>Yes</b>     |   |
| Receive Reset   | Yes            | 1 dash= 1-30% signal strength<br>2 dashes= 31-70% signal strength<br>3 dashes= 71-100% signal strength    |
| DMX             | Disconnect     |   |
| BLE (Bluetooth) | Disabled       |   |

 19 CH  
RGB

**1**  
Next  
( 20 )

• CRMX(TX)  
DMX


|                 |                |   |
|-----------------|----------------|---|
| CRMX            | <b>Enabled</b> | Once the fixture is linked to an external transmitter, the CRMX signal-symbol appears on upper left side. |
| Operation Mode  | <b>TX</b>      |   |
| Linked          | <b>Yes</b>     |   |
| Receive Reset   | Yes            | 1 dash= 1-30% signal strength<br>2 dashes= 31-70% signal strength<br>3 dashes= 71-100% signal strength    |
| DMX             | Disconnect     |   |
| BLE (Bluetooth) | Disabled       |   |

 19 CH  
RGB

**1**  
Next  
( 20 )

• CRMX(RX)  
DMX

|                 |                          |  |
|-----------------|--------------------------|--|
| CRMX            | <b>Enabled</b>           | In case the external transmitter is switched off or out of signal range the signal-symbol starts to blink. |
| Operation Mode  | <b>RX</b>                |  |
| Linked          | <b>Yes, out of range</b> |  |
| Receive Reset   | Yes                      |  |
| DMX             | Disconnect               |  |
| BLE (Bluetooth) | Disabled                 |  |

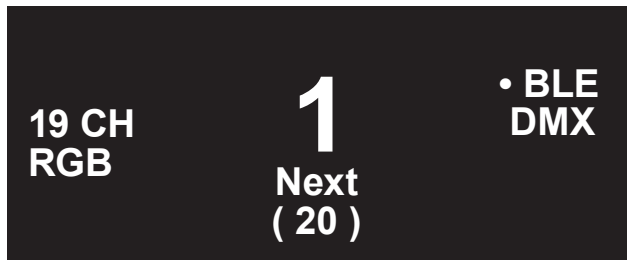
 19 CH  
RGB

**1**  
Next  
( 20 )

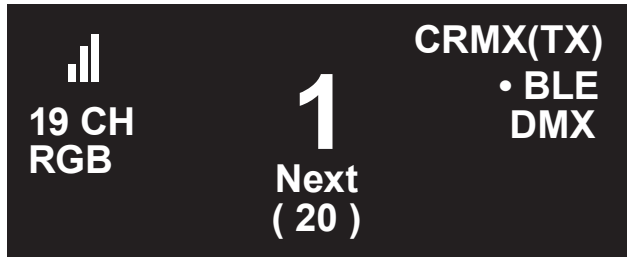
• CRMX(RX)  
DMX

|                 |                        |  |
|-----------------|------------------------|--|
| CRMX            | <b>Enabled</b>         | An exclamation appears and blinks although the external transmitter is switched on and is inside the signal range but no DMX is connected to the external transmitter. |
| Operation Mode  | <b>RX</b>              |  |
| Linked          | <b>Yes, but no DMX</b> |  |
| Receive Reset   | Yes                    |  |
| DMX             | Disconnect             |  |
| BLE (Bluetooth) | Disabled               |  |

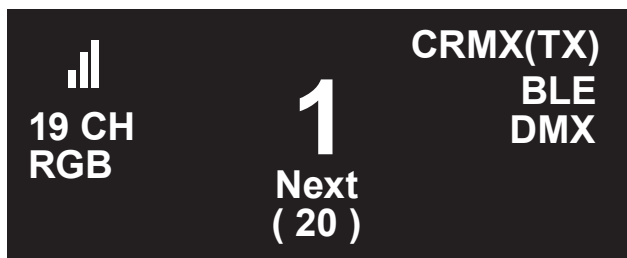
#### 4.2.3.2. Wireless Connection



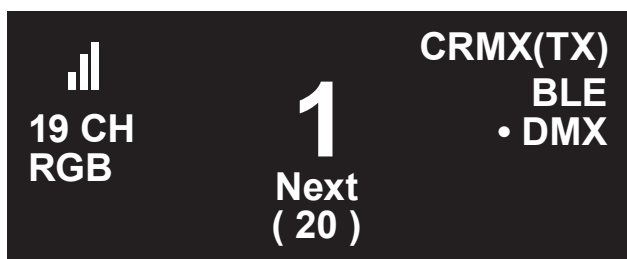
|                 |                         |   |
|-----------------|-------------------------|---|
| CRMX            | Disabled                | The indicator infront of "BLE" shows that the fixture is now working in Bluetooth mode and is paired to ROXX App. |
| Operation Mode  | n.a.                    |   |
| Linked          | No                      |   |
| Receive Reset   | No                      |   |
| DMX             | Disconnect              |   |
| BLE (Bluetooth) | <b>Enabled + Paired</b> |   |



|                 |                         |   |
|-----------------|-------------------------|---|
| CRMX            | <b>Enabled</b>          | The indicator infront of "BLE" shows that the fixture is now working in Bluetooth mode and is paired to ROXX App. |
| Operation Mode  | <b>TX</b>               |   |
| Linked          | <b>Yes</b>              |   |
| Receive Reset   | No                      | As CRMX TX is enabled and linked a full DMX universe is send out by CRMX (wireless DMX).                          |
| DMX             | Disconnect              |   |
| BLE (Bluetooth) | <b>Enabled + Paired</b> |   |



|                 |                            |   |
|-----------------|----------------------------|---|
| CRMX            | <b>Enabled</b>             | No indicator infront of "BLE", fixture is not paired to ROXX App. |
| Operation Mode  | <b>TX</b>                  |   |
| Linked          | <b>Yes</b>                 |   |
| Receive Reset   | No                         |   |
| DMX             | Disconnect                 |   |
| BLE (Bluetooth) | <b>Enabled, not paired</b> |   |

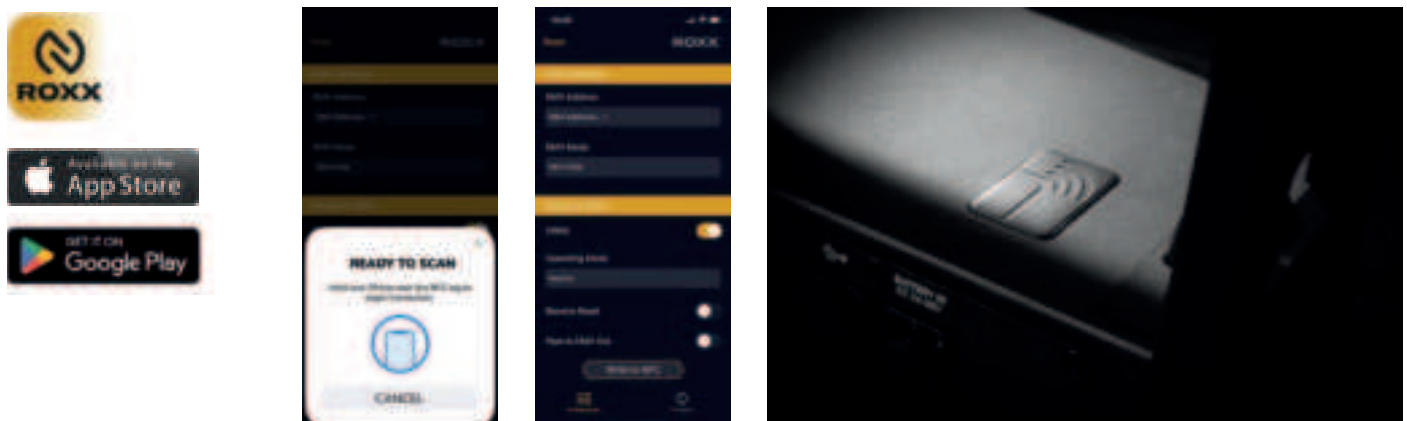


|                 |                |  |
|-----------------|----------------|--|
| CRMX            | <b>Enabled</b> | DMX is active.<br>As CRMX TX is enabled and linked a full DMX universe is send out by CRMX (wireless DMX). |
| Operation Mode  | <b>TX</b>      |  |
| Linked          | <b>Yes</b>     |  |
| Receive Reset   | No             |  |
| DMX             | <b>Connect</b> |  |
| BLE (Bluetooth) | Enabled        |  |

#### 4.3. NFC (Near Field Communication)

NEO integrates a NFC chip (Near Field Communication) and allows in conjunction with ROXX NFC App to address and configure the fixtures wirelessly even when the fixture power is not prevent. Additionally, the fixtures firmware can be read out and updated to latest version. For this please make sure NEO stays AC powered during update process.

The NFC chip is based on it's lower housing part, close to the CRMX antenna. To get a proper connection between your mobile phone and NEO, please make sure that your phone is very close to the NFC.



## 5. OPERATION

### 5.1 Start up\*

Once the fixture is connected to AC power, the boot process starts and the following information will appear on the display:

"Ready to ROXX", the product name and the current software version.



After this process, the fixture is ready for operation, and starts in the previously enabled mode.

**\*Note:**

**During boot process the fan spins up quickly to blow out some possible dust from last use.**

### 5.2 Control Display\*

2.0" TFT Display with ten backlit control buttons

ENTER

**Press ENTER** to access the selection menu for system settings or confirm changes.

ESC

**Press ESC** to take a step back in the menu.

▲ ▼

**Press arrows to scroll up and down** inside the menu and change values, such as DMX address.

**\*Note:**

**After approximately 1 minute of inactivity inside the menu settings, the display will automatically jump back to home screen.**

### 5.3 Display Short Cuts\*

Short Cuts

For some always recurring functions the fixture allows quick and user-friendly access at home screen over some display control short-cuts:

#### User Reset or Factory Reset\*

ENTER

+

ESC

Pressing ESC+ENTER simultaneously a Factory Reset or User Reset can be started.

By using the up/down arrows the Factory- or User Reset can be selected.

For confirming press ENTER, to jump back please press ESC.

**\*Note:**

**For detailed information about the different reset options please refer to chapter "5.4.6.1 Reset functions"**

## Display Off



Pressing ESC + arrow down simultaneously the display backlight function will set to off and the display will turn off immediately. Once a control is pressed the display backlight will turn on.

## Manual display flip function\*



The fixture includes an auto display flip function by default.

To use the manual display flip function please disable the auto flip function under Settings / Display first. Once the auto display flip function is disabled you can use the manual display flip function by pressing arrow up + arrow down simultaneously. The display will rotate 180. By pressing both arrows simultaneously again the display will flip back.

### \*Note:

**Once the display is flipped both Up / Down controls will work according to the display rotation.**

## 5.4 Configuration

### Home Screen

After boot process the fixture is ready for operation and starts in the previously enabled mode. At home screen the following information will appear, depending on the current operating mode:

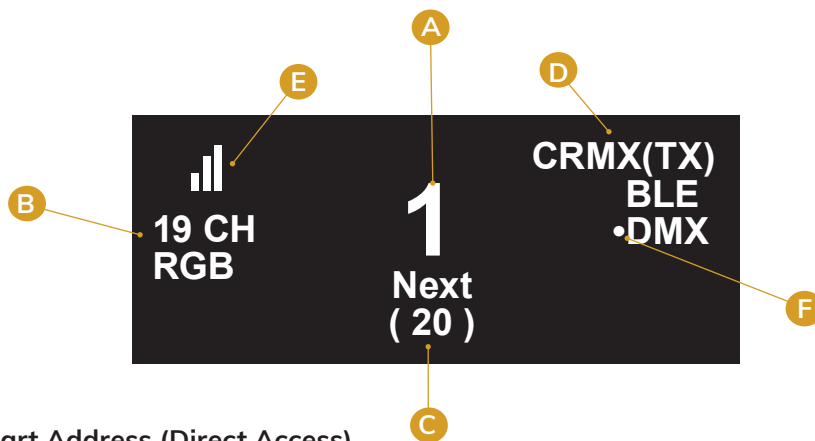
- A** DMX Address
- B** Operating Mode (DMX Mode, Quick Light or Standalone Mode)
- C** Next available DMX address depending on the fixtures DMX footprint
- D** External Data protocol (CRMX, DMX, BLE).
- E** CRMX status and strength
- F** The dot indicates the active protocol

Note:

**CRMX (RX)** CRMX Receiving Mode

**CRMX (TX)** CRMX Transmit Mode

**BLE** Bluetooth enabled



#### 5.4.1 Set DMX Start Address (Direct Access)

At Home Screen the DMX address can be changed directly by using the up and down arrows. During this process the DMX address starts blinking, once it's confirmed by pressing ENTER it stops blinking.

If the DMX address will not be confirmed by ENTER within 10 seconds, the display will jump back and show the DMX address from before and stops blinking.

#### 5.4.2 Selecting DMX Mode\*

At home screen please press ENTER to access to the main menu (level 1).

While using UP / DOWN arrows, please select the menu item "DMX Mode" and confirm by pressing ENTER.

In the following sub-menu (level 2), you can now choose between 16 different DMX operating modes while using the UP/Down arrows and confirm by pressing ENTER or jump back by pressing ESC.

After confirmation the display will jump back to main menu (level 1). Press ESC for homescreen, here the selected DMX mode will be displayed.

#### **\*Note:**

For detailed information about the several DMX modes including channel assignment please see our DMX Control chart.



#### Level 1

| Menu  |
|---|
| <ul style="list-style-type: none"> <li>➤ DMX Mode</li> <li>Stand Alone</li> <li>Slave</li> <li>Settings</li> <li>System Info</li> </ul> |

#### Level 2

| DMX Mode  |
|---|
| <ul style="list-style-type: none"> <li>➤ 3CH CCT</li> <li>3CH RGB</li> <li>6CH RGB</li> <li>8CH RGB</li> <li><b>19CH RGB</b></li> <li>23CH RGB</li> <li>4CH DIRECT</li> <li>8CH DIRECT</li> <li>9CH DIRECT</li> <li>21CH DIRECT</li> <li>26CH DIRECT</li> <li>17CH HSI</li> <li>16CH PURE</li> <li>29CH PURE</li> <li>28CH FULL ACCESS</li> <li>44CH FULL ACCESS</li> </ul> |

### 5.4.3 Stand Alone\*

Press ENTER to access to main menu (level 1).

While using the UP / DOWN arrows, please select the menu item “Stand Alone” and confirm by pressing ENTER.

In the following sub-menu (level 2), you can now choose between 6 different Stand Alone operating modes (Auto, Editor, Color Macro, Quick Color, Tunable White, User Color) ,Stop Stand Alone, Timer and Color Settings functions while using the UP/Down arrows and confirm by pressing ENTER or jump back by pressing ESC.

To finally use Stand Alone programs please make sure either DMX, CRMX RX or BLE is connected to the fixture, as these protocols have priority.

#### Stop Stand Alone

To stop a running Stand Alone mode immediately, please select “Stop Stand Alone” and confirm by pressing ENTER. The display will automatically jump back to level 1.

#### Level 1

| Menu  |
|---|
| <ul style="list-style-type: none"> <li>DMX Mode</li> <li>➤ Stand Alone</li> <li>Slave</li> <li>Settings</li> <li>System Info</li> </ul> |

#### Level 2

| Stand Alone Mode   |
|--|
| <ul style="list-style-type: none"> <li>➤ Stop Stand Alone</li> <li>Auto</li> <li>Editor</li> <li>Color Macro</li> <li>Quick Color</li> <li>Tunable White</li> <li>User Color</li> <li>Timer</li> <li>Color Settings</li> </ul> |

### Auto\*

Select "Auto" by using the up/down arrows and press ENTER.

Here at sub-menu (level 3), you can choose between 20 different Auto Programs and Stop Program. Using the Up/Down arrows you can select one of the 10 auto programs and confirm by pressing ENTER or step back by ESC.

After confirming your preferred Auto Program, you can now adjust speed and brightness at level 4. For all Pattern effects you can select the Colors for Pattern and Backlight on level 4, Dimmer and Pattern X-fade on level 5

To adjust speed, please use the UP / DOWN arrows to select the menu item "Speed", and confirm with ENTER. After use UP / DOWN arrows to adjust the speed value between 000-100 and confirm by ENTER or jump back by ESC.

To adjust brightness please select "Dim" as per the procedure previously described and confirm with ENTER. After use UP / DOWN arrows again to adjust the brightness value between 000-100 and confirm by ENTER or jump back by ESC. Same with the other adjustable functions.

Once it's confirmed or denied the display will automatically jump back to level 3. To stop running a selected auto program please chose "Stop Program" at level 3 or "Stop Stand Alone" at level 2. For returning back to homescreen please press ESC three times. At homescreen the selected Stand Alone mode "Auto" and the selected program will be displayed.

**\*Note: Using arrows UP /DOWN at homescreen Auto programs can be directly changed according to the list.**

Level 1

| Menu          |
|---------------|
| DMX Mode      |
| ➡ Stand Alone |
| Slave         |
| Settings      |
| System Info   |

Level 2

| Stand Alone Mode |
|------------------|
| Stop Stand Alone |
| ➡ Auto           |
| Editor           |
| Color Macro      |
| Quick Color      |
| Tunable White    |
| User Color       |
| Timer            |
| Color Settings   |

Level 3

| Auto               |
|--------------------|
| ➡ Stop Program     |
| 7-Color Fade       |
| 7-Color Jump       |
| 15-Color Fade      |
| 15-Color Jump..... |
| Police RB          |
| Police B           |
| Candle Light       |
| Fireworks          |
| Red Carpet         |
| Welding            |

Level 4

| Program                         |
|---------------------------------|
| ➡ Speed <0-100><br>(Default 50) |
| Dim <0-100>                     |

Level 3

| Auto       |
|------------|
| ➡ Pulse A1 |
| Pulse A2   |
| Pulse A3   |
| Pulse A4   |
| Pulse A5   |
| Pulse A6   |
| Pulse A7   |
| Pulse A8   |
| Pulse A9   |
| Pulse A10  |

Level 4

| Program   |
|---|
| ➡ Pattern - Color Macro (LED Blue as default)       |
| Backlight - Color Macro (Orange LEE 105 as default) |

Level 5

| Program                      |
|------------------------------|
| ➡ Dimmer Pattern.<br><0-100> |
| Dimmer Backlight.<br><0-100> |
| Pattern X-Fade<br><0-100>    |

## Editor\*

At Editor you have up to three customizable programs which can be defined and run from the menus.

Each of the three values contains twenty four user-definable scenes with its own values for RGBL (RAW) or RGB (Calibrated) and shutter, playing continuously in a loop. Each scene has a definable fade-in time for the transition from one color to the other and wait-time.

To define a program please press ENTER to access to main menu (level 1).

While using the UP / DOWN arrows, please select the menu item "Stand Alone" and confirm by pressing ENTER.

Level 1

| Menu          |
|---------------|
| DMX Mode      |
| ➤ Stand Alone |
| Slave         |
| Settings      |
| System Info   |

Level 2

| Stand Alone Mode |
|------------------|
| Stop Stand Alone |
| Auto             |
| ➤ Editor         |
| Color Macro      |
| Quick Color      |
| Tunable White    |
| User Color       |
| Timer            |
| Color Settings   |

Select "Editor" by using the up/down arrows and press ENTER.

Here at sub-menu (level 3) you can choose between Program 1-3, Dimmer and Stop Program. Using the Up/Down arrows you can select program 1, 2 or 3 and confirm by pressing ENTER or step back by ESC. After confirming your preferred program, you can now choose between Scene 1-24. Select one of the scenes and press ENTER or step back by ESC. At level 5 you can now set your color, shutter and fade / wait time in minutes and seconds. For creating a color jump please set value for "Fade Time" to 0, and "Wait Time" to at least 1 second.

Once it's set your first scene is programmed.

You can now jump back to level 3 by using ESC. Here your program will starts automatically. For creating more scenes please use the same procedure. To stop an active program please press ESC and select "Stop Program" at level 3 or "Stop Stand Alone" at level 2. To start again, please re-select your preferred program, it will starts automatically again. To adjust the master brightness for program 1-3, you can use the item "Dimmer" at level 3 and select between 000-100 and confirm by ENTER or jump back by ESC.

**\*Note:** Once "Factory Calibration" is selected under "Color Settings" inside Stand Alone, only values for RGB are available here.

Using UP / DOWN arrows at homescreen Editor program can be directly changed according to the list. For choosing the right strobe effect please follow the Strobe Channel from our DMX chart at the end of this manual.

Level 3

| Editor       |
|--------------|
| Program 1    |
| ➤ Program 2  |
| Program 3    |
| Dim <0-100>  |
| Stop Program |

Level 4

| Program           |
|-------------------|
| ➤ Scene 1         |
| Scene 2           |
| Scene 3           |
| ...max. 24 Scenes |

Level 5

| Scene            |         |
|------------------|---------|
| Red              | <0-255> |
| Green            | <0-255> |
| Blue             | <0-255> |
| Lime             | <0-255> |
| Shutter          | <0-255> |
| Fade Time (min.) | <0-480> |
| Fade Time (sec.) | <0-59>  |
| Wait Time (min.) | <0-720> |
| Wait Time (min.) | <0-59>  |

## Color Macro\*

46 different color macros (34x matched LEE color filters, 6 LED colors and 6 different Whites) are available as presets. For each the brightness can be adjusted separately.

