LEDBAR PRO

MANUAL

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DIMENSIONS
ALL DIMENSIONS ARE IN MILLIMETERS

105

165

210

1000
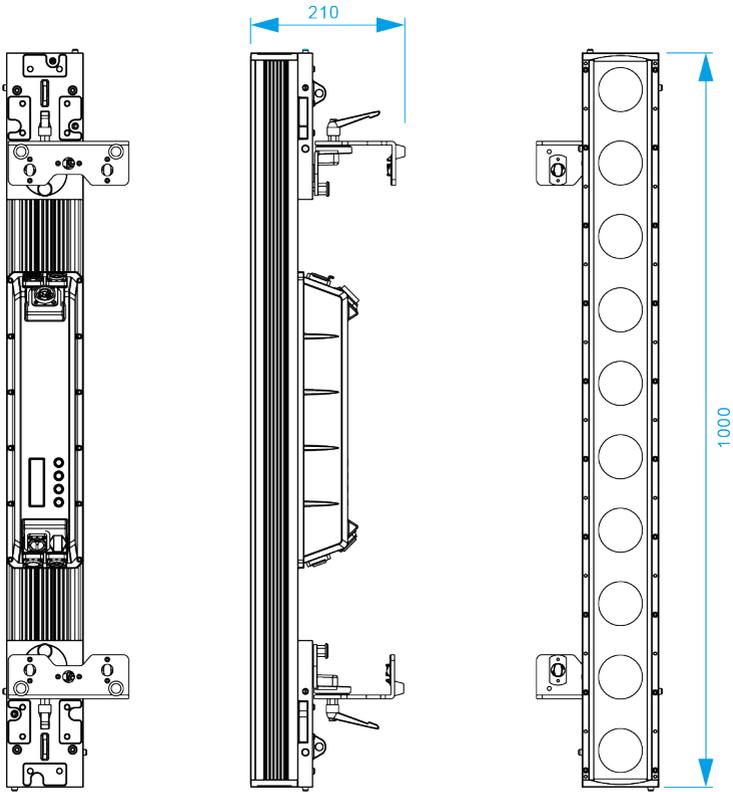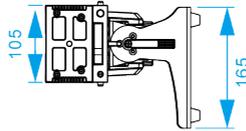
SAFETY INSTRUCTION

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.

WARNING!
Fire hazard.

WARNING!
LED light emission. Risk of eye injury.

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

WARNING!
Wear protective eyewear.

WARNING!
Refer to user manual.

Warning! Risk Group 1 (low risk) LED product according to EN 62471. Do not look into the beam at a distance of less than 0,2 meters from the front surface 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 questions 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 0,1 meters 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 0,2 meters 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 continuously at LEDs from a distance of less than 0,2 meters from the front surface of the fixture without protective eyewear such as shade 4-5 welding goggles. At less than this distance, the LED emission can cause eye injury or irritation.

- Do not look at LEDs with magnifiers, telescopes, binoculars or similar optical instruments that may concentrate the light output.

- 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.

FIXTURE OVERVIEW

Safety cable
attachment point

5P DMX output
3P DMX output (accessoires)
CLF-13-454

Art-net output

AC mains power
throughput

LCD Display

Control buttons

AC mains power
input

WDMX (accessoires ±Q1 2019)

