

MANUAL



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DIMENSIONS All dimensions are in millimeters







SAFETY INSTRUCTION



WARNING

Read the safety precautions in this section before installing, powering, operating or servicing this

product

The following symbols are used to identify important safety information on the product and in this manual:



DANGER!

Safety hazard.

Risk of severe

injury or death.

DANGER! Hazardous voltage. Risk of lethal or severe electric shock



Fire hazard



WARNING! LED light emission. Risk of eye injury.



WARNING! Burn hazard. Hot surface. Do not touch.



Wear protective

eyewear.



WARNING! Refer to user manual



Warning! Risk Group 2 (Moderate-Risk) LED product according to EN 62471. Do not look into the beam at short distance of the of the product ... Do not view the light output with optical instruments or any device that may concentrate the beam.



This product is for professional use only. It is not for household use.

This product presents risks of severe injury or death due to fire and burn hazards, electric shock and falls.

Read this manual before installing, powering or servicing the fixture, follow the safety precautions listed below and observe all warnings in this manual and printed on the fixture. If you have guestions about how to operate the fixture safely, please contact your supplier.



PROTECTION FROM ELECTRIC SHOCK

- Disconnect the fixture from AC power before removing or installing any cover or part and when not in use.
- Always ground (earth) the fixture electrically.
- Use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault (earth-fault) protection.



- Before using the fixture, check that all power distribution equipment and cables are in perfect condition and rated for the current requirements of all connected devices.
- Power input and throughput cables must be rated 20 A minimum, have three conductors 1.5 mm² (16 AWG) minimum conductor size and an outer cable diameter of 5 - 15 mm. Cables must be hard usage type (SJT or equivalent) and heat-resistant to 90° C minimum.
- Use only PowerCON TRUE 1 ® cable connectors to connect to power input sockets. Use only PowerCON TRUE 1 . [®] cable connectors to connect to power through put sockets.
- Isolate the fixture from power immediately if the power plug or any seal, cover, cable, or other component is damaged, defective, deformed, wet or showing signs of overheating. Do not reapply power until repairs have been completed
- Refer any service operation not described in this manual to a qualified technician.
- Socket outlets used to supply fixture fixtures with power or external power switches must be located near the fixtures and easily accessible so that the fixtures can easily be disconnected from power.

PROTECTION FROM BURNS AND FIRE





- The exterior of the fixture becomes hot during use. Avoid contact by persons and materials. Allow the fixture to cool for at least 5 minutes before handling.
- Keep all combustible materials (e.g. fabric, wood, paper) at least 100 mm away from the fixture.
- Keep flammable materials well away from the fixture.
- Ensure that there is free and unobstructed airflow around the fixture.
- Do not illuminate surfaces within 200 mm of the fixture.
 - Do not attempt to bypass thermostatic switches or fuses.
- If you relay power from one fixture to another using power throughput sockets, do not connect more than ten fixture fixtures in total to each other in an interconnected chain.
- · Connect only other fixture fixtures to fixture power throughput sockets.
- Do not connect any other type of device to these sockets.
- · Do not stick filters, masks or other materials onto any optical component.
- Do not modify the fixture in any way not described in this manual.

PROTECTION FROM INJURY



- Do not look directly into the product's light output.
- Do not look at operating lamp. Eye injury may result.
- Do not look at the light output with magnifiers, telescopes, binoculars or similar optical instruments that may concentrate the light output.
- Ensure that persons are not looking directly into the front of the fixture when the product lights up suddenly. This
 can happen when power is applied, when the product receives a DMX signal, or when certain control menu items
 are selected.
- To minimize the risk of eye irritation or injury, disconnect the fixture from power at all times when the fixture is not in use and provide well-lit conditions to reduce the pupil diameter of anyone working on or near the fixture.
- Fasten the fixture securely to a fixed surface or structure when in use. The fixture is not portable when installed.
- Ensure that any supporting structure and/or hardware used can hold at least 10 times the weight of all the devices they support.
- Allow enough clearance around the head to ensure that it cannot collide with an object or another fixture when it moves.
- Check that all external covers and rigging hardware are securely fastened.
- Block access below the work area and work from a stable platform whenever installing, servicing or moving the fixture.
- Do not operate the fixture with missing or damaged covers, shields or any optical component.

BATTERY SAFETY



The spotlight has an integrated, non-removable rechargeable battery; do not attempt to remove the battery – the spotlight may not be opened. To have the rechargeable battery replaced, take the device to an authorised service centre.

Fully recharge the battery immediately after discharge. Batteries which are not fully charged will lose capacity, and their lifetime will be reduced. Only store the spotlight with a fully charged battery. If the spotlight is not used for an extended period of time, fully recharge the battery every six months. Do not charge the battery at ambient temperatures of less than 0 $^{\circ}$ C or more than 40 $^{\circ}$ C.



1. Keep the battery poles away from conductive objects such as keys, jewellery and the like. This can lead to the battery being

short-circuited, which can cause injuries and burns.

2. Never alter the polarity of the battery contacts.

3. Keep the battery well away from excessive heat and direct sunlight. Do not place it on or in heating devices such as microwaves, ovens or radiators. Batteries can explode if they overheat.

4. Do not attempt to alter or adapt the battery or put foreign objects inside it and do not immerse it or allow it to come into contact with water or other liquids. This can result in a fire, explosion or other dangerous situation.

5. If battery acid leaks, take care to ensure that it does not come into contact with skin or eyes. If this does happen, rinse immediately with clear water and seek medical advice.

6. In the event of the battery deforming, changing colour or overheating during charging or storage, stop using the device immediately and remove the battery. If you continue to use the device, battery acid may leak or a fire or explosion may occur.

7. Never throw batteries into a fire since they can explode. Damaged batteries can also explode.

8. Dispose of used batteries in compliance with local regulations. Improper use of the battery can result in a fire, explosion or other dangerous situation.

9. Never allow children or pets to chew or suck on the battery. This can result in damage or an explosion.

10. Do not smash or pierce the battery and do not expose it to high pressure. This can result in short-circuiting or overheating.

11. Never drop the device or the battery. If the device or battery is dropped, in particular on a hard surface, they can be damaged.

12. If the standby time of the device decreases significantly, replace the battery.

13. If the device has an integrated, non-removable battery, do not try to remove the battery since this may damage the device. Take the device to an authorised service centre to have the battery replaced.

CHARGING THE BATTERY, OPERATING AND STORING THE FIXTURE



• Once the SERA BATT is correctly connected to the power supply, the internal battery is charged. This means that the battery is also charged, if the SERA BATT is in use.

- The battery charge status is shown in the display when the device is switched on or in standby mode.
- · Charge time from 0% to 100% charge status is approximately 4 hours.

• Battery life in full operation (RGBL at 100%) is approximately 1.5 hours. Use of individual colours and colour-change programmes gives much longer battery life. Battery life can be increased to up to 12 hours by reducing brightness accordingly.

- After about 300 charging cycles (0-100%), the battery will retain approx. 70% of its nominal capacity.
- The electronic battery management system protects against overcharging and deep discharging.
- The rechargeable battery may only be replaced with original equipment by an authorised service centre.
- Charge the battery of the SERA BATT at ambient temperatures above 0°C and below 40°C.
- If the SERA BATT is operated on the mains, ensure that the ambient temperature is not below 0°C and not above 40°C.

 If the SERA BATT is operated on its internal battery, ensure that the ambient temperature is not below -15°C and not above 40°C.

• Charge the battery immediately after full discharge. Batteries which are not fully charged will lose capacity and their lifetime will be reduced.

- · Store the SERA BATT only with a fully charged battery.
- If the SERA BATT is not used for a long time, recharge the battery every 6 months.

 To extend the lifetime of the battery, it is recommended that the battery is recharged as soon as possible and it is charged before its energy is completely discharged.

- · In cold environments, battery life may be shorter than expected.
- · Store the SERA BATT in cool and dry conditions to ensure optimal storage conditions for the battery.



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

(2) This device must accept any interference received, including interference that may cause undesired operation

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

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

FCC Radiation Exposure Statement:

The device has been evaluated to meet general RF exposure requirement. The device can been used in the portable exposure condition with restriction

FCC Radiation Exposure Statement:

The equipment complies with FCC Radiation exposure limits set forth for uncontrolled environment.

