

**E.SHOW** mini TW+  
**E.SHOW** mini FC



USER MANUAL

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## 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 authorized 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..



- 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. E.SHOW mini TW+ / E.SHOW mini FC

With the SHOW mini series, ROXX® continues to meet the demand for very powerful, weatherproof lighting for the entertainment and architectural sectors and offers a battery version as an important innovation. The flexibility and variety of options previously offered by its bigger brother E.SHOW in terms of light quality, size and accessories is now even more pronounced thanks to the completely wireless application option, offering customers that certain extra freedom of choice. The E.SHOW mini is the tool for stage, trade fair, theatre or film, now even more compact. The E.SHOW mini includes two LED versions, the already familiar Tunable White (RGBALC) and Full Color. Designed for indoor and outdoor use, the luminaire is IP65 certified and made of robust die-cast aluminium. In addition to control via DMX, RDM or standalone, ROXX® integrates the wireless technology of the Swedish manufacturer Lumenradio. The integrated Bluetooth interface enables direct control via an iOS device using ROXX.APP. The ROXX® E.SHOW mini series uses the already popular single-source LEDs that produce a very uniform, powerful light without colour or multi-shadows, and LED variants including a Tunable White (RGBALC) and a Full Colour (RGB+Lime) version. Both circular and elliptical emitting Micro Fresnel lenses can be changed easily, quickly and without tools, as usual, thanks to the specially developed and protected ROXX® R.LOK® technology. The beam angle can thus be conveniently adjusted, whether 14°, 23°, 35°, 52° or elliptical 30° x 15° and 46° x 17.5°.

### 3. GENERAL PRODUCT INFORMATION

#### 3.1. Scope of delivery

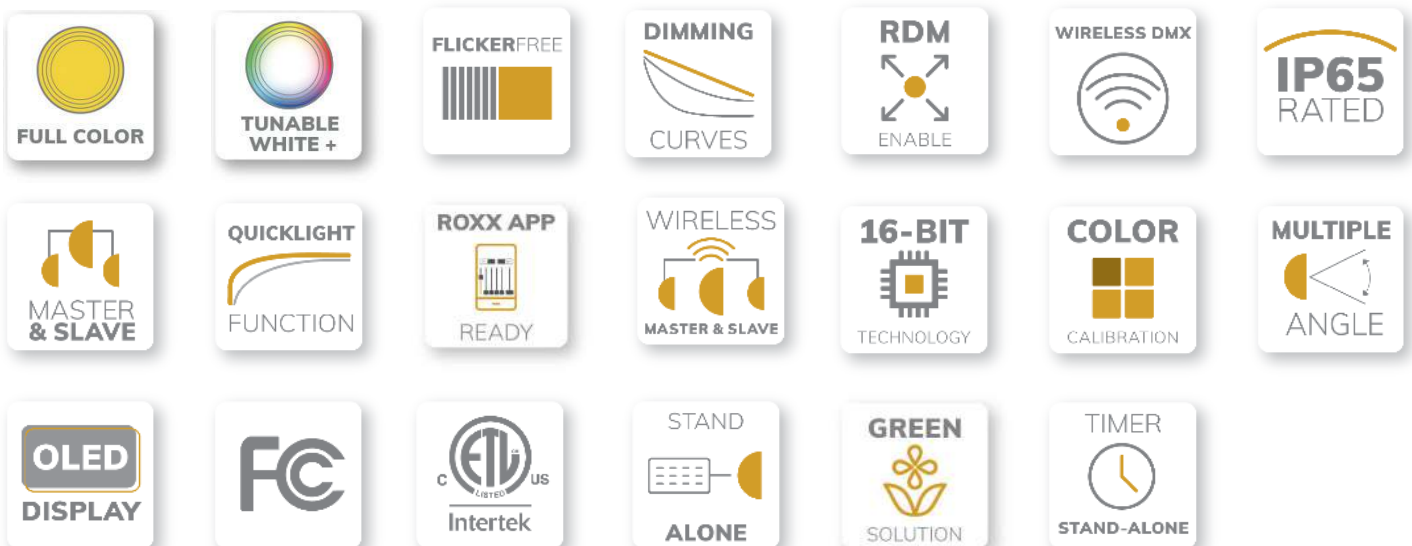
- ⊕ 1x E.SHOW mini TW+ / E.SHOW mini FC
- ⊕ 1x Power cord with plug (EU country specific, if not ordered differently)
- ⊕ 1x Pendant luminaire closing caps

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

- E.SHOW mini TW+:  
3CH CCT, 3CH RGB, 6CH RGB, 9CH RGB, 11CH RGB, 14CH RGB, 6CH DIRECT, 12CH DIRECT, 13CH DIRECT, 20CH DIRECT, <3CH HSI, 10CH HSI
- E.SHOW mini FC :  
3CH CCT, 3CH RGB, 6CH RGB, 9CH RGB, 11CH RGB, 14CH RGB, 4CH DIRECT, 8CH DIRECT, 11CH DIRECT, 16CH DIRECT, 3CH HSI, 10CH HSI
- Stand Alone Functions including cinema effects, various auto programs, customisable scenes, CCT, LEE adjusted color macros and custom color templates.
- Master & Slave (by DMX and Wireless DMX)
- Wireless DMX (Lumenradio CRMX®)
- ROXX App - Bluetooth 5.0

#### 3.3. Features





## 4. INSTALLATION & SETUP

### 4.1 Physical Installation and Rigging

ROXX E.SHOW mini TW+ / E.SHOW mini FC may be installed in any orientation. For this purpose the product provides several options:

#### Standing:

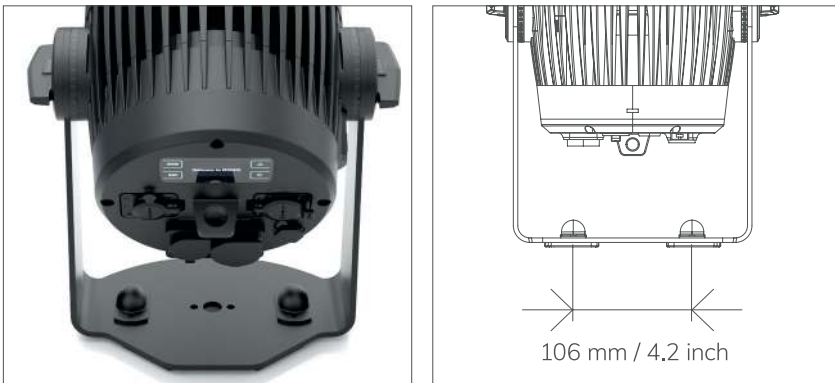
The fixtures yoke with its implemented rubber feet is designed to ensure a secure stand on nearly every plane surface with every possible angle/orientation of the lamp's head. Please take care that supporting surfaces are loadable and stable.

#### Hanging:

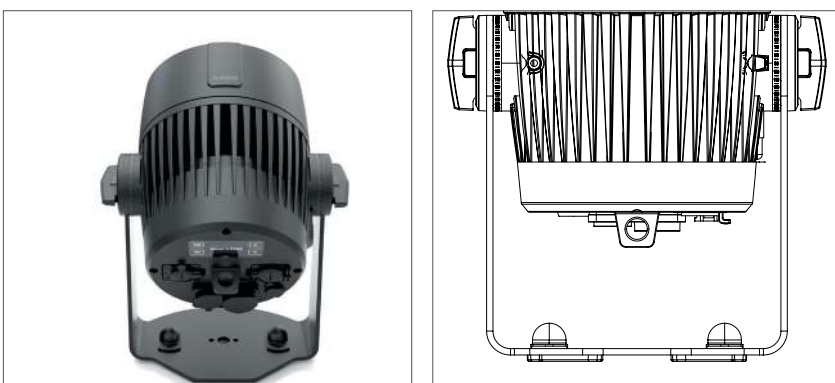
On the bottom the yoke provides 2 Camlock QuickRelease connectors. Here it's possible to click in the ROXX Omega Bracket ST (optional accessory) equipped with any suitable clamp.



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



A centric hole on the yoke's bottom ( $d=13\text{mm} / 0,51\text{ inch}$ ) provides a mounting point for more rigging options. Next to it, two additional holes allow the perfect connection of a TV spigot, to use the E.SHOW mini TW+ / E.SHOW mini FC on a tripod or for example with a superclamp.

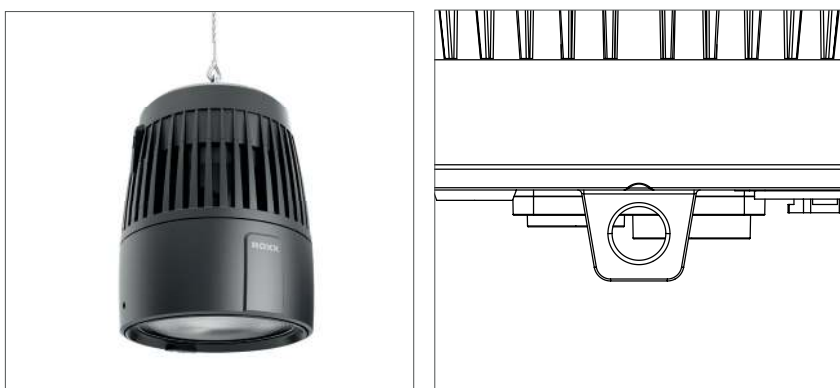


### Pendant Light\*:

The sophisticated and attractive design of the ROXX E.SHOW mini TW+ / E.SHOW mini FC makes the luminaire predestinated for the use as a pendant light, e.g. for exhibition booths, galas,... The position of the safety eyelet and the lamp body balancing makes that possible in a perfect way. Dismount the Yoke by turning out the both wing screws completely and detach them together with the Yoke and the scaled plastic parts. Seal the apertures with the 2pcs covering "Pendant Caps" (included). Use the safety eyelet for hanging down the ROXX E.SHOW mini TW+ / E.SHOW mini FC.

#### ⓘ Note:

To hang down the fixture as a pendant light with only one wire and without the need of a secondary safety the setup has to be done as a „stationary installation“. Please mounting material, that is not dismountable without tools (e.g. halfcoupler with nut and chain link).



Also in this application, please take care of the current requirements and regulations for dimensioning and design of the used wires, clamps and all other possible mounting materials.

⚠ Always take care of an adequate distance between the fixture and surrounding surfaces and be sure to keep the fans outlets free for good ventilation.

## 4.2 Connections\*



**A: Mains In:** IP65 Power input connector with rubber sealing cap. Connect using the provided power cable (when not in use, always close with rubber sealing cap).

**B: Mains Out:** IP65 Power output connector with rubber sealing cap. Provides power to additional fixtures. Ensure that the total power consumption of all daisy-chained devices connected do not exceed 8A (Ampere)! (when not in use, always close with rubber sealing cap).

**C: DMX IN:** Male IP65 5-pin XLR connector (when not in use, always close with rubber sealing cap).

**D: DMX OUT:** Female IP65 5-pin XLR connector when not in use, always close with rubber sealing cap).

**E:** Safety Eyelet

**F:** Gore Tex

#### ⓘ \*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.

#### 4.2.1.1 AC Power

The ROXX E.SHOW mini TW+ / E.SHOW mini FC operates on any 100–260 V, 50/60 Hz AC mains power supply with a maximum power consumption of 220W.

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 ⊚



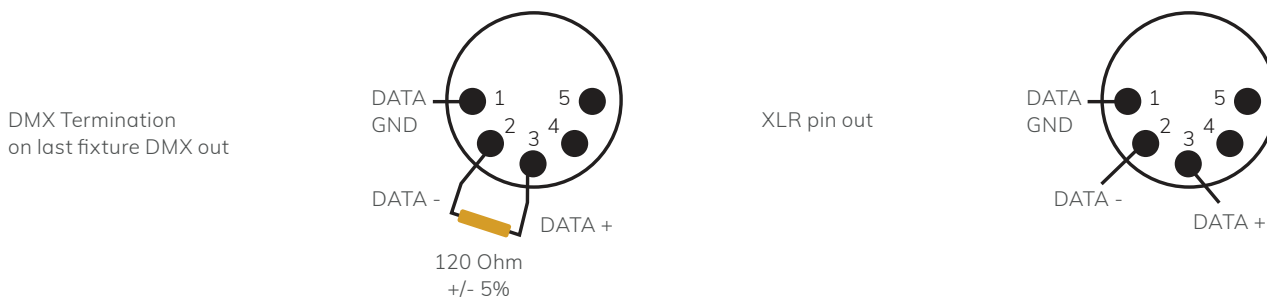
#### Warning!

