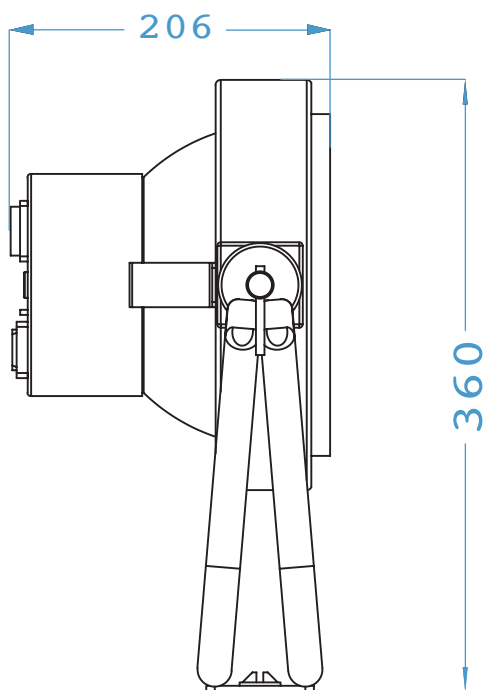
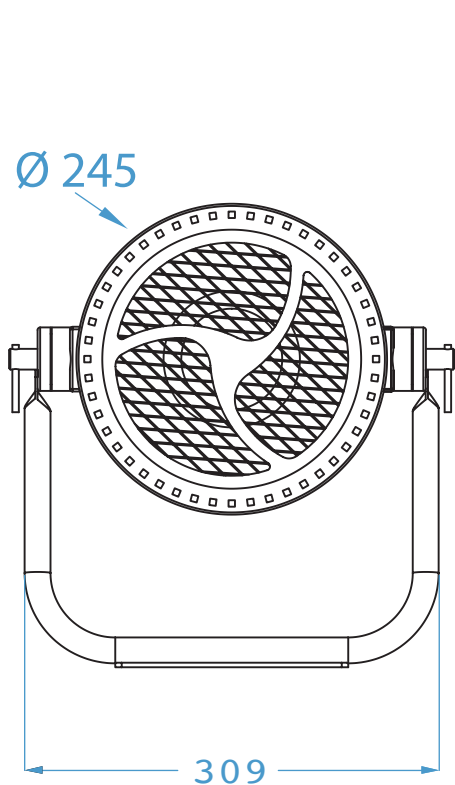


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DIMENSIONS

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.



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! Do not look into the beam at a short distance of less than 3 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 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 continuously at LEDs from a distance of less than 3 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. At distances of 3 meters and above, light output is harmless to the naked eye provided that the eye's natural aversion response is not overcome.
- Do not look at LEDs with magnifiers, telescopes, binoculars or similar optical instruments that may concentrate the light output.

