User Manual

ROXX®

E.SHOW mini TW+
E.SHOW mini FC

USER MANUAL

User Manual

CONTENT

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 used in combination with an power outlet, providing a protective ground. In no circustances 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 temparature 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/adapter/connector does not show signs of kinks/warps or is being stepped on.

1.2.6. Allwas 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 exact the same fuse will be used (type and rating). Repeatedly blown fuses need to be checked by an authorised service technician.

1.2.9. In the risk of lighting strike all units need to be unpluged 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 applys 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 houshold 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, expecially 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 ist 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

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

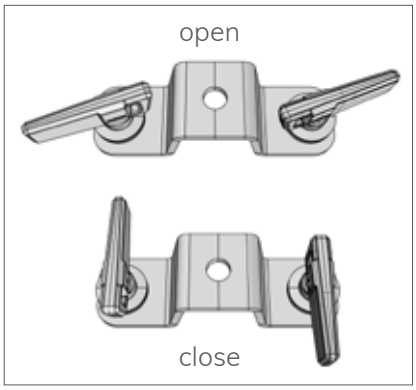
4. INSTALLATION & SETUP

4.1 Physical Installation and Rigging

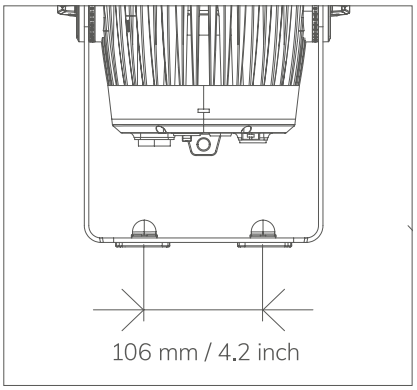
ROXX E.SHOW mini TW+ / E.SHOW mini FC may be installed in any orientation. For this purpose the product provides several options:

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.

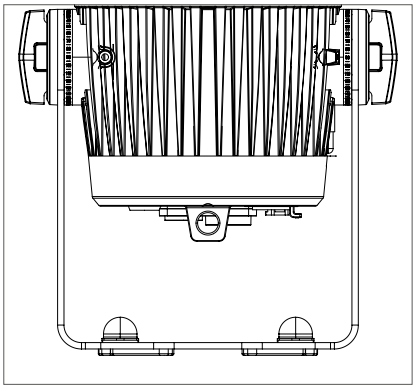
Hanging:
On the bottom the yoke provides 2 Camlock QuickRelease connectors. Here it´s possible to click in the ROXX Omega Bracket ST (optional accessory) equiped with any suitable clamp.



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

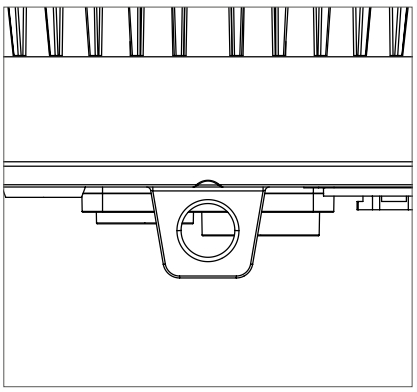


A centric hole on the yoke´s bottom (d=13mm / 0,51 inch) provides a mounting point for more rigging options. Next to it, two additional holes allow the perfect connection of a TV spigot, to use the E.SHOW mini TW+ / E.SHOW mini FC on a tripod or for example with a superclamp.



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" (inlcuded). 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 ⏚

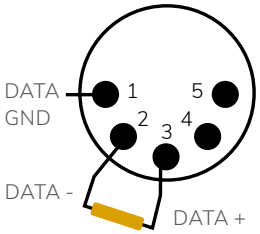
Warning!

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

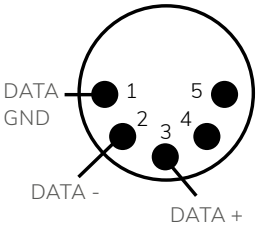
The E.SHOW mini TW+ / E.SHOW mini FC is fully controllable by DMX (USITT DMX512-A standard, based on RS-485) and RDM. It can be connected using either DMX cables or via the built-in LumenRadio CRMX wireless system.

DMX Termination
on last fixture DMX out



120 Ohm
+/- 5%

XLR pin out



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) simultanously as being connected to a cabled DMX. The device will prioritize cabled DMX input over wireless DMX and over Bluetooth. A small indicator infront of "DMX", "CRMX" or "BLE" gives an easy overview which protocol is curently 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 simoultaneously.
- **If CRMX RX is enabled and BLE will 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

CRMX	Disabled
Operation Mode	n.a.
Linked	No
Receive Reset	No
DMX	**Enabled**
BLE (Bluetooth)	Disabled

The indicator infront of "DMX" shows that DMX is active.

CRMX	**Enabled**
Operation Mode	**RX**
Linked	**No**
Receive Reset	Yes
DMX	Disconnect
BLE (Bluetooth)	Disabled

The indicator infront of "CRMX (RX)" shows that the fixture is now working in wireless DMX receive mode.

