

# EclProfile CT+IP

Waterproofed high quality six colours LED ellipsoidal, Tunable White and colour mixing



**USER MANUAL** 

REV.01-02/22 English version

## Thank you for choosing PROLIGHTS

Please note that every PROLIGHTS product has been designed in Italy to meet quality and performance requirements for professionals and designed and manufactured for the use and application as shown in this document.

Any other use, if not expressly indicated, could compromise the good condition/operation of the product and/or be a source of danger.

This product is meant for professional use. Therefore, commercial use of this equipment is subject to the respectively applicable national accident prevention rules and regulations.

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Product user manual can be downloaded from the website www.prolights.it, or can be inquired to the official PROLIGHTS distributors of your territory (https://www.prolights.it/sales\_network.html).

Scanning the below **QR Code**, you will access the download area of the product page, where you can find a broad set of always updated technical documentation: specifications, user manual, technical drawings, photometrics, personalities, fixture firmware updates.



Visit the download area of the product page



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## SAFETY INFORMATION



#### WARNING!

Please read carefully the instruction reported in this section before installing, powering, operating or servicing the product and observe the indications also for its future handling.



This unit is not for household and residential use, only professional applications.



#### Connection to mains supply

- The Connection to the mains supply must be carried out by a qualified electrical installer
- Use only AC supplies 100-240V 50-60 Hz, the fixture must be electrically connected to ground (earth).
- Select the cable cross section in according with the maximum current draw of the product and the possible number of products connected at the same power line.
- The AC mains power distribution circuit must be equipped with magnetic+residual current circuit breaker protection.
- Do not connect it to a dimmer system; doing so may damage the product.



## Protection and Warning against electrical shock

- Do not remove any cover from the product, always disconnect the product from AC power before servicing.
- Ensure that the fixture is electrically connected to ground (earth). And 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.
- Isolate the fixture from power immediately if the power plug or any seal, cover, cable, or other components are damaged, defective, deformed or showing signs of overheating.
- Do not reapply power until repairs have been completed.
- Refer any service operation not described in this manual to PROLIGHTS Service team or an authorized PROLIGHTS service center.



#### Installation

- Make sure that all visible parts of the product are in good visible condition before its use or installation.
- Make sure the point of anchorage is stable before positioning the projector.
- When suspending the fixture above ground level, secure it against failure of primary attachments by attaching a safety cable that is approved as a safety attachment for the weight of the fixture to the attachment point on the main frame of the product. In case the safety cable, enter in action, it needs to be replaced with a new one.
- Install the product only in well ventilated places.
- For non temporary installations, ensure that the fixture is securely fastened to a loadbearing surface with suitable corrosionresistant hardware.
- For a temporary installation with clamps, ensure that the quarter-turn fastener and/or screws are turned fully, and secured with a suitable safety cable.



#### Minimum distance of illuminated objects

• The projector needs to be positioned so that the objects hit by the beam of light are at least 0.3 meters (0.98 ft) from the lens of the projector.

## Ta45°C

## Max operating ambient temperature (Ta)

• Do not operate the fixture if the ambient temperature (Ta) exceeds 45 °C (113 °F).

## Ta-15°C

## Minimum operating ambient temperature (Ta)

Do not operate the fixture if the ambient temperature (Ta) is below -15 °C (5 °F).



#### Protection from burns and fire

- The exterior of the fixture becomes hot during use. Avoid contact by persons and materials.
- Ensure that there is free and unobstructed airflow around the fixture.
- Keep flammable materials well away from the fixture.
- Do not expose the front glass to sunlight or any other strong light source from any angle. Lenses can focus the sun's rays inside the fixture, creating a potential fire hazard.
- Do not attempt to bypass thermostatic switches or fuses.

## IP65

#### Outdoor (temporary) use

- This product is rated with an IP (Ingress protection) for temporary outdoor use when used and serviced according to the instruction contained in this document.
- Never use the fixture in places subject to vibrations or bumps.
- Make certain that no inflammable liquids, water or metal objects enter the fixture.
- Excessive dust, smoke fluid, and particle build up degrades performance, causes overheating and will damage the fixture.
- Damages caused by inadequate cleaning or maintenance are not covered by the product warranty

## T<sub>C</sub>58°C

#### Temperature of the external surface

 The surface of the fixture can reach up to 58 °C (136.4 °F) during operation. Avoid contact with people and materials.



#### Maintenance

- Warning! Disconnect the fixture from AC mains power and allow to cool for at least 10 minutes before handling.
- Only technicians who are authorized by PROLIGHTS or Authorised service partners are permitted to open the fixture.
- Users may carry out external cleaning, following the warnings and instructions provided, but any service operation not described in this manual must be referred to a qualified service technician.
- Important! Excessive dust, smoke fluid, and particle build up degrades performance, causes overheating and will damage the fixture. Damages caused by inadequate cleaning or maintenance is not covered by the product warranty.



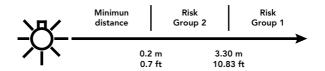
#### Photobiological safety

This device emits potentially dangerous optical radiation and is identified in the category of Risk Group 2 according to EN 62471.



#### Do not stare at the operating light source

- Do not look directly at the LED source during operation. It can be harmful to the eyes and skin.
- During Installation, operation and maintenance, be prepared for the fixture to light and move suddenly when connected to power.
- The device should be positioned so that prolonged staring into the luminaire at a distance closer than 3.30 m (10.83 ft) is not expected.





#### Disposal

 This product is supplied in compliance with European Directive 2012/19/EU – Waste Electrical and Electronic Equipment (WEEE). To preserve the environment please dispose/ recycle this product at the end of its life according to the local regulation.



## The products to which this manual refers comply with:

- 2014/35/EU Safety of electrical equipment supplied at low voltage (LVD).
- 2014/30/EU Electromagnetic Compatibility (EMC).
- 2011/65/EU Restriction of the use of certain hazardous substances (RoHS).



#### The products to which this manual refers comply with:

- UL 1573 + CSA C22.2 No. 166 Stage and Studio Luminaires and Connector Strips.
- UL 1012 + CSA C22.2 No. 107.1 Standard for power units other than class 2.



## **FCC Compliance:**

- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.



#### Other approvals

• The product meets the safety requirements of the certification procedures of the market in which it is placed and sold.

## 1 - PACKAGING

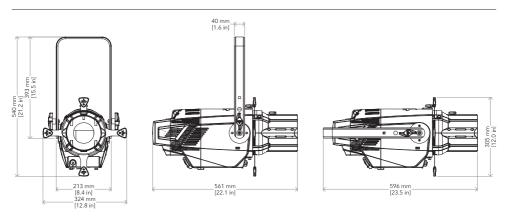
#### PACKAGE CONTENT

- 1x ECLCTPLUSIP;
- 1x 1,5 meters power cable (BARE END SEETRONIC IP65 power connector);
- 1x Calibration Report;
- User manual.

