



EclPar IPMFC

100W IP65 RGB+WW single source LED PAR



USER MANUAL

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.

Features, specifications and appearance are subject to change without notice. Music & Lights S.r.l. and all affiliated companies disclaim liability for any injury, damage, direct or indirect loss, consequential or economic loss or any other loss occasioned by the use of, inability to use or reliance on the information contained in this document.

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**



The PROLIGHTS Logo, PROLIGHTS names and all other trademark in this document pertaining to PROLIGHTS services or PROLIGHTS product are trademarks OWNED or licensed by Music & Lights S.r.l., its affiliates, and subsidiaries. PROLIGHTS is a registered trademark by Music & Lights S.r.l. All right reserved. Music & Lights – Via A. Olivetti, snc - 04026 - Minturno (LT) ITALY.

INDEX

SAFETY INFORMATION	02
1 - PACKAGING	05
PACKAGE CONTENT	05
OPTIONAL ACCESSORIES	05
2 - TECHNICAL DRAWING	06
3 - INSTALLATION	07
MOUNTING	07
4 - CONNECTION TO THE MAINS SUPPLY	08
5 - START UP	08
CONNECT AND DISCONNECT POWER FROM THE PRODUCT	08
6 - PRODUCT OVERVIEW	09
7 - DMX CONNECTION	10
CONNECTION OF THE CONTROL SIGNAL: DMX LINE	10
INSTRUCTIONS FOR A RELIABLE DMX CONNECTION	10
CONNECTION DAISY CHAIN	10
CONNECTION OF THE DMX LINE	10
CONSTRUCTION OF THE DMX TERMINATION	11
DMX ADDRESSING	11
OPERATION AS A WIRELESS TRANSMITTER	11
IN TO CRMX	12
OPERATION AS A WIRELESS RECEIVER	12
CRMX TO DMX (RX)	12
8 - CONTROL PANEL	13
DISPLAY AND BUTTONS LAYOUT	13
9 - MENU STRUCTURE	14
10 - SHORTCUT	18
11 - RDM FUNCTIONS	19
13 - DMX CHARTS	23
RDM Personality ID List	23
RDM Model ID	23
14 - ERROR MESSAGES	31
15 - ACCESSORIES INSTALLATION	32
LENS ASSEMBLY (EPIPMLENS15 - 15° lens INCLUDE; EPIPMLENS30 - 30° lens OPTIONAL; EPIPMLENS60 - 60° lens OPTIONAL)	32
EPIPMLENS15	33
EPIPMLENS30	33
EPIPMLENS60	33
BARN DOOR (CODE AJP7ZIPBD - OPTIONAL)	34
BARN DOOR (CODE AJP7ZIPBD - OPTIONAL)	35
FULL SNOOT (CODE EPIPMFNSNOOTBK - OPTIONAL)	36
HONEYCOMB LOUVRE (CODE EPIPMHLOUVREBK - OPTIONAL)	37
CONCENTRIC LOUVRE (CODE EPIPMCLOUVREBK - OPTIONAL)	38
LENS ASSEMBLY FROM INSIDE	39
LENS ASSEMBLY FROM INSIDE	40
16 - PERIODICAL CLEANING	41
17 - TEST OF IP65 RATING	42
18 - MAINTENANCE	43
MAINTENANCE AND CLEANING THE PRODUCT	43
REPLACING THE FUSE	43
VISUAL CHECK OF PRODUCT HOUSING	43
TROUBLESHOOTING	44

SAFETY INFORMATION



WARNING!

- See <https://www.prolights.it/product/ECLPARIPMFC#download> for installation instructions.
- 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 load-bearing surface with suitable corrosion-resistant 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 1,4 meters (4,7 ft) from the lens of the projector.

T_a 45°C

Max operating ambient temperature (T_a)

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

T_a -20°C

Minimum operating ambient temperature (T_a)

- Do not operate the fixture if the ambient temperature (T_a) is below -20 °C (-4 °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_c 75°C

Temperature of the external surface

- The surface of the fixture can reach up to 75 °C (167 °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.



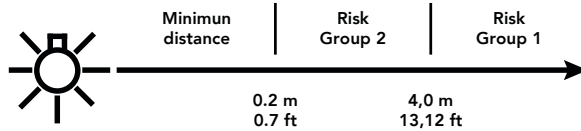
Photobiological safety

- 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 4 m (13,12 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

1 - PACKAGING

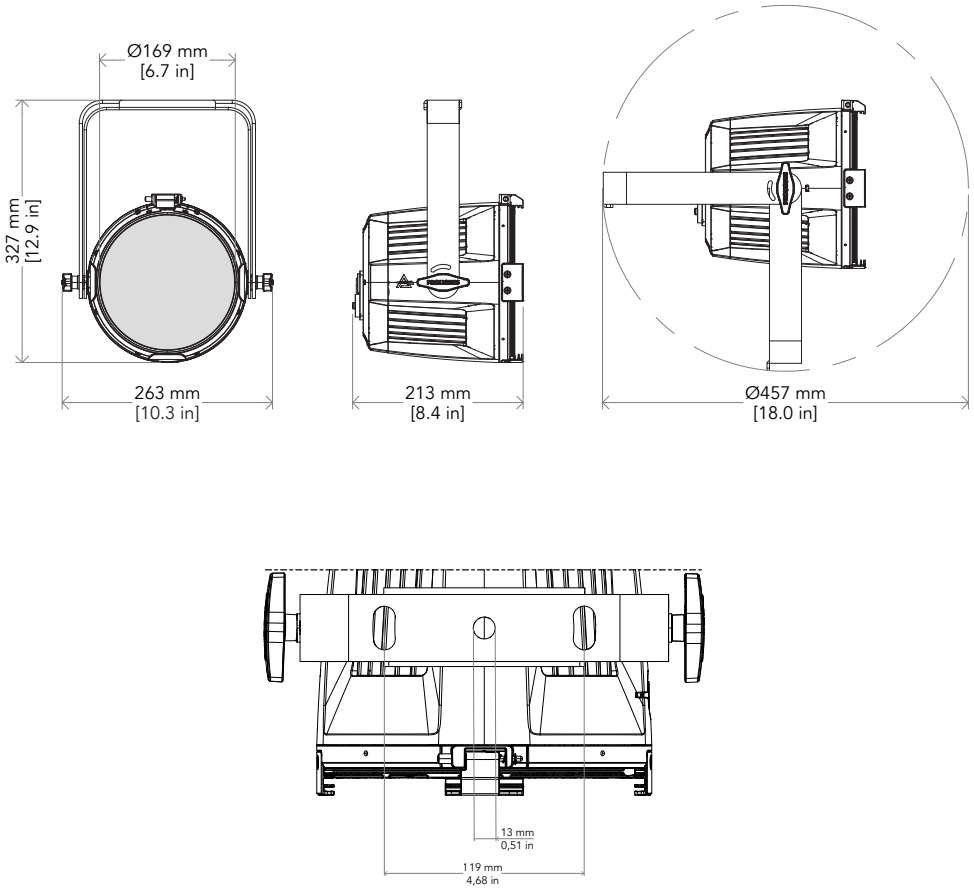
PACKAGE CONTENT

- 1 x ECLPARIPMFC
- 1 x EPIPMLENS15
- 1 x ECLPARTPG
- 1 x 1,5 meters power cable (BARE END - SEETRONIC IP65 power connector)
- 1 x User Manual

OPTIONAL ACCESSORIES

- LECLPARIPM: Flight-case per contenere 6 pc serie ECLPARIPM
- EPIPMBAG1U: ABS case vuoto per contenere 1 pc serie ECLPARIPM
- ECLPARIPMBDBK: 8 alette direzionali per la regolazione del fascio di luce, ECLPARIPM, nero
- ECLPARTPG: Telaio porta gelatina per proiettori ECLPAR
- EPIPMRFFBK: Telaio porta gelatina circolare per ECLPARIPM series, nero
- ECLPARIPMWKKBK: CRMX Timo Fx kit per serie ECLPARIPM, nero
- EPIPMLENS15: Lente a 15° per serie ECLPARIPM
- EPIPMLENS30: Lente a 30° per serie ECLPARIPM
- EPIPMLENS60: Lente a 60° per serie ECLPARIPM
- EPIPMFILT1040: Diffusore di luce per ECLPARIPM, asimmetrico 10°x40°
- EPIPMFILT1060: Diffusore di luce per ECLPARIPM, asimmetrico 10°x60°
- EPIPMFILT1090: Diffusore di luce per ECLPARIPM, asimmetrico 10°x90°
- EPIPMFILT3060: Diffusore di luce per ECLPARIPM, asimmetrico 30°x60°
- EPIPMFSNOOTBK: Visiera completa per serie ECLPARIPM, nero
- EPIPMHLOUVREBK: Filtro anti abbagliamento a nido d'ape per serie ECLPARIPM, nero
- EPIPMCLOUVREBK: Filtro anti abbagliamento concentrico per serie ECLPARIPM, nero
- SPGM10: Spigot 28mm per fixtures, perno M10
- SPGM12: Spigot 28mm per fixtures, perno M12
- UPBOX1UP5: Interfaccia aggiornamento firmware, USB IN, 5p XLR DMX OUT, USB OUT
- UPBOXPRO: Interfaccia aggiornamento firmware, USB IN, connettore XLR DMX OUT 5-pin
- TOUR53415L03: Cavo Dmx assembl. HC5340, CANC5MXX XLR 5p -> CANC5FXX XLR (f) 5p, L.3m
- TOUR53413L03: Cavo Dmx assembl. HC5340 CANC3MXX XLR 3p -> CANC3FXX XLR (f) 3p, L.3m
- 958025L03: Cavo TH07 3x2.5mm, PwCon FCA 3p 20A, PwCon FCB 3p 20A, L. 3m
- 9513FCAL03: Cavo Ass. TH07 3x2.5mm, spina CEE 3p 16A 230V, presa MENAC3FCA, L.3 m
- RSR0630B: Cavo di sicurezza acciaio per corpi sospesi, moschettone inox, L=60 cm, nero
- C6002B: Clamp in alluminio Slim, port.200Kg, tubi 48-51mm, perno M10, Black
- 9533FCAL03: Cavo Ass. TH07 3x2.5mm, spina SCHUKO, presa MENAC3FCA, L.3 m
- SPGM12: Spigot 28mm per fixtures, perno M12
- UPBOX1UP5: Interfaccia aggiornamento firmware, USB IN, 5p XLR DMX OUT, USB OUT
- UPBOXPRO: Interfaccia aggiornamento firmware, USB IN, connettore XLR DMX OUT 5-pin
- TOUR53415L03: Cavo Dmx assembl. HC5340, CANC5MXX XLR 5p -> CANC5FXX XLR (f) 5p, L.3m
- TOUR53413L03: Cavo Dmx assembl. HC5340 CANC3MXX XLR 3p -> CANC3FXX XLR (f) 3p, L.3m
- 958025L03: Cavo TH07 3x2.5mm, PwCon FCA 3p 20A, PwCon FCB 3p 20A, L. 3m
- 9513FCAL03: Cavo Ass. TH07 3x2.5mm, spina CEE 3p 16A 230V, presa MENAC3FCA, L.3 m
- RSR0630B: Cavo di sicurezza acciaio per corpi sospesi, moschettone inox, L=60 cm, nero
- C6002B: Clamp in alluminio Slim, port.200Kg, tubi 48-51mm, perno M10, Black
- 9533FCAL03: Cavo Ass. TH07 3x2.5mm, spina SCHUKO, presa MENAC3FCA, L.3 m

2 - TECHNICAL DRAWING



Weight: 4,1Kg - 9,04 lbs

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.