"(RX)"= CRMX operating mode is set to receive

CRMX	**Enabled**
Operation Mode	**TX**
Linked	**No**
Receive Reset	Yes
DMX	Disconnect
BLE (Bluetooth)	Disabled

The indicator infront of "CRMX (TX)" shows that the fixture is now working in wireless DMX transmit mode.

"(TX)"= CRMX operating mode is set to transmit

CRMX	**Enabled**
Operation Mode	**RX**
Linked	**Yes**
Receive Reset	Yes
DMX	Disconnect
BLE (Bluetooth)	Disabled

Once the fixture is linked to an external transmitter, the CRMX signal-symbole appears on upper left side.

1 dash= 1-30% signal strength
2 dashs= 31-70% signal strength
3 dashs= 71-100% signal strength

CRMX	**Enabled**
Operation Mode	**TX**
Linked	**Yes**
Receive Reset	Yes
DMX	Disconnect
BLE (Bluetooth)	Disabled

Once the fixture is linked to an external transmitter, the CRMX signal-symbole appears on upper left side.

1 dash= 1-30% signal strength
2 dashs= 31-70% signal strength
3 dashs= 71-100% signal strength

CRMX	**Enabled**
Operation Mode	**RX**
Linked	**Yes, out of range**
Receive Reset	Yes
DMX	Disconnect
BLE (Bluetooth)	Disabled

In case the external transmitter is switched off or out of signal range the signal-symbole starts to blink.

4.2.2.2. Wireless Connection

CRMX	**Enabled**	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	**RX**	
Linked	**Yes, but no DMX**	
Receive Reset	Yes	
DMX	Disconnect	
BLE (Bluetooth)	Disabled	

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

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

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

CRMX	**Enabled**	DMX is active. As CRMX TX is enabled and linked a full DMX universe is send out by CRMX (wireless DMX).
Operation Mode	**TX**	
Linked	**Yes**	
Receive Reset	No	
DMX	**Connect**	
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:

ENTER ⊕ ESC

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

(hold 3 seconds)

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:

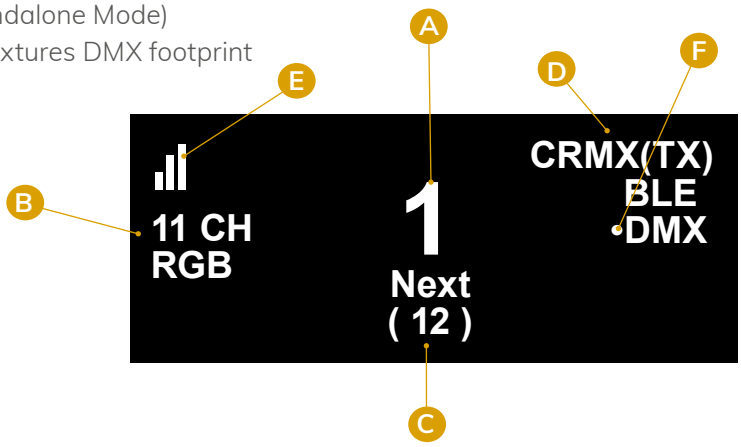
- **A** DMX Adress
- **B** Operating Mode (DMX Mode, Quick Light or Standalone Mode)
- **C** Next available DMX address depending on the fixtures DMX footprint
- **D** External Data protocol (CRMX, DMX, BLE).
- **E** CRMX status and strength
- **F** The dot indicates the active protocol

  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
11CH RGB (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
11CH RGB (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	Level 2	Level 3	Level 4
Menu	**Stand Alone Mode**	**Auto**	**Program**
DMX Mode	Stop Stand Alone	➨ Stop Program	➨ Speed <0-100> **(Default 50)**
➨ Stand Alone	➨ Auto	7-Color Fade	Dim <0-**100**>
Slave	Editor	7-Color Jump	
Settings	Color Macro	15-Color Fade	
System Info	Quick Color	15-Color Jump.....	
	Tunable White	Police RB	
	User Color	Police B	
	Timer	Candle Light	
	Color Settings	Fireworks	
		Red Carpet	
		Welding	

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

Pos.	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

Gels - Color Macros for Standalone Mode

Pos.	Gel Name	Color Number
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
29	Lavender	LEE 058
30	Magenta	LEE 113
31	Mauve	LEE 126
32	Smokey Pink	LEE 127

Gels - Color Macros for Standalone Mode

Pos.	Gel Name	Color Number
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

Quick Color*

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

Level 1

Menu
DMX Mode
➨ Stand Alone
Slave
Set-tings

Level 2

Stand Alone Mode
Stop Stand Alone
Auto
Editor
Color Macro
➨ Quick Color
Tunable White
User Color
Timer
Color Settings