#### **OPTIONAL ACCESSORIES**

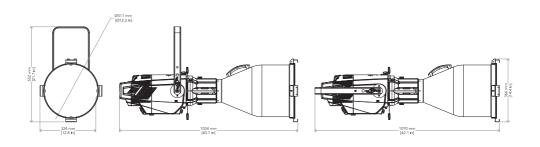
- INF53415L03: dmx cable HC5340. SETMC5MXXB XLR 5p->SETMC5FXXB XLR (f) 5p;
- 9333FXWL03: ass. 3x2.5mm TH07 cable, SHUKO plug, SETSAC3FX socket, L.3m
- 9313FXWL03: ass. 3x2.5mm TH07 cable, 16A 3p 230V CEE plug, SETSAC3FX socket, L.3 m;
- 938225L03: 3x2.5mm TH07 Cable, 16A SETSAC3MX, 16A SETSAC3FX, L. 3m;
- RSR0630A/B: steel security cable for hanging bodies, inox steel shackle, L=60 cm, silver/black;
- C6040: heavy-load aluminum clamp, 200kg load, 48-51mm tubes, M10 bolt inc;
- C6002: slim aluminium clamp, 200 kg loading, 48-51 mm tubes, M10 bolt;
- FCLECLPRIP: flightcase to contain 8 pcs ECLFWIP / ECLCTPLUS with lenses 19°, 26°, 36°, 50°;
- FCLECLPRLZ: flightcase to contain 8 ECLPRLZ zoom lenses;
- ECLPRL05BK: 5° PRL lens barrel for EclProfile fixtures, black housing;
- ECLPRL10BK: 10° PRL lens barrel for EclProfile fixtures, black housing;
- ECLPRL14BK: 14° PRL lens barrel for EclProfile fixtures, black housing;
- ECLPRL19BK: 19° PRL lens barrel for EclProfile fixtures, black housing;
   ECLPRL26BK: 26° PRL lens barrel for EclProfile fixtures, black housing;
- ECLPRL36BK: 36° PRL lens barrel for EclProfile fixtures, black housing;
- ECLPRL50BK: 50° PRL lens barrel for EclProfile fixtures, black housing;
- ECLPRL70BK: 70° PRL lens barrel for EclProfile fixtures, black housing;
- ECLERE/OBN: 70 FRE lens barrel for Ecleronie fixtures, black flousing,
- ECLPRLZ1530BK: zoom 15°-30° PRL lens barrel for EclProfile fixtures, black housing;
- ECLPRLZ2550BK: zoom 25°-50° PRL lens barrel for EclProfile fixtures, black housing;
- ECLPRTPG: gel filter frame for ECL Profile PRL lens barrel, comp. with 19°,26°,36° and 50°;
- ECLPRGH: gobo holder for ECL Profile fixtures;
- ECLPRIRIS: iris accessory for ECL Profile fixtures;
- ECLPRSEF1: soft edge filter and holder kit for ECL Profile fixtures;
- ECLLZLLKA: hexagonal head screw, to adapt and mount ECLLZ lenses on ECLCTPLUS and ECLFS;
- ECLPRSMOOTHF1: smooth/homogenizer filter with aluminium frame and magnets for Ecl Profile fixture;
- ECLPRPOYO: pole operated aluminium yoke bracket for ECLCTPLUS and ECLFS;
- ECLPRIPROTGOBO1BK/WH: rotating gobo assembly for ECL Profile fixtures, black/white;
- IPTESTBOX: portable vacuum and pressure tester for ProLights IP fixtures;
- SPGM12: 28mm spigot for fixtures, M12 bolt;
- SPGM10: 28mm spigot for fixtures, M10 bolt;
- UPBOX2P5: firmware uploader kit, USB IN, 5-pin XLR DMX OUT.

## 2 - TECHNICAL DRAWING



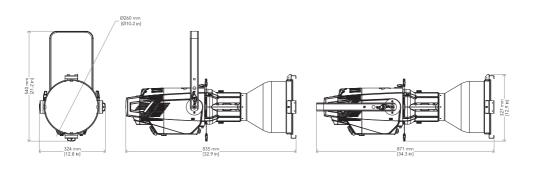
Weight: 10 kg - 22.04 lbs

ECLCTPLUSIP without optic



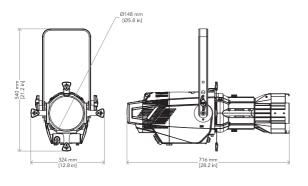
Weight: 12.9 kg - 28.44 lbs

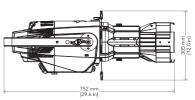
ECLCTPLUSIP with ECLPRL05



Weight: 11.9 kg - 26.23 lbs

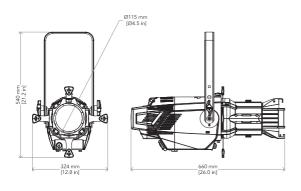
ECLCTPLUSIP with ECLPRL10

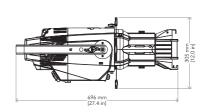




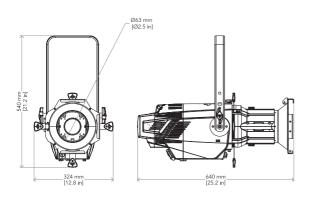
Weight: 13.3 kg - 29.32 lbs

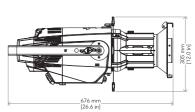
ECLCTPLUSIP with ECLPRL14





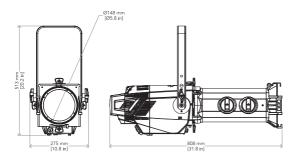
Weight: ECLPRL19: 12.3 kg - 27.11 lbs Weight: ECLPRL26: 12.4 kg - 27.33 lbs Weight: ECLPRL36: 12.1 kg - 26.67 lbs Weight: ECLPRL50: 11.7 kg - 25.79 lbs ECLCTPLUSIP with ECLPRL19 ECLCTPLUSIP with ECLPRL26 ECLCTPLUSIP with ECLPRL36 ECLCTPLUSIP with ECLPRL50

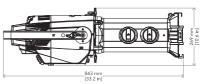




Weight: 11.8 kg - 26.01 lbs

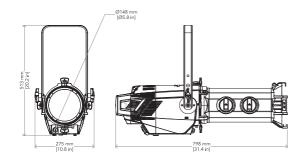
ECLCTPLUSIP with ECLPRL70

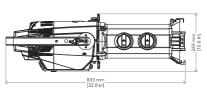




Weight: 14 kg - 30.86 lbs

ECLCTPLUSIP with ECLPRLZ1530





Weight: 14 kg - 30.86 bs

ECLCTPLUSIP with ECLPRLZ2550

Fig. 01

## 3 - INSTALLATION

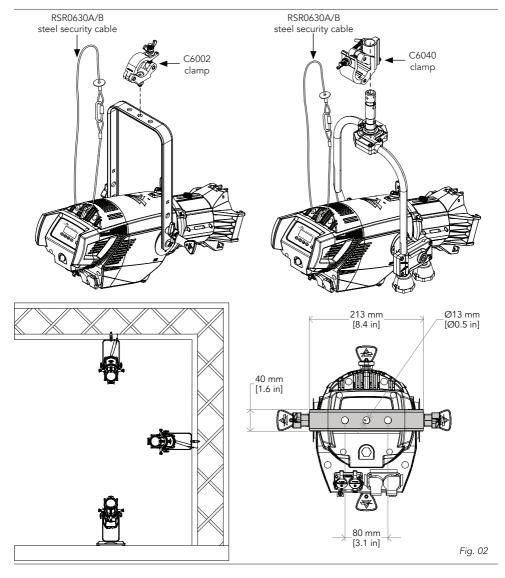
#### MOUNTING

Check that the supporting structure can safely bear the weight of all installed fixtures, clamps, cables, auxiliary equipment, etc. and complies with locally applicable regulations.

When suspending the fixture above ground level, secure it against failure of primary attachments by attaching a safety wire that is approved as a safety attachment for the weight of the fixture to an anchor point on the product main frame.

Do not use removable parts or weak anchors for secondary attachment.

Warning! When clamping the fixture to a truss or other structure at any angle, use clamps of half-coupler type. Do not use any type of clamp that does not completely encircle the structure when fastened.



## 4 - CONNECTION TO THE MAINS SUPPLY

WARNING: For protection from electric shock, the fixture must be earthed!

The product is equipped with auto-switching power supply that automatically adjusts to any 50-60Hz AC power source from 100-240 Volts.

If you need to install a power plug on the power cable to allow connection to power outlets, install a grounding-type (earthed) plug, following the plug manufacturer's instructions. If you have any doubts about proper installation, consult a qualified electrician.

The max power consumption is 264W.

Core (EU)	Core (US)	Connection	Plug terminal marking
Brown	Black	Live	L
Blue	White	Neutral	N
Yellow+green	Green	Earth	

## 5 - START UP

#### CONNECT AND DISCONNECT POWER FROM THE PRODUCT

To apply and disconnect power to the product:

- Check that the product is installed and secured as indicated in the Safety Informations, and that personal safety will not be put at risk when the fixture lights up.
- Connect the power connector into the Mains input socket (100-240 VAC-50/60 Hz).
- The product is then ready for its operations and can be controlled through the available input signals on board.
- To disconnect power from the product, disconnect the Mains from the socket.

## 6 - PRODUCT OVERVIEW

- 1. OPTIC (optional accessory);
- 2. KNOB for focus;
- 3. BLADES for FRAMING SYSTEM;
- 4. KNOB for bracket;
- 5. KNOB for locking the middle part;
- 6. BRACKET;
- 7. SAFETY EYE to attach safety cable;
- 8. HANDLE;
- 9. USER INTERFACE with display and buttons for access to the control panel functions.
- 10.DMX IN (5-p XLR): 1 = GND, 2 = sign-, 3 = sign+, 4 N/C, 5 N/C;
- 11.DMX OUT (5-p XLR): 1 = GND, 2 = sign-, 3 = sign+, 4 N/C, 5 N/C;
- 12.MAIN FUSE HOLDER: replace a burnt-out fuse by one of the same type only (5\*20 TBC-5A);
- 13.POWER IN: for connection to the Mains 100-240V~/50-60Hz;
- 14.POWER OUT: power output for connection of multiple units in series;
- 15.GORE VALVE.