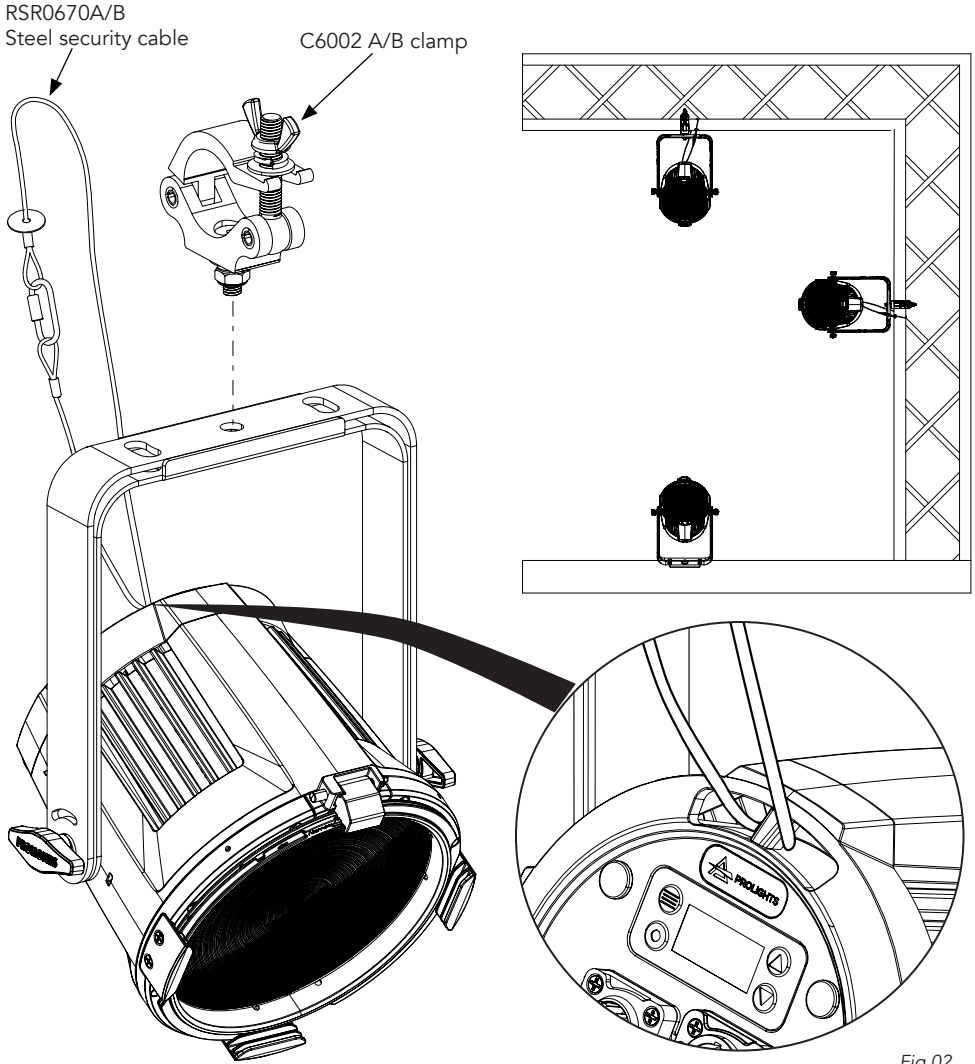


Fig.02


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 112 W.

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. BRACKET for hanging safe.
2. BRACKET for floor positioning.
3. HOLDER CLIP for filter frame and barndoor accessory.
4. SAFETY EYE to attach safety cable.
5. USER INTERFACE with display and buttons for access to the control panel functions.
6. POWER IN: for connection to the Mains 100-240V~/50-60Hz.
7. DMX IN (5-p XLR): 1 = GND, 2 = sign-, 3 = sign+, 4 N/C, 5 N/C.
8. DMX OUT (5-p XLR): 1 = GND, 2 = sign-, 3 = sign+, 4 N/C, 5 N/C.
9. KNOB for bracket.
10. POWER OUT: power output for connection of multiple units in series.
11. ACCESSORY HOLDER for filter frame and barndoor accessory.

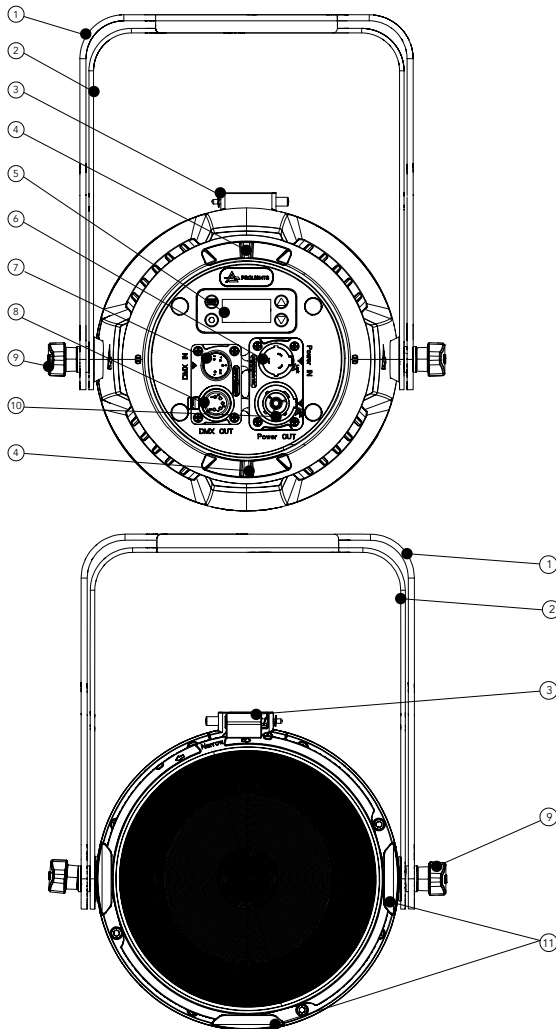


Fig 03

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
- Pin5 : N/C

DMX - OUTPUT XLR socket

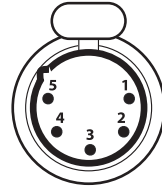


Fig. 04

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 120Ω impedance and low capacity.
The following diagram shows the connection mode:

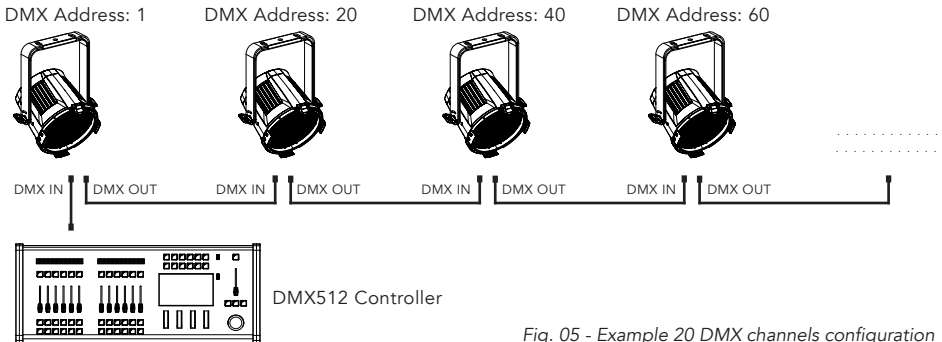


Fig. 05 - Example 20 DMX channels configuration

CONSTRUCTION OF THE DMX TERMINATION

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

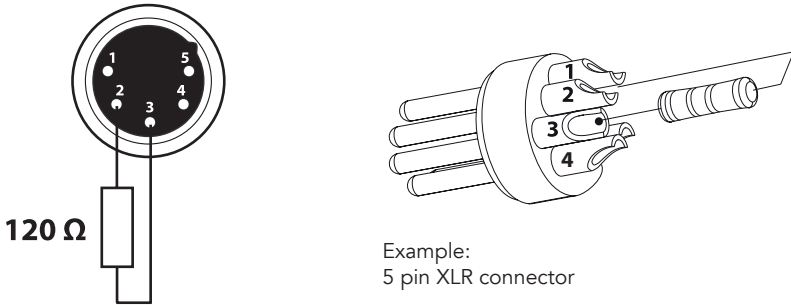


Fig. 06

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 ENTER 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.

OPERATION AS A WIRELESS TRANSMITTER

ECLPARIPMFC can be used as wireless transmitter to transmit DMX signal to different wireless receivers. To use ECLPARIPMFC as wireless transmitter, please follow the procedure below:

1. Push ENTER button until you show CONNECT on display, then press ENTER button to confirm.
2. Use UP/DOWN buttons for select WIRELESS, then press ENTER to confirm.
3. Push ENTER button on CRMX ON/OFF function and enable it to ON.
4. Select CRMX mode and set it on Transmitter (please note that CRMX mode will be available only if CRMX ON/OFF is set to ON).
5. Ensure that the receiver units are not connected to any other transmitter. Please refer to "Reset the receiver" paragraph.
6. Enable TX LINK to ON to link transmitter to receivers (please note that TX LINK will be available only if CRMX mode is set to Transmitter).
 - The transmitter scans for all unlinked receivers for a period of about 5 seconds.
 - If the connection fails, check the position of the receiver.
 - The wireless icon on the receiver display indicates the received signal strength.

Unlinking the transmitter

Follow the procedure below to unlink the transmitter from all receivers connected with the unit.

1. Push ENTER button until you show CONNECT on display, then press ENTER button to confirm.
 2. Use UP/DOWN buttons for select Wireless, then press ENTER to confirm.
 3. Enable TX UNLINK to ON 8 (please note that TX UNLINK will be available only if CRMX mode is set to Transmitter).
- All connected receivers will be unlinked.

IN TO CRMX

This function enable or disable the transmission through wireless of the DMX signal from the transmitter side to the receiver.

Any incoming signal (ArtNet, sACN or DMX) is retransmitted through wireless. It's possible to choose retransmission of Main Fixture or Pixel Engine.

If the ECLPARIPMFC protocol selected is ArtNet / sACN, the CRMX module will retransmit the DMX values contained in the ArtNet / sACN signal received from the ECLPARIPMFC.

NOTE: Artnet and sACN have higher priority on DMX if they are connected to transmitter.

NOTE: Do not use IN TO CRMX and ETH TO DMX simultaneously, this will cause data conflict on DMX output signal.

OPERATION AS A WIRELESS RECEIVER

ECLPARIPMFC can be used as wireless receiver connected to a wireless transmitter.

To use ECLPARIPMFC as wireless receiver, please follow the procedure below:

1. Push ENTER button until you show CONNECT on display, then press ENTER button to confirm.
2. Use UP/DOWN buttons for select Wireless, then press ENTER to confirm.
3. Push ENTER button on CRMX ON/OFF function and enable it to ON.
4. Select CRMX mode and set it on Receiver (please note that CRMX mode will be available only if CRMX ON/OFF is set to ON).
5. Enable RX RESET to ON to reset the receiver (please note that RX RESET will be available only if CRMX mode is set to Receiver).
6. On the transmitter, enable TX LINK to ON to link transmitter to the receivers.
7. If the connection is successful and DMX input is available the display on the receiver unit will show the DMX address. If DMX signal is not available, the display will show "No signal" but keeps the transmitter linked.
8. If the connection fails, check the position of the receiver.
9. The wireless icon on the receiver display indicates the received signal strength.

Reset the receiver

Follow the procedure below to reset the receiver.