Level 3 | E.SHOW mini TW+

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>

Level 3 | E.SHOW mini FC

Quick Color	
Dimmer	<0-**100**>
Shutter	<0-**255**>
Red	<**0**-255>
Green	<**0**-255>
Blue	<**0**-255>
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

Menu
DMX Mode
➨ Stand Alone
Slave
Settings
System Info

Level 2

Stand Alone Mode
Stop Stand Alone
Auto
Editor
Color Macro
Quick Color
➨ Tunable White
User Color
Timer
Color Settings

Level 3

Tunable White	
CCT	<**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

Menu
DMX Mode
➡ Stand Alone
Slave
Set-tings

Level 2

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

Level 3

User Color
Color 1
Color 2
Color 3
Color 4
Color 5

Level 4 | E.SHOW mini TW+

User 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>

Level 4 | E.SHOW mini FC

User Color	
Dimmer	<0-**100**>
Shutter	<0-**255**>
Red	<**0**-255>
Green	<**0**-255>
Blue	<**0**-255>
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+) / RGBL (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 / **Off**>	
Fade In	<**0**-60 min>	1 minute steps
Dwell Time	<**1**-24h>	1 hour steps
Fade Out	<**0**-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

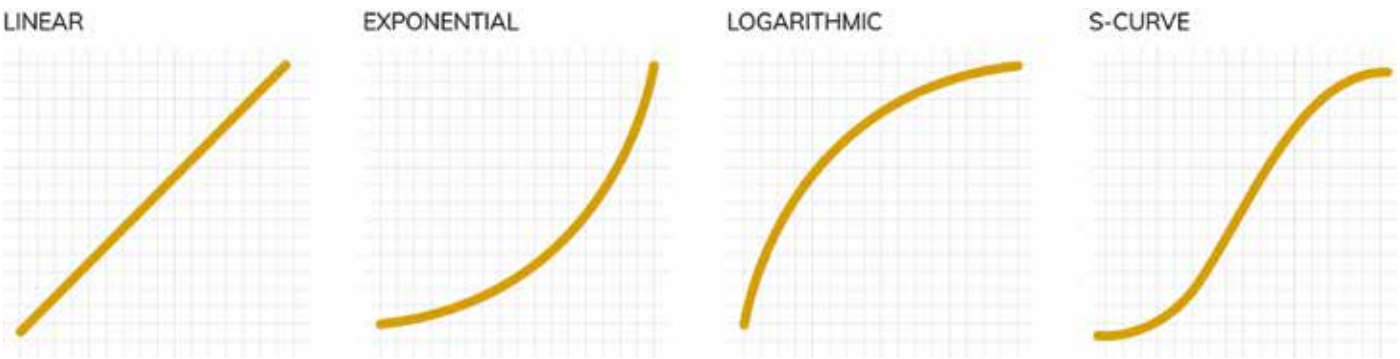
Menu
DMX Mode
Stand Alone
Slave
➨ Settings
System Info

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 disbaled
		Backlight	<**on**/off>	On= controls permanent on, display itself will deactivate after 60 minues of incativity 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 adjust-ments of specific Standalone Modes)	**DMX**		Select your default operating mode when fixture is powered on
		Auto		
		Editor		
		Color Macro		
		Quick Color		
		Tunable White		
		User Color		
Settings	DMX Fail	**Hold**		Hold= last command retains
		Blackout		Blackout= Activates Blackout
		Emergency Light		Emergency Light= Fixtures changes to 5600K
	Dimmer Curve	**Linear**		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	**LED**		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	**Full Calibration**	Color & CCT Calibration	
		CCT Calibration	CCT only (RAW Colors)	
	RAW Balance E.SHOW mini TW+ (affects RAW Mode in DMX and Stand Alone Modes "Editor", "Quick Color" and "User Color".	**RAW**		RGBALC (E.SHOW mini TW+) / RGBL (E.SHOW mini FC) with maximum value of brightnes)
		Red	<0-**255**>	individual color calibration for R,G,B,A,L and C
		Green	<0-**255**>	
		Blue	<0-**255**>	
		Amber	<0-**255**>	
		Lime	<0-2**55**>	
		Cyan	<0-**255**>	
	RAW Balance E.SHOW mini FC+ RAW Balance (affects RAW Mode in DMX and Stand Alone Modes "Editor", "Quick Color" and "User Color".	**RAW**		RGBL with maximum value of brightnes)
		Red	<0-**255**>	individual color calibration for R,G,B and L
		Green	<0-**255**>	
		Blue	<0-**255**>	
		Lime	<0-2**55**>	
	LED Frequency	800 Hz		Select preferred LED PWM frequency
		1200 Hz		
		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 adress 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 **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	Select your User Reset defaults
			DMX Mode **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 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	<**DMX**/Auto/Editor/Color Macro, Quick Color, Tunable White User Color>	
			DMX Fail	<**Hold**/Blackout/Emergency (5600K)>	
			Dimmer Curve	<**Linear**, Exponential, Logarithmic, S-Curve>	
			Dimmer Response	<**LED**, Halogen>	
			Color Calibration	**Full Calibration** / CCT Calibration	
			RAW Balance	**RAW** / User Calibration	
			LED Frequency	<800Hz, **1200Hz**, 2000Hz, 3600Hz, 12000Hz, 25000Hz>	