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. DMX Connection

The E.SHOW mini TW+ / E.SHOW mini FC 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.



##### 4.2.2.1. 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.

##### 4.2.2.2. Wireless Connection\*

E.SHOW mini TW+ / E.SHOW mini FC 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.

E.SHOW mini TW+ / E.SHOW mini FC 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.**

#### 4.2.2.2. Wireless Connection

11 CH RGB

**1**  
Next  
( 12 )

•DMX

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

11 CH RGB

**1**  
Next  
( 12 )

• CRMX(RX)  
DMX


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

11 CH 1RGB

**1**  
Next  
( 12 )

• CRMX(TX)  
DMX


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

 11 CH RGB

**1**  
Next  
( 12 )

• 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.  1 dash= 1-30% signal strength 2 dashes= 31-70% signal strength 3 dashes= 71-100% signal strength
Operation Mode	<b>RX</b>	
Linked	<b>Yes</b>	
Receive Reset	Yes	
DMX	Disconnect	
BLE (Bluetooth)	Disabled	

 11 CH RGB

**1**  
Next  
( 12 )

• 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.  1 dash= 1-30% signal strength 2 dashes= 31-70% signal strength 3 dashes= 71-100% signal strength
Operation Mode	<b>TX</b>	
Linked	<b>Yes</b>	
Receive Reset	Yes	
DMX	Disconnect	
BLE (Bluetooth)	Disabled	


 11 CH RGB

**1**  
Next  
( 12 )

• 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	

#### 4.2.2.2. Wireless Connection


  
**11 CH**  
**RGB**

**1**  
 Next  
 ( 12 )

• **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	

**11 CH**  
**RGB**

**1**  
 Next  
 ( 12 )

• **BLE**  
**DMX**


CRMX	Disabled	The indicator in front 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>	


  
**11 CH**  
**RGB**

**1**  
 Next  
 ( 12 )

**CRMX(TX)**  
• **BLE**  
**DMX**


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


  
**11 CH**  
**RGB**

**1**  
 Next  
 ( 12 )

**CRMX(TX)**  
**BLE**  
**DMX**

CRMX	<b>Enabled</b>	No indicator in front 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>	


  
**11 CH**  
**RGB**

**1**  
 Next  
 ( 12 )

**CRMX(TX)**  
**BLE**  
• **DMX**

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

## 5. OPERATION

### 5.1 Start up\*

Once the fixture is switched On, 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\*

**ENTER** OLED Display with Touch-Sensitive controls

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

**▲ ▼** 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:**

For a smooth navigation thru the menu settings, please make sure the display surface is dry and dust free.

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\*

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:**

After Factory Reset all fixture settings are set back to factory default values.

After User Reset all user selected reset functions and user default values will set back.

Also a short self-test will start immediately while dimming in and out each single color.

### 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.

### BLE enabled / disabled



Pressing ESC + Arrow Up simultaneously the Bluetooth will enabled or disabled. Confirm by pressing ENTER, step back by pressing ESC.

### Manual display flip function\*

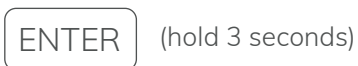


Use the manual display flip function by pressing arrow up + arrow down simultaneously. The display will rotate 180. By pressing both arrows simultaneously again the display will flip back.

#### \*Note:

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

### Quick Light function



For easy and fast operation during setting the lights the fixture includes a user-friendly Quick Light function (Daylight 5600 Kelvin). If DMX, CRMX or Bluetooth is not assigned please press and hold ENTER for 3 seconds at homescreen, after the Quick Light function will appear.

Here dimmer can be adjusted from 0-100% by using up/down arrows, to take over the dimming value please press ENTER to confirm.



## 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:

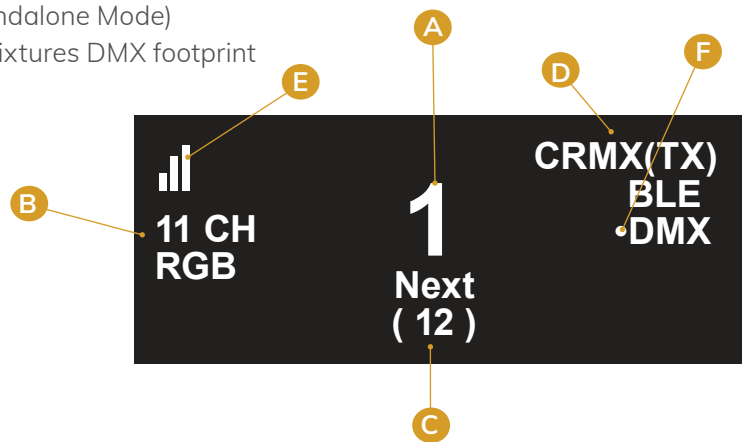
- A DMX Address
- B Operating Mode (DMX Mode, Quick Light or Standalone Mode)
- C Next available DMX address depending on the fixtures DMX footprint
- D External Data protocol (CRMX, DMX, BLE).
- E CRMX status and strength
- F The dot indicates the active protocol

Note:

**CRMX (RX)** CRMX Receiving Mode

**CRMX (TX)** CRMX Transmit Mode

**BLE** Bluetooth enabled



#### 5.4.1 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 12 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
DMX Mode
Stand Alone
Slave
Settings
System Info

Level 2 | E.SHOW mini TW+

DMX Mode
3CH CCT
3CH RGB
6CH RGB
9CH RGB
<b>11CH RGB</b> (default)
14CH RGB
6CH DIRECT
12CH DIRECT
13CH DIRECT
20CH DIRECT
3CH HSI
10CH HSI

Level 2 | E.SHOW mini FC

DMX Mode
3CH CCT
3CH RGB
6CH RGB
9CH RGB
<b>11CH RGB</b> (default)
14CH RGB
4CH DIRECT
8CH DIRECT,
11CH DIRECT
16CH DIRECT
3CH HSI
10CH HSI

### 5.4.2 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
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

#### Auto\*

Select “Auto” by using the up/down arrows and press ENTER. Here at sub-menu (level 3), you can choose between 10 different Auto Programs (7-Color Fade, 7-Color Jump, 15-Color Fade, 15-Color Jump, Police RB, Police B, Candle Light, Fireworks, Red Carpet and Welding) 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. 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. 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>
<b>(Default 50)</b>
Dim <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 RGBALC (E.SHOW mini TW+) or RGBAL (E.SHOW mini FC) 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.

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 "Color Calibration" is selected under "Color Settings" inside Stand Alone, only values for RGB for the center LED 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 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

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 - E.SHOW mini TW+

Scene	
Red	<0-255>
Green	<0-255>
Blue	<0-255>
Amber	<0-255>
Lime	<0-255>
Cyan	<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>

Level 5 - E.SHOW mini FC

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\***

44 different color macros (34x matched LEE color filters, 4 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 "Center" or "Halo" and confirm by pressing ENTER again.

At level 4 select your desired color preset and confirm with ENTER, 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
7	Deep Amber	LEE 104	23	Med Blue	LEE 132	39	Halogen White	3200K
8	Orange	LEE 105	24	Congo Blue	LEE 181	40	Neutral White	4200K
9	Deep Golden Amber	LEE 135	25	Mikkel Blue	LEE 716	41	Daylight White	5600K
10	Yellow	LEE 101	26	Rose Pink	LEE 002	42	Cold White I	6000K
11	Green	100% Green LED	27	Med Pink	LEE 036	43	Cold White II	6300K
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 Dimmer and Shutter.

Level 1	Level 2	Level 3   E.SHOW mini TW+	Level 3   E.SHOW mini FC																															
<table border="1"> <thead> <tr> <th>Menu</th> </tr> </thead> <tbody> <tr><td>DMX Mode</td></tr> <tr><td>➤ Stand Alone</td></tr> <tr><td>Slave</td></tr> <tr><td>Set-tings</td></tr> </tbody> </table>	Menu	DMX Mode	➤ Stand Alone	Slave	Set-tings	<table border="1"> <thead> <tr> <th>Stand Alone Mode</th> </tr> </thead> <tbody> <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> </tbody> </table>	Stand Alone Mode	Stop Stand Alone	Auto	Editor	Color Macro	➤ Quick Color	Tunable White	User Color	Timer	Color Settings	<table border="1"> <thead> <tr> <th>Quick Color</th> </tr> </thead> <tbody> <tr><td>Dimmer &lt;0-100&gt;</td></tr> <tr><td>Shutter &lt;0-255&gt;</td></tr> <tr><td>Red &lt;0-255&gt;</td></tr> <tr><td>Green &lt;0-255&gt;</td></tr> <tr><td>Blue &lt;0-255&gt;</td></tr> <tr><td>Amber &lt;0-255&gt;</td></tr> <tr><td>Lime &lt;0-255&gt;</td></tr> <tr><td>Cyan &lt;0-255&gt;</td></tr> </tbody> </table>	Quick Color	Dimmer <0-100>	Shutter <0-255>	Red <0-255>	Green <0-255>	Blue <0-255>	Amber <0-255>	Lime <0-255>	Cyan <0-255>	<table border="1"> <thead> <tr> <th>Quick Color</th> </tr> </thead> <tbody> <tr><td>Dimmer &lt;0-100&gt;</td></tr> <tr><td>Shutter &lt;0-255&gt;</td></tr> <tr><td>Red &lt;0-255&gt;</td></tr> <tr><td>Green &lt;0-255&gt;</td></tr> <tr><td>Blue &lt;0-255&gt;</td></tr> <tr><td>Lime &lt;0-255&gt;</td></tr> </tbody> </table>	Quick Color	Dimmer <0-100>	Shutter <0-255>	Red <0-255>	Green <0-255>	Blue <0-255>	Lime <0-255>
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Red <0-255>																																		
Green <0-255>																																		
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Lime <0-255>																																		

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 for Center- and Halo LED 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	Level 2	Level 3																					
<table border="1"> <thead> <tr> <th>Menu</th> </tr> </thead> <tbody> <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> </tbody> </table>	Menu	DMX Mode	➤ Stand Alone	Slave	Settings	System Info	<table border="1"> <thead> <tr> <th>Stand Alone Mode</th> </tr> </thead> <tbody> <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> </tbody> </table>	Stand Alone Mode	Stop Stand Alone	Auto	Editor	Color Macro	Quick Color	➤ Tunable White	User Color	Timer	Color Settings	<table border="1"> <thead> <tr> <th>Tunable White</th> </tr> </thead> <tbody> <tr><td>CCT &lt;5600&gt;</td></tr> <tr><td>TINT &lt;000&gt; (+/-127)</td></tr> <tr><td>Dimmer &lt;0-255&gt;</td></tr> <tr><td>Shutter &lt;0-255&gt;</td></tr> </tbody> </table>	Tunable White	CCT <5600>	TINT <000> (+/-127)	Dimmer <0-255>	Shutter <0-255>
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➤ Stand Alone																							
Slave																							
Settings																							
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CCT <5600>																							
TINT <000> (+/-127)																							
Dimmer <0-255>																							
Shutter <0-255>																							

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.**

**Tunable White is only available for Center LED.**

**User Color\***

The standalone mode “User Color” allows to store up to 5 customized color presets.

Level 1	Level 2	Level 3	Level 4   E.SHOW mini TW+	Level 4   E.SHOW mini FC																																					
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Lime <0-255>																																									

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 RGBALC (E.SHOW mini TW+) / RGLB (E.SHOW mini FC) 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.

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

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.

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 "Color Calibration" or "RAW". Full Calibration RGBALC (E.SHOW mini TW+) / RGBL (E.SHOW mini FC) 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
➤ Color Calibration
RAW

### 5.4.3 Slave Mode\*

Slave Mode allows same model fixtures to be controlled by the “Master” fixture via DMX or wireless DMX (CRMX). The “Master” device should run in Stand Alone mode, all “Slave” devices should set to “Slave”.

Level 1

Menu
DMX Mode
Stand Alone
➤ Slave
Settings
System Info

To select “Slave” please press ENTER to access to main menu (level 1).

While using the UP / DOWN arrows, please select the menu item “Slave” and confirm by pressing ENTER. Now this unit is set to “Slave”. Please connect the slave and the master devices (same model) either with a DMX cable or via wireless DMX and enable one of your preferred standalone mode on the master device. Once the Stand Alone mode is activated all slave devices will follow the master device. For using Master & Slave function via wireless DMX (CRMX), please activate CRMX transmit function at Master unit and CRMX receive function at all “Slave” units.