### Level 1

| Menu          |
|---------------|
| DMX Mode      |
| ■ Stand Alone |
| Slave         |
| Settings      |
| System Info   |

### Level 2

| Stand Alone Mode |
|------------------|
| Stop Stand Alone |
| Auto             |
| Editor           |
| ■ Color Macro    |
| Quick Color      |
| Tunable White    |
| User Color       |
| Timer            |
| Color Settings   |

### Level 3

| Color Macro       |
|-------------------|
| Color Off         |
| ■ Color Macros    |
| Color Macro Chart |
| Dim <0-100>       |

To select a color macro please press ENTER to access to main menu (level 1). While using the UP / DOWN arrows select the menu item "Stand Alone" and confirm by pressing ENTER. After please select the item "Color Macro" by using the up/down arrows and press ENTER again.

Using UP and DOWN controls, select your desired color preset and confirm with ENTER.

At level 3 you can adjust the brightness for the color preset between 000-100. Confirm by ENTER. For color blackout choose the item "Color Off".

**Note:** Using UP / DOWN arrows at homescreen Color Macros can be changed according to the list.

### Level 4

| Gels - Color Macros for Standalone Mode |                   |                | Gels - Color Macros for Standalone Mode |                |               | Gels - Color Macros for Standalone Mode |                           |                  |
|---|-------------------|----------------|---|----------------|---------------|---|---------------------------|------------------|
| Pos.                                    | Gel Name          | Color Number   | Pos.                                    | Gel Name       | Color Number  | Pos.                                    | Gel Name                  | Color Number     |
| 1                                       | Red               | 100% Red LED   | 17                                      | Jade           | LEE 323       | 33                                      | Special Med Lavender      | LEE 343          |
| 2                                       | Fire              | LEE 019        | 18                                      | Blue           | 100% Blue LED | 34                                      | Ultimate Violet           | LEE 707          |
| 3                                       | Medium Red        | LEE 027        | 19                                      | Sky Blue       | LEE 068       | 35                                      | Magical Magenta           | LEE 795          |
| 4                                       | Primary Red       | LEE 106        | 20                                      | Tokyo Blue     | LEE 071       | 36                                      | Chrysalis Pink            | LEE 798          |
| 5                                       | Med Amber         | LEE 020        | 21                                      | Light Blue     | LEE 118       | 37                                      | Specia KH Lavender        | LEE 799          |
| 6                                       | Dark Amber        | LEE 022        | 22                                      | Marine Blue    | LEE 131       | 38                                      | Bulb White                | 2700K / High CRI |
| 7                                       | Deep Amber        | LEE 104        | 23                                      | Med Blue       | LEE 132       | 39                                      | Halogen White             | 3200K / High CRI |
| 8                                       | Orange            | LEE 105        | 24                                      | Congo Blue     | LEE 181       | 40                                      | Neutral White             | 4200K / High CRI |
| 9                                       | Deep Golden Amber | LEE 135        | 25                                      | Mikkel Blue    | LEE 716       | 41                                      | Daylight White            | 5600K / High CRI |
| 10                                      | Yellow            | LEE 101        | 26                                      | Rose Pink      | LEE 002       | 42                                      | Cold White I              | 6000K / High CRI |
| 11                                      | Green             | 100% Green LED | 27                                      | Med Pink       | LEE 036       | 43                                      | Cold White II             | 6300K / High CRI |
| 12                                      | Lime Green        | LEE 088        | 28                                      | Light Lavender | LEE 052       | 44                                      | Amber (only if available) | 100% Amber LED   |
| 13                                      | Moss Green        | LEE 089        | 29                                      | Lavender       | LEE 058       | 45                                      | Lime (only if available)  | 100% Lime LED    |
| 14                                      | LEE Green         | LEE 121        | 30                                      | Magenta        | LEE 113       | 46                                      | Cyan (only if available)  | 100% Cyan LED    |
| 15                                      | Primary Green     | LEE 139        | 31                                      | Mauve          | LEE 126       |   |                           |                  |
| 16                                      | Jas Green         | LEE 738        | 32                                      | Smokey Pink    | LEE 127       |   |                           |                  |

### Quick Color\*

The standalone mode “Quick Color” allows a direct adjustment of the single LED colors R, G, B, L, Dimmer and Shutter.

Level 1

| Menu          |
|---------------|
| DMX Mode      |
| ■ Stand Alone |
| Slave         |
| Settings      |
| System Info   |

Level 2

| Stand Alone Mode |
|------------------|
| Stop Stand Alone |
| Auto             |
| Editor           |
| Color Macro      |
| ■ Quick Color    |
| Tunable White    |
| User Color       |
| Timer            |
| Color Settings   |

Level 3

| Quick Color              |
|--------------------------|
| Dimmer <0- <b>100</b> >  |
| Shutter <0- <b>255</b> > |
| Red < <b>0</b> -255>     |
| Green < <b>0</b> -255>   |
| Blue < <b>0</b> -255>    |
| Lime < <b>0</b> -255>    |

To adjust your Quick Color please press ENTER to access to main menu (level 1).

While using the UP / DOWN arrows select the menu item “Stand Alone” and confirm

by pressing ENTER. After please select the item “Quick Color” by using the up/down arrows and press ENTER again.

Using UP and DOWN controls, select your desired color and confirm with ENTER.

After you can adjust the brightness for the color between 000-255 and confirm by ENTER.

Besides the individual color mix also a master dimmer can be adjusted between 000-100.

For strobe effects please adjust the Shutter value between 000-255.

ⓘ **\*Note: Please see detailed explanation for strobe effects inside DMX chart at the end of this manual.**

**If “Factory Calibration” is selected in “Color Settings” only R,G,B is available here.**

**Using UP/DOWN arrows at homescreen you can change Quick Color’s dimmer value.**

### Tunable White\*

The standalone mode “Tuneable White” allows the color temperature (CCT) to be adjusted from 2.000K – 10.000K in 100K steps. Besides brightness and shutter also a +/- green and magenta correction is available.

Level 1

| Menu          |
|---------------|
| DMX Mode      |
| ■ Stand Alone |
| Slave         |
| Settings      |
| System Info   |

Level 2

| Stand Alone Mode |
|------------------|
| Stop Stand Alone |
| Auto             |
| Editor           |
| Color Macro      |
| Quick Color      |
| ■ Tunable White  |
| User Color       |
| Timer            |
| Color Settings   |

Level 3

| Tunable White                |
|------------------------------|
| CCT < <b>2000K</b> -10.000>  |
| TINT < <b>000</b> > (+/-127) |
| Dimmer <0- <b>255</b> >      |
| Shutter <0- <b>255</b> >     |

Starting from home screen press ENTER to access to main menu (level 1).

While using the UP / DOWN arrows select the menu item “Stand Alone” and confirm by pressing ENTER.

After please select the item “Tunable White” by using the up/down arrows and press ENTER again.

Using UP and DOWN controls to select your desired menu item, confirm by ENTER and adjust the desired value by up and down controls and confirm all entries with ENTER.

**\*Note:**

**Tint values**

000 = no function/neutral  
001 - 127 = + green  
-001 to - 127 = - green

**\*Note:** Using UP/DOWN arrows at homescreen the selected CCT value can be changed in +/- 100K steps.  
**Shutter:** Please see detailed explanation for strobe effects inside DMX chart at the end of this manual.

**User Color\***

The standalone mode “User Color” allows to store up to 5 customized color presets out of Red, Green, Blue, Lime, brightness and shutter.

| Level 1  | Level 2 | Level 3  | Level 4       |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
|--|---------|----------|---------------|-------|----------|-------------|---|------------------|------------------|------|--------|-------------|-------------|---------------|--------------|-------|----------------|--|------------|---------|---------|---------|---------|---------|--|------------|-------------------------|--------------------------|----------------------|------------------------|-----------------------|-----------------------|
| <table><tr><th>Menu</th></tr><tr><td>DMX Mode</td></tr><tr><td>■ Stand Alone</td></tr><tr><td>Slave</td></tr><tr><td>Settings</td></tr><tr><td>System Info</td></tr></table> | Menu    | DMX Mode | ■ Stand Alone | Slave | Settings | System Info | <table><tr><th>Stand Alone Mode</th></tr><tr><td>Stop Stand Alone</td></tr><tr><td>Auto</td></tr><tr><td>Editor</td></tr><tr><td>Color Macro</td></tr><tr><td>Quick Color</td></tr><tr><td>Tunable White</td></tr><tr><td>■ User Color</td></tr><tr><td>Timer</td></tr><tr><td>Color Settings</td></tr></table> | Stand Alone Mode | Stop Stand Alone | Auto | Editor | Color Macro | Quick Color | Tunable White | ■ User Color | Timer | Color Settings | <table><tr><th>User Color</th></tr><tr><td>Color 1</td></tr><tr><td>Color 2</td></tr><tr><td>Color 3</td></tr><tr><td>Color 4</td></tr><tr><td>Color 5</td></tr></table> | User Color | Color 1 | Color 2 | Color 3 | Color 4 | Color 5 | <table><tr><th>User Color</th></tr><tr><td>Dimmer &lt;0-<b>100</b>&gt;</td></tr><tr><td>Shutter &lt;0-<b>255</b>&gt;</td></tr><tr><td>Red &lt;<b>0</b>-255&gt;</td></tr><tr><td>Green &lt;<b>0</b>-255&gt;</td></tr><tr><td>Blue &lt;<b>0</b>-255&gt;</td></tr><tr><td>Lime &lt;<b>0</b>-255&gt;</td></tr></table> | User Color | Dimmer <0- <b>100</b> > | Shutter <0- <b>255</b> > | Red < <b>0</b> -255> | Green < <b>0</b> -255> | Blue < <b>0</b> -255> | Lime < <b>0</b> -255> |
| Menu   |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| DMX Mode   |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| ■ Stand Alone  |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Slave  |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Settings   |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| System Info  |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Stand Alone Mode   |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Stop Stand Alone   |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Auto   |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Editor   |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Color Macro  |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Quick Color  |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Tunable White  |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| ■ User Color   |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Timer  |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Color Settings   |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| User Color   |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Color 1  |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Color 2  |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Color 3  |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Color 4  |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Color 5  |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| User Color   |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Dimmer <0- <b>100</b> >  |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Shutter <0- <b>255</b> >   |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Red < <b>0</b> -255>   |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Green < <b>0</b> -255>   |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Blue < <b>0</b> -255>  |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |
| Lime < <b>0</b> -255>  |         |          |               |       |          |             |   |                  |                  |      |        |             |             |               |              |       |                |  |            |         |         |         |         |         |  |            |                         |                          |                      |                        |                       |                       |

To define a User Color please press ENTER to access to main menu (level 1).

While using the UP / DOWN arrows, please select the menu item “Stand Alone” and confirm by pressing ENTER.

Select the item menu “User Color” by using the up/down controls and press ENTER.

Using UP and DOWN select your desired preset number (Color 1 -5) and confirm with ENTER.

Use UP and DOWN controls to select your desired color, confirm by ENTER and adjust the value by up and down controls between 000-255 and confirm all entries with ENTER.

With dimmer you can adjust the allover brightness of your User Color. Shutter allows several strobe effects. Once your color mix is ready, jump back by ESC. Your individual color is stored under the selected color preset now.

**\*Note:** All five User Colors are also available by DMX at Color Macro channel. Using one of the RGB DMX modes, only User Colors mixed out of RGB values are available. For Direct modes, both RGB and RGLB User Colors are available. For detailed information please see Color Macro Chart at the end of this manual. Using UP/DOWN arrows at homescreen the Color Macros can be changed according to the list.

**Shutter:** Please see detailed explanation for strobe effects inside DMX chart at the end of this manual.

### Timer\*

Via the internal timer function, all Stand Alone modes except "Auto" and "Editor" can be conveniently faded in and out after the function is enabled in the previously activated standalone mode, without the need for an external controller. Also it remains active even the fixture is switched off and restarted. Simultaneously, the timer function is available via cable as well as via wireless DMX for master & slave operation. The fade-in time can be set from 0 to 60 minutes, the dwell time from 1 to 24 hours and the fade-out time from 0 to 60 minutes.

To select "Timer" please press ENTER to access to main menu (level 1). While using the UP / DOWN arrows, please select the menu item "Stand Alone" and confirm by pressing ENTER.

Level 1

| Menu          |
|---------------|
| DMX Mode      |
| ▀ Stand Alone |
| Slave         |
| Settings      |
| System Info   |

Level 2

| Stand Alone Mode |
|------------------|
| Stop Stand Alone |
| Auto             |
| Editor           |
| Color Macro      |
| Quick Color      |
| Tunable White    |
| User Color       |
| ▀ Timer          |
| Color Settings   |

Level 3

| Timer                                       |
|---|
| Timer <On / <b>Off</b> >                    |
| Fade In < <b>0</b> -60 min> 1 minute steps  |
| Dwell Time < <b>1</b> -24h> 1 hour steps    |
| Fade Out < <b>0</b> -60 min> 1 minute steps |

Select the item menu "Timer" by using the up/down controls and press ENTER. Now you can activate / deactivate the Timer function, select "Fade In", "Dwell Time" or "Fade Out" for the individual settings and confirm with ENTER. In each case a three-digit number field will be displayed. Use UP and DOWN to set the value as required from 000 to 060 minutes for "Fade In" and "Fade Out", or 001 to 024 hours for the "Dwell Time". Confirm by pressing ENTER again. After all time settings have been configured, please activate the timer function by selecting the submenu item "Timer On/Off" using UP and DOWN, confirm with ENTER, select "On" and confirm with ENTER again.

To disable the timer function, please select "Off" and confirm by ENTER.

ⓘ **\*Note: Please don't forget to select one of the Stand Alone modes for "Startup Mode" at "Settings".**

### Color Settings\*

Here at "Color Settings" you can chose your preferred working color mode for all Stand Alone color modes. Either Factory Calibrated or RAW. Factory color calibration of R, G, B, L for a maximum of color consistency from unit to unit. Please note If this function is activated only RGB is available at User Color and Quick Color. For a maximum of saturation please chose RAW mode.

Level 1

| Menu          |
|---------------|
| DMX Mode      |
| ▀ Stand Alone |
| Slave         |
| Settings      |
| System Info   |

Level 2

| Stand Alone Mode |
|------------------|
| Stop Stand Alone |
| Auto             |
| Editor           |
| Color Macro      |
| Quick Color      |
| Tunable White    |
| User Color       |
| Timer            |
| ▀ Color Settings |

Level 3

| Color Settings              |
|-----------------------------|
| ▀ <b>Factory Calibrated</b> |
| RAW                         |

## 5.4.5 Settings

Level 1

| Menu        |
|-------------|
| DMX Mode    |
| Stand Alone |
| Slave       |
| ➡ Settings  |
| System Info |

| Main Menu | Menu level 2 | Menu level 3    | Menu level 4       | Description  |
|-----------|--------------|-----------------|--------------------|--|
| Settings  | Wireless DMX | CRMX            | <on/off>           | On=CRMX enabled / Off= CRMX disabled   |
|           |              | Operating Mode  | <receive/transmit> | Receive= CRMX module as Receiver<br>Transmit= CRMX module as Transmitter   |
|           |              | Transmit Link   | <no/yes>           | Yes= pair with CRMX devices. CRMX must be activated on all devices and the pairing must be picked up by a transmitter (Receive Reset).<br>No= Linking disabled   |
|           |              | Receive Reset   | <no/yes>           | Yes = retain transmitter pairing<br>No = do not retain transmitter pairing   |
|           |              | Pass to DMX Out | <no/yes>           | Yes= incoming wireless DMX and BLE signal will be passed to wired DMX out<br><br>No= incoming wireless DMX and BLE signal will not be passed to wired DMX out  |
|           |              | Signal Strength | 0-100              | CRMX signal strength   |
|           |              | BLE             | <on/off>           | On= BLE enabled / Off= BLE disabled  |
|           |              | BLE Link        | <no/yes>           | Link = starts bluetooth advertising for at least 1 minute  |
|           |              | BLE Password    | <000000>           | Set 6-digits user Password for connection to your mobile device (ROXXAPP)  |
|           | Protocol     | <b>DMX</b>      |                    | enables DMX protocol   |
|           |              | Slave           |                    | Confirm with ENTER, after Slave Mode is activated Display will show Slave Mode.<br><br>Connect the master and slave units (same model) with either DMX cable or Wireless DMX (set Master to Transmit mode, Slave to Receive mode) and enable one of the standalone modes on the master unit (Auto, Quick Color). |



| Main Menu | Menu level 2  | Menu level 3                  | Menu level 4                          | Description  |
|-----------|---|-------------------------------|---------------------------------------|--|
|           | Display   | Auto Flip                     | <on/off>                              | On= Auto-Display-Flip-Function enabled<br>Off= Auto-Display-Flip-Function disbaled   |
|           |   | Backlight                     | <on/off>                              | On= controls permanent on, display itself will deactivate after 60 minues of incativity<br>Off= controls and display deactivation after approximately 1 minute of inactivity   |
|           |   | Auto Lock                     | <on/off>                              | On= Automatically locks the controls after approximately 1 minute of inactivity. After attempted input the display shows: „Locked!“<br>Unlock process: press arrows up, down, up, down consecutively   |
|           |   | User Control                  | Auto FX                               |  |
|           |   |                               | Quick Color                           |  |
|           |   |                               | <b>Tint</b>                           |  |
|           |   |                               | User Colors                           |  |
|           |   |                               | Highlight (5600K)                     | If "Highlight" is selected here, and "USER" control button on the display is pressed, the fixture will show 5600K White for 15 seconds, even an outside protocol like DMX or Wireless DMX is connected. After 15sec. the fixture will display the DMX signal again. If no DMX is connected, please show blackout after 15 seconds. |
|           | Startup Mode<br>(using last adjustments of specific Standalone Modes) | <b>DMX</b>                    |                                       | Select your default operating mode when fixture is powered on  |
|           |   | Auto                          |                                       |  |
|           |   | Editor                        |                                       |  |
|           |   | Color Macro                   |                                       |  |
|           |   | Quick Color                   |                                       |  |
|           |   | Tunable White                 |                                       |  |
|           |   | User Color                    |                                       |  |
|           | DMX Fail  | <b>Hold</b> (factory default) |                                       | Hold= last command retains   |
|           |   | Blackout                      |                                       | Blackout= Activates Blackout   |
|           |   | Emergency Light               |                                       | Emergency Light= Fixtures changes to 5600K   |
|           | Battery Runtime   | Battery 100Wh                 | <b>discharge current 9-12A (200W)</b> | Off<br><b>1hour</b> - 8hours (set in 1h increments)  |
|           |   | <b>Battery 190Wh</b>          | discharge current 13-16A (300W)       |  |
|           |   | Battery 290Wh                 | discharge current 17-20A (400W)       |  |
|           | Dimmer Curve  | <b>Linear</b>                 |                                       | Linear= Light intensity increases linear with DMX value  |
|           |   | Exponential                   |                                       | Exponential= Light intensity can be set more smooth at lower DMX values and broadly at higher DMX values.  |
|           |   | Logarithmic                   |                                       | Light intensity can be broadly adjusted at lower DMX values and more smooth at higher DMX values   |
|           |   | S-Curve                       |                                       | Light intensity can be adjusted smoothly at lower and higher DMX values and broadly at medium DMX values   |

| Main Menu | Menu level 2   | Menu level 3      | Menu level 4                                      | Description   |
|-----------|--|-------------------|---|---|
|           | Dimmer Response  | <b>LED</b>        |   | The LED responds abruptly to it's DMX values  |
|           |  | Halogen           |   | The LED responds similar to a halogen fixture with soft changes at brightness.  |
|           | Color Calibration  | <b>Normal CRI</b> |   |   |
|           |  | High CRI          |   |   |
|           | RAW Balance<br>(affects RAW Mode in DMX and Stand-alone control) | User Calibration  | Red <0-255>                                       | Individual color calibration for R,G,B,L  |
|           |  |                   | Green <0-255>                                     |   |
|           |  |                   | Blue <0-255>                                      |   |
|           |  |                   | Lime <0-255>                                      |   |
|           | LED Frequency  | 800 Hz            | Select preferred LED PWM frequency                |   |
|           |  | <b>1200 Hz</b>    |   |   |
|           |  | 2000 Hz           |   |   |
|           |  | 3600 Hz           |   |   |
|           |  | 12000 Hz          |   |   |
|           |  | 25000 Hz          |   |   |
|           | Fan  | <b>Auto 1</b>     |   | Adjust fan speed relative to internal fixture temperature, maximum 2500rpm  |
|           |  | Auto 2            |   | Adjust fan speed relative to internal fixture temperature, maximum 3000rpm  |
|           |  | Silent            |   | Low fan speed for silent operation, maximum 1800rpm   |
|           |  | Studio            |   | Low fan speed for silent operation, maximum 1500rpm   |
|           |  | Fan Off           |   | Fan Off   |
|           |  | Max Power         |   | High fan speed for maximum cooling effect, maximum 3000rpm  |
|           | Invert Mapping   | Invert            | On / <b>Off</b>                                   |   |
|           | Redshift   | On / <b>Off</b>   | On= Activates Redshift, Off= Deactivates Redshift | Redshift function simulate traditional halogen fixtures while dimming down. Redshift affects only between 2700-3500K. |
|           | USB Update   | Auto              |   | Runs firmware update automatically, once USB stick gets plugged in  |
|           |  | <b>Manual</b>     |   | Runs firmware update manually after USB stick gets plugged in   |
|           |  | No                |   | Do not run firmware update via USB port   |