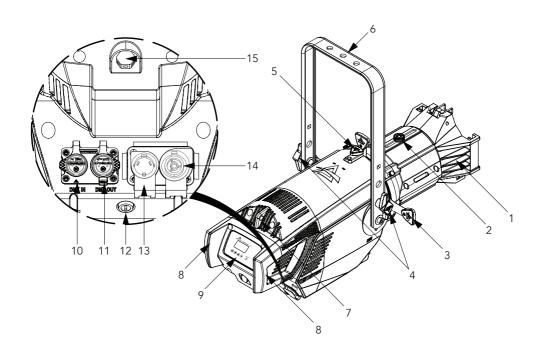


Fig. 03

## 7 - DMX CONNECTION

#### CONNECTION OF THE CONTROL SIGNAL: DMX LINE

The product has XLR sockets for DMX input and output.

The default pin-out on both socket is as the following diagram:

## DMX - INPUT XLR plug



Pin1 : GND - Shield Pin2 : - Signal Pin3 : + Signal Pin4 : N/C

Pin4 : N/C Pin5 : N/C

## DMX - OUTPUT XLR socket



Fig. 04

#### INSTRUCTIONS FOR A RELIABLE DMX CONNECTION

Use shielded twisted-pair cable designed for RS-485 devices: standard microphone cable cannot transmit control data reliably over long runs. 24 AWG cable is suitable for runs up to 300 meters (1000 ft). Heavier gauge cable and/or an amplifier is recommended for longer runs.

To split the data link into branches, use splitter-amplifiers in the connection line.

Do not overload the link. Up to 32 devices may be connected on a serial link.

#### CONNECTION DAISY CHAIN

Connect the DMX data output from the DMX source to the product DMX input (male connector XLR) socket.

Run the data link from the product XLR output (female connector XLR) socket to the DMX input of the next fixture.

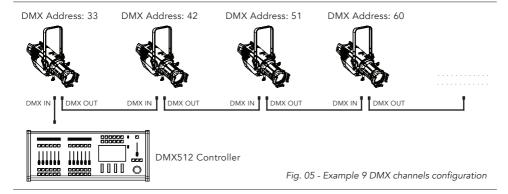
Terminate the data link by connecting a 120 Ohm signal termination. If a splitter is used, terminate each branch of the link.

Install a DMX termination plug on the last fixture on the link.

#### CONNECTION OF THE DMX LINE

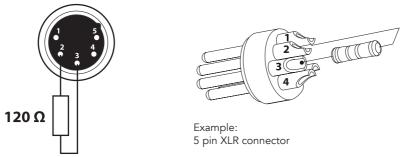
DMX connection employs standard XLR connectors. Use shielded pair-twisted cables with  $120\Omega$  impedance and low capacity.

The following diagram shows the connection mode:



#### CONSTRUCTION OF THE DMX TERMINATION

The termination is prepared by soldering a  $120\Omega$  1/4 W resistor between pins 2 and 3 of the male XLR connector, as shown in figure.



## Fig. 06

#### DMX ADDRESSING

In order to start controlling the product via DMX, the first step is to select a DMX address, also known as the start channel, this is the first channel used to receive instructions from a DMX controller. If you wish to control the product individually, it is necessary to assign a different starting address channel to each fixture.

The number of channels occupied from the product depends on the DMX mode selected, so always verify the DMX Mode in the MENU before start addressing.

If you assign two fixtures the same address, they will be executing the same behaviour. Selecting the same address to multiple fixtures can be useful for diagnostic purposes and symmetrical control.

DMX addressing is limited to make it impossible to set the DMX address so high that you are left without enough control channels for the product.

To set the fixture's DMX address:

- 1. Press MENU to open the main menu.
- 2. Reach the addressing menu, then select the DMX ADDRESS settings.
- 3. Select the address from 1 to 512 using the navigation arrows/buttons and confirm by pressing ENTER.
- 4. Press Menu to exit and return to the Home screen.

## 8 - CONTROL PANEL

The product has a display and buttons for access to the control panel functions.















Fig. 07

## **DISPLAY AND BUTTONS LAYOUT**



HIGHLIGHT: Press and hold for three seconds to temporary turn ON the product at Full ON for user focusing operations.



MENU: Used to access the menu tree or to return a previous menu window.



UP: Browse upwards through the menu list and increases the numeric value displayed.



 ${\sf DOWN:}\ Browse\ downwards\ through\ the\ menu\ list\ and\ decreases\ the\ numeric\ value\ displayed.$ 



ENTER: Used to confirm the current menu or confirm the current function value or option within a menu.

## 9 - MENU STRUCTURE

The following chart describes the MENU tree of the product, the terms shown in **BOLD** indicates the default settings.

CONNECT	DMX Address	001 - 512				
	DMX Mode	Gobo Rot OFF	Gobo Rot ON			
		UNO	UNO Gobo	Tungsten	Off Slow Medium Fast	
				White Point	Colour Temperature	2700 K 2800 K 3000 K 3200 K 3400 K 3400 K 3600 K 4200 K 4400 K 4400 K 4400 K 4800 K 5000 K 5200 K 5400 K 5400 K 5400 K 6500 K 6500 K 6500 K 6500 K 6500 K 6500 K
					Tint	-25 % - <b>0</b> % - 25 %
				Preset COLOUR	Presets see COLOUR Wheel	
				Manual COLOUR	Red Amber Mint Green Blue Royal Blue	000 ÷ 255 000 ÷ 255 000 ÷ 255 000 ÷ 255 000 ÷ 255 000 ÷ 255
		DUO	DUO Gobo	Tungsten	Off Slow Medium Fast	
				White Point	COLOUR Temperature	2700 K 2800 K 3000 K 3000 K 3400 K 3400 K 3400 K 4000 K 4400 K 4400 K 4400 K 4400 K 5000 K 5500 K 5400 K 5600 K 5600 K 5600 K 6500 K

_	г — -					Tint -25 % - <b>0</b>
						% - 25 %
					Preset COLOUR	Presets see COLOUR Wheel
					Manual COLOUR	Red 000 ÷ 255 Amber 000 ÷ 255 Mint 000 ÷ 255 Green 000 ÷ 255 Blue 000 ÷ 255 Royal Blue 000 ÷ 255
			Basic	Basic Gobo	RGB CMY HS	
			Standard	Standard Gobo	RGB CMY HS	
			Extended	Extended Gobo	RGB CMY HS	
			RAW Direct	RAW Direct Gobo		
			RAW 16 bit	RAW 16 bit Gobo		
			XY	XY Gobo		
2	ADVANCED	Dimmer Curve	Linear S-Curve Square Law Inverse Square Law			Select different curve behaviour of dimmer.
		Dimmer Speed	Auto Slow Medium Fast			Linear speed behaviour.  Dimmer speed adding long fade.  Dimmer speed adding medium fade.  Dimmer speed adding little fade.
		Tungsten Emulation	Off Slow Medium Fast			Emulation of halogen lamp. Dimmer speed adding long fade. Dimmer speed adding medium fade. Dimmer speed adding little fade.
		LED Mode	High Brightness <b>High Quality</b>			Priority on brightness or quality of the output.
		LED Frequency	600 Hz 1282 Hz 2500 Hz 5000 Hz 6400 Hz 25 kHz			Select PWM frequency.
		Fan Mode	Auto Balanced Silent Full			Select the product Fan mode Auto mode: fan speed from 0% to 100% following temperature curve. Balanced mode: fan speed from 0% to 50% following temperature curve. Silent mode: speed fan from 0% to 30% following temperature curve. Full mode: fan speed at 100% without following fixture temperature.
		Gobo Rot.	Off On			Enable / Disable Gobo functionality DMX Mode in use is automatically converted to "Gobo" version. DMX Mode list is switched to "Gobo Rot On" version.
		Calibration	Off On			Manufacturer calibration to grant performance and color consistency.

