# ARCSPOT XL FC

IP66 Spot featuring with 61x4W RGB+WarmWhite source, 10° native

# USER MANUAL

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.

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**

# INDEX

# SAFETY INFORMATION

**WARNING!**
- See https://www.prolights.it/product/ARCSPOTXLFC#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.
- The product has XLR sockets for DMX input and output.
- Connection of the control signal: DMX LINE.
- Notice: this control circuit is not isolated.
- Cumulative leakage current of less than 3.5mA on the control circuit.

**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 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.

**0,5 m**

### Minimum distance of illuminated objects
- The projector needs to be positioned so that the objects hit by the beam of light are at least 0.5 meters (1.64 ft) from the lens of the projector.

**$T_a$ 45°C**

### Max operating ambient temperature (Ta)
- Do not operate the fixture if the ambient temperature (Ta) exceeds 45 °C (113 °F).

**$T_a$ -20°C**

### Minimum operating ambient temperature (Ta)
- Do not operate the fixture if the ambient temperature (Ta) 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.

**IP66**

### Permanent Outdoor use
- This product is rated with an IP (Ingress protection) for permanent 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.

**$T_C$ 70°C**

### Temperature of the external surface
- The surface of the fixture can reach up to 70 °C (158 °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 1 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 adistance closer than 3,5 m (11,48 ft) is not expected.

| | Minimun distance | Risk Group 2 | Risk Group 1 |
|---|---|---|---|
| | 0.2 m 0.7 ft | 3,5 m 11,48 ft | |
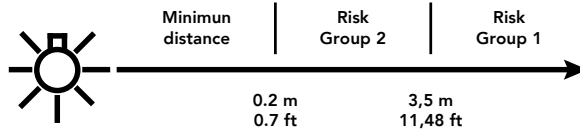
**Disposal**
- This product is supplied in compliance with European Directive 2012/19/EU – Waste Electrical and Electronic Equipment (WEEE). To preserve the environment please dispose/ recycle this product at the end of its life according to the local regulation.

**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 8750 + CSA C22.2 No. 250.13-22 - Light Emitting Diode (LED) Equipment for use in Lighting Product.

**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.

# 1 - PACKAGING

**PACKAGE CONTENT**
- 1x ARCSPOTXLFC.
- User Manual.

**OPTIONAL ACCESSORIES**
Check the updated accessories list, description and informations of the product at the following link:
https://www.prolights.it/product/ARCSPOTXLFC#accessories

# 2 - TECHNICAL DRAWING
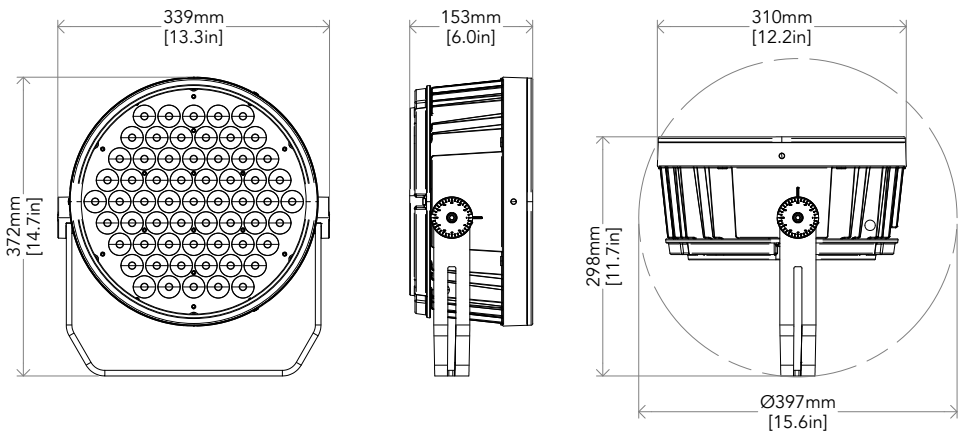


*Weight: 11,9 kg - 26,23 lbs*

*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.

**NOTE**: *In external installations it is advisable to mount the product with the cables facing downwards to avoid water or humidity deposits which can compromise functionality in the long term.*

C6002
clamp

RSR1235B
Steel security cable

42mm
[1.7in]

100mm
[3.9in]