This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

FIXTURE OVERVIEW



INTRODUCTION

POWERFUL AND VERSATILE OUTDOOR LED WASH

- OUTDOOR LIGHTING ESSENTIAL
- TOURING READY, COMPACT HOUSING
- 21 RGBL HIGH POWER LEDS
- 17° BEAM ANGLE
- IP65 RATING
- LITHIUM-ION BATTERY



USING FOR THE FIRST TIME

Warning! Read "Safety Information" before installing, powering, operating or servicing the fixture. Before applying power to the fixture:

Check that the local AC mains power source is within the fixture's power voltage and frequency ranges.

See "Power cables and power plug" on page 6. Install a PowerCON TRUE 1 ® power input connector power cable.

AC POWER



Warning! Read "Safety Information" starting on before connecting the fixtures to AC mains power.

Warning! For protection from electric shock, the fixture must be grounded (earthed). The power distributioncircuit must be equipped with a fuse or circuit breaker and ground-fault (earth-fault) protection.

Warning! Socket outlets or external power switches used to supply the fixture with power must be located near the fixture and easily accessible so that the fixtures can easily be disconnected from power.



Important! Do not insert or remove PowerCON TRUE 1 ® connectors to apply or cut power, as this may cause arcing at the terminals that will damage the connectors.

Important! Do not use an external dimming system to supply power to the fixture, as this may cause damage to the fixture that is not covered by the product warranty.

The fixture can be hard-wired to a electrical installation if you want to install it permanently, or a power plug that is suitable for the local power outlets can be installed on the power cable.



POWER VOLTAGE

Warning! Check that the voltage range specified on the fixtures serial number label matches the local AC mains power voltage before applying power to the fixture.

The fixtures accepts AC mains power at 100-240 V nominal, 50/60 Hz. Do not apply AC mains power to the fixture at any other voltage than specified.

POWER CABLES

Power input and throughput cables must be rated 16A minimum, have three conductors 1.5 mm² (16 AWG) minimum conductor size and an outer cable diameter of 5 - 15 mm. Cables must be hard usage type (SJT or equivalent) and heat- resistant to 90°C minimum. In the EU the cable must be HAR approved or equivalent.

If you install a power plug on the power cable, install a grounding-type (earthed) plug that is rated 16A minimum. Follow the plug manufacturer's instructions. Table 1 shows standard wire color-coding schemes and some possible pin identification schemes; if pins are not clearly identified.

Wire Color (EU models)	Wire Color (US models)	Conductor	Symbol
Brown	Black	Live	L
Blue	White	Neutral	Ν
Yellow/Green	Green	Ground (earth)	(≟) or ⊥

Table 1: Wire color-coding and power connections

RELAYING POWER TO OTHER DEVICES

Warning! Do not connect more than seven fixtures in total to AC mains power in one interconnected chain. Power can be relayed to another device via the PowerCON TRUE 1 ® throughput socket.

If you daisy chain the fixtures in a chain so that they all draw AC mains power via the first fixture, certain points must be respected:

- A heavy duty, three-conductor, 16 AWG or 1.5 mm2 cable with SJT or equivalent cable jacket must be used to connect the first fixture to AC mains power.
- PowerCON TRUE 1 ® connectors must be used to draw AC mains power from the fixtures power throughput sockets and yellow PowerCON TRUE 1 ® connectors must be used to supply power at the fixture's power input sockets.
- No matter what the AC mains power voltage is, do not connect more than ten the fixture in total (including the first fixture) to AC
 mains power in one interconnected daisy chain using power input and through out connectors.

DATA LINK

A DMX 512 data link is required in order to control a fixture via DMX. The fixture has 5-pin XLR connectors for DMX data input and output. The pin-out on all connectors is pin 1 = shield, pin 2 = cold (-), and pin 3 = hot (+) Pins 4 and 5 in the 5-pin XLR connectors are not used.

TIPS FOR RELIABLE DATA TRANSMISSION

To connect the fixture to data:

1. Connect the DMX data output from the controller to the 5-pin XLR connector of the nearest fixture.

2. Connect the DMX output of the fixture closest to the controller to the DMX input of the next fixture and continue connecting fixtures output to input.

PHYSICAL INSTALLATION



Warning! The fixture must be either fastened to a flat surface such as a stage or wall, or clamped to a truss or similar structure in any orientation using a rigging clamp.

Warning! If the fixture can cause injury or damage if it falls, attach an approved safety cable to one of the safety cable attachment points on the base (see "Fixture overview").

Check that all surfaces to be illuminated are minimum 200 mm. from the fixture, that combustible materials (wood, fabric, paper, etc.) are minimum 100 mm. from the fixture, that there is free airflow around the fixture and that there are no flammable materials nearby.

FASTENING THE FIXTURE TO A FLAT SURFACE

The fixture can be fastened to a fixed flat surface that is oriented at any angle. Check that the surface can support at least 10 times the weight of all fixtures and equipment to be installed on it.



Warning! The supporting surface must be hard and flat or cooling may be blocked, which will cause overheating. Fasten the fixture securely. Do not stand it on a surface or leave it where it can be moved or can fall over. Attach a securely anchored safety cable to the safety cable attachment point (see "Fixture overview") if the fixture is to be installed in any location where it may fall and cause injury or damage if the primary attachment fails.

1. Block access under the work area. Working from a stable platform, hang the fixture on the truss with the arrow on the base towards the area to be illuminated. Tighten the rigging clamp.

2. Secure the fixture against clamp failure with a secondary attachment such as an approved safety cable that is rated for the weight of the fixture using one of the attachment points at the edges of the base (see "Fixture overview"). Do not use any other part of the fixture as a safety cable attachment point.

The installation of the fixture has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.

The installation must always be secured with a secondary safety attachment, e.g. an appropriate catch net. This secondary safety attachment must be constructed in a way that no part of the installation can fall down if the main attachment fails.

When rigging, derigging or servicing the fixture staying in the area below the installation place, on bridges, under high working places and other endangered areas is forbidden.

The operator has to make sure that safety-relating and machine-technical installations are approved by an expert before taking into operation for the first time and after changes before taking into operation another time.

The operator has to make sure that safety-relating and machine-technical installations are approved by an expert after every four year in the course of an acceptance test.

The operator has to make sure that safety-relating and machine-technical installations are approved by a skilled person once a year.

The fixture should be installed outside areas where persons may walk by or be seated.

IMPORTANT! OVERHEAD RIGGING REQUIRES EXTENSIVE EXPERIENCE, including (but not limited to) calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the projector. If you lack these qualifications, do not attempt the installation yourself, but instead use a professional structural rigger. Improper installation can result in bodily injury or damage to property. The fixture has to be installed out of the reach of people.



If the fixture shall be lowered from the ceiling or high joists, professional trussing systems have to be used. The fixture must never be fixed swinging freely in the room.

Caution: Fixture may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do not install the moving head!

Before rigging make sure that the installation area can hold a minimum point load of 10 times the fixture's weight.

When installing the device, make sure there is no highly inflammable material (decoration articles, etc.) in a distance of min. 0.5 m.

Use an appropriate clamp to rig the fixture on the truss.

Follow the instructions mentioned at the bottom of the base.

Make sure that the device is fixed properly! Ensure that the structure (truss) to which you are attaching the fixtures is secure.

The fixture can be placed directly on the stage floor or rigged on a truss without altering its operation characteristics .



For securing the fixture to the truss, install a safety wire which can hold at least 10 times the weight of the fixture. Use only the safety wire with a snap hook with screw lock gate. Fasten the safety cable in the attachment point and around the truss as shown on the picture below.

RIGGING VIA OMEGA BRACKET:



OUTDOOR IP-RATED FIXTURES

CLF products are applied to official classified IP norm levels. For this product the IP rate is IP65 when using the covers for the chassis parts. IP65 means according classified norm: shielded against dust and pressurized water from any side. Typical use for outdoor rated stage events with normal weather acceptance. So no heavy rain, because then the water pressure over exceeds the IP norm.



CONDENSATION/MOISTURE INSIDE HOUSING

Because of high humidity levels during production condensation can occur inside the housing. This is mostly visible on the coldest parts of the fixture, like the front glass or display. To prevent this problem we work with special conditioned areas for outdoor fixtures. Because of the breathing air valves it is still possible to get humidity inside the fixture. This will evaporate slowly. Do not put wet fixtures in a flightcase, this will help humidity enter the fixture.