Dimmer Curves



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

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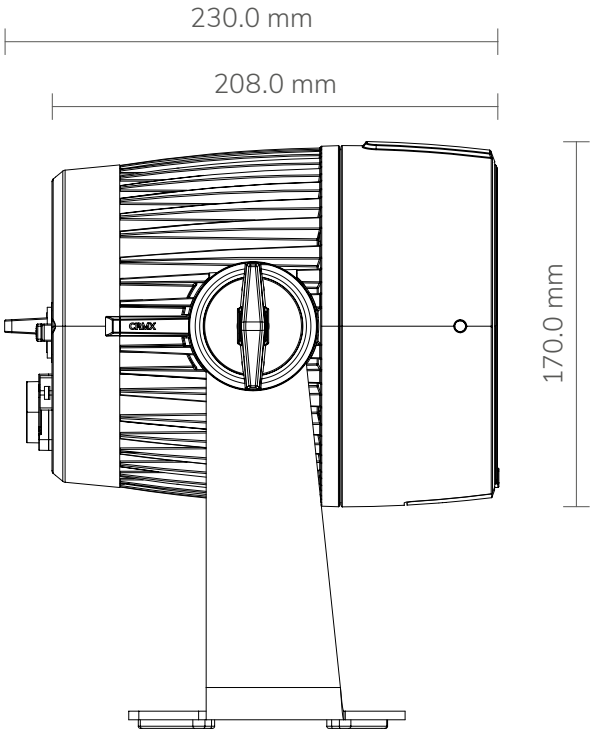
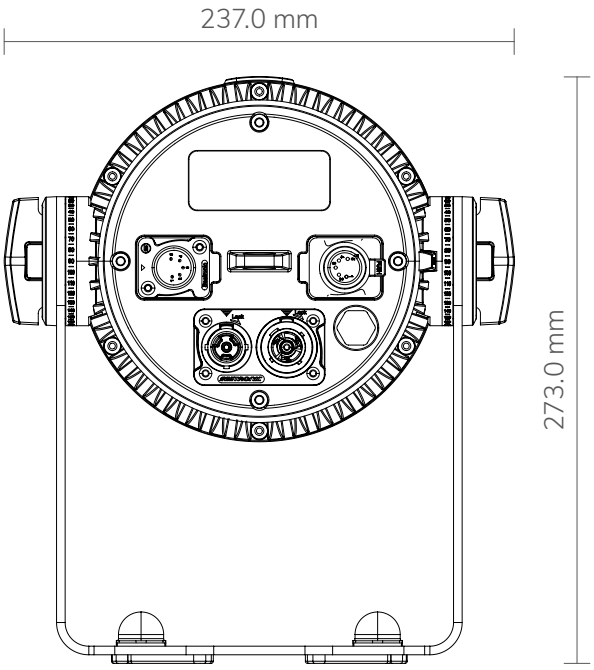
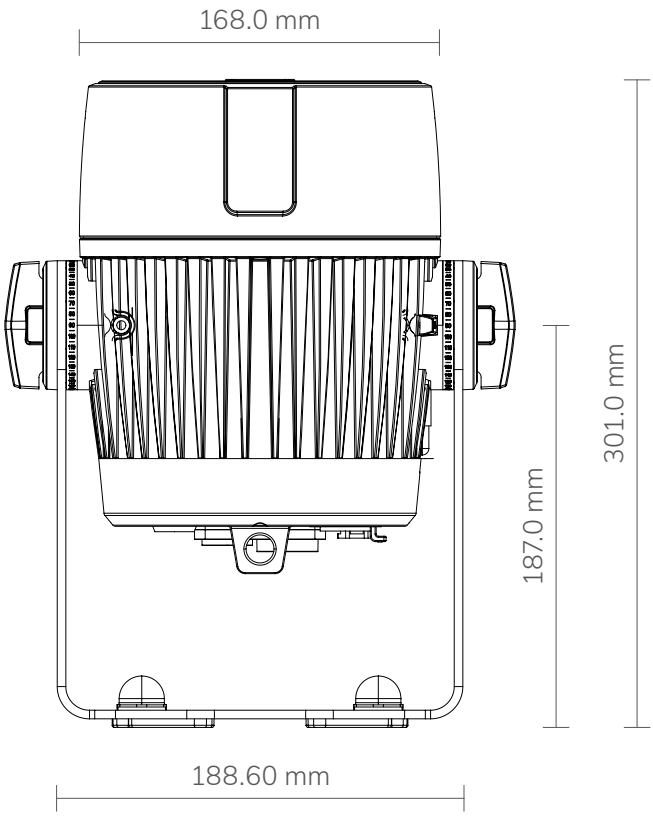
7. TECHNICAL DATA / DIAGRAMS