3xØ13mm
[Ø0.5in]
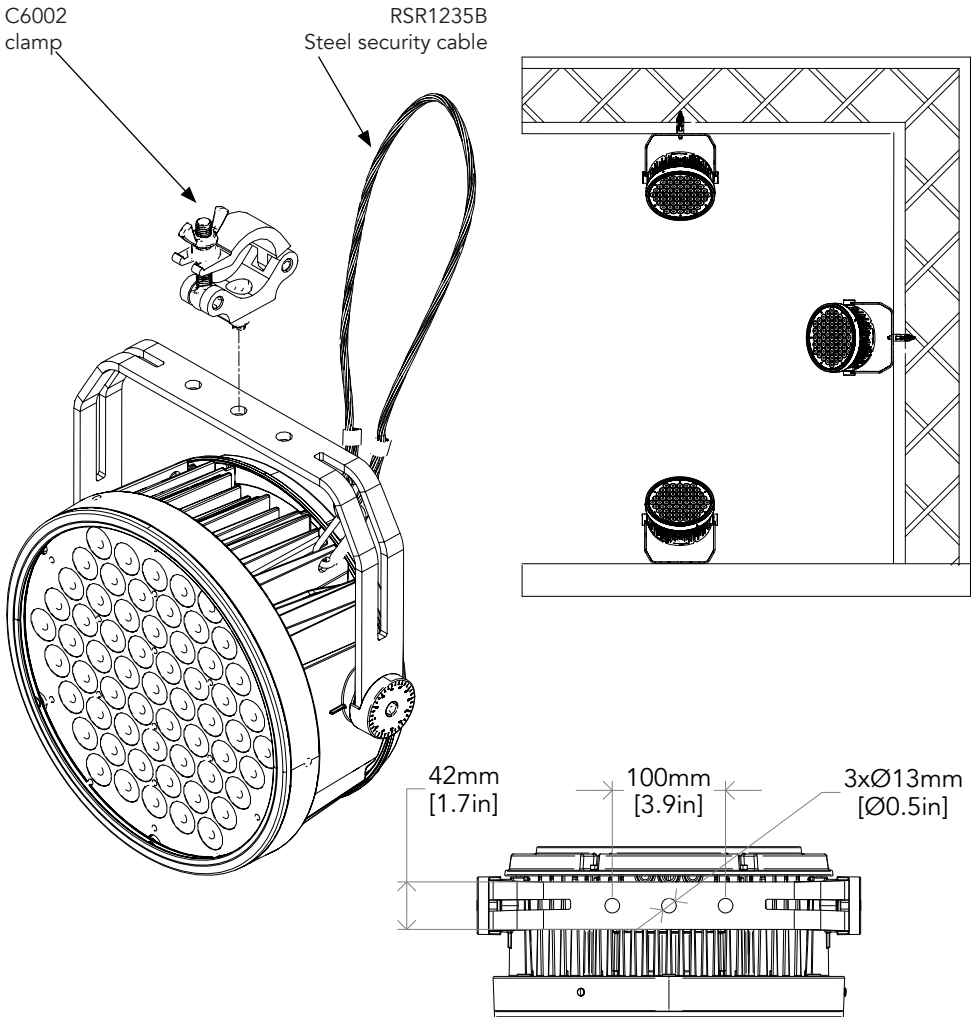
*Fig. 02*

# 4 - PRODUCT OVERVIEW

1. ADJUSTABLE YOKE: to install the fixture.
2. SAFETY EYES: to attach safety cable.
3. GORE VALVE.
4. DMX IN (4-p XLR): 1 = GND, 2 = sign-, 3 = sign+, 4 N/C, 5.
5. POWER IN: for connection to the Mains 100-240V~/50-60Hz.
6. DMX OUT (4-p XLR): 1 = GND, 2 = sign-, 3 = sign+, 4 N/C, 5.
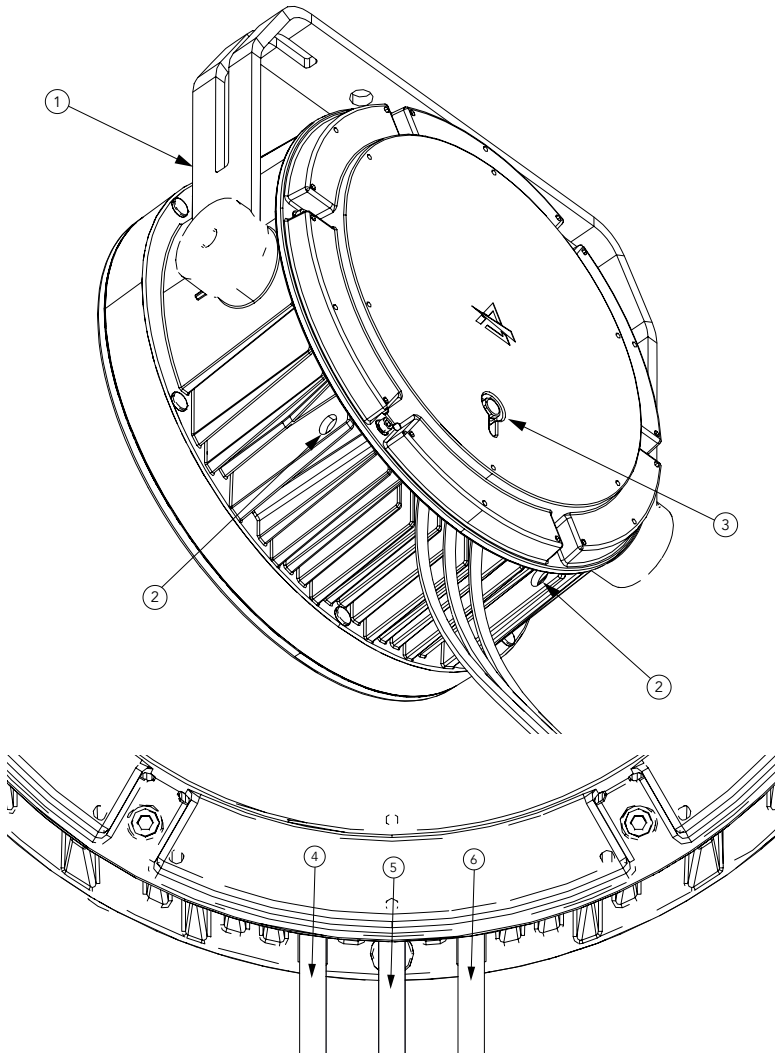


*Fig. 03*

# 5 - 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 (max absolutes range :  90- 264V).
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 220W.

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

# 6 - 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.

# 7 - DMX CONNECTION

**CONNECTION OF THE CONTROL SIGNAL: DMX LINE**
The product has connectors for DMX input and output.
The default pin-out on both connectors is as the following diagram:



DMX - INPUT
IP67 CONNECTOR

Yellow    Black

Red    White

DMX - OUTPUT
IP67 CONNECTOR

Black    Yellow

White    Red

*Fig. 06*

**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.**

**NOTE: To connect the unit to your DMX network, it is necessary to use the adapters XLR 5 pin-IP67 signal connector, supplied with this product.**

**CONNECTION DAISY CHAIN OF THE DMX LINE**
Connect the DMX data output from the DMX source to the product DMX input (male connector).
Run the data link from the product DMX output (female connector) connector to the DMX input of the next fixture.
Terminate the data link by connecting a 120 Ohm signal termination.
The termination is prepared by 120Ω 1/4 W resistor between pins 2 and 3 of the male DMX connector. Install a DMX termination plug on the last fixture on the link. If a splitter is used, terminate each branch of the link.

**NOTE: when not using the DMX input or DMX output connectors, you must seal the cable ends with the supplied caps.**

## 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:



DMX Address: 1   DMX Address: 13   DMX Address: 25   DMX Address: 37

DMX IN   DMX OUT   DMX IN   DMX OUT   DMX IN   DMX OUT   DMX IN   DMX OUT

DMX512 Controller

*Fig. 08 - Example 12 DMX channels configuration*
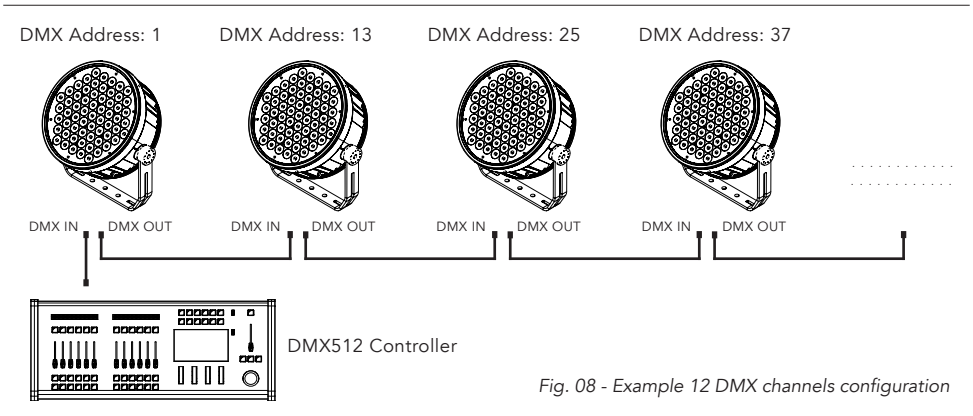
## CONSTRUCTION OF THE DMX TERMINATION

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.