5P DMX input
3P DMX input (accessoires)
CLF-13-453

Art-net input

Safety cable
attachment point

Omega bracket with
Quicklock # 520114/520113
(accessoires)
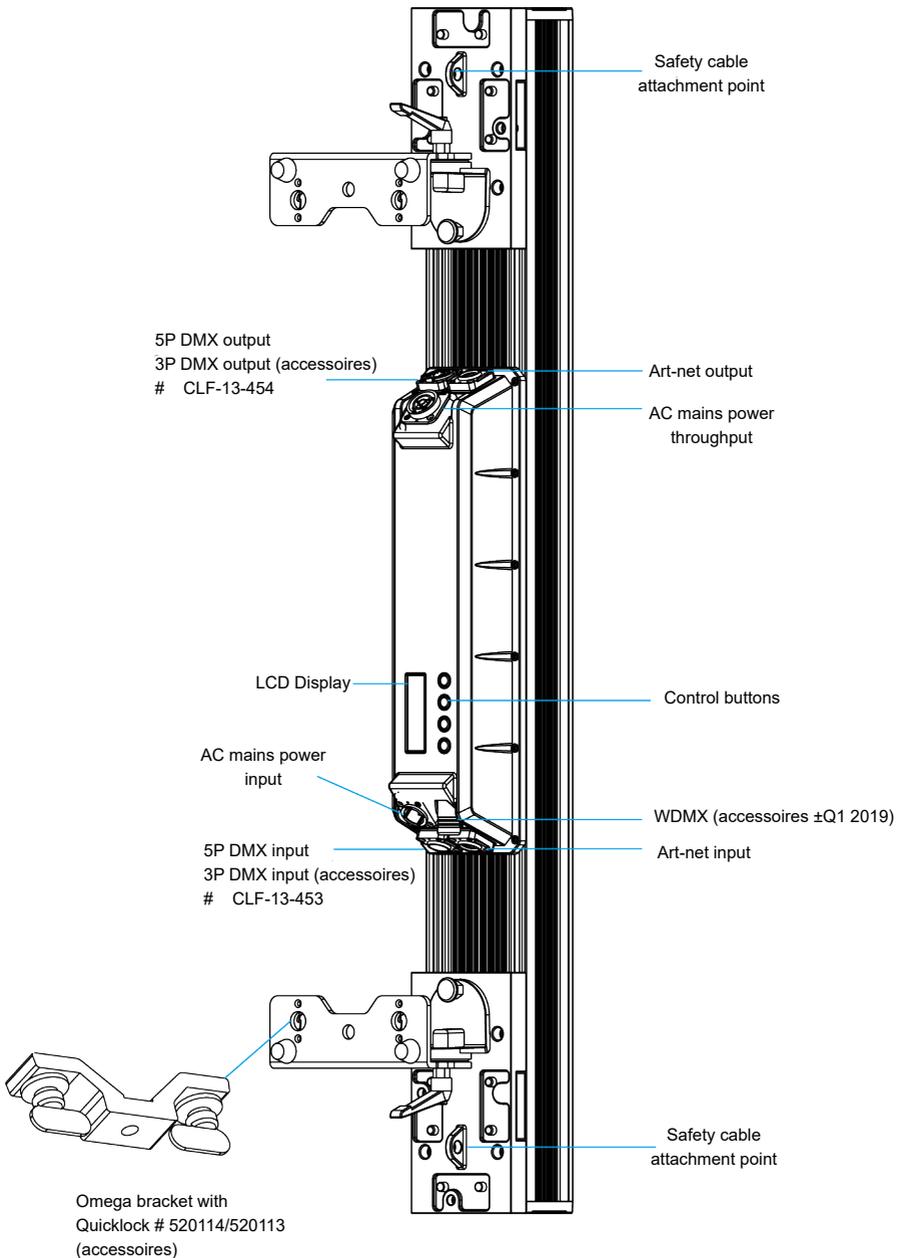
INTRODUCTION

OUTDOOR RGBW LED FIXTURE
AFFORDABLE LIGHTING ESSENTIAL

- Unique bracket design
- Touring proof
- Smooth RGBW color mixing
- IP65 rating
- Silent operation
- Smooth projection
- PowerCON TRUE 1 ® in & out
- RDM ready
- Art NET , sACN ready

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	N
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 ten 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.

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.

SOLID OBJECT

1	Protected against a solid object greater than 50mm such as a hand.
2	Protected against a solid object greater than 12.5mm such as a finger.
3	Protected against a solid object greater than 2.5mm such as a screwdriver.
4	Protected against a solid object greater than 1mm such as a wire.
5	Dust protected. Limited ingress of dust permitted. Will not interfere with operation of the equipment.
6	Dust tight. No ingress of dust.

MOISTURE

1	Protected against vertical falling drops of water. Limited ingress permitted.
2	Protected against vertical falling drops of water with enclosure tilted up to 15 degrees from the vertical. Limited ingress permitted.
3	Protected against sprays of water up to 60 degrees from the vertical. Limited ingress permitted.
4	Protected against water splashes from all directions. Limited ingress permitted.
5	Protected against jets of water. Limited ingress permitted.
6	Protected against powerful jets of water. Limited ingress permitted.
7	Protected against the effects of immersion in water between 15cm and 1m for 30 minutes.
8	Protected against the effects of immersion in water under pressure for long periods.

IP 6 5

Ingress Protection

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.

INSTALLATION

COUPLING (SHORT SIDE)

Use a hexagon wrench to rotate the locking positioning system clockwise to to fasten two fixtures. Do not mount more than two fixtures to each other when hanging vertically.

art. no.
156634
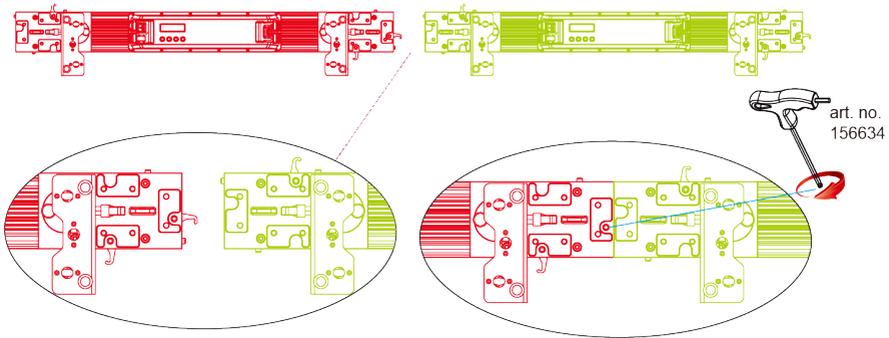
COMBINED COUPLING

Use a hexagon wrench to rotate the locking positioning system clockwise to fasten the fixtures.