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

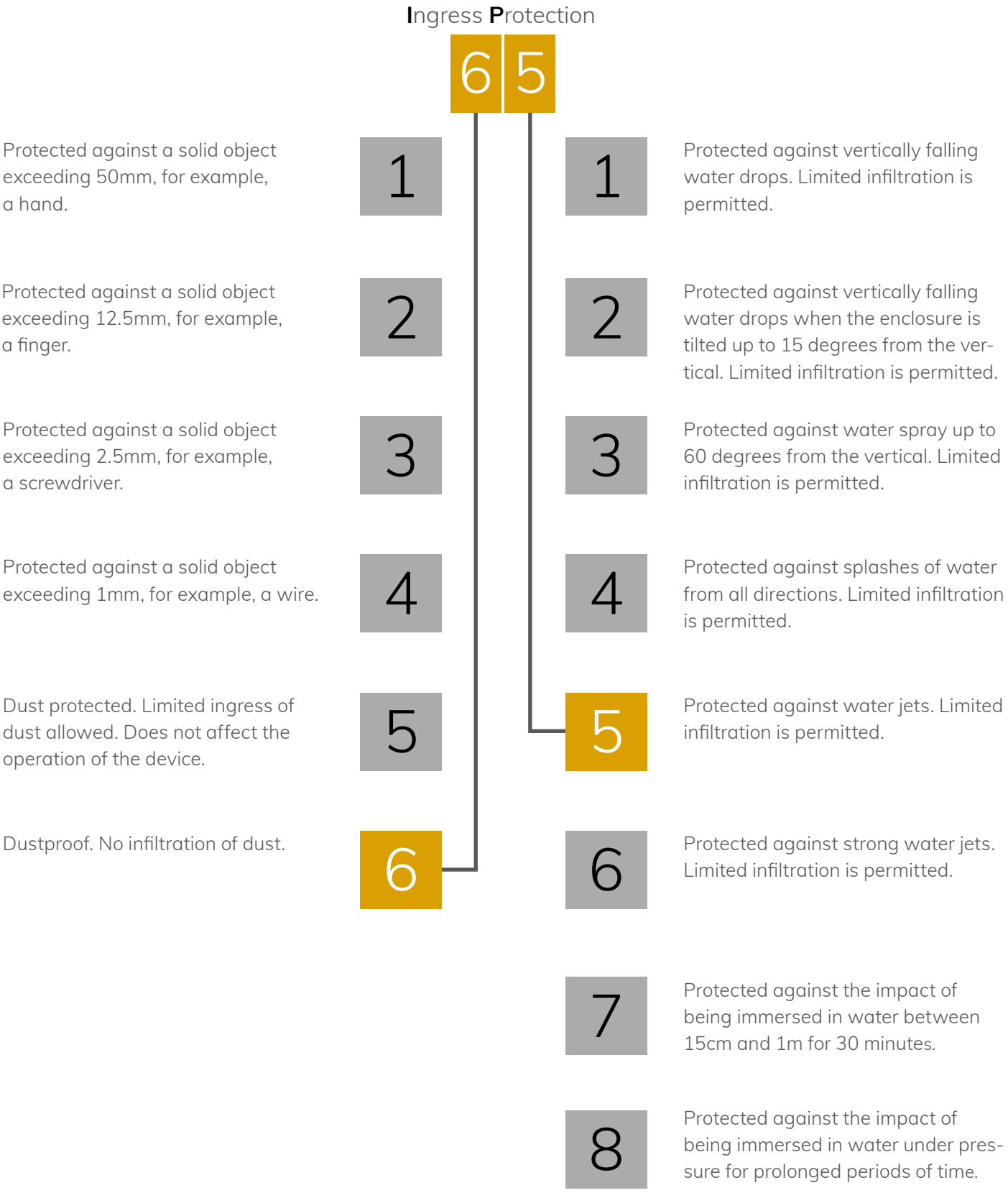






7.2 IP Rating

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	1x100W RGBALC
Type of optical system	reflector + interchangable 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
Efficancy (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
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	1,206A
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
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 quater-turn fasteners, Touring Cases
Color options	Black – RAL 9004 (Standard)
	White – RAL 9010 (on request)
	Custom color – any RAL (on request)
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, 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, backlighted 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	1x100W RGBL
Type of optical system	reflector + interchangable 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
Efficancy (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 quater-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, backlighted 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+

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

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	Tint channel active in CCT mode
		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	**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	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 and RGB)**	0	no function	Tint channel active in CCT mode
		001-127	Magenta -> Neutral	
		128-128	Neutral	
		129-255	Neutral -> Green	
8	**Color Macro (override RGB/CTC)**		**Please see color macro chart**	
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	**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	**Duration (only affects to channel 2 - Strobe 1 025-064)**	000-255	0 - 100%	(only affects to channel 2 - Strobe 1 - 025-064)
4	**Red**	000-255	0 - 100%	
5	**Green**	000-255	0 - 100%	
6	**Blue**	000-255	0 - 100%	
7	**CTC (affects RGB)**	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	**Tint (affects CTC and RGB)**	0	No function	Tint channel active in CCT mode
		001-127	Magenta -> Neutral	
		128-128	Neutral	
		129-255	Neutral -> Green	
9	**Color Macro (override RGB/CTC)**		**Please see color macro chart**	