1. Push MENU button until you show CONNECT on display, then press ENTER button to confirm.
 2. Use UP/DOWN buttons for select Wireless, then press ENTER to confirm.
 3. Enable RX RESET to ON.
- The wireless icon on the receiver display indicates the received signal strength.

CRMX TO DMX (RX)

This function enable or disable the retransmission of the wireless DMX signal received through the DMX port on the receiver side.

8 - CONTROL PANEL

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

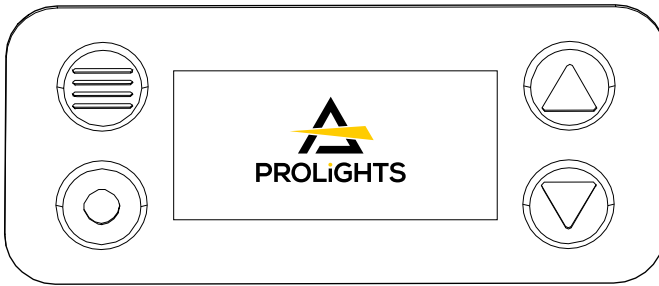






Fig. 07

DISPLAY AND BUTTONS LAYOUT

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

- | | | |
|---|--|--|
| 1 |  | <ul style="list-style-type: none">• MODE / ESC: used to access the menu tree or to return a previous menu window. |
| 2 |  | <ul style="list-style-type: none">• ENTER: used to confirm the current menu or confirm the current function value or option within a menu. |
| 3 |  | <ul style="list-style-type: none">• UP: browse upwards through the menu list and increases the numeric value displayed. |
| 4 |  | <ul style="list-style-type: none">• DOWN: browse downwards through the menu list and decreases the numeric value displayed. |

9 - MENU STRUCTURE

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

CONNECT	ADDRESS	VALUE (1-512)				Set address used for Fixture.
	DMX MODE	UNO	COLOR TEMPERATURE / COLOR MACRO / MANUAL COLORS			Set DMX chart for Main Fixture.
		DUO				For Uno and Duo mode selection of CCT, Color Macro or Manual color is available.
		BASIC				
		BASIC 16BIT				
		STANDARD				
		EXTENDED				
	WIRELESS	CRMX ON/OFF	ON/ OFF			Enable/Disable the wireless card.
		CRMX MODE	TX CRMX			Choose whether to set the wireless card as Transmitter or Receiver.
	TX G4S				For Transmitter mode you can also select which protocol to transmit.	
	TX G3				CRMX mode is unlocked only if CRMX ON / OFF is ON	
		TX LINK	ON/ OFF			TX link unlock when the unit is set as a transmitter.
		TX UNLINK	ON/ OFF			Disconnect the transmitter from all receivers. TX unlink unlocks only if CRMX mode is on transmitter.
		RX RESET	ON/ OFF			Disconnect the transmitter from all receivers. TX unlink unlocks only if CRMX mode is on transmitter
		IN TO CRMX (TX)	ON /OFF			Enable/Disable the transmission of the DMX from the transmitter to the receiver via CRMX.
		CRMX TO DMX (RX)	ON /OFF			Enable/Disable the retransmission of the DMX from the receiver to the other units connected by cable to the receiver itself.
		LINKING KEY	When In RX Mode: 1. Insert 8 digit code 2. Ask for mode (CRMX or CRMX?) 3. Ask for universe (CRMX: A,C,E,G CRMX?: A,B,C,D,E,F,G,H) When in TX CRMX Mode: 1. Insert 8 digit code			
	UNIVERSE METADATA	In RX Mode: 1. RGB Color code received from TX 2. Universe name received from TX In TX CRMX Mode: 1.RGB Color code set from R,G,B combo list 2. Universe name by default takes first 16 characters of Model Name				CRMX transmitters may transmit some universe metadata information used to identify the received universe on the receiver side. These are; Universe name: A 16 character string with a human readable name identifying the universe. Universe color: RGB code for an LED that can easily be used to visually identify the universe by color.

SET UP	SCREEN	BACKLIGHT	ON/ 10S /20S/30S			Allows you to select the timing after that display will switch automatically off when unactive.	
		FLIP DISPLAY	ON/ OFF			Allows you to rotate the display by 180°.	
		KEY LOCK	ON/ OFF			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.	
		TEMPERATURE UNIT	°C/°F			Choose Temperature unit.	
TRANSFER CONFIGURATION	WITHOUT 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.	
	WITH DMX ADDRESS						
ADVANCED	DIMMER CURVE	LINEAR				Set Dimmer Curve for Main Dimmer function.	
		S-CURVE					
		SQUARE LAW					
		INVERSE SQUARE LAW					
	DIMMER SPEED	AUTO					Linear dimmer behaviour.
		FAST					Dimmer curve adding long fade.
		MEDIUM					Dimmer curve adding medium fade.
		SLOW					Dimmer curve adding little fade.
	SPEKTRA CALIBRATION	ON					ON: CCT and colors are fully calibrated, working in the common color space definition set by Spektra. This means that output of multiple fixtures will match with no visible differences. Color Saturation is slightly reduced.
		PURE COLORS					PURE COLORS: CCT is calibrated, giving perfect white matching across multiple fixtures, but primary and secondary colors are calibrated to their native color space which allows maximum color saturation. The closer you move towards white, the more closely multiple fixtures will match each other's output. The further you move away from white and the closer you move towards saturated color, the less closely multiple fixtures will match each other's output.
		OFF					
	LED MODE	HIGH QUALITY					Set led operating mode.
		HIGH BRIGHTNESS					
	WHITE POINT	3200K					Select CCT when RGBW@Full.
4000K							
5600K							
6000K							
	8000K						

INFORMATION	DMX FAULT	HOLD				To choose the behaviour of fixture in case of dmx signal lost.	
		BLACKOUT					
		STAND-ALONE					
		EMERGENCY					
	TUNGSTEN EMULATION	ON				Toggle Tungsten Emulation	
		OFF					
	OUTPUT CONTROL	OFF				Choose Output Control mode.	
		CONSTANT					
		DYNAMIC					
	FACTORY RELOAD	ON/ OFF				Default of all parameters	
	INFORMATION	DEVICE TIME	FIXTURE HOURS	TOTAL	(READ)		To check the total working hours of the unit.
				PARTIAL	(READ AND RESET)		
CURRENT HOURS		TOTAL	(READ AND RESET)		To check the current working hours of the unit.		
		PARTIAL	(READ AND RESET)				
SOURCE HOURS		TOTAL	(READ)		To see the total operating hours of the LED source.		
		PARTIAL	(READ AND RESET)				
POWER ON CYCLE		TOTAL	(READ)		To see the power cycles of the machine.		
		PARTIAL	(READ AND RESET)				
MAINTENANCE TIME		ELAPSED TIME	(READ AND RESET)		To choose and reset unit maintenance warning hours.		
		ALERT PERIOD	10 – 750				
POWER CONSUMPTION	** W				Show estimated power consumption.		
TEMPERATURE	NEAR SOURCE TEMP, DRIVER PCB TEMP, LED PCB TEMP,...				To see the unit temperature.		
WIRELESS QUALITY					To see the wireless quality.		
CHANNEL VALUE					To see the dmx value of those channels.		
ERROR MESSAGE					To see any error messages		
FIXTURE MODEL	ECLPARIPMFC				View informations about fixture model		
DEVICE LABEL	<RDM LABEL>				View LABEL for the RDM control.		
CALIBRATION	MASTER				Show calibration state.		
SOFTWARE VERSION	1U01 V1.1.00.0...				View informations about software version.		
CRMX MODULE VERSION	TimoFX: Vx.x.xx				Show firmware version of TimoFX module.		
RDM UID	(READ)				View ID for the RDM control		
STAND ALONE	MASTER/SLAVE	MASTER DMX				Allow you to link and operating in synk multiple units without a DMX console. Choose a unit to perform as the Master. Master No DMX: fixture is not broadcasting signal	
		MASTER NO DMX					
		SLAVE					

EFFECTS	EFFECT 1 - 5	DIMMER	<1-100>		<p>Effects modes allows creation and editing of 5 effects maximum. Each effect contains up to 20 colors, a Main Dimmer and a Main Strobe.</p> <p>COLOR section: SWITCH is used to toggle On/Off the color in the sequence. DIMMER is used to individually DIM the selected color. STROBE is used to individually STROBE the selected color. HOLD TIME defines how long the color is hold on the output. FADE IN/OUT TIME defines the timings of fading in/out.</p> <p>The effects can be considered as CHASE, once last color has finished playing the sequence will start again</p> <p>List of Color Macro like per Static Mode.</p> <p>List of White Presets like per Static Mode.</p> <p>List of Manual Colors like per Static Mode.</p>	
		STROBE	<1-100>			
		COLOR 1	SWITCH	ON		
				OFF		
			DIMMER			
			STROBE			
			HOLD TIME	0 - 360s (Step by 0.5s)		
			FADE IN TIME	0 - 60s (Step by 0.5s)		
			FADE OUT TIME	0 - 60s (Step by 0.5s)		
			COLOR MACRO	Show list of STATIC mode		
			WHITE PRESETS	Show list of STATIC mode		
			MANUAL COLORS	Show list of STATIC mode		
				
		COLOR 20	SWITCH	ON		
				OFF		
			DIMMER			
			STROBE			
			HOLD TIME	0 - 360s (Step by 0.5s)		
			FADE IN TIME	0 - 60s (Step by 0.5s)		
			FADE OUT TIME	0 - 60s (Step by 0.5s)		
COLOR MACRO	Show list of STATIC mode					
WHITE PRESETS	Show list of STATIC mode					
MANUAL COLORS	Show list of STATIC mode					
STATIC	COLOR MACRO	Check Color Macro channel on DMX Charts	Dimmer <000-255>			
	WHITE PRESETS	2700K	Dimmer <000-255> G/M Point <-025-025>			
		2800K				
		3200K				
		3500K				
		4000K				
		4500K				
		5000K				
		5600K				
		6000K				
		6500K				
	7000K					
	8000K					
	9000K					
	10000K					
MANUAL COLORS	RED	<000-255>				
	GREEN	<000-255>				
	BLUE	<000-255>				
	WHITE	<000-255>				

10 - SHORTCUT

Keys	Mode	Description
MENU + ENTER then power on	Clear All	Clear all value of functions + factory default
UP + DOWN after power on	Flip Display	Directly flip display without enter inside menu

11 - 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.

RDM is also available on Wireless. WDMX Tiny's Downstream must be enabled in its custom PIDs to work.