① ③

② ④
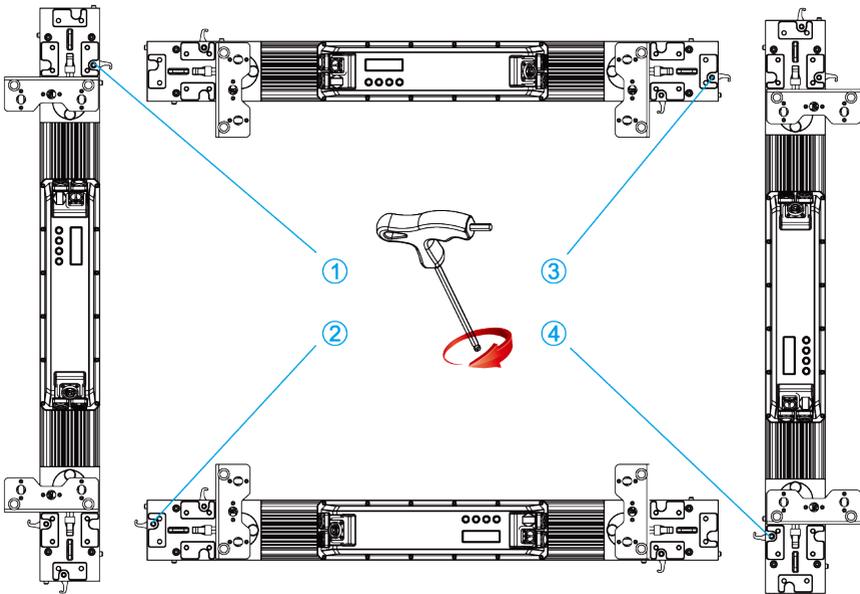
COUPLING (LONG SIDE)

When using the locking system on the long side, you need to keep in mind that the bracket positioning system should be moved. Do not mount more than three fixtures to each other when hanging horizontally.
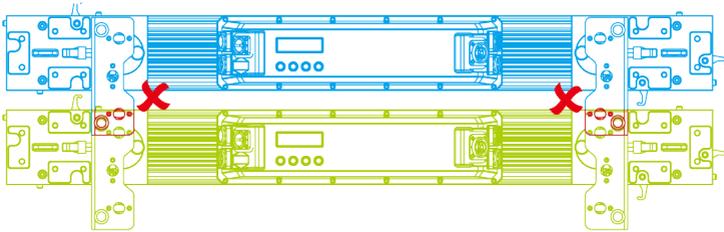
The adaptable bracket system can be rotated by pulling the locking pin. After bringing the bracket system in the right direction, make sure to fasten the locking pin.
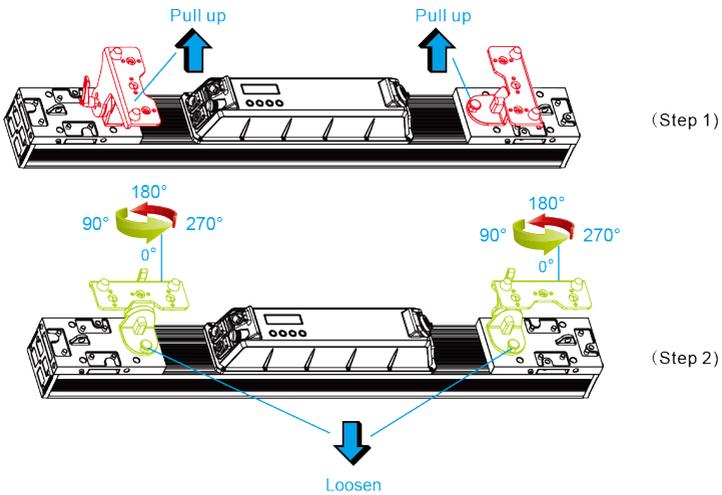
（Step 1)

（Step 2)

Use a hexagon wrench to rotate the locking positioning system clockwise to fasten the fixtures.
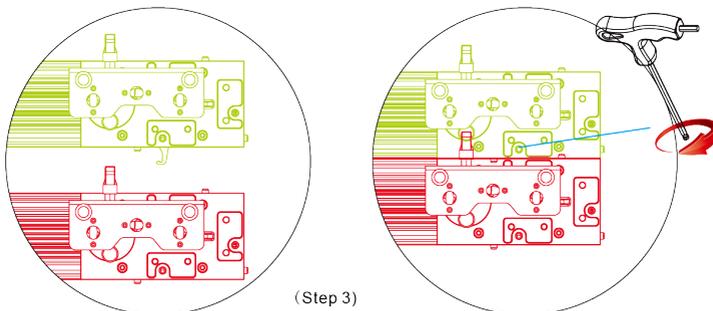
（Step 3)

HANGING (OMEGA BRACKET)

Always use CLF omega brackets to hang the LEDbar PRO. The bracket system can be moved to avoid truss bracing patterns.
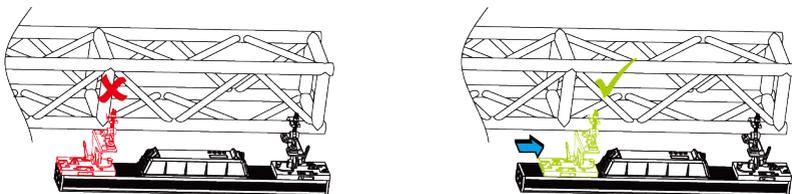
To move the bracket system, loosen the four screws on the slider counterclockwise, then move the bracket system to the required position. Then tighten the four screws on the slider clockwise to fixate the bracket system.