FIXTURES TEMPERATURE SPECIFICATION

Make sure the fixture is used within its working temperature range. Outside this range we cannot guarantee correct operation.

TEMPORARY USAGE:

Stage event equipment is designed with temporary use in mind. Our product purpose is for theatre, festival, (disco) clubs and indoor & outdoor concerts. Long term use is possible but keep in mind that it can bring damage to aging materials and affect the coated surface (i.e. stainless steel). Rubber sealings will be negatively affected after long-term UV exposure and should be checked by qualified service technicians over time.

Tighten screws too hard will also affect the IP-rating.

SETUP

Warning! Read "Safety Information" before installing, powering or operating the fixture.

CONTROL PANEL AND MENU NAVIGATION

The onboard control panel and backlit graphic display are used to set the fixture's DMX address, configure individual fixture settings (personality), read out data and execute service utilities. See "Onboard control menus" for a complete list of menus and commands.

Using the control buttons

- To enter the menu select [MENU].
- Press [UP] and [DOWN] to scroll within a menu or adjust values.
- To enter a menu, select a function or apply a selection, press [ENTER].
- To escape a function or move back one level in the menu structure, press [MENU].
- Hold [MENU] = highlight for 15 seconds
- Press [UP] and [DOWN] together to rotate display

DMX ADDRESS SETTING

The DMX address, also known as the start channel, is the first channel used to receive instructions from the controller. For independent control, each fixture must be assigned its to a separate channel. The DMX address can be configured as by using the DMX ADDRESS menu in the control panel. For setting the DMX address press [ENTER] before you can change the address.

- The main screen will show a 'dot' and the backlight will be switched off when a DMX signal is detected.
- The fixture is fully RDM ready. So when you are using a RDM ready console you can address the unit and read out its complete status. For RDM functions please refer to the ANSI/ESTA E1.20-2006 standard

W-DMX CONTROL

Go to the W-DMX section in the main menu, press the button "UP" to switch off Wireless DMX or disconnect with all connected Transmitters.

Press the button "DOWN' to set the unit in the "ready to connect with all not connected transmitters' mode. If you press the mode button on the Wireless sollution transmitter all the units in this mode will be connected.

If the unit is successfully connected display show the sign " 📶: VV " .

If the unit is successfully connected ,but the signal is weak, display show the sign " 📶 :! " .

If the unit is not connected to a transmitter the display show the sign "

- Holding the MENU and ENTER button for more than 3 seconds, the wireless board will reset.
- Do not use Wireless DMX and Wired DMX at the same time because it will give unwanted interference

CONTROL MODE

DMX control mode is selected in the CONTROL MODE menu. The fixture can be controlled with 3 DMX control modes:



CONTROL PANEL

Here you can set all functions for the fixture.

PERSONALITY

FANS		%, FAN : variable , FAN : 1800RPM (continuously) 6, FAN : 1000RPM (continuously)				
Dimmer speed	"Normal" means select linear dimming, or choose dimmer 1-4 to control the dimming speed, dimming 1 of the fastest dimming curves, 4 for the most slowly dimming speed.					
Dimmer curve	Linear / Square law / INV Squ	are law / S- Curve / Special				
WDMX Reset	Reset the Wireless Board					
LED Calibration	FACTORY = Factory calibration	on mode, All colors are calibrated ide off				
Refresh rate	Controls the flicker frequency 600 / 1200 / 4800 / 10000 / 25					
DMX HOLD		remember on last values when you disconnect DMX has no output when you disconnect DMX				
Display	Rotate: Auto= Normal=	Auto Display Flip Function enabled Auto Display Flip Function disbaled				
	Background Light: always on = Auto off =	Display background Light always on Display deactivation after approximately 15 second of inactivity				
	BL blinking when no DMX : Yes = NO =	When there is no Dmx , the dmx value will be blinking on main menu When there is no dmx , the dmx value will be static on main menu				
Indicator Light	fixture is on and dmx, and Dis On -> Battery only = Display b	n the display is standby, there are 2 low brightness dots visible to show that the play battery				
KEY-Lock		Standard unlocking password is MENU+UP+MENU+DOWN+ENTER)				
Battery runtime	Choose fixture working time Max power / 4 Hours / 5 Hours	s / 6 Hours / 8 Hours / 10 Hours / 12 Hours				
Alarm	On = the anti-theft function on to release this . (Password : 7 Off = the anti-theft function off					
Font selection	Select display font					

DIMMER MODE

provides five dimming options (see picture below):



- LINEAR the increase in light intensity appears to be linear as DMX value is increased.
- SQUARE LAW light intensity control is finer at low levels and coarser at high levels.
- INV Square law light intensity control is coarser at low levels and finer at high levels.
- S-CURVE light intensity control is finer at low levels and high levels and coarser at medium levels.
- Special the light intensity was linear increase with DMX value, and light intensity control is finer at low level with DMX values decrease, the dimmer speed will also has effect on it.

Whichever DIMMER CURVE option you select, you can choose between NORMAL or SMOOTH 1 / 2 / 3 / 4 dimming settings:

- NORMAL is the default setting. It gives a virtually instantaneous reaction when you dim from one intensity to another, but dimming
 slowly from one intensity to another may appear slightly uneven.
- The MOOTH 1 / 2 / 3 / 4 setting gives smoother dimming during slow changes in intensity, but it limits the speed of dimming changes slightly. This makes it ideal for slow, smooth dimming, but a short time-lag may be noticeable if you try to dim quickly from one intensity to another.

ONBOARD CONTROL MENU

NO.	Main menu	Menu level 2	Menu level 3	Remark
	C	Set DMX Address —	<001>	— Default : 001
1	DMX ADDRESS	DMX Signal Mode—	wire / wireless	— Default : wire
2	CONTROL MODE	2 CH CCT — 3 CH RGB — 4CH RGBL — 4CH RGBW — 6CH 16bit — 8CH 16bit — 10CH — 12CH pixel —	 Dimmer, 2.CCT Red, 2.Green, 3.Blue Red, 2.Green, 3.Blue, 4.Lime Red, 2.Green, 3.Blue, 4.White Red, 2.Red fine, 3.Green, 4.Green fine, 5.Blue, 6.Blue fine Red, 2.Red fine, 3.Green, 4.Green fine, 5.Blue, 6.Blue fine, 7.Lime, 8.Lime fine Strobe, 2.Dimmer, 3.Function set, 4.Color macro, 5.Red, 6.Green, 7.Blue, 8.Lime, 9.CCT, 10.Tint Block1 red, 2.Block1 green, 3.Block1 blue, 4.Block1 lime, 5.Block2 red, 6.Block2 green, 7.Block2 blue, 8.Block2 lime, 9.Block3 red, 10.Block3 green, 11.Block3 blue, 12.Block3 lime, 1.Strobe, 2.Dimmer, 3.Dimmer fine, 4.Function set, 5.Color macro, 6.Red, 7.Green, 8.Blue, 9.Lime, 10.CCT, 11.Tint, 12.Effect, 13.E-speed/Fade Strobe, 2.Dimmer, 3.Dimmer fine, 4.Function set, 5.Color macro, 6.Red, 7.Red fine, 8.Green, 9.Green fine, 10.Blue, 11.Blue fine, 12.Lime, 13.Lime fine, 14.CCT, 15.Tint, 16.Block red, 17.Block1 green, 18.Block1 blue, 23.Block2 lime, 24.Block3 red, 25.Block2 blue, 23.Block2 lime, 24.Block3 red, 25.Block3 green, 26.Block3 blue, 	— Default : 13CH
4	PERSONALITY	 Dimmer Speed Dimmer Curve WDMX Reset Calibration CRI Refresh Rate MMX hold Display Indicator Light Key Lock Battery runtime Alarm 	27.Block3 lime, 28.Effect, 29.E-speed/Fade Regulated / Full / Silent Normal / Smooth 1 / Smooth 2 / Smooth 3 / Smooth 4 Linear / Square law/INV Square law / S-curve / Special Reset the Wireless ? Factory / Normal High / Low 600Hz / 1200Hz / 4800Hz / 10000Hz / 25000Hz 0mx hold / No dmx hold 600Hz / 1200Hz / 4800Hz / 10000Hz / 25000Hz Dmx hold / No dmx hold 7 Rotate — Auto / Normal Background Light — Always on / Auto off (15S) 8 L blinking when no DMX — Yes ~ no 0 Gf 0 n -> Battery+ Power 0 n -> Battery+ Power 0 n -> Battery only 0 n -> Bilinking when<15% 0 N / Off Max power / 4 Hours / 5 Hours / 6 Hours / 8 Hours / 10 Hours / 12 Hours 0 N / OFF Helvetica / Arial / Univers / Calibri / Big_noodle_titling / Gill Sans / Book Antiqua	 Default : Regulated Default : Normal Default : Linear Default : Factory Default : Factory Default : Low Default : Low Default : Normal Default : Normal Default : Normal Default : Auto off Default : Yes Default : Battery only Default : Off Default : Helvetica