**120 Ω**

Pin1 : GND - Shield (Black)
Pin2 : - Signal (Yellow)
Pin3 : + Signal (Red)
Pin4 : Auto-addressing (White)

Example:
5 pin XLR connector

*Fig. 07*
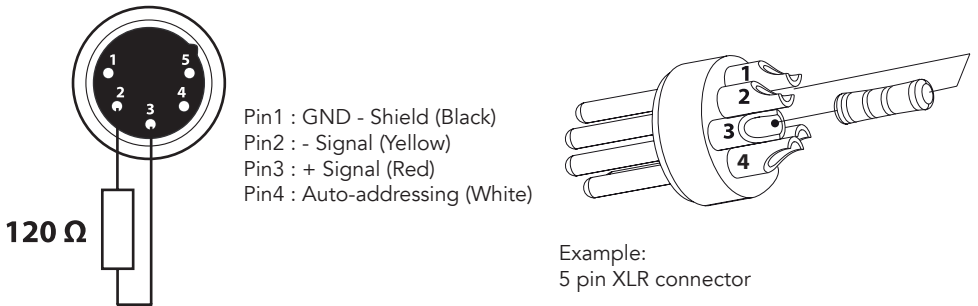
# 8 - OPERATION VIA DATAMASTER

The unit uses a DATAMASTER for configuration purposes. The diagram below shows how to connect the DATAMASTER to this product. This connection will control multiple products at the same time.
To set different Stand Alone mode on different product, you must connect the DATAMASTER to each product, individually.
However, by using the DATAMASTER, you may address each product in the daisy chain to a different DMX address by using the RDM function without the need connect to each individual product.
Important: The DATAMASTER must be used to configure this product.
MUSIC & LIGHTS suggests that you connect no more than 11 units in this mode and keep the total distance to less than 60 m (197 ft). Otherwise, you might need to use an RDM optically isolated signal amplifier.

**RDM SETTING**
To set the RDM functions with the DATAMASTER follow these steps:
• Turn on the DATAMASTER;
• Select the "RDM" function;
• Wait the discovering of all units;
• Select the desired unit and press ENTER button;
• Change the value of the desired function.

For the operating procedure, refer to the DATAMASTER user manual.

DMX Address: 1    DMX Address: 13    DMX Address: 25    DMX Address: 37

DMX IN    DMX OUT    DMX IN    DMX OUT    DMX IN    DMX OUT    DMX IN    DMX OUT
DMX OUT

DATAMASTER

*Fig. 04 - Example 12 DMX channels configuration*

*Fig. 08*
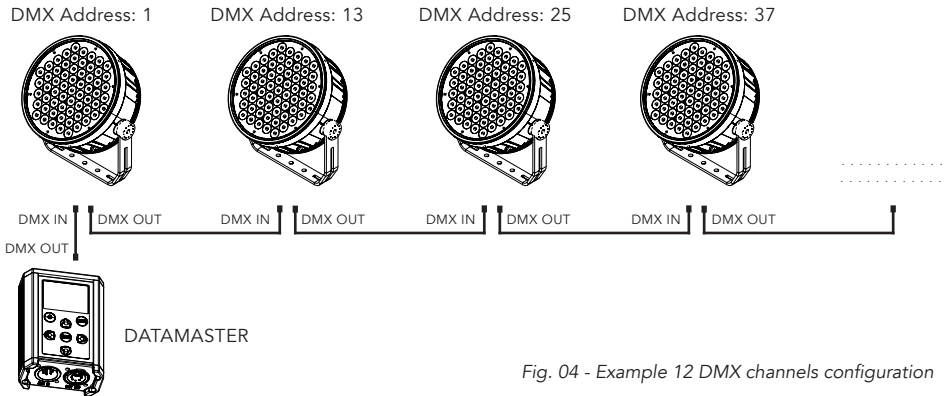
# 9 - RDM MENU STRUCTURE

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

| N° | MENU | LEVEL 1 | LEVEL 2 | LEVEL 3 | DESCRIPTION |
|---|---|---|---|---|---|
| 1 | DMX ADDRESS | **001** - 512 | | | *Set address used for Fixture.* |
| 2 | DMX MODE | **5CH** | | | *Set DMX chart for Main Fixture.* |
| | | 6CH | | | |
| | | 9CH | | | |
| | | 12CH | | | |
| 3 | DIMMER CURVE | LINEAR | | | *Select Dimmer curve.* |
| | | S-CURVE | | | |
| | | **SQUARE LAW** | | | |
| | | INVERSE SQUARE LAW | | | |
| 4 | DIMMER SPEED | **AUTO** | | | *Select Dimmer speed.* |
| | | FAST | | | |
| | | MEDUIM | | | |
| | | SLOW | | | |
| | | OFF | | | |
| 5 | LED FREQUENCY | 600Hz | | | *Select LED PWM frequency.* |
| | | **1200Hz** | | | |
| | | 2000Hz | | | |
| | | 4000Hz | | | |
| | | 6000Hz | | | |
| | | 25kHZ | | | |
| 6 | DMX FAULT | HOLD | | | *Define the behaviour of fixture in case of DMX signal lost.* |
| | | BLACKOUT | | | |
| | | **STAND ALONE** | | | |
| 7 | ADVANCED | SPEKTRA | 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** | | *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 | | *CCT doesn't guarantee High CRI Values and color output of one fixture may or may not closely match that of other fixtures.* |
| | | LED MODE | **HIGH BRIGHTNESS** | | *Delivering the full output on every primary color.* |
| | | | HIGH QUALITY | | *Calibrated white output at 6000K, when all primary colors are set to full.* |

| N° | MENU | LEVEL 1 | LEVEL 2 | LEVEL 3 | DESCRIPTION |
|---|---|---|---|---|---|
| 7 | ADVANCED | WHITE POINT | FULL ON | | |
| | | | 3200K | | |
| | | | 4000K | | |
| | | | 5600K | | |
| | | | 6000K | | |
| | | | 8000K | | |
| 8 | INFORMATIONS | DEVICE TIME | FIXTURE HOURS | TOTAL | *To check the total working hours of the unit.* |
| | | | | PARTIAL | |
| | | | CURRENT HOURS | TOTAL | *To check the current working hours of the unit.* |
| | | | | PARTIAL | |
| | | | SOURCE HOURS | TOTAL | *To see the total operating hours of the LED source.* |
| | | | | PARTIAL | |
| | | | POWER ON CYCLE | TOTAL | *To see the power cycles of the machine.* |
| | | | | PARTIAL | |
| | | | MAINTENANCE TIME | ELAPSED TIME | *To choose and reset unit maintenance warning hours.* |
| | | | | ALERT PERIOD | |
| | | POWER CONSUMPTION | | | *Show actual power consumption.* |
| | | TEMPERATURE | NEAR SOURCE TEMP, DRIVER PCB TEMP, LED PCB TEMP,… | | *To see the unit temperature.* |
| | | SOFTWARE VERSION | | | *View informations about software version.* |
| | | DEVICE INFO | | | *View informations about device.* |
| | | DEVICE LABEL | | | *Show RDM Device label.* |
| | | RDM UID | | | *View ID for the RDM control.* |
| 9 | 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. This unit must be the first unit in line; Set the successive units to be slave.* |
| | | | MASTER NO DMX | | |
| | | | **SLAVE** | | |
| | | EFFECTS | **EFFECT 1** | SPEED:1-**100** | *Effects modes allows creation and editing of 5 effects maximum. Each effect contains up to 20 colors, a Main Dimmer and a Main Strobe.* |
| | | | … | | |
| | | | EFFECT 5 | | |
| | | STATIC COLORS | RED | DIMMER:0-255 | *Select of the following predefined color combination and its Dimmer value. After enabled this mode, the unit will be automatically assigned as Master.* |
| | | | … | | |
| | | | **FULL** | | |
| | | COLOR MACRO | SEE COLOR MACRO PAGE | | |
| | | WHITE PRESETS | 2700K | DIMMER:0-255 | |
| | | | **3200K** | | |
| | | | … | | |
| | | | 10000K | | |
| | | MANUAL | RED | DIMMER: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.* |
| | | | GREEN | DIMMER:0-**255** | |
| | | | BLUE | DIMMER:0-**255** | |
| | | | WARM WHITE | DIMMER:0-**255** | |
| 10 | FACTORY DEFAULT | - | | | |