For detailed CRMX information please read chapter “Wireless DMX”.

ⓘ **Note: All devices should use same software version.**

### 5.4.4 Settings

Level 1

Menu
DMX Mode
Stand Alone
Slave
➤ Settings
System Info

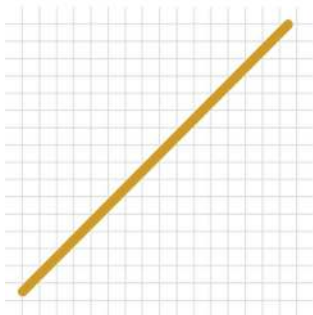
Main Menu	Menu level 2	Menu level 3	Menu level 4	Description
Settings	Wireless DMX	CRMX	<on/off>	On=CRMX enabled / Off= CRMX disabled
		Operating Mode	<receive/transmit>	Receive= CRMX module as Receiver Transmit= CRMX module as Transmitter
		Transmit Link	<no/yes>	Yes= pair with CRMX devices. CRMX must be activated on all devices and the pairing must be picked up by a transmitter (Receive Reset). No= Linking disabled
		Receive Reset	<no/yes>	Yes = retain transmitter pairing 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 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)	
	Display	Auto Flip	<on/off>	On= Auto-Display-Flip-Function enabled Off= Auto-Display-Flip-Function disabled
		Backlight	<on/off>	On= controls permanent on, display itself will deactivate after 60 minutes of inactivity 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!“ Unlock process: press arrows up, down, up, down consecutively
	Startup Mode (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				
Settings	DMX Fail	<b>Hold</b>		Hold= last command retains
		Blackout		Blackout= Activates Blackout
		Emergency Light		Emergency Light= Fixtures changes to 5600K
	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

Settings	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>Full Calibration</b>	Color & CCT Calibration	
		CCT Calibration	CCT only (RAW Colors)	
	<b>RAW Balance</b> E.SHOW mini TW+ (affects RAW Mode in DMX and Stand Alone Modes "Editor", "Quick Color" and "User Color").	<b>RAW</b>		RGBALC (E.SHOW mini TW+) / RGBL (E.SHOW mini FC) with maximum value of brightness)
		Red	<0-255>	individual color calibration for R,G,B,A,L and C
		Green	<0-255>	
		Blue	<0-255>	
		Amber	<0-255>	
		Lime	<0-255>	
	Cyan	<0-255>		
	<b>RAW Balance</b> E.SHOW mini FC+ RAW Balance (affects RAW Mode in DMX and Stand Alone Modes "Editor", "Quick Color" and "User Color").	<b>RAW</b>		RGBL with maximum value of brightness)
		Red	<0-255>	individual color calibration for R,G,B and 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				
Factory / User Reset	Factory Reset	Are you sure to reset? Confirm by pressing ENTER, cancel with ESC	Restores all factory defaults including User Colors, but no User defaults.	
	User Reset	Are you sure to reset? Confirm by pressing ENTER, cancel with ESC	Restores all User Reset according to the User Preset List. Timer Function and DMX address restore to Factory default. Once User Reset is activated a fixture self test will start.	

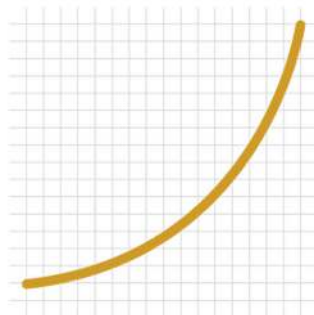
Main Menu	Menu level 2	Menu level 3	Menu level 4	Menu Level 5	Description
Settings	Factory / User Reset	User Reset List	DMX Mode <b>E.SHOW mini TW+</b>	3CH CCT / 3CH RGB / 6CH RGB, 9CH RGB / <b>11CH RGB</b> / 14CH RGB / 6CH DIRECT / 12CH DIRECT / 13CH DIRECT / 20CH DIRECT / 3CH HSI / 10CH HSI	Select your User Reset defaults
			DMX Mode <b>E.SHOW mini FC</b>	3CH CCT / 3CH RGB / 6CH RGB / 9CH RGB / <b>11CH RGB</b> / 14CH RGB / 4CH DIRECT / 8CH DIRECT, 11CH DIRECT / 16CH DIRECT / 3CH HS / 10CH HSI	
			CRMX	<on/off>	
			CRMX Operating Mode.	<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>	
			Auto Lock	<on/off>	
			Startup Mode	< <b>DMX</b> /Auto/Editor/Color Macro, Quick Color, Tunable White User Color>	
			DMX Fail	< <b>Hold</b> /Blackout/Emergency (5600K)>	
			Dimmer Curve	< <b>Linear</b> , Exponential, Logarithmic, S-Curve>	
			Dimmer Response	< <b>LED</b> , Halogen>	
			Color Calibration	<b>Full Calibration</b> / CCT Calibration	
RAW Balance	<b>RAW</b> / User Calibration				
LED Frequency	<800Hz, <b>1200Hz</b> , 2000Hz, 3600Hz, 12000Hz, 25000Hz>				

### Dimmer Curves

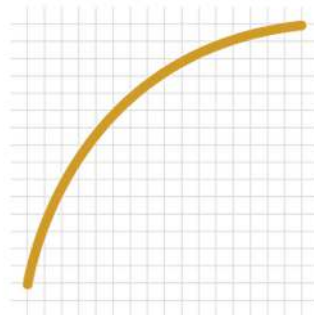
LINEAR



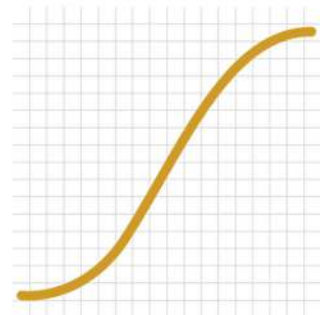
EXPONENTIAL



LOGARITHMIC



S-CURVE



### 5.4.5 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	E.SHOW mini TW+: 0112xxxxxxxxx E.SHOW mini FC: 0113xxxxxxxxx	
	RDM UID	E.SHOW mini TW+: 0X6a6a0112xxxx E.SHOW mini FC: 0X6a6a0113xxxx	Display unique RDM ID for identification
	Temperatures	Celsius LED : XXX°C or 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 Lenses

Available lenses for ROXX E.SHOW mini TW+ / E.SHOW mini FC with order numbers:



Very Narrow  
Art.: 11409701



Narrow  
Art.: 11408901



Medium  
Art.: 11409001



Wide  
Art.: 11409101



Elliptical Narrow  
Art.: 11409201



Elliptical Wide  
Art.: 11409301

#### Lens matrix E.SHOW mini TW+:

Lens	Beam / Field Angle	Distance							
		3m/9.8ft		5m/16.4ft		7m/23ft		10m/32.8ft	
		Illuminance lux	Diameter cm/feet	Illuminance lux	Diameter cm/feet	Illuminance lux	Diameter cm/feet	Illuminance lux	Diameter cm/feet
VN lens	14° / 25°	4130	73 / 2,4	1570	122 / 4,0	781	171 / 5,6	400	247 / 8,1
N lens	23° / 43°	2540	122 / 4,0	954	204 / 6,7	492	283 / 9,3	245	405 / 13,3
M lens	35° / 69°	888	189 / 6,2	327	314 / 10,3	171	442 / 14,5	85	631 / 20,7
W lens	52° / 86°	487	293 / 9,6	179	488 / 16,0	94	683 / 22,4	47	975 / 32,0
EN lens (v x h)	30° / 58° x 15° / 34°	1520	160 x 80 / 5,25 x 2,62	320	268 x 131 / 8,8 x 4,3	163	375 x 183 / 12,3 x 6,0	80	536 x 262 / 17,6 x 8,6
EW lens (v x h)	46° / 73,5° x 17,5° / 40°	1065	255 x 92 / 8,37 x 3,02	230	424 x 152 / 13,9 x 5,0	115	594 x 216 / 19,5 x 7,1	58	850 x 308 / 27,9 x 10,1

#### Lens matrix E.SHOW mini FC:

Lens	Beam / Field Angle	Distance							
		3m/9.8ft		5m/16.4ft		7m/23ft		10m/32.8ft	
		Illuminance lux	Diameter cm/feet	Illuminance lux	Diameter cm/feet	Illuminance lux	Diameter cm/feet	Illuminance lux	Diameter cm/feet
VN lens	14° / 25°	4200	73 / 2,4	1404	122 / 4,0	660	171 / 5,6	339	247 / 8,1
N lens	23° / 43°	1886	122 / 4,0	696	204 / 6,7	349	283 / 9,3	174	405 / 13,3
M lens	35° / 69°	725	189 / 6,2	264	314 / 10,3	135	442 / 14,5	66	631 / 20,7
W lens	52° / 86°	400	293 / 9,6	147	488 / 16,0	76	683 / 22,4	37	975 / 32,0
EN lens (v x h)	30° / 58° x 15° / 34°	1390	160 x 80 / 5,25 x 2,62	320	268 x 131 / 8,8 x 4,3	163	375 x 183 / 12,3 x 6,0	80	536 x 262 / 17,6 x 8,6
EW lens (v x h)	46° / 73,5° x 17,5° / 40°	924	255 x 92 / 8,37 x 3,02	230	424 x 152 / 13,9 x 5,0	115	594 x 216 / 19,5 x 7,1	58	850 x 308 / 27,9 x 10,1

## 6.2 More accessories



Safety Free  
Accessory Holder  
Art.: 11909401



8-Way Barndoor  
Art.: 11909501



Honey Comb  
Art.: 11909501



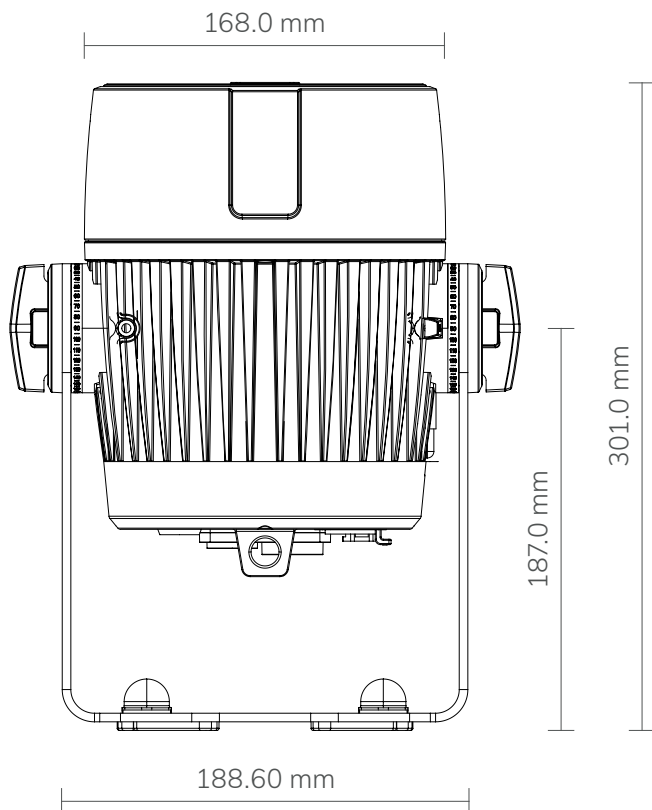
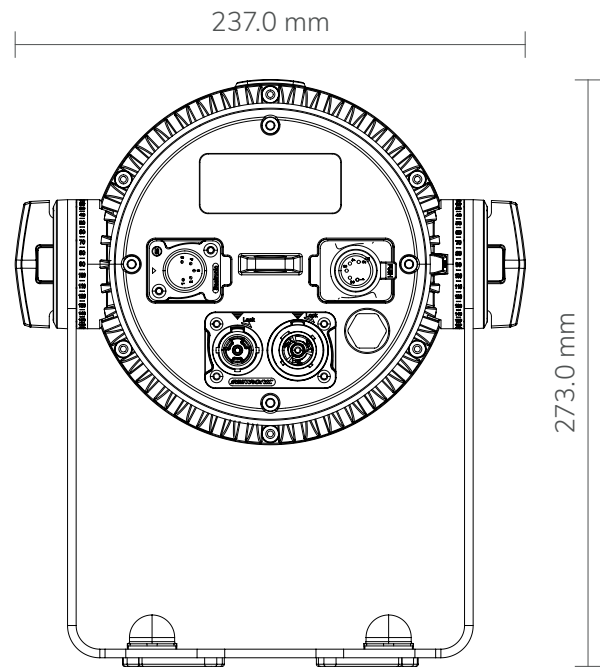
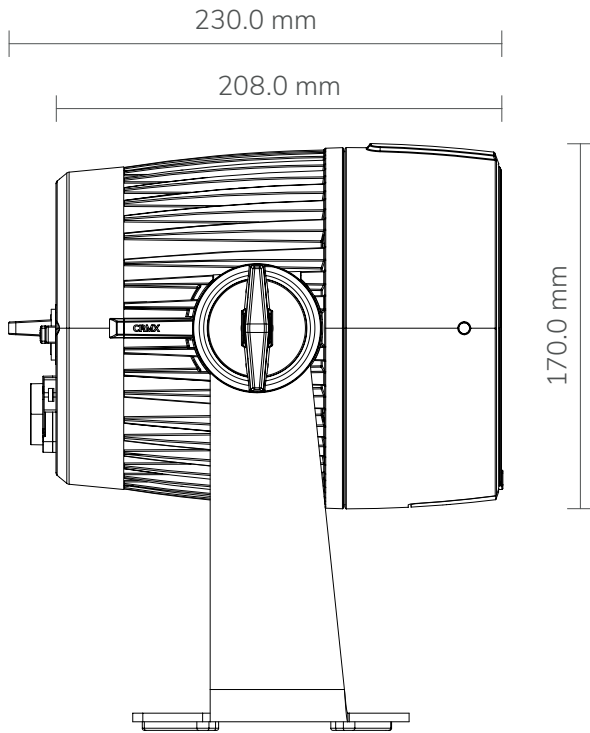
Omega Bracket ST  
Art.: 90900002



