ROXX ®

B.SHOW mini TW+
B.SHOW mini FC

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..

The fixture has an integrated, non-removable battery, do not attempt to remove the battery. Do not open the headlamp. To replace the battery, take the device to an authorized service center.

Fully charge the battery again immediately after discharging. Batteries that are not fully charged lose capacity and service life.
For short to medium-term storage of the headlamp, fully charge the battery.
If the headlamp will not be used for a longer period of time, use the "Storage" function inside the device settings to charge the battery. This limits the maximum charging capacity to 40% and thus preserves the life of the battery.
Do not charge the battery of the B.SHOW mini TW+ / B.SHOW mini FC headlamp at ambient temperatures below 0°C / 32°F and above 40°C / 104°F.
If the headlamps are charged inside a flightcase, the case lid must remain open during the entire charging process in order to avoid heat accumulation.

- 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.

1.4. Battery Safety

1. Keep the battery poles away from conductive objects, such as keys, jewelry, or other materials. Otherwise, the battery may be short-circuited, resulting in injury and burns.
2. Never change the polarity of the battery's contacts.
3. Keep the battery away from excessive heat and direct sunlight. Do not place it on or in heating devices, such as microwaves, ovens, or radiators. Batteries may explode if overheated.
4. Do not attempt to modify or rework the battery, insert foreign objects into the battery, or immerse the battery in water or other liquids.
   Do not attempt to modify or rework the battery, insert foreign objects into the battery, or immerse or come into contact with water or other liquids. Failure to do so may result in fire, explosion, or other hazardous dangerous situations.
5. In case of battery acid leakage, make sure that it does not get on the skin or in the eyes. if it does, rinse immediately with clean water and consult a doctor.
6. In case of deformation, color change or overheating of batteries during charging or storage, stop using the device immediately. Immediately stop using the device and remove the battery. If you continue to use the device, battery acid may leak or a fire or explosion may occur.
7. Do not dispose of batteries in fire as they may explode. Damaged batteries may also explode.
8. Dispose of used batteries in accordance with local regulations. Improper use of the battery may result in a fire, explosion, or other hazardous situation.
9. Do not allow children or pets to chew, suck or suck on the battery. Doing so may cause damage or an explosion may occur.
10. Do not smash or puncture the battery and do not subject it to high pressure. Otherwise, it may cause a short circuit or overheating.
11. Do not drop the device or battery. If the device or battery is dropped, especially on a hard surface, it may be damaged.
12. If the standby time of the device shortens significantly, replace the battery.
13. If the device has a built-in, non-removable battery, do not attempt to remove the battery as the device may be damaged. otherwise the device may be damaged. To replace the battery, take the device to an authorized service center.

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. B.SHOW mini TW+ / B.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. Thanks to the new B.SHOW mini, you can say goodbye to tangled cables for ultimate flexibility without compromise. The powerful lithium-ion battery ensures reliable operation and a runtime of up to 24 hours. The integrated battery management system protects against deep discharge and overcharging. The integrated CRMX transceiver module offers the latest wireless technology from Lumenradio, and the headlamp can also be conveniently controlled via Bluetooth using the ROXX.APP. The ROXX® B.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 B.SHOW mini TW+ / B.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

- B.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

- B.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
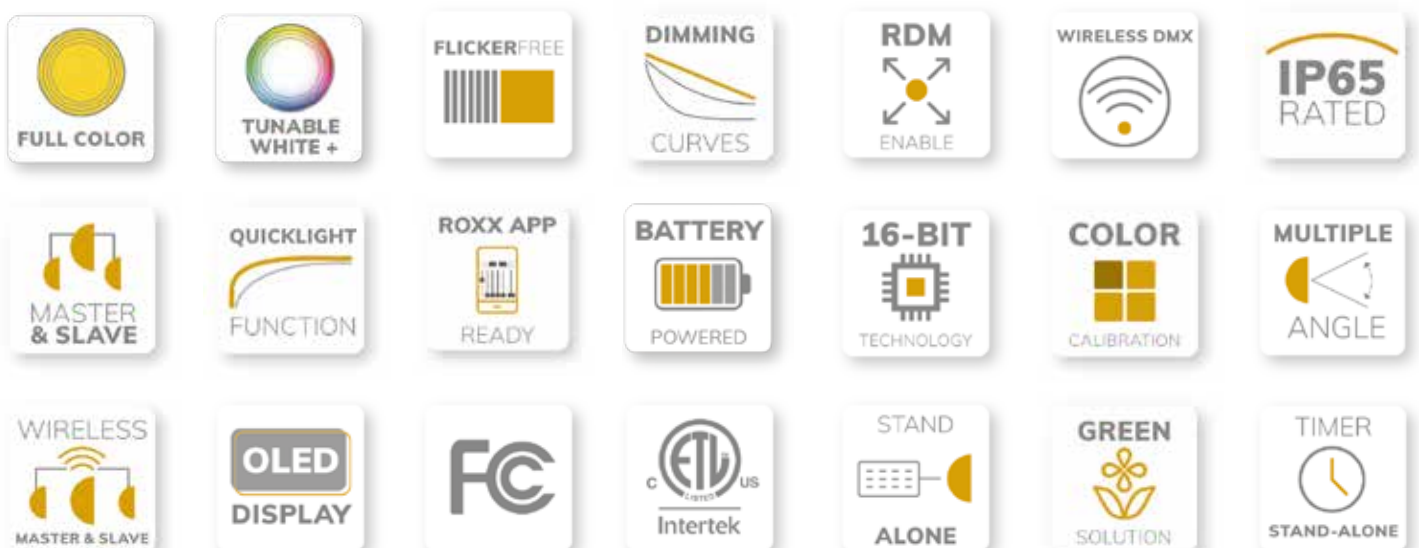
4. INSTALLATION & SETUP

4.1 Physical Installation and Rigging

ROXX B.SHOW mini TW+ / B.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.

106 mm / 4.2 inch
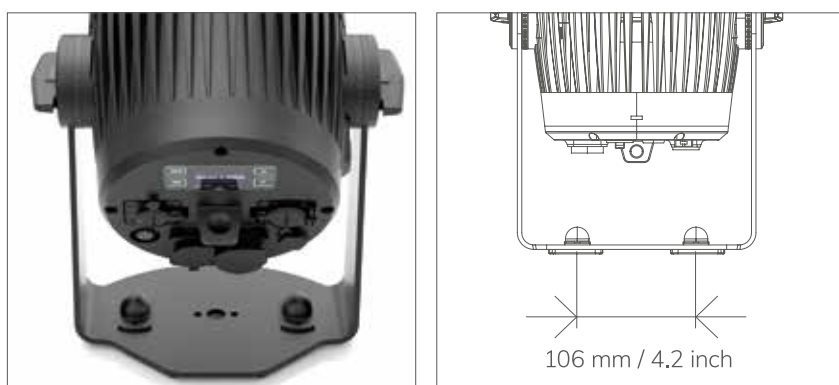
A centric hole on the yoke´s bottom (d=13mm / 0,51 inch) provides a mounting point for more rigging options. Next to it, two additional holes allow the perfect connection of a TV spigot, to use the B.SHOW mini TW+ / B.SHOW mini FC on a tripod or for example with a superclamp.
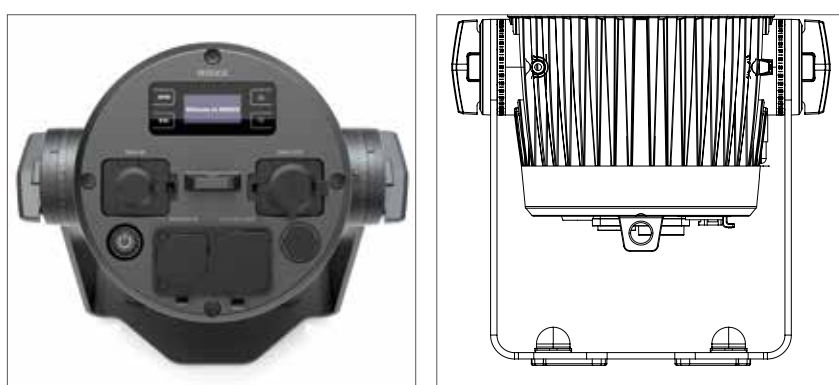
Pendant Light*:

The sophisticated and attractive design of the ROXX B.SHOW mini TW+ / B.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 B.SHOW mini TW+ / B.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).
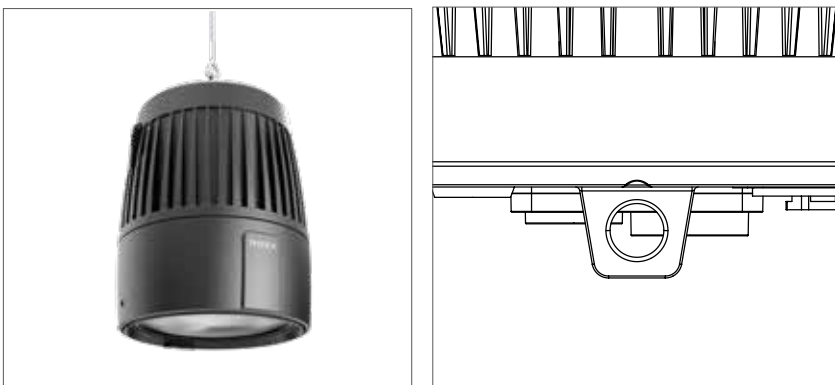
Also in this application, please take care of the current requirements and regulations for dimensioning and design of the used wires, clamps and all other possible mounting materials.
⚠ Always take care of an adequate distance between the fixture and surrounding surfaces and be sure to keep the fans outlets free for good ventilation.

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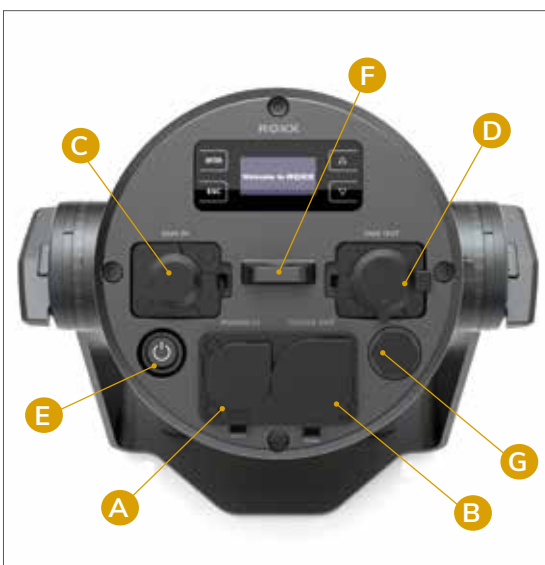
A: Mains In: IP65 Power input connector with rubber sealing cap. Connect using the provided power cable (when not in use, always close with rubber sealing cap).

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: Power On/Off

F: Safety Eyelet

G: 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 B.SHOW mini TW+ / B.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!

4.2.1.2 Charging the battery, operating and storage

- As soon as the headlamp is connected to AC power the internal battery starts charging.
- The battery charge status is shown on the display both when the headlamp is on and when it is in standby mode.
- The charging time from 0% charge status to 100% charge status is approximately 5 hours.
- The battery runtime is approx. 7.5 hoursfor a two-color mix (both colors at 100%). The battery runtime can be extended up to 24 hours by using the runtime function with correspondingly reduced brightness.
- The headlamp automatically calculates the brightness based on the color setting and runtime used.
- After approximately 300 charging cycles (0% - 100%), the battery capacity is still approximately 70% of the nominal capacity.
- The electronic Battery Management System protects against overcharging and deep discharge.
- The battery may only be replaced with original accessories by an authorized service center.
- Do not charge the battery at ambient temperatures below 0°C and above 40°C.
- When operating the B.SHOW mini TW+ / B.SHOW mini FC floodlight with mains voltage, the ambient temperature must not fall below 0°C and must not exceed +40°C.
- When operating with internal rechargeable battery, the ambient temperature must not fall below -20°C and must not exceed +40°C.
- Immediately recharge the battery completely after discharging. Batteries that are not fully charged lose capacity and service life.
- For short to medium-term storage of the headlamp, fully charge the battery.
- If the headlamp will not be used for a longer period of time, use the "Storage" function inside the device settings to charge the battery. This limits the maximum charging capacity to 40% and thus preserves the life of the battery.
- If the headlamps are charged inside a flight-case, be aware the case lid must remain open during the entire charging process in order to avoid heat accumulation.
- When operating in a cold environment, battery life may be shorter than expected.
- Store the headlamp in a cool, dry place to allow optimal storage conditions for the battery.

4.2.2. DMX Connection

The B.SHOW mini TW+ / B.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

DATA
GND

DATA -

DATA +

120 Ohm
+/- 5%

XLR pin out

DATA
GND

DATA -

DATA +

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*

B.SHOW mini TW+ / B.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.
B.SHOW mini TW+ / B.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

11 CH RGB — **1** Next (12) — **•DMX**
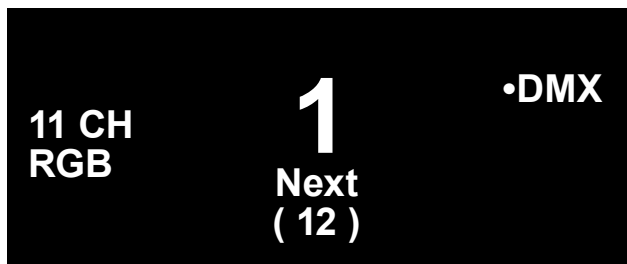
CRMX	Disabled	
Operation Mode	n.a.	
Linked	No	The indicator infront of "DMX" shows that DMX is active.
Receive Reset	No	
DMX	**Enabled**	
BLE (Bluetooth)	Disabled	