| Main Menu | Menu level 2   | Menu level 3    | Menu level 4   | Menu Level 5   |
|-----------|--|-----------------|--|--|
| Settings  | Factory /<br>User Reset<br><br>For more and<br>detailed information<br>about the different<br>reset options please<br>refer to chapter<br>"5.4.6.1 Reset<br>functions" | Factory Reset   | Are you sure to reset? / Confirm by pressing ENTER, cancel with ESC  | Restores all factory defaults , but not User defaults and no User Colors   |
|           |  | User Reset      | Are you sure to reset? / Confirm by pressing ENTER, cancel with ESC  | Restores all User Reset according to the User Preset List. User Colors will not set back. Timer Function and DMX address restore to Factory default. Once User Reset is activated a fixture self test will start. Self Test is not available while activating User Rest by DMX Settings. |
|           |  | User Reset List | DMX Mode<br>3CH CCT, 3CH RGB, 6CH RGB, 8CH RGB, 19CH RGB, 23CH RGB, 4CH DIRECT, 8CH DIRECT, 9CH DIRECT, 21CH DIRECT, 26CH DIRECT, 17CH HSI, 16CH PURE, 29CH PURE, 28CH FULL ACCESS, 44CH FULL ACCESS | Select your User Reset defaults  |
|           |  |                 | CRMX <on/off>  |  |
|           |  |                 | CRMX Operating Mode.<br><receive/transmit>   |  |
|           |  |                 | CRMX Receive Reset <no/yes>  |  |
|           |  |                 | BLE <on/off>   |  |
|           |  |                 | BLE Link <no/yes>  |  |
|           |  |                 | BLE Password <000000>  |  |
|           |  |                 | CRMX Pass to DMX Out <no/yes>  |  |
|           |  |                 | Display Flip <on/off>  |  |
|           |  |                 | Backlight <on/off>   | Select your User Reset defaults  |
|           |  |                 | Auto Lock <on/off>   |  |
|           |  |                 | Display User Control <Auto FX/Quick Color, <b>Tint</b> , User Colors, Highlight>   |  |
|           |  |                 | Startup Mode < <b>DMX</b> /Auto/Editor/Color Macro, Quick Color, Tunable White, User Color>  |  |
|           |  |                 | DMX Fail < <b>Hold</b> /Blackout/Emergency)>   |  |
|           |  |                 | Battery 100Wh, <b>190Wh</b> , 290Wh  |  |
|           |  |                 | Battery Runtime Off, <b>1hour</b> - 8hours   |  |
|           |  |                 | <b>Discharge current 9-12A (200W)</b> , 13-16A (300W), 17-20A (400W)   |  |
|           |  |                 | Dimmer Curve < <b>Linear</b> , Exponential, Logarithmic, S-Curve>  |  |
|           |  |                 | Dimmer Response < <b>LED</b> , Halogen >   |  |
|           |  |                 | Color Calibration<br><b>Normal CRI</b> / High CRI  |  |
|           |  |                 | RAW Balance<br>< <b>RAW</b> / User Calibration>  |  |
|           |  |                 | LED Frequency <800Hz, <b>1200Hz</b> , 2000Hz, 3600Hz, 12000Hz, 25000Hz>  |  |
|           |  |                 | Fan < <b>Auto1</b> , Auto 2, Silent, Studio, Fan Off, Max Power>   |  |
|           |  |                 | Redshift <on/off>  |  |
|           |  |                 | USB update <Auto, <b>Manual</b> , No>  |  |

## Dimmer Curves

Linear



Exponential



Logarithmic



S-Curve



### 5.4.5.1 Reset Functions

#### 1. Via DMX

Factory / User Reset only starts if shutter channel has the DMX value “250” at the same time

##### ⊕ Factory Reset:

DMX address and DMX mode stay on the same value as set before the reset. All other settings will set back to default

##### ⊕ User Reset:

DMX address and DMX mode stay on the same value as set before the reset.  
There is no LED / Fan test. All other settings will set back to User Reset List.

#### 2. Via RDM

Factory / User Reset only starts if shutter channel has the DMX value “250” at the same time

##### ⊕ Factory Reset:

DMX address and DMX mode stay on the same value as set before the reset  
All other settings will set back to default

##### ⊕ User Reset:

DMX address and DMX mode stay on the same value as set before the reset.  
All other settings will set back to User Reset List.

There is no LED / Fan test

#### 3. Via Menu / Display Shortcut

##### ⊕ Factory Reset:

Display Query:

**“> With Add. / Mode**

**No Add. / Mode**

**RESET NOW?”**

⊕ If “With Add. / Mode” is selected, DMX address is set to “1” and DMX mode changes to default mode.  
All other settings will set back to default

⊕ If “No Add. / Mode” is selected, DMX address and DMX Mode stay at current values. All other settings will set back to default

⊖ User Reset:

Display Query:

**"> With Add. / Mode**

**No Add. / Mode**

**RESET NOW?"**

- ⊖ If "With Add. / Mode" is selected, DMX address is set to "1" and DMX mode changes to the mode defined by "User Reset List / DMX Mode". All other settings will set back to User Reset List.
- ⊖ If "No Add. / Mode" is selected, DMX address and DMX Mode stay at current values. All other settings will set back to User Reset List.

Unit Starts LED / Fan test.

## 5.4.6 System Info

Level 1

| Menu          |
|---------------|
| DMX Mode      |
| Stand Alone   |
| Slave         |
| Settings      |
| ▬ System Info |

| Main Menu   | Menu level 2     | Menu level 3                                      | Menu level 4  |
|-------------|------------------|---|---|
| System Info | Firmware Version | vx.xx   | Display installed firmware version                    |
|             | Serial Number    | 137xxxxxxxx                                       |   |
|             | RDM UID          | 0X6a6axxxxxxxx                                    | Display unique RDM ID for identification              |
|             | Temperatures     | Celsius LED : XXX°C or<br>Fahrenheit LED : XXX °F | Display fixture temperature by celsius and fahrenheit |
|             | Power on Time    | Total: xxxxxhours                                 | Display fixture total power on time                   |
|             | LED on Time      | Total: xxxxxhours                                 | Display LED total power on time                       |
|             | Errors           | Errors information                                | Display error codes                                   |

## 6. ACCESSORIES

### 6.1 Filters

Available filters of ROXX NEO with order numbers:



Very Narrow 10°  
Art.: 14905101



Narrow 15°  
Art.: 14905201



Medium 40°  
Art.: 14905301



Wide 80°  
Art.: 14905401



Horizontal 60° x 10°  
Art.: 14905501



Vertical 10° x 60°  
Art.: 14905601



Smoked Clear  
Art.: 14905701

### 6.2 More accessories



8-way Barndoor  
Art.: 14905901



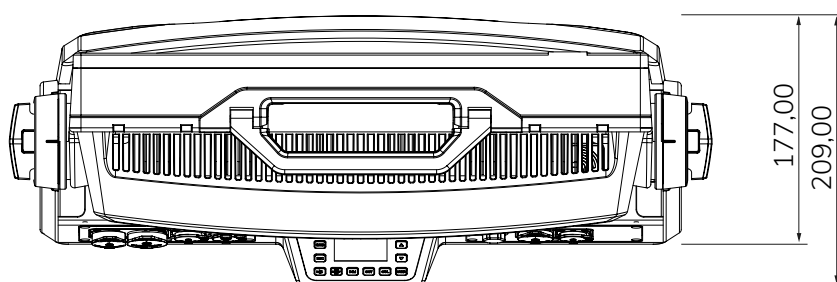
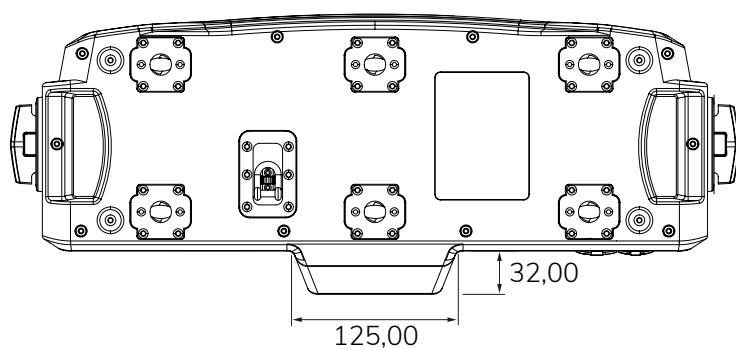
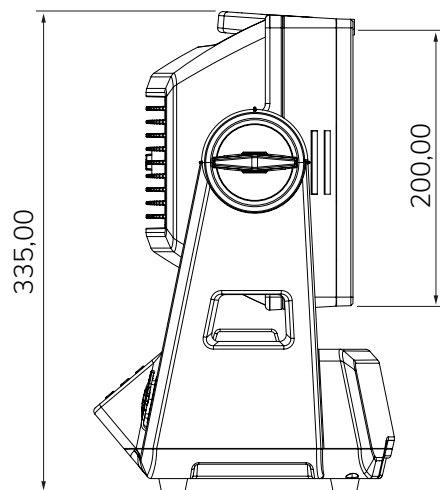
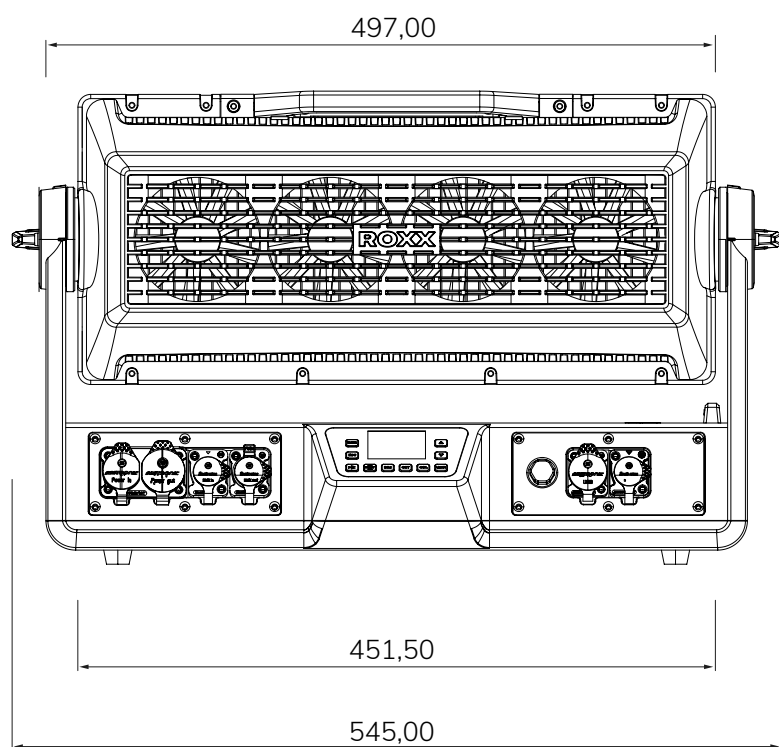
Casetec Case 4x  
Art.: 14906041



Amptown Case 4x  
Art.: 14906011

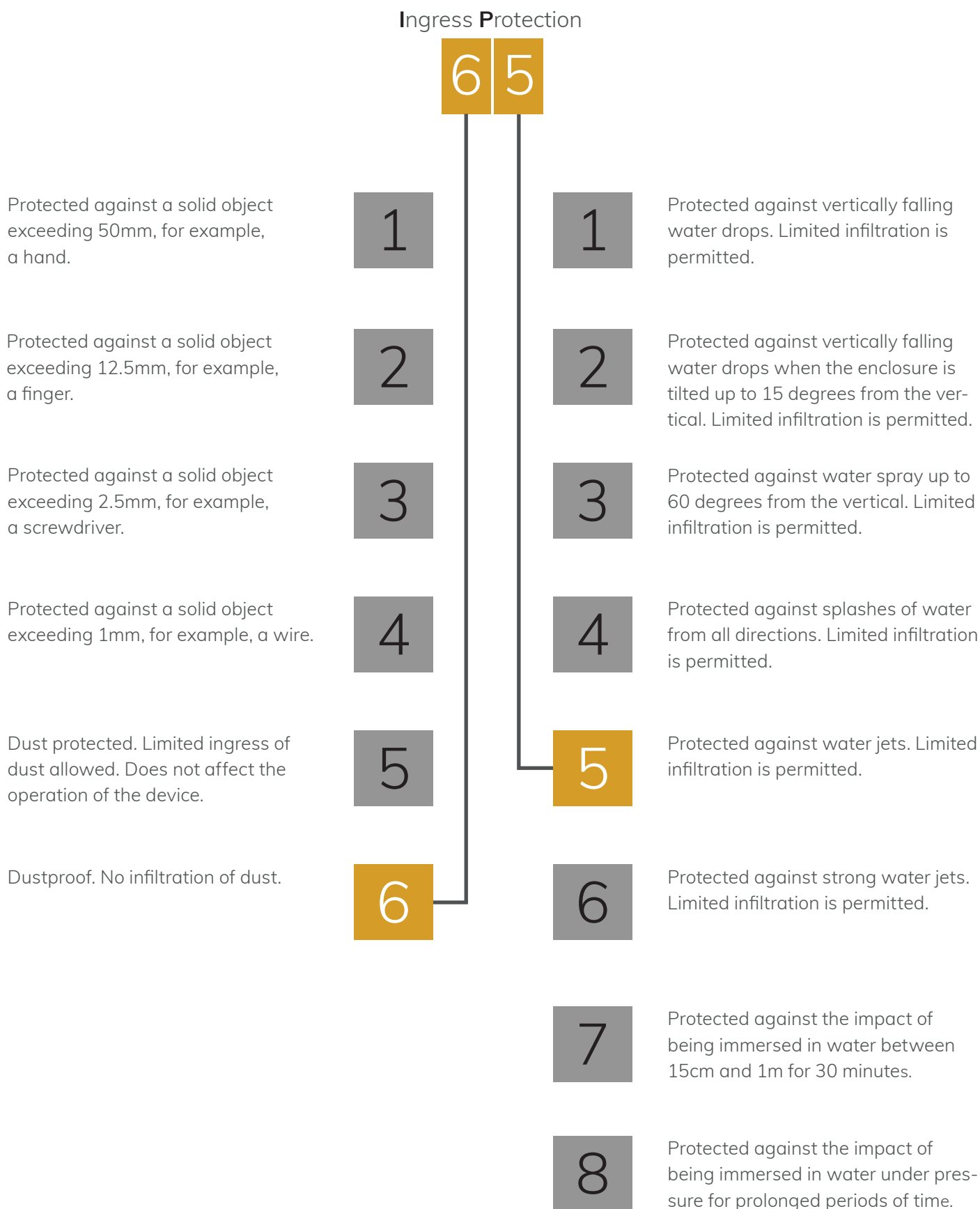
## 7. TECHNICAL DATA / DIAGRAMS

### 7.1 Technical drawings and measurements



## 7.2 IP Rating

ROXX products conform to officially classified IP standard levels. NEO is rated to IP65 when using the covers for the housing parts. IP stands for Ingress Protection and IP65, according to classified standard, means shielded against dust and high-pressure jets of water from any side.





## 7.3 Technical Data

| Photometrics                                       |   |
|--|---|
| LED expected lifetime                              | 50.000 hours  |
| Lightsource  | 24x 40W RGBL  |
| Type of optical system                             | TIR lens  |
| LED PWM Frequency                                  | selectable 800Hz, 1.200Hz, 2.000Hz, 3.600Hz, 12kHz, 25kHz |
| Beam angles @ Full (50%)                           | 8° (native)   |
| Maximum Field angles @ Full (10%)                  | 15° (native)  |
| Color temperature range                            | 2000-10.000K  |
| CRI/Ra @ 5600K                                     | > 85  |
| TLCI @ 5600K                                       | > 85  |
| Luminous flux @ Full (RAW)                         | 27.225 lm (918W)  |
| Luminous flux @ 5600K (Normal CRI)                 | 26.183 lm (721,5W)  |
| Luminous flux @ 5600K (High CRI)                   | 16.627 lm (389,4W)  |
| illuminance Lux @ 5m / 16,4ft (@ Full)             | 38.525 lx / 3579 fcd                                      |
| illuminance Lux @ 5m / 16,4ft (@ 5600K Normal CRI) | 36.865 lx / 3425 fcd                                      |
| illuminance Lux @ 5m / 16,4ft (@ 5600K High CRI)   | 23.124 lx / 2148 fcd                                      |
| Efficacy @ Full (max)                              | 29,7 lm/W   |
| Dimensions & Weight                                |   |
| IP class   | IP65  |
| IK class   | IK08  |
| Body material                                      | Aluminum, Nylon   |
| Lens material                                      | Tempered glass front                                      |
| Net dimensions (w x h x d)                         | 545 x 340 x 210 mm  |
| Net dimensions inches                              | 21,46 x 13,39 x 8,27 inches                               |
| Net weight (incl. Yoke)                            | 15,4kg / 33,95 lbs  |
| Tilt   | 220°  |
| Tilt Locking System                                | Locking system including angle indicator                  |
| Thermal Characteristics                            |   |
| Cooling  | Active, Forced Air, Temperature-regulated                 |
| Humidity (max.)                                    | 95%   |
| Temperature range, Operating                       | -40°C to 45°C   |
| Temperature range, Start-Up                        | -20° to 45°C  |
| Temperature range, Storage                         | -40°C to 80°C   |
| Thermal Protection                                 | Automatic overtemperature protection                      |
| Electrical Data                                    |   |
| AC Power, max                                      | 90 – 285V 50/60Hz   |
| AC Power, nominal                                  | 100 – 240V 50/60Hz  |
| Electrical protection                              | Overload protection with automatic recover                |
| Max. power consumption                             | 988W  |
| Standby Power                                      | 11,2W   |
| Power Thru max. @ 100V                             | 2A (ETL) / 5A   |
| Power Thru max. @ 230V                             | 7A (ETL) / 10A  |

### 7.3 Technical Data

|   |  |
|---|--|
| Power Linking                             | 1 unit @ 230V / 0 units @ 100V   |
| Power Factor                              | PF 0.993@ 100V / PF 0.977@ 230V  |
| Power Supply Unit                         | Inbuilt auto-ranging electronic switch-mode  |
| DC Power In                               | 24-34V   |
| <b>Operator &amp; Controller</b>          |  |
| DMX channels                              | 3CH CCT, 3CH RGB, 6CH RGB, 8CH RGB, 19CH RGB, 23CH RGB, 4CH DIRECT, 8CH DIRECT, 9CH DIRECT, 21CH DIRECT, 26CH DIRECT, 17CH HSI, 16CH PURE, 29CH PURE, 28CH FULL ACCESS, 44CH FULL ACCESS |
| DMX modes                                 | 16   |
| Protocol                                  | USITT DMX512A<br>RDM ANSI E1.20<br>CRMx, W-DMX™ G2, W-DMX™ G3, W-DMX™ G4, W-DMX™ G4S<br>Bluetooth (Low Energy)   |
| Setting and addressing                    | 2.0" TFTdisplay / 10 controls<br>RDM ANSI E1.20<br>Near Field Control (NFC)  |
| Standalone mode                           | Auto Program, Color Macro, Quick Color, Tunable White, User Color  |
| Wireless DMX                              | Lumen Radio transmitt & receive function (CRMx)  |
| indicator                                 | 2.0" TFT display   |
| controls                                  | 10 backlighted controls  |
| Strobe                                    | 0-30Hz   |
| DMX I/O                                   | IP65 XLR 5-pin male/female   |
| Power In                                  | TRUE1 compatible input & link-thru sockets   |
| USB Firmware Update                       | IP65 USB socket  |
| <b>Included / Optional</b>                |  |
| Included items                            | 2m Power Cable   |
| Optional Accessories                      | Multiple magnetic filters (circular / elliptical, smoked-clear), 8-Way Barndoor, Omega Bracket ST  |
| Color options                             | Black – RAL 9004 (Standard)<br>White – RAL 9010 (on request)<br>Custom color – any RAL (on request)  |
| <b>Installation</b>                       |  |
| Mounting point on fixture bottom side     | 3x 1/4 turn Omega Bracket  |
| Mounting point on fixture Yoke side       | 1x 1/4 turn Omega Bracket  |
| Orientation                               | Any  |
| Rigging possibilities                     | hanging direct   |
| Safety features                           | 1x bottom mount for fixtures safety wire / 2x Yoke mount for accessory safety wires  |
| Minimum distance from flammable materials | 0,3 meters (11,8 inch)   |