Full Anti-Glare Shield  
Art.: 11909801

## 7. TECHNICAL DATA / DIAGRAMS

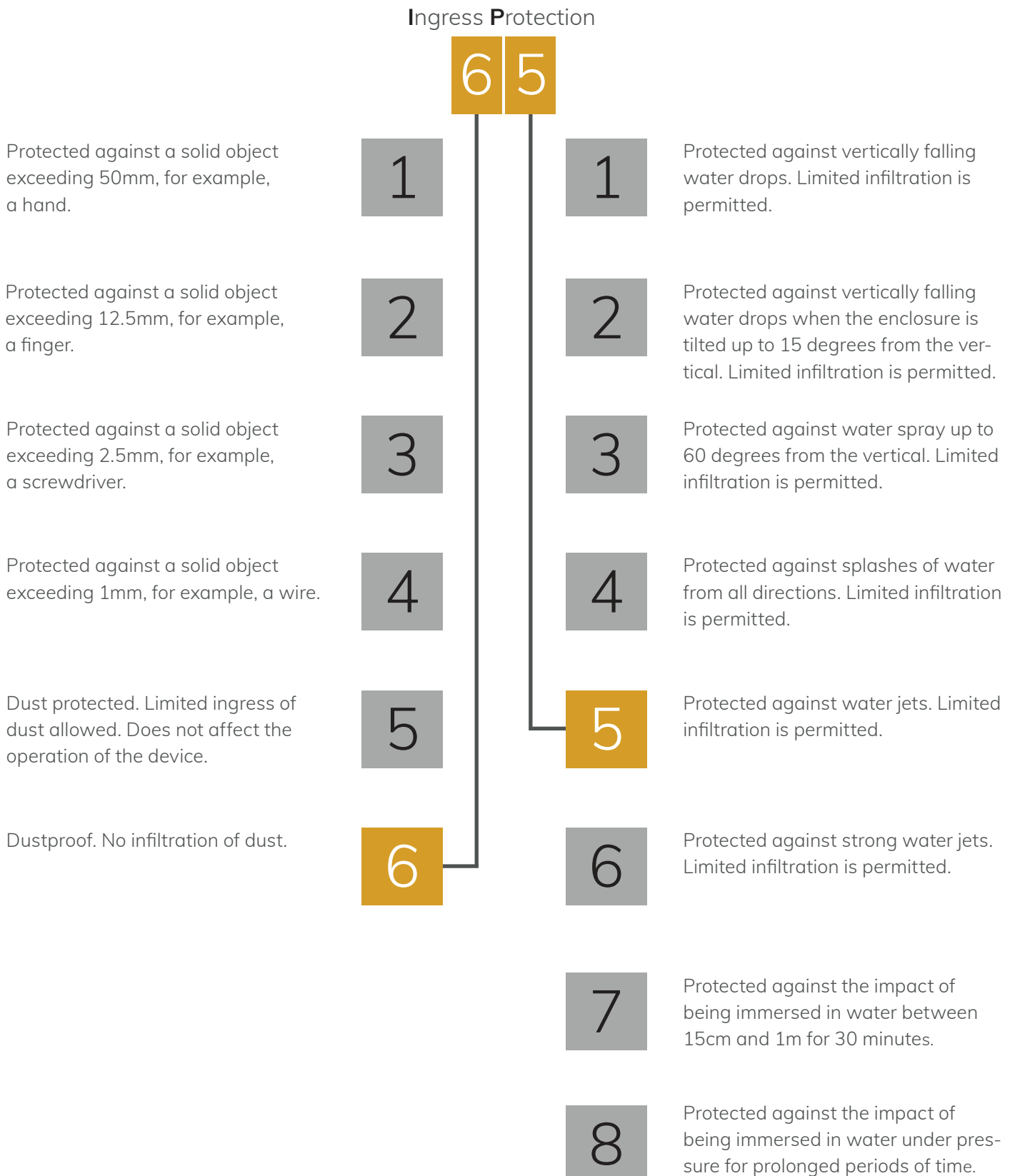
### 7.1 Technical drawings and measurements - ROXX E.SHOW mini TW+ / E.SHOW mini FC





## 7.2 IP Rating

ROXX products conform to officially classified IP standard levels. E.SHOW mini TW+ / E.SHOW mini FC 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 - E.SHOW mini TW+

Photometrics	
LED expected lifetime	50.000 hours
Lightsource	1x200W RGBALC
Type of optical system	reflector + interchangeable lens plates
LED PWM Frequency	selectable 800Hz, 1.200Hz, 2.000Hz, 3.600Hz, 12kHz, 25kHz
Beam angles (50%)	14° (with VN lens)
	23° (with N lens)
	35° (with M lens)
	52° (with W lens)
	30° x 15° (with EN lens)
	46° x 17,5° (with EW lens)
Maximum Field angles (10%)	25° (with VN lens)
	43° (with N lens)
	69° (with M lens)
	86° (with W lens)
	58° x 34° (with EN lens)
	73,5° x 40° (with EW lens)
Color temperature range	2.000-10.000K
CRI/Ra	97
TLCI	95
Efficacy (max)	38,14 lm/W
Luminous flux	4501 lm
illuminance Lux @ 3m (with VN lens)	4130lx
illuminance Lux @ 3m (with N lens)	2540lx
illuminance Lux @ 3m (with M lens)	888lx
illuminance Lux @ 3m (with W lens)	487lx
illuminance Lux @ 3m (with EN lens)	1520lx
illuminance Lux @ 3m (with EW lens)	1065lx
Dimensions & Weight	
IP class	IP65
Body material	Aluminum, Nylon
Lens material	Tempered glass front
Net dimensions (w x h x d)	170 x 273 x 230mm
Net dimensions inches	6,69 x 10,75 x 9,06 inches
Physical Head Straight Up Height	310mm (12,20 inches)
Net weight (including Yoke)	3,92 kg (8,64lbs)
Tilt	360°
Tilt Locking System	Locking system with angle indicator
Thermal Characteristics	
Cooling	Active, Forced Air, Temperature-regulated
Humidity (max.)	95%
Temperature range, Operating	-20°C to 45°C

### 7.3 Technical Data - E.SHOW mini TW+

Temperature range, Start-Up	-20° to 50°C
Temperature range, Storage	-20°C to 80°C
Thermal Protection	Automatic overtemperature protection
<b>Electrical Data</b>	
AC Power, max	90 – 285V 50/60Hz
AC Power, nominal	100 – 240V 50/60Hz
Electrical protection	Overload protection with automatic recover
Max Inrush Current	1,206A
Max power consumption	130W
Standby Power	5,5W
Max power thru @ 100 V	11A
Max power thru @ 230 V	11A
Power Factor	0.895 PF (230V) / 0.992 PF (120V)
Power Supply Unit	Inbuilt auto-ranging electronic switch-mode
Power Linking	12 units @ 120 V; 21 units @ 230 V
<b>Included / optional</b>	
Included items	2x radiator caps for pendant installation
	2m power cord
Optional Accessories	Multiple Lens Plates (circular & elliptical), Safety-Free Accessory Adapter, 8-Way Barndoor, Honey Comb, Full Anti-Glare Shield, Gel-Frame, Omega Bracket with quater-turn fasteners, Touring Cases
Color options	Black – RAL 9004 (Standard)
	White – RAL 9010 (on request)
	Custom color – any RAL (on request)
<b>Operator &amp; Controller</b>	
DMX Functions	Dimmer, Dimmer Fine, Shutter, Duration, Hue, Saturation, Red, Red Fine, Green, Green Fine, Blue, Blue Fine, Lime, Lime Fine, CCT, Tint, Color Macro, Color Macro Crossfade, Device Settings
DMX channels	3CH CCT, 3CH RGB, 6CH RGB, 9CH RGB, 11CH RGB, 14CH RGB, 6CH DIRECT, 12CH DIRECT, 13CH DIRECT, 20CH DIRECT, 3CH HSI, 10CH HSI
DMX modes	12
Protocol	CRMX, W-DMX™ G2, W-DMX™ G3, W-DMX™ G4, W-DMX™ G4S
	USITT DMX512A
	RDM ANSI E1.20
	Bluetooth Low Energy (BLE)
Setting and addressing	OLED graphical display / 4 controls
	RDM ANSI E1.20
Standalone mode	Auto Program, Editor, Color Macro, Quick Color, Tunable White, User Color, Timer
Wireless DMX	Lumenradio with RDM (CRMX)
Indicator	OLED graphical display
Controls	4 touch sensitive, backlitged controls
Strobe	0-20Hz
DMX I/O	IP65 XLR 5-pin male/female
Power In	TRUE1 compatible input & link-thru sockets

### 7.3 Technical Data - E.SHOW mini TW+

Installation	
Mounting point on fixture	1 x two quarter-turn locking points for optional Omega Bracket, centric hole 13mm (1/2"), 2x extra holes for TV Spigot
Orientation	Any
Rigging possibilities	Hanging or ceiling / pendant mount (Pendant blind caps included)
Safety features	rear mount for safety wire
Minimum distance from flammable materials	0,3 meters (11,8 inch)

### 7.3 Technical Data - E.SHOW mini FC

Photometrics	
LED expected lifetime	50.000 hours
Lightsource	1x200W RGBL
Type of optical system	reflector + interchangeable lens plates
LED PWM Frequency	selectable 800Hz, 1.200Hz, 2.000Hz, 3.600Hz, 12kHz, 25kHz
Beam angles (50%)	14° (with VN lens)
	23° (with N lens)
	35° (with M lens)
	52° (with W lens)
	30° x 15° (with EN lens)
	46° x 17,5° (with EW lens)
Maximum Field angles (10%)	25° (with VN lens)
	43° (with N lens)
	69° (with M lens)
	86° (with W lens)
	58° x 34° (with EN lens)
	73,5° x 40° (with EW lens)
Color temperature range	2.000-10.000K
CRI/Ra	80
Efficacy (max)	36,16 lm/W
Luminous flux	4325 lm
illuminance Lux @ 3m (with VN lens)	4200lx
illuminance Lux @ 3m (with N lens)	1886lx
illuminance Lux @ 3m (with M lens)	725lx
illuminance Lux @ 3m (with W lens)	400lx
illuminance Lux @ 3m (with EN lens)	1390lx
illuminance Lux @ 3m (with EW lens)	924lx