10	**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	**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)	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	according to CTC chart
		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	Tint channel active in CCT mode
		001-127	Magenta -> Neutral	
		128-128	Neutral	
		129-255	Neutral -> Green	
12	**Color Macro (override RGB+Fine/CTC)**		**Please see color macro chart**	

13	**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)
14	**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) — 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	**Red**	000-255	0 - 100%	
4	**Green**	000-255	0 - 100%	
5	**Blue**	000-255	0 - 100%	
6	**Amber**	000-255	0 - 100%	
7	**Lime**	000-255	0 - 100%	
8	**Cyan**	000-255	0 - 100%	
9	**CTC (affects RGBALC)**	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	**Tint (affects CTC and RGBALC)**	0	no function	Tint channel active in CCT mode
		001-127	Magenta -> Neutral	
		128-128	Neutral	
		129-255	Neutral -> Green	
11	**Color Macro (over-ride RGBALC/CTC)**		**Please see color macro chart**	
12	**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)	
13	**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)	
		060-069	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	**Blue Fine**	000-255	0 - 100%	
10	**Amber**	000-255	0 - 100%	
11	**Amber Fine**	000-255	0 - 100%	
12	**Lime**	000-255	0 - 100%	
13	**Lime Fine**	000-255	0 - 100%	
14	**Cyan**	000-255	0 - 100%	
15	**Cyan Fine**	000-255	0 - 100%	
16	**CTC (affects RGBALC/ Fine)**	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	
17	**Tint (affects CTC and RGBALC/FIne)**	0	No function	Tint channel active in CCT mode
		001-127	Magenta -> Neutral	
		128-128	Neutral	
		129-255	Neutral -> Green	
18	**Color Macro (override RGBALC+Fine/CTC)**		**Please see color macro chart**	
19	**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)	

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	**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	**Hue**	000-255	0° (RED) Thru 360°	
5	**Saturation**	000-255	0 - 100% (CTC-->HUE)	
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	Tint channel active in CCT mode
		001-127	Magenta -> Neutral	
		128-128	Neutral	
		129-255	Neutral -> Green	
8	**Color Macro (override HUE/ SATURATION/CTC)**		**Please see color macro chart**	
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)	
		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	
remark *1		**After adjustments please set the value back to 000 to avoid any disturbance by endless function call.**		

7.4 DMX Charts - mini TW+

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

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 steps	
3	Tint (affects CCT)	0	no function	Tint channel active in CCT mode
		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	**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	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 and RGB)**	0	No function	Tint channel active in CCT mode
		001-127	Magenta -> Neutral	
		128-128	Neutral	
		129-255	Neutral -> Green	
8	**Color Macro (override RGB/CTC)**		**Please use color macros from ROXX color macro chart**	
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	**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	**Duration (only affects to channel 2 - Strobe 1 025-064)**	000-255	0 - 100%	
4	**Red**	000-255	0 - 100%	
5	**Green**	000-255	0 - 100%	
6	**Blue**	000-255	0 - 100%	
7	**CTC (affects RGB)**	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	**Tint (affects CTC and RGB)**	0	no function	Tint channel active in CCT mode
		001-127	Magenta -> Neutral	
		128-128	Neutral	
		129-255	Neutral -> Green	
9	**Color Macro (override RGB/CTC)**		**Please use color macros from ROXX color macro chart**	

10	**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	**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)	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**	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 ⇒)	
		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)**	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	
11	**Tint (affects CTC and RGB)**	0	no function	Tint channel active in CCT mode
		001-127	Magenta -> Neutral	
		128-128	Neutral	
		129-255	Neutral -> Green	
12	**Color Macro (override RGB+Fine/ CTC)**		**Please use color macros from ROXX color macro chart**	

13	**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)	
14	**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)	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	**CTC (affects RGBL)**	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	**Tint (affects CTC and RGBL)**	0	no function	Tint channel active in CCT mode
		001-127	Magenta -> Neutral	
		128-128	Neutral	
		129-255	Neutral -> Green	
9	**Color Macro (override RGBL/CTC)**		**Please use color macros from ROXX color macro chart**	
10	**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	**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)	
		060-069	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	**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	**Lime**	000-255	0 - 100%	
11	**Lime Fine**	000-255	0 - 100%	
12	**CTC (affects RGBL)**	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	**Tint (affects CTC and RGBL)**	0	No function	Tint channel active in CCT mode
		001-127	Magenta -> Neutral	
		128-128	Neutral	
		129-255	Neutral -> Green	
14	**Color Macro (override RGBL,CTC)**		**Please use color macros from ROXX color macro chart**	
15	**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)	
16	**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)	
		060-069	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	0° (RED) Thru 360°	
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	Tint channel active in CCT mode
		001-127	Magenta -> Neutral	
		128-128	Neutral	
		129-255	Neutral -> Green	
8	**Color Macro (override HUE/ SATURATION/CTC)**		**Please use color macros from ROXX color macro chart**	
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		**After adjustments please set the value back to 000 to avoid any disturbance by endless function call.**		