# 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.

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

| Category | Parameter | Value | GET | SET |
|---|---|---|---|---|
| Product Information | SUPPORTED_PARAMETERS | 0x0050 | x | |
| | PARAMETER_DESCRIPTION | 0x0051 | x | |
| | PRODUCT_DETAIL_ID_LIST | 0x0070 | x | |
| | DEVICE_MODEL_DESCRIPTION | 0x0080 | x | |
| | MANUFACTURER_LABEL | 0x0081 | x | |
| | DEVICE_LABEL | 0x0082 | x | x |
| | FACTORY_DEFAULTS | 0x0090 | x | x |
| DMX512 Setup | DMX_PERSONALITY | 0x00E0 | x | x |
| | DMX_PERSONALITY_DESCRIPTION | 0x00E1 | x | |
| | DMX_START_ADDRESS | 0x00F0 | x | x |
| | SLOT_INFO | 0x0120 | x | |
| | SLOT_DESCRIPTION | 0x0121 | x | |
| | DEFAULT_SLOT_VALUE | 0x0122 | x | |
| Sensors | SENSOR_DEFINITION | 0x0200 | x | |
| | SENSOR_VALUE | 0x0201 | x | x |
| | CURVE | 0x0343 | x | x |
| | CURVE_DESCRIPTION | 0x0344 | x | x |
| | OUTPUT_RESPONSE_TIME | 0x0345 | x | x |
| | OUTPUT_RESPONSE_TIME_ DESCRIPTION | 0x0346 | x | |
| | MODULATION_FREQUENCY | 0x0347 | x | x |
| | MODULATION_FREQUENCY_ DESCRIPTION | 0x0348 | x | |
| Power/Lamp Settings | DEVICE_HOURS | 0x0400 | x | x |
| | LAMP_HOURS | 0x0401 | x | x |
| | LAMP_STRIKES | 0x0402 | x | x |
| | LAMP_STATE | 0x0403 | x | x |
| | LAMP_MODE | 0x0404 | x | x |
| | DEVICE_POWER_CYCLES | 0x0405 | x | x |

## Manufacturer Specific PIDs

| Parameter | PID | GET | SET | Value | Description |
|---|---|---|---|---|---|
| DMX FAULT | 0x82DD | x | x | 0-2 | 0: Hold<br>1: Blackout<br>**2: Stand Alone** |
| MASTER/SLAVE | 0x8211 | x | x | 0-2 | 0: Master DMX<br>1: Master NO DMX<br>**2: Slave** |
| STAND ALONE MODE | 0x82EC | x | x | 0-4 | 0: S.A. EFFECTS<br>**1: S.A. FIXED COLOR**<br>2: S.A. WHITE PRESET<br>3: S.A. COLOR MACROS<br>4: S.A. MANUAL COLORS |
| EFFECTS | 0x8209 | x | x | 1-5 | **DEFAULT: 1** |
| EFFECTS SPEED | 0x8210 | x | x | 1-100 | **DEFAULT: 100** |
| SPEKTRA CALIBRATION | 0x822F | x | x | 0-2 | 0: ON<br>**1: Pure Colors**<br>2: OFF |
| FIXED COLOR | 0x82BE | x | x | 0-14 | 0: R   8: GW<br>1: G   9: BW<br>2: B   10:RGB<br>3: W   11:RGW<br>4: RG   12:RBW<br>5: RB   13:GBW<br>6: RW   **14:RGBW**<br>7: GB |
| WHITE PRESET | 0x82BF | x | x | 0-16 | 0: 2700K<br>1: 2800K<br>**2: 3200K**<br>3: 3500K<br>4: 4000K<br>...<br>16:10000K |
| MANUAL RED | 0x82C0 | x | x | 0-255 | **DEFAULT: 255** |
| MANUAL GREEN | 0x82C1 | x | x | 0-255 | **DEFAULT: 255** |
| MANUAL BLUE | 0x82C2 | x | x | 0-255 | **DEFAULT: 255** |
| MANUAL WHITE | 0x82C3 | x | x | 0-255 | **DEFAULT: 255** |
| COLOR MACROS | 0x82ED | x | x | 1-67 | **DEFAULT: 1** |
| LED MODE | 0x8330 | x | x | 0-1 | **0: High Brightness**<br>1: High Quality |
| WHITE POINT | 0x8331 | x | x | 0-5 | **0: FULL ON**<br>1: 3200K<br>2: 4000K<br>3: 5600K<br>4: 6000K<br>5: 8000K |
| CURRENT HOURS | 0x82C5 | x | | 0-1 | |
| POWER CONSUMPTION(AC 220V) | 0x82EF | x | | 0-1 | |
| MAINTENANCE TIME:ALERT PERIOD | 0x82DF | x | x | 10-300 | **DEFAULT: 300** |
| MAINTENANCE TIME:ELAPSED TIME | 0x82E0 | x | x | 0-1 | **DEFAULT: 0** |
| ERROR MESSAGES | 0x82EA | x | | 0-1 | 0: No Error |
| CLEAN ALL DATA | 0x82C8 | x | x | 0-1 | **0: No**<br>1: Yes |

# 11 - DMX CHARTS

**RDM Personality ID List**

**RDM Model ID:** 0xD144

| ID | DMX Mode | Footprint |
|----|----------|-----------|
| 1 | 5CH | 5CH |
| 2 | 6CH | 6CH |
| 3 | 9CH | 9CH |
| 4 | 12CH | 12CH |
| 5 | 13CH | 13CH |

| PARAMETER | MODE | | | | |
|-----------|------|------|------|-------|-------|
| | 5CH | 6CH | 9CH | 12CH | 13CH |
| DIMMER | | 1 | 1 | 1 | 1 |
| DIMMER FINE | | | 2 | 2 | 2 |
| CCT | | | | | 3 |
| CCT FINE | | | | | 4 |
| GMP | | | | | 5 |
| CROSSFADE | | | | | 6 |
| RED | 1 | 2 | 3 | 3 | 7 |
| GREEN | 2 | 3 | 4 | 4 | 8 |
| BLUE | 3 | 4 | 5 | 5 | 9 |
| WARM WHITE | 4 | 5 | 6 | 6 | 10 |
| STROBE | | | 7 | 7 | 11 |
| COLOR MACRO | | | | 8 | |
| EFFECTS | | | | 9 | |
| EFFECTS SPEED | | | | 10 | |
| CONTROL | | | 8 | 11 | 12 |
| RESERVED | 5 | 6 | 9 | 12 | 13 |

| 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 | |
| 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 | Default @ 0 |
| 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 | |

### GMP

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

### Crossfade

| Function | 8 bit value | | 16 bit value | | Note |
|---|---|---|---|---|---|
| | From | To | From | To | |
| LINEARY FROM 0% TO 100% | 0 | 255 | - | - | Default @ 255 |