11 CH RGB — **1** Next (12) — **• CRMX(RX) DMX**
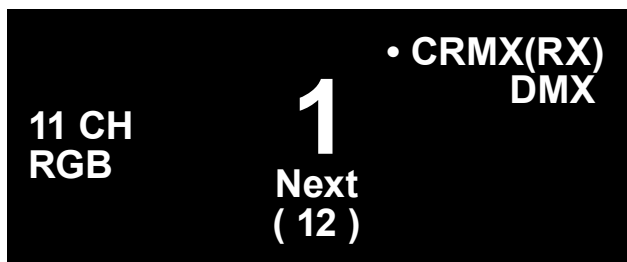
CRMX	**Enabled**	
Operation Mode	**RX**	The indicator infront of "CRMX (RX)" shows that the fixture is now working in wireless DMX receive mode.
Linked	**No**	
Receive Reset	Yes	
DMX	Disconnect	"(RX)"= CRMX operating mode is set to receive
BLE (Bluetooth)	Disabled	

11 CH 1RGB — **1** Next (12) — **• CRMX(TX) DMX**

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

11 CH RGB — **1** Next (12) — **• CRMX(RX) DMX**

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

11 CH RGB — **1** Next (12) — **• CRMX(TX) DMX**

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

11 CH RGB — **1** Next (12) — **• CRMX(RX) DMX**

CRMX	**Enabled**	
Operation Mode	**RX**	In case the external trans- mitter is switched off or out of signal range the signal-sym- bole starts to blink.
Linked	**Yes, out of range**	
Receive Reset	Yes	
DMX	Disconnect	
BLE (Bluetooth)	Disabled	

4.2.2.2. Wireless Connection

11 CH RGB — **1** Next (12) — • CRMX(RX) DMX		
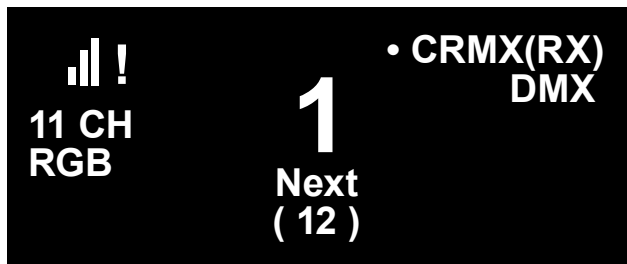
CRMX	**Enabled**	An exclamation appears and blinks although the external transmitter is switched on and is inside the signal range but no DMX is connected to the external transmitter.
Operation Mode	**RX**	
Linked	**Yes, but no DMX**	
Receive Reset	Yes	
DMX	Disconnect	
BLE (Bluetooth)	Disabled	

11 CH RGB — **1** Next (12) — • BLE DMX		

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**	

11 CH RGB — **1** Next (12) — CRMX(TX) • BLE DMX		

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

11 CH RGB — **1** Next (12) — CRMX(TX) BLE DMX		

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**	

11 CH RGB — **1** Next (12) — CRMX(TX) BLE • DMX		
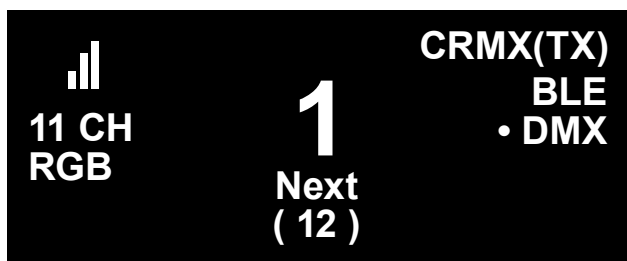
CRMX	**Enabled**	DMX is active. As CRMX TX is enabled and linked a full DMX universe is send out by CRMX (wireless DMX).
Operation Mode	**TX**	
Linked	**Yes**	
Receive Reset	No	
DMX	**Connect**	
BLE (Bluetooth)	Enabled	

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.

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

ESC	✚	▽

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

ESC	✚	△

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

| ENTER | (hold 3 seconds)
|-------|
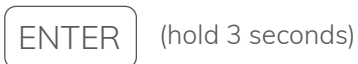
For easy and fast operation during setting the lights the fixture includes a user-friendly Quick Light function (Daylight 5600 Kelvin). If DMX, CRMX or Bluetooth is not assigned please press and hold ENTER for 3 seconds at homescreen, after the Quick Light function will appear.
Here dimmer can be adjusted 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
G   Battery Status
H   The flash symbole indicates that AC power is and the
       battery is charging. It disappears if AC power is disconected
       Note:
       CRMX (RX) CRMX Receiving Mode
       CRMX (TX) CRMX Transmit Mode
       BLE Bluetooth enabled
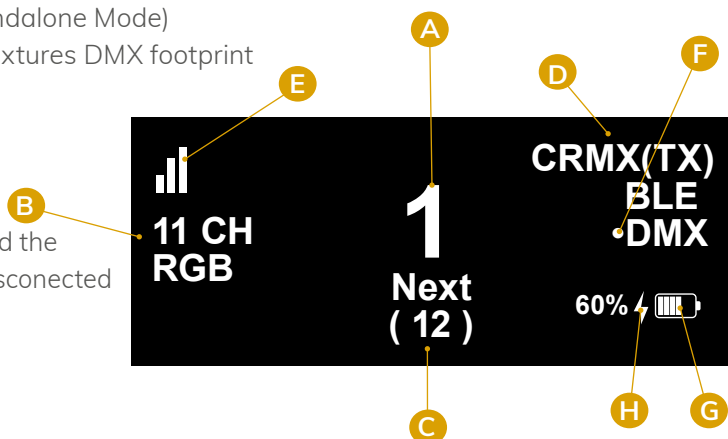
5.4.1 Battery Charge Status

To recharge the internal battery, connect the fixture to the AC power.
The battery charge status is indicated by the battery symbol on the display in Standby Mode. Once the fixture is switched On, the battery status will be also displayed in percentage.
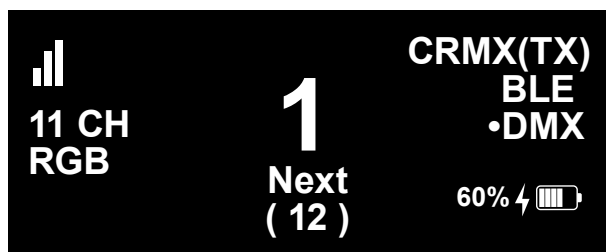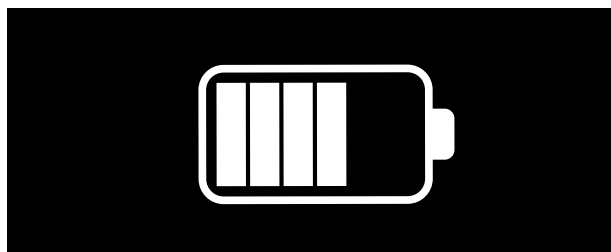
5.4.2 Selecting DMX Mode*

At home screen please press ENTER to access to the main menu (level 1).
While using UP / DOWN arrows, please select the menu item "DMX Mode" and confirm
by pressing ENTER.
In the following sub-menu (level 2), you can now choose between 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   Level 2 | B.SHOW mini TW+   Level 2 | B.SHOW mini FC

Menu
➥ DMX Mode
Stand Alone
Slave
Settings
System Info

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

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

5.4.3 Stand Alone*

Press ENTER to access to main menu (level 1).
While using the UP / DOWN arrows, please select the menu item "Stand Alone" and confirm
by pressing ENTER.
In the following sub-menu (level 2), you can now choose between 6 different Stand Alone operating modes (Auto, Editor, Color Macro, Quick Color, Tunable White, User Color) ,Stop Stand Alone, Timer and Color Settings functions while using the UP/Down arrows and confirm by pressing ENTER or jump back by pressing ESC.
To finally use Stand Alone programs please make sure either DMX, CRMX RX or BLE is connected to the fixture, as these protocols have priority.