## 7.4 DMX-Charts / Color Macro Charts / CCT Chart / Pattern Chart / Section Chart

|                                |                              |
|--------------------------------|------------------------------|
| <b>3CH CCT</b>                 | <b>9CH DIRECT</b>            |
| <b>3CH RGB</b>                 | <b>21CH DIRECT</b>           |
| <b>6CH RGB</b>                 | <b>26CH DIRECT</b>           |
| <b>8CH RGB</b>                 | <b>17CH HSI</b>              |
| <b>19CH RGB / Default Mode</b> | <b>16CH Pure Mode</b>        |
| <b>23CH RGB</b>                | <b>29CH Pure Mode</b>        |
| <b>4CH DIRECT</b>              | <b>28CH Full Access Mode</b> |
| <b>8CH DIRECT</b>              | <b>44CH Pure Mode</b>        |

| Channel | 3CH CCT | 3CH RGB | 6CH RGB    | 8CH RGB         | 19CH RGB (default)       | 23CH RGB                 |
|---------|---------|---------|------------|-----------------|--------------------------|--------------------------|
| 1       | Dimmer  | Red     | Red        | Dimmer          | Dimmer                   | Dimmer                   |
| 2       | CTC     | Green   | Red Fine   | Shutter         | Shutter                  | Dimmer Fine              |
| 3       | Tint    | Blue    | Green      | Red             | Duration                 | Shutter                  |
| 4       |         |         | Green Fine | Green           | Red                      | Duration                 |
| 5       |         |         | Blue       | Blue            | Green                    | Red                      |
| 6       |         |         | Blue Fine  | CTC             | Blue                     | Red Fine                 |
| 7       |         |         |            | Tint            | CTC                      | Green                    |
| 8       |         |         |            | Device Settings | Tint                     | Green Fine               |
| 9       |         |         |            |                 | Color Macro              | Blue                     |
| 10      |         |         |            |                 | Color Macro Crossfade    | Blue Fine                |
| 11      |         |         |            |                 | Pattern Dimmer           | CTC                      |
| 12      |         |         |            |                 | Pattern selection        | Tint                     |
| 13      |         |         |            |                 | Pattern selection X-fade | Color Macro              |
| 14      |         |         |            |                 | Pattern speed            | Color Macro Crossfade    |
| 15      |         |         |            |                 | Pattern X-fade           | Pattern Dimmer           |
| 16      |         |         |            |                 | Pattern Red              | Pattern selection        |
| 17      |         |         |            |                 | Pattern Green            | Pattern selection X-fade |
| 18      |         |         |            |                 | Pattern Blue             | Pattern speed            |
| 19      |         |         |            |                 | Device Settings          | Pattern X-fade           |
| 20      |         |         |            |                 |                          | Pattern Red              |
| 21      |         |         |            |                 |                          | Pattern Green            |
| 22      |         |         |            |                 |                          | Pattern Blue             |
| 23      |         |         |            |                 |                          | Device Settings          |

| Channel | 4CH DIRECT | 8CH DIRECT | 9CH DIRECT      | 21CH DIRECT              | 26CH DIRECT              | 17CH HSI                 |
|---------|------------|------------|-----------------|--------------------------|--------------------------|--------------------------|
| 1       | Red        | Red        | Dimmer          | Dimmer                   | Dimmer                   | Dimmer                   |
| 2       | Green      | Red Fine   | Shutter         | Shutter                  | Dimmer Fine              | Dimmer Fine              |
| 3       | Blue       | Green      | Red             | Duration                 | Shutter                  | Shutter                  |
| 4       | Lime       | Green Fine | Green           | Red                      | Duration                 | Hue                      |
| 5       |            | Blue       | Blue            | Green                    | Red                      | Saturation               |
| 6       |            | Blue Fine  | Lime            | Blue                     | Red Fine                 | CTC                      |
| 7       |            | Lime       | CTC             | Lime                     | Green                    | Tint                     |
| 8       |            | Lime Fine  | Tint            | CTC                      | Green Fine               | Color Macro              |
| 9       |            |            | Device Settings | Tint                     | Blue                     | Color Macro Crossfade    |
| 10      |            |            |                 | Color Macro              | Blue Fine                | Pattern Dimmer           |
| 11      |            |            |                 | Color Macro Crossfade    | Lime                     | Pattern selection        |
| 12      |            |            |                 | Pattern Dimmer           | Lime Fine                | Pattern selection X-fade |
| 13      |            |            |                 | Pattern selection        | CTC                      | Pattern speed            |
| 14      |            |            |                 | Pattern selection X-fade | Tint                     | Pattern X-fade           |
| 15      |            |            |                 | Pattern speed            | Color Macro              | Hue                      |
| 16      |            |            |                 | Pattern X-fade           | Color Macro Crossfade    | Saturation               |
| 17      |            |            |                 | Pattern Red              | Pattern Dimmer           | Device Settings          |
| 18      |            |            |                 | Pattern Green            | Pattern selection        |                          |
| 19      |            |            |                 | Pattern Blue             | Pattern selection X-fade |                          |
| 20      |            |            |                 | Pattern Lime             | Pattern speed            |                          |
| 21      |            |            |                 | Device Settings          | Pattern X-fade           |                          |
| 22      |            |            |                 |                          | Pattern Red              |                          |
| 23      |            |            |                 |                          | Pattern Green            |                          |
| 24      |            |            |                 |                          | Pattern Blue             |                          |
| 25      |            |            |                 |                          | Pattern Lime             |                          |
| 26      |            |            |                 |                          | Device Settings          |                          |

| Channel | 16CH PURE       | 29CH PURE            | 28 CH Full Acces         | Channel | 44CH Pure Mode           | Channel | 44CH Pure Mode       |
|---------|-----------------|----------------------|--------------------------|---------|--------------------------|---------|----------------------|
| 1       | Master Dimmer   | Master Dimmer        | Master Dimmer            | 1       | Master Dimmer            | 30      | Segment 2 Blue       |
| 2       | Shutter         | Master Dimmer fine   | Shutter                  | 2       | Master Dimmer fine       | 31      | Segment 2 Blue fine  |
| 3       | Duration        | Shutter              | Duration                 | 3       | Shutter                  | 32      | Segment 3 Red        |
| 4       | Segment 1 Red   | Duration             | Pattern Dimmer           | 4       | Duration                 | 33      | Segment 3 Red fine   |
| 5       | Segment 1 Green | Segment 1 Red        | Pattern selection        | 5       | Pattern Dimmer           | 34      | Segment 3 Green      |
| 6       | Segment 1 Blue  | Segment 1 Red fine   | Pattern selection X-fade | 6       | Pattern selection        | 35      | Segment 3 Green fine |
| 7       | Segment 2 Red   | Segment 1 Green      | Pattern speed            | 7       | Pattern selection X-fade | 36      | Segment 3 Blue       |
| 8       | Segment 2 Green | Segment 1 Green fine | Pattern X-fade           | 8       | Pattern Speed            | 37      | Segment 3 Blue fine  |
| 9       | Segment 2 Blue  | Segment 1 Blue       | Pattern Red              | 9       | Pattern X-fade           | 38      | Segment 4 Red        |
| 10      | Segment 3 Red   | Segment 1 Blue fine  | Pattern Green            | 10      | Pattern Red              | 39      | Segment 4 Red fine   |
| 11      | Segment 3 Green | Segment 2 Red        | Pattern Blue             | 11      | Pattern Red fine         | 40      | Segment 4 Green      |
| 12      | Segment 3 Blue  | Segment 2 Red fine   | CTC                      | 12      | Pattern Green            | 41      | Segment 4 Green fine |
| 13      | Segment 4 Red   | Segment 2 Green      | Tint                     | 13      | Pattern Green fine       | 42      | Segment 4 Blue       |
| 14      | Segment 4 Green | Segment 2 Green fine | Color Macro              | 14      | Pattern Blue             | 43      | Segment 4 Blue fine  |
| 15      | Segment 4 Blue  | Segment 2 Blue       | Color Macro Crossfade    | 15      | Pattern Blue fine        | 44      | Device Settings      |
| 16      | Device Settings | Segment 2 Blue fine  | Segment 1 Red            | 16      | CTC                      |         |                      |
| 17      |                 | Segment 3 Red        | Segment 1 Green          | 17      | Tint                     |         |                      |
| 18      |                 | Segment 3 Red fine   | Segment 1 Blue           | 18      | Color Macro              |         |                      |
| 19      |                 | Segment 3 Green      | Segment 2 Red            | 19      | Color Macro Crossfade    |         |                      |
| 20      |                 | Segment 3 Green fine | Segment 2 Green          | 20      | Segment 1 Red            |         |                      |
| 21      |                 | Segment 3 Blue       | Segment 2 Blue           | 21      | Segment 1 Red fine       |         |                      |
| 22      |                 | Segment 3 Blue fine  | Segment 3 Red            | 22      | Segment 1 Green          |         |                      |
| 23      |                 | Segment 4 Red        | Segment 3 Green          | 23      | Segment 1 Green fine     |         |                      |
| 24      |                 | Segment 4 Red fine   | Segment 3 Blue           | 24      | Segment 1 Blue           |         |                      |
| 25      |                 | Segment 4 Green      | Segment 4 Red            | 25      | Segment 1 Blue fine      |         |                      |
| 26      |                 | Segment 4 Green fine | Segment 4 Green          | 26      | Segment 2 Red            |         |                      |
| 27      |                 | Segment 4 Blue       | Segment 4 Blue           | 27      | Segment 2 Red fine       |         |                      |
| 28      |                 | Segment 4 Blue fine  | Device Settings          | 28      | Segment 2 Green          |         |                      |
| 29      |                 | Device Settings      |                          | 29      | Segment 2 Green fine     |         |                      |

3CH CCT

9CH DIRECT

3CH RGB

21CH DIRECT

6CH RGB

26CH DIRECT

8CH RGB

17CH HSI

19CH RGB / Default Mode

16CH Pure Mode

23CH RGB

29CH Pure Mode

4CH DIRECT

28CH Full Access Mode

8CH DIRECT

44CH Pure Mode

### 3 CH CCT MODE (Color Calibrated)

| Ch. | Function              | Value     | Setting   | Default                     |
|-----|-----------------------|-----------|---|-----------------------------|
| 1   | Dimmer                | 000-255   | 0 - 100%  | 0                           |
| 2   | CTC                   | 000 - 004 | 5600K   | according to CTC chart<br>0 |
|     |                       | 005-226   | 2000K-6500K linear in 20-21K steps<br>(please see detailed CTC chart)     |                             |
|     |                       | 182-182   | 5600K   |                             |
|     |                       | 226-226   | 6500K   |                             |
|     |                       | 227-255   | 6621K-10.000K linear in 120-121K steps<br>(please see detailed CTC chart) |                             |
| 3   | Tint<br>(affects CCT) | 0         | no function   | 128                         |
|     |                       | 001-127   | Magenta -> Neutral  |                             |
|     |                       | 128-128   | Neutral   |                             |
|     |                       | 129-255   | Neutral -> Green  |                             |

### 3 CH - RGB MODE (Color Calibrated)

| Ch. | Function | Value   | Setting  | Default |
|-----|----------|---------|----------|---------|
| 1   | Red      | 000-255 | 0 - 100% | 0       |
| 2   | Green    | 000-255 | 0 - 100% | 0       |
| 3   | Blue     | 000-255 | 0 - 100% | 0       |

### 6 CH - RGB MODE (Color Calibrated)

| Ch. | Function   | Value   | Setting  | Default |
|-----|------------|---------|----------|---------|
| 1   | Red        | 000-255 | 0 - 100% | 0       |
| 2   | Red Fine   | 000-255 | 0 - 100% | 0       |
| 3   | Green      | 000-255 | 0 - 100% | 0       |
| 4   | Green Fine | 000-255 | 0 - 100% | 0       |
| 5   | Blue       | 000-255 | 0 - 100% | 0       |
| 6   | Blue Fine  | 000-255 | 0 - 100% | 0       |

| 8 CH - RGB (Color Calibrated) |                            |           |  |   |
|-------------------------------|----------------------------|-----------|--|---|
| Ch.                           | Function                   | Value     | Setting  | Default   |
| 1                             | Dimmer                     | 000-255   | 0 - 100%   | 0   |
| 2                             | Shutter                    | 000 - 019 | Shutter close                                    | 20  |
|                               |                            | 020 - 024 | Shutter open                                     |   |
|                               |                            | 025 - 064 | Strobe 1 (fast ⊕ slow)                           |   |
|                               |                            | 065 - 069 | Shutter open                                     |   |
|                               |                            | 070 - 084 | Strobe 2: opening pulse (fast ⊕ slow)            |   |
|                               |                            | 085 - 089 | Shutter open                                     |   |
|                               |                            | 090 - 104 | Strobe 3: closing pulse (fast ⊕ slow)            |   |
|                               |                            | 105 - 109 | Shutter open                                     |   |
|                               |                            | 110 - 124 | Strobe 4: random strobe (fast ⊕ slow)            |   |
|                               |                            | 125 - 129 | Shutter open                                     |   |
|                               |                            | 130 - 144 | Strobe 5: random opening pulse (fast ⊕ slow)     |   |
|                               |                            | 145 - 149 | Shutter open                                     |   |
|                               |                            | 150 - 164 | Strobe 6: random closing pulse (fast ⊕ slow)     |   |
|                               |                            | 165 - 169 | Shutter open                                     |   |
|                               |                            | 170 - 184 | Strobe 7: burst pulse (fast ⊕ slow)              |   |
|                               |                            | 185 - 189 | Shutter open                                     |   |
|                               |                            | 190 - 204 | Strobe 8: random burst pulse (fast ⊕ slow)       |   |
|                               |                            | 205 - 209 | Shutter open                                     |   |
|                               |                            | 210 - 224 | Strobe 9: sine wave (fast ⊕ slow)                |   |
|                               |                            | 225 - 229 | Shutter open                                     |   |
|                               |                            | 230 - 244 | Strobe 10: burst (fast ⊕ slow)                   |   |
|                               |                            | 245 - 255 | Shutter open                                     |   |
| 3                             | Red                        | 000-255   | 0 - 100%   | 255   |
| 4                             | Green                      | 000-255   | 0 - 100%   | 255   |
| 5                             | Blue                       | 000-255   | 0 - 100%   | 255   |
| 6                             | CTC<br>(affects RGB)       | 000 - 004 | 5600K  | according to CTC chart<br>0                       |
|                               |                            | 005-226   | 2000K-6500K<br>(please see detailed CTC chart)   |   |
|                               |                            | 182-182   | 5600K  |   |
|                               |                            | 226-226   | 6500K  |   |
|                               |                            | 227-255   | 6621K-10.000K<br>(please see detailed CTC chart) |   |
| 7                             | Tint<br>(affects CTC, RGB) | 0         | no function                                      | 128   |
|                               |                            | 001-127   | Magenta ⊕ Neutral                                |   |
|                               |                            | 128-128   | Neutral  |   |
|                               |                            | 129-255   | Neutral ⊕ Green                                  |   |
| 8                             | Device Settings            |           |  | according to Device Settings RGB mode (p.58)<br>0 |

**19 CH RGB Mode (Color Calibrated) - Default mode**

| Ch. | Function   | Value     | Setting   |  | Default |
|-----|--|-----------|---|--|---------|
| 1   | Dimmer   | 000-255   | 0 - 100%  |  | 0       |
| 2   | Shutter  | 000 - 019 | Shutter close   |  | 20      |
|     |  | 020 - 024 | Shutter open  |  |         |
|     |  | 025 - 064 | Strobe 1 (fast ⊕ slow)  |  |         |
|     |  | 065 - 069 | Shutter open  |  |         |
|     |  | 070 - 084 | Strobe 2: opening pulse (fast ⊕ slow)                                     |  |         |
|     |  | 085 - 089 | Shutter open  |  |         |
|     |  | 090 - 104 | Strobe 3: closing pulse (fast ⊕ slow)                                     |  |         |
|     |  | 105 - 109 | Shutter open  |  |         |
|     |  | 110 - 124 | Strobe 4: random strobe (fast ⊕ slow)                                     |  |         |
|     |  | 125 - 129 | Shutter open  |  |         |
|     |  | 130 - 144 | Strobe 5: random opening pulse (fast ⊕ slow)                              |  |         |
|     |  | 145 - 149 | Shutter open  |  |         |
|     |  | 150 - 164 | Strobe 6:random closing pulse (fast ⊕ slow)                               |  |         |
|     |  | 165 - 169 | Shutter open  |  |         |
|     |  | 170 - 184 | Strobe 7: burst pulse (fast ⊕ slow)                                       |  |         |
|     |  | 185 - 189 | Shutter open  |  |         |
|     |  | 190 - 204 | Strobe 8: random burst pulse (fast ⊕ slow)                                |  |         |
|     |  | 205 - 209 | Shutter open  |  |         |
|     |  | 210 - 224 | Strobe 9:sine wave (fast ⊕ slow)  |  |         |
|     |  | 225 - 229 | Shutter open  |  |         |
|     |  | 230 - 244 | Strobe 10: burst (fast ⊕ slow)  |  |         |
|     |  | 245 - 255 | Shutter open  |  |         |
| 3   | Duration<br>(only affects to<br>channel 2 - Strobe<br>1 025-064) | 000-255   | 0 - 100%  |  | 0       |
| 4   | Red  | 000-255   | 0 - 100%  | affects main &<br>pattern background color | 255     |
| 5   | Green  | 000-255   | 0 - 100%  |  | 255     |
| 6   | Blue   | 000-255   | 0 - 100%  |  | 255     |
| 7   | CTC<br>(affects RGB)   | 000 - 004 | 5600K   | according to CTC chart                     | 0       |
|     |  | 005-226   | 2000K-6500K linear in 20-21K steps<br>(please see detailed CTC chart)     |  |         |
|     |  | 182-182   | 5600K   |  |         |
|     |  | 226-226   | 6500K   |  |         |
|     |  | 227-255   | 6621K-10.000K linear in 120-121K steps<br>(please see detailed CTC chart) |  |         |
| 8   | Tint<br>(affects CTC and<br>RGB)                                 | 0         | no function   |  | 128     |
|     |  | 001-127   | Magenta -> Neutral  |  |         |
|     |  | 128-128   | Neutral   |  |         |
|     |  | 129-255   | Neutral -> Green  |  |         |



|    |  |           |                                |  |  |     |
|----|--|-----------|--------------------------------|--|--|-----|
| 9  | <b>Color Macro</b><br>(override RGB/CTC)                                     |           | according to Color Macro Chart |  | affects main &<br>pattern background color | 0   |
| 10 | <b>Color Macro Crossfade</b><br>(Transition Time<br>between Color<br>Macros) | 000 - 005 | no function                    |  |  | 0   |
|    |  | 006-105   | 0,1s - 10s (0,1s steps)        |  |  |     |
|    |  | 106-214   | 11s - 119s (1s steps)          |  |  |     |
|    |  | 215-244   | 2m - 4m50s (10s steps)         |  |  |     |
|    |  | 245-255   | 5m - 15m (1m steps)            |  |  |     |
| 11 | <b>Pattern Dimmer</b>  | 000-255   |                                |  |  | 255 |
| 12 | <b>Pattern selection</b>   | 000-255   |                                |  | according to Pattern chart                 | 0   |
| 13 | <b>Pattern selection X-fade</b>  | 000 - 005 | no function                    |  |  | 0   |
|    |  | 006-255   | 1s - 250s (1s steps)           |  |  |     |
| 14 | <b>Pattern speed</b>   | 000-005   | No Function                    |  |  | 0   |
|    |  | 006-124   | Left to Right / Fast to slow   |  |  |     |
|    |  | 125-130   | No Function                    |  |  |     |
|    |  | 131-249   | Right to Left / Slow to fast   |  |  |     |
|    |  | 250-255   | No Function                    |  |  |     |
| 15 | <b>Pattern X-fade</b>  | 000-005   | Snap from cell to cell         |  |  | 0   |
|    |  | 006-255   | Fade Duration short to long    |  |  |     |
| 16 | <b>Pattern Red</b>   | 000-255   | 0 - 100%                       |  |  | 255 |
| 17 | <b>Pattern Green</b>   | 000-255   | 0 - 100%                       |  |  | 255 |
| 18 | <b>Pattern Blue</b>  | 000-255   | 0 - 100%                       |  |  | 255 |
| 19 | <b>Device Settings</b>   |           |                                | according to Device Settings RGB mode (p.58) |  | 0   |