### Red

| Function | 8 bit value | | 16 bit value | | Note |
|---|---|---|---|---|---|
| | From | To | From | To | |
| DIMMER | 0 | 255 | - | - | Default @ 255 |

### Green

| Function | 8 bit value | | 16 bit value | | Note |
|---|---|---|---|---|---|
| | From | To | From | To | |
| DIMMER | 0 | 255 | - | - | Default @ 255 |

### Blue

| Function | 8 bit value | | 16 bit value | | Note |
|---|---|---|---|---|---|
| | From | To | From | To | |
| DIMMER | 0 | 255 | - | - | Default @ 255 |

### Warm White

| Function | 8 bit value | | 16 bit value | | Note |
|---|---|---|---|---|---|
| | From | To | From | To | |
| DIMMER | 0 | 255 | - | - | Default @ 255 |

### 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 | - | - | |
| YELLOW | 12 | 13 | - | - | |
| DIRTY WHITE | 14 | 15 | - | - | |
| ALICE BLLUE | 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 | - | - | |

| | 8 bit | | 16 bit | | |
|---|---|---|---|---|---|
| MEDIUM PINK | 102 | 103 | - | - | Default @ 0 |
| 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 | 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 | - | - | |

| Effects | | | | | |
|---|---|---|---|---|---|
| Function | 8 bit value | | 16 bit value | | Note |
| | From | To | From | To | |
| NO FUNCTION | 0 | 10 | - | - | Default @ 0 |
| FX 1 | 11 | 60 | - | - | |
| FX 2 | 61 | 110 | - | - | |
| FX 3 | 111 | 160 | - | - | |
| FX 4 | 161 | 210 | - | - | |
| FX 5 (FX 1 -4) | 211 | 255 | - | - | |

| Effects Speed | | | | | |
|---|---|---|---|---|---|
| Function | 8 bit value | | 16 bit value | | Note |
| | From | To | From | To | |
| FROM SLOW TO FAST | 0 | 255 | - | - | Default @ 128 |

| Control | | | | | |
|---|---|---|---|---|---|
| Function | 8 bit value | | 16 bit value | | Note |
| | From | To | From | To | |
| No Functon | 0 | 1 | - | - | Default @ 0 |
| DIMMER CURVE LINEAR | 2 | 3 | - | - | |
| DIMMER CURVE S-CURVE | 4 | 5 | - | - | |
| DIMMER CURVE SQUARE LAW | 6 | 7 | - | - | |
| DIMMER CURVE INVERSE SQUARE LAW | 8 | 9 | - | - | |
| DIMMER SPEED AUTO | 10 | 11 | - | - | |
| DIMMER SPEED FAST | 12 | 13 | - | - | |
| DIMMER SPEED MEDIUM | 14 | 15 | - | - | |
| DIMMER SPEED SLOW | 16 | 17 | - | - | |
| DIMMER SPEED OFF | 18 | 19 | - | - | |
| LED FREQUENCY 600HZ | 20 | 21 | - | - | |
| LED FREQUENCY 1200HZ | 22 | 23 | - | - | |
| LED FREQUENCY 2000HZ | 24 | 25 | - | - | |
| LED FREQUENCY 4000HZ | 26 | 27 | - | - | |
| LED FREQUENCY 6000HZ | 28 | 29 | - | - | |
| LED FREQUENCY 25KHZ | 30 | 31 | - | - | |
| DMX FAULT HOLD | 32 | 33 | - | - | |
| DMX FAULT BLACKOUT | 34 | 35 | - | - | |
| DMX FAULT STAND ALONE | 36 | 37 | - | - | |
| SPEKTRA CALIBRATION ON | 38 | 39 | - | - | |
| SPEKTRA CALIBRATION PURE COLORS | 40 | 41 | - | - | |
| SPEKTRA CALIBRATION OFF | 42 | 43 | - | - | |
| LED MODE HIGH BRIGHTNESS | 44 | 45 | - | - | |
| LED MODE HIGH QUALITY | 46 | 47 | - | - | |
| WHITE POINT FULL ON | 48 | 49 | - | - | |
| WHITE POINT 3200K | 50 | 51 | - | - | |
| WHITE POINT 4000K | 52 | 53 | - | - | |
| WHITE POINT 5600K | 54 | 55 | - | - | |
| WHITE POINT 6000K | 56 | 57 | - | - | |
| WHITE POINT 8000K | 58 | 59 | - | - | |
| STAND ALONE MASTER DMX | 60 | 61 | - | - | |
| STAND ALONE MASTER NO DMX | 62 | 63 | - | - | |
| STAND ALONE SLAVE | 64 | 65 | - | - | |
| STAND ALONE EFFECTS | 66 | 67 | - | - | |
| STAND ALONE STATIC COLORS | 68 | 69 | - | - | |
| STAND ALONE WHITE PRESETS | 70 | 71 | - | - | |
| STAND ALONE COLOR MACROS | 72 | 73 | - | - | |
| STAND ALONE MANUAL COLORS | 74 | 75 | - | - | |
| RESERVED | 76 | 249 | - | - | |
| RESET ALL CHANNEL CONTROLLED | 250 | 251 | - | - | |
| RESERVED | 252 | 255 | - | - | |