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

Level 1   Level 2

Menu
DMX Mode
➥ Stand Alone
Slave
Settings
System Info

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

Auto*
Select "Auto" by using the up/down arrows and press ENTER. Here at sub-menu (level 3), you can choose between 10 different Auto Programs (7-Color Fade, 7-Color Jump, 15-Color Fade, 15-Color Jump, Police RB, Police B, Candle Light, Fireworks, Red Carpet and Welding) and Stop Program. Using the Up/Down arrows you can select one of the 10 auto programs and confirm by pressing ENTER or step back by ESC.
After confirming your preferred Auto Program, you can now adjust speed and brightness at level 4. To adjust speed, please use the UP / DOWN arrows to select the menu item "Speed", and confirm with ENTER. After use UP / DOWN

arrows to adjust the speed value between 000-100 and confirm by ENTER or jump back by ESC.

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

Once it´s confirmed or denied the display will automatically jump back to level 3.

To stop running a selected auto program please chose "Stop Program" at level 3 or "Stop Stand Alone" at level 2.

For returning back to homescreen please press ESC three times.

At homescreen the selected Stand Alone mode "Auto" and the selected program will be displayed.

ⓘ ***Note:**

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

Level 1

Menu
DMX Mode
� Stand Alone
Slave
Settings
System Info

Level 2

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

Level 3

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

Level 4

Program	
➥ Speed	<0-100>
	(Default 50)
Dim	<0-**100**>

Editor*

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

Each of the three values contains twenty four user-definable scenes with its own values for RGBALC (B.SHOW mini TW+) or RGBAL (B.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
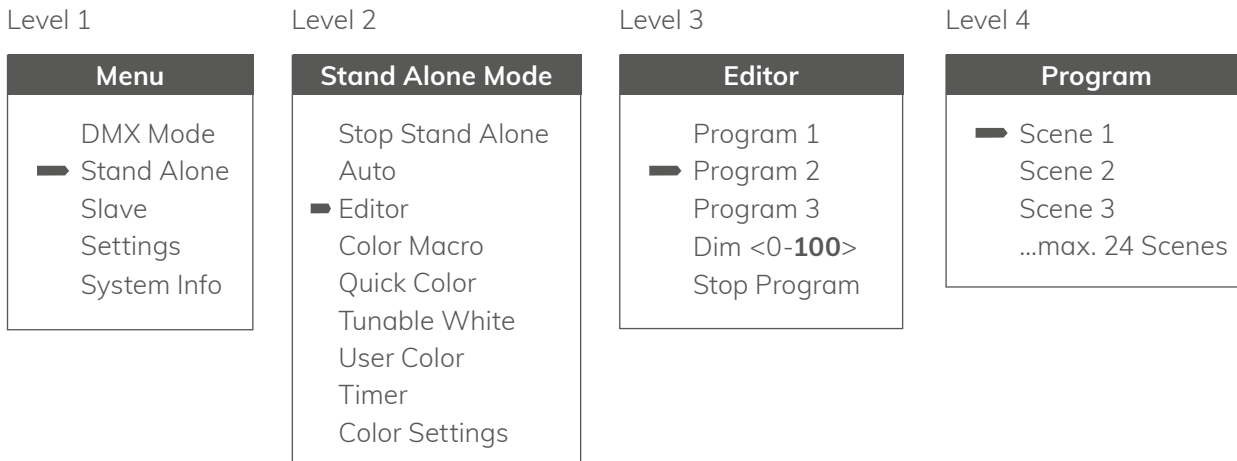
Level 5 - B.SHOW mini TW+

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 - B.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**>
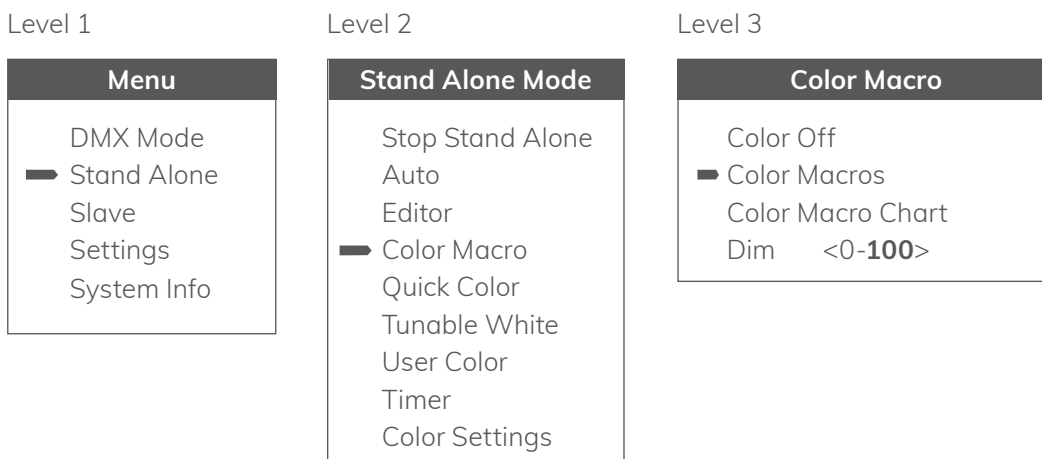
To select a color macro please press ENTER to access to main menu (level 1).
While using the UP / DOWN arrows select the menu item "Stand Alone" and confirm
by pressing ENTER. After please select the item "Color Macro" by using the up/down arrows and press ENTER again.
Using UP and DOWN controls, select "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 | B.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 | B.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	Level 2	Level 3	Level 4 | B.SHOW mini TW+	Level 4 | B.SHOW mini FC
Menu	**Stand Alone Mode**	**User Color**	**User Color**	**User Color**
DMX Mode	Stop Stand Alone	Color 1	Dimmer <0-**100**>	Dimmer <0-**100**>
➥ Stand Alone	Auto	Color 2	Shutter <0-**255**>	Shutter <0-**255**>
Slave	Editor	Color 3	Red <**0**-255>	Red <**0**-255>
Set-	Color Macro	Color 4	Green <**0**-255>	Green <**0**-255>
tings	Quick Color	Color 5	Blue <**0**-255>	Blue <**0**-255>
	Tunable White		Amber <**0**-255>	Lime <**0**-255>
	➥ User Color		Lime <**0**-255>	
	Timer		Cyan <**0**-255>	
	Color Settings			

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 (B.SHOW mini TW+) / RGBL (B.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 (B.SHOW mini TW+) / RGBL (B.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