### 23 CH RGB Mode (Color Calibrated)

| Ch. | Function           | Value     | Setting                                      | Default |
|-----|--------------------|-----------|--|---------|
| 1   | <b>Dimmer</b>      | 000-255   | 0 - 100%                                     | 0       |
| 2   | <b>Dimmer Fine</b> | 000-255   | 0 - 100%                                     | 0       |
| 3   | <b>Shutter</b>     | 000 - 019 | Shutter close                                | 20      |
|     |                    | 020 - 024 | Shutter open                                 |         |
|     |                    | 025 - 064 | Strobe 1 (fast ⊕ slow)                       |         |
|     |                    | 065 - 069 | Shutter open                                 |         |
|     |                    | 070 - 084 | Strobe 2: opening pulse (fast ⊕ slow)        |         |
|     |                    | 085 - 089 | Shutter open                                 |         |
|     |                    | 090 - 104 | Strobe 3: closing pulse (fast ⊕ slow)        |         |
|     |                    | 105 - 109 | Shutter open                                 |         |
|     |                    | 110 - 124 | Strobe 4: random strobe (fast ⊕ slow)        |         |
|     |                    | 125 - 129 | Shutter open                                 |         |
|     |                    | 130 - 144 | Strobe 5: random opening pulse (fast ⊕ slow) |         |
|     |                    | 145 - 149 | Shutter open                                 |         |
|     |                    | 150 - 164 | Strobe 6: random closing pulse (fast ⊕ slow) |         |
|     |                    | 165 - 169 | Shutter open                                 |         |
|     |                    | 170 - 184 | Strobe 7: burst pulse (fast ⊕ slow)          |         |

### 23 CH RGB Mode (Color Calibrated)

|    |  |           |   |   |     |
|----|--|-----------|---|---|-----|
| 3  | Shutter  | 185 - 189 | Shutter open  |   | 20  |
|    |  | 190 - 204 | Strobe 8: random burst pulse (fast ⊕ slow)                                |   |     |
|    |  | 205 - 209 | Shutter open  |   |     |
|    |  | 210 - 224 | Strobe 9:sine wave (fast ⊕ slow)  |   |     |
|    |  | 225 - 229 | Shutter open  |   |     |
|    |  | 230 - 244 | Strobe 10: burst (fast ⊕ slow)  |   |     |
|    |  | 245 - 255 | Shutter open  |   |     |
| 4  | Duration<br>(only affects to channel 3 - Strobe 1 025-064)         | 000-255   | 0 - 100%  |   | 0   |
| 5  | Red  | 000-255   | 0 - 100%  | affects main & pattern background color | 255 |
| 6  | Red Fine   | 000-255   | 0 - 100%  |   | 255 |
| 7  | Green  | 000-255   | 0 - 100%  |   | 255 |
| 8  | Green Fine   | 000-255   | 0 - 100%  |   | 255 |
| 9  | Blue   | 000-255   | 0 - 100%  |   | 255 |
| 10 | Blue Fine  | 000-255   | 0 - 100%  |   | 255 |
| 11 | CTC<br>(affects RGB)   | 000 - 004 | 5600K   | according to CTC chart                  | 0   |
|    |  | 005-226   | 2000K-6500K linear in 20-21K steps<br>(please see detailed CTC chart)     |   |     |
|    |  | 182-182   | 5600K   |   |     |
|    |  | 226-226   | 6500K   |   |     |
|    |  | 227-255   | 6621K-10.000K linear in 120-121K steps<br>(please see detailed CTC chart) |   |     |
| 12 | Tint<br>(affects CTC and RGB)                                      | 0         | no function   |   | 128 |
|    |  | 001-127   | Magenta -> Neutral  |   |     |
|    |  | 128-128   | Neutral   |   |     |
|    |  | 129-255   | Neutral -> Green  |   |     |
| 13 | Color Macro<br>(override RGB /CTC)                                 |           | According to Color Macro Chart  | affects main & pattern background color | 0   |
| 14 | Color Macro<br>Crossfade<br>(Transition Time between Color Macros) | 000 - 005 | no function   |   | 0   |
|    |  | 006-105   | 0,1s - 10s (0,1s steps)   |   |     |
|    |  | 106-214   | 11s - 119s (1s steps)   |   |     |
|    |  | 215-244   | 2m - 4m50s (10s steps)  |   |     |
|    |  | 245-255   | 5m - 15m (1m steps)   |   |     |
| 15 | Pattern Dimmer   | 000-255   |   |   | 255 |
| 16 | Pattern selection  | 000-255   |   | according to Pattern chart              | 0   |
| 17 | Pattern selection<br>X-fade  | 000 - 005 | no function   |   | 0   |
|    |  | 006-255   | 1s - 250s (1s steps)  |   |     |
| 18 | Pattern speed  | 000-005   | No Function   |   | 0   |
|    |  | 006-124   | Left to Right / Fast to slow  |   |     |
|    |  | 125-130   | No Function   |   |     |
|    |  | 131-249   | Right to Left / Slow to fast  |   |     |
|    |  | 250-255   | No Function   |   |     |

**23 CH RGB Mode (Color Calibrated)**

|    |                        |         |  |     |
|----|------------------------|---------|--|-----|
| 19 | <b>Pattern X-fade</b>  | 000-005 | Snap from cell to cell                       | 0   |
|    |                        | 006-255 | Fade Duration short to long                  |     |
| 20 | <b>Pattern Red</b>     | 000-255 | 0 - 100%                                     | 255 |
| 21 | <b>Pattern Green</b>   | 000-255 | 0 - 100%                                     | 255 |
| 22 | <b>Pattern Blue</b>    | 000-255 | 0 - 100%                                     | 255 |
| 23 | <b>Device Settings</b> |         | according to Device Settings RGB mode (p.58) | 0   |

**4 CH - DIRECT MODE (RAW Balance)**

| Ch. | Function     | Value   | Setting  | Default |
|-----|--------------|---------|----------|---------|
| 1   | <b>Red</b>   | 000-255 | 0 - 100% | 0       |
| 2   | <b>Green</b> | 000-255 | 0 - 100% | 0       |
| 3   | <b>Blue</b>  | 000-255 | 0 - 100% | 0       |
| 4   | <b>Lime</b>  | 000-255 | 0 - 100% | 0       |

**8 CH - DIRECT MODE (RAW Balance)**

| Ch. | Function          | Value   | Setting  | Default |
|-----|-------------------|---------|----------|---------|
| 1   | <b>Red</b>        | 000-255 | 0 - 100% | 0       |
| 2   | <b>Red Fine</b>   | 000-255 | 0 - 100% | 0       |
| 3   | <b>Green</b>      | 000-255 | 0 - 100% | 0       |
| 4   | <b>Green Fine</b> | 000-255 | 0 - 100% | 0       |
| 5   | <b>Blue</b>       | 000-255 | 0 - 100% | 0       |
| 6   | <b>Blue Fine</b>  | 000-255 | 0 - 100% | 0       |
| 7   | <b>Lime</b>       | 000-255 | 0 - 100% | 0       |
| 8   | <b>Lime Fine</b>  | 000-255 | 0 - 100% | 0       |

**9 CH - DIRECT MODE (RAW Balance)**

| Ch. | Function       | Value     | Setting                                      | Default |
|-----|----------------|-----------|--|---------|
| 1   | <b>Dimmer</b>  | 000-255   | 0 - 100%                                     | 0       |
| 2   | <b>Shutter</b> | 000 - 019 | Shutter close                                | 20      |
|     |                | 020 - 024 | Shutter open                                 |         |
|     |                | 025 - 064 | Strobe 1 (fast ⊕ slow)                       |         |
|     |                | 065 - 069 | Shutter open                                 |         |
|     |                | 070 - 084 | Strobe 2: opening pulse (fast ⊕ slow)        |         |
|     |                | 085 - 089 | Shutter open                                 |         |
|     |                | 090 - 104 | Strobe 3: closing pulse (fast ⊕ slow)        |         |
|     |                | 105 - 109 | Shutter open                                 |         |
|     |                | 110 - 124 | Strobe 4: random strobe (fast ⊕ slow)        |         |
|     |                | 125 - 129 | Shutter open                                 |         |
|     |                | 130 - 144 | Strobe 5: random opening pulse (fast ⊕ slow) |         |
|     |                | 145 - 149 | Shutter open                                 |         |
|     |                | 150 - 164 | Strobe 6: random closing pulse (fast ⊕ slow) |         |
|     |                | 165 - 169 | Shutter open                                 |         |

|   |                                |           |   |   |     |
|---|--------------------------------|-----------|---|---|-----|
| 2 | Shutter                        | 170 - 184 | Strobe 7: burst pulse (fast ⊕ slow)                                       |   | 20  |
|   |                                | 185 - 189 | Shutter open  |   |     |
|   |                                | 190 - 204 | Strobe 8: random burst pulse (fast ⊕ slow)                                |   |     |
|   |                                | 205 - 209 | Shutter open  |   |     |
|   |                                | 210 - 224 | Strobe 9:sine wave (fast ⊕ slow)  |   |     |
|   |                                | 225 - 229 | Shutter open  |   |     |
|   |                                | 230 - 244 | Strobe 10: burst (fast ⊕ slow)  |   |     |
|   |                                | 245 - 255 | Shutter open  |   |     |
| 3 | Red                            | 000-255   | 0 - 100%  |   | 255 |
| 4 | Green                          | 000-255   | 0 - 100%  |   | 255 |
| 5 | Blue                           | 000-255   | 0 - 100%  |   | 255 |
| 6 | Lime                           | 000-255   | 0 - 100%  |   | 255 |
| 7 | CTC<br>(affects RGBL)          | 000 - 004 | RAW   | according to CTC chart                          | 0   |
|   |                                | 005-226   | 2000K-6500K linear in 20-21K steps<br>(please see detailed CTC chart)     |   |     |
|   |                                | 182-182   | 5600K   |   |     |
|   |                                | 226-226   | 6500K   |   |     |
|   |                                | 227-255   | 6621K-10.000K linear in 120-121K steps<br>(please see detailed CTC chart) |   |     |
| 8 | Tint<br>(affects CTC and RGBL) | 0         | no function   |   | 128 |
|   |                                | 001-127   | Magenta -> Neutral  |   |     |
|   |                                | 128-128   | Neutral   |   |     |
|   |                                | 129-255   | Neutral -> Green  |   |     |
| 9 | Device Settings                |           |   | according to Device Settings Direct mode (p.60) | 0   |

## 21 CH - DIRECT MODE (RAW Balance)

| Ch. | Function | Value     | Setting                                      | Default |
|-----|----------|-----------|--|---------|
| 1   | Dimmer   | 000-255   | 0 - 100%                                     | 0       |
| 2   | Shutter  | 000 - 019 | Shutter close                                | 20      |
|     |          | 020 - 024 | Shutter open                                 |         |
|     |          | 025 - 064 | Strobe 1 (fast ⊕ slow)                       |         |
|     |          | 065 - 069 | Shutter open                                 |         |
|     |          | 070 - 084 | Strobe 2: opening pulse (fast ⊕ slow)        |         |
|     |          | 085 - 089 | Shutter open                                 |         |
|     |          | 090 - 104 | Strobe 3: closing pulse (fast ⊕ slow)        |         |
|     |          | 105 - 109 | Shutter open                                 |         |
|     |          | 110 - 124 | Strobe 4: random strobe (fast ⊕ slow)        |         |
|     |          | 125 - 129 | Shutter open                                 |         |
|     |          | 130 - 144 | Strobe 5: random opening pulse (fast ⊕ slow) |         |
|     |          | 145 - 149 | Shutter open                                 |         |
|     |          | 150 - 164 | Strobe 6:random closing pulse (fast ⊕ slow)  |         |
|     |          | 165 - 169 | Shutter open                                 |         |
|     |          | 170 - 184 | Strobe 7: burst pulse (fast ⊕ slow)          |         |
|     |          | 185 - 189 | Shutter open                                 |         |

## 21 CH - DIRECT MODE (RAW Balance)

|    |   |           |   |   |     |
|----|---|-----------|---|---|-----|
| 2  | Shutter   | 190 - 204 | Strobe 8: random burst pulse (fast ⊕ slow)                                |   | 020 |
|    |   | 205 - 209 | Shutter open  |   |     |
|    |   | 210 - 224 | Strobe 9:sine wave (fast ⊕ slow)  |   |     |
|    |   | 225 - 229 | Shutter open  |   |     |
|    |   | 230 - 244 | Strobe 10: burst (fast ⊕ slow)  |   |     |
|    |   | 245 - 255 | Shutter open  |   |     |
| 3  | Duration<br>(only affects to channel 2 - Strobe 1 025-064)      | 000-255   | 0 - 100%  |   | 0   |
| 4  | Red   | 000-255   | 0 - 100%  |   | 255 |
| 5  | Green   | 000-255   | 0 - 100%  |   | 255 |
| 6  | Blue  | 000-255   | 0 - 100%  |   | 255 |
| 7  | Lime  | 000-255   | 0 - 100%  |   | 255 |
| 8  | CTC<br>(affects RGBL)   | 000 - 004 | RAW   | according to CTC chart                  | 0   |
|    |   | 005-226   | 2000K-6500K linear in 20-21K steps<br>(please see detailed CTC chart)     |   |     |
|    |   | 182-182   | 5600K   |   |     |
|    |   | 226-226   | 6500K   |   |     |
|    |   | 227-255   | 6621K-10.000K linear in 120-121K steps<br>(please see detailed CTC chart) |   |     |
| 9  | Tint<br>(affects CTC and RGBL)                                  | 0         | no function   |   | 128 |
|    |   | 001-127   | Magenta -> Neutral  |   |     |
|    |   | 128-128   | Neutral   |   |     |
|    |   | 129-255   | Neutral -> Green  |   |     |
| 10 | Color Macro (over-ride RGBL,CTC)                                |           | according to Color Macro Chart  | affects main & pattern background color | 0   |
| 11 | Color Macro Crossfade<br>(Transition Time between Color Macros) | 000 - 005 | no function   |   | 0   |
|    |   | 006-105   | 0,1s - 10s (0,1s steps)   |   |     |
|    |   | 106-214   | 11s - 119s (1s steps)   |   |     |
|    |   | 215-244   | 2m - 4m50s (10s steps)  |   |     |
|    |   | 245-255   | 5m - 15m (1m steps)   |   |     |
| 12 | Pattern Dimmer  | 000-255   |   |   | 255 |
| 13 | Pattern selection   | 000-255   |   | according to Pattern chart              | 0   |
| 14 | Pattern selection X-fade  | 000 - 005 | no function   |   | 0   |
|    |   | 006-255   | 1s - 250s (1s steps)  |   |     |
| 15 | Pattern speed   | 000-005   | No Function   |   | 0   |
|    |   | 006-124   | Left to Right / Fast to slow  |   |     |
|    |   | 125-130   | No Function   |   |     |
|    |   | 131-249   | Right to Left / Slow to fast  |   |     |
|    |   | 250-255   | No Function   |   |     |
| 16 | Pattern X-fade  | 000-005   | Snap from cell to cell  |   | 0   |
|    |   | 006-255   | Fade Duration short to long   |   |     |

### 21 CH - DIRECT MODE (RAW Balance)

|    |                 |         |          |   |
|----|-----------------|---------|----------|---|
| 17 | Pattern Red     | 000-255 | 0 - 100% | 255   |
| 18 | Pattern Green   | 000-255 | 0 - 100% | 255   |
| 19 | Pattern Blue    | 000-255 | 0 - 100% | 255   |
| 20 | Pattern Lime    | 000-255 | 0 - 100% | 255   |
| 21 | Device Settings |         |          | according to Device Settings Direct mode (p.60) 0 |

### 26 CH - DIRECT MODE (RAW Balance)

| Ch. | Function   | Value     | Setting                                      | Default |
|-----|--|-----------|--|---------|
| 1   | Dimmer   | 000-255   | 0 - 100%                                     | 0       |
| 2   | Dimmer Fine  | 000-255   | 0 - 100%                                     | 0       |
| 3   | Shutter  | 000 - 019 | Shutter close                                | 20      |
|     |  | 020 - 024 | Shutter open                                 |         |
|     |  | 025 - 064 | Strobe 1 (fast ⊕ slow)                       |         |
|     |  | 065 - 069 | Shutter open                                 |         |
|     |  | 070 - 084 | Strobe 2: opening pulse (fast ⊕ slow)        |         |
|     |  | 085 - 089 | Shutter open                                 |         |
|     |  | 090 - 104 | Strobe 3: closing pulse (fast ⊕ slow)        |         |
|     |  | 105 - 109 | Shutter open                                 |         |
|     |  | 110 - 124 | Strobe 4: random strobe (fast ⊕ slow)        |         |
|     |  | 125 - 129 | Shutter open                                 |         |
|     |  | 130 - 144 | Strobe 5: random opening pulse (fast ⊕ slow) |         |
|     |  | 145 - 149 | Shutter open                                 |         |
|     |  | 150 - 164 | Strobe 6: random closing pulse (fast ⊕ slow) |         |
|     |  | 165 - 169 | Shutter open                                 |         |
|     |  | 170 - 184 | Strobe 7: burst pulse (fast ⊕ slow)          |         |
|     |  | 185 - 189 | Shutter open                                 |         |
|     |  | 190 - 204 | Strobe 8: random burst pulse (fast ⊕ slow)   |         |
|     |  | 205 - 209 | Shutter open                                 |         |
|     |  | 210 - 224 | Strobe 9: sine wave (fast ⊕ slow)            |         |
|     |  | 225 - 229 | Shutter open                                 |         |
|     |  | 230 - 244 | Strobe 10: burst (fast ⊕ slow)               |         |
|     |  | 245 - 255 | Shutter open                                 |         |
| 4   | Duration<br>(only affects to<br>channel 3 -<br>Strobe 1 025-064) | 000-255   | 0 - 100%                                     | 0       |

## 26 CH - DIRECT MODE (RAW Balance)

|    |  |           |   |  |     |
|----|--|-----------|---|--|-----|
| 5  | Red  | 000-255   | 0 - 100%  | affects main &<br>pattern background color | 255 |
| 6  | Red Fine   | 000-255   | 0 - 100%  |  | 255 |
| 7  | Green  | 000-255   | 0 - 100%  |  | 255 |
| 8  | Green Fine   | 000-255   | 0 - 100%  |  | 255 |
| 9  | Blue   | 000-255   | 0 - 100%  |  | 255 |
| 10 | Blue Fine  | 000-255   | 0 - 100%  |  | 255 |
| 11 | Lime   | 000-255   | 0 - 100%  |  | 255 |
| 12 | Lime Fine  | 000-255   | 0 - 100%  |  | 255 |
| 13 | CTC<br>(affects RGBL)  | 000 - 004 | RAW   | according to CTC chart                     | 0   |
|    |  | 005-226   | 2000K-6500K linear in 20-21K steps<br>(please see detailed CTC chart)     |  |     |
|    |  | 182-182   | 5600K   |  |     |
|    |  | 226-226   | 6500K   |  |     |
|    |  | 227-255   | 6621K-10.000K linear in 120-121K steps<br>(please see detailed CTC chart) |  |     |
| 14 | Tint<br>(affects CTC<br>and RGBL)  | 0         | no function   |  | 128 |
|    |  | 001-127   | Magenta -> Neutral  |  |     |
|    |  | 128-128   | Neutral   |  |     |
|    |  | 129-255   | Neutral -> Green  |  |     |
| 15 | Color Macro<br>(override<br>RGBL,CTC)                                    |           | According to Color Macro Chart  | affects main &<br>pattern background color | 0   |
| 16 | Color Macro<br>Crossfade<br>(Transition Time<br>between Color<br>Macros) | 000 - 005 | no function   |  | 0   |
|    |  | 006-105   | 0,1s - 10s (0,1s steps)   |  |     |
|    |  | 106-214   | 11s - 119s (1s steps)   |  |     |
|    |  | 215-244   | 2m - 4m50s (10s steps)  |  |     |
|    |  | 245-255   | 5m - 15m (1m steps)   |  |     |
| 17 | Pattern Dimmer   | 000-255   |   |  | 255 |
| 18 | Pattern selection  | 000-255   |   | according to Pattern chart                 | 0   |
| 19 | Pattern selection<br>X-fade  | 000 - 005 | no function   |  | 0   |
|    |  | 006-255   | 1s - 250s (1s steps)  |  |     |
| 20 | Pattern speed  | 000-005   | No Function   |  | 0   |
|    |  | 006-124   | Left to Right / Fast to slow  |  |     |
|    |  | 125-130   | No Function   |  |     |
|    |  | 131-249   | Right to Left / Slow to fast  |  |     |
|    |  | 250-255   | No Function   |  |     |
| 21 | Pattern X-fade   | 000-005   | Snap from cell to cell  |  | 0   |
|    |  | 006-255   | Fade Duration short to long   |  |     |

**26 CH - DIRECT MODE (RAW Balance)**

|    |                 |         |   |     |
|----|-----------------|---------|---|-----|
| 22 | Pattern Red     | 000-255 | 0 - 100%  | 255 |
| 23 | Pattern Green   | 000-255 | 0 - 100%  | 255 |
| 24 | Pattern Blue    | 000-255 | 0 - 100%  | 255 |
| 25 | Pattern Lime    | 000-255 | 0 - 100%  | 255 |
| 26 | Device Settings |         | according to Device Settings Direct mode (p.60) | 0   |