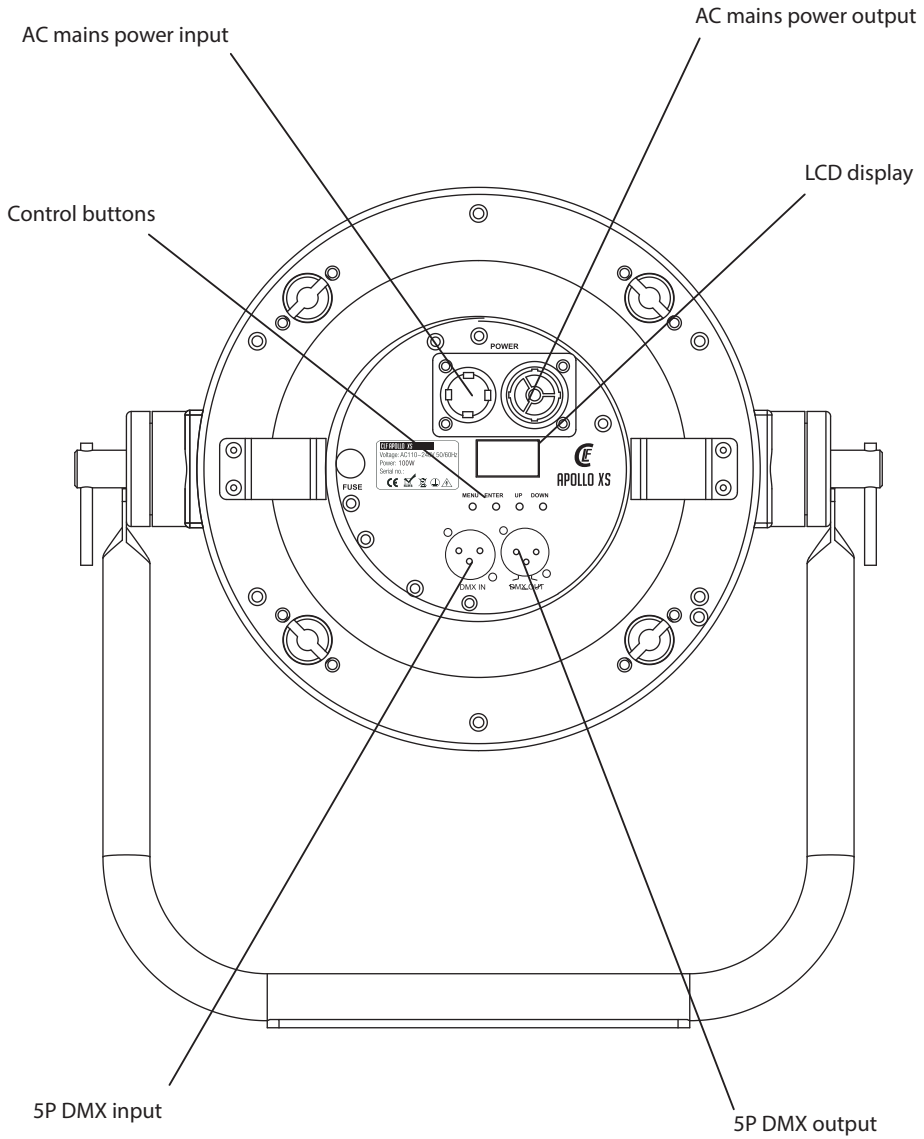


- Ensure that persons are not looking at the LEDs from within 3 meters when the product lights up suddenly. This can happen when power is applied, when the product receives a DMX signal, or when SERVICE menu items are selected.
- Fasten the fixture securely to a fixed surface or structure when in use. 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



INTRODUCTION

RETRO STYLE LED FIXTURE AFFORDABLE LIGHTING ESSENTIAL

- RGB center effect
- Warm white center effects
- Outer RGB ring
- PowerCON TRUE 1 in and out
- 5 pin DMX

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 distribution circuit 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 live 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 an 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)	 

Table 1 : Wire color-coding and power connections

RELAYING POWER TO OTHER DEVICES

Warning! Do not connect more than 8 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 they all draw AC mains power through 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 must be used to supply power at the fixture's power input sockets.

DATA LINK

A DMX 512 data link is required in order to control a fixture via DMX. The fixture has 3 and 5-pin XLR connectors for DMX data input and output.

TIPS FOR RELIABLE DATA TRANSMISSION

To connect the fixture to data:

1. Connect the DMX data output from the controller to the DMX 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.

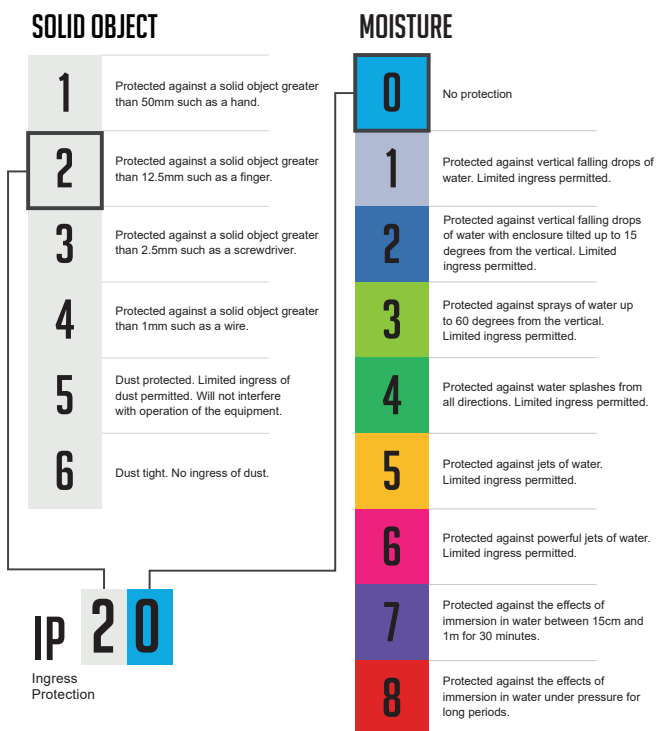


Warning! The supporting surface must be hard and flat or cooling may be blocked, which will cause overheating. Fasten the fixture securely. Do not stand it on a surface or leave it where it can be moved or can fall over. Attach a securely anchored safety cable to the safety cable attachment point (see "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 IP20 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.