5.4.4 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.**

5.4.5 Settings

Level 1

Menu
DMX Mode
Stand Alone
Slave
➥ Settings
System Info

Main Menu	Menu level 2	Menu level 3	Menu level 4	Description
Settings	Wireless DMX	CRMX	<on/**off**>	On=CRMX enabled / Off= CRMX disabled
		Operating Mode	<**receive**/transmit>	Receive= CRMX module as Receiver 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)
	Battery	Runtime	4 Hours 6 Hours **8 Hours** 10 Hours 12 Hours 14 Hours 16 Hours 18 Hours 20 Hours 22 Hours 24 Hours	"Off" for maximum of brightness. Set runtime in 2h increments, based on fully charged battery
		Charging	**Continous**	Continous : charging up to 100% capacity, for short and medium term fixture storage.
			Storage	Charging up to just 40% capacity. Recommended for long term fixture storage and thus preserves the life of the battery. Once battery is charged to 40% the display backlight will be switched off automatically.
	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 adjustments 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
	AC 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)	
	B.SHOW mini TW+ RAW Balance (affects RAW Mode in DMX and Stand Alone Modes "Editor", "Quick Color" and "User Color".	**RAW**		RGBALC (B.SHOW mini TW+) / RGBL (B.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**>	
	B.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 **B.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 **B.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)	
			Runtime	<off/4-24h> (8hours default)	
			Charging	<**Continous** / Storage>	
			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)>	
			AC 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

LINEAR
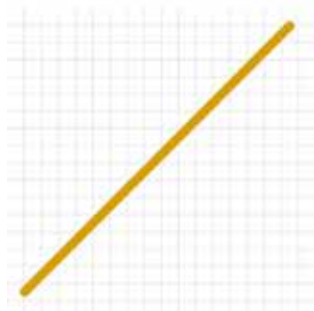
EXPONENTIAL

LOGARITHMIC

S-CURVE

5.4.6 System Info

Level 1

Menu
DMX Mode
Stand Alone
Slave
Settings
➡ System Info

Main Menu	Menu level 2	Menu level 3	Menu level 4
System Info	Firmware Version	vx.xx	Display installed firmware version
	Serial Number	B.SHOW mini TW+: 0118xxxxxxxxx B.SHOW mini FC: 0119xxxxxxxxx	
	RDM UID	B.SHOW mini TW+: 0X6a6a0118xxxx B.SHOW mini FC: 0X6a6a0119xxxx	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
	Voltage	x Voltage	Display the Battery Voltage
	Errors	Errors information	Display error codes

6. ACCESSORIES

6.1 Lenses

Available lenses for ROXX B.SHOW mini TW+ / B.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 B.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°	2960	73 / 2,4	1020	122 / 4,0	518	171 / 5,6	252	247 / 8,1
N lens	23° / 43°	1798	122 / 4,0	652	204 / 6,7	339	283 / 9,3	168	405 / 13,3
M lens	35° / 69°	603	189 / 6,2	217	314 / 10,3	114	442 / 14,5	57	631 / 20,7
W lens	52° / 86°	320	293 / 9,6	116	488 / 16,0	62	683 / 22,4	30	975 / 32,0
EN lens (v x h)	30° / 58° x 15° / 34°	1056	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°	736	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 B.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°	2710	73 / 2,4	916	122 / 4,0	465	171 / 5,6	223	247 / 8,1
N lens	23° / 43°	1550	122 / 4,0	556	204 / 6,7	290	283 / 9,3	141	405 / 13,3
M lens	35° / 69°	550	189 / 6,2	196	314 / 10,3	101	442 / 14,5	50	631 / 20,7
W lens	52° / 86°	305	293 / 9,6	109	488 / 16,0	56	683 / 22,4	28	975 / 32,0
EN lens (v x h)	30° / 58° x 15° / 34°	930	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°	640	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

Safetyfree
Accessory Holder
Art.: 11909401

Safetyfree
8-Way Barndoor
Art.: 11909501

Safetyfree
Honey Comb
Art.: 11909501

Omega Bracket ST
Art.: 90900002

Safetyfree
Full Anti-Glare Shield
Art.: 11909801

7. TECHNICAL DATA / DIAGRAMS

7.1 Technical drawings and measurements - ROXX B.SHOW mini TW+ / B.SHOW mini FC
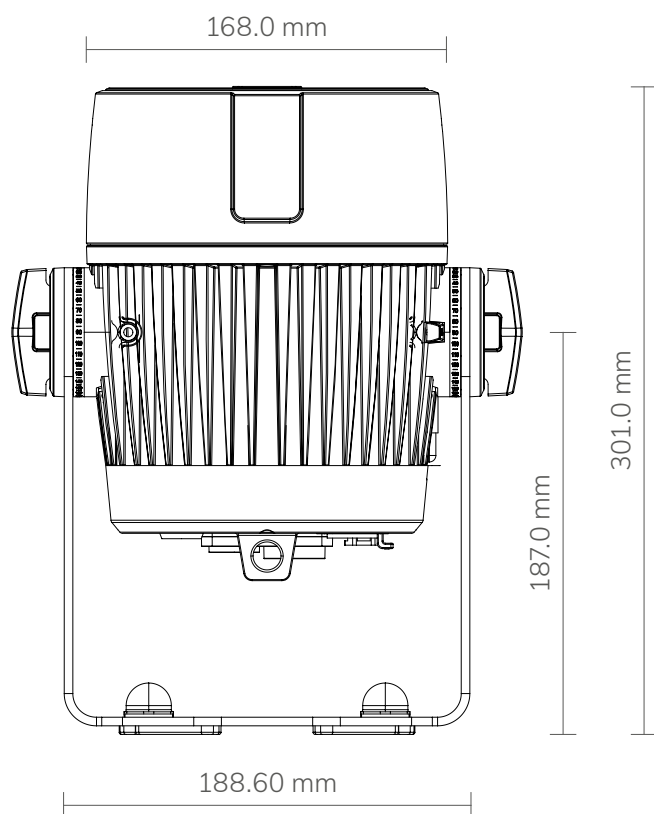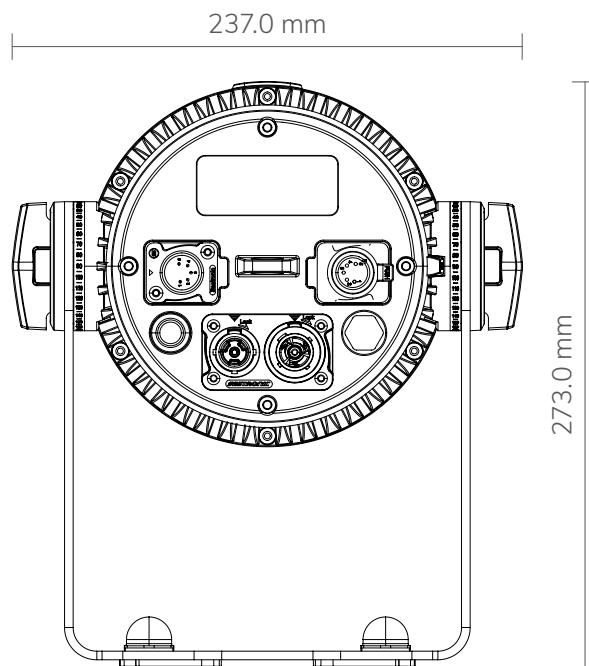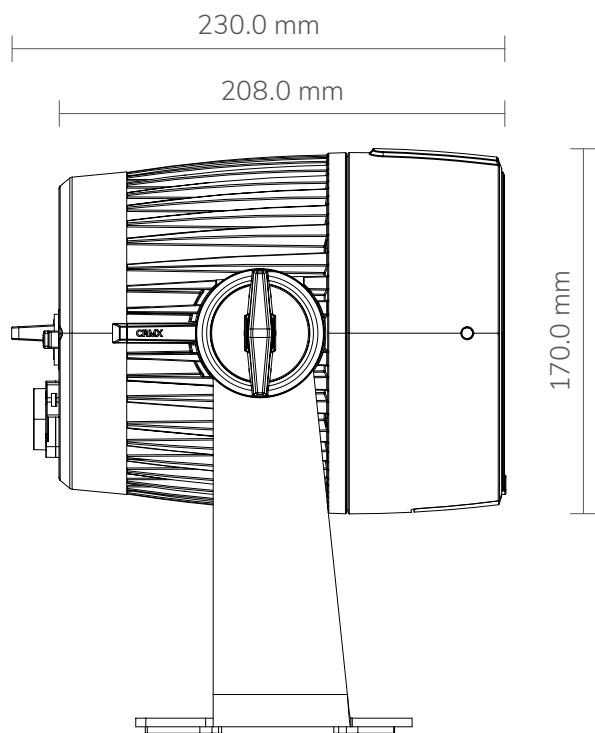
7.2 IP Rating