3	SETUP	Display Flip	Regular Top Down				Allows you to rotate the display by 180°.
		Back Light	On 10 s 20 s 30 s				Allows you to select the timing after that display will switch automatically off when unactive.
		Key Lock	Locked Unlocked				Allows you lock the buttons on the control panel by a password. Press following combinations (password) in order to access to the user menu: UP, DOWN, UP, DOWN.
		Gobo Rot. Reset	Abort Reference				
		Transfer Config	Abort Without DMX Addr With DMX Address				To transfer the same menu settings of one fixtures to all the other in the daisy chain, including or not the dmx address.
4	DMX LOST	Blackout					Fixture go in blackout if it lose dmx signal.
		Hold					Fixture hold last dmx frame if it lose dmx signal.
		Master	Static	Dimmer Gobo Rot. Gobo Rot. F	000 ÷ 255		Select the dimmer value of the selected white point.
				White Point	Colour Temperature	2800 K 3000 K 3200 K 3400 K 3600 K 3800 K 4000 K 4200 K 4400 K 4500 K 5200 K 5400 K 5400 K 6500 K 6500 K 6500 K 6500 K 6500 K 6500 K	Select a predefined White CCT output from the list. After enabled this mode, the unit will be automatically assigned as Master.
					Tint	-25 % <b>0</b> % 25 %	Select the tint value of the selected white point.
				Preset Colour	Presets see Colour Wheel		Select of the following predefined color combination and its Dimmer value. After enabled this mode, the unit will be automatically assigned as Master.
				Manual Colour	Red Amber Mint Green Blue Royal Blue	0 ÷ 255 0 ÷ 255 0 ÷ 255 0 ÷ 255 0 ÷ 255 0 ÷ 255	User generated color preset by assigning values to each primary color attribute.  After enabled this mode, the unit will be automatically assigned as Master.
			Effect 1  Effect 3	Dimmer Duration Attack Decay Gobo Rot. Gobo Rot. F.	0÷255 0.0s÷30.0s ÷6 0% ÷ 100% 0% ÷ 100% 0 ÷ 255 0 ÷ 255	50.0s	Edit and choose effect 1/2/3.
		Slave					Set the units to be slave.

5	INFORMA- TION	Operating Hours Lamp Hours Power Cycles Power Consumtion LED Temperature Fan Speed Gobo Rot. DEG Gobo Rot. RPM RDM Id Version			View informations about product.
6	FACTORY SETTINGS	Abort Set Default Values			To reset the unit to factory default settings.

NOTE: If the projector is in Slave mode if the DMX signal is lost, the projector will remain on according to the last received DMX value. If the projector was in STATIC or AUTO mode, if the DMX signal is lost, the projector will return to the previously set STATIC or AUTO.

## 10 - RDM FUNCTIONS

The product can communicate using RDM (Remote Device Management) protocol over a DMX512 Networks.

RDM is a bi-directional communications protocol for use in DMX512 control systems, it is the open standard for DMX512 device configuration and status monitoring.

The RDM protocol allows data packets to be inserted into a DMX512 data stream without affecting existing non-RDM equipment. It allows a console or dedicated RDM controller to send commands to and receive messages from specific fixtures.

The PIDs in the following tables are supported in the product.

Parameter	PID	GET	SET
SUPPORTED_PARAMETERS	0x0050	Х	
DEVICE_INFO	0x0060	Х	х
DEVICE_MODEL_DESCRIPTION	0x0080	Х	
MANUFACTURER_LABEL	0x0081	Х	
DEVICE_LABEL	0x0082	Х	х
FACTORY_DEFAULTS	0x0090	X	х
SOFTWARE_VERSION_LABEL	0x00c0	X	
BOOT_SOFTWARE_VERSION_ID	0x00c1	X	
BOOT_SOFTWARE_VERSION_LABEL	0x00c2	Х	
DMX_PERSONALITY	0x00e0	Х	х
DMX_PERSONALITY_DESCRIPTION	0x00e1	X	
DMX_START_ADDRESS	0x00f0	X	х
SENSOR_DEFINITION	0x0200	X	
SENSOR_VALUE	0x0201	X	
DEVICE_HOURS	0x0400	Х	
LAMP_HOURS	0x0401	Х	
LAMP_STRIKES	0x0402	X	
DEVICE_POWER_CYCLES	0x0405	X	
IDENTIFY_DEVICE	0x1000	X	x
RESET_DEVICE	0x1001		х
MOTOR_ENABLE	0x8200	Х	х
MOTOR_RESET	0x8201	X	x

## **11 - ERROR MESSAGES**

Group	Message	Туре	Comment
Config	"Not Calibrated"	Error	
Temperature sensor	"Temp. Sensor failed"	Warning	Checksum error ROM code
	"T: Can't read ROM code"	Error	
	"T: Can't get input"	Error	
	"T: Can't read status"	Error	
Temperature management	"Overtemperature"	Error	
	"LED Temperature"	Error	Cannot read LED temperature
Transfer config	"DMX active"	Error	Cannot transfer with active DMX
Flash memory	"Initializing Flash"	Information	
	"Invalid flash entry"	Warning	
	"Can't unlock flash (WR)"	Error	
	"Can't unlock flash (ER)"	Error	
	"Can't lock flash"	Error	
	"Can't load Pg1"	Error	
	"Can't load Pg2"	Error	
	"Can't load flash"	Error	
Gobo Rot.	"Gobo position lost"	Warning	Refernce signal at unex- pected position
	"Gobo ref. disabled"	Information	Use of reference position automatically disabled after referencing failed

## 12 - DMX CHARTS

## **DMX Chart with Gobo Rotation disabled**

Channel	UNO	DUO	Basic	Standard	Extended	RAW Direct	RAW 16bit	XY
1	DIMMER COARSE	DIMMER COARSE	DIMMER COARSE	DIMMER COARSE	DIMMER COARSE	DIMMER COARSE	DIMMER COARSE	DIMMER COARSE
2		DIMMER FINE	COLOUR MIX 1	DIMMER FINE	DIMMER FINE	DIMMER FINE	DIMMER FINE	DIMMER FINE
3			COLOUR MIX 2	STROBE	STROBE	STROBE	STROBE	STROBE
4			COLOUR MIX 3	ССТ	ССТ	RED COARSE	RED COARSE	X COARSE
5				COLOUR MIX 1	TINT	GREEN COARSE	RED FINE	X FINE
6				COLOUR MIX 2	COLOUR MIX 1	BLUE COARSE	GREEN COARSE	Y COARSE
7				COLOUR MIX 3	COLOUR MIX 2	PC AMBER COARSE	GREEN FINE	Y FINE
8				COLOUR WHEEL	COLOUR MIX 3	MINT COARSE	BLUE COARSE	COLOUR WHEEL
9				CONTROL	COLOUR WHEEL	ROYAL BLUE COARSE	BLUE FINE	COLOUR WHEEL SATURATION
10					COLOUR WHEEL SATURATION	CONTROL	PC AMBER COARSE	CONTROL
11					СТО		PC AMBER FINE	
12					CONTROL		MINT COARSE	
13							MINT FINE	
14							ROYAL BLUE COARSE	
15							ROYAL BLUE FINE	
16							CONTROL	

UNO	DUO	Basic	Standard	Extended	RAW Direct	RAW 16bit	XY	Function	DMX Value	Default
1	1	1	1	1	1	1	1	DIMMER COARSE 0÷100%	000 ÷ 255	000
	2		2	2	2	2	2	DIMMER FINE 0÷100%	000 ÷ 255	000
			3	3	3	3	3	STROBE Close 0,9 Hz to 20 Hz Strobing Duty Cycle Open Time: 100 ms to 25 ms Duty Cycle Open Time: 1000 ms to 25 ms Duty Cycle Closed Time: 1000 ms to 25 ms Open 0,8 Hz to 6,6 Hz Pulse-In Strobing Duty Cycle Puls-In Time: 250 ms to 50 ms Duty Cycle Closed Time: 1000 ms to 100 ms Open 0,8 Hz to 6,6 Hz Pulse-Out Strobing Duty Cycle Puls-Out Time: 250 ms to 50 ms Duty Cycle Closed Time: 1000 ms to 100 ms Open 0,9 Hz to 20 Hz Random Strobing Duty Cycle Open Time: 100 ms to 25 ms Duty Cycle Open Time: 100 ms to 25 ms Duty Cycle Open Time: 1000 ms to 25 ms Duty Cycle Open Time: 1000 ms to 25 ±12 ms	0 ÷ 1 2 ÷ 62 63 ÷ 64 64 ÷ 125 126 ÷ 127 128 ÷ 188 189 ÷ 190 191 ÷ 251	255
							4	Open  X COARSE	252 ÷ 255	
							4	0 to 1 X FINE	000 ÷ 001	000
							5	0 to 1	000 ÷ 001	000
							6	Y COARSE 0 to 1	000 ÷ 001	000
							7	Y COARSE 0 to 1	000 ÷ 001	000
					4	4		RED COARSE 0÷100%	000 ÷ 255	000
						5		RED FINE 0÷100%	000 ÷ 255	000
					5	6		GREEN COARSE 0÷100%	000 ÷ 255	000
						7		GREEN FINE 0÷100%	000 ÷ 255	000
					6	8		BLUE COARSE 0÷100%	000 ÷ 255	000
						9		BLUE FINE 0÷100%	000 ÷ 255	000
					7	10		PC AMBER COARSE 0÷100%	000 ÷ 255	000
						11		PC AMBER FINE 0÷100%	000 ÷ 255	000
					8	12		MINT COARSE 0÷100%	000 ÷ 255	000
						13		MINT FINE 0÷100%	000 ÷ 255	000
					9	14		ROYAL BLUE COARSE 0÷100%	000 ÷ 255	000
						15		ROYAL BLUE FINE 0÷100%	000 ÷ 255	000