**17CH - HSI Mode (Color Calibrated)**

| Ch. | Function    | Value     | Setting                                      | Default |
|-----|-------------|-----------|--|---------|
| 1   | Dimmer      | 000-255   | 0 - 100%                                     | 0       |
| 2   | Dimmer Fine | 000-255   | 0 - 100%                                     | 0       |
| 3   | Shutter     | 000 - 019 | Shutter close                                | 20      |
|     |             | 020 - 024 | Shutter open                                 |         |
|     |             | 025 - 064 | Strobe 1 (fast ⊕ slow)                       |         |
|     |             | 065 - 069 | Shutter open                                 |         |
|     |             | 070 - 084 | Strobe 2: opening pulse (fast ⊕ slow)        |         |
|     |             | 085 - 089 | Shutter open                                 |         |
|     |             | 090 - 104 | Strobe 3: closing pulse (fast ⊕ slow)        |         |
|     |             | 105 - 109 | Shutter open                                 |         |
|     |             | 110 - 124 | Strobe 4: random strobe (fast ⊕ slow)        |         |
|     |             | 125 - 129 | Shutter open                                 |         |
|     |             | 130 - 144 | Strobe 5: random opening pulse (fast ⊕ slow) |         |
|     |             | 145 - 149 | Shutter open                                 |         |
|     |             | 150 - 164 | Strobe 6: random closing pulse (fast ⊕ slow) |         |
|     |             | 165 - 169 | Shutter open                                 |         |
|     |             | 170 - 184 | Strobe 7: burst pulse (fast ⊕ slow)          |         |
|     |             | 185 - 189 | Shutter open                                 |         |
|     |             | 190 - 204 | Strobe 8: random burst pulse (fast ⊕ slow)   |         |
|     |             | 205 - 209 | Shutter open                                 |         |
|     |             | 210 - 224 | Strobe 9: sine wave (fast ⊕ slow)            |         |
|     |             | 225 - 229 | Shutter open                                 |         |
|     |             | 230 - 244 | Strobe 10: burst (fast ⊕ slow)               |         |
|     |             | 245 - 255 | Shutter open                                 |         |
| 4   | Hue         | 000-255   | 0° (RED) Thru 360°                           | 0       |
| 5   | Saturation  | 000-255   | 0 - 100%                                     | 0       |



**17CH - HSI Mode (Color Calibrated)**

|    |   |           |   |  |  |     |
|----|---|-----------|---|--|--|-----|
| 6  | CTC (affects HUE and Saturation) --> CTC no effect if Sa-<br>turation to 100%               | 000 - 004 | 5600K   |  | according to CTC chart                     | 0   |
|    |   | 005-226   | 2000K-6500K linear in 20-21K steps<br>(please see detailed CTC chart)     |  |  |     |
|    |   | 182-182   | 5600K   |  |  |     |
|    |   | 226-226   | 6500K   |  |  |     |
|    |   | 227-255   | 6621K-10.000K linear in 120-121K steps<br>(please see detailed CTC chart) |  |  |     |
| 7  | Tint (affects CTC, HUE and Satura-<br>tion). --> Tint no<br>effect if Saturation<br>to 100% | 0         | no function   |  |  | 128 |
|    |   | 001-127   | Magenta -> Neutral  |  |  |     |
|    |   | 128-128   | Neutral   |  |  |     |
|    |   | 129-255   | Neutral -> Green  |  |  |     |
| 8  | Color Macro<br>(override HUE/<br>SATURATION/CTC)  |           | According to Color Macro Chart  |  | affects main &<br>pattern background color | 0   |
| 9  | Color Macro<br>Crossfade<br>(Transition Time<br>between Color<br>Macros)                    | 000 - 005 | no function   |  |  | 0   |
|    |   | 006-105   | 0,1s - 10s (0,1s steps)   |  |  |     |
|    |   | 106-214   | 11s - 119s (1s steps)   |  |  |     |
|    |   | 215-244   | 2m - 4m50s (10s steps)  |  |  |     |
|    |   | 245-255   | 5m - 15m (1m steps)   |  |  |     |
| 10 | Pattern Dimmer  | 000-255   |   |  |  | 255 |
| 11 | Pattern selection   | 000-255   |   |  | according to Pattern chart                 | 0   |
| 12 | Pattern selection<br>X-fade   | 000 - 005 | no function   |  |  | 0   |
|    |   | 006-255   | 1s - 250s (1s steps)  |  |  |     |
| 13 | Pattern speed   | 000-005   | No Function   |  |  | 0   |
|    |   | 006-124   | Left to Right / Fast to slow  |  |  |     |
|    |   | 125-130   | No Function   |  |  |     |
|    |   | 131-249   | Right to Left / Slow to fast  |  |  |     |
|    |   | 250-255   | No Function   |  |  |     |
| 14 | Pattern X-fade  | 000-005   | Snap from cell to cell  |  |  | 0   |
|    |   | 006-255   | Fade Duration short to long   |  |  |     |
| 15 | Pattern Hue   | 000-255   | 0° (RED) Thru 360°  |  |  | 0   |
| 16 | Pattern Saturation  | 000-255   | 0 - 100%  |  |  | 0   |
| 17 | Device Settings   |           |   | according to Device Settings RGB mode (p.58) |  | 0   |

**16CH Pure Mode (Color Calibrated )**

| Ch. | Function   | Value     | Setting                                      | Default |
|-----|--|-----------|--|---------|
| 1   | Master Dimmer  | 000-255   | 0 - 100%                                     | 0       |
| 2   | Shutter  | 000 - 019 | Shutter close                                | 20      |
|     |  | 020 - 024 | Shutter open                                 |         |
|     |  | 025 - 064 | Strobe 1 (fast ⊕ slow)                       |         |
|     |  | 065 - 069 | Shutter open                                 |         |
|     |  | 070 - 084 | Strobe 2: opening pulse (fast ⊕ slow)        |         |
|     |  | 085 - 089 | Shutter open                                 |         |
|     |  | 090 - 104 | Strobe 3: closing pulse (fast ⊕ slow)        |         |
|     |  | 105 - 109 | Shutter open                                 |         |
|     |  | 110 - 124 | Strobe 4: random strobe (fas ⊕ slow)         |         |
|     |  | 125 - 129 | Shutter open                                 |         |
|     |  | 130 - 144 | Strobe 5: random opening pulse (fast ⊕ slow) |         |
|     |  | 145 - 149 | Shutter open                                 |         |
|     |  | 150 - 164 | Strobe 6:random closing pulse (fast ⊕ slow)  |         |
|     |  | 165 - 169 | Shutter open                                 |         |
|     |  | 170 - 184 | Strobe 7: burst pulse (fast ⊕ slow)          |         |
|     |  | 185 - 189 | Shutter open                                 |         |
|     |  | 190 - 204 | Strobe 8: random burst pulse (fast ⊕ slow)   |         |
|     |  | 205 - 209 | Shutter open                                 |         |
|     |  | 210 - 224 | Strobe 9:sine wave (fast ⊕ slow)             |         |
|     |  | 225 - 229 | Shutter open                                 |         |
|     |  | 230 - 244 | Strobe 10: burst (fast ⊕ slow)               |         |
|     |  | 245 - 255 | Shutter open                                 |         |
| 3   | Duration<br>(only affects to<br>channel 2 -<br>Strobe 1 025-064) | 000-255   | 0 - 100%                                     | 0       |
| 4   | Segment 1 Red  | 000-255   | 0 - 100%                                     | 255     |
| 5   | Segment 1 Green  | 000-255   | 0 - 100%                                     | 255     |
| 6   | Segment 1 Blue   | 000-255   | 0 - 100%                                     | 255     |
| 7   | Segment 2 Red  | 000-255   | 0 - 100%                                     | 255     |
| 8   | Segment 2 Green  | 000-255   | 0 - 100%                                     | 255     |
| 9   | Segment 2 Blue   | 000-255   | 0 - 100%                                     | 255     |
| 10  | Segment 3 Red  | 000-255   | 0 - 100%                                     | 255     |
| 11  | Segment 3 Green  | 000-255   | 0 - 100%                                     | 255     |
| 12  | Segment 3 Blue   | 000-255   | 0 - 100%                                     | 255     |

**16CH Pure Mode (Color Calibrated )**

|    |                        |         |  |     |
|----|------------------------|---------|--|-----|
| 13 | <b>Segment 4 Red</b>   | 000-255 | 0 - 100%                                     | 255 |
| 14 | <b>Segment 4 Green</b> | 000-255 | 0 - 100%                                     | 255 |
| 15 | <b>Segment 4 Blue</b>  | 000-255 | 0 - 100%                                     | 255 |
| 16 | <b>Device Settings</b> |         | according to Device Settings RGB mode (p.58) | 0   |

**29CH Pure Mode (Color Calibrated)**

| Ch. | Function  | Value     | Setting                                      | Default |
|-----|---|-----------|--|---------|
| 1   | <b>Master Dimmer</b>  | 000-255   | 0 - 100%                                     | 0       |
| 2   | <b>Master Dimmer fine</b>   | 000-255   | 0 - 100%                                     | 0       |
| 3   | <b>Shutter</b>  | 000 - 019 | Shutter close                                | 20      |
|     |   | 020 - 024 | Shutter open                                 |         |
|     |   | 025 - 064 | Strobe 1 (fast ⊕ slow)                       |         |
|     |   | 065 - 069 | Shutter open                                 |         |
|     |   | 070 - 084 | Strobe 2: opening pulse (fast ⊕ slow)        |         |
|     |   | 085 - 089 | Shutter open                                 |         |
|     |   | 090 - 104 | Strobe 3: closing pulse (fast ⊕ slow)        |         |
|     |   | 105 - 109 | Shutter open                                 |         |
|     |   | 110 - 124 | Strobe 4: random strobe (fast ⊕ slow)        |         |
|     |   | 125 - 129 | Shutter open                                 |         |
|     |   | 130 - 144 | Strobe 5: random opening pulse (fast ⊕ slow) |         |
|     |   | 145 - 149 | Shutter open                                 |         |
|     |   | 150 - 164 | Strobe 6: random closing pulse (fast ⊕ slow) |         |
|     |   | 165 - 169 | Shutter open                                 |         |
|     |   | 170 - 184 | Strobe 7: burst pulse (fast ⊕ slow)          |         |
|     |   | 185 - 189 | Shutter open                                 |         |
|     |   | 190 - 204 | Strobe 8: random burst pulse (fast ⊕ slow)   |         |
|     |   | 205 - 209 | Shutter open                                 |         |
|     |   | 210 - 224 | Strobe 9: sine wave (fast ⊕ slow)            |         |
|     |   | 225 - 229 | Shutter open                                 |         |
|     |   | 230 - 244 | Strobe 10: burst (fast ⊕ slow)               |         |
|     |   | 245 - 255 | Shutter open                                 |         |
| 4   | <b>Duration</b><br>(only affects to channel 3 - Strobe 1 025-064) | 000-255   | 0 - 100%                                     | 0       |
| 5   | <b>Segment 1 Red</b>  | 000-255   | 0 - 100%                                     | 255     |
| 6   | <b>Segment 1 Red fine</b>   | 000-255   | 0 - 100%                                     | 255     |

### 29CH Pure Mode (Color Calibrated)

|    |                      |         |  |     |
|----|----------------------|---------|--|-----|
| 7  | Segment 1 Green      | 000-255 | 0 - 100%                                     | 255 |
| 8  | Segment 1 Green fine | 000-255 | 0 - 100%                                     | 255 |
| 9  | Segment 1 Blue       | 000-255 | 0 - 100%                                     | 255 |
| 10 | Segment 1 Blue fine  | 000-255 | 0 - 100%                                     | 255 |
| 11 | Segment 2 Red        | 000-255 | 0 - 100%                                     | 255 |
| 12 | Segment 2 Red fine   | 000-255 | 0 - 100%                                     | 255 |
| 13 | Segment 2 Green      | 000-255 | 0 - 100%                                     | 255 |
| 14 | Segment 2 Green fine | 000-255 | 0 - 100%                                     | 255 |
| 15 | Segment 2 Blue       | 000-255 | 0 - 100%                                     | 255 |
| 16 | Segment 2 Blue fine  | 000-255 | 0 - 100%                                     | 255 |
| 17 | Segment 3 Red        | 000-255 | 0 - 100%                                     | 255 |
| 18 | Segment 3 Red fine   | 000-255 | 0 - 100%                                     | 255 |
| 19 | Segment 3 Green      | 000-255 | 0 - 100%                                     | 255 |
| 20 | Segment 3 Green fine | 000-255 | 0 - 100%                                     | 255 |
| 21 | Segment 3 Blue       | 000-255 | 0 - 100%                                     | 255 |
| 22 | Segment 3 Blue fine  | 000-255 | 0 - 100%                                     | 255 |
| 23 | Segment 4 Red        | 000-255 | 0 - 100%                                     | 255 |
| 24 | Segment 4 Red fine   | 000-255 | 0 - 100%                                     | 255 |
| 25 | Segment 4 Green      | 000-255 | 0 - 100%                                     | 255 |
| 26 | Segment 4 Green fine | 000-255 | 0 - 100%                                     | 255 |
| 27 | Segment 4 Blue       | 000-255 | 0 - 100%                                     | 255 |
| 28 | Segment 4 Blue fine  | 000-255 | 0 - 100%                                     | 255 |
| 29 | Device Settings      |         | according to Device Settings RGB mode (p.58) | 0   |

### 28CH Full Access Mode (Color Calibrated)

| Ch. | Function      | Value     | Setting                               | Default |
|-----|---------------|-----------|---------------------------------------|---------|
| 1   | Master Dimmer | 000-255   | 0 - 100%                              | 0       |
| 2   | Shutter       | 000 - 019 | Shutter close                         | 20      |
|     |               | 020 - 024 | Shutter open                          |         |
|     |               | 025 - 064 | Strobe 1 (fast ⊕ slow)                |         |
|     |               | 065 - 069 | Shutter open                          |         |
|     |               | 070 - 084 | Strobe 2: opening pulse (fast ⊕ slow) |         |
|     |               | 085 - 089 | Shutter open                          |         |

**28CH Full Access Mode (Color Calibrated)**

|    |  |           |  |                            |     |
|----|--|-----------|--|----------------------------|-----|
| 2  | Shutter  | 090 - 104 | Strobe 3: closing pulse (fast ⊕ slow)        |                            | 20  |
|    |  | 105 - 109 | Shutter open                                 |                            |     |
|    |  | 110 - 124 | Strobe 4: random strobe (fast ⊕ slow)        |                            |     |
|    |  | 125 - 129 | Shutter open                                 |                            |     |
|    |  | 130 - 144 | Strobe 5: random opening pulse (fast ⊕ slow) |                            |     |
|    |  | 145 - 149 | Shutter open                                 |                            |     |
|    |  | 150 - 164 | Strobe 6:random closing pulse (fast ⊕ slow)  |                            |     |
|    |  | 165 - 169 | Shutter open                                 |                            |     |
|    |  | 170 - 184 | Strobe 7: burst pulse (fast ⊕ slow)          |                            |     |
|    |  | 185 - 189 | Shutter open                                 |                            |     |
|    |  | 190 - 204 | Strobe 8: random burst pulse (fast ⊕ slow)   |                            |     |
|    |  | 205 - 209 | Shutter open                                 |                            |     |
|    |  | 210 - 224 | Strobe 9:sine wave (fast ⊕ slow)             |                            |     |
|    |  | 225 - 229 | Shutter open                                 |                            |     |
|    |  | 230 - 244 | Strobe 10: burst (fast ⊕ slow)               |                            |     |
|    |  | 245 - 255 | Shutter open                                 |                            |     |
| 3  | Duration<br>(only affects to channel 2 - Strobe 1 025-064) | 000-255   | 0 - 100%                                     |                            | 0   |
| 4  | Pattern Dimmer   | 000-255   |  |                            | 255 |
| 5  | Pattern selection  | 000-255   |  | according to Pattern chart | 0   |
| 6  | Pattern selection X-fade                                   | 000 - 005 | no function                                  |                            | 0   |
|    |  | 006-255   | 1s - 250s (1s steps)                         |                            |     |
| 7  | Pattern speed  | 000-005   | No Function                                  |                            | 0   |
|    |  | 006-124   | Left to Right / Fast to slow                 |                            |     |
|    |  | 125-130   | No Function                                  |                            |     |
|    |  | 131-249   | Right to Left / Slow to fast                 |                            |     |
|    |  | 250-255   | No Function                                  |                            |     |
| 8  | Pattern X-fade   | 000-005   | Snap from cell to cell                       |                            | 0   |
|    |  | 006-255   | Fade Duration short to long                  |                            |     |
| 9  | Pattern Red  | 000-255   | 0 - 100%                                     |                            | 255 |
| 10 | Pattern Green  | 000-255   | 0 - 100%                                     |                            | 255 |
| 11 | Pattern Blue   | 000-255   | 0 - 100%                                     |                            | 255 |

**28CH Full Access Mode (Color Calibrated)**

|    |  |           |   |  |  |     |
|----|--|-----------|---|--|--|-----|
| 12 | CTC<br>(affects RGB)   | 000 - 004 | 5600K   |  | according to CTC chart                     | 0   |
|    |  | 005-226   | 2000K-6500K linear in 20-21K steps<br>(please see detailed CTC chart)     |  |  |     |
|    |  | 182-182   | 5600K   |  |  |     |
|    |  | 226-226   | 6500K   |  |  |     |
|    |  | 227-255   | 6621K-10.000K linear in 120-121K steps<br>(please see detailed CTC chart) |  |  |     |
| 13 | Tint<br>(affects CTC / RGB)  | 0         | no function   |  |  | 128 |
|    |  | 001-127   | Magenta -> Neutral  |  |  |     |
|    |  | 128-128   | Neutral   |  |  |     |
|    |  | 129-255   | Neutral -> Green  |  |  |     |
| 14 | Color Macro<br>(override RGB / CTC)                                      |           | According to Color Macro Chart  |  | affects main &<br>pattern background color | 0   |
| 15 | Color Macro<br>Crossfade<br>(Transition Time<br>between Color<br>Macros) | 000 - 005 | no function   |  |  | 0   |
|    |  | 006-105   | 0,1s - 10s (0,1s steps)   |  |  |     |
|    |  | 106-214   | 11s - 119s (1s steps)   |  |  |     |
|    |  | 215-244   | 2m - 4m50s (10s steps)  |  |  |     |
|    |  | 245-255   | 5m - 15m (1m steps)   |  |  |     |
| 16 | Segment 1 Red  | 000-255   | 0 - 100%  |  |  | 255 |
| 17 | Segment 1 Green  | 000-255   | 0 - 100%  |  |  | 255 |
| 18 | Segment 1 Blue   | 000-255   | 0 - 100%  |  |  | 255 |
| 19 | Segment 2 Red  | 000-255   | 0 - 100%  |  |  | 255 |
| 20 | Segment 2 Green  | 000-255   | 0 - 100%  |  |  | 255 |
| 21 | Segment 2 Blue   | 000-255   | 0 - 100%  |  |  | 255 |
| 22 | Segment 3 Red  | 000-255   | 0 - 100%  |  |  | 255 |
| 23 | Segment 3 Green  | 000-255   | 0 - 100%  |  |  | 255 |
| 24 | Segment 3 Blue   | 000-255   | 0 - 100%  |  |  | 255 |
| 25 | Segment 4 Red  | 000-255   | 0 - 100%  |  |  | 255 |
| 26 | Segment 4 Green  | 000-255   | 0 - 100%  |  |  | 255 |
| 27 | Segment 4 Blue   | 000-255   | 0 - 100%  |  |  | 255 |
| 28 | Device Settings  |           |   | according to Device Settings RGB mode (p.58) |  | 0   |