(Step 1)

(Step 2)

MOVE
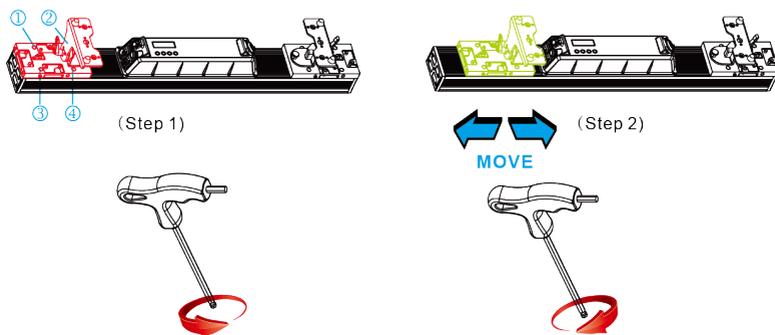
HANGING

The fixture can also be secured by using the M8 mounting hole with any kind of rigging.
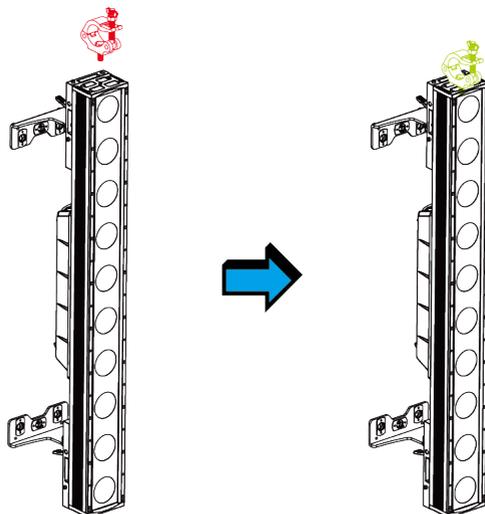
SETUP

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 [MODE].
- 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 [MODE].

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 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 (OPTIONAL ±Q1 2019)

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 in the home display the sign " ◀ : V " appears. If the unit is not connected to a transmitter in the home display the sign " ◀ : X ". If the unit is switched off in the home display the sign " ◀ : OFF ".

- 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 7 DMX control modes:

	4ch	6ch	11ch	12ch	18ch	40ch	47ch
RGBW	✓	✓	✓		✓		
Strobe		✓	✓		✓		✓
Dimmer		✓	✓	✓	✓		✓
Function set			✓		✓		✓
Color macro			✓		✓		✓
Auto			✓				✓
Auto speed			✓				✓
Fade			✓	✓			✓
LED 1-10 (Dimmer)					✓		
LED 1-10 (RGBW)						✓	✓
LED 1-10 (Macro color)				✓			

CONTROL PANEL

Here you can set all functions for the fixture.

PERSONALITY

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 curve.
Dimmer curve	Linear / Square law / INV Square law / S- Curve / Special
Refresh rate	Controls the flicker frequency of the fixture 600 / 1200 / 4800 / 9600 Hz
CALIBRATION	NO CALIBRATION = Color calibration mode off. MANUAL = Manual calibration mode, RGBW to white is custom calibration FACTORY = Factory calibration mode, RGBW to white is factory calibration
KEY-Lock	Locks all the button functions. Standard unlocking password is (MODE+UP+MODE+DOWN+MODE+UP+MODE+DOWN+ENTER)
DMX HOLD	DMX HOLD = The fixture will remember on last values when you disconnect DMX NO DMX HOLD = The fixture has no output when you disconnect DMX
W-DMX	ON (Turn on the Wireless Board) OFF (Turn off the Wireless Board) RESET (Reset the Wireless Board)

ART-NET

NET	MODE	Auto	IP configuration mode. (When choose the Custom in MODE , can modify the IP .)
		Custom	
	UNIVERSE	0-255	Selection of the Universe
	IP	xxx.xxx.xxx.xxx	IP address of the unit
	SUBNET	xxx.xxx.xxx.xxx	SUBNET address of the unit

INFORMATION

Software type	Shows software version (Vx.x)
Usage time	Use of time and use time reset (password)
Temperature	LED board current temperature
RDM.UID	Shows the unique ID for the RDM protocoll. <0x02E20002xxxx>

FACTORY RESET

Resets the fixture to its factory default settings.