Parameter	Category	PID Address	GET	SET	Value	Description	Default Value
DEVICE_INFO	Product Information	0x0060	x				
PRODUCT_DETAIL_ID_LIST	Product Information	0x0070	x				
DEVICE_MODEL_DESCRIPTION	Product Information	0x0080	x				
MANUFACTURER_LABEL	Product Information	0x0081	x				
DEVICE_LABEL	Product Information	0x0082	x	x			
FACTORY_DEFAULTS	Product Information	0x0090	x	x			
SOFTWARE_VERSION_LABEL	Product Information	0x00C0	x				
BOOT_SOFTWARE_VERSION_ID	Product Information	0x00C1	x				
BOOT_SOFTWARE_VERSION_LABEL	Product Information	0x00C2	x				
DMX_PERSONALITY	DMX512 Setup	0x00E0	x	x			
DMX_PERSONALITY_DESCRIPTION	DMX512 Setup	0x00E1	x				
DMX_START_ADDRESS	DMX512 Setup	0x00F0	x	x			
SLOT_INFO	DMX512 Setup	0x0120	x				
SLOT_DESCRIPTION	DMX512 Setup	0x0121	x				
DEFAULT_SLOT_VALUE	DMX512 Setup	0x0122	x				
DMX_BLOCK_ADDRESS	DMX512 Setup	0x0140	x	x			
DMX_FAIL_MODE	DMX512 Setup	0x0141	x	x			
DMX_STARTUP_MODE	DMX512 Setup	0x0142	x	x			
DIMMER_INFO	Dimmer Settings	0x0340	x				

Parameter	Category	PID Address	GET	SET	Value	Description	Default Value
MINIMUM_LEVEL	Dimmer Settings	0x0341	x	x			
MAXIMUM_LEVEL	Dimmer Settings	0x0342	x	x			
CURVE	Dimmer Settings	0x0343	x	x			
CURVE_DESCRIPTION	Dimmer Settings	0x0344	x	x			
OUTPUT_RESPONSE_TIME	Dimmer Settings	0x0345	x	x			
OUTPUT_RESPONSE_TIME_DESCRIPTION	Dimmer Settings	0x0346	x				
MODULATION_FREQUENCY	Dimmer Settings	0x0347	x	x			
MODULATION_FREQUENCY_DESCRIPTION	Dimmer Settings	0x0348	x				
SENSOR_DEFINITION	Sensors	0x0200	x				
SENSOR_VALUE	Sensors	0x0201	x	x			
RECORD_SENSORS	Sensors	0x0202		x			
BURN_IN	Sensors	0x0440	x	x			
DEVICE_HOURS	Power/Lamp Settings	0x0400	x	x			
LAMP_HOURS	Power/Lamp Settings	0x0401	x	x			
LAMP_STRIKES	Power/Lamp Settings	0x0402	x	x			
LAMP_STATE	Power/Lamp Settings	0x0403	x	x			
LAMP_ON_MODE	Power/Lamp Settings	0x0404	x	x			
DEVICE_POWER_CYCLES	Power/Lamp Settings	0x0405	x	x			
DISPLAY_INVERT	Display Settings	0x0500	x	x			
DISPLAY_LEVEL	Display Settings	0x0501	x	x			
LOCK_PIN	Configuration	0x0640	x	x			
LOCK_STATE	Configuration	0x0641	x	x			
LOCK_STATE_DESCRIPTION	Configuration	0x0642	x				
IDENTIFY_DEVICE	Control	0x1000	x	x			
RESET_DEVICE	Control	0x1001		x			
POWER_STATE	Control	0x1010	x	x			
PERFORM_SELFTEST	Control	0x1020	x	x			
SELF_TEST_DESCRIPTION	Control	0x1021	x				
CAPTURE_PRESET	Control	0x1030	x	x			
PRESET_PLAYBACK	Control	0x1031	x	x			
IDENTIFY_MODE	Control	0x1040	x	x			
PRESET_INFO	Control	0x1041	x				
PRESET_STATUS	Control	0x1042	x	x			
POWER_ON_SELF_TEST	Control	0x1044	x	x			

Parameter	Category	PID Address	GET	SET	Value	Description	Default Value
DMX FAULT	Manufacturer PIDs	0x82DD	x	x	0-3	"0: HOLD 1: BLACKOUT 2:STAND ALONE 3:EMERGENCY"	2
MASTER/SLAVE	Manufacturer PIDs	0x8211	x	x	0-2	"0:MASTER DMX 1:MASTER NO DMX 2: SLAVE"	2
ST. AL. MODE	Manufacturer PIDs	0x82EC	x	x	0-4	"0:Stand Alone EF- FECTS 1:Stand Alone FIXED COLOR 2:STAND ALONE COLOR MACROS 3:STAND ALONE WHITE PRESETS 4:STANDALONE MA- NUAL COLORS"	1
EFFECTS	Manufacturer PIDs	0x8209	x	x	1-5	"1: FX1 2: FX2 3: FX3 4: FX4 5: FX5"	1
FIXED COLOR	Manufacturer PIDs	0x82BE	x	x	0-14	"0: R 1: G 2: B 3: W 4: RG 5: RB 6: RW 7: GB 8: GW 9: BW 10: RGB 11: RGW 12: RBW 13: GBW 14: RGBW"	14
WHITE PRESETS	Manufacturer PIDs	0x82BF	x	x	0-13	"0: 2700K 1: 2800K 2: 3200K 3: 3500K 4: 4000K 5: 4500K 6: 5000K 7: 5600K 8: 6000K 9: 6500K 10: 7000K 11: 8000K 12: 9000K 13: 10000K"	2
COLOR MACROS	Manufacturer PIDs	0x82ED	x	x	0-66	Refer to Color Macro channel	0
MANUAL RED	Manufacturer PIDs	0x82C0	x	x	0-255	Linear Red 0% to 100%	255
MANUAL GREEN	Manufacturer PIDs	0x82C1	x	x	0-255	Linear Green 0% to 100%	255
MANUAL BLUE	Manufacturer PIDs	0x82C2	x	x	0-255	Linear Blue 0% to 100%	255

Parameter	Category	PID Address	GET	SET	Value	Description	Default Value
MANUAL WHITE	Manufacturer PIDs	0x82C3	x	x	0-255	Linear White 0% to 100%	255
SPEKTRA	Manufacturer PIDs		x	x	0 - 2	"0: ON 1: PURE COLORS 2: OFF"	1
LED MODE	Manufacturer PIDs	0x830C	x	x	0-1	"0: HIGH QUALITY 1:HIGH BRIGHTNESS"	0
OUTPUT CONTROL	Manufacturer PIDs	0x830C	x	x	0-1	"0:CONSTANT OUTPUT 1:DYNAMIC OUTPUT"	1
TUNGSTEN EMULATION	Manufacturer PIDs	0x82BC	x	x	0 - 1	"0: OFF 1: ON"	0
CURRENT HOURS	Manufacturer PIDs	0x82C5	x	x		-	0
POWER CONSUMPTION(AC 220V)	Manufacturer PIDs	0x82DE	x			AC:220V	0
MAINTENANCE TIME:ALERT PERIOD	Manufacturer PIDs	0x82DF	x	x	10-1000	-	750
MAINTENANCE TIME:ELAPSED TIME	Manufacturer PIDs	0x82E0	x	x	0-ALERT PERIOD		0
ERROR MESSAGES	Manufacturer PIDs	0x82EA	x		0-5	"0 - NO ERROR 1 - LED ERROR 2 - LED TEMPERATURE ERROR 3 - LED TEMP. SENSOR ERROR 4 - DRV ERROR 5 - CALIBRATION ERROR"	0
CLEAN ALL DATA	Manufacturer PIDs	0x82C8	x	x	0-1	0:NO,1:YES	0

13 - DMX CHARTS

RDM Personality ID List

RDM Model ID

ID	Mode	DMX Footprint
1	UNO	1CH
2	DUO	2CH
3	BASIC	5CH
5	BASIC 16BIT	10CH
6	STANDARD	9CH
7	EXTENDED	12CH
8	ADVANCED	18CH

0xD119

DMX Chart Summary

Channel	UNO	DUO	BASIC	BASIC 16BIT	STANDARD	EXTENDED	ADVANCED
1	DIMMER	DIMMER	DIMMER	DIMMER	DIMMER	DIMMER	DIMMER
2		DIMMER FINE	RED	DIMMER FINE	DIMMER FINE	DIMMER FINE	DIMMER FINE
3			GREEN	RED	RED	CCT	CCT
4			BLUE	RED FINE	GREEN	TINT	CCT FINE
5			WHITE	GREEN	BLUE	CROSSFADE	TINT
6				GREEN FINE	WHITE	RED	CROSSFADE
7				BLUE	COLOR MACRO	GREEN	RED
8				BLUE FINE	STROBE	BLUE	RED FINE
9				WHITE	CONTROL	WHITE	GREEN
10				WHITE FINE		COLOR MACRO	GREEN FINE
11						STROBE	BLUE
12						CONTROL	BLUE FINE
13							WHITE
14							WHITE FINE
15							COLOR MACRO
16							CTO ON COLORS
17							STROBE
18							CONTROL

Dimmer

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Dimmer	0	255	0	65535	Default @ 0

CCT

Function		8 bit value		16 bit value		Note
CCT From	CCT To	From	To	From	To	
2800	2900	0	4	0	910	Default @ 0
2900	3000	4	7	910	1820	
3000	3100	7	11	1820	2731	
3100	3200	11	14	2731	3641	
3200	3300	14	18	3641	4551	
3300	3400	18	21	4551	5461	
3400	3500	21	25	5461	6371	
3500	3600	25	28	6371	7282	
3600	3700	28	32	7282	8192	
3700	3800	32	35	8192	9102	
3800	3900	35	39	9102	10012	
3900	4000	39	43	10012	10923	
4000	4100	43	46	10923	11833	
4100	4200	46	50	11833	12743	
4200	4300	50	53	12743	13653	
4300	4400	53	57	13653	14563	
4400	4500	57	60	14563	15474	
4500	4600	60	64	15474	16384	
4600	4700	64	67	16384	17294	
4700	4800	67	71	17294	18204	
4800	4900	71	74	18204	19114	
4900	5000	74	78	19114	20025	
5000	5100	78	81	20025	20935	
5100	5200	81	85	20935	21845	
5200	5300	85	89	21845	22755	
5300	5400	89	92	22755	23665	
5400	5500	92	96	23665	24576	
5500	5600	96	99	24576	25486	
5600	5700	99	103	25486	26396	
5700	5800	103	106	26396	27306	
5800	5900	106	110	27306	28216	
5900	6000	110	113	28216	29127	
6000	6100	113	117	29127	30037	
6100	6200	117	120	30037	30947	
6200	6300	120	124	30947	31857	
6300	6400	124	128	31857	32768	
6400	6500	128	131	32768	33678	
6500	6600	131	135	33678	34588	
6600	6700	135	138	34588	35498	
6700	6800	138	142	35498	36408	
6800	6900	142	145	36408	37319	

CCT

Function	8 bit value		16 bit value		Note	
	CCT From	CCT To	From	To		From
6900	7000	145	149	37319	38229	
7000	7100	149	152	38229	39139	
7100	7200	152	156	39139	40049	
7200	7300	156	159	40049	40959	
7300	7400	159	163	40959	41870	
7400	7500	163	166	41870	42780	
7500	7600	166	170	42780	43690	
7600	7700	170	174	43690	44600	
7700	7800	174	177	44600	45510	
7800	7900	177	181	45510	46421	
7900	8000	181	184	46421	47331	
8000	8100	184	188	47331	48241	
8100	8200	188	191	48241	49151	
8200	8300	191	195	49151	50061	
8300	8400	195	198	50061	50972	
8400	8500	198	202	50972	51882	
8500	8600	202	205	51882	52792	
8600	8700	205	209	52792	53702	
8700	8800	209	213	53702	54613	
8800	8900	213	216	54613	55523	
8900	9000	216	220	55523	56433	
9000	9100	220	223	56433	57343	
9100	9200	223	227	57343	58253	
9200	9300	227	230	58253	59164	
9300	9400	230	234	59164	60074	
9400	9500	234	237	60074	60984	
9500	9600	237	241	60984	61894	
9600	9700	241	244	61894	62804	
9700	9800	244	248	62804	63715	
9800	9900	248	251	63715	64625	
9900	10000	251	255	64625	65535	

Tint

Function	8 bit value		16 bit value		Note
	From	To	From	To	
-25% to 0	0	127	-	-	Default @ 128 Linear tint correction from -0.25 to +0.25
Neutral	128	128	-	-	
0 to 25%	129	255	-	-	

Crossfade from CCT to Color

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Linear Crossfade	0	255	0	65535	Default @ 255 / 65535