# 12 - ACCESSORIES INSTALLATION

**HALF SNOOT (CODE ARXLHSNOOTGY - OPTIONAL)**
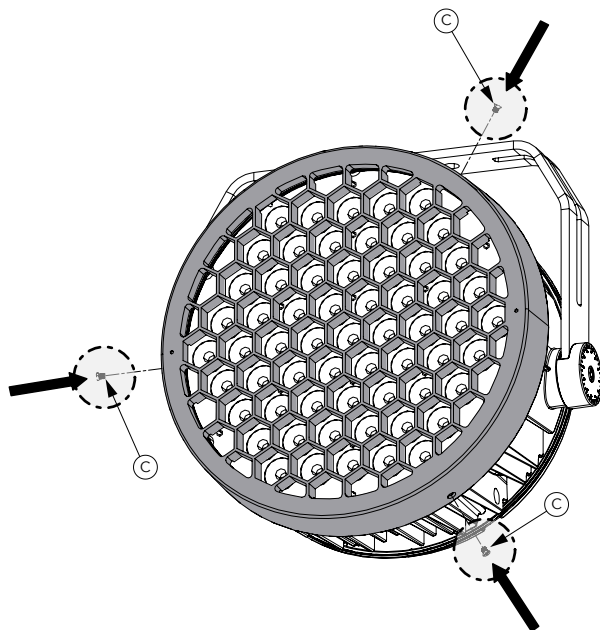
1



2
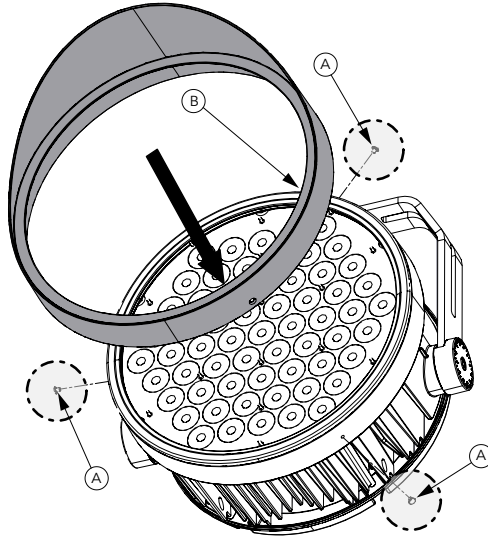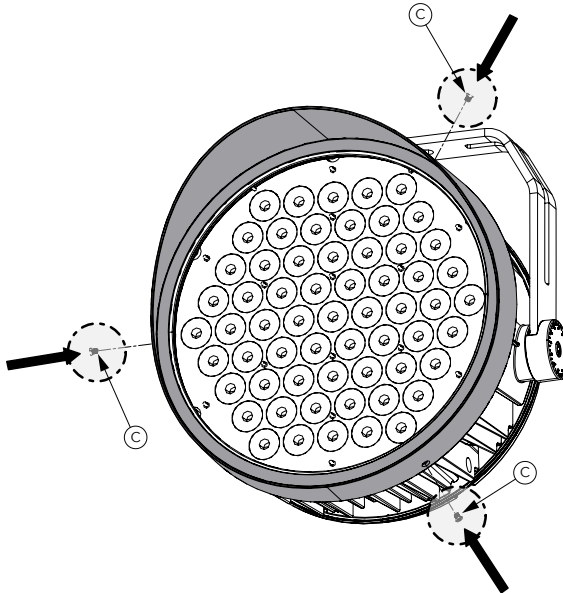


Place fixture on a stable surface.
1.  Remove rubber caps (A). Insert the Half snoot (B).
2.  Screw the supplied screws (C) to secure the accessory.

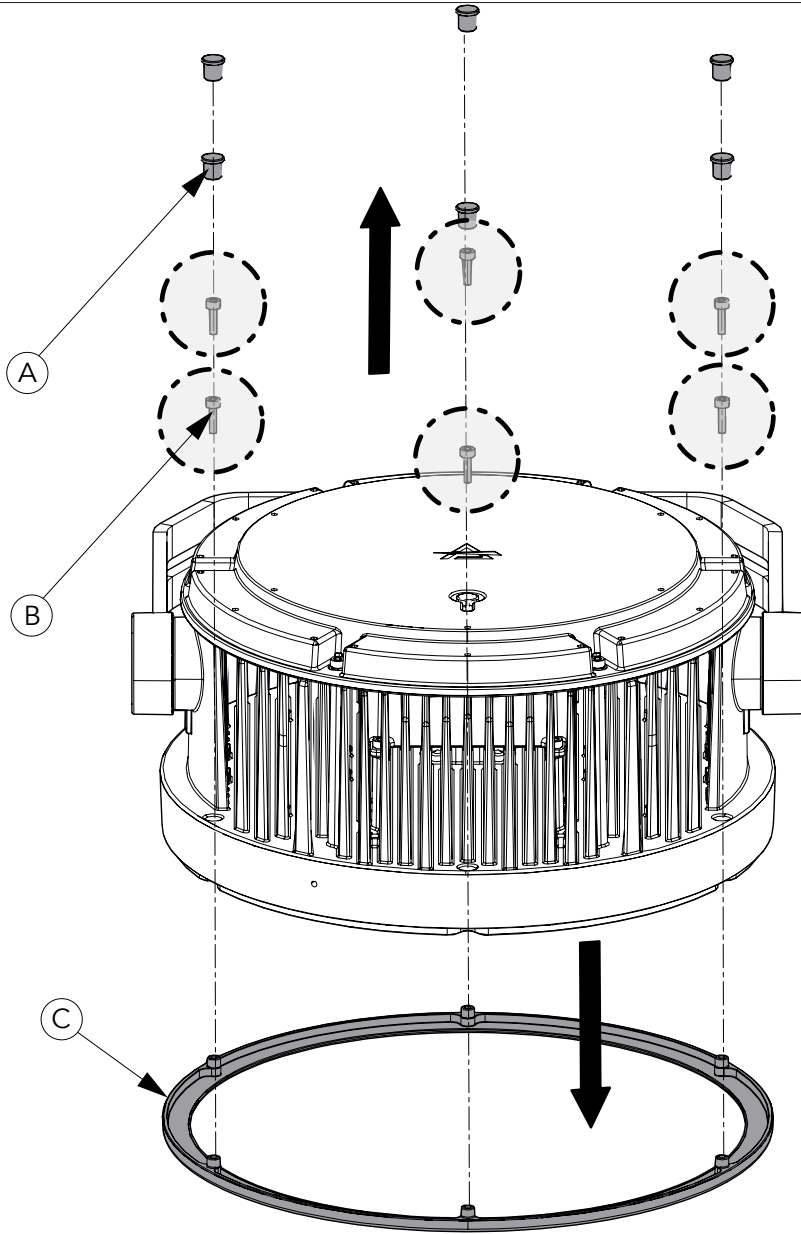**HONEYCOMB LOUVRE (CODE ARXLHLOUVREGY - OPTIONAL)**
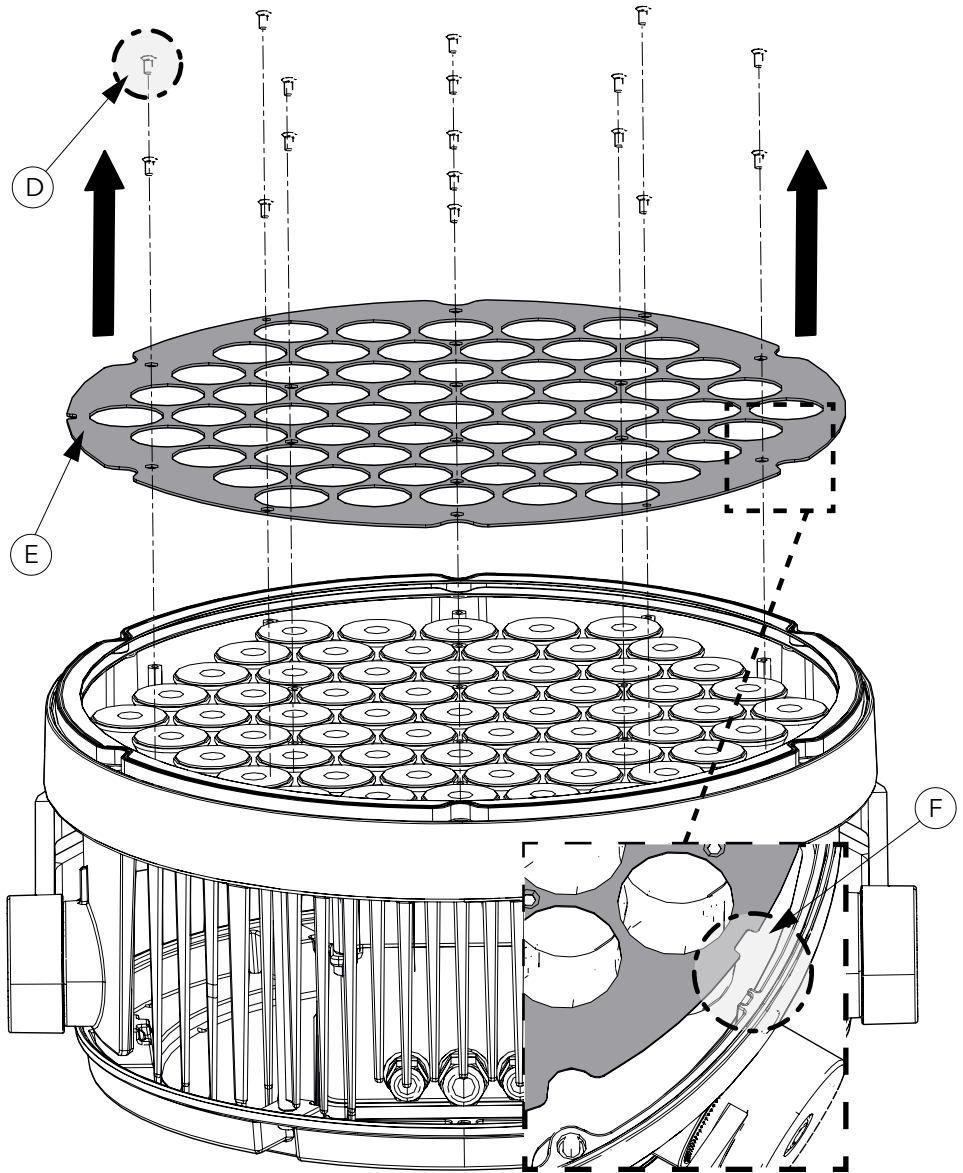
1