**44CH Pure Mode (Color Calibrated)**

| Ch. | Function   | Value     | Setting                                      | Default                    |
|-----|--|-----------|--|----------------------------|
| 1   | Master Dimmer  | 000-255   | 0 - 100%                                     | 0                          |
| 2   | Master Dimmer fine   | 000-255   | 0 - 100%                                     | 0                          |
| 3   | Shutter  | 000 - 019 | Shutter close                                | 20                         |
|     |  | 020 - 024 | Shutter open                                 |                            |
|     |  | 025 - 064 | Strobe 1 (fast ⊕ slow)                       |                            |
|     |  | 065 - 069 | Shutter open                                 |                            |
|     |  | 070 - 084 | Strobe 2: opening pulse (fast ⊕ slow)        |                            |
|     |  | 085 - 089 | Shutter open                                 |                            |
|     |  | 090 - 104 | Strobe 3: closing pulse (fast ⊕ slow)        |                            |
|     |  | 105 - 109 | Shutter open                                 |                            |
|     |  | 110 - 124 | Strobe 4: random strobe (fast ⊕ slow)        |                            |
|     |  | 125 - 129 | Shutter open                                 |                            |
|     |  | 130 - 144 | Strobe 5: random opening pulse (fast ⊕ slow) |                            |
|     |  | 145 - 149 | Shutter open                                 |                            |
|     |  | 150 - 164 | Strobe 6: random closing pulse (fast ⊕ slow) |                            |
|     |  | 165 - 169 | Shutter open                                 |                            |
|     |  | 170 - 184 | Strobe 7: burst pulse (fast ⊕ slow)          |                            |
|     |  | 185 - 189 | Shutter open                                 |                            |
|     |  | 190 - 204 | Strobe 8: random burst pulse (fast ⊕ slow)   |                            |
|     |  | 205 - 209 | Shutter open                                 |                            |
|     |  | 210 - 224 | Strobe 9: sine wave (fast ⊕ slow)            |                            |
|     |  | 225 - 229 | Shutter open                                 |                            |
|     |  | 230 - 244 | Strobe 10: burst (fast ⊕ slow)               |                            |
|     |  | 245 - 255 | Shutter open                                 |                            |
| 4   | Duration<br>(only affects to<br>channel 3 -<br>Strobe 1 025-064) | 000-255   | 0 - 100%                                     | 0                          |
| 5   | Pattern Dimmer   | 000-255   |  | 255                        |
| 6   | Pattern selection  | 000-255   |  | according to Pattern chart |
| 7   | Pattern selection<br>X-fade                                      | 000 - 005 | no function                                  | 0                          |
|     |  | 006-255   | 1s - 250s (1s steps)                         |                            |
| 8   | Pattern speed  | 000-005   | No Function                                  | 0                          |
|     |  | 006-124   | Left to Right / Fast to slow                 |                            |
|     |  | 125-130   | No Function                                  |                            |
|     |  | 131-249   | Right to Left / Slow to fast                 |                            |
|     |  | 250-255   | No Function                                  |                            |

**44CH Pure Mode (Color Calibrated)**

|    |  |           |   |  |     |
|----|--|-----------|---|--|-----|
| 9  | Pattern X-fade   | 000-005   | Snap from cell to cell  |  | 0   |
|    |  | 006-255   | Fade Duration short to long   |  |     |
| 10 | Pattern Red  | 000-255   | 0 - 100%  |  | 255 |
| 11 | Pattern Red fine   | 000-255   | 0 - 100%  |  | 255 |
| 12 | Pattern Green  | 000-255   | 0 - 100%  |  | 255 |
| 13 | Pattern Green fine   | 000-255   | 0 - 100%  |  | 255 |
| 14 | Pattern Blue   | 000-255   | 0 - 100%  |  | 255 |
| 15 | Pattern Blue fine  | 000-255   | 0 - 100%  |  | 255 |
| 16 | CTC<br>(affects RGB)   | 000 - 004 | 5600K   | according to CTC chart                     | 0   |
|    |  | 005-226   | 2000K-6500K linear in 20-21K steps<br>(please see detailed CTC chart)     |  |     |
|    |  | 182-182   | 5600K   |  |     |
|    |  | 226-226   | 6500K   |  |     |
|    |  | 227-255   | 6621K-10.000K linear in 120-121K steps<br>(please see detailed CTC chart) |  |     |
| 17 | Tint<br>(affects CTC / RGB)  | 0         | no function   |  | 128 |
|    |  | 001-127   | Magenta -> Neutral  |  |     |
|    |  | 128-128   | Neutral   |  |     |
|    |  | 129-255   | Neutral -> Green  |  |     |
| 18 | Color Macro<br>(override RGB / CTC)                                      |           | According to Color Macro Chart  | affects main &<br>pattern background color | 0   |
| 19 | Color Macro<br>Crossfade<br>(Transition Time<br>between Color<br>Macros) | 000 - 005 | no function   |  | 0   |
|    |  | 006-105   | 0,1s - 10s (0,1s steps)   |  |     |
|    |  | 106-214   | 11s - 119s (1s steps)   |  |     |
|    |  | 215-244   | 2m - 4m50s (10s steps)  |  |     |
|    |  | 245-255   | 5m - 15m (1m steps)   |  |     |
| 20 | Segment 1 Red  | 000-255   | 0 - 100%  |  | 255 |
| 21 | Segment 1 Red fine   | 000-255   | 0 - 100%  |  | 255 |
| 22 | Segment 1 Green  | 000-255   | 0 - 100%  |  | 255 |
| 23 | Segment 1 Green fine   | 000-255   | 0 - 100%  |  | 255 |
| 24 | Segment 1 Blue   | 000-255   | 0 - 100%  |  | 255 |
| 25 | Segment 1 Blue fine  | 000-255   | 0 - 100%  |  | 255 |
| 26 | Segment 2 Red  | 000-255   | 0 - 100%  |  | 255 |
| 27 | Segment 2 Red fine   | 000-255   | 0 - 100%  |  | 255 |
| 28 | Segment 2 Green  | 000-255   | 0 - 100%  |  | 255 |
| 29 | Segment 2 Green fine   | 000-255   | 0 - 100%  |  | 255 |



**44CH Pure Mode (Color Calibrated)**

|    |                      |         |          |  |
|----|----------------------|---------|----------|--|
| 30 | Segment 2 Blue       | 000-255 | 0 - 100% | 255  |
| 31 | Segment 2 Blue fine  | 000-255 | 0 - 100% | 255  |
| 32 | Segment 3 Red        | 000-255 | 0 - 100% | 255  |
| 33 | Segment 3 Red fine   | 000-255 | 0 - 100% | 255  |
| 34 | Segment 3 Green      | 000-255 | 0 - 100% | 255  |
| 35 | Segment 3 Green fine | 000-255 | 0 - 100% | 255  |
| 36 | Segment 3 Blue       | 000-255 | 0 - 100% | 255  |
| 37 | Segment 3 Blue fine  | 000-255 | 0 - 100% | 255  |
| 38 | Segment 4 Red        | 000-255 | 0 - 100% | 255  |
| 39 | Segment 4 Red fine   | 000-255 | 0 - 100% | 255  |
| 40 | Segment 4 Green      | 000-255 | 0 - 100% | 255  |
| 41 | Segment 4 Green fine | 000-255 | 0 - 100% | 255  |
| 42 | Segment 4 Blue       | 000-255 | 0 - 100% | 255  |
| 43 | Segment 4 Blue fine  | 000-255 | 0 - 100% | 255  |
| 44 | Device Settings      |         |          | according to Device Settings RGB mode (p.58) |

# Device Setting RGB Modes

| Ch.                                       | Settings | DMX Value   | Function  | remark |
|---|----------|-------------|---|--------|
| Device Settings<br>(please see remark *1) |          | 000-005     | No function                                       |        |
|   |          | 6           | Display Backlight On (hold 3s)                    |        |
|   |          | 7           | Display Backlight Off (hold 3s)                   |        |
|   |          | 8           | Display Lock On (hold 3s)                         |        |
|   |          | 9           | Display Lock Off (hold 3s)                        |        |
|   |          | 010-014     | reserved / no function                            |        |
|   |          | 15          | DMX Fail - Blackout (hold 3s)                     |        |
|   |          | 16          | DMX Fail - Hold (hold 3s)                         |        |
|   |          | 17          | DMX Fail - Emergency Light (hold 3s)              |        |
|   |          | 018-022     | reserved / no function                            |        |
|   |          | 23          | Linear Dimmer Curve (hold 3s)                     |        |
|   |          | 24          | Exponential Dimmer Curve (hold 3s)                |        |
|   |          | 25          | Logarithmic Dimmer Curve (hold 3s)                |        |
|   |          | 26          | S-Curve Dimmer Curve (hold 3s)                    |        |
|   |          | 027-031     | reserved / no function                            |        |
|   |          | 32          | Dimmer Response LED / fast (hold 3s)              |        |
|   |          | 33 reserved | reserved / no function                            |        |
|   |          | 34          | Dimmer Respononse Halogen / slow (hold 3s)        |        |
|   |          | 035-039     | reserved / no function                            |        |
|   |          | 40          | Calibration - High CRI (Colors & CCT / hold 3s)   |        |
|   |          | 41          | Calibration - Normal CRI (Colors & CCT / hold 3s) |        |
|   |          | 042-046     | reserved / no function                            |        |
|   |          | 47          | LED Frequency 800Hz (hold 3s)                     |        |
|   |          | 48          | LED Frequency 1200Hz (hold 3s)                    |        |
|   |          | 49          | LED Frequency 2000Hz (hold 3s)                    |        |
|   |          | 50          | LED Frequency 3600Hz (hold 3s)                    |        |
|   |          | 51          | LED Frequency 12kHz (hold 3s)                     |        |
|   |          | 52          | LED Frequency 25kHz (hold 3s)                     |        |
|   |          | 053-057     | reserved / no function                            |        |
|   |          | 58          | Fan Auto 1 (hold 3s)                              |        |
|   |          | 59          | Fan Auto 2 (hold 3s)                              |        |
|   |          | 60          | Fan Silent (hold 3s)                              |        |

## Device Setting RGB Modes

| Ch. | Settings                                  | DMX Value          | Function                     | remark   |
|-----|---|--------------------|------------------------------|--|
|     | Device Settings<br>(please see remark *1) | 61                 | Fan Studio (hold 3s)         |  |
|     |   | 62                 | Fan Off (hold 3s)            |  |
|     |   | 63                 | Fan High Power (hold 3s)     |  |
|     |   | 064-068            | reserved / no function       |  |
|     |   | 69                 | Redshift On (hold 3s)        | Redshift (affects only between 2700-3500K)   |
|     |   | 70                 | Redshift Off (hold 3s)       |  |
|     |   | 071-083            | reserved / no function       |  |
|     |   | 84                 | Runtime Off (hold 3s)        |  |
|     |   | 85                 | Runtime 1h (hold 3s)         |  |
|     |   | 86                 | Runtime 2h (hold 3s)         |  |
|     |   | 87                 | Runtime 3h (hold 3s)         |  |
|     |   | 88                 | Runtime 4h (hold 3s)         |  |
|     |   | 089-093            | reserved / no function       |  |
|     |   | 94                 | Invert Mapping On (hold 3s)  |  |
|     |   | 95                 | Invert Mapping Off (hold 3s) |  |
|     |   | 096-244 reserved   | reserved / no function       |  |
|     |   | 245                | Snapshot (hold 3s)           |  |
|     |   | 246-248            | reserved / no function       |  |
|     |   | 249                | User Reset (hold 3s)         | No Change of DMX Address and Mode! / Reset activates only if Shutter is set to DMX 250 |
|     |   | 250                | Factory Reset (hold 3s)      | No Change of DMX Address and Mode! / Reset activates only if Shutter is set to DMX 250 |
|     |   | 251 - 255 reserved | No Function                  |  |

remark\*1: After adjustments please set the value back to 000 to avoid any disturbance by endless function call.

## Device Setting DIRECT Modes

| Ch.                                       | Settings | DMX Value   | Function  | remark |
|---|----------|-------------|---|--------|
| Device Settings<br>(please see remark *1) |          | 000-005     | No function                                       |        |
|   |          | 6           | Display Backlight On (hold 3s)                    |        |
|   |          | 7           | Display Backlight Off (hold 3s)                   |        |
|   |          | 8           | Display Lock On (hold 3s)                         |        |
|   |          | 9           | Display Lock Off (hold 3s)                        |        |
|   |          | 010-014     | reserved / no function                            |        |
|   |          | 15          | DMX Fail - Blackout (hold 3s)                     |        |
|   |          | 16          | DMX Fail - Hold (hold 3s)                         |        |
|   |          | 17          | DMX Fail - Emergency Light (hold 3s)              |        |
|   |          | 018-022     | reserved / no function                            |        |
|   |          | 23          | Linear Dimmer Curve (hold 3s)                     |        |
|   |          | 24          | Exponential Dimmer Curve (hold 3s)                |        |
|   |          | 25          | Logarithmic Dimmer Curve (hold 3s)                |        |
|   |          | 26          | S-Curve Dimmer Curve (hold 3s)                    |        |
|   |          | 027-031     | reserved / no function                            |        |
|   |          | 32          | Dimmer Response LED / fast (hold 3s)              |        |
|   |          | 33 reserved | reserved / no function                            |        |
|   |          | 34          | Dimmer Respononse Halogen / slow (hold 3s)        |        |
|   |          | 035-039     | reserved / no function                            |        |
|   |          | 40          | Calibration - High CRI (Colors & CCT / hold 3s)   |        |
|   |          | 41          | Calibration - Normal CRI (Colors & CCT / hold 3s) |        |
|   |          | 042-046     | reserved / no function                            |        |
|   |          | 47          | LED Frequency 800Hz (hold 3s)                     |        |
|   |          | 48          | LED Frequency 1200Hz (hold 3s)                    |        |
|   |          | 49          | LED Frequency 2000Hz (hold 3s)                    |        |
|   |          | 50          | LED Frequency 3600Hz (hold 3s)                    |        |
|   |          | 51          | LED Frequency 12kHz (hold 3s)                     |        |
|   |          | 52          | LED Frequency 25kHz (hold 3s)                     |        |
|   |          | 053-057     | reserved / no function                            |        |
|   |          | 58          | Fan Auto 1 (hold 3s)                              |        |
|   |          | 59          | Fan Auto 2 (hold 3s)                              |        |
|   |          | 60          | Fan Silent (hold 3s)                              |        |

# Device Setting DIRECT Modes

| Ch.                                       | Settings | DMX Value          | Function                     | remark   |
|---|----------|--------------------|------------------------------|--|
| Device Settings<br>(please see remark *1) |          | 61                 | Fan Studio (hold 3s)         |  |
|   |          | 62                 | Fan Off (hold 3s)            |  |
|   |          | 63                 | Fan High Power (hold 3s)     |  |
|   |          | 064-068            | reserved / no function       |  |
|   |          | 69                 | Redshift On (hold 3s)        | Redshift (affects only between 2700-3500K)   |
|   |          | 70                 | Redshift Off (hold 3s)       |  |
|   |          | 071-083            | reserved / no function       |  |
|   |          | 84                 | Runtime Off (hold 3s)        |  |
|   |          | 85                 | Runtime 1h (hold 3s)         |  |
|   |          | 86                 | Runtime 2h (hold 3s)         |  |
|   |          | 87                 | Runtime 3h (hold 3s)         |  |
|   |          | 88                 | Runtime 4h (hold 3s)         |  |
|   |          | 089-093            | reserved / no function       |  |
|   |          | 94                 | Invert Mapping On (hold 3s)  |  |
|   |          | 95                 | Invert Mapping Off (hold 3s) |  |
|   |          | 096-244 reserved   | reserved / no function       |  |
|   |          | 245                | Snapshot (hold 3s)           |  |
|   |          | 246-248            | reserved / no function       |  |
|   |          | 249                | User Reset (hold 3s)         | No Change of DMX Address and Mode! / Reset activates only if Shutter is set to DMX 250 |
|   |          | 250                | Factory Reset (hold 3s)      | No Change of DMX Address and Mode! / Reset activates only if Shutter is set to DMX 250 |
|   |          | 251 - 255 reserved | No Function                  |  |

remark\*1: After adjustments please set the value back to 000 to avoid any disturbance by endless function call.

## Color Macro Chart

| Gels - Color Macros for DMX |                   |                |
|-----------------------------|-------------------|----------------|
| DMX value                   | Gel Name          | Color Number   |
| 000-005                     | no function       |                |
| 006-008                     | Red               | 100% Red LED   |
| 009-011                     | Fire              | LEE 019        |
| 012-014                     | Medium Red        | LEE 027        |
| 015-017                     | Primary Red       | LEE 106        |
| 018-020                     | Med Amber         | LEE 020        |
| 021-023                     | Dark Amber        | LEE 022        |
| 024-026                     | Deep Amber        | LEE 104        |
| 027-029                     | Orange            | LEE 105        |
| 030-032                     | Deep Golden Amber | LEE 135        |
| 033-035                     | Yellow            | LEE 101        |
| 036-038                     | Green             | 100% Green LED |
| 039-041                     | Lime Green        | LEE 088        |
| 042-044                     | Moss Green        | LEE 089        |
| 045-047                     | LEE Green         | LEE 121        |
| 048-050                     | Primary Green     | LEE 139        |
| 051-053                     | Jas Green         | LEE 738        |
| 054-056                     | Jade              | LEE 323        |
| 057-059                     | Blue              | 100% Blue LED  |
| 060-062                     | Sky Blue          | LEE 068        |
| 063-065                     | Tokyo Blue        | LEE 071        |
| 066-068                     | Light Blue        | LEE 118        |
| 069-071                     | Marine Blue       | LEE 131        |
| 072-074                     | Med Blue          | LEE 132        |
| 075-077                     | Congo Blue        | LEE 181        |
| 078-080                     | Mikkel Blue       | LEE 716        |
| 081-083                     | Rose Pink         | LEE 002        |
| 084-086                     | Med Pink          | LEE 036        |
| 087-089                     | Light Lavender    | LEE 052        |
| 090-092                     | Lavender          | LEE 058        |
| 093-095                     | Magenta           | LEE 113        |
| 096-098                     | Mauve             | LEE 126        |
| 099-101                     | Smokey Pink       | LEE 127        |

| Gels - Color Macros for DMX |                                    |                  |
|-----------------------------|------------------------------------|------------------|
| DMX value                   | Gel Name                           | Color Number     |
| 102-104                     | Special Med Lavender               | LEE 343          |
| 105-107                     | Ultimate Violet                    | LEE 707          |
| 108-110                     | Magical Magenta                    | LEE 795          |
| 111-113                     | Chrysalis Pink                     | LEE 798          |
| 114-116                     | Specia KH Lavender                 | LEE 799          |
| 117-119                     | Bulb White                         | 2700K / High CRI |
| 120-122                     | Halogen White                      | 3200K / High CRI |
| 123-125                     | Neutral White                      | 4200K / High CRI |
| 126-128                     | Daylight White                     | 5600K / High CRI |
| 129-131                     | Cold White I                       | 6000K / High CRI |
| 132-134                     | Cold White II                      | 6300K / High CRI |
| 135-137                     | White (only if available)          | 100% White LED   |
| 138-140                     | Amber (only if available)          | 100% Amber LED   |
| 141-143                     | Lime (only if available)           | 100% Lime LED    |
| 144-146                     | Cyan (only if available)           | 100% Cyan LED    |
| 147-149                     | User Color 1                       |                  |
| 150-152                     | User Color 2                       |                  |
| 153-155                     | User Color 3                       |                  |
| 156-158                     | User Color 4                       |                  |
| 159-161                     | User Color 5                       |                  |
| 162-164                     | Color Jumping stop                 |                  |
| 165-209                     | Color Jumping speed<br>slow @ fast | color 1-37       |
| 210-255                     | Color fading speed<br>slow @ fast  | color 1-37       |

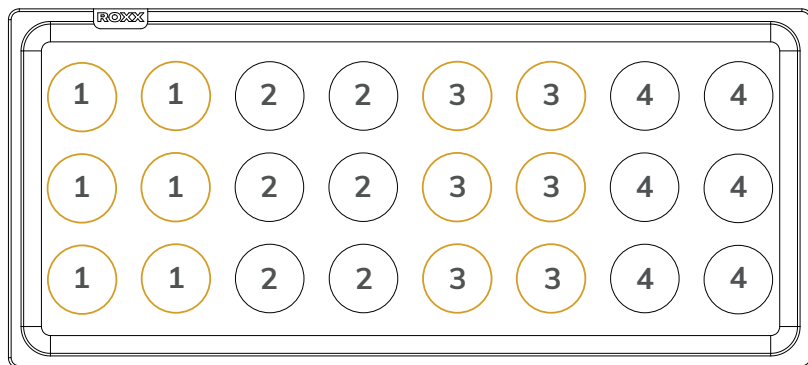
## Color Macro Chart

| Gels - Color Macros for Standalone Mode |                   |                |
|---|-------------------|----------------|
| Position                                | Gel Name          | Color Number   |
| 1                                       | Red               | 100% Red LED   |
| 2                                       | Fire              | LEE 019        |
| 3                                       | Medium Red        | LEE 027        |
| 4                                       | Primary Red       | LEE 106        |
| 5                                       | Med Amber         | LEE 020        |
| 6                                       | Dark Amber        | LEE 022        |
| 7                                       | Deep Amber        | LEE 104        |
| 8                                       | Orange            | LEE 105        |
| 9                                       | Deep Golden Amber | LEE 135        |
| 10                                      | Yellow            | LEE 101        |
| 11                                      | Green             | 100% Green LED |
| 12                                      | Lime Green        | LEE 088        |
| 13                                      | Moss Green        | LEE 089        |
| 14                                      | LEE Green         | LEE 121        |
| 15                                      | Primary Green     | LEE 139        |
| 16                                      | Jas Green         | LEE 738        |
| 17                                      | Jade              | LEE 323        |
| 18                                      | Blue              | 100% Blue LED  |
| 19                                      | Sky Blue          | LEE 068        |
| 20                                      | Tokyo Blue        | LEE 071        |
| 21                                      | Light Blue        | LEE 118        |
| 22                                      | Marine Blue       | LEE 131        |
| 23                                      | Med Blue          | LEE 132        |
| 24                                      | Congo Blue        | LEE 181        |
| 25                                      | Mikkel Blue       | LEE 716        |
| 26                                      | Rose Pink         | LEE 002        |
| 27                                      | Med Pink          | LEE 036        |
| 28                                      | Light Lavender    | LEE 052        |