Red					
Function	8 bit value		16 bit value		Note
	From	To	From	To	
0 - 100%	0	255	0	65535	Default @ 255 / 65535

Green					
Function	8 bit value		16 bit value		Note
	From	To	From	To	
0 - 100%	0	255	0	65535	Default @ 255 / 65535

Blue					
Function	8 bit value		16 bit value		Note
	From	To	From	To	
0 - 100%	0	255	0	65535	Default @ 255 / 65535

White					
Function	8 bit value		16 bit value		Note
	From	To	From	To	
0 - 100%	0	255	0	65535	Default @ 255 / 65535

Strobe					
Function	8 bit value		16 bit value		Note
	From	To	From	To	
Open	0	1	-	-	Default @ 255
Strobe from Slow to Fast	2	62	-	-	
Open	63	64	-	-	
Pulse In from slow to fast	65	125	-	-	
Close	126	127	-	-	
Pulse Out from slow to fast	128	188	-	-	
Open	189	190	-	-	
Random from slow to fast	191	251	-	-	
Open	252	255	-	-	

Color Macro					
Function	8 bit value		16 bit value		Note
	From	To	From	To	
No Function	0	1	-	-	Default @ 0
Red	2	3	-	-	
Green	4	5	-	-	
Blue	6	7	-	-	
Cyan	8	9	-	-	
Magenta	10	11	-	-	

Color Macro

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Yellow	12	13	-	-	
Dirty White	14	15	-	-	
Alice Blue	16	17	-	-	
Congo Blue	18	19	-	-	
Dark Steel Blue	20	21	-	-	
Deep Lavender	22	23	-	-	
Lilac Ting	24	25	-	-	
Daylight Blue	26	27	-	-	
Flame Red	28	29	-	-	
Bastard Amber	30	31	-	-	
Deep Orange	32	33	-	-	
Pale Gold	34	35	-	-	
Apricot	36	37	-	-	
Bright Blue	38	39	-	-	
Primary Green	40	41	-	-	
Special Lavender	42	43	-	-	
Pale Lavender	44	45	-	-	
Deep Golden Amber	46	47	-	-	
Medium Blue	48	49	-	-	
Bright Pink	50	51	-	-	
Mauve	52	53	-	-	
Dark Green	54	55	-	-	
Lee Green	56	57	-	-	
Dark Blue	58	59	-	-	
Light Blue	60	61	-	-	
Steel Blue	62	63	-	-	
Medium Blue-Green	64	65	-	-	
Peacock Blue	66	67	-	-	
Magenta	68	69	-	-	
Dark Pink	70	71	-	-	
Middle Rose	72	73	-	-	
Light Salmon	74	75	-	-	
English Rose	76	77	-	-	
Light Rose	78	79	-	-	
Orange	80	81	-	-	
Deep Amber	82	83	-	-	
Straw	84	85	-	-	
Light Amber	86	87	-	-	
Spring Yellow	88	89	-	-	
Dark Yellow Green	90	91	-	-	
Just Blue	92	93	-	-	
Sky Blue	94	95	-	-	
Lavender	96	97	-	-	
Light Lavender	98	99	-	-	
Pink Carnation	100	101	-	-	
Medium Pink	102	103	-	-	

Color Macro

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Light Pink	104	105	-	-	
Sunset Red	106	107	-	-	
Dark Amber	108	109	-	-	
Gold Amber	110	111	-	-	
Medium Amber	112	113	-	-	
Fire	114	115	-	-	
Surprise Peach	116	117	-	-	
Straw Tint	118	119	-	-	
Medium Yellow	120	121	-	-	
Lee Minus Green	122	123	-	-	
Pale Gold	124	125	-	-	
Orange	126	127	-	-	
Deep Straw	128	129	-	-	
Rose Purple	130	131	-	-	
Deep Purple	132	133	-	-	
Soft Green	134	135	-	-	
Reserved for future use	136	209	-	-	
2700K	210	211	-	-	
2800K	212	213	-	-	
3000K	214	215	-	-	
3200K	216	217	-	-	
3400K	218	219	-	-	
3600K	220	221	-	-	
3800K	222	223	-	-	
4000K	224	225	-	-	
4200K	226	227	-	-	
4400K	228	229	-	-	
4600K	230	231	-	-	
4800K	232	233	-	-	
5000K	234	235	-	-	
5200K	236	237	-	-	
5400K	238	239	-	-	
5600K	240	241	-	-	
6000K	242	243	-	-	
6500K	244	245	-	-	
7000K	246	247	-	-	
8000K	248	249	-	-	
9000K	250	251	-	-	
10000K	252	253	-	-	
FULL ON	254	255	-	-	

CTO On Colors

Function	8 bit value		16 bit value		Note
	From	To	From	To	
0 - 100%	0	255	-	-	Default @ 0

Control Channel

Function	8 bit value		16 bit value		Note
	From	To	From	To	
No Functon		0	1	-	Default @ 0
DISPLAY ON		2	3	-	Hold 3s to take function
DISPLAY 10S		4	5	-	
DISPLAY 20S		6	7	-	
DISPLAY 30S		8	9	-	
FLIP DISPLAY ON		10	11	-	
FLIP DISPLAY OFF		12	13	-	
KEY LOCK ON		14	15	-	
KEY LOCK OFF		16	17	-	
DIMMER CURVE LINEAR		18	19	-	
DIMMER CURVE S-CURVE		20	21	-	
DIMMER CURVE SQUARE LAW		22	23	-	
DIMMER CURVE INVERSE SQUARE LAW		24	25	-	
DIMMER SPEED AUTO		26	27	-	
DIMMER SPEED FAST		28	29	-	
DIMMER SPEED MEDIUM		30	31	-	
DIMMER SPEED SLOW		32	33	-	
DIMMER SPEED OFF		34	35	-	
SPEKTRA CALIBRATION ON		36	37	-	
SPEKTRA CALIBRATION PURE COLORS		38	39	-	
SPEKTRA CALIBRATION OFF		40	41	-	
LED MODE HIGH QUALITY		42	43	-	
LED MODE HIGH BRIGHTNESS		44	45	-	
WHITE POINT 3200K		46	47	-	
WHITE POINT 4000K		48	49	-	
WHITE POINT 5600K		50	51	-	
WHITE POINT 6000K		52	53	-	
WHITE POINT 8000K		54	55	-	
LED FREQUENCY 600HZ		56	57	-	
LED FREQUENCY 1200HZ		58	59	-	
LED FREQUENCY 2000HZ		60	61	-	
LED FREQUENCY 4000HZ		62	63	-	
LED FREQUENCY 6000HZ		64	65	-	
LED FREQUENCY 25KHZ		66	67	-	
LED FREQUENCY 36KHZ		68	69	-	
LED FREQUENCY 40KHZ		70	71	-	
DMX FAULT HOLD		72	73	-	
DMX FAULT BLACKOUT		74	75	-	
DMX FAULT STAND ALONE		76	77	-	

Control Channel					
Function	8 bit value		16 bit value		Note
	From	To	From	To	
DMX FAULT EMERGENCY		78	79	-	
TUNGSTEN EMULATION ON		80	81	-	
TUNGSTEN EMULATION OFF		82	83	-	
OUTPUT CONTROL CONSTANT		84	85	-	
OUTPUT CONTROL DYNAMIC		86	87	-	
STAND ALONE MASTER DMX		88	89	-	
STAND ALONE MASTER NO DMX		90	91	-	
STAND ALONE SLAVE		92	93	-	
STAND ALONE EFFECTS		94	95	-	
STAND ALONE FIXED COLORS		96	97	-	
STAND ALONE COLOR MACROS		98	99	-	
STAND ALONE WHITE PRESETS		100	101	-	
STAND ALONE MANUAL COLORS		102	103	-	
Reserved		104	249	-	
Reset all channel controlled		250	251	-	
Reserved		252	255	-	

14 - ERROR MESSAGES

The error is shown on the unit display. In the table below, the "ERROR SHOWED ON SCREEN" column lists the possible errors, accompanied by a possible cause ("POSSIBLE" CAUSES "column). The color of the error messages (listed in the "COLOR MESSAGES" column) is different for each board it refers to ("PCB" column).

ERROR SHOWED ON SCREEN	POSSIBLE CAUSES	CODE
[LED ERROR]	This error message is displayed when the lamp is switched OFF without a command from the product control system	1
[LED TEMPERATURE ERROR]	LAMP sensor damaged (open or in short circuit)	2
[LED TEMP. SENSOR ERROR]	Communication failure between DISP and DRV	3
[DRV ERROR]	Communication failure between calibration chip and DRV2 or Calibration returning unexpected/wrong datas	4
[CALIBRATION ERROR]	Blower for cooling the ignitor failed.	5

IDENTIFICATION OF ELECTRONIC BOARDS

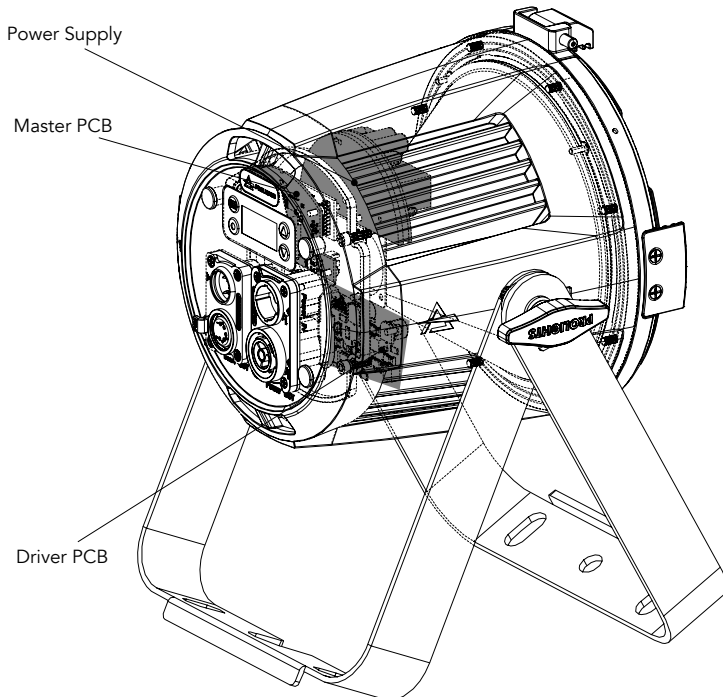
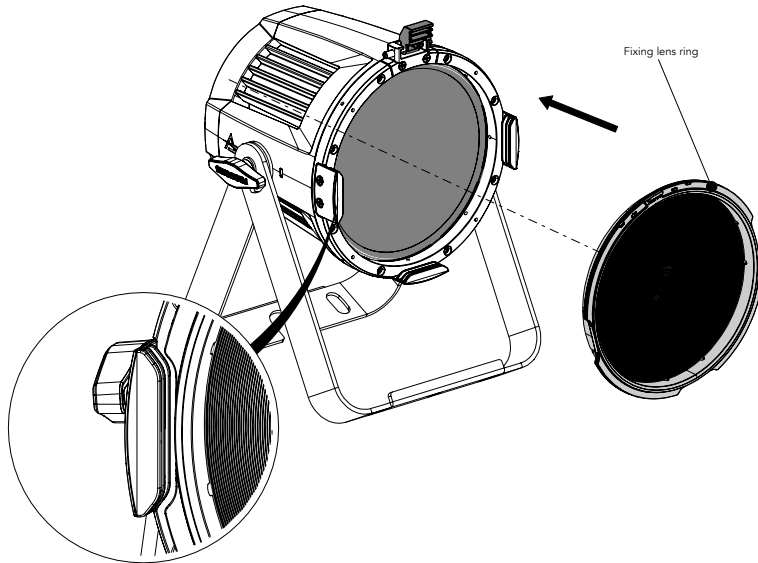


Fig. 08

15 - ACCESSORIES INSTALLATION

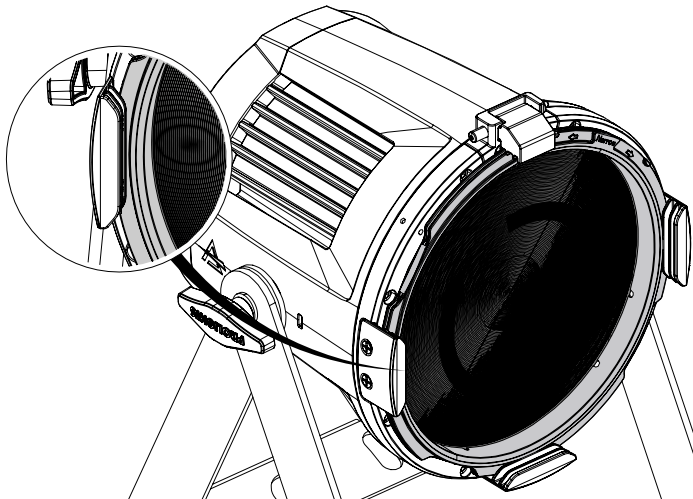
LENS ASSEMBLY (EPIPMLENS15 - 15° lens INCLUDE; EPIPMLENS30 - 30° lens OPTIONAL;
EPIPMLENS60 - 60° lens OPTIONAL;)

1



Open the Holder Clip and insert in the fixing lens accessory, pay attention to match the holders with the slots in the accessory.