		Fixed color	— R, G, B, L, RG, RB, G RGBL	B, RGB, RL, GL, BL, RGL, RBL, C	βBL , -	Default : RGBL
		- сст	 2500K / 2800K / 3200 7000K / 8000K / 9000 	K / 4000K / 5000K / 5600K / 6000 K /10000K	-</td <td>Default : 7000K</td>	Default : 7000K
			_ Dimmer	— _{0 - 255}	-	Default : 000
5	STATIC COLOR	-	_ Red	— _{0 - 255}	-	Default : 000
		Manual color	_ Green	— _{0 - 255}	-	Default : 000
		Manual Color	- Blue	— _{0 - 255}	-	Default : 000
			— Lime	— _{0 - 255}	-	Default : 000
			L Strobe	— _{0 - 255}	-	Default : 000
6	AUTO COLOR	- Speed Dimmer	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	 7 color bump 7 color fading 14 color bump 15 color fading 15 color fade in/out 15 color fade in 15 color fade out rainbow Block effect 1 Block fade effect 1 Block fade effect 2 Block effect 2 Block effect 3 Block effect 3 Block effect 4 Block fade effect 4 Block fade effect 5 Block fade Effect 1~19 Loop play (1-300S per step) 		Default : Auto 01

		Q. ft. u.e.	 Display board:Vx.xx Led board: Vx.xx 	
		Software version	- IAP for D.B: Vx.xx	
			Date: xx-xxxx	
			TOTAL: XXXX H	
		 Usage time 	LED total: xxxx H	
			Power cycle: xxxxxTimes	
		 Temperature 	Head: xxx°C (Stored max: XXX°C,Stored min: XXX°C)	
		lomporataro	□ Base: xxx°C (Stored max: XXX°C,Stored min: XXX°C)	
		– Fan		
			∟ xx%	
8	INFO	_	□ xx% xx.xxV	
		 Battery 	XXX°C	
			 Remaining time: xxxxx H 	
			└ Charge cycle: xxxxx times	
		- RDM.UID	- 0x02E2003xxxxx	
		- DMX LIVE	 Show all received DMX data 	
		Error	- Running normally	
		 information 	L Error code:	Clear error message?
			Manufacturer: CRMX	
		Wireless	Module name: Timo RX	
		module	Driver version :xxxxxxxx	
			HW version:x.x.x.x	
		1015	└── Signal strength: xxx%	
9	Factory reset	- LOAD		

DMX PROTOCOLS

2СН ССТ

2 CH	Function	Value	Setting	Remark
1	Dimmer	000 - 255	0 - 100%	
2	CCT	000 - 255	10000K - 2500K	

3CH RGB / 6CH 16bit / 4CH RBGL / 8CH 16bit

3CH	4CH	6CH	8CH	Function	Value	Setting	Remark
1	1	1	1	Red	000 - 255	0 - 100%	
		2	2	Red fine	000 - 255	0 - 100%	
2	2	3	3	Green	000 - 255	0 - 100%	
		4	4	Green fine	000 - 255	0 - 100%	
3	3	5	5	Blue	000 - 255	0 - 100%	
		6	6	Blue fine	000 - 255	0 - 100%	
	4		7	Lime	000 - 255	0 - 100%	
			8	Lime fine	000 - 255	0 - 100%	

4CH RBGW (RGBW led simulation)

3CH	Function	Value	Setting	Remark
1	Red	000 - 255	0 - 100%	
2	Green	000 - 255	0 - 100%	
3	Blue	000 - 255	0 - 100%	
4	white	000 - 255	0 - 100%	

10CH / 12CH pixel / 13CH / 29CH

10CH	12CH	13CH	29CH	Function	Value	Setting	Remark
					000 - 019	No function	
					020 - 024	Shutter open	
					025 - 064	Strobe 1 (fast \rightarrow slow)	
					065 - 069	Shutter open	
					070 - 084	Strobe 2: opening pulse (fast \rightarrow slow)	
					085 - 089	Shutter open	
					090 - 104	Strobe 3: closing pulse (fast \rightarrow slow)	
					105 - 109	Shutter open	
					110 - 124	Strobe 4: random strobe (fast \rightarrow slow)	
					125 - 129	Shutter open	
1	1	1	1	Shutter	130 - 144	Strobe 5: random opening pulse (fast \rightarrow slow)	
•	•			onation	145 - 149	Shutter open	
					150 - 164	Strobe 6: random closing pulse (fast \rightarrow slow)	
					165 - 169	Shutter open	
					170 - 184	Strobe 7: burst pulse (fast \rightarrow slow)	
					185 - 189	Shutter open	
					190 - 204	Strobe 8: random burst pulse (fast \rightarrow slow)	
					205 - 209	Shutter open	
					210 - 224	Strobe 9: sine wave (fast \rightarrow slow)	
					225 - 229	Shutter open	
					230 - 244	Strobe 10: burst (fast \rightarrow slow)	
					245 - 255	Shutter open	
2	2	2		Dimmer	000 - 255	0 - 100%	
	3	3		Dimmer fine	000 - 255	0 - 100%	
	5	5		2or mile	200 200		