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, 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

- Press [ENTER] button when shown the address menu, then adjust the DMX address by pressing [UP] or [DOWN] button
- Press [ENTER] to confirm or pressing [ESC] to return to main menu.

CONTROL MODE

DMX control mode is selected in the CONTROL MODE menu. The fixture can be controlled with 4 DMX control modes:

	2ch	7 ch	10ch	16ch
Master dimmer	✓	✓	✓	✓
Master strobe				✓✓
Effect	✓			✓
Dimmers		✓		
Strobes		✓		
Dimmer speed				✓
RGB control			✓	✓
Center			✓	✓
RGB segments			✓	

CONTROL PANEL

DMX Address	1 - 512		
Control Mode	2 CH		
	7 CH		
	10 CH		
	16 CH		
Personality	Display	On 30 Sec	
	DMX Hold	On Off	
	Dimmer Speed	Normal Smooth	
	Fan Speed	Regulated	
		Silent 2	
		Silent 1	
	Fan Test	Center Fan Test	
Ring Fan Test			
LED Test	Test All LED		
RDM	RDM-Status	On Off	
	RDM-Uid	12X:XXXXX	
	RDM-Label	CLF Apollo XS	
Auto	Flow effect	Auto mode 1-5	
	Flow speed	1-10	
	Group mode	On / Off	
	Group ID	0-6	
Information	Temperature	Outer: X°	
		Inner: X°	
		Center: X°	
Factory Reset	Software Version		
	No		
	Yes		

DMX PROTOCOL

2 CH	FUNCTION	VALUES	DESCRIPTION
1	Master	000 - 255	0 - 100%
2	Flow effect	000 - 041	No Function
		042 - 083	Effect 1
		084 - 125	Effect 2
		126 - 167	Effect 3
		168 - 209	Effect 4
		210 - 255	Effect 5

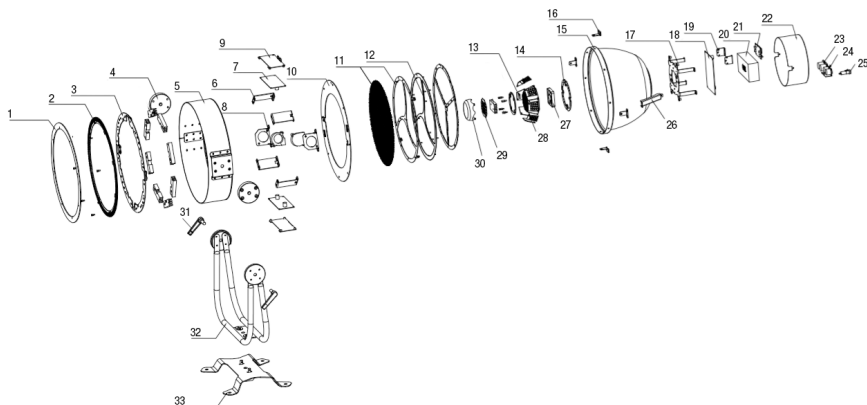
7 CH	FUNCTION	VALUES	DESCRIPTION	REMARK
1	Master	000 - 255	0 - 100%	
2	Outer Dimmer	000 - 255	0 - 100%	
3	Outer Strobe	000 - 010	No function	
		011 - 240	From slow to fast	
		241 - 255	Random flash	
4	Inner Dimmer	000 - 255	0 - 100%	
5	Inner Strobe	000 - 010	No function	Inner dimmer (4 CH) and master (1 CH) need to be on.
		011 - 240	From slow to fast	
		241 - 255	Random flash	
6	Center Dimmer	000 - 255	0 - 100%	
7	Center Strobe	000 - 010	No function	Center dimmer(6 CH) and master (1 CH) need to be on.
		011 - 240	From slow to fast	
		241 - 255	Random flash	

10 CH	FUNCTION	VALUES	DESCRIPTION
1	Master	000 - 255	0 - 100%
2	Outer Red	000 - 255	0 - 100%
3	Outer Green	000 - 255	0 - 100%
4	Outer Blue	000 - 255	0 - 100%
5	Inner Red	000 - 255	0 - 100%
6	Inner Green	000 - 255	0 - 100%
7	Inner Blue	000 - 255	0 - 100%
8	Center Warm White	000 - 255	0 - 100%
9	Center Amber	000 - 255	0 - 100%
10	Back Warm White	000 - 255	0 - 100%