2
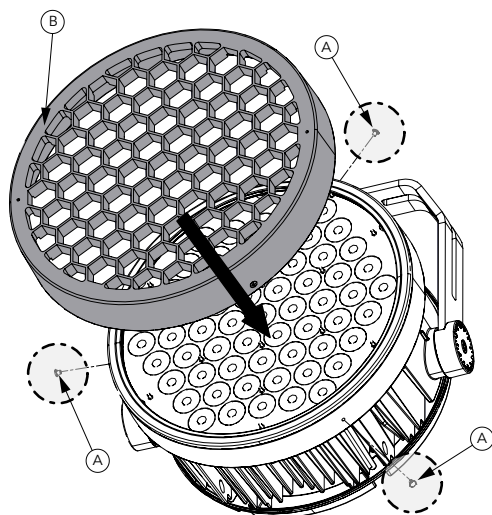


Place fixture on a stable surface.
1. Remove rubber caps (A). Insert the Honeycomb louvre (B).
2. Screw the supplied screws (C) to secure the accessory.

(A)

(B)

(C)

Place fixture on a stable surface.
- Remove the rubber caps (A), then unscrew the metal front ring screws (B).
- Remove the metal front ring (C).

*Fig. 12*

Turn the fixture with lenses upside and proceed as follows:
- Unscrew the lenses holder screws (D).
- Remove the lenses holder (E).

**NOTE**: *be careful to match the spaces* (F) *in the same way as they are disassembled to close the product correctly.*

*Fig. 12*
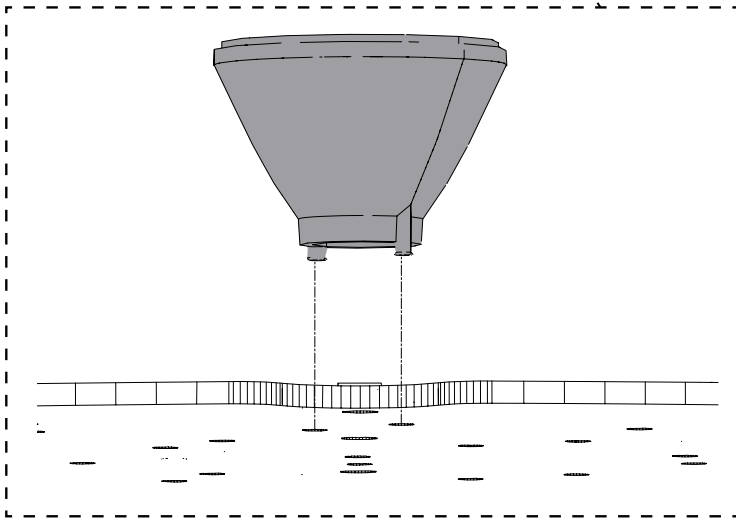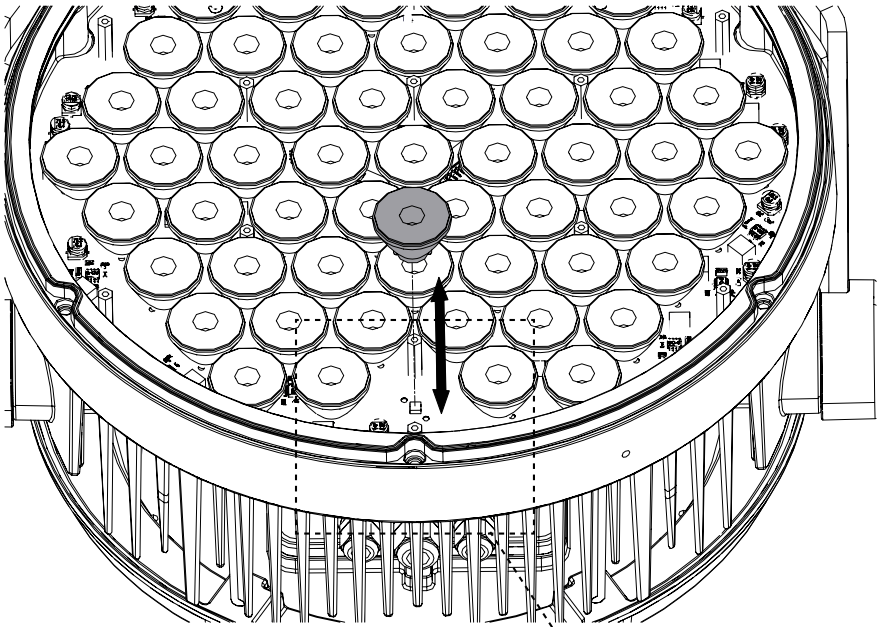
Gently replace each lens as shown in figure,