### 7.3 Technical Data - E.SHOW mini FC

Dimensions & Weight	
IP class	IP65
Body material	Aluminum, Nylon
Lens material	Tempered glass front
Net dimensions (w x h x d)	170 x 273 x 230mm
Net dimensions inches	6,69 x 10,75 x 9,06 inches
Physical Head Straight Up Height	310mm (12,20 inches)
Net weight (including Yoke)	3,92 kg (8,64lbs)
Tilt	360°
Tilt Locking System	Locking system with angle indicator
Thermal Characteristics	
Cooling	Active, Forced Air, Temperature-regulated
Humidity (max.)	95%
Temperature range, Operating	-20°C to 45°C
Temperature range, Start-Up	-20° to 50°C
Temperature range, Storage	-20°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 Inrush Current	1,258A
Max power consumption	130W
Standby Power	5,5W
Max power thru @ 100 V	11A
Max power thru @ 230 V	11A
Power Factor	0.862 PF (230V) / 0.985 PF (120V)
Power Supply Unit	Inbuilt auto-ranging electronic switch-mode
Power Linking	12 units @ 120 V; 21 units @ 230 V
Included / optional	
Included items	2x radiator caps for pendant installation
	2m power cord
Optional Accessories	Multiple Lens Plates (circular & elliptical), Safety-Free Accessory Adapter, 8-Way Barndoor, Honey Comb, Full Anti-Glare Shield, Gel-Frame, Omega Bracket with quarter-turn fasteners, Touring Cases
Color options	Black – RAL 9004 (Standard)
	White – RAL 9010 (on request)
	Custom color – any RAL (on request)

### 7.3 Technical Data - E.SHOW mini FC

Operator & Controller	
DMX Functions	Dimmer, Dimmer Fine, Shutter, Duration, Hue, Saturation, Red, Red Fine, Green, Green Fine, Blue, Blue Fine, Lime, Lime Fine, CCT, Tint, Color Macro, Color Macro Crossfade, Device Settings
DMX channels	3CH CCT, 3CH RGB, 6CH RGB, 9CH RGB, 11CH RGB, 14CH RGB, 4CH DIRECT, 8CH DIRECT, 11CH DIRECT, 16CH DIRECT, 3CH HSI, 10CH HSI
DMX modes	12
Protocol	CRMX, W-DMX™ G2, W-DMX™ G3, W-DMX™ G4, W-DMX™ G4S
	USITT DMX512A
	RDM ANSI E1.20
	Bluetooth Low Energy (BLE)
Setting and addressing	OLED graphical display / 4 controls
	RDM ANSI E1.20
Standalone mode	Auto Program, Editor, Color Macro, Quick Color, Tunable White, User Color, Timer
Wireless DMX	Lumenradio with RDM (CRMX)
Indicator	OLED graphical display
Controls	4 touch sensitive, backlit controls
Strobe	0-20Hz
DMX I/O	IP65 XLR 5-pin male/female
Power In	TRUE1 compatible input & link-thru sockets
Installation	
Mounting point on fixture	1 x two quarter-turn locking points for optional Omega Bracket, centric hole 13mm (1/2"), 2x extra holes for TV Spigot
Orientation	Any
Rigging possibilities	Hanging or ceiling / pendant mount (Pendant blind caps included)
Safety features	rear mount for safety wire
Minimum distance from flammable materials	0,3 meters (11,8 inch)

## 7.4 DMX Charts - mini TW+

<b>3CH CCT</b>	<b>6CH DIRECT</b>
<b>3CH RGB</b>	<b>12CH DIRECT</b>
<b>6CH RGB</b>	<b>13CH DIRECT</b>
<b>9CH RGB</b>	<b>20CH DIRECT</b>
<b>11CH RGB</b> (default mode)	<b>3CH HSI</b>
<b>14CH RGB</b>	<b>10CH HSI</b>

3 CH CCT MODE (Color Calibration)				
Ch.	Function	Value	Setting	
1	Dimmer	000-255	0 - 100%	
2	CTC	000 - 004	5600K	according to CTC chart
		005-226	2000K-6500K linear in 20-21K steps	
		182-182	5600K	
		226-226	6500K	
		227-255	6621K-10.000K linear in 120-121K step	
3	Tint	0	no function	
		001-127	Magenta -> Neutral	
		128-128	Neutral	
		129-255	Neutral -> Green	
3 CH - RGB MODE (Color Calibration)				
Ch.	Function	Value	Setting	
1	Red	000-255	0 - 100%	
2	Green	000-255	0 - 100%	
3	Blue	000-255	0 - 100%	
6 CH RGB MODE - (Color Calibration)				
Ch.	Function	Value	Setting	
1	Red	000-255	0 - 100%	
2	Red Fine	000-255	0 - 100%	
3	Green	000-255	0 - 100%	
4	Green Fine	000-255	0 - 100%	
5	Blue	000-255	0 - 100%	
6	Blue Fine	000-255	0 - 100%	

**9 CH RGB MODE - (Color Calibration)**

Ch.	Function	Value	Setting
1	<b>Dimmer</b>	000-255	0 - 100%
2	<b>Shutter</b>	000 - 019	Shutter close
		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	<b>Red</b>	000-255	0 - 100%
4	<b>Green</b>	000-255	0 - 100%
5	<b>Blue</b>	000-255	0 - 100%
6	<b>CTC (affects RGB)</b>	000 - 004	5600K
		005-226	2000K-6500K linear in 20-21K steps
		182-182	5600K
		226-226	6500K
		227-255	6621K-10.000K linear in 120-121K steps
according to CTC chart			
7	<b>Tint (affects CTC and RGB)</b>	0	no function
		001-127	Magenta -> Neutral
		128-128	Neutral
		129-255	Neutral -> Green
8	<b>Color Macro (override RGB/CTC)</b>		<b>Please see color macro chart</b>
9	<b>Color Macro Crossfade (Transition Time between Color Macros)</b>	000 - 005	No function
		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 CH RGB Mode (Color Calibration) default mode**

1	<b>Dimmer Center</b>	000-255	0 - 100%	
2	<b>Shutter</b>	000 - 019	Shutter close	
		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	<b>Duration (only affects to channel 2 - Strobe 1 025-064)</b>	000-255	0 - 100%	(only affects to channel 2 - Strobe 1 - 025-064)
4	<b>Red</b>	000-255	0 - 100%	
5	<b>Green</b>	000-255	0 - 100%	
6	<b>Blue</b>	000-255	0 - 100%	
7	<b>CTC (affects RGB)</b>	000 - 004	5600K	according to CTC chart
		005-226	2000K-6500K linear in 20-21K steps	
		182-182	5600K	
		226-226	6500K	
		227-255	6621K-10.000K linear in 120-121K steps	
8	<b>Tint (affects CTC and RGB)</b>	0	No function	
		001-127	Magenta -> Neutral	
		128-128	Neutral	
		129-255	Neutral -> Green	
9	<b>Color Macro (override RGB/CTC)</b>		<b>Please see color macro chart</b>	

10	<b>Color Macro Crossfade (Transition Time between Color Macros)</b>	000 - 005	no function		
		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>Device Settings (please see remark *1)</b>	000-029	No function		
		030-034	Linear Dimmer Curve (hold 3s)		
		035-039	Exponential Dimmer Curve (hold 3s)		
		040-044	Logarithmic Dimmer Curve (hold 3s)		
		045-049	S-Curve Dimmer Curve (hold 3s)		
		050-054	Dimmer Response LED (Hold 1,5s)		
		055-059	Dimmer Response Halogen (Hold 1,5s)		
		060-094	No function		
		095-099	LED Frequency 800Hz (hold 3s)		
		100-104	LED Frequency 1200Hz (hold 3s)		
		105-109	LED Frequency 2000Hz (hold 3s)		
		110-114	LED Frequency 3600Hz (hold 3s)		
		115-119	LED Frequency 12kHz (hold 3s)		
		120-124	LED Frequency 25kHz (hold 3s)		
		125-129	No function		
		130-134	Fan Auto (hold 3s)		
		135-139	Fan Silent (hold 3s)		
		140-144	Fan Studio (hold 3s)		
		145-149	Fan Off (hold 3s)		
		150-154	Fan High Power (hold 3s)		
		155-159	No function		
		160-164	Redshift On (Hold 1,5s)	Redshift affects only between 2700-3500K	
		165-169	Redshift Off (Hold 1,5s)		
		170-174	No function		
		175-179	Full Calibration (Colors & CCT / Hold 3s)		
		180-184	CCT Calibration (CCT only / RAW Colors / Hold 3s)		
		185-189	Factory Reset (hold 3s) - except User Reset defaults		
190-194	User Reset (hold 3s) - except User Colors				
195-255	No function				

14 CH RGB Mode (Color Calibration)			
Ch.	Function	Value	Setting
1	Dimmer Center	000-255	0 - 100%
2	Dimmer Fine	000-255	0 - 100%
3	Shutter	000 - 019	Shutter close
		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	Red	000-255	0 - 100%
5	Red Fine	000-255	0 - 100%
6	Green	000-255	0 - 100%
7	Green Fine	000-255	0 - 100%
8	Blue	000-255	0 - 100%
9	Blue Fine	000-255	0 - 100%
10	CTC (affects RGB/Fine)	000 - 004	5600K
		005-226	2000K-6500K linear in 20-21K steps (please see detailed CTC chart)
		182-182	5600K
		226-226	6500K
		227-255	6621K-10.000K linear in 120-121K steps (please see detailed CTC chart)
11	Tint (affects CTC and RGB/Fine)	0	No function
		001-127	Magenta -> Neutral
		128-128	Neutral
		129-255	Neutral -> Green
12	Color Macro (override RGB+Fine/CTC)		Please see color macro chart

according to CTC chart

13	<b>Color Macro Crossfade (Transition Time between Color Macros)</b>	000 - 005	no function	
		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)	
14	<b>Device Settings (please see remark *1)</b>	000-029	No function	
		030-034	Linear Dimmer Curve (hold 3s)	
		035-039	Exponential Dimmer Curve (hold 3s)	
		040-044	Logarithmic Dimmer Curve (hold 3s)	
		045-049	S-Curve Dimmer Curve (hold 3s)	
		050-054	Dimmer Response LED (Hold 1,5s)	
		055-059	Dimmer Response Halogen (Hold 1,5s)	
		060-094	No function	
		095-099	LED Frequency 800Hz (hold 3s)	
		100-104	LED Frequency 1200Hz (hold 3s)	
		105-109	LED Frequency 2000Hz (hold 3s)	
		110-114	LED Frequency 3600Hz (hold 3s)	
		115-119	LED Frequency 12kHz (hold 3s)	
		120-124	LED Frequency 25kHz (hold 3s)	
		125-129	No function	
		130-134	Fan Auto (hold 3s)	
		135-139	Fan Silent (hold 3s)	
		140-144	Fan Studio (hold 3s)	
		145-149	Fan Off (hold 3s)	
		150-154	Fan High Power (hold 3s)	
		155-159	No function	
		160-164	Redshift On (Hold 1,5s)	Redshift affects only between 2700-3500K
		165-169	Redshift Off (Hold 1,5s)	
		170-174	No function	
		175-179	Full Calibration (Colors & CCT / Hold 3s)	
		180-189	Factory Reset (hold 3s) - except User Reset defaults	
190-194	User Reset (hold 3s) - except User Colors			
195-244	No function			
245-249	Snapshot (hold 1,5s)			
250-255	No function			

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

Ch.	Function	Value	Setting
1	Red	000-255	0 - 100%
2	Green	000-255	0 - 100%
3	Blue	000-255	0 - 100%
4	Amber	000-255	0 - 100%
5	Lime	000-255	0 - 100%
6	Cyan	000-255	0 - 100%

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

Ch.	Function	Value	Setting
1	Red	000-255	0 - 100%
2	Red Fine	000-255	0 - 100%
3	Green	000-255	0 - 100%
4	Green Fine	000-255	0 - 100%
5	Blue	000-255	0 - 100%
6	Blue Fine	000-255	0 - 100%
7	Amber	000-255	0 - 100%
8	Amber Fine	000-255	0 - 100%
9	Lime	000-255	0 - 100%
10	Lime Fine	000-255	0 - 100%
11	Cyan	000-255	0 - 100%
12	Cyan Fine	000-255	0 - 100%