UNO	DUO	Basic	Standard	Extended	RAW Direct	RAW 16bit	XY	Function	DMX Value	Default
			4	4				CCT (Linear) 2800 K 2800 - 3000 K 3000 C 3000 S 3000 C 3000 - 3200 K 3200 - 3400 C 340	0 0 + 24 24 24 + 44 44 + 462 63 63 + 79 79 79 + 93 93 + 106 106 + 118 118 118 + 129 129 + 139 139 + 148 148 148 + 156 156 + 163 163 + 171 171 + 177 177 + 189 189 + 202 202 + 212 213 213 + 230 230 + 244 244 244 + 255 255	156
				5				TINT (Linear) +25 % magenta +20 % to +25 % magenta +20 % magenta +15 % to +20 % magenta +15 % magenta +10 % to +15 % magenta +10 % magenta +5 % to +10 % magenta +5 % magenta +5 % magenta +5 % magenta +5 % to +5 % magenta balanced +0 % to +5 % green +5 % green +5 % green +10 % green +10 % to +15 % green +15 % green +15 % green +15 % to +20 % green +20 % to +25 % green +20 % to +25 % green +25 % green	0 1 ÷ 25 26 27 ÷ 50 51 52 ÷ 76 77 78 ÷ 91 92 93 ÷ 127 128 129 ÷ 152 153 154 ÷ 178 179 180 ÷ 203 204 205 ÷ 219 220 221 ÷ 254 255	128
		2	5	6				COLOUR MIX 1 Channel Function depending on Set Colour mode	000 ÷ 255	RGB: 255 CMY: 000 HS: 000
		3	6	7				COLOUR MIX 2 Channel Function depending on Set Colour mode (non used in HS)	000 ÷ 255	RGB: 255 CMY: 000
		4	7	8				COLOUR MIX 3 Channel Function depending on Set Colour mode	000 ÷ 255	RGB: 255 CMY: 000 HS: 000

UNO	DUO	Basic	Standard	Extended	RAW Direct	RAW 16bit	XY	Function	DMX Value	Default
UNO	DUO	Basic	Standard	Extended			XY	Function  COLOUR WHEEL Open Red Green Blue Cyan Magenta Yellow L.744 Dirty White L.197 Alice Bllue L.181 Congo Blue L.174 Dark Steel Blue L.174 Dark Steel Blue L.174 Dark Steel Blue L.175 Daylight Blue L.165 Daylight Blue L.162 Bastard Amber L.163 Bastard Amber L.158 Deep Orange		Default
			8	9			8	L 15a Deep Orlange L 152 Pale Gold L 147 Apricot L 141 Bright Blue L 139 Primary Green L 137 Special Lavender L 135 Deep Golden Amber L 132 Medium Blue L 128 Bright Pink L 126 Mauve L 124 Dark Green L 121 Lee Green L 121 Dark Blue L 118 Light Blue L 118 Light Blue L 118 Light Blue L 111 Dark Pink L 110 Medium Blue-Green L 111 Dark Pink L 110 Middle Rose L 101 Dight Salmon L 108 English Rose L 107 Light Rose L 107 Light Rose L 107 Light Amber L 100 Spring Yellow L 109 Dark Yellow Green L 1090 Dark Yellow Green L 1091 Dark Dark Green L 1091 Dark Dark Green L 1091 Dark Dark Green L 1091 Dark Yellow Green L 1092 Dark Amber L 1093 Pink Carnation L 1093 Pink Carnation L 1094 Medium Pink L 1095 Sunset Red L 1095 Dark Green L 1095 Pire L 1096 Medium Amber L 1097 Surprise Peach L 1097 Surprise Peach L 1098 Pink Green L 152 Pale Gold L 105 Orange L 1048 Rose Purple L 1052 Control Green L 1052 Soff Green R 1000 K 10	32 + 33 34 + 35 36 + 37 38 + 39 40 + 41 42 + 43 44 + 45 46 + 47 48 + 49 50 + 51 52 + 53 54 + 55 56 + 57 58 + 59 60 + 61 62 + 63 64 + 65 66 + 67 68 + 69 70 + 71 72 + 73 74 + 75 76 + 77 78 + 79 80 + 81 82 + 83 84 + 85 86 + 87 88 + 89 90 + 91 92 + 93 94 + 95 96 + 97 98 + 99 100 + 101 102 + 103 104 + 105 106 + 107 118 + 119 120 + 121 118 + 119 120 + 121 131 + 125 126 + 127 130 + 131 132 + 133 134 + 135 136 + 211 212 + 213 214 + 215 216 + 217 218 + 219	000

UNO	DUO	Basic	Standard	Extended	RAW Direct	RAW 16bit	XY	Function	DMX Value	Default
			8	9			8	3600K 3800K 4000K 4200K 4400K 4400K 4600K 4800K 5000K 5200K 5400K 5600K 6000K 6500K 7000K 8000K 9000K	220 ÷ 221 222 ÷ 223 224 ÷ 225 226 ÷ 227 228 ÷ 229 230 + 231 232 ÷ 233 234 ÷ 235 236 ÷ 237 240 ÷ 241 242 ÷ 243 244 ÷ 245 246 ÷ 247 248 ÷ 249 250 ÷ 251 252 ÷ 253 254 ÷ 255	000
				10			9	COLOUR WHEEL SATURATION (Linear) 100 % 100 % to 95 % 95 % 95 % to 90 % 90 % to 85 % 85 % 85 % to 80 % 80 % 80 % to 75 % 75 % to 70 % 70 % 70 % to 65 % 65 % 65 % to 60 % 60 % to 55 % 55 % to 50 % 50 % 45 % 45 % to 40 % 40 % 40 % to 35 % 35 % to 30 % 30 % 30 % to 25 % 25 % to 20 % 20 % 20 % to 15 % 55 % 55 % to 10 % 10 % to 5 % 5 % 5 % to 10 % 10 % 10 % to 5 % 5 % 5 % to 10 % 10 % 10 % to 5 % 5 % 5 % to 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 %	0 1 + 12 13 14 + 25 26 27 + 38 39 40 + 50 51 52 + 63 64 65 + 76 77 78 + 89 90 91 + 101 102 103 + 114 115 116 + 127 128 129 + 140 141 142 + 152 153 154 + 165 166 167 + 178 179 180 + 181 192 193 + 203 204 205 + 216 217 218 + 229 230 231 + 242 243 244 + 254 255	000
				11				0 % 0 % to 5 % 5 % 5 % to 10 % 10 % to 15 % 5 % to 20 % 20 % 20 % to 25 % 25 % to 30 % 30 %	0 1 ÷ 12 13 14 ÷ 25 26 27 ÷ 38 39 40 ÷ 50 51 52 ÷ 63 64 65 ÷ 76 77	000