DIMMER MODE

provides five dimming options (see picture below):
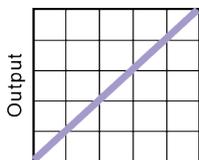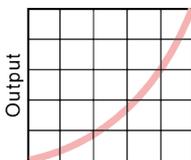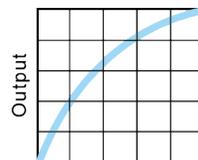
LINEAR

SQUARE LAW

INVERSE SQUARE LAW
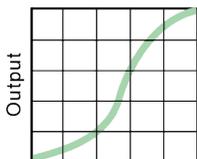
S-CURVE
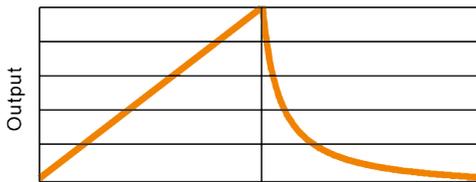
SPECIAL

- **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
1	DMX ADDRESS	<001>		Default : 001
2	CONTROL MODE	4CH	1. Red, 2. Green, 3. Blue, 4. White	Default : 11CH
		6CH	1. Strobe, 2. Dimmer, 3. Red, 4. Green, 5. Blue, 6. White	
		11CH	1. Strobe, 2. Dimmer, 3. Function Set, 4. Color Macro, 5. Red, 6. Green, 7. Blue, 8. White, 9. Effects, 10. Effect Speed, 11. Fade	
		12CH	1. Dimmer, 2. Led 1, 3. Led 2, 4. Led 3, 5. Led 4, 6. Led 5, 7. Led 6, 8. Led 7, 9. Led 8, 10. Led 9, 11.Led 10, 12.Fade,	
		18CH	1. Strobe, 2. Dimmer, 3. Function set, 4. Color macro, 5. Red, 6. Green, 7. Blue, 8. White, 9. led 1, 10. led 2, 11. led 3, 12. led 4, 13. led 5, 14. led 6, 15. led 7, 16. led 8, 17. led 9, 18. led 10	
		40CH	1-4. Led1 RGBW , 5-8. Led2 RGBW , 9-12. Led3 RGBW , 13-16. Led4 RGBW , 17-20. Led5 RGBW , 21-24. Led6 RGBW , 25-28. Led7 RGBW , 29-32. Led8 RGBW , 33-36. Led9 RGBW , 37-40. Led10 RGBW.	
		47CH	1. Strobe, 2. Dimmer, 3. Function set, 4. Color macro, 5-8. Led1 RGBW, 9-12. Led2 RGBW, 13-16. Led3 RGBW, 17-20. Led4 RGBW, 21-24. Led5 RGBW, 25-28. Led6 RGBW, 29-32. Led7 RGBW, 33-36. Led8 RGBW, 37-40. Led9 RGBW, 41-44. Led10 RGBW, 45.Effects, 46. Effect Speed, 47. Fade	
3	PERSONALITY	Dimmer Speed	Normal	Default : Normal
			Smooth 1 / Smooth 2 / Smooth 3 / Smooth 4	
		Dimmer curve	Linear	Default : linear
			Square law	
			INV Square law	
			S-Curve	
			Special	
		Refresh rate	600 / 1200 / 4800 / 9600 Hz	
		Calibration	Normal	Default : FACTORY
			Factory	
			Manual — Red (0-255)	
			Green (0-255)	
			Blue (0-255)	
			White (0-255)	
		KEY-Lock	ON/OFF	Default : OFF
		DMX hold	Dmx hold / No dmx hold	Default : DMX HOLD
		WDMX	ON	Default : ON
			OFF	
			Reset	
			TEST	Automatic running

4	NET	MODE	Auto:2.x.x.x		
			Auto:10.x.x.x		
			Custom		
		UNIVERSE	0-255		
		IP	xxx.xxx.xxx.xxx		
		SUBNET	xxx.xxx.xxx.xxx		
5	STATIC COLOR*	Fixed color	R, G, B, W, RG, RB, GB, RGB, RW, GW, BW, RGW, RBW, GBW, RGBW		Default : RGBW
		CCT	2800K / 3000K / 4000K / 5000K / 6000K / 7000K / 8000K / 10000K		Default : 2800K
		Manual color	Dimmer	0-100	Default : 000
			Red	0-100	Default : 000
			Green	0-100	Default : 000
			Blue	0-100	Default : 000
			White	0-100	Default : 000
			Strobe	0-20	Default : 000
6	AUTO*	Auto	01-50	Speed (00 - 20)	Default :Auto 01, Speed 00
7	INFO	Software	VX.XX		
		Usage time	Xxxx H		
		Temperature	LED 1-5: XXX° C , LED 6-10: XXX° C		
		RDM.UID	0x02E2000xxxxx		
8	FACTORY SET	LOAD	Please reboot power before reset takes effect!		