3 4 4 Function Value must be held for 3 eccords to activate. 3 4 4 No function Value must be held for 3 eccords to activate. 3 4 4 No function Value must be held for 3 eccords to activate. 3 4 4 No function Value must be held for 3 eccords to activate. 3 4 4 No function Value must be held for 3 eccords to activate. 3 4 4 Function Value must be held for 3 eccords to activate. 3 4 4 Function Value must be held for 3 eccords 3 4 4 Function Value must be held for 3 eccords 3 4 4 Function Value must be held for 3 eccords 3 4 4 Function Value must be held for 3 eccords 3 4 4 Function Value must be held for 3 eccords 3 4 4 Function Value must be held for 3 eccords 3 4 4 Function Value must be held for 3 e	10 CH	12 CH	13 CH	29 CH	Function	Value	Setting	Remark
Part Part Part Part Part Part Part Part								
3 4 5 Odd - 044 Odd - 044 Odd - 044 Odd - 044 Odd - 044 Odd - 044 Odd - 044 Run time - 0H Odd - 044 Run time - 0H Odd - 044 Run time - 12H Odd - 044 Run cime - 12H Odd - 14 Run time - 12H Run time								
3 4 5 Contract Contract Contract 5 Contract Contract Contract Contract 5 Contract Contract Contract Contract 5 Contract Contract Contract Contract 6 Contract Contract Contract Contract 7 Contract Contract Contract Contract 7 Contract Contract Contract Contract 10 Contract Contract Contract Contract Co								
3 4 5 Control 5 0 Control 6 0 Control 7 4 5 Control 8 9 1 Control 8 9 1 Control 9 1 1 Control 9 1 Control Control 10 Control Control Control 10 Control Control Control 100 Control Control Control <								
3 4 4 5 050-054 Run time - 12H 050-054 Ran mode FEGULATED 060-044 Fam mode FEGULATED 070-074 Fam mode FULL 070-074 Fam mode FULL 070-074 Fam mode FULL 070-074 Fam mode FULH 070-074 Fam mode FULH 070-074 Fam mode FULH 070-074 Fam mode FULH 070-074 Fam mode FULH 070-074 Fam mode FULH Calibrated color output mode-Calibrated = 0FF 070-074 No function 080-042 Calibrated Calibrated = 0FF 100-104 Raw color output mode-Calibrated = 0FF 080-12 101-114 Raw color output mode-Calibrated = 0FF 080-12 105-124 No function 180-12 115-135 OEIFersh rate 180-14 120-142 2000012: Refresh rate 180-14 120-144 1000012: Refresh rate 180-14 120-144 No function 180-14 120-144 No function 180-14 120-144 No function 180-14 <td></td> <th></th> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
3 4 4 Fixture Fixture Sector 05:093 No function 3 4 4 Fixture Fixture Sector No function 3 4 4 Fixture Fixture Sector 05:09 No function 3 4 4 Fixture Sector 05:09 No function 10:104 Raw color output mode-Calibrated = OFF 15:12 No function 10:104 Raw color output mode-Calibrated = OFF 15:13 900 Hz Refresh rate 10:104 Raw color output mode-Calibrated = OFF 15:14 No function 10:104 No function 15:15 000 Hz Refresh rate 10:104 No function 15:15 16:14 No function 15:105 CRI = High 16:16 No function 16:18 No function 16:19 Dimmer Speed - Normal 18:19 Dimmer Speed - Smooth 1 12:14 10:19 Dimmer Speed - Smooth 1 12:14 12:14 12:14 10:19 Dimmer Speed - Smooth 1 12:14 12:14 12:14								
3 4 4 Financial Picture 3 4 4 Financial Picture 5 0 Financial Picture 5 4 5 6 0 Financial Picture 7 6 Financial Picture 7 8 6 0 7 8 6 0 7 8 10 0.25 7 8 10 0.25 7 8 10 0.25 7 8 10 0.25 7 8 10 10.25 7 8 10 10.25 7 8 10 10.25 8 9 10 10.25 9 10 10.25 10.25 10 10 10.25 10.25 10 10 10.25 10.25 10 10 10.25 10.25 10 10.25 1								
3 4 4 No No <td></td> <th></th> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
3 4 4 Fiture Fiture Settings 00 05 09 04 Calibrated color output mode-Calibrated=0N 3 4 4 Fiture Settings 100 104 Raw color output mode-Calibrated = OFF 100 105 12 600 Hz Refresh rate 105 130 130 130 130 130 125 600 Hz Refresh rate 1000 Hz Refresh rate 1000 Hz Refresh rate 140 140 140 1000Hz Refresh rate 150 150 No function 151 150 No function 152 150 Refresh rate 150 150 No function 151 150 No function 152 150 REfresh rate 150 150 No function 151 No function 100 152 150 No function 153 150 No function 154 150 No function 155 150								
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3 4 4 Fiture Fiture Settings 005 - 009 (10 - 104) No function (10 - 104) Raw color output mode- Calibrated = OFF 3 4 4 Fiture Settings 100 - 124 No function (10 - 124) No function 3 4 4 Fiture Settings 120 H2 Refresh rate 120 H2 Refresh rate 150 - 154 No function 155 - 159 CRI = High 150 - 154 No function 155 - 159 CRI = High 160 - 164 No function 165 - 169 CRI = High 160 - 164 No function 165 - 169 CRI = High 170 - 174 No function 165 - 169 CRI = 10W 170 - 174 No function 165 - 169 CRI = NOM 180 - 184 No function 165 - 169 CRI = NOM 190 - 194 No function 165 - 169 CRI = NOM 190 - 194 No function 165 - 169 CRI = NOM 190 - 194 No function 165 - 169 CRI = NOM 190 - 194 No function 100 - 104 No func						075 - 089	No function	
3 4 4 Fixture control 50 100 - 104 105 - 12 No function 105 - 12 No function 105 - 12 3 100 - 104 105 - 12 No function 105 - 12 No function 100 - 12 No function 100 - 12 3 130 - 134 1200 Hz Refresh rate 130 - 130 400 Hz Refresh rate 130 - 134 100 - 144 14 100 - 144 100 - 144 No function 145 - 149 2500 Hz Refresh rate 145 - 149 150 - 15 No function 165 - 169 CR = High 160 - 164 No function 165 - 169 160 - 164 No function 175 - 179 WDMX - RESET 180 - 184 No function 175 - 179 WDMX - RESET 180 - 184 No function 175 - 179 WDMX - RESET 180 - 184 No function 180 - 184 No function 180 - 184 190 - 194 No function 190 - 194 No function 190 - 194 191 - 194 No function 195 - 190 No function 195 - 100% 192 - 194 No function 195 - 100% No function 195 - 100% 193 - 194 Refresh rate spage 23 Color macro chart 194 - 100 - 255 194 - 194 No function 195 - 100% -100% -100%						090 - 094	Calibrated color output mode- Calibrated= ON	
3 4 4 Fixture onto onto onto onto onto onto onto ont						095 - 099	No function	
3 4 4 Firture istings 125 - 129 100 - 134 1200 H2 Refresh rate 1200 H2 Refresh rate 1200 H2 Refresh rate 140 - 144 14 1400 H2 Refresh rate 145 - 149 2500H2 Refresh rate 140 - 144 155 - 159 CRI = High 160 - 164 No function 155 - 159 CRI = High 160 - 164 No function 175 - 179 WDMX - RESET 175 - 179 180 - 184 No function 185 - 189 185 - 189 Dimmer Speed - Normal 190 - 194 No function 190 - 194 Ref free 000 - 255 190 - 195 Inimmark speed - Smooth 3 <						100 - 104	Raw color output mode- Calibrated = OFF	
3 4 4 Fixture control settings 130 - 134 1200 Hz Refresh rate 135 - 139 4800 Hz Refresh rate 135 - 139 4800 Hz Refresh rate 145 - 149 25000Hz Refresh rate 145 - 149 25000Hz Refresh rate 150 - 154 No function 155 - 159 CRI = High 160 - 164 No function 165 - 169 CRI = LOW 170 - 174 No function 165 - 169 CRI = LOW 180 - 184 No function 185 - 169 Dimmer Speed - Normal 190 - 140 Dimmer Speed - Normal 195 - 199 Dimmer Speed - Smooth 1 195 - 190 Dimmer Speed - Smooth 1 200 - 204 Dimmer Speed - Smooth 1 195 - 190 Dimmer Speed - Smooth 1 200 - 204 Dimmer Speed - Smooth 1 195 - 190 Dimmer Speed - Smooth 1 200 - 205 Illimate display 14 50 6 Ref 00 - 255 Illimate display 15 100 00 - 255 0 - 100% 100 - 164 16 100 100 - 255 0 - 100% 16 8 Ref Ine 000 - 255 0 - 100% 16 100 00 - 255 0 - 100% 17 8 10 Blue fine 000 - 255						105 - 124	No function	
3 4 FAULTE 135 - 139 4800 Hz Refresh rate 140 - 144 10000Hz Refresh rate 140 - 144 10000Hz Refresh rate 145 - 149 25000Hz Refresh rate 145 - 159 CRI = High 155 - 159 CRI = High 160 - 164 No function 175 - 179 WDMX - RESET 180 - 184 No function 175 - 179 WDMX - RESET 185 - 189 Dimmer Speed - Normal 190 - 194 No function						125 - 129	600 Hz Refresh rate	
3 4 4 control 135 - 139 4000 Hz Refresh rate 140 - 144 10000Hz Refresh rate 150 - 154 No function 150 - 154 No function 150 - 154 No function 160 - 164 No function 170 - 174 No function 170 - 174 No function 180 - 184 No function 190 - 194 No function 190 - 196 Ref free					Fixture	130 - 134	1200 Hz Refresh rate	
145 - 149 2500Hz Refresh rate 150 - 154 No function 155 - 159 CRI = High 165 - 169 CRI = LOW 170 - 174 No function 175 - 179 WDMX - RESET 180 - 184 No function 175 - 179 WDMX - RESET 180 - 184 No function 175 - 179 WDMX - RESET 180 - 184 No function 190 - 194 No function 190 - 194 No function 195 - 199 Dimmer Speed Normal 190 - 194 No function 195 - 199 Dimmer Speed Smooth 1 200 - 204 Dimmer Speed Smooth 1 201 - 214 Dimmer Speed Smooth 2 205 - 209 Dimmer Speed Smooth 3 210 - 214 Dimmer Speed Smooth 4 175 - 249 No function 7 Red fine 000 - 255 0 - 100% 6 7 Red fine 000 - 255 0 - 100% 7 8 Green fine 000 - 255 0 - 100% 7 8 Green fine 000 - 255	3		4	4		135 - 139	4800 Hz Refresh rate	
Intermediate Intermediate Intermediate Intermediate Intermediate Intermediate					settings	140 - 144	10000Hz Refresh rate	
10 10 165 - 159 CRI = High 160 - 164 No function 165 - 169 CRI = LOW 170 - 174 No function 175 - 179 WDMX - RESET 180 - 184 No function 185 - 189 Dimmer Speed - Normal 190 - 194 No function 205 - 209 Dimmer Speed - Smooth 1 210 - 214 Dimmer Speed - Smooth 2 210 - 214 Dimmer Speed - Smooth 2 210 - 214 Dimmer Speed - Smooth 3 210 - 214 Dimmer Speed - Smooth 4 210 - 214 Dimer Speed - Smooth 4 210 - 214 Dimer Speed - Smooth 4 210 - 10 Rol 00 - 255 0 -100% <td></td> <th></th> <td></td> <td></td> <td></td> <td>145 - 149</td> <td>25000Hz Refresh rate</td> <td></td>						145 - 149	25000Hz Refresh rate	
4 5 5 Color macro 00 - 255 0 - 100% 4 5 5 Color macro 00 - 255 0 - 100% 5 6 6 Red 00 - 255 0 - 100% 6 7 Red free 00 - 255 0 - 100% 7 8 100 - 00 - 255 0 - 100% 7 8 100 - 00 - 255 0 - 100% 7 8 100 - 00 - 255 0 - 100% 7 8 00 - 255 0 - 100% - 00 7 8 100 - 00 - 255 0 - 100% 7 8 00 - 255 0 - 100% - 00 7 8 100 00 - 255 0 - 100% 7 8 100 00 - 255 0 - 100% 8 07 - 00 - 255 0 - 100% - 00 9 6 - 10 00 - 255 0 - 100% 9 6 - 10 00 - 255 0 - 100% 9 6 - 10 00 - 255 0 - 100% 10 100 - 255 0 - 100% <td< th=""><td></td><th></th><td></td><td></td><td rowspan="5"></td><td>150 - 154</td><td>No function</td><td></td></td<>						150 - 154	No function	
1 165 - 169 CRI = LOW 170 - 174 No function 170 - 174 No function 175 - 179 VDMX - RESET 180 - 184 No function 180 - 184 No function 190 - 194 No function 191 - 194 Dimmer Speed - Smooth 1 200 - 204 Dimmer Speed - Smooth 2 201 - 214 Dimmer Speed - Smooth 3 210 - 214 Dimer Speed - Smooth 3 210 - 21 Red fine 000 - 255 <td></td> <th></th> <td></td> <td></td> <td>155 - 159</td> <td>CRI = High</td> <td></td>						155 - 159	CRI = High	
Image: Provide the second s						160 - 164	No function	
1 175 - 179 WDMX - RESET 180 - 184 No function 185 - 189 Dimmer Speed - Normal 190 - 194 No function 200 - 204 Dimmer Speed - Smooth 1 201 - 214 Dimmer Speed - Smooth 3 201 - 214 Dimmer Speed - Smooth 4 210 - 216 Ref monton 000 - 255 210 - 216 Ref monton 000 - 255 210 - 216 Ref monton 000 - 255 211 - 810e 000 - 255 0 -						165 - 169	CRI = LOW	
10 180 - 184 No function 185 - 189 Dimmer Speed - Normal 190 - 194 No function 190 - 194 No function 190 - 194 Dimmer Speed - Smooth 1 200 - 204 Dimmer Speed - Smooth 1 205 - 209 Dimmer Speed - Smooth 2 210 - 214 Dimmer Speed - Smooth 3 210 - 214 Dimmer Speed - Smooth 4 210 - 216 Olo - 255 <td></td> <th></th> <td></td> <td rowspan="2"></td> <td>170 - 174</td> <td>No function</td> <td></td>						170 - 174	No function	
185-189 Dimmer Speed - Normal 190-194 No function 190-194 No function 190-194 Dimmer Speed - Smooth 1 200-204 Dimmer Speed - Smooth 2 200-204 Dimmer Speed - Smooth 2 200-204 Dimmer Speed - Smooth 2 200-204 Dimmer Speed - Smooth 3 210-214 Dimmer Speed - Smooth 3 210-214 Dimmer Speed - Smooth 4 210-214 Dimmer Speed - Smooth 3 210-214 Dimmer Speed - Smooth 3 210-214 Dimmer Speed - Smooth 3 210-214 Dimmer Speed - Smooth 4 210-214 Dimmer Speed - Smooth 3 210-214 Dimmer Speed - Smooth 3 210-214 Dimmer Speed - Smooth 3 210-214 Dimmer Speed - Smooth 4 210-214 Dimmer Speed - Smooth 3 210-214 Dimmer Speed - Smooth 3 210-214 Dimer Speed - Smooth 3 210-214 Ref fine 000-255 0100-255 0 - 100% 210 Blue fin						175 - 179	WDMX - RESET	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						180 - 184	No function	
195 - 199 Dimmer Speed Smooth 1 200 - 204 Dimmer Speed Smooth 2 205 - 209 Dimmer Speed Smooth 3 210 - 214 Dimmer Speed Smooth 4 210 - 214 Dimmer Speed Smooth 4 215 - 249 No function 250 - 255 Illuminat display 4 5 5 6 6 Red 7 Red fine 00 - 255 6 7 Red fine 9 Green fine 000 - 255 0 100 - 255 0 - 100% 7 Red fine 000 - 255 7 8 Green fine 000 - 255 7 8 Green fine 000 - 255 7 8 Ill Blue fine 000 - 255 7 8 Ill Blue fine 000 - 255 8 9 12 Lime fine 000 - 255 9 10 Blue fine 000 - 255 0 - 100% 9 10 Ref fine 000 - 255 0 - 100% 9 10 CT 000 -						185 - 189	Dimmer Speed Normal	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						190 - 194	No function	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$								
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						200 - 204		
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4 5 5 Color macro 000 - 255 Please see page 23 Color macro chart 5 6 6 Red 000 - 255 0 - 100% 7 Red fine 000 - 255 0 - 100% 6 7 8 Green 000 - 255 0 - 100% 6 7 8 Green 000 - 255 0 - 100% 7 8 10 Blue 000 - 255 0 - 100% 7 8 10 Blue 000 - 255 0 - 100% 7 11 Blue fine 000 - 255 0 - 100% 8 9 12 Lime 000 - 255 0 - 100% 8 9 12 Lime 000 - 255 0 - 100% 9 10 14 CCT 000 - 055 10000k - 2500k 10 14 CCT channel fint 001 - 127 Magenta - Neutral 10 11 5 CCT channel fint 001 - 127 Magenta - Neutral								
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7 Red fine 000 - 255 0 - 100% 6 7 8 Green 000 - 255 0 - 100% 9 Green fine 000 - 255 0 - 100% 7 8 10 Blue 000 - 255 0 - 100% 8 9 12 Lime 000 - 255 0 - 100% 8 9 12 Lime 000 - 255 0 - 100% 9 13 Lime fine 000 - 255 0 - 100% 9 10 14 CCT 000 - 255 0 - 100% 10 14 CCT 000 - 005 No function 000 No Function 000 - 255 10000k - 2500k 10 14 15 CCT channel fint 001-127 Magenta - Neutral 10 11 15 CCT channel fint 001-127 Magenta - Neutral								
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9 Green fine 000 - 255 0 - 100% 7 8 10 Blue 000 - 255 0 - 100% 11 Blue fine 000 - 255 0 - 100% 8 9 12 Lime 000 - 255 0 - 100% 8 9 12 Lime 000 - 255 0 - 100% 9 10 14 CCT 000 - 005 No function 00 No Function 006 - 255 1000K - 2500K 10 14 CCT channel fint 001-127 Magenta - Neutral 10 11 15 CCT channel fint 001-127 Magenta - Neutral	6		7					
7 8 10 Blue 000 - 255 0 - 100% 11 Blue fine 000 - 255 0 - 100% 8 9 12 Lime 000 - 255 0 - 100% 8 9 12 Lime 000 - 255 0 - 100% 9 10 14 CCT 000 - 005 No function 000 06 255 10000k - 2500k No Function 10 11 15 CCT channel fint 001-127 Magenta - Neutral 10 11 15 CCT channel fint No Iuction Neutral	5							
11 Blue fine 000 - 255 0 - 100% 8 9 12 Lime 000 - 255 0 - 100% 13 Lime fine 000 - 255 0 - 100% 00 9 10 14 CCT 000 - 005 No function 06 - 255 10000k - 2500k 000 No Function 10 11 15 CCT channel fint 001-127 Magenta - Neutral 10 11 15 CCT channel fint 001-127 Magenta - Neutral	7		8					
8 9 12 Lime 000 - 255 0 - 100% 13 Lime fine 000 - 255 0 - 100% 9 10 14 CCT 000 - 005 No function 06 - 255 10000k - 2500k 000 No Function 10 11 15 CCT channel fint 001-127 Magenta - Neutral 10 11 15 CCT channel fint 001-127 Magenta - Neutral								
9 10 14 CCT 000 - 005 006 - 255 No function 10 11 15 CCT channel tint 001 - 127 Magenta - Neutral 10 11 15 CCT channel tint 001 - 127 Magenta - Neutral	8		9	12				
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006 - 255 10000k - 2500k 000 No Function 10 11 15 CCT channel tint 001-127 Magenta - Neutral 128-128 Neutral	0		10	14	CCT	000 - 005	No function	
10 11 15 CCT channel 001-127 Magenta - Neutral tint 128-128 Neutral	9		10	14	001	006 - 255	10000k - 2500k	
10 11 15 001 Malmel 128-128 Neutral						000	No Function	
unu 128-128 Neutral	10		11	15		001-127	Magenta - Neutral	
129-255 Neutral - Green	10			15	tint			
						129-255	Neutral - Green	