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	Mikkel Blue	LEE 716
081-083	Rose Pink	LEE 002
084-086	Med Pink	LEE 036
087-089	Light Lavender	LEE 052
090-092	Lavender	LEE 058
093-095	Magenta	LEE 113
096-098	Mauve	LEE 126
099-101	Smokey Pink	LEE 127

Gels - Color Macros for DMX		
DMX value	Gel Name	Color Number
102-104	Special Med Lavender	LEE 343
105-107	Ultimate Violet	LEE 707
108-110	Magical Magenta	LEE 795
111-113	Chrysalis Pink	LEE 798
114-116	Specia KH Lavender	LEE 799
117-119	Bulb White	2700K
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 availble use no function)	100% White LED
138-140	Amber (if not availble use no function)	100% Amber LED
141-143	Lime (if not availble use no function)	100% Lime LED
144-146	Cyan (if not availble use no function)	100% Cyan LED
147-149	User Color 1	(if not availble use no function)
150-152	User Color 2	(if not availble use no function)
153-155	User Color 3	(if not availble use no function)
156-158	User Color 4	(if not availble use no function)
159-161	User Color 5	(if not availble 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

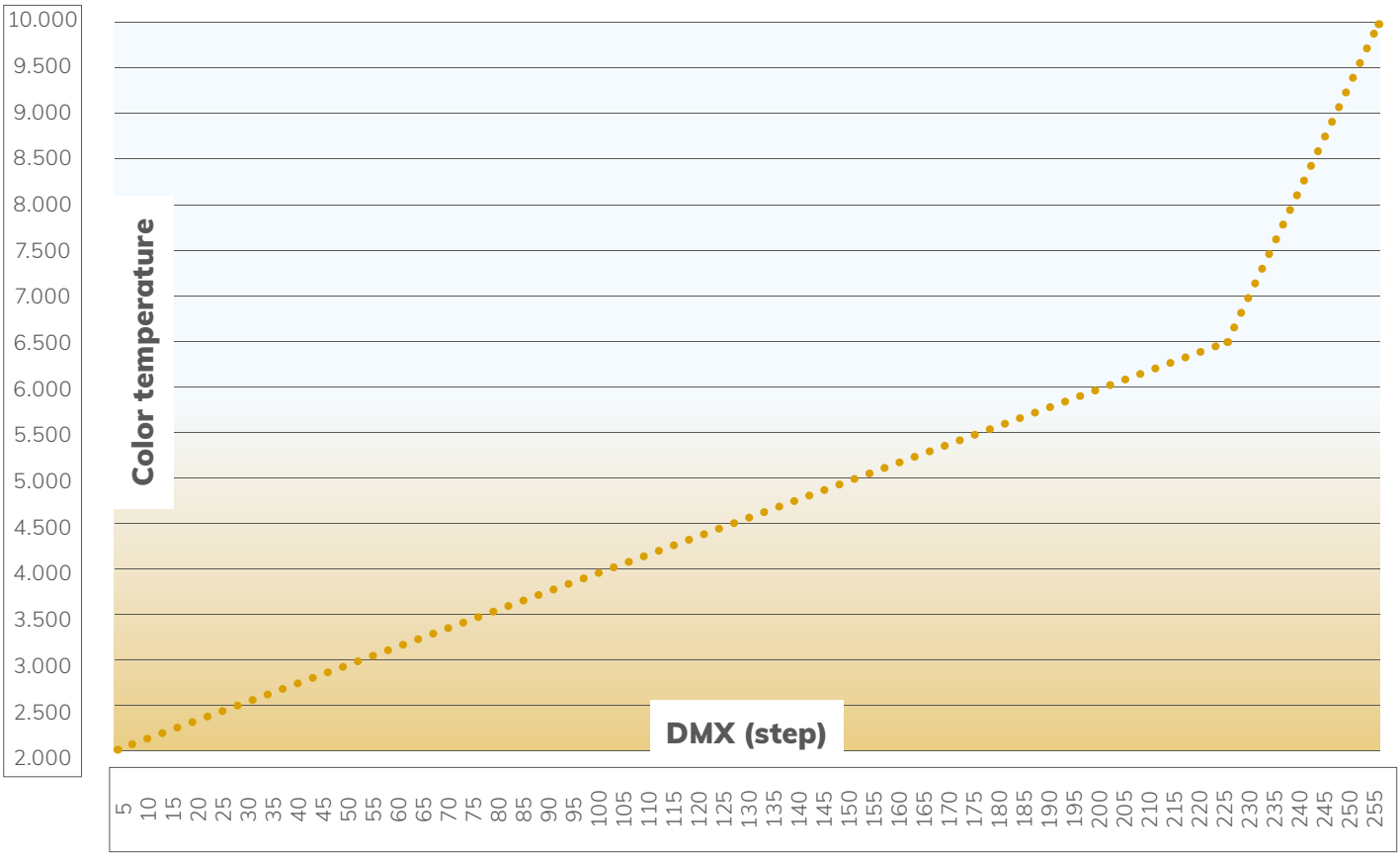
7.5 Color Macro Chart for Stand Alone

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)
0	5600
1	5600
2	5600
3	5600
4	5600
5	2000
6	2020
7	2041
8	2061
9	2081
10	2102
11	2122
12	2143
13	2163
14	2183
15	2204
16	2224
17	2244
18	2265
19	2285
20	2305
21	2326
22	2346
23	2367
24	2387
25	2407
26	2428
27	2448
28	2468
29	2489
30	2509
31	2529
32	2550
33	2570
34	2590
35	2611
36	2631
37	2652
38	2672
39	2692
40	2713
41	2733
42	2753

DMX (Step)	Color Temp (°K)
43	2774
44	2794
45	2814
46	2835
47	2855
48	2876
49	2896
50	2916
51	2937
52	2957
53	2977
54	2998
55	3018
56	3038
57	3059
58	3079
59	3100
60	3120
61	3140
62	3161
63	3181
64	3201
65	3222
66	3242
67	3262
68	3283
69	3303
70	3324
71	3344
72	3364
73	3385
74	3405
75	3425
76	3446
77	3466
78	3486
79	3507
80	3527
81	3548
82	3568
83	3588
84	3609
85	3629

DMX (Step)	Color Temp (°K)
86	3649
87	3670
88	3690
89	3710
90	3731
91	3751
92	3771
93	3792
94	3812
95	3833
96	3853
97	3873
98	3894
99	3914
100	3934
101	3955
102	3975
103	3995
104	4016
105	4036
106	4057
107	4077
108	4097
109	4118
110	4138
111	4158
112	4179
113	4199
114	4219
115	4240
116	4260
117	4281
118	4301
119	4301
120	4342
121	4362
122	4382
123	4403
124	4423
125	4443
126	4464
127	4484
128	4505