2



Mount the accessory for fixing lens on the lens cover and rotate to lock it.

Fig.09

To distinguish the projection angle of different accessory lenses, they are identified by color:

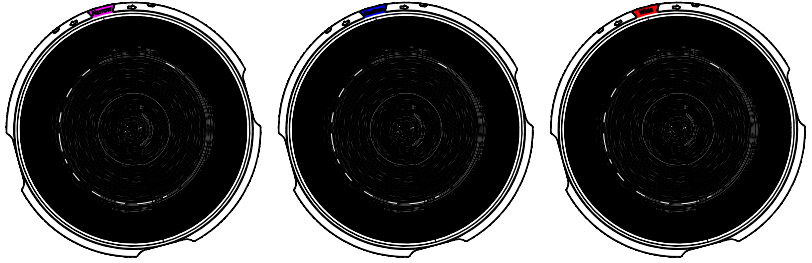
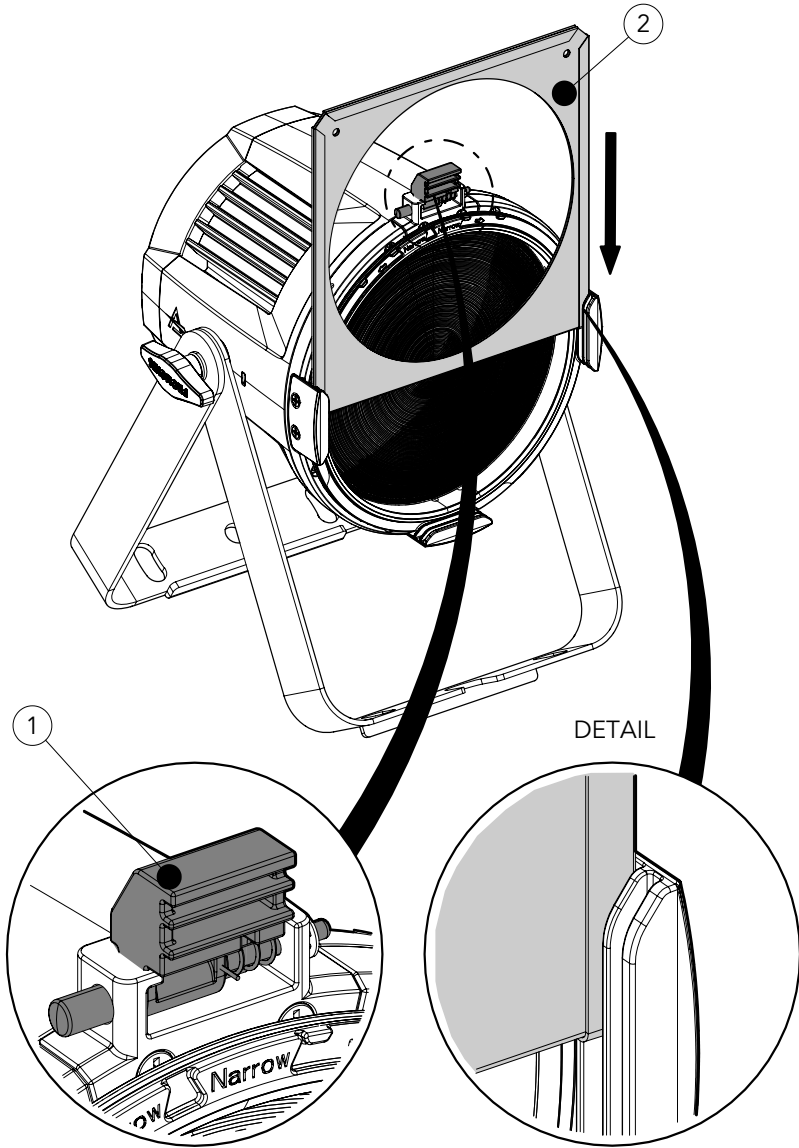


Fig.10

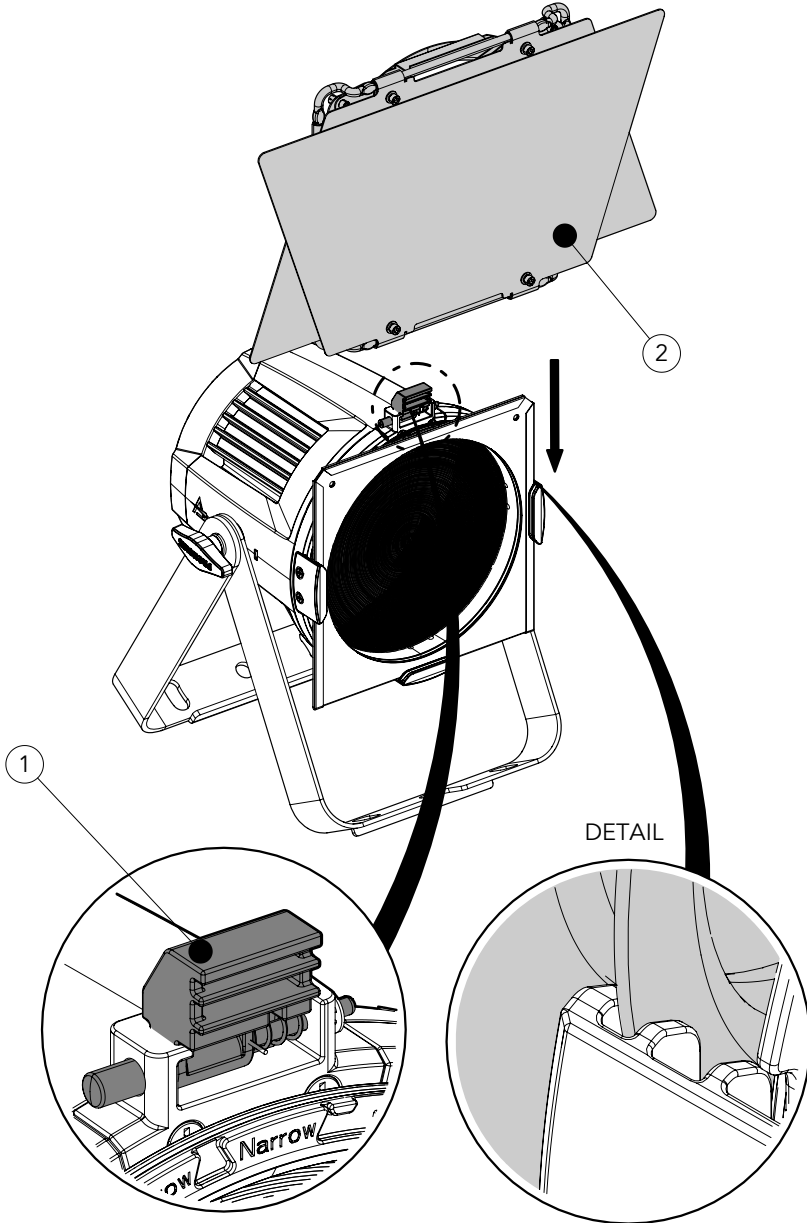
<i>Code:</i>	EPIPMLENS15	EPIPMLENS30	EPIPMLENS60
<i>Lens Model:</i>	Narrow Lens	Medium Lens	Wide Lens
<i>Color Code:</i>	MAGENTA	BLUE	RED
<i>Beam Angle:</i>	15°	30°	60°



Lift the pin (1) upwards. Insert the filter frame (2) into the gel frame lock (DETAIL) and close down the snap.

NOTE: To remove the accessory, reverse the procedure.

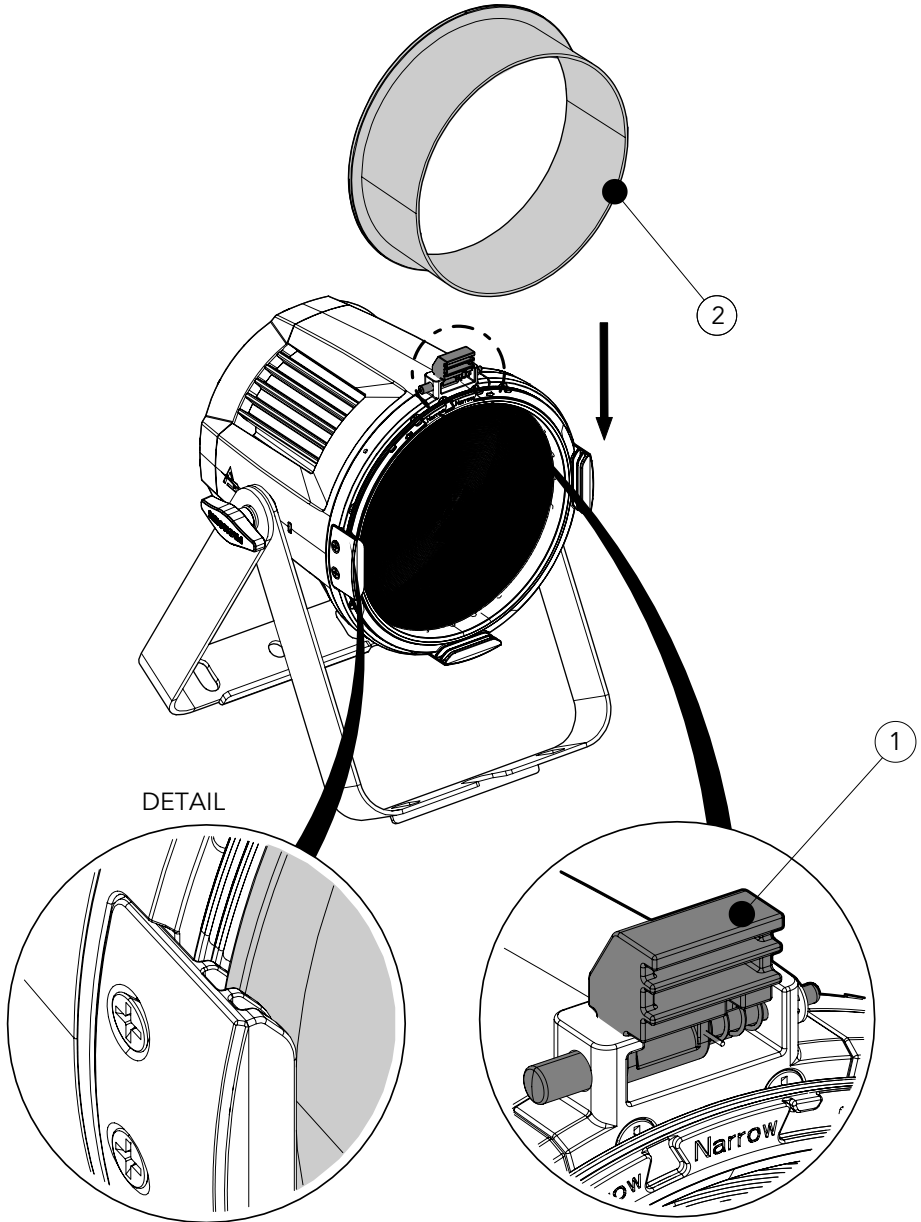
Fig.11



Lift the pin (1) upwards. Insert the barn door (2) into the gel frame lock (DETAIL) and close down the snap.