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

Ch.	Function	Value	Setting
1	Dimmer Center	000-255	0 - 100%
2	Shutter	000 - 019	Shutter close
		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	<b>Red</b>	000-255	0 - 100%	
4	<b>Green</b>	000-255	0 - 100%	
5	<b>Blue</b>	000-255	0 - 100%	
6	<b>Amber</b>	000-255	0 - 100%	
7	<b>Lime</b>	000-255	0 - 100%	
8	<b>Cyan</b>	000-255	0 - 100%	
9	<b>CTC (affects RGBALC)</b>	000 - 004	RAW	according to CTC chart
		005-226	2000K-6500K linear in 20-21K steps	
		182-182	5600K	
		226-226	6500K	
		227-255	6621K-10.000K linear in 120-121K steps	
10	<b>Tint (affects CTC and RGBALC)</b>	0	no function	
		001-127	Magenta -> Neutral	
		128-128	Neutral	
		129-255	Neutral -> Green	
11	<b>Color Macro (override RGBALC/CTC)</b>		<b>Please see color macro chart</b>	
12	<b>Color Macro Crossfade (Transition Time between Color Macros)</b>	000 - 005	No function	
		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)	
13	<b>Device Settings (please see remark *1)</b>	000-029	No function	
		030-034	Linear Dimmer Curve (hold 3s)	
		035-039	Exponential Dimmer Curve (hold 3s)	
		040-044	Logarithmic Dimmer Curve (hold 3s)	
		045-049	S-Curve Dimmer Curve (hold 3s)	
		050-054	Dimmer Response LED (Hold 1,5s)	
		055-059	Dimmer Response Halogen (Hold 1,5s)	
		060-069	No function	
		070-074	RAW Mode (hold 3s)	
		075-079	User Calibrated Mode (hold 3s)	
		080-094	No function	
		095-099	LED Frequency 800Hz (hold 3s)	
		100-104	LED Frequency 1200Hz (hold 3s)	
		105-109	LED Frequency 2000Hz (hold 3s)	
		110-114	LED Frequency 3600Hz (hold 3s)	
		115-119	LED Frequency 12kHz (hold 3s)	
		120-124	LED Frequency 25kHz (hold 3s)	
		125-129	No function	
		130-134	Fan Auto (hold 3s)	
		135-139	Fan Silent (hold 3s)	
140-144	Fan Studio (hold 3s)			

13	Device Settings (please see remark *1)	145-149	Fan Off (hold 3s)	
		150-154	Fan High Power (hold 3s)	
		155-159	No function	
		160-164	Redshift On (Hold 1,5s)	Redshift affects only between 2700-3500K
		165-169	Redshift Off (Hold 1,5s)	
		170-179	No function	
		180-189	Factory Reset (hold 3s) - except User Reset defaults	
		190-194	User Reset (hold 3s) - except User Colors	
		195-244	No function	
		245-249	Snapshot (hold 1,5s)	
		250-255	No function	

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

Ch.	Function	Value	Setting
1	Dimmer Center	000-255	0 - 100%
2	Dimmer Fine	000-255	0 - 100%
3	Shutter	000 - 019	Shutter close
		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	Red	000-255	0 - 100%
5	Red Fine	000-255	0 - 100%
6	Green	000-255	0 - 100%
7	Green Fine	000-255	0 - 100%
8	Blue	000-255	0 - 100%

9	<b>Blue Fine</b>	000-255	0 - 100%	
10	<b>Amber</b>	000-255	0 - 100%	
11	<b>Amber Fine</b>	000-255	0 - 100%	
12	<b>Lime</b>	000-255	0 - 100%	
13	<b>Lime Fine</b>	000-255	0 - 100%	
14	<b>Cyan</b>	000-255	0 - 100%	according to CTC chart
15	<b>Cyan Fine</b>	000-255	0 - 100%	
16	<b>CTC (affects RGBALC/ Fine)</b>	000 - 004	RAW	
		005-226	2000K-6500K linear in 20-21K steps	
		182-182	5600K	
		226-226	6500K	
		227-255	6621K-10.000K linear in 120-121K steps	
17	<b>Tint (affects CTC and RGBALC/Fine)</b>	0	No function	
		001-127	Magenta -> Neutral	
		128-128	Neutral	
		129-255	Neutral -> Green	
18	<b>Color Macro (override RGBALC+Fine/CTC)</b>		<b>Please see color macro chart</b>	
19	<b>Color Macro Crossfade (Transition Time between Color Macros)</b>	000 - 005	No function	
		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	Device Settings (please see remark *1)	000-029	No function		
		030-034	Linear Dimmer Curve (hold 3s)		
		035-039	Exponential Dimmer Curve (hold 3s)		
		040-044	Logarithmic Dimmer Curve (hold 3s)	Redshift affects only between 2700-3500K	
		045-049	S-Curve Dimmer Curve (hold 3s)		
		050-054	Dimmer Response LED (Hold 1,5s)		
		055-059	Dimmer Response Halogen (Hold 1,5s)		
		060-069	No function		
		070-074	RAW Mode (hold 3s)		
		075-079	User Calibrated Mode (hold 3s)		
		080-094	No function		
		095-099	LED Frequency 800Hz (hold 3s)		
		100-104	LED Frequency 1200Hz (hold 3s)		
		105-109	LED Frequency 2000Hz (hold 3s)		
		110-114	LED Frequency 3600Hz (hold 3s)		
		115-119	LED Frequency 12kHz (hold 3s)		
		120-124	LED Frequency 25kHz (hold 3s)		
		125-129	No function		
		130-134	Fan Auto (hold 3s)		
		135-139	Fan Silent (hold 3s)		
		140-144	Fan Studio (hold 3s)		
		145-149	Fan Off (hold 3s)		
		150-154	Fan High Power (hold 3s)		
		155-159	No function		
		160-164	Redshift On (Hold 1,5s)		
		165-169	Redshift Off (Hold 1,5s)		
		170-179	No function		
		180-189	Factory Reset (hold 3s) - except User Reset defaults		
190-194	User Reset (hold 3s) - except User Colors				
195-244	No function				
245-249	Snapshot (hold 1,5s)				
250-255	No function				

### 3 CH - HSI MODE (Color Calibration)

Ch.	Function	000-255	0 - 100%
1	Dimmer	000-255	0° (RED) Thru 360°
2	Hue	000-255	0 - 100%
3	Saturation	000-255	0 - 100%

### 10 CH - HSI MODE (Color Calibration)

Ch.	Function	Value	Setting
1	Dimmer	000-255	0 - 100%

2	<b>Dimmer Fine</b>	000-255	0 - 100%
3	<b>Shutter</b>	000 - 019	Shutter close
		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		
			according to CTC chart
4	<b>Hue</b>	000-255	0° (RED) Thru 360°
5	<b>Saturation</b>	000-255	0 - 100% (CTC-->HUE)
6	<b>CTC (affects HUE and Saturation) --&gt; CTC no effect if Saturation to 100%</b>	000 - 004	5600K
		005-226	2000K-6500K linear in 20-21K steps
		182-182	5600K
		226-226	6500K
		227-255	6621K-10.000K linear in 120-121K steps
7	<b>Tint (affects CTC, HUE and Saturation). --&gt; Tint no effect if Saturation to 100%</b>	0	No function
		001-127	Magenta -> Neutral
		128-128	Neutral
		129-255	Neutral -> Green
8	<b>Color Macro (override HUE/ SATURATION/CTC)</b>		<b>Please see color macro chart</b>
9	<b>Color Macro Crossfade (Transition Time between Color Macros)</b>	000 - 005	No function
		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)
			Redshift affects only between 2700-3500K

10	Device Settings (please see remark *1)	000-029	No function
		030-034	Linear Dimmer Curve (hold 3s)
		035-039	Exponential Dimmer Curve (hold 3s)
		040-044	Logarithmic Dimmer Curve (hold 3s)
		045-049	S-Curve Dimmer Curve (hold 3s)
		050-054	Dimmer Response LED (Hold 1,5s)
		055-059	Dimmer Response Halogen (Hold 1,5s)
		060-094	No function
		095-099	LED Frequency 800Hz (hold 3s)
		100-104	LED Frequency 1200Hz (hold 3s)
		105-109	LED Frequency 2000Hz (hold 3s)
		110-114	LED Frequency 3600Hz (hold 3s)
		115-119	LED Frequency 12kHz (hold 3s)
		120-124	LED Frequency 25kHz (hold 3s)
		125-129	No function
		130-134	Fan Auto (hold 3s)
		135-139	Fan Silent (hold 3s)
		140-144	Fan Studio (hold 3s)
		145-149	Fan Off (hold 3s)
		150-154	Fan High Power (hold 3s)
		155-159	No function
		160-164	Redshift On (Hold 1,5s)
		165-169	Redshift Off (Hold 1,5s)
		170-174	No function
		175-179	Full Calibration (Colors & CCT / Hold 3s)
		180-189	Factory Reset (hold 3s) - except User Reset defaults
		190-194	User Reset (hold 3s) - except User Colors
		195-244	No function
245-249	Snapshot (hold 1,5s)		
250-255	No function		
remark *1	<b>After adjustments please set the value back to 000 to avoid any disturbance by endless function call.</b>		

## 7.4 DMX Charts - mini TW+

<b>3CH CCT</b>	<b>4CH DIRECT</b>
<b>3CH RGB</b>	<b>8CH DIRECT</b>
<b>6CH RGB</b>	<b>11CH DIRECT</b>
<b>9CH RGB</b>	<b>16CH DIRECT</b>
<b>11CH RGB</b> (default mode)	<b>3CH HSI</b>
<b>14CH RGB</b>	<b>10CH HSI</b>

<b>3 CH CCT MODE (Color Calibration)</b>			
Ch.	Function	Value	Setting
1	Dimmer	000-255	0 - 100%
2	CTC	000 - 004	5600K
		005-226	2000K-6500K linear in 20-21K steps
		182-182	5600K
		226-226	6500K
		227-255	6621K-10.000K linear in 120-121K steps
3	Tint (affects CCT)	0	no function
		001-127	Magenta -> Neutral
		128-128	Neutral
		129-255	Neutral -> Green
<b>3 CH - RGB MODE (Color Calibration)</b>			
Ch.	Function	Value	Setting
1	Red	000-255	0 - 100%
2	Green	000-255	0 - 100%
3	Blue	000-255	0 - 100%
<b>6 CH RGB MODE - Color Calibration</b>			
Ch.	Function	Value	Setting
1	Red	000-255	0 - 100%
2	Red Fine	000-255	0 - 100%
3	Green	000-255	0 - 100%
4	Green Fine	000-255	0 - 100%
5	Blue	000-255	0 - 100%
6	Blue Fine	000-255	0 - 100%

according to CTC chart

9 CH RGB MODE - Color Calibration			
Ch.	Function	Value	Setting
1	Dimmer	000-255	0 - 100%
2	Shutter	000 - 019	Shutter close
		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%
4	Green	000-255	0 - 100%
5	Blue	000-255	0 - 100%
6	CTC (affects RGB)	000 - 004	5600K
		005-226	2000K-6500K linear in 20-21K steps
		182-182	5600K
		226-226	6500K
		227-255	6621K-10.000K linear in 120-121K steps
according to CTC chart			
7	Tint (affects CTC and RGB)	0	No function
		001-127	Magenta -> Neutral
		128-128	Neutral
		129-255	Neutral -> Green
8	Color Macro (override RGB/CTC)		<b>Please use color macros from ROXX color macro chart</b>
9	Color Macro Crossfade (Transition Time between Color Macros)	000 - 005	No function
		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 CH RGB Mode (Color Calibration) default mode**

1	<b>Dimmer</b>	000-255	0 - 100%
2	<b>Shutter</b>	000 - 019	Shutter close
		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	<b>Duration (only affects to channel 2 - Strobe 1 025-064)</b>	000-255	0 - 100%
4	<b>Red</b>	000-255	0 - 100%
5	<b>Green</b>	000-255	0 - 100%
6	<b>Blue</b>	000-255	0 - 100%
7	<b>CTC (affects RGB)</b>	000 - 004	5600K
		005-226	2000K-6500K linear in 20-21K steps
		182-182	5600K
		226-226	6500K
		227-255	6621K-10.000K linear in 120-121K steps
according to CTC chart			
8	<b>Tint (affects CTC and RGB)</b>	0	no function
		001-127	Magenta -> Neutral
		128-128	Neutral
		129-255	Neutral -> Green
9	<b>Color Macro (override RGB/CTC)</b>		<b>Please use color macros from ROXX color macro chart</b>