*Fig. 12*
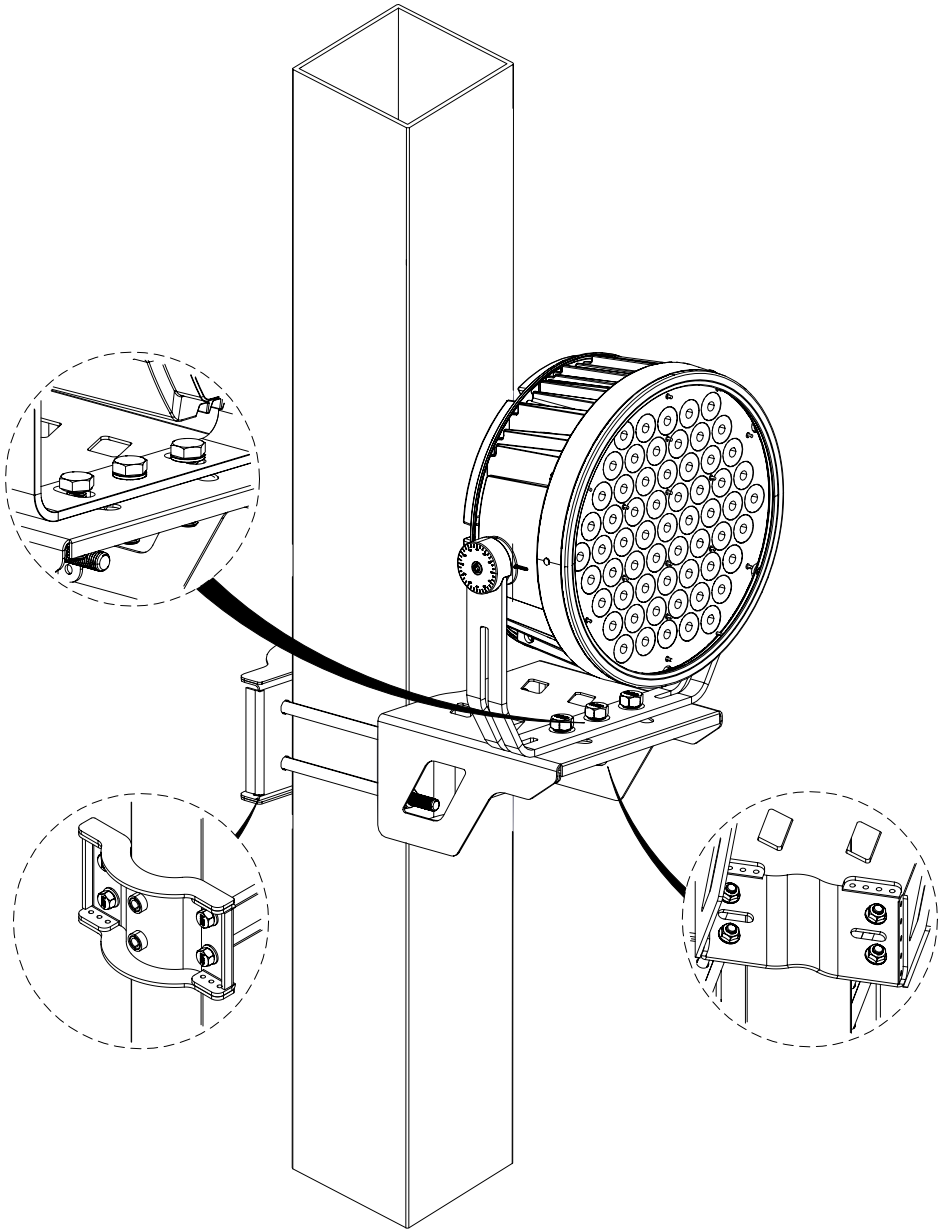
**NOTE**:
Do not mount the bracket on a support whose surface shows deformations, injuries, crushing, etc.
Both the bracket and the unit must be secured with a safety cable.

*Fig. 12*

# 13 - 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 using UPBOXPRO or UPBOX2  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.

- **Only for IP66 projectors**: It is recommended to verify IP grade using IPTESTBOX every time the bodies are removed for maintenance, this tool helps to double check the correct  assembling of the covers with a check of the IP grade of the fixture.
- 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 re-place optical components if their characteristics are affected by wear and tear after an extended pe-riod 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 ac-cessories approved by PROLIGHTS.

## 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 prop-erly in place need to be immediately replaced.
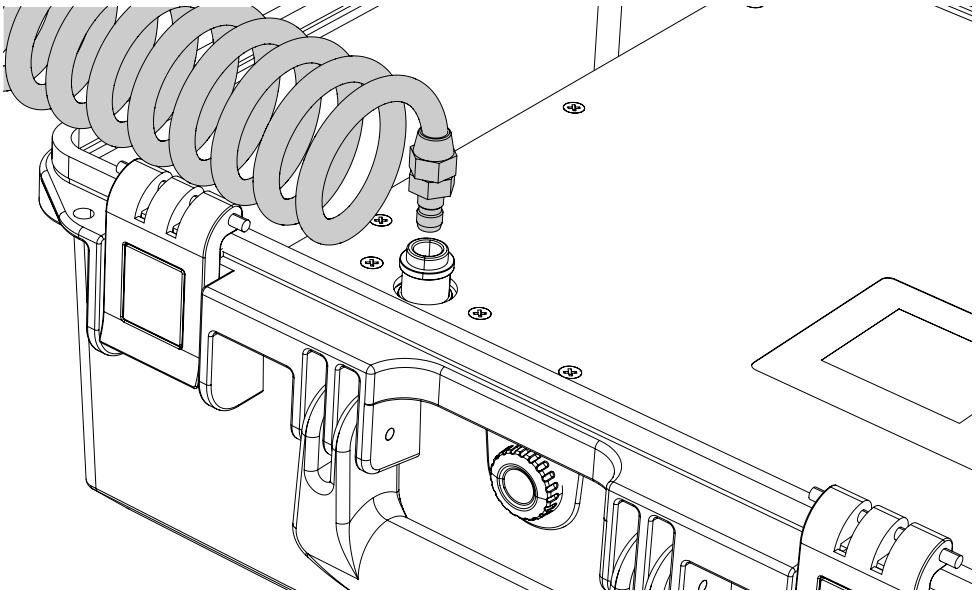
## 14 - TEST OF IP66 RATING

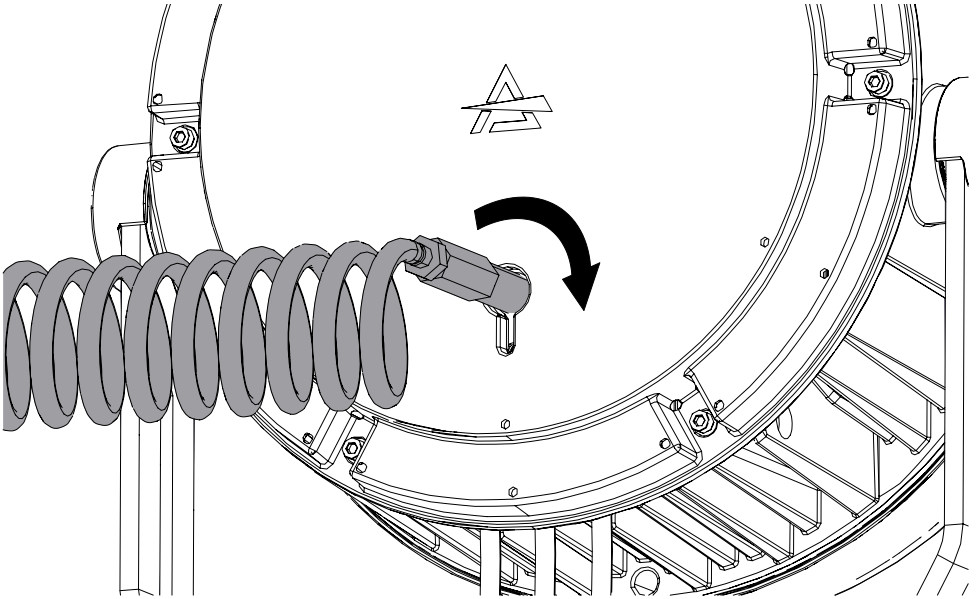It is recommended to verify IP grade using IPTESTBOX every time the bodies are removed for maintenance.

**1**