NOTE: To remove the accessory, reverse the procedure.

Fig.12

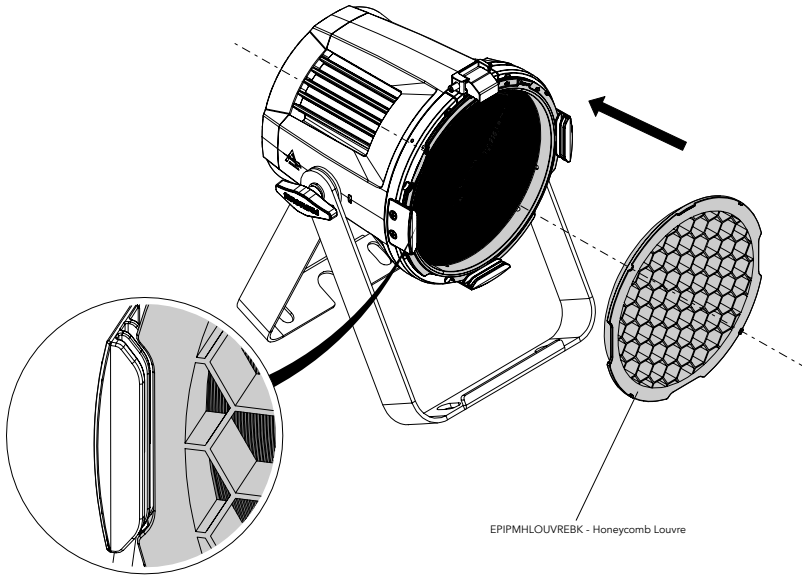


Lift the pin (1) upwards. Insert the snoot (2) into the gel frame lock (DETAIL) and close down the snap.
NOTE: To remove the accessory, reverse the procedure.

Fig.13

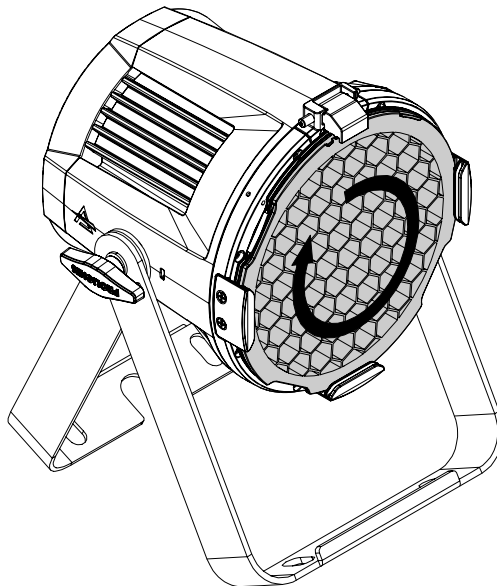
HONEYCOMB LOUVRE (CODE EPIPMHLOUVREBK - OPTIONAL)

1



Open the Holder Clip and insert in the fixing lens accessory, pay attention to match the holders with the slots in the accessory.

2

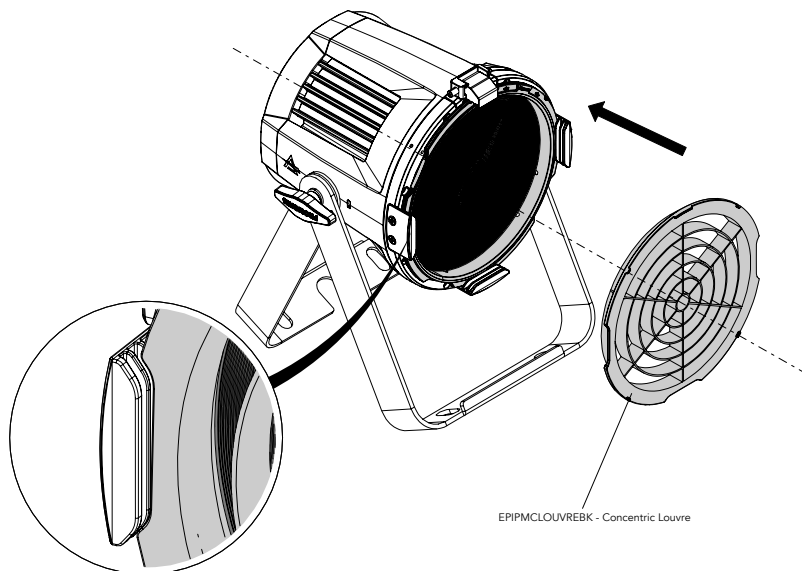


Mount the accessory for fixing lens on the lens cover and rotate to lock it.

Fig.14

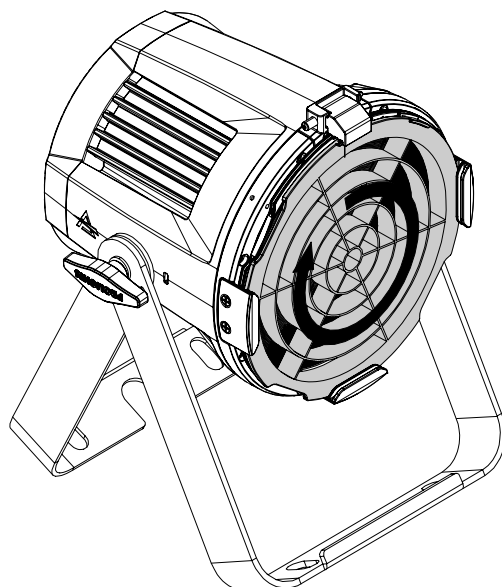
CONCENTRIC LOUVRE (CODE EPIPMCLOUVREBK - OPTIONAL)

1



Open the Holder Clip and insert in the fixing lens accessory, pay attention to match the holders with the slots in the accessory.

2

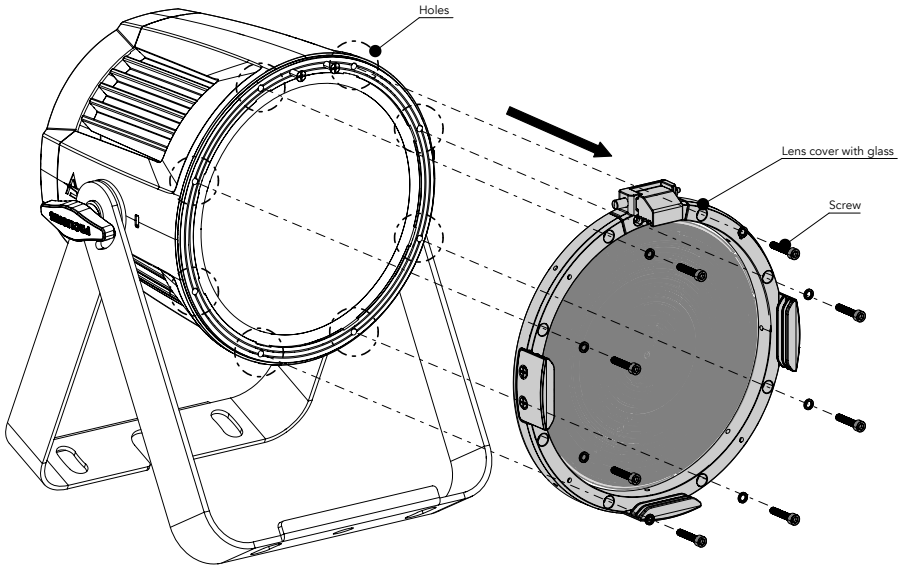


Mount the accessory for fixing lens on the lens cover and rotate to lock it.

Fig.15

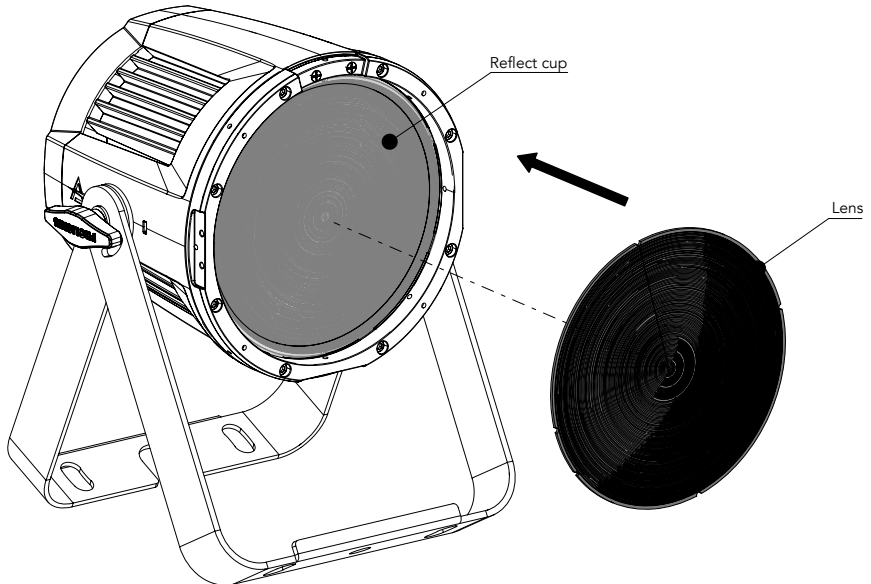
LENS ASSEMBLY FROM INSIDE

1



Loosen the 8 M4x20 screws and the M4 washers to remove the lens cover and glass.

2

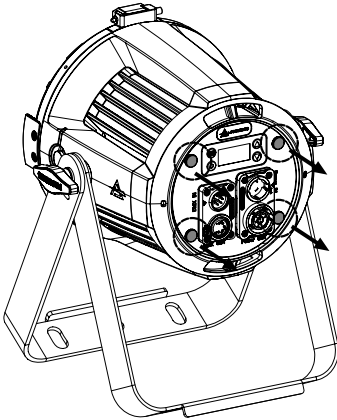


Mount the lens on the reflect cup and then carry out the reverse operation of the previous point to reassemble the lens cover with the glass.