1			Function	Value	Setting	Remark
		16	Red 1	000 - 255	0 - 100%	
2		17	Green 1	000 - 255	0 - 100%	
3		18	Blue 1	000 - 255	0 - 100%	
4		19	Lime 1	000 - 255	0 - 100%	
5		20	Red 2	000 - 255	0 - 100%	
6		21	Green 2	000 - 255	0 - 100%	
7		22	Blue 2	000 - 255	0 - 100%	
8		23	Lime 2	000 - 255	0 - 100%	
9		24	Red 3	000 - 255	0 - 100%	
10		25	Green 3	000 - 255	0 - 100%	
11		26	Blue 3	000 - 255	0 - 100%	
12		27	Lime 3	000 - 255	0 - 100%	
	12	28	Effect	000 - 009 010 - 019 020 - 029 030 - 039 040 - 049 050 - 059 060 - 069	No function Effect 1 Effect 2 Effect 3 Effect 4 Effect 5 Effect 6	
				070 - 079	Effect 7	
				080 - 089 090 - 099	Effect 8 Effect 9	
				100 - 109 100 - 109		
				100 - 109 110 - 119	Effect 10	
				110 - 119 120 - 129	Effect 11 Effect 12	
				120 - 129 130 - 139		
				130 - 139 140 - 149	Effect 13 Effect 14	
				140 - 149 150 - 159	Effect 15	
				160 - 169		
				160 - 169 170 - 179	Effect 16 Effect 17	
				170 - 179 180 - 189	Effect 18	
				180 - 189 190 - 199	Effect 19	
				200 - 255	Effect 20	
	10	20	Effect encod			
	13	29	Effect speed	000 - 255	Fast- slow	