UNO	DUO	Basic	Standard	Extended	RAW Direct	RAW 16bit	XY	Function	DMX Value	Default
				11				30 % to 35 % 35 % to 40 % 40 % 40 % to 45 % 45 % 45 % to 50 % 50 % 50 % to 55 % 55 % to 60 % 60 % to 65 % 65 % 65 % to 70 % 70 % to 75 % 75 % to 80 % 80 % to 85 % 85 % to 90 % 90 % 90 % to 95 % 95 % to 100 % 100 %	78 + 89 90 91 + 101 102 103 + 114 115 116 + 127 128 129 + 140 141 142 + 152 153 154 + 165 166 167 + 178 179 180 + 181 192 193 + 203 204 205 + 216 217 218 + 229 230 231 + 242 243 244 + 254	000
			9	12	10	16	10	CONTROL (hold 3 seconds)  No Function/Safe Colour Mix RGB Colour Mix RGB Colour Mix RGB Colour Mix HS Dimmer Mode Linear Dimmer Mode S-Curve Dimmer Mode S-Curve Dimmer Mode Square Law Dimmer Speed Auto Dimmer Speed Slow Dimmer Speed Medium Dimmer Speed Medium Dimmer Speed Fast Tungsten Off Tungsten Nedium Tungsten Medium Tungsten Fast LED Mode Brigtness LED Mode Quality LED Frequency 255 Hz LED Frequency 2500 Hz LED Frequency 2500 Hz LED Frequency 2500 Hz LED Frequency 2500 Hz LED Frequency 5000 Hz LE	0 + 1 2 + 3 4 + 5 6 + 7 8 + 9 10 + 11 12 + 13 14 + 15 16 + 17 18 + 19 20 + 21 22 + 23 24 + 25 26 + 27 28 + 29 30 + 31 32 + 33 34 + 35 36 + 37 38 + 39 40 + 41 42 + 43 44 + 45 46 + 47 47 48 + 49 50 + 51 52 + 53 54 + 73 74 + 75 76 + 77 78 + 79 80 + 81 82 + 83 84 + 85 86 + 87 88 + 89 90 + 91 92 + 93 94 + 105 96 + 97 98 + 99 100 + 101 102 + 103 104 + 105 106 + 107 108 + 109 110 + 111 111 + 255 254 + 255	000

## DMX Chart with Gobo Rotation enabled

Channel	UNO	DUO	Basic	Standard	Extended	RAW Direct	RAW 16bit	XY
1	DIMMER COARSE	DIMMER COARSE	DIMMER COARSE	DIMMER COARSE	DIMMER COARSE	DIMMER COARSE	DIMMER COARSE	DIMMER COARSE
2	GOBO ROT.	DIMMER FINE	COLOUR MIX 1	DIMMER FINE	DIMMER FINE	DIMMER FINE	DIMMER FINE	DIMMER FINE
3	GOBO ROT. FINE	GOBO ROT.	COLOUR MIX 2	STROBE	STROBE	STROBE	STROBE	STROBE
4		GOBO ROT. FINE	COLOUR MIX 3	ССТ	ССТ	RED COARSE	RED COARSE	X COARSE
5			GOBO ROT.	COLOUR MIX 1	TINT	GREEN COARSE	RED FINE	X FINE
6			GOBO ROT. FINE	COLOUR MIX 2	COLOUR MIX 1	BLUE COARSE	GREEN COARSE	Y COARSE
7				COLOUR MIX 3	COLOUR MIX 2	PC AMBER COARSE	GREEN FINE	Y FINE
8				COLOUR WHEEL	COLOUR MIX 3	MINT COARSE	BLUE COARSE	COLOUR WHEEL
9				CONTROL	COLOUR WHEEL	ROYAL BLUE COARSE	BLUE FINE	COLOUR WHEEL SATURATION
10				GOBO ROT.	COLOUR WHEEL SATURATION	CONTROL	PC AMBER COARSE	CONTROL
11				GOBO ROT. FINE	СТО	GOBO ROT.	PC AMBER FINE	GOBO ROT.
12					CONTROL	GOBO ROT. FINE	MINT COARSE	GOBO ROT. FINE
13					GOBO ROT.		MINT FINE	
14					GOBO ROT. FINE		ROYAL BLUE COARSE	
15							ROYAL BLUE FINE	
16							CONTROL	
17							GOBO ROT.	
18							GOBO ROT. FINE	

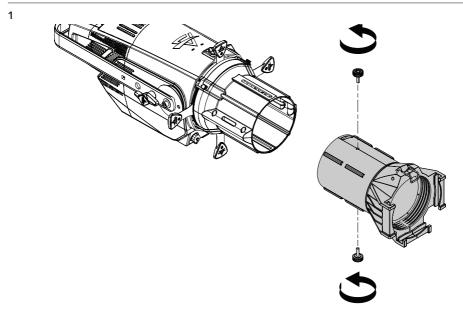
UNO	DUO	Basic	Standard	Extended	RAW Direct	RAW 16bit	XY	Function	DMX Value	Default
2	3	All C	hannel and	Channel va	11	n DMX	Chai	Twith Gobo Rotation disabled plus following  GOBO ROTATION Pos 0,00° Pos 2,81° Pos 5,63° Pos 11,25° Pos 14,06° Pos 11,25° Pos 14,06° Pos 16,88° Pos 19,69° Pos 22,50° Pos 28,13° Pos 28,13° Pos 28,13° Pos 28,13° Pos 28,13° Pos 30,94° Pos 33,75° Pos 34,56° Pos 39,38° Pos 47,81° Pos 48,00° Pos 47,81° Pos 50,63° Pos 59,06° Pos 59,06° Pos 59,06° Pos 59,06° Pos 50,13° Pos 67,50° Pos 70,31° Pos 73,13° Pos 75,94° Pos 48,48° Pos 87,19° Pos 88,48° Pos 87,19° Pos 88,18° Pos 87,19° Pos 112,51° Pos 104,06° Pos 115,31° Pos 104,06° Pos 115,31° Pos 115,31° Pos 115,31° Pos 115,31° Pos 115,31° Pos 116,88° Pos 109,69° Pos 117,81° Pos 116,88° Pos 109,69° Pos 117,81° Pos 118,13° Pos 120,94° Pos 132,19° Pos 140,68° Pos 157,50° Pos 177,18° Pos 160,31° Pos 160,31° Pos 168,75° Pos 174,38° Pos 174,38° Pos 174,38° Pos 174,38° Pos 174,38° Pos 174,38° Pos 185,63° Pos 196,88° Pos 199,69° Pos 202,50° Pos 199,88° Pos 219,38° Pos 221,93° Pos 225,04° Pos 226,15° Pos 226,138° Pos 226,15° Pos 226,138° P	Channel  0123456789910112314567899101123345567899012232455678990122334556788909122344567789911233456778991223456778991223456788909122345678890912234567789912234567789912234567789912234567789991223456778912200000000000000000000000000000000000	000

UNO	DUO	Basic	Standard	Extended	RAW Direct	RAW 16bit	XY	Function	DMX Value	Default
2	3	5	10	13	11	17	11	GOBO ROTATION Pos 267, 19° Pos 270, 00° Pos 271, 81° Pos 2710, 63° Pos 2718, 144° Pos 2814, 125° Pos 284, 148° Pos 284, 148° Pos 284, 188° Pos 288, 188° Pos 288, 188° Pos 289, 189° Pos 292, 50° Pos 295, 31° Pos 300, 94° Pos 300, 188° Pos 301, 18° Pos 301, 18° Pos 301, 18° Pos 311, 18° Pos 301, 18° Pos 311, 18° Pos 321, 18° Pos 3	956 977 988 999 1000 1002 103 104 105 106 107 108 109 1110 1111 1112 1113 1144 1115 1166 1170 1180 1191 1191 1212 123 124 125 126 127 128 130 131 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 151 152 153 154 166 167 168 169 170 177 178 179 179 170 177 178 179 179 170 177 178 179 179 170 177 178 179 179 170 177 178 179 179 179 170 177 178 179 179 170 177 178 179 179 179 170 177 178 179 179 179 170 177 178 179 179 179 170 177 178 179 179 170 177 178 179 179 179 170 177 178 179 179 179 179 179 179 179 179	000

UNO	DUO	Basic	Standard	Extended	RAW Direct	RAW 16bit	XY	Function	DMX Value	Default
2	3	5	10	13	11	17	11	GOBO ROTATION  Stop CCW Spin 0.10 rpm CCW Spin 0.17 rpm CCW Spin 0.26 rpm CCW Spin 0.36 rpm CCW Spin 0.49 rpm CCW Spin 0.49 rpm CCW Spin 0.79 rpm CCW Spin 0.79 rpm CCW Spin 1.16 rpm CCW Spin 1.16 rpm CCW Spin 1.213 rpm CCW Spin 1.213 rpm CCW Spin 1.213 rpm CCW Spin 2.13 rpm CCW Spin 2.13 rpm CCW Spin 3.39 rpm CCW Spin 5.13 rpm CCW Spin 6.79 rpm CCW Spin 1.135 rpm CC	192 193 194 195 196 197 198 199 200 201 203 204 205 206 207 208 209 211 212 213 214 215 216 217 218 219 220 221 223 224 225 223 234 225 226 227 228 239 230 231 231 235 234 245 246 247 248 249 245 247 248 249 245 255 255 255 255 255	000
3	4	6	11	14	12	18	12	GOBO ROTATION FINE All 16bit DMX values are possible, the list above only shows intermedium value.	000 ÷ 255	000

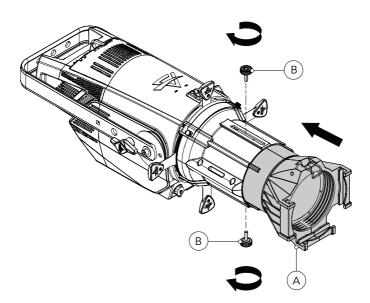
## 13 - ACCESSORIES INSTALLATION

OPTIC (CODE ECLPRL - OPTIONAL)



Loosen and remove the two marked knobs of the optic.