DMX PROTOCOL

16 CH	FUNCTION	VALUES	DESCRIPTION
1	Master	000 - 255	0 - 100%
2	ALL LED Strobe	000 - 255	Slow to fast
3	Flow Effect	000 - 041	No Function
		042 - 083	Effect 1
		084 - 125	Effect 2
		126 - 167	Effect 3
		168 - 209	Effect 4
4	Dimmer Speed	210 - 255	Effect 5
		000 - 254	Fast to slow
		255	Tungsten Effect
5	Outer Red	000 - 255	0 - 100%
6	Outer Green	000 - 255	0 - 100%
7	Outer Blue	000 - 255	0 - 100%
8	Outer Strobe	000 - 010	No Function
		011 - 240	Slow to fast
		241 - 255	Random flash
9	Inner Red	000 - 255	0 - 100%
10	Inner Green	000 - 255	0 - 100%
11	Inner Blue	000 - 255	0 - 100%
12	Inner Strobe	000 - 010	No Function
		011 - 240	Slow to fast
		241 - 255	Random flash
13	Center Warm White	000 - 255	0 - 100%
14	Center Amber	000 - 255	0 - 100%
15	Back Warm White	000 - 255	0 - 100%
16	Central Strobe	000 - 010	No Function
		011 - 240	Slow to fast
		241 - 255	Random flash

EXPLODED VIEW



NO.	Description	Part number	NO.	Description	Part number
1	Frost cover ring	CLF-23-011	21	Display board	CLF-23-009
2	Led PCB outer ring	CLF-23-001	22	Back housing	CLF-23-023
3	Support frame Led PCB	CLF-23-040	23	Power in / out PCB	CLF-21-018
4	Fixing plate knob	CLF-23-027	24	XLR5 PCB	CLF-21-017
5	Outer housing	CLF-23-024	25	Fuse	CLF-21-042
6	Outer housign support frame	CLF-23-028	26	Support bracket back panel	CLF-23-026
7	Driver board ring	CLF-23-008	27	Fan dot	CLF-23-014
8	Support frame fan	CLF-23-025	28	Heatsink centre	CLF-23-033
9	Support frame driver board ring	CLF-23-036	29	Led PCB dot	CLF-21-003
10	Ring housign back	CLF-23-022	30	Frost cover dot	CLF-23-012
11	Front cover	CLF-23-015	31	Knob bracket	CLF-23-016
12	Led PCB inner ring centre	CLF-23-005	32	Joke	CLF-23-031
13	Temperature PCB dot	CLF-21-037	33	Stand	CLF-23-043
14	Support bracket heatsink dot	CLF-23-035			
15	Reflector	CLF-23-032			
16	Support bracket reflector	CLF-23-029			
17	Support plate back housing	CLF-23-025			
18	Driver board centre dot	CLF-23-007			
19	Cable support back frame	CLF-23-030			
20	Power supply	CLF-23-006			

SPECIFICATIONS

Power

Input voltage & rate 100-240V, 50/60Hz

Standby power 3W

*Nominal total power consumption

(at nominal voltage 230V) 100W

Typical current (at nominal voltage 230V) 0,43A

Power plug type PowerCON TRUE 1

Configuration

LED color RGB and Warm White / Amber

LED CRI level Center LED's warm white + amber: 87,8

Quantity of LED 84 RGB, 12 warm white and 45 amber

Dimming frequency 7000Hz

Dimmer resolution 16 bit

Heat management

Cooling type Temperature controlled fan

MAX ambient temp (Ta max) 40°C

MIN ambient temp (Ta min) -10°C

MAX housing temp. (ta=25°C) 55°C

Menu

Auto program 5

Strobe speed Yes

Random strobe Yes

Control

Control protocol USITT DMX512/1990

DMX channel range 2/7/10/16

RDM Yes

RDM compliance Yes

WDMX No

ACN No

DMX input connection 5 pin XLR

Data input (artnet, SACN) No

Hardware

Interface LCD display

Software upload method Uploader box

Installation

IP rating IP20

SPECIFICATIONS

Housing

Safety attachment point	Yes
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Physical

Net product weight	3,35 Kg
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Machine dimensions - length	340mm
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Machine dimensions - depth	206mm
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Machine dimensions - height	360mm
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Accessories

Included items	Power and signal cable,manual
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Approvals

Approved certifications	CE/RoHS
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