ROXX products conform to officially classified IP standard levels. B.SHOW mini TW+ / B.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.

Ingress **P**rotection

6 5

Protected against a solid object exceeding 50mm, for example, a hand.

1

1 Protected against vertically falling water drops. Limited infiltration is permitted.

Protected against a solid object exceeding 12.5mm, for example, a finger.

2

2 Protected against vertically falling water drops when the enclosure is tilted up to 15 degrees from the vertical. Limited infiltration is permitted.

Protected against a solid object exceeding 2.5mm, for example, a screwdriver.

3

3 Protected against water spray up to 60 degrees from the vertical. Limited infiltration is permitted.

Protected against a solid object exceeding 1mm, for example, a wire.

4

4 Protected against splashes of water from all directions. Limited infiltration is permitted.

Dust protected. Limited ingress of dust allowed. Does not affect the operation of the device.

5

5 Protected against water jets. Limited infiltration is permitted.

Dustproof. No infiltration of dust.

6

6 Protected against strong water jets. Limited infiltration is permitted.

7 Protected against the impact of being immersed in water between 15cm and 1m for 30 minutes.

8 Protected against the impact of being immersed in water under pressure for prolonged periods of time.

7.3 Technical Data - B.SHOW mini TW+

Photometrics	
LED expected lifetime	50.000 hours
Lightsource	1x60W 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	93
TLCI	96
Efficancy (max)	41,88 lm/W
Luminous flux	2.760 lm
illuminance Lux @ 3m (with VN lens)	2960lx
illuminance Lux @ 3m (with N lens)	1798lx
illuminance Lux @ 3m (with M lens)	603lx
illuminance Lux @ 3m (with W lens)	320lx
illuminance Lux @ 3m (with EN lens)	1056lx
illuminance Lux @ 3m (with EW lens)	736lx
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)	4,85 kg (10,69lbs)
Tilt	360°
Tilt Locking System	Locking system with angle indicator
Thermal Characteristics	
Cooling	convection cooling
Humidity (max.)	95%
Temperature range, Operating on Battery	-20°C to 40°C

7.3 Technical Data - B.SHOW mini TW+

Temperature range, Start-Up on Battery	-20° to 40°C
Temperature range, Operating on DC Power Supply	0°C to 40°C
Temperature range, Start-Up on DC Power Supply	0°C to 40°C
Temperature range, Storage	-10°C to 25°C
Temperature range, Charging	0°C to 40°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	1,102A
Max power consumption	110W
Standby Power	5,5W
Max power thru @ 100 V	11A
Max power thru @ 230 V	11A
Power Factor	0.853 PF (230V) / 0.988 PF (120V)
Power Supply Unit	Inbuilt auto-ranging electronic switch-mode
Power Linking	12 units @ 120 V; 22 units @ 230 V
Battery	217Wh / Lithium-Ionen including BMS
Lifetime	70% after 300 cycles
Battery Run Time	up to 24 hours
Charging Time (nominal)	5h
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

7.3 Technical Data - B.SHOW mini TW+

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)

7.3 Technical Data - B.SHOW mini FC

Photometrics	
LED expected lifetime	50.000 hours
Lightsource	1x60W 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)	43,56 lm/W
Luminous flux	2.831 lm
illuminance Lux @ 3m (with VN lens)	2710lx
illuminance Lux @ 3m (with N lens)	1550lx
illuminance Lux @ 3m (with M lens)	550lx
illuminance Lux @ 3m (with W lens)	305lx

7.3 Technical Data - B.SHOW mini FC

illuminance Lux @ 3m (with EN lens)	930lx
illuminance Lux @ 3m (with EW lens)	640lx
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)	4,85 kg (10,69lbs)
Tilt	360°
Tilt Locking System	Locking system with angle indicator
Thermal Characteristics	
Cooling	convection cooling
Humidity (max.)	95%
Temperature range, Operating on Battery	-20°C to 40°C
Temperature range, Start-Up on Battery	-20° to 40°C
Temperature range, Operating on DC Power Supply	0°C to 40°C
Temperature range, Start-Up on DC Power Supply	0°C to 40°C
Temperature range, Storage	-10°C to 25°C
Temperature range, Charging	0°C to 40°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	1,102A
Max power consumption	110W
Standby Power	5,5W
Max power thru @ 100 V	11A
Max power thru @ 230 V	11A
Power Factor	0.853 PF (230V) / 0.988 PF (120V)
Power Supply Unit	Inbuilt auto-ranging electronic switch-mode
Power Linking	12 units @ 120 V; 22 units @ 230 V
Battery	217Wh / Lithium-Ionen including BMS
Lifetime	70% after 300 cycles
Battery Run Time	up to 24 hours
Charging Time (nominal)	5h

7.3 Technical Data - B.SHOW mini FC

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, 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)

7.5 DMX Chart B.SHOW mini TW+

3CH CCT	**6CH DIRECT**
3CH RGB	**12CH DIRECT**
6CH RGB	**13CH DIRECT**
9CH RGB	**20CH DIRECT**
11CH RGB (default mode)	**3CH HSI**
14CH RGB	**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	Runtime Off (hold 3s)	
		135-139	Runtime 8h (hold 3s)	
		140-144	Runtime 12h (hold 3s)	
		145-149	Runtime 16h (hold 3s)	
		150-154	Runtime 20h (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	Full Calibration (Colors & CCT / Hold 3s)	
		175-179	CCT Calibration (CCT only / RAW Colors / Hold 3s)	
		180-184	Factory Reset (hold 3s) - except User Reset defaults	
		185-189	User Reset (hold 3s) - except User Colors	
		190-244	No function	
		245-249	Snapshot (hold 1,5s)	
		250-255	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**	