10	<b>Color Macro Crossfade (Transition Time between Color Macros)</b>	000 - 005	No function		
		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>Device Settings (please see remark *1)</b>	000-029	No function		
		030-034	Linear Dimmer Curve (hold 3s)		
		035-039	Exponential Dimmer Curve (hold 3s)		
		040-044	Logarithmic Dimmer Curve (hold 3s)		
		045-049	S-Curve Dimmer Curve (hold 3s)		
		050-054	Dimmer Response LED (Hold 1,5s)		
		055-059	Dimmer Response Halogen (Hold 1,5s)		
		060-094	No function		
		095-099	LED Frequency 800Hz (hold 3s)		
		100-104	LED Frequency 1200Hz (hold 3s)		
		105-109	LED Frequency 2000Hz (hold 3s)		
		110-114	LED Frequency 3600Hz (hold 3s)		
		115-119	LED Frequency 12kHz (hold 3s)		
		120-124	LED Frequency 25kHz (hold 3s)		
		125-129	No function		
		130-134	Fan Auto (hold 3s)		
		135-139	Fan Silent (hold 3s)		
		140-144	Fan Studio (hold 3s)		
		145-149	Fan Off (hold 3s)		
		150-154	Fan High Power (hold 3s)		
		155-159	No function		
		160-164	Redshift On (Hold 1,5s)	Redshift affects only between 2700-3500K	
		165-169	Redshift Off (Hold 1,5s)		
		170-174	No function		
		175-179	Full Calibration (Colors & CCT / Hold 3s)		
		180-184	CCT Calibration (CCT only / RAW Colors / Hold 3s)		
		185-189	Factory Reset (hold 3s) - except User Reset defaults		
190-194	User Reset (hold 3s) - except User Colors				
195-255	No function				

**14 CH RGB Mode (Color Calibration)**

Ch.	Function	Value	Setting
1	<b>Dimmer</b>	000-255	0 - 100%
2	<b>Dimmer Fine</b>	000-255	0 - 100%
3	<b>Shutter</b>	000 - 019	Shutter close
		020 - 024	Shutter open
		025 - 064	Strobe 1 (fast ⊕ slow)
		065 - 069	Shutter open
		070 - 084	Strobe 2: opening pulse (fast ⊕ )
		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>Red</b>	000-255	0 - 100%
5	<b>Red Fine</b>	000-255	0 - 100%
6	<b>Green</b>	000-255	0 - 100%
7	<b>Green Fine</b>	000-255	0 - 100%
8	<b>Blue</b>	000-255	0 - 100%
9	<b>Blue Fine</b>	000-255	0 - 100%
10	<b>CTC (affects RGB)</b>	000 - 004	5600K
		005-226	2000K-6500K linear in 20-21K steps
		182-182	5600K
		226-226	6500K
		227-255	6621K-10.000K linear in 120-121K steps
			according to CTC chart
11	<b>Tint (affects CTC and RGB)</b>	0	no function
		001-127	Magenta -> Neutral
		128-128	Neutral
		129-255	Neutral -> Green
12	<b>Color Macro (override RGB+Fine/CTC)</b>		<b>Please use color macros from ROXX color macro chart</b>



13	<b>Color Macro Crossfade (Transition Time between Color Macros)</b>	000 - 005	No function	
		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)	
14	<b>Device Settings (please see remark *1)</b>	000-029	No function	
		030-034	Linear Dimmer Curve (hold 3s)	
		035-039	Exponential Dimmer Curve (hold 3s)	
		040-044	Logarithmic Dimmer Curve (hold 3s)	
		045-049	S-Curve Dimmer Curve (hold 3s)	
		050-054	Dimmer Response LED (Hold 1,5s)	
		055-059	Dimmer Response Halogen (Hold 1,5s)	
		060-094	No function	
		095-099	LED Frequency 800Hz (hold 3s)	
		100-104	LED Frequency 1200Hz (hold 3s)	
		105-109	LED Frequency 2000Hz (hold 3s)	
		110-114	LED Frequency 3600Hz (hold 3s)	
		115-119	LED Frequency 12kHz (hold 3s)	
		120-124	LED Frequency 25kHz (hold 3s)	
		125-129	No function	
		130-134	Fan Auto (hold 3s)	
		135-139	Fan Silent (hold 3s)	
		140-144	Fan Studio (hold 3s)	
		145-149	Fan Off (hold 3s)	
		150-154	Fan High Power (hold 3s)	
		155-159	No function	
		160-164	Redshift On (Hold 1,5s)	Redshift affects only between 2700-3500K
		165-169	Redshift Off (Hold 1,5s)	
		170-174	No function	
175-179	Full Calibration (Colors & CCT / Hold 3s)			
180-184	CCT Calibration (CCT only / RAW Colors / Hold 3s)			
185-189	Factory Reset (hold 3s) - except User Reset defaults			
190-194	User Reset (hold 3s) - except User Colors			
		195-255	No function	

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

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

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

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

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

Ch.	Function	Value	Setting
1	Dimmer	000-255	0 - 100%
2	Shutter	000 - 019	Shutter close
		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%
4	Green	000-255	0 - 100%
5	Blue	000-255	0 - 100%
6	Lime	000-255	0 - 100%

7	<b>CTC (affects RGBL)</b>	000 - 004	RAW	according to CTC chart
		005-226	2000K-6500K linear in 20-21K steps	
		182-182	5600K	
		226-226	6500K	
		227-255	6621K-10.000K linear in 120-121K steps	
8	<b>Tint (affects CTC and RGBL)</b>	0	no function	
		001-127	Magenta -> Neutral	
		128-128	Neutral	
		129-255	Neutral -> Green	
9	<b>Color Macro (override RGBL/CTC)</b>		<b>Please use color macros from ROXX color macro chart</b>	
10	<b>Color Macro Crossfade (Transition Time between Color Macros)</b>	000 - 005	No function	
		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>Device Settings (please see remark *1)</b>	000-029	No function	
		030-034	Linear Dimmer Curve (hold 3s)	
		035-039	Exponential Dimmer Curve (hold 3s)	
		040-044	Logarithmic Dimmer Curve (hold 3s)	
		045-049	S-Curve Dimmer Curve (hold 3s)	
		050-054	Dimmer Response LED (Hold 1,5s)	
		055-059	Dimmer Response Halogen (Hold 1,5s)	
		060-069	No function	
		070-074	RAW Mode (hold 3s)	
		075-079	User Calibrated Mode (hold 3s)	
		080-094	No function	
		095-099	LED Frequency 800Hz (hold 3s)	
		100-104	LED Frequency 1200Hz (hold 3s)	
		105-109	LED Frequency 2000Hz (hold 3s)	
		110-114	LED Frequency 3600Hz (hold 3s)	
		115-119	LED Frequency 12kHz (hold 3s)	
		120-124	LED Frequency 25kHz (hold 3s)	
125-129	No function			

11	Device Settings (please see remark *1)	130-134	Fan Auto (hold 3s)	
		135-139	Fan Silent (hold 3s)	
		140-144	Fan Studio (hold 3s)	
		145-149	Fan Off (hold 3s)	
		150-154	Fan High Power (hold 3s)	
		155-159	No function	
		160-164	Redshift On (Hold 1,5s)	Redshift affects only between 2700-3500K
		165-169	Redshift Off (Hold 1,5s)	
		170-179	No function	
		180-184	Factory Reset (hold 3s) - except User Reset defaults	
		185-189	User Reset (hold 3s) - except User Colors	
		190-255	No function	
		185-189	User Reset (hold 3s) - except User Colors.	
		190-255	No function	

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

Ch.	Function	Value	Setting
1	Dimmer	000-255	0 - 100%
2	Dimmer Fine	000-255	0 - 100%
3	Shutter	000 - 019	Shutter close
		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		
3	Shutter	230 - 244	Strobe 10: burst (fast ⊕ slow)
		245 - 255	Shutter open
4	Red	000-255	0 - 100%
5	Red Fine	000-255	0 - 100%

6	<b>Green</b>	000-255	0 - 100%	
7	<b>Green Fine</b>	000-255	0 - 100%	
8	<b>Blue</b>	000-255	0 - 100%	
9	<b>Blue Fine</b>	000-255	0 - 100%	
10	<b>Lime</b>	000-255	0 - 100%	
11	<b>Lime Fine</b>	000-255	0 - 100%	
12	<b>CTC (affects RGBL)</b>	000 - 004	RAW	according to CTC chart
		005-226	2000K-6500K linear in 20-21K steps	
		182-182	5600K	
		226-226	6500K	
		227-255	6621K-10.000K linear in 120-121K steps	
13	<b>Tint (affects CTC and RGBL)</b>	0	No function	
		001-127	Magenta -> Neutral	
		128-128	Neutral	
		129-255	Neutral -> Green	
14	<b>Color Macro (override RGBL,CTC)</b>		<b>Please use color macros from ROXX color macro chart</b>	
15	<b>Color Macro Crossfade (Transition Time between Color Macros)</b>	000 - 005	No function	
		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	<b>Device Settings (please see remark *1)</b>	000-029	No function	
		030-034	Linear Dimmer Curve (hold 3s)	
		035-039	Exponential Dimmer Curve (hold 3s)	
		040-044	Logarithmic Dimmer Curve (hold 3s)	
		045-049	S-Curve Dimmer Curve (hold 3s)	
		050-054	Dimmer Response LED (Hold 1,5s)	
		055-059	Dimmer Response Halogen (Hold 1,5s)	
		060-069	No function	
		070-074	RAW Mode (hold 3s)	
		075-079	User Calibrated Mode (hold 3s)	
		080-094	No function	
		095-099	LED Frequency 800Hz (hold 3s)	
		100-104	LED Frequency 1200Hz (hold 3s)	

16	Device Settings (please see remark *1)	105-109	LED Frequency 2000Hz (hold 3s)		
		110-114	LED Frequency 3600Hz (hold 3s)		
		115-119	LED Frequency 12kHz (hold 3s)		
		120-124	LED Frequency 25kHz (hold 3s)		
		125-129	No function		
		130-134	Fan Auto (hold 3s)		
		135-139	Fan Silent (hold 3s)		
		140-144	Fan Studio (hold 3s)		
		145-149	Fan Off (hold 3s)		
		150-154	Fan High Power (hold 3s)		
		155-159	No function		
		160-164	Redshift On (Hold 1,5s)	Redshift affects only between 2700-3500K	
		165-169	Redshift Off (Hold 1,5s)		
		170-179	No function		
		180-184	Factory Reset (hold 3s) - except User Reset defaults		
		185-189	User Reset (hold 3s) - except User Colors		
		190-255	No function		
		170-179	No function		
		180-184	Factory Reset (hold 3s) - except User Reset defaults		
		185-189	User Reset (hold 3s) - except User Colors		
190-255	No function				

### 3 CH - HSI MODE (Color Calibration)

Ch.	Function	Value	Setting
1	Dimmer	000-255	0 - 100%
2	Hue	000-255	0° (RED) Thru 360°
3	Saturation	000-255	0 - 100%

### 10 CH - HSI MODE (Color Calibration)

Ch.	Function	Value	Setting
1	Dimmer	000-255	0 - 100%
2	Dimmer Fine	000-255	0 - 100%
3	Shutter	000 - 019	Shutter close
		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

3	Shutter	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
5	Satuation	000-255	0 - 100%	
6	CTC (affects HUE and Saturation) --> CTC no effect if Saturation to 100%	000 - 004	5600K	according to CTC chart
		005-226	2000K-6500K linear in 20-21K steps	
		182-182	5600K	
		226-226	6500K	
		227-255	6621K-10.000K linear in 120-121K steps	
7	Tint (affects CTC, HUE and Saturation). --> Tint no effect if Saturation to 100%	0	no function	
		001-127	Magenta -> Neutral	
		128-128	Neutral	
		129-255	Neutral -> Green	
8	Color Macro (override HUE/ SATURATION/CTC)		<b>Please use color macros from ROXX color macro chart</b>	
9	Color Macro Crossfade (Transition Time between Color Macros)	000 - 005	No function	
		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	Device Settings (please see remark *1)	000-029	No function	
		030-034	Linear Dimmer Curve (hold 3s)	
		035-039	Exponential Dimmer Curve (hold 3s)	
		040-044	Logarithmic Dimmer Curve (hold 3s)	
		045-049	S-Curve Dimmer Curve (hold 3s)	
		050-054	Dimmer Response LED (Hold 1,5s)	
		055-059	Dimmer Response Halogen (Hold 1,5s)	
		060-094	No function	
		095-099	LED Frequency 800Hz (hold 3s)	
		100-104	LED Frequency 1200Hz (hold 3s)	
		105-109	LED Frequency 2000Hz (hold 3s)	
		110-114	LED Frequency 3600Hz (hold 3s)	
		115-119	LED Frequency 12kHz (hold 3s)	