COLOR MACRO CHART

DMX value	Gel Name	Color Number
0-4	no function	
5	Rose Pink	LEE 002
6	Medium Bastard Amber	LEE 004
7	Pale Yellow	LEE 007
8	Dark Salmon	LEE 008
9	Pale Amber Gold	LEE 009
10	Medium Yellow	LEE 010
11	Straw Tint	LEE 013
12	Deep Straw	LEE 015
13	Surprise Peach	LEE 017
14	Medium Amber	LEE 020
15	Dark Amber	LEE 022
16	Sunset Red	LEE 025
17	Bright Red	LEE 026
18	Medium Pink	LEE 036
19	Rose Purple	LEE 048
20	Lavender	LEE 058
21	Pale Blue	LEE 063
22	Sky Blue	LEE 068
23	Tokyo Blue	LEE 071
24	Evening Blue	LEE 075
25	Lime Green	LEE 088
26	Moss Green	LEE 089
27	Dark Yellow Green	LEE 090
28	Yellow	LEE 101
29	Straw	LEE 103
30	Deep Amber	LEE 104
31	Orange	LEE 105
32	Primary Red	LEE 106
33	Light Rose	LEE 107
34	English Rose	LEE 108
35	Light Salmon	LEE 109
36	Middle Rose	LEE 110
37	Dark Pink	LEE 111
38	Magenta	LEE 113
39	Peacock Blue	LEE 115
40	Steel Blue	LEE 117
41	Light Blue	LEE 118
42	Dark Blue	LEE 119
43	LEE Green	LEE 121

DMX value	Gel Name	Color Number
44	Fern Green	LEE 122
45	Dark Green	LEE 124
46	Mauve	LEE 126
47	Smokey Pink	LEE 127
48	Bright Pink	LEE 128
49	Marine Blue	LEE 131
50	Medium Blue	LEE 132
51	Golden Amber	LEE 134
52	Deep Golden Amber	LEE 135
53	Special Lavender	LEE 137
54	Pale Green	LEE 138
55	Primary Green	LEE 139
56	Summer Blue	LEE 140
57	Bright Blue	LEE 141
58	Pale Violet	LEE 142
59	Pale Navy Blue	LEE 143
60	No Colour Blue	LEE 144
61	Apricot	LEE 147
62	Bright Rose	LEE 148
63	Gold Tint	LEE 151
64	Pale Gold	LEE 152
65	Pale Salmon	LEE 153
66	Pale Rose	LEE 154
67	Chocolate	LEE 156
68	Pink	LEE 157
69	Deep Orange	LEE 158
70	Slate Blue	LEE 161
71	Bastard Amber	LEE 162
72	Flame Red	LEE 164
73	Daylight Blue	LEE 165
74	Deep Lavender	LEE 170
75	Lagoon Blue	LEE 172
76	Dark Steel Blue	LEE 174
77	Loving Amber	LEE 176
78	Chrome Orange	LEE 179
79	Dark Lavender	LEE 180
80	Congo Blue	LEE 181
81	Moonlight Blue	LEE 183
82	Flesh Pink	LEE 192
83	Surprise Pink	LEE 192
00		LLL 134

DMX value	Gel Name	Color Number
84	Zenith Blue	LEE 195
85	True Blue	LEE 196
86	Alice Blue	LEE 197
87	Palace Blue	LEE 198
88	Regal Blue	LEE 199
89	Double CTB	LEE 200
90	Full CTB	LEE 201
91	Half CTB	LEE 202
92	Quarter CTB	LEE 203
93	Full CTO	LEE 204
94	Half CTO	LEE 205
95	Quarter CTO	LEE 206
96	Full CTO + .3 ND	LEE 207
97	Full CTO + .6 ND	LEE 208
98	LCT Yellow (Y1)	LEE 212
99	White Flame Green	LEE 213
100	LEE Fluorescent Green	LEE 219
101	Super Correction LCT Yellow	LEE 230
102	Super Correction W.F. Green	LEE 232
103	HMI (to Tungsten)	LEE 236
104	CID (to Tungsten)	LEE 237
105	CSI (to Tungsten)	LEE 238
106	LEE Fluorescent 5700 Kelvin	LEE 241
107	LEE Fluorescent 4300 Kelvin	LEE 242
108	LEE Fluorescent 3600 Kelvin	LEE 243
109	LEE Plus Green	LEE 244
110	Half Plus Green	LEE 245
111	LEE Minus Green	LEE 247
112	Half Minus Green	LEE 248
113	Quarter Minus Green	LEE 249
114	Three Quarter CTB	LEE 281
115	One and a Half CTB	LEE 283
116	Three Quarter CTO	LEE 285
117	One and a Half CTO	LEE 286
118	Double CTO	LEE 287
119	Soft Green	LEE 322
120	Jade	LEE 323
121	Forest Green	LEE 327
122	Follies Pink	LEE 328
123	Special Rose Pink	LEE 332