Ch.	Function	Value	Setting	
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	Runtime Off (hold 3s)	
		135-139	Runtime 8h (hold 3s)	
		140-144	Runtime 12h (hold 3s)	
		145-149	Runtime 16h (hold 3s)	
		150-154	Runtime 20h (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	Full Calibration (Colors & CCT / Hold 3s)	
		175-179	CCT Calibration (CCT only / RAW Colors / Hold 3s)	
		180-184	Factory Reset (hold 3s) - except User Reset defaults	
		185-189	User Reset (hold 3s) - except User Colors	
		190-244	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)	according to CTC chart
		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	
		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)	Redshift affects only between 2700-3500K
		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 Calibration 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	Runtime Off (hold 3s)	
		135-139	Runtime 8h (hold 3s)	
		140-144	Runtime 12h (hold 3s)	
		145-149	Runtime 16h (hold 3s)	
		150-154	Runtime 20h (hold 3s)	
		155-159	No function	
		160-164	Redshift On (Hold 1,5s)	
		165-169	Redshift Off (Hold 1,5s)	
		170-179	No function	
		180-184	Factory Reset (hold 3s) - except User Reset defaults	
		185-189	User Reset (hold 3s) - except User Colors	
		190-244	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	according to CTC chart
		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	
		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**	Redshift affects only between 2700-3500K
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)	
		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 Calibration 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	Runtime Off (hold 3s)	
		135-139	Runtime 8h (hold 3s)	
		140-144	Runtime 12h (hold 3s)	
		145-149	Runtime 16h (hold 3s)	
		150-154	Runtime 20h (hold 3s)	
		155-159	No function	
		160-164	Redshift On (Hold 1,5s)	
		165-169	Redshift Off (Hold 1,5s)	
		170-179	No function	
		180-184	Factory Reset (hold 3s) - except User Reset defaults	
		185-189	User Reset (hold 3s) - except User Colors	
		190-244	No function	
		245-249	Snapshot (hold 1,5s)	
		250-255	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
		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
		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

Redshift affects only between 2700-3500K

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	Runtime Off (hold 3s)	
		135-139	Runtime 8h (hold 3s)	
		140-144	Runtime 12h (hold 3s)	
		145-149	Runtime 16h (hold 3s)	
		150-154	Runtime 20h (hold 3s)	
		155-159	No function	
		160-164	Redshift On (Hold 1,5s)	
		165-169	Redshift Off (Hold 1,5s)	
		170-174	Full Calibration (Colors & CCT / Hold 3s)	
		175-179	CCT Calibration (CCT only / RAW Colors / Hold 3s)	
		180-184	Factory Reset (hold 3s) - except User Reset defaults	
		185-189	User Reset (hold 3s) - except User Colors	
		190-244	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.**		

7.5 DMX Chart B.SHOW mini FC

3CH CCT	**4CH DIRECT**
3CH RGB	**8CH DIRECT**
6CH RGB	**11CH DIRECT**
9CH RGB	**16CH DIRECT**
11CH RGB (default mode)	**3CH HSI**
14CH RGB	**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	Runtime Off (hold 3s)	
		135-139	Runtime 8h (hold 3s)	
		140-144	Runtime 12h (hold 3s)	
		145-149	Runtime 16h (hold 3s)	
		150-154	Runtime 20h (hold 3s)	Redshift affects only between 2700-3500K
		155-159	No function	
		160-164	Redshift On (Hold 1,5s)	
		165-169	Redshift Off (Hold 1,5s)	
		170-174	Full Calibration (Colors & CCT / Hold 3s)	
		175-179	CCT Calibration (CCT only / RAW Colors / Hold 3s)	
		180-184	Factory Reset (hold 3s) - except User Reset defaults	
		185-189	User Reset (hold 3s) - except User Colors	
		190-244	No function	
		245-249	Snapshot (hold 1,5s)	
		250-255	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	Runtime Off (hold 3s)	
		135-139	Runtime 8h (hold 3s)	
		140-144	Runtime 12h (hold 3s)	
		145-149	Runtime 16h (hold 3s)	
		150-154	Runtime 20h (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	Full Calibration (Colors & CCT / Hold 3s)	
		175-179	CCT Calibration (CCT only / RAW Colors / Hold 3s)	
		180-184	Factory Reset (hold 3s) - except User Reset defaults	
		185-189	User Reset (hold 3s) - except User Colors	
		190-244	No function	
		245-249	Snapshot (hold 1,5s)	
		250-255	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	
		130-134	Runtime Off (hold 3s)	
		135-139	Runtime 8h (hold 3s)	
		140-144	Runtime 12h (hold 3s)	
		145-149	Runtime 16h (hold 3s)	
		150-154	Runtime 20h (hold 3s)	
		155-159	No function	
		160-164	Redshift On (Hold 1,5s)	

		165-169	Redshift Off (Hold 1,5s)
11	**Device Settings (please see remark *1)**	170-179	No function
		180-184	Factory Reset (hold 3s) - except User Reset defaults
		185-189	User Reset (hold 3s) - except User Colors
		190-244	No function
		245-249	Snapshot (hold 1,5s)
		250-255	No function Redshift affects only between 2700-3500K

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)	
		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	Runtime Off (hold 3s)	
		135-139	Runtime 8h (hold 3s)	
		140-144	Runtime 12h (hold 3s)	
		145-149	Runtime 16h (hold 3s)	
		150-154	Runtime 20h (hold 3s)	
		155-159	No function	

16	Device Settings (please see remark *1)	160-164	Redshift On (Hold 1,5s)	
		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	
		190-244	No function	Redshift affects only between 2700-3500K
		245-249	Snapshot (hold 1,5s)	
		250-255	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
		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	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)	
		120-124	LED Frequency 25kHz (hold 3s)	
		125-129	No function	
		130-134	Runtime Off (hold 3s)	
		135-139	Runtime 8h (hold 3s)	
		140-144	Runtime 12h (hold 3s)	
		145-149	Runtime 16h (hold 3s)	
		150-154	Runtime 20h (hold 3s)	
		155-159	No function	
		160-164	Redshift On (Hold 1,5s)	
		165-169	Redshift Off (Hold 1,5s)	

10	**Device Settings (please see remark *1)**	170-174	Full Calibration (Colors & CCT / Hold 3s)	
		175-179	CCT Calibration (CCT only / RAW Colors / Hold 3s)	
		180-184	Factory Reset (hold 3s) - except User Reset defaults	
		185-189	User Reset (hold 3s) - except User Colors	
		190-244	No function	Redshift affects only between 2700-3500K
		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.**		