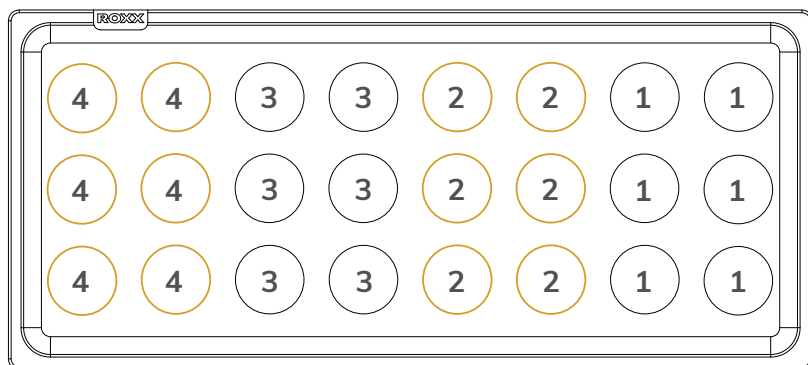
| Gels - Color Macros for Standalone Mode |                           |                  |
|---|---------------------------|------------------|
| Position                                | Gel Name                  | Color Number     |
| 29                                      | Lavender                  | LEE 058          |
| 30                                      | Magenta                   | LEE 113          |
| 31                                      | Mauve                     | LEE 126          |
| 32                                      | Smokey Pink               | LEE 127          |
| 33                                      | Special Med Lavender      | LEE 343          |
| 34                                      | Ultimate Violet           | LEE 707          |
| 35                                      | Magical Magenta           | LEE 795          |
| 36                                      | Chrysalis Pink            | LEE 798          |
| 37                                      | Specia KH Lavender        | LEE 799          |
| 38                                      | Bulb White                | 2700K / High CRI |
| 39                                      | Halogen White             | 3200K / High CRI |
| 40                                      | Neutral White             | 4200K / High CRI |
| 41                                      | Daylight White            | 5600K / High CRI |
| 42                                      | Cold White I              | 6000 / High CRI  |
| 43                                      | Cold White II             | 6300K / High CRI |
| 44                                      | White (only if available) | 100% White LED   |
| 45                                      | Amber (only if available) | 100% Amber LED   |
| 46                                      | Lime (only if available)  | 100% Lime LED    |
| 47                                      | Cyan (only if available)  | 100% Cyan LED    |

## Section Chart

Below you can see the layout of the controllable sections for the NEO:

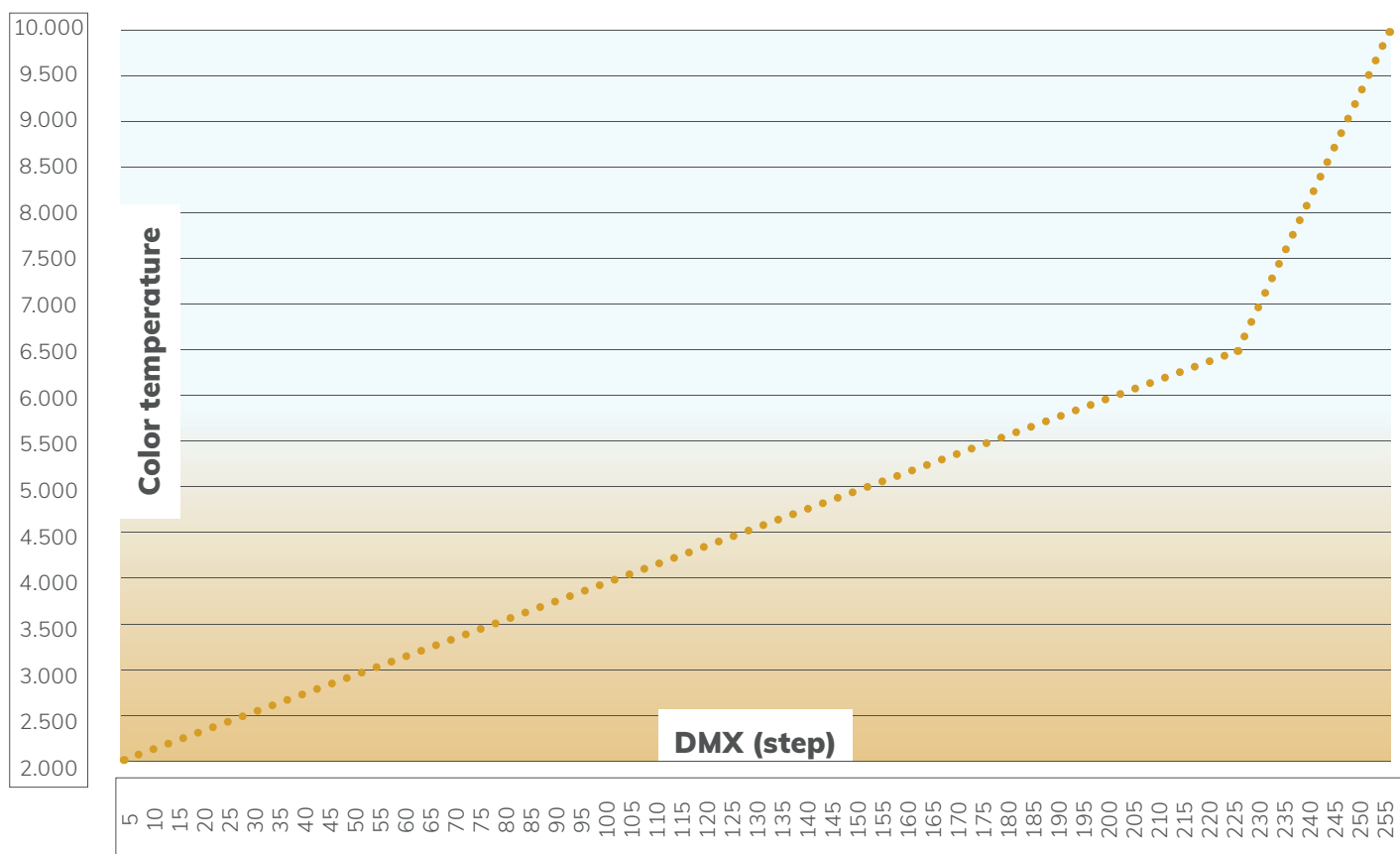


Below you can see the layout of the controllable sections for the NEO, when „Invert“ is activated in settings:



## CTC channel

### DMX / Color temperature





## CTC-Chart

| DMX (Step) | Color Temp (°K) | DMX (Step) | Color Temp (°K) | DMX (Step) | Color Temp (°K) | DMX (Step) | Color Temp (°K) | DMX (Step) | Color Temp (°K) | DMX (Step) | Color Temp (°K) |
|------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|
| 0          | 5600            | 43         | 2774            | 86         | 3649            | 129        | 4525            | 172        | 5400            | 215        | 6276            |
| 1          | 5600            | 44         | 2794            | 87         | 3670            | 130        | 4545            | 173        | 5421            | 216        | 6296            |
| 2          | 5600            | 45         | 2814            | 88         | 3690            | 131        | 4566            | 174        | 5441            | 217        | 6317            |
| 3          | 5600            | 46         | 2835            | 89         | 3710            | 132        | 4586            | 175        | 5462            | 218        | 6337            |
| 4          | 5600            | 47         | 2855            | 90         | 3731            | 133        | 4606            | 176        | 5482            | 219        | 6357            |
| 5          | 2000            | 48         | 2876            | 91         | 3751            | 134        | 4627            | 177        | 5502            | 220        | 6378            |
| 6          | 2020            | 49         | 2896            | 92         | 3771            | 135        | 4647            | 178        | 5523            | 221        | 6398            |
| 7          | 2041            | 50         | 2916            | 93         | 3792            | 136        | 4667            | 179        | 5543            | 222        | 6419            |
| 8          | 2061            | 51         | 2937            | 94         | 3812            | 137        | 4688            | 180        | 5563            | 223        | 6439            |
| 9          | 2081            | 52         | 2957            | 95         | 3833            | 138        | 4708            | 181        | 5584            | 224        | 6459            |
| 10         | 2102            | 53         | 2977            | 96         | 3853            | 139        | 4729            | 182        | 5604            | 225        | 6480            |
| 11         | 2122            | 54         | 2998            | 97         | 3873            | 140        | 4749            | 183        | 5624            | 226        | 6500            |
| 12         | 2143            | 55         | 3018            | 98         | 3894            | 141        | 4769            | 184        | 5645            | 227        | 6621            |
| 13         | 2163            | 56         | 3038            | 99         | 3914            | 142        | 4790            | 185        | 5665            | 228        | 6741            |
| 14         | 2183            | 57         | 3059            | 100        | 3934            | 143        | 4810            | 186        | 5686            | 229        | 6862            |
| 15         | 2204            | 58         | 3079            | 101        | 3955            | 144        | 4830            | 187        | 5706            | 230        | 6983            |
| 16         | 2224            | 59         | 3100            | 102        | 3975            | 145        | 4851            | 188        | 5726            | 231        | 7103            |
| 17         | 2244            | 60         | 3120            | 103        | 3995            | 146        | 4871            | 189        | 5747            | 232        | 7224            |
| 18         | 2265            | 61         | 3140            | 104        | 4016            | 147        | 4891            | 190        | 5767            | 233        | 7345            |
| 19         | 2285            | 62         | 3161            | 105        | 4036            | 148        | 4912            | 191        | 5787            | 234        | 7466            |
| 20         | 2305            | 63         | 3181            | 106        | 4057            | 149        | 4932            | 192        | 5808            | 235        | 7586            |
| 21         | 2326            | 64         | 3201            | 107        | 4077            | 150        | 4952            | 193        | 5828            | 236        | 7707            |
| 22         | 2346            | 65         | 3222            | 108        | 4097            | 151        | 4973            | 194        | 5848            | 237        | 7828            |
| 23         | 2367            | 66         | 3242            | 109        | 4118            | 152        | 4993            | 195        | 5869            | 238        | 7948            |
| 24         | 2387            | 67         | 3262            | 110        | 4138            | 153        | 5014            | 196        | 5889            | 239        | 8069            |
| 25         | 2407            | 68         | 3283            | 111        | 4158            | 154        | 5034            | 197        | 5910            | 240        | 8190            |
| 26         | 2428            | 69         | 3303            | 112        | 4179            | 155        | 5054            | 198        | 5930            | 241        | 8310            |
| 27         | 2448            | 70         | 3324            | 113        | 4199            | 156        | 5075            | 199        | 5950            | 242        | 8431            |
| 28         | 2468            | 71         | 3344            | 114        | 4219            | 157        | 5095            | 200        | 5971            | 243        | 8552            |
| 29         | 2489            | 72         | 3364            | 115        | 4240            | 158        | 5115            | 201        | 5991            | 244        | 8672            |
| 30         | 2509            | 73         | 3385            | 116        | 4260            | 159        | 5136            | 202        | 6011            | 245        | 8793            |
| 31         | 2529            | 74         | 3405            | 117        | 4281            | 160        | 5156            | 203        | 6032            | 246        | 8914            |
| 32         | 2550            | 75         | 3425            | 118        | 4301            | 161        | 5176            | 204        | 6052            | 247        | 9034            |
| 33         | 2570            | 76         | 3446            | 119        | 4301            | 162        | 5197            | 205        | 6072            | 248        | 9155            |
| 34         | 2590            | 77         | 3466            | 120        | 4342            | 163        | 5217            | 206        | 6093            | 249        | 9276            |
| 35         | 2611            | 78         | 3486            | 121        | 4362            | 164        | 5238            | 207        | 6113            | 250        | 9397            |
| 36         | 2631            | 79         | 3507            | 122        | 4382            | 165        | 5258            | 208        | 6133            | 251        | 9517            |
| 37         | 2652            | 80         | 3527            | 123        | 4403            | 166        | 5278            | 209        | 6154            | 252        | 9638            |
| 38         | 2672            | 81         | 3548            | 124        | 4423            | 167        | 5299            | 210        | 6174            | 253        | 9759            |
| 39         | 2692            | 82         | 3568            | 125        | 4443            | 168        | 5319            | 211        | 6195            | 254        | 9879            |
| 40         | 2713            | 83         | 3588            | 126        | 4464            | 169        | 5339            | 212        | 6215            | 255        | 10000           |
| 41         | 2733            | 84         | 3609            | 127        | 4484            | 170        | 5360            | 213        | 6235            |            |                 |
| 42         | 2753            | 85         | 3629            | 128        | 4505            | 171        | 5380            | 214        | 6256            |            |                 |

## 7.5 RDM Templates\*

The ROXX NEO features support for various RDM functions. RDM (Remote Device Management) is a protocol enhancement to USITT DMX512 that allows bi-directional communication between the fixtures and the controller over a standard DMX line. This protocol will allow configuration, status monitoring and management. You will need a RDM controller to get control over the supported parameters. See the tables below for supported RDM features.

|               |           |
|---------------|-----------|
| Label:        | ROXX NEO  |
| Model:        | NEO       |
| Manufacturer: | ROXX      |
| ID:           | 6A6Ah     |
| Device ID:    | 0137 xxxx |

**\*Note: During RDM identifying process NEO flashes white to blue color alternately.**

### RDM functions

For easy identifying ROXX NEO during RDM process the unit will jump from white color to blue color every second.

| PID    | Function                | Action | Values   |
|--------|-------------------------|--------|--|
| 0x00F0 | DMX Start Adress        | Set    | 001-512  |
| 0x00E0 | DMX Personality         | Set    | DMX modes  |
| 0x00E1 | DMX Slots               | Read   | Channels   |
| 0x8010 | Fan Mode                | Set    | 1= Auto 1 / 2= Auto 2 / 3= Silent / 4= Studio / 5= Fan Off / 6= Max. Power                           |
| 0x8030 | Dimmer Curve            | Set    | 1= Linear / 2= Exponential / 3= Logarithmic / 4= S-Curve   |
| 0x8031 | Dimmer Response         | Set    | 1= LED / 2= Halogen  |
| 0x8032 | Redshift                | Set    | 0= Off / 1= On   |
| 0x8033 | Color Calibration       | Set    | 0= Normal CRI / 1= High CRI  |
| 0x8034 | RAW Balance             | Set    | 0= RAW / 1= User Calibration   |
| 0x8035 | User Calibration- Red   | Set    | 000-255  |
| 0x8036 | User Calibration- Green | Set    | 000-255  |
| 0x8037 | User Calibration- Blue  | Set    | 000-255  |
| 0x8038 | User Calibration- Lime  | Set    | 000-255  |
| 0x8040 | LED Frequency (PWM)     | Set    | 1= 800Hz / 2= 1200Hz / 3= 2000Hz / 4= 3600Hz / 5= 12kHz / 6= 25kHz                                   |
| 0x8041 | Startup Mode            | Set    | 0= DMX / 1= AUTO FX / 2= Editor / 3= Color Macro / 4= Quick Color / 5= Tunable White / 6= User Color |
| 0x8011 | DMX Fail                | Set    | 1= Hold / 2= Blackout / 3= Emergency   |
| 0x8012 | Display Backlight       | Set    | 0= Off / 1= On   |
| 0x8013 | Display Auto Flip       | Set    | 0= Off / 1= On   |
| 0x8017 | Display Lock            | Set    | 0= Off / 1= On   |
| 0x8018 | CRMX Operating Mode     | Set    | 0= RX / 1= TX  |
| 0x8019 | CRMX Receive Reset      | Set    | 0= No / 1= Yes   |
| 0x801A | CRMX Transmit Link      | Set    | 0= No / 1= Yes   |
| 0x801B | CRMX Pass to DMX out    | Set    | 0= No / 1= Yes   |
| 0x801C | Bluetooth               | Set    | 0= Off / 1= On   |
| 0x801D | Bluetooth Link          | Set    | 0= No / 1= Yes   |
| 0x8048 | Protocol                | Set    | 1=DMX / 2= Slave   |
| 0x8045 | Battery Runtime         | Set    | 0= Off / 1= 1h / 2= 2h / 3= 3h / 4= 4h / 5= 5h / 6= 6h / 7= 7h / 8= 8h                               |
| 0x8049 | Invert Mapping          | Set    | 0= Off / 1= On   |

|         |                      |      |                |
|---------|----------------------|------|----------------|
| 0x801E  | Factory Reset        | Set  | 0= No / 1= Yes |
| 0x801F  | User Reset           | Set  | 0= No / 1= Yes |
| 0x00C0  | Firmware Version     | Read | n.a.           |
| 0x0082  | Serial Number        | Read | n.a.           |
| 0x0400  | Device Power on Time | Read | n.a.           |
| 0x0401  | LED on Time          | Read | n.a.           |
| Sensor1 | LED Temperature      | Read | n.a.           |
| Sensor2 | Fan Speed            | Read | n.a.           |

\* For more and detailed information about the different reset options please refer to chapter "5.4.6.1 Reset functions"

## Sensors

RDM enables various readouts for remote device monitoring. See the table below for sensors and sensor types. Please note: The RDM controller communicates with the fixtures to show only the available sensors for this fixture. The table is subject to change without notice.

| Name             |              |
|------------------|--------------|
| Temperature      | xx°C / xxx°F |
| Software Version | SW-Version   |
| Errors           |              |

## 8. TROUBLESHOOTING

Did you try turning the device off and on again?

| Problem                        | Reason  | Solution   |
|--------------------------------|---|--|
| Device is not responding.      | No power.   | Check cable connections and conform that power is switched on.   |
|                                | Fuse defect.  | Contact your qualified service technician / manufacturer.  |
| Device has turned off.         | Power failure or power was turned off.                    | Check power supply, fuse, connections, switches.   |
| Device has stopped responding. | DMX cable correct?  | Check cables.  |
|                                | Wireless connection got cut off.                          | Check wireless transmitter and connection signals.   |
| Device operates strangely.     | DMX cable inverted (pins correct?)                        | Use a phase inverter or different cables.  |
|                                | DMX cable terminated?                                     | If not, install DMX termination at the end of the cable.   |
|                                | Stand Alone program running?                              | Stop internal Stand Alone.   |
| No Bluetooth Connectivity      | No Bluetooth Connectivity                                 | Please make sure your mobile device is inside the connectivity range of maximum 10-15m.  |
|                                | Bluetooth is disabled at your mobile device               | Please enable Bluetooth at your mobile device settings.  |
|                                | Mobile device has wrong Bluetooth Pin                     | Please use same Bluetooth Pin to connect ROXX. APP with the fixture. Current BLE Pin can be read out inside fixture's wireless DMX settings. |
|                                | Mobile device has different Bluetooth connectivity        | As only one Bluetooth connectivity can be active, please make sure your mobile device is currently not connected to some other devices.      |
|                                | Different mobile device is still connected to the fixture | Please disconnect other mobile device from fixture.  |
|                                | No Bluetooth Advertisement                                | Please send new BLE advertisement by enable "BLE Link" inside Settings of the fixture.   |
|                                | Bluetooth module has hang up                              | Please enable Factory Reset at the fixture to re-start the Bluetooth module.   |

## 9. MANUFACTURER'S DECLARATION

### Manufacturer's Warranty & Limitations of Liability

Please find our warranty conditions and limitations of liability inside our manufacturer's declaration at [www.roxxlight.com/support](http://www.roxxlight.com/support)

### Requesting Warranty-Service

To request warranty service for your product, please contact:

ROXX GmbH,

Hansestr. 91, 51149 Köln

Email: [info@roxxlight.com](mailto:info@roxxlight.com) or the ROXX authorized reseller in your country, from where you purchased your product.

### Correct Disposal of this product



This is for the European Union and European countries with electrical waste collection systems. When this label is shown on the product or brochure it means that the item cannot be disposed with household waste. In order to prevent damage to the environment or human health please do not dispose this product uncontrolled. Make sure to act responsible, recycle this product separately from other types of waste to enable lasting reuse of resources. Private users please contact the retailer where you purchased this product or your local authorities to find out where and how proper recycling of this item is possible. Business users please contact your supplier or check the terms and conditions of your purchasing contract. Make sure not to mix this product with other commercial waste.

### FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## CE Compliance

The equipment marketed by ROXX GmbH complies (where applicable) with the essential requirements and other specifications of the following Directives:

- 2014/53/EU (RED)
- 2014/30/EU (EMC)
- 2014/35/EU (LVD)
- 2011/65/EU (RoHS)

The complete EU- and UK-Declaration of Conformity can be found at [www.roxxlight.com/support](http://www.roxxlight.com/support), or you can also request it at [info@roxxlight.com](mailto:info@roxxlight.com)