DMX PROTOCOLS

4 CH	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%	

6 CH	Function	Value	Setting	Remark
1	Shutter	000 - 019	No function	
		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	
2	Dimmer	000 - 255	0 - 100%	
3	Red	000 - 255	0 - 100%	
4	Green	000 - 255	0 - 100%	
5	Blue	000 - 255	0 - 100%	
6	White	000 - 255	0 - 100%	

11 CH	Function	Value	Setting	Remark
		000 - 019	No function	
		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)	
1	Shutter	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	
2	Dimmer	000 - 255	0 - 100%	
		000 - 044	No function	[1] Value must be held for 3 seconds to activate.
		045 - 049	Dimmer off[1]	
		050 - 054	No function	
		055 - 059	Dimmer 1[1]	
		060 - 064	Dimmer 2[1]	
		065 - 069	Dimmer 3[1]	
		070 - 074	Dimmer 4[1]	
		075 - 089	No function	
		090 - 094	Calibrated color output mode - COLOR CALIB = On[1]	
		095 - 099	Manual calibration output mode - Manual calibration = On[1]	
		100 - 104	Raw color output mode - COLOR CALIB = OFF[1]	
	Fixture	105 - 129	No function	
3	control	130 - 134	600Hz refresh rate	
	settings	135 - 139	1200Hz refresh rate	
		140 - 144	4800Hz refresh rate	
		145 - 149	9600Hz refresh rate	
		150 - 154	No function	
		155 - 159	WDMX - On[1]	
		160 - 164	No function	
		165 - 169	WDMX - OFF[1]	
		170 - 174	No function	
		175 - 179	WDMX - RESET[1]	
		180 - 249	No function	
		250 - 255	Illuminate display	
		000 - 009	No Function	
4	Color macro	010 - 215	Color wheel rotation effect	
		216 - 255	CCT 10000K - 2800K	
5	Red	000 - 255	0 - 100%	
6	Green	000 - 255	0 - 100%	
7	Blue	000 - 255	0 - 100%	
8	White	000 - 255	0 - 100%	
9	Auto program	000 - 005	No function	
		006 - 255	Auto 1- 50 (refer to the DMX auto function)	
10	AUTO Speed	000	No function	
		1 - 255	AUTO Speed (slow → fast	
11	Fade	000	No function	
		1 - 255	Dimmer Speed (fast → slow)	

12 CH	Function	Value	Setting	Remark
1	**Dimmer**	000 - 255 000 - 015 016 - 031 032 - 047	0 - 100% No Function R G	
2	**2, LED 1**	048 - 063	B	
3	**3, LED 2**	064 - 079	R+G	
4	**4, LED 3**	080 - 095	G+B	
5	**5, LED 4**	096 - 111	R+B	
6	**6, LED 5**	112 - 127	R+G+B	
7	**7, LED 6**	128 - 143	W	
8	**8, LED 7**	144 - 159	R+W	
9	**9, LED 8**	160 - 175	G+W	
10	**10, LED 9**	176 - 191	B+W	
11	**11, LED 10**	192 - 207 208 - 223 224 - 239 240 - 255	R+G+W R+G+W R+G+W R+G+B+W	
12	**Fade**	000 1-255	No function Dimmer Speed (fast to slow)	

18 CH	Function	Value	Setting	Remark
		000 - 019	No function	
		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)	
1	Shutter	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	
2	Dimmer	000 - 255	0 - 100%	
		000 - 044	No function	[1] Value must be held for 3 seconds to activate.
		045 - 049	Dimmer off[1]	
		050 - 054	Function	
		055 - 059	Dimmer 1[1]	
		060 - 064	Dimmer 2[1]	
		065 - 069	Dimmer 3[1]	
		070 - 074	Dimmer 4[1]	
		075 - 089	No function	
		090 - 094	Calibrated color output mode - COLOR CALIB = On[1]	
		095 - 099	Manual calibration output mode - Manual calibration = On[1]	
		100 - 104	Raw color output mode - COLOR CALIB = OFF[1]	
	Fixture	105 - 129	No function	
3	control	130 - 134	600Hz refresh rate	
	settings	135 - 139	1200Hz refresh rate	
		140 - 144	4800Hz refresh rate	
		145 - 149	9600Hz refresh rate	
		150 - 154	No function	
		155 - 159	WDMX - On[1]	
		160 - 164	No function	
		165 - 169	WDMX - OFF[1]	
		170 - 174	No function	
		175 - 179	WDMX - RESET[1]	
		180 - 249	No function	
		250 - 255	Illuminate display	
		000 - 009	No Function	
4	Color macro	010 - 215	Color wheel rotation effect	
		216 - 255	CCT 10000K - 2800K	
5	Red	000 - 255	0 - 100%	
6	Green	000 - 255	0 - 100%	
7	Blue	000 - 255	0 - 100%	
8	White	000 - 255	0 - 100%	
9	LED 1	000 - 255	Dimmer (0 - 100%)	
10	LED 2	000 - 255	Dimmer (0 - 100%)	
11	LED 3	000 - 255	Dimmer (0 - 100%)	
...	...	...	...	
17	LED 9	000 - 255	Dimmer (0 - 100%)	
18	LED 10	000 - 255	Dimmer (0 - 100%)	

40 CH	Function	Value	Setting	Remark
1	**LED 1 (Red)**	000 - 255	0 - 100%	
2	**LED 1 (Green)**	000 - 255	0 - 100%	
3	**LED 1 (Blue)**	000 - 255	0 - 100%	
4	**LED 1 (White)**	000 - 255	0 - 100%	
5	**LED 2 (Red)**	000 - 255	0 - 100%	
6	**LED 2 (Green)**	000 - 255	0 - 100%	
7	**LED 2 (Blue)**	000 - 255	0 - 100%	
8	**LED 2 (White)**	000 - 255	0 - 100%	
...	**...**	...	...	
37	**LED 10 (Red)**	000 - 255	0 - 100%	
38	**LED 10 (Green)**	000 - 255	0 - 100%	
39	**LED 10 (Blue)**	000 - 255	0 - 100%	
40	**LED 10 (White)**	000 - 255	0 - 100%	