7.5 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
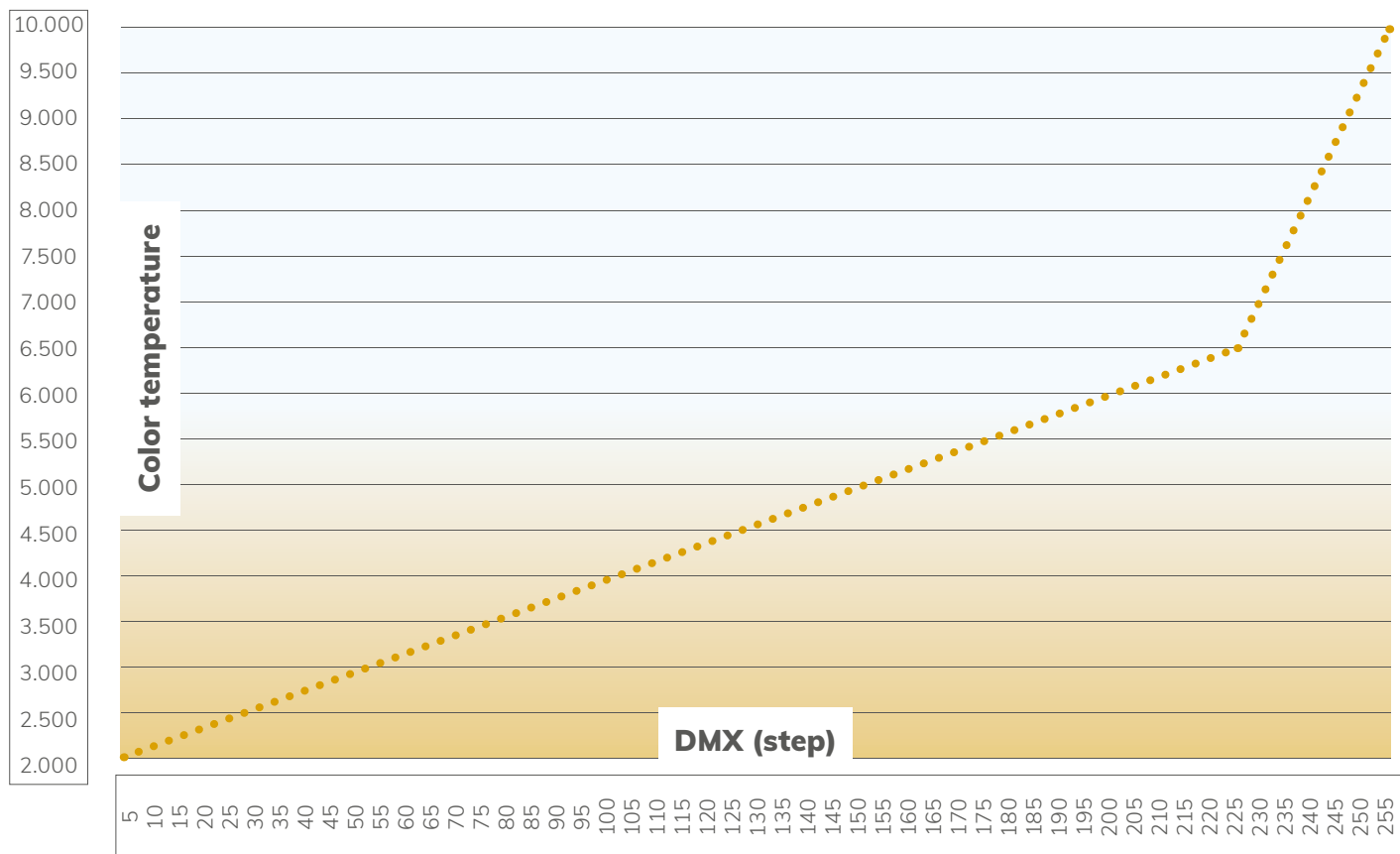
7.5 CTC-Chart

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

7.6 RDM Templates*

The ROXX Show series features support for various RDM functions.

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

Label:	ROXX B.SHOW mini TW+ / B.SHOW mini FC
Model:	B.SHOW mini TW+ / B.SHOW mini FC
Manufacturer:	ROXX
ID: B.SHOW mini TW+	0X6a6a0118xxxx
ID: B.SHOW mini FC	0X6a6a0119xxxx
Device ID (B.SHOW mini TW+ / B.SHOW mini FC):	0118xxxxxxxxx / 0119xxxxxxxxx

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

RDM functions B.SHOW mini TW+

For easy identifying B.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
0x8045	Runtime	Set	0= Off / 1= 4h / 2= 6h / 3= 8h / 4= 10h / 5= 12h / 6= 14h / 7=16h / 8=18h / 9=20h / 10= 22h / 11= 24h
0x8046	Charging	Set	0= Continous / 1= Storage
0x8013	Display Auto Flip	Set	0= Off / 1= On
0x8012	Display Backlight	Set	0= Off / 1= On
0x0641	Display Lock	Set	0= Off / 1= On
0x0142	Startup Mode	Set	0= DMX / 1= AUTO / 2= Editor / 3= Color Macro / 4= Quick Color / 5= Tunable White / 6= User Color
0x0141	DMX Fail	Set	1= Hold / 2= Blackout / 3= Emergency
0x8044	AC Fail	Set	1= Hold / 2= Blackout / 3= Emergency
0x0343 / 0x0344	Dimmer Curve	Set	1= Linear / 2= Exponential / 3= Logarithmic / 4= S-Curve
0x0345 / 0x0346	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	000-255
0x8036	User Calibration- Green	Set	000-256

0x8037	User Calibration- Blue	Set	000-257
0x8039	User Calibration- Amber	Set	000-258
0x8038	User Calibration- Lime	Set	000-259
0x803A	User Calibration- Cyan	Set	000-260
0x0347 / 0x0348	LED Frequency (PWM)	Set	1= 800Hz / 2= 1200Hz / 3= 2000Hz / 4= 3600Hz / 5= 12kHz / 6= 25kHz
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.
Sensor 2	Voltage	Read	n.a.
Sensor 3	Battery Temperature	Read	n.a.

RDM functions - B.SHOW mini FC

For easy identifying B.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
0x8045	Runtime	Set	0= Off / 1= 4h / 2= 6h / 3= 8h / 4= 10h / 5= 12h / 6= 14h / 7=16h / 8=18h / 9=20h / 10= 22h / 11= 24h
0x8046	Charging	Set	0= Continous / 1= Storage
0x8013	Display Auto Flip	Set	0= Off / 1= On
0x8012	Display Backlight	Set	0= Off / 1= On
0x0641	Display Lock	Set	0= Off / 1= On
0x0142	Startup Mode	Set	0= DMX / 1= AUTO / 2= Editor / 3= Color Macro / 4= Quick Color / 5= Tunable White / 6= User Color
0x0141	DMX Fail	Set	1= Hold / 2= Blackout / 3= Emergency
0x8044	AC Fail	Set	1= Hold / 2= Blackout / 3= Emergency
0x0343 / 0x0344	Dimmer Curve	Set	1= Linear / 2= Exponential / 3= Logarithmic / 4= S-Curve

0x0345 / 0x0346	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	000-255
0x8036	User Calibration- Green	Set	000-255
0x8037	User Calibration- Blue	Set	000-255
0x8038	User Calibration- Lime	Set	000-255
0x0347 / 0x0348	LED Frequency (PWM)	Set	1= 800Hz / 2= 1200Hz / 3= 2000Hz / 4= 3600Hz / 5= 12kHz / 6= 25kHz
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.
Sensor 2	Voltage	Read	n.a.
Sensor 3	Battery Temperature	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 B.SHOW mini TW+ / B.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

ROXX GmbH | Hansestr. 91 | 51149 Köln | www.roxxlight.com

REV: 01