10	Device Settings (please see remark *1)	120-124	LED Frequency 25kHz (hold 3s)		
		125-129	No function		
		130-134	Fan Auto (hold 3s)		
		135-139	Fan Silent (hold 3s)		
		140-144	Fan Studio (hold 3s)		
		145-149	Fan Off (hold 3s)		
		150-154	Fan High Power (hold 3s)		
		155-159	No function		
		160-164	Redshift On (Hold 1,5s)	Redshift affects only between 2700-3500K	
		165-169	Redshift Off (Hold 1,5s)		
		170-174	No function		
		175-179	Full Calibration (Colors & CCT / Hold 3s)		
		180-184	CCT Calibration (CCT only / RAW Colors / Hold 3s)		
		185-189	Factory Reset (hold 3s) - except User Reset defaults		
		190-194	User Reset (hold 3s) - except User Colors		
		195-255	No function		
remark *1		<b>After adjustments please set the value back to 000 to avoid any disturbance by endless function call.</b>			



## 7.5 Color Macro Chart for DMX

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	Mikkell 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

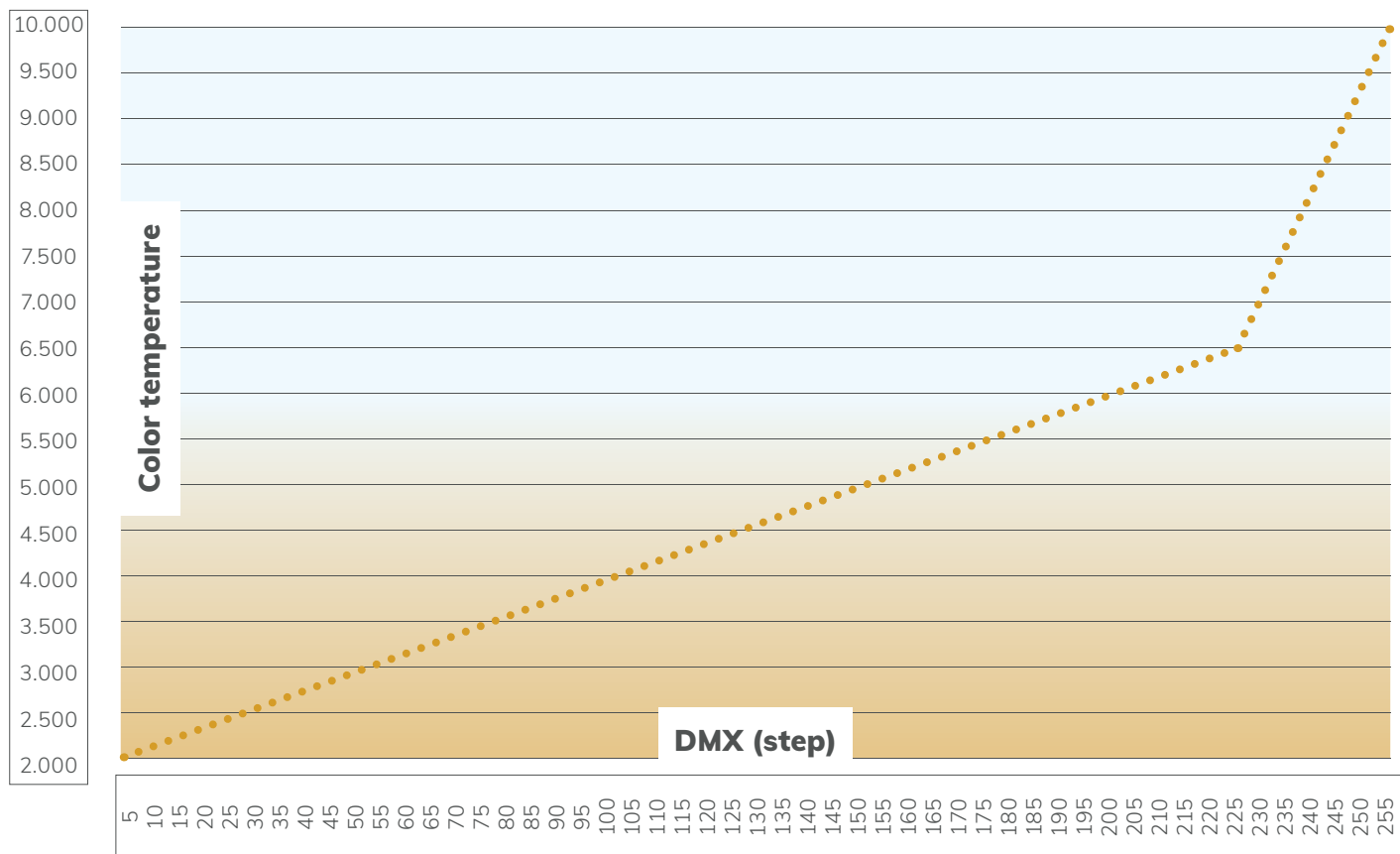
Gels - Color Macros for DMX		
DMX value	Gel Name	Color Number
102-104	Special Med Lavender	LEE 343
105-107	Ultimate Violet	LEE 707
108-110	Magical Magenta	LEE 795
111-113	Chrysalis Pink	LEE 798
114-116	Specia KH Lavender	LEE 799
117-119	Bulb White	2700K
120-122	Halogen White	3200K
123-125	Neutral White	4200K
126-128	Daylight White	5600K
129-131	Cold White I	6000K
132-134	Cold White II	6300K
135-137	White (if not available use no function)	100% White LED
138-140	Amber (if not available use no function)	100% Amber LED
141-143	Lime (if not available use no function)	100% Lime LED
144-146	Cyan (if not available use no function)	100% Cyan LED
147-149	User Color 1	(if not available use no function)
150-152	User Color 2	(if not available use no function)
153-155	User Color 3	(if not available use no function)
156-158	User Color 4	(if not available use no function)
159-161	User Color 5	(if not available use no function)
162-164	Color Jumping stop	
165-209	Color Jumping speed slow @ fast	color 1-37
210-255	Color fading speed slow @ fast	color 1-37

## 7.5 Color Macro Chart for Stand Alone

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
39	Halogen White	3200K
40	Neutral White	4200K
41	Daylight White	5600K
42	Cold White I	6000K
43	Cold White II	6300K
44	Amber (only if available)	100% Amber LED
45	Lime (only if available)	100% Lime LED
46	Cyan (only if available)	100% Cyan LED

### 7.5 CTC channel DMX / Color temperature



## 7.5 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		

## 7.6 RDM Templates\*

The ROXX Show series 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 E.SHOW mini TW+ / E.SHOW mini FC
Model:	E.SHOW mini TW+ / E.SHOW mini FC
Manufacturer:	ROXX
ID: E.SHOW mini TW+	0X6a6a0112xxxx
ID: E.SHOW mini FC	0X6a6a0113xxxx
Device ID (E.SHOW mini TW+ / E.SHOW mini FC):	0112xxxxxxxxxx / 0113xxxxxxxxxx

**ⓘ \*Note: During RDM identifying process E.SHOW mini TW+ / E.SHOW mini FC flashes white to blue color alternately.**

### RDM functions E.SHOW mini TW+

For easy identifying E.SHOW mini TW+ 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	n.a.
0x8048	Master / Slave	Set	0= Master / 1= Slave
0x8018	CRMX Operating Mode	Set (Receive / Transmit)	0= RX / 1= TX
0x8019	CRMX Receive Reset	Yes/No	0= No / 1= Yes
0x801A	CRMX Transmit Link	Yes/No	0= No / 1= Yes
0x801B	CRMX Pass to DMX out	Yes/No	0= No / 1= Yes
0x801C	Bluetooth	On/Off	0= Off / 1= On
0x801D	Bluetooth Link	Yes/No	0= No / 1= Yes
0x8013	Display Auto Flip	Set	0= Off / 1= On
0x8012	Display Backlight	Set	0= Off / 1= On
0x8017	Display Lock	Set	0= Off / 1= On
0x8041	Startup Mode	Set	0= DMX / 1= AUTO / 2= Editor / 3= Color Macro / 4= Quick Color / 5= Tunable White / 6= User Color
0x8011	DMX Fail	Set	1= Hold / 2= Blackout / 3= Emergency
0x8030	Dimmer Curve	Set	1= Linear / 2= Exponential / 3= Logarithmic / 4= S-Curve
0x8031	Dimmer Response	Set	1= LED / 2= Halogen
0x8033	Color Calibration	Set	0=Full Calibration / 1=CCT Calibration
0x8034	RAW Balance	Set	0= RAW / 1= User Calibration
0x8035	User Calibration- Red	Set	
0x8036	User Calibration- Green	Set	
0x8037	User Calibration- Blue	Set	
0x8039	User Calibration- Amber	Set	
0x8038	User Calibration- Lime	Set	

0x803A	User Calibration- Cyan	Set	
0x8040	LED Frequency (PWM)	Set	1= 800Hz / 2= 1200Hz / 3= 2000Hz / 4= 3600Hz / 5= 12kHz / 6= 25kHz
0x8010	Fan Mode	Set	1= Auto / 2= Silent / 3= Studio / 4= Fan Off / 5= Max. Power
0x8032	Redshift	Set	0= Off / 1= On
0x801E	Factory Reset	Yes/No	0= No / 1= Yes
0x801F	User Reset	Yes/No	0= No / 1= Yes
0x00C0	Firmware Version	read	n.a.
0x8700	Serial Number	Read	n.a.
Sensor 1	LED Temperature	read	n.a.
0x0400	Device Power on Time	read	n.a.
0x0401	LED on Time	read	n.a.
	Fan Speed	read	n.a.

### RDM functions - E.SHOW mini FC

For easy identifying E.SHOW mini FC mini 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	n.a.
0x8048	Master / Slave	Set	0= Master / 1= Slave
0x8018	CRMX Operating Mode	Set (Receive / Transmit)	0= RX / 1= TX
0x8019	CRMX Receive Reset	Yes/No	0= No / 1= Yes
0x801A	CRMX Transmit Link	Yes/No	0= No / 1= Yes
0x801B	CRMX Pass to DMX out	Yes/No	0= No / 1= Yes
0x801C	Bluetooth	On/Off	0= Off / 1= On
0x801D	Bluetooth Link	Yes/No	0= No / 1= Yes
0x8013	Display Auto Flip	Set	0= Off / 1= On
0x8012	Display Backlight	Set	0= Off / 1= On
0x8017	Display Lock	Set	0= Off / 1= On
0x8041	Startup Mode	Set	0= DMX / 1= AUTO / 2= Editor / 3= Color Macro / 4= Quick Color / 5= Tunable White / 6= User Color
0x8011	DMX Fail	Set	1= Hold / 2= Blackout / 3= Emergency
0x8030	Dimmer Curve	Set	1= Linear / 2= Exponential / 3= Logarithmic / 4= S-Curve
0x8031	Dimmer Response	Set	1= LED / 2= Halogen
0x8033	Color Calibration	Set	0=Full Calibration / 1=CCT Calibration
0x8034	RAW Balance	Set	0= RAW / 1= User Calibration
0x8035	User Calibration- Red	Set	
0x8036	User Calibration- Green	Set	
0x8037	User Calibration- Blue	Set	
0x8038	User Calibration- Lime	Set	

0x8040	LED Frequency (PWM)	Set	1= 800Hz / 2= 1200Hz / 3= 2000Hz / 4= 3600Hz / 5= 12kHz / 6= 25kHz
0x8010	Fan Mode	Set	1= Auto / 2= Silent / 3= Studio / 4= Fan Off / 5= Max. Power
0x8032	Redshift	Set	0= Off / 1= On
0x801E	Factory Reset	Yes/No	0= No / 1= Yes
0x801F	User Reset	Yes/No	0= No / 1= Yes
0x00C0	Firmware Version	read	n.a.
0x8700	Serial Number	Read	n.a.
Sensor 1	LED Temperature	read	n.a.
0x0400	Device Power on Time	read	n.a.
0x0401	LED on Time	read	n.a.
	Fan Speed	read	n.a.

### 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	

## 7.7 Firmware Update

To update E.SHOW mini TW+ / E.SHOW mini FC mini to newest firmware, please use ROXX update box and make sure the fixtures are connected to DC power.

Please download update instructions here:  
<https://roxlight.com/support/>

## 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

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This equipment 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.

FCC Radiation Exposure Statement:

The device has been evaluated to meet general RF exposure requirement.

The device can be used in the portable exposure condition with restriction

FCC Radiation Exposure Statement:

The equipment complies with FCC Radiation exposure limits set forth for uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

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)