47 CH	Function	Value	Setting	Remark
		000 - 019	No function	
		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)	
1	Shutter	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	
2	Dimmer	000 - 255	0 - 100%	
		000 - 044	No function	[1] Value must be held for 3 seconds to activate.
		045 - 049	Dimmer off[1]	
		050 - 054	Function	
		055 - 059	Dimmer 1[1]	
		060 - 064	Dimmer 2[1]	
		065 - 069	Dimmer 3[1]	
		070 - 074	Dimmer 4[1]	
		075 - 089	No function	
		090 - 094	Calibrated color output mode - COLOR CALIB = On[1]	
		095 - 099	Manual calibration output mode - Manual calibration = On[1]	
		100 - 104	Raw color output mode - COLOR CALIB = OFF[1]	
		105 - 129	No function	
3	Fixture control settings	130 - 134	600Hz refresh rate	
		135 - 139	1200Hz refresh rate	
		140 - 144	4800Hz refresh rate	
		145 - 149	9600Hz refresh rate	
		150 - 154	No function	
		155 - 159	WDMX - On[1]	
		160 - 164	No function	
		165 - 169	WDMX - OFF[1]	
		170 - 174	No function	
		175 - 179	WDMX - RESET[1]	
		180 - 249	No function	
		250 - 255	Illuminate display	
4	Color macro	000 - 215	Color wheel rotation effect	
		216 - 255	CCT 10000K - 2800K	
5	LED 1 (Red)	000 - 255	0 - 100%	
6	LED 1 (Green)	000 - 255	0 - 100%	
7	LED 1 (Blue)	000 - 255	0 - 100%	
8	LED 1 (White)	000 - 255	0 - 100%	
...	...	...	...	
42	LED 10 (Green)	000 - 255	0 - 100%	
43	LED 10 (Blue)	000 - 255	0 - 100%	
44	LED 10 (White)	000 - 255	0 - 100%	
45	Auto	000 - 255	Auto 1- 50 (refer to the DMX auto function)	
46	Auto Speed	000 - 255	AUTO Speed (slow → fast)	
47	Fade	000 - 255	Dimmer Speed (fast → slow)	

DMX AUTO FUNCTION

Function	Value	Setting
No function	000 - 005	Controller auto function
Auto 1	006 - 010	
Auto 2	011 - 015	
Auto 3	016 - 020	
Auto 4	021 - 025	
Auto 5	026 - 030	
Auto 6	031 - 035	
Auto 7	036 - 040	Auto 1 - 14 was effect by Strobe, Dimmer, Color Macro, Red, Green, Blue,
Auto 8	041 - 045	White, Auto Speed, and Fade .
Auto 9	046 - 050	
Auto 10	051 - 055	
Auto 11	056 - 060	
Auto 12	061 - 065	
Auto 13	066 - 070	
Auto 14	071 - 075	
Auto 15	076 - 080	
Auto 16	081 - 085	
Auto 17	086 - 090	
Auto 18	091 - 095	Auto 15 - 22 was effect by Strobe, Dimmer, Auto Speed, and Fade.
Auto 19	096 - 100	Choose the Color Macro, Red, Green, Blue, White as background color.
Auto 20	101 - 105	
Auto 21	106 - 110	
Auto 22	111 - 115	
Auto 23	116 - 120	
Auto 24	121 - 125	
Auto 25	126 - 130	
Auto 26	131 - 135	
Auto 27	136 - 140	
Auto 28	141 - 145	
Auto 29	146 - 150	
Auto 30	151 - 155	
Auto 31	156 - 160	
Auto 32	161 - 165	
...		Can set the auto speed by next channel
Auto 40	201 - 205	
Auto 41	206 - 210	
Auto 42	211 - 215	
Auto 43	216 - 220	
Auto 44	221 - 225	
Auto 45	226 - 230	
Auto 46	231 - 235	
Auto 47	236 - 240	
Auto 48	241 - 245	
Auto 49	246 - 250	Auto 41 - 48 circulation (Can set the auto speed by next channel)
Auto 50	251 - 255	Auto 23 - 40 circulation (Can set the auto speed by next channel)