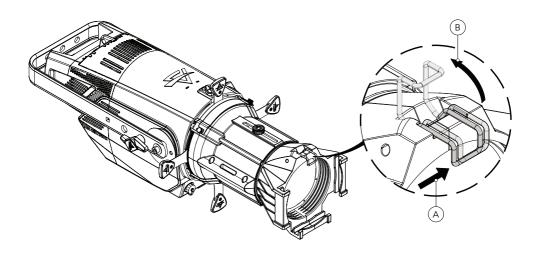
2



Mount the desired optic (A) in the middle part. Then insert and tighten the knobs (B) in the holes.

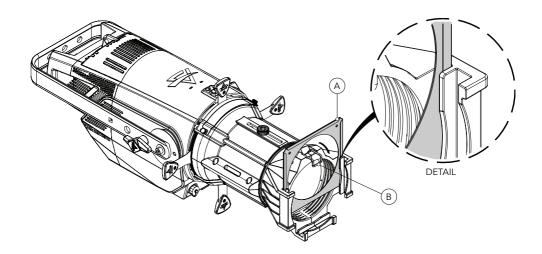
Fig. 08

1



Push the clip (A), located at the top of the optics body, outwards and lift it (B).

2



Insert the filter (A) into the marked track (DETAIL) and close the clip (B), always applying an outward push. NOTE: To remove the accessory, reverse the procedure.

Fig. 09

## GOBO HOLDER (CODE ECLPRGH - OPTIONAL)

Gobo dimensions:

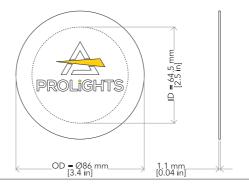
• Type B

• Ø external (OD)= 86 mm

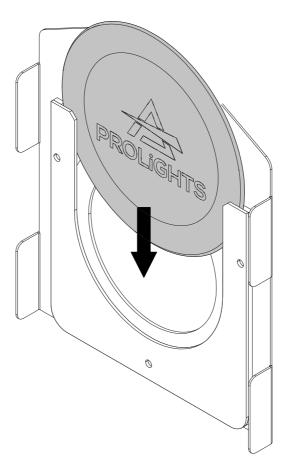
(3.4 in)

• Ø of image (ID)= 64.5 mm (2.5 in)

• Thinckness= 1.1 mm (0.04 in)



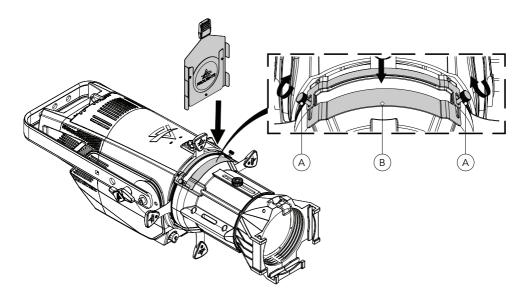
1



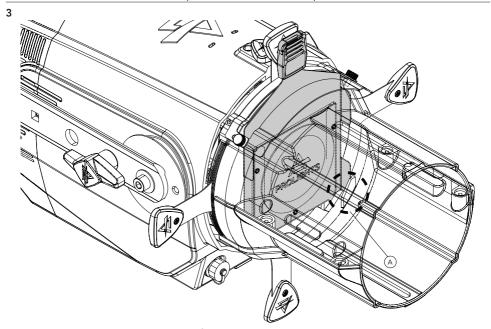
Put in place the gobo (2).

ATTENTION! Load with mirror surface toward the light source.

Please turn!

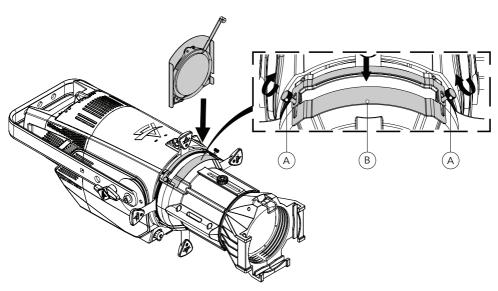


Loosen the marked screws (A). Then open the slot of the middle part (B).



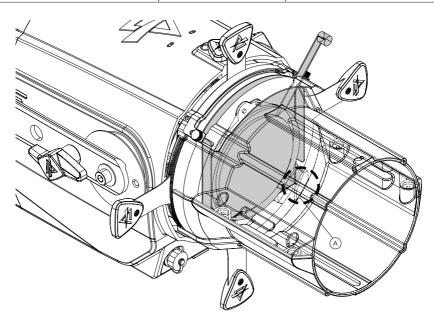
Insert the gobo holder into the slot. The flaps (A) will go into the appropriate size. NOTE: To remove the accessory, reverse the procedure.

Fig. 11

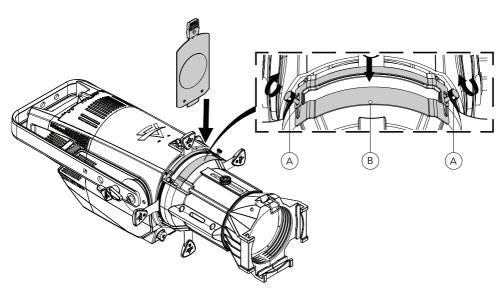


Loosen the marked screws (A). Then open the slot of the middle part (B).

2

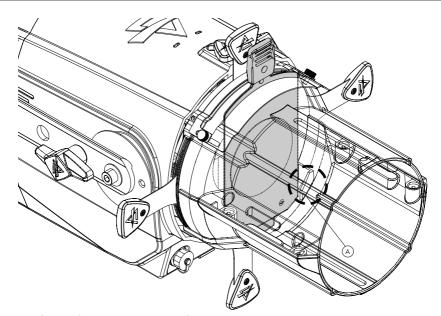


Insert the steel iris diaphram into the slot. The flaps (A) will go into the appropriate size. NOTE: To remove the accessory, reverse the procedure.

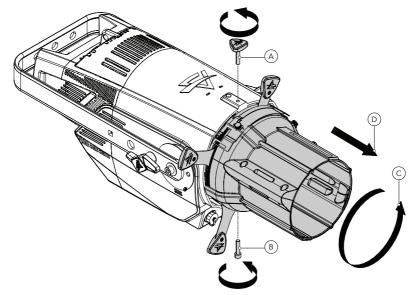


Loosen the marked screws (A). Then open the slot of the middle part (B).

2

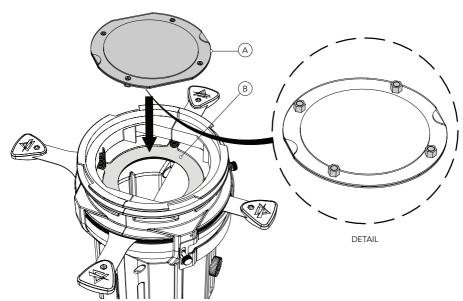


Insert the soft edge filter into the slot. The flaps (A) will go into the appropriate size. NOTE: To remove the accessory, reverse the procedure.



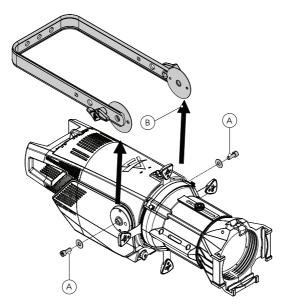
Loosen the marked knob (A) and screw (B). Then rotate (C) the middle part and remove it (D).