Fig.16

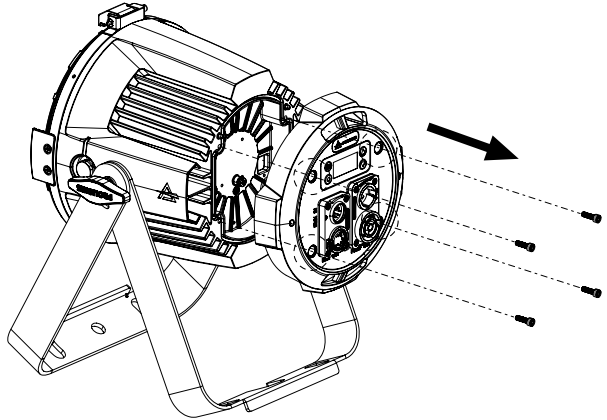
LENS ASSEMBLY FROM INSIDE

1



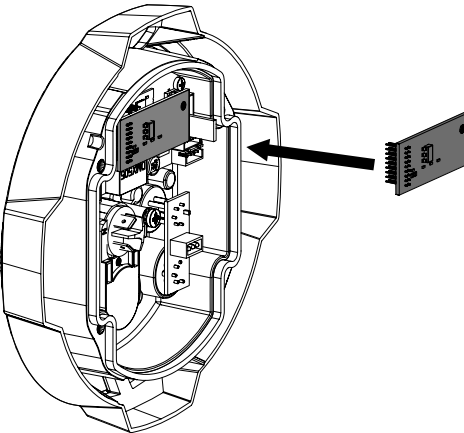
Remove the 4 grommets as shown in Figure 1.

2



Unscrew the screws under the grommets and remove the cover with the connectors and the user interface as shown in Figure 2.

3



Connect the radio board to the appropriate connector on the master pcb and secure the antenna using a nylon cable tie.

4

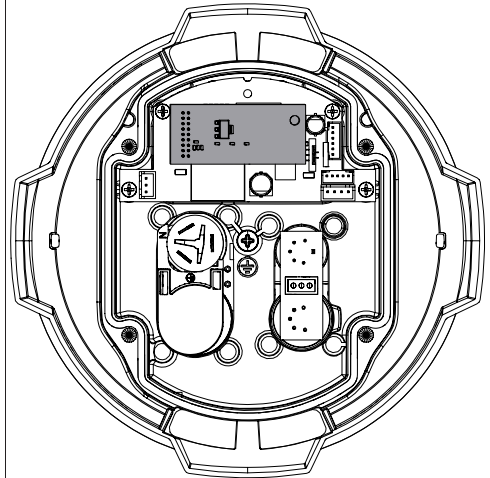
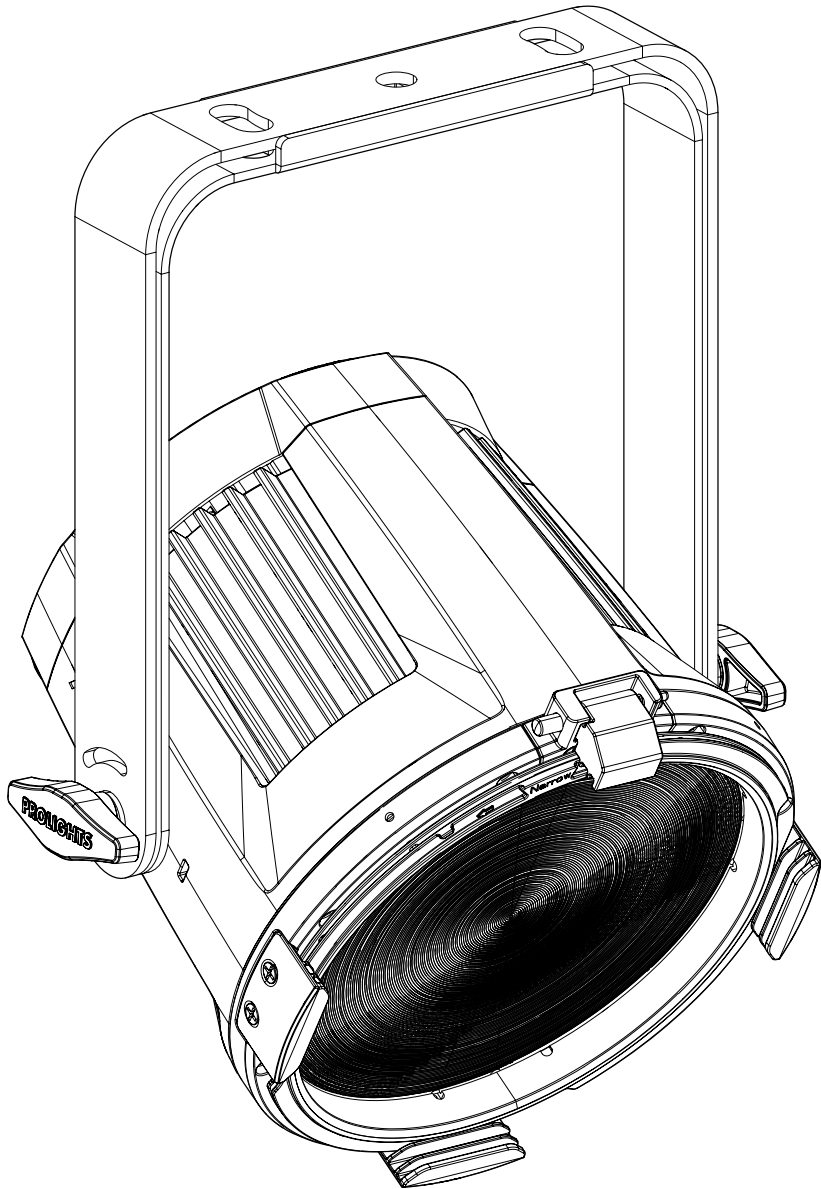


Fig.17

16 - PERIODICAL CLEANING

WARNING! Turn OFF power and allow approximately 20 minutes for the fixture to cool down.



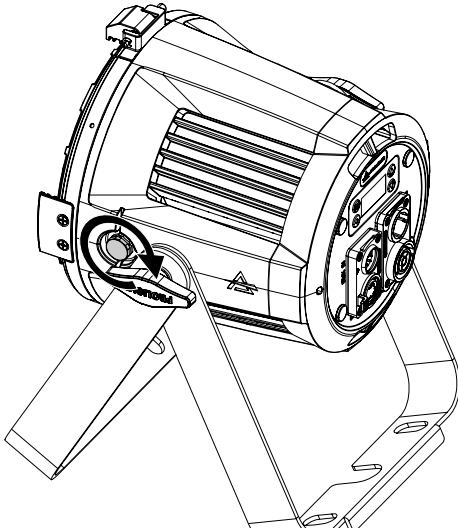
Use a soft cloth dampened with any detergent liquid for cleaning to remove the dirt from the optics.

Fig. 18

17 - TEST OF IP65 RATING

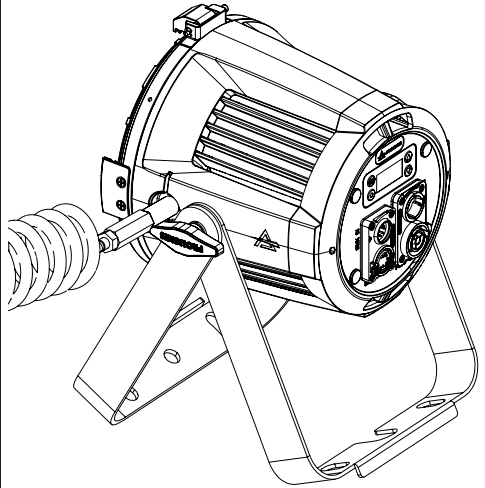
To check sealing after servicing use the IPTESTBOX.

1



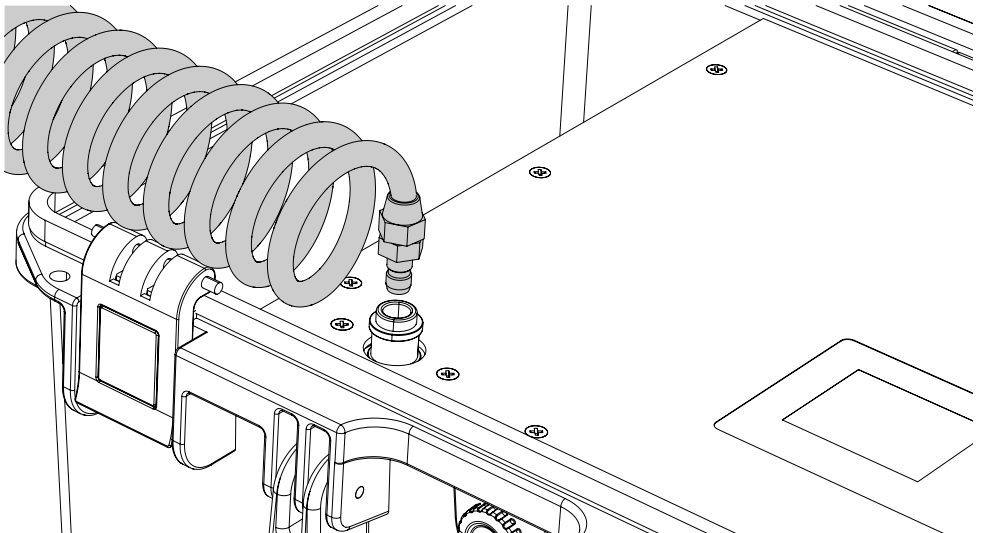
Remove the gork valve from the side of fixture.

2



Insert the threaded end into the threaded valve hole socket.

2



Connect the air hose to the IPTESTBOX by inserting the quick-connect fitting into the coupler.

Fig. 19

18 - 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 (T8A 250V).


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	<ul style="list-style-type: none"> No power to the product 	<ul style="list-style-type: none"> Check that power is switched ON and cables are plugged in.
	<ul style="list-style-type: none"> Fuse blown or internal fault 	<ul style="list-style-type: none"> 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 controller.	<ul style="list-style-type: none"> Bad signal connection 	<ul style="list-style-type: none"> Inspect connections and cables. Fix eventual bad connections. Repair or replace damaged cables.
	<ul style="list-style-type: none"> Signal connection not terminated 	<ul style="list-style-type: none"> Insert DMX termination plug in signal output socket of the last product on the signal line.
	<ul style="list-style-type: none"> Incorrect addressing of the product 	<ul style="list-style-type: none"> Check the product address and control settings
	<ul style="list-style-type: none"> One of the product is defective and is corrupting the signal transmission on the signal line 	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> One or more hardware components requires mechanical adjustments 	<ul style="list-style-type: none"> Check product stored error messages for more information. Contact PROLIGHTS Service or an authorized service partner.
Mechanical effect loses position	<ul style="list-style-type: none"> Mechanical hardware require cleaning, adjustment or lubrication 	<ul style="list-style-type: none"> Check product stored error messages for more information. Contact PROLIGHTS Service or an authorized service partner.
Light output turn OFF Intermittently	<ul style="list-style-type: none"> Fixture is too hot 	<ul style="list-style-type: none"> Check product stored error messages. Allow product to cool. Clean the product and airflow filters. Reduce ambient temperature.
	<ul style="list-style-type: none"> Hardware failure (temperature sensor, fans, Light source...) 	<ul style="list-style-type: none"> Check product stored error messages for more information. Contact PROLIGHTS Service or an authorized service partner.
General low light intensity	<ul style="list-style-type: none"> Dirty lens assembly 	<ul style="list-style-type: none"> Clean the fixture regularly.
	<ul style="list-style-type: none"> Dirty or damaged filters 	<ul style="list-style-type: none"> Install lens assembly properly.

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.



PROLIGHTS is a trademark of
MUSIC & LIGHTS S.r.l.
musiclights.it

Via A.Olivetti snc
04026 - Minturno (LT) ITALY
Tel: +39 0771 72190

prolights.it
support@prolights.it