DMX value	Gel Name	Color Number
124	Special Medium Lavender	LEE 343
	Fuchsia Pink	LEE 345
125 126	Glacier Blue	LEE 345
127	Lighter Blue	LEE 353
128	Special Steel Blue	LEE 354
129	Special Medium Blue	LEE 363
130	Cornflower	LEE 366
131	Full CT Straw	LEE 441
132	Half CT Straw	LEE 442
133	Eighth CT Straw	LEE 444
134	Double New Colour Blue	LEE 500
135	New Colour Blue (Robertson Blue)	LEE 501
136	Half New Colour Blue	LEE 502
137	Waterfront Green	LEE 504
138	Sally Green	LEE 505
139	Marlene	LEE 506
140	Madge	LEE 507
141	Midnight Maya	LEE 508
142	Argent Blue	LEE 525
143	ALD Gold	LEE 550
144	Full CT Eight Five	LEE 604
145	Industry Sodium	LEE 650
146	HI Sodium	LEE 651
147	Urban Sodium	LEE 652
148	Perfect Lavender	LEE 700
149	Provence	LEE 701
150	Special Pale Lavender	LEE 702
151	Cold Lavender	LEE 703
152	Lily	LEE 704
153	King Fals Lavender	LEE 706
154	Cool Lavender	LEE 708
155	Electric Lilac	LEE 709
156	Spir Special Blue	LEE 710
157	Cold Blue	LEE 711
158	Bedford Blue	LEE 712
159	Elysian Blue	LEE 714
160	Cabana Blue	LEE 715
161	Mikkel Blue	LEE 716
162	Colour Wash Blue	LEE 719
163	Berry Blue	LEE 721
	,	

DMX value	Gel Name	Color Number
164	Bray Blue	LEE 722
165	Virgin Blue	LEE 723
166	Ocean Blue	LEE 724
167	Old Steel Blue	LEE 725
168	QFD Blue	LEE 727
169	Steel Green	LEE 728
170	Scuba Blue	LEE 729
171	Twickenham Green	LEE 736
172	JAS Green	LEE 738
173	Bram Brown	LEE 742
174	Dirty White	LEE 744
175	Easy White	LEE 747
176	Seedy Pink	LEE 748
177	Wheat	LEE 763
178	Sun Colour Straw	LEE 764
179	LEE Yellow	LEE 765
180	Oklahoma Yellow	LEE 767
181	Egg Yolk Yellow	LEE 768
182	Burnt Yellow	LEE 770
183	Rust	LEE 777
184	Millennium Gold	LEE 778
185	Bastard Pink	LEE 779
186	AS Golden Amber	LEE 780

DMX value	Function	setting
187	Terry Red	LEE 781
188	Moroccan Pink	LEE 790
189	Vanity Fair	LEE 793
190	Pretty 'n Pink	LEE 794
191	Magical Magenta	LEE 795
192	Special KH Lavender	LEE 799
193	Color Effect	2500K
194	CCT 1	2800K
195	CCT 2	3200K
196	CCT 3	4000K
197	CCT 4	5000K
198	CCT 5	5600K
199	CCT 6	6000K
200	CCT 7	7000K
201	CCT 8	8000K
202	CCT 9	9000K
203	CCT 10	10,000K
204 - 205	no function	
206 - 215	colour rainbow 1	slow - fast
216 - 225	colour rainbow 2	slow - fast
226 - 235	colour rainbow 3	slow - fast
236 - 245	colour rainbow 4	slow - fast
246 - 255	colour rainbow 5	slow - fast

SPECIFICATIONS

Power	
Input voltage & rate	100-240V, 50/60Hz
Standby power	7W
Nominal total power consumption (at nominal voltage 230V)	243W
Typical current (at nominal voltage 230V)	1.13A
Cos φ	0,932
Power plug type	Seetronic PowerCon True
Configuration	
LED color	RGBL
LED color temperature	2500 K - 10000 K
Quantity of LED	21 pcs
Dimming frequency	600 / 1200 / 4800 / 10000 / 25000 Hz
Dimmer resolution	8bit / 16bit
Optical	
Beam angle	Beam angle 17.6° (50%) Field angle 31.4° (10%)
Photometric	
Output @1M	88214 lux
Output @5M	3529 lux
Heat management	
Cooling type:	Passive cooling
MAX. Ambient temp (Ta max)	40, °C
MIN. Ambient temp (Ta min)	25, °C
MAX housing temp.(ta=25°C)	50, °C
MAX housing temp.(ta=40°C)	65, °C
Menu	
Auto program	yes
Static color	yes
Manual calibration	yes
Factory calibration	yes
Strobe speed	0 - 20Hz
Random strobe	yes

* PF = power factor. Measurements made at nominal voltage with all LEDs at full intensity. Allow for a deviation of +/- 10%.

Control	
Battery voltage:	36V
Battery capacity:	10Ah
Battery power:	360Wh
Battery charge time:	4h
Battery protection:	Protection against overloading and deep discharge
Battery charging cycles:	300 charging cycles 0% -> 100% 70% capacity
Control	
Control protocol	USITT DMX512/1990
DMX channel range	2 / 3 / 4 / 4 / 6 / 8 / 10 / 12 / 13 / 29 CH
RDM	yes
RDM compliance	ANSI/ESTA E.120
CRMX	Standard (Wireles Solution from Lumenradio)
ACN	None
DMX input connection	DMX 5P in & out (3 pin possible with optional chassis part)
Data input (artnet, SACN)	None
Hardware	
Interface	Backlite LCD display
Software upload method	XLR via special box
Installation	
IP rating	IP65
Housing	
Safety attachment point	Yes
Physical	
Net product weight	10.8 kg
Machine dimensions - Length	418 mm
Machine dimensions - Width	157 mm
Machine dimensions - Height	301 mm
Accessories	
Included items	Power cable , manual
Approvals	
Approved certifications	CE / ROHS, FCC, UKCA, RED, ETL

EXPLODED VIEW



NO.	Description	Part Number
1	Top cover	CLF-28-001
2	Glass for cover	CLF-28-002
3	Waterproof pads for glass	CLF-28-003
4	Batt glass frame	CLF-28-004
5	Batt waterproof pads of cover	CLF-28-005
6	Lens clamp	CLF-28-006
7	Lens	CLF-28-007
8	Lens plate	CLF-28-008
9	Led control board	CLF-28-009
10	Led board	CLF-28-010
11	Plate for cable	CLF-28-011
12	Waterproof ring for cable	CLF-28-012
13	Dial	CLF-28-013
14	Protect ring for cable	CLF-28-014
15	Handle pads	CLF-28-015
16	Stainless steel folding handle	CLF-28-016
17	Radiator	CLF-28-017
18	Rubber pads for bracket 3	CLF-28-018
19	Rubber pads for bracket 4	CLF-28-019
20	Rubber pads for bracket 1	CLF-28-020
21	Rubber pads for bracket 2	CLF-28-021
22	Bracket accessories	CLF-28-022
23	Wdmx antenna	CLF-28-023
24	Powercon female	CLF-28-024
25	XLR board and 5pin females socket	CLF-28-025
26	XLR board and 5pin males socket	CLF-28-026
27	Powercon male	CLF-28-027
28	Switch button	CLF-28-028

NO.	Description	Part Number
29	Breather valve	CLF-28-029
30	Fan frame	CLF-28-030
31	Radiator Fan	CLF-28-031
32	Side parts of bracket	CLF-28-032
33	Bracket	CLF-28-033
34	Knob	CLF-28-034
35	Plate for charging	CLF-28-035
36	Charging board	CLF-28-036
37	Advisor chips module	CLF-28-037
38	Wireless board	CLF-28-038
39	Supporting structure of main board	CLF-28-039
40	Display control board	CLF-28-040
41	Waterproof pads of TFT	CLF-28-041
42	Glass for Icd	CLF-28-042
43	Display glass cover	CLF-28-043
44	Housing	CLF-28-044
45	Bottom plate for PSU	CLF-28-045
46	PSU	CLF-28-046
47	Waterproof pads of housing	CLF-28-047
48	Bottom cover	CLF-28-048
49	Plate for bottom cover	CLF-28-049
50	Clip of safety lock	CLF-28-050
51	Foot pads	CLF-28-051
52	U shape safety lock	CLF-28-052
53	Desiccant plate	CLF-28-053
54	PSU Fan	CLF-28-054
55	Plate for battery	CLF-28-055
56	Battery	CLF-28-056





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