EXPLODED VIEW
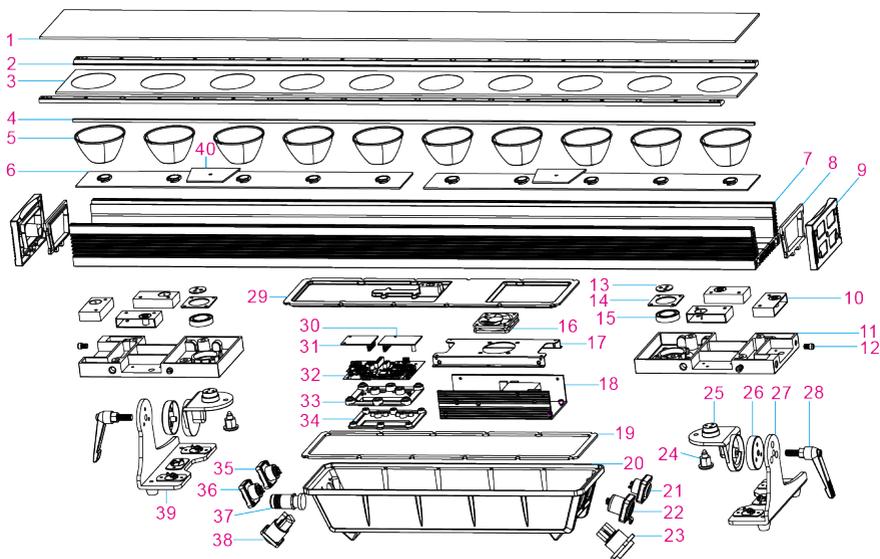
NO.	Description	Part number
1	Frostfilter	156632
2	Glass holder	CLF-20-003
3	Tempered front glass	CLF-20-025
4	Rubber glass ring	CLF-20-016
5	Reflector	CLF-20-022
6	LED board	CLF-20-038
7	LED board Radiator	CLF-20-002
8	Side part waterproof rubber ring	CLF-20-014
9	Side part	CLF-20-010
10	Lock	CLF-20-035
11	Slider block right	CLF-20-007
12	Slideng pin	CLF-20-030
13	Bearing cap	CLF-20-021
14	Bearing support	CLF-20-020
15	Bearing stand	CLF-20-036
16	Fan	CLF-20-034
17	Fan cover	CLF-20-019
18	Power supply	CLF-20-026
19	Rubber ring for housing	CLF-20-013
20	Power supply housing	CLF-20-004

NO.	Description	Part number
21	ART-NET chassis part waterproof	CLF-20-031
22	DMX 5 pin female chassis part waterproof	CLF-14-031
23	PowerCON TRUE1 output socket	CLF-14-028
24	Bracket extention knob	CLF-20-037
25	Rotation support	CLF-20-008
26	Side cover bracket	CLF-20-009
27	Right bracket	CLF-20-018
28	Knob	CLF-20-027
29	Bottom power supply cover	CLF-20-005
30	W-DMX module (optional)	
31	ART-NET module	CLF-20-036
32	Display board	CLF-20-040
33	Acrylic display support	CLF-20-011
34	Rubber button pad	CLF-20-012
35	ART-NET chassis part waterproof	CLF-20-031
36	DMX 5 pin male chassis part waterproof	CLF-14-032
37	W-DMX antenna (optional)	
38	PowerCON TRUE1 input socket	CLF-14-027
39	Left bracket	CLF-20-017
40	Driver board	CLF-20-039

SPECIFICATIONS

Power	
Input voltage & rate	100-240V, 50/60Hz
Standby power	10W
Nominal total power consumption (at nominal voltage 230V)	237W
Typical current (at nominal voltage 230V)	1.059A
Cos φ	0,926
Power plug type	Seetronic PowerCon True
Configuration	
LED color	RGBW
LED color temperature	2500 K - 10000 K
LED CRI level	
Quantity of LED	10 pc
Dimming frequency	600/1200/2400/4800/9600
Dimmer resolution	16bit
Optical	
Beam angle	24°
Photometric	
Output @1M	9.000 lux
Output @5M	720 lux
Heat management	
Cooling type:	Passive cooling
MAX. Ambient temp (Ta max)	40°C
MIN. Ambient temp (Ta min)	-20°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
Control	

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

Control protocol	USITT DMX512/1990
DMX channel range	4/6/10/11/12/40/47
RDM	yes
RDM compliance	ANSI/ESTA E.120
WDMX	optional
ACN	Yes
DMX input connection	DMX 5P in & out
Data input (artnet, SACN)	yes
Hardware	
Interface	Backlite LCD display
Software upload method	XLR & RJ45
Installation	
IP rating	IP65
Housing	
Safety attachment point	yes
Physical	
Net product weight	10,2 kg
Machine dimensions - Length	1000 mm
Machine dimensions - Width (fixture)	105 mm
Machine dimensions - Width (bracket)	165 mm
Machine dimensions - Height	210 mm
Accessories	
Included items	Power cable, Manual
Approvals	
Approved certifications	CE, RoHS

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

Control protocol	USITT DMX512/1990
DMX channel range	4/6/10/11/12/40/47
RDM	yes
RDM compliance	ANSI/ESTA E.120
WDMX	optional
ACN	Yes
DMX input connection	DMX 5P in & out
Data input (artnet, SACN)	yes
Hardware	
Interface	Backlite LCD display
Software upload method	XLR & RJ45
Installation	
IP rating	IP65
Housing	
Safety attachment point	yes
Physical	
Net product weight	10,2 kg
Machine dimensions - Length	1.000 mm
Machine dimensions - Width	165 mm
Machine dimensions - Height	210 mm
Accessories	
Included items	
Approvals	
Approved certifications	

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

NOTES

LEDBAR PRO