DMX (Step)	Color Temp (°K)
129	4525
130	4545
131	4566
132	4586
133	4606
134	4627
135	4647
136	4667
137	4688
138	4708
139	4729
140	4749
141	4769
142	4790
143	4810
144	4830
145	4851
146	4871
147	4891
148	4912
149	4932
150	4952
151	4973
152	4993
153	5014
154	5034
155	5054
156	5075
157	5095
158	5115
159	5136
160	5156
161	5176
162	5197
163	5217
164	5238
165	5258
166	5278
167	5299
168	5319
169	5339
170	5360
171	5380

DMX (Step)	Color Temp (°K)
172	5400
173	5421
174	5441
175	5462
176	5482
177	5502
178	5523
179	5543
180	5563
181	5584
182	5604
183	5624
184	5645
185	5665
186	5686
187	5706
188	5726
189	5747
190	5767
191	5787
192	5808
193	5828
194	5848
195	5869
196	5889
197	5910
198	5930
199	5950
200	5971
201	5991
202	6011
203	6032
204	6052
205	6072
206	6093
207	6113
208	6133
209	6154
210	6174
211	6195
212	6215
213	6235
214	6256

DMX (Step)	Color Temp (°K)
215	6276
216	6296
217	6317
218	6337
219	6357
220	6378
221	6398
222	6419
223	6439
224	6459
225	6480
226	6500
227	6621
228	6741
229	6862
230	6983
231	7103
232	7224
233	7345
234	7466
235	7586
236	7707
237	7828
238	7948
239	8069
240	8190
241	8310
242	8431
243	8552
244	8672
245	8793
246	8914
247	9034
248	9155
249	9276
250	9397
251	9517
252	9638
253	9759
254	9879
255	10000

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):	0112xxxxxxxxx / 0113xxxxxxxxx

ⓘ ***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://roxxlight.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 eanble 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 connectiviy can be active, please make sure your mobile device is currently not connected to some other devices.
	Different mobile device is still conneced to the fixture	Please disconnect other mobile device from fixture.
	No Bluetooth Advertisment	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

Requesting Warranty-Service

To request warranty service for your product, please contact:
ROXX GmbH,
Hansestr. 91, 51149 Köln
Email: 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 ben used inthe portable exposure condition with restiction

FCC Radiation Exposure Statement:
The equipment complies with FCC Radiation exposure limits set forth for uncontrolled enviroment. 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,
or you can also request it at info@roxxlight.com

NOTES

User Manual

ROXX®

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