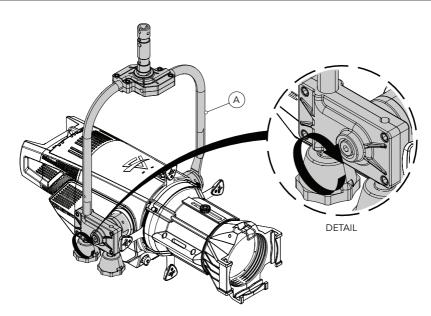
Insert the soft focus diffusion (A) by placing the magnets (DETAIL) on the back of the framing system (B) of the middle part.

NOTE: To remove the accessory, reverse the procedure.

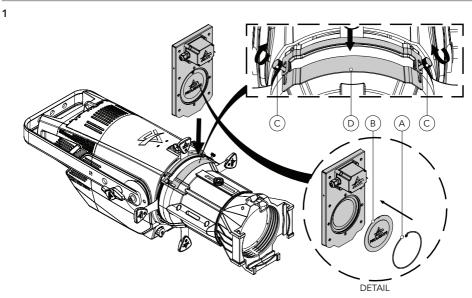


Loosen and remove the marked screws (A). Then remove the bracket (B).

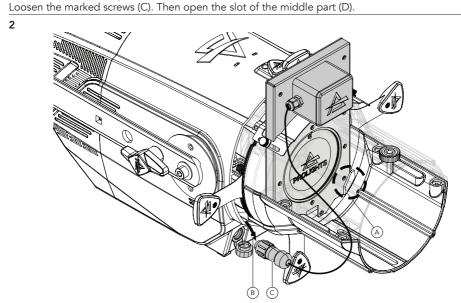
2



Mount the Pole Operated Yoke bracke (A) and tighten the screws (DETAIL). NOTE: To remove the accessory, reverse the procedure.



To insert a gobo into the marked rotating gobo assembly, remove the spring (A) and insert the new gobo (B) following the procedure shown in the image (DETAIL).

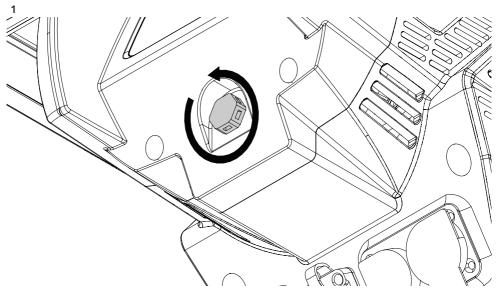


Insert the soft edge filter into the slot. The flaps (A) will go into the appropriate size. Then connect the rotating gobo assembly throught the connector (C) into the socket.

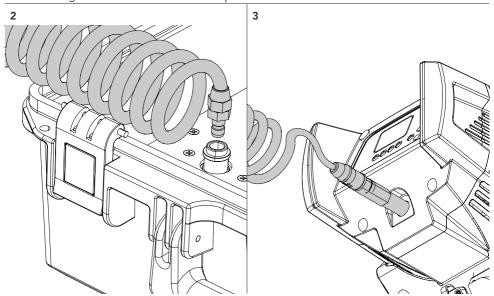
NOTE: To remove the accessory, reverse the procedure.

# 14 - TEST OF IP65 RATING

To check sealing after servicing use the IPTESTBOX.



Remove the gore valve from the connections panel.



Connect the air hose to the IPTESTBOX by inserting the quick-connect fitting into the coupler (2). Insert the threaded end into the threaded valve hole socket (3).

For the operating procedure using the instrument, refer to the IPTESTBOX user manual.

## 15 - MAINTENANCE

## MAINTENANCE AND CLEANING THE PRODUCT

WARNING: Disconnect from the mains before starting any maintenance work

It is recommended to clean the front at regular intervals, from impurities caused by dust, smoke, or other particles to ensure that the light is radiated at maximum brightness.

- For cleaning, disconnect the main plug from the socket. Use a soft, clean cloth moistened with a mild detergent. Then carefully wipe the part dry. For cleaning other housing parts use only a soft, clean cloth. Never use a liquid, it might penetrate the unit and cause damage to it.
- The user must clean the product periodically to maintain optimum performance and cooling. The
  user may also upload firmware (product software) to the fixture via the DMX signal input port or USB
  port using firmware and instructions from PROLIGHTS.
- The frequency of such maintenance operations is to be performed according to various factors, such
  as the amount of the use and the condition of the installation environment (air humidity, presence
  of dust, salinity, etc.). It is recommended that the product is subject to annual service by a qualified
  technician for special maintenance involving at least the following procedures:
- General cleaning of internal parts.
- For all the parts subject to friction, using lubricants specifically supplied by PROLIGHTS.
- General visual check of the internal components, cabling, mechanical parts, etc.
- Electrical, photometric and functional checks; eventual repairs.
- Cleaning the lenses. Only use neutral soap and water to clean the lenses, then dry it carefully with a soft, non-abrasive cloth.

WARNING: the use of alcohol or any other detergent could damage the lenses.

- All other service operations on the product must be carried out by PROLIGHTS, its approved service
  agents or trained and qualified personnel.
- It is PROLIGHTS policy to apply the strictest possible calibration procedures and use the best quality materials available to ensure optimum performance and the longest possible component lifetimes. However, optical components are subject to wear and tear over the life of the product, resulting in gradual changes in colours over many thousands of hours of use. The extent of wear and tear depends heavily on operating conditions and environment, so it is impossible to specify precisely whether and to what extent performance will be affected. However, you may eventually need to replace optical components if their characteristics are affected by wear and tear after an extended period of use and if you require fixtures to perform within very precise optical and colour parameters.
- Do not apply filters, lenses or other materials on lenses or other optical components. Use only accessories approved by PROLIGHTS.

#### REPLACING THE FUSE

WARNING: Before replacing the fuse, unplug the product from the mains.

• Remove the old fuse from the housing with a suitable screwdriver (anticlockwise) and replace it with one of the same type and of the same classification (5\*20 TBC-5A).

#### VISUAL CHECK OF PRODUCT HOUSING

- The parts of the product cover/housing should be checked for eventual damages and breaking start at least every two months. In addition, especially the parts of the front lens holder have to be checked mechanically (by means of movement by the part) if it is firmly fastened to the fixture. If hint of a crack is found on some plastic part, do not use the product until the damaged part will be replaced.
- Cracks or another damages of the cover/housing parts can be caused by the product transportation or manipulation and also ageing process may influence materials.
- This checking is necessary for both fixed installations and preparing product for renting. Any free
  moving parts inside of the product, cracked cover/housing or any part of front lens not sitting properly in place need to be immediately replaced.

## **TROUBLESHOOTING**

Problems	Possible causes	Checks and remedies		
Product doesn't power ON	No power to the product.	Check that power is switched ON and cables are plugged in.		
	Fuse blown or internal fault.	Check if the Fuse is intact and eventually replace it if necessary.     Contact the PROLIGHTS Service or authorized service partner. Do not remove parts and/or covers, or carry out any repairs or service that are not described in this Safety and User Manual unless you have both authorization from PROLIGHTS and the service documentation.		
Product reset correctly but does not respond correctly to the contoller.	Bad signal connection.	Inspect connections and cables. Fix eventual bad connections. Repair or replace damaged cables.		
	Signal connection not terminated.	Insert DMX termination plug in signal output socket of the last product on the signal line.		
	Incorrect addressing of the product.	Check the product address and control settings.		
	One of the product is defective and is corrupt- ing the signal transmis- sion on the signal line.	Unplug the XLR in and out connectors and connect them directly together to bypass one product at a time until normal operation is regained. Once found the error, have that fixture serviced by a qualified technician.		
Timeout error after fixture reset.	One or more hardware components requires mechanical adjustments	Check product stored error messages for more information. Contact PROLIGHTS Service or an authorized service partner.		
Mechanical effect loses position	Mechanical hardware require cleaning, adjust- ment or lubrification.	Check product stored error messages for more information. Contact PROLIGHTS Service or an authorized service partner.		
Light output turn OFF Intermittently	Fixture is too hot.	<ul> <li>Check product stored error messages.</li> <li>Allow product to cool.</li> <li>Clean the product and airflow filters.</li> <li>Reduce ambient temperature.</li> </ul>		
	Hardware failure (tem- perature sensor, fans, Light source).	Check product stored error messages for more information. Contact. PROLIGHTS Service or an authorized service partner.		
General low light intensity	<ul><li>Dirty lens assembly.</li><li>Dirty or damaged filters.</li></ul>	<ul><li>Clean the fixture regularly.</li><li>Install lens assembly properly.</li></ul>		

Contact an authorized service center in case of technical problems or not reported in the table can not be resolved by the procedure given in the table.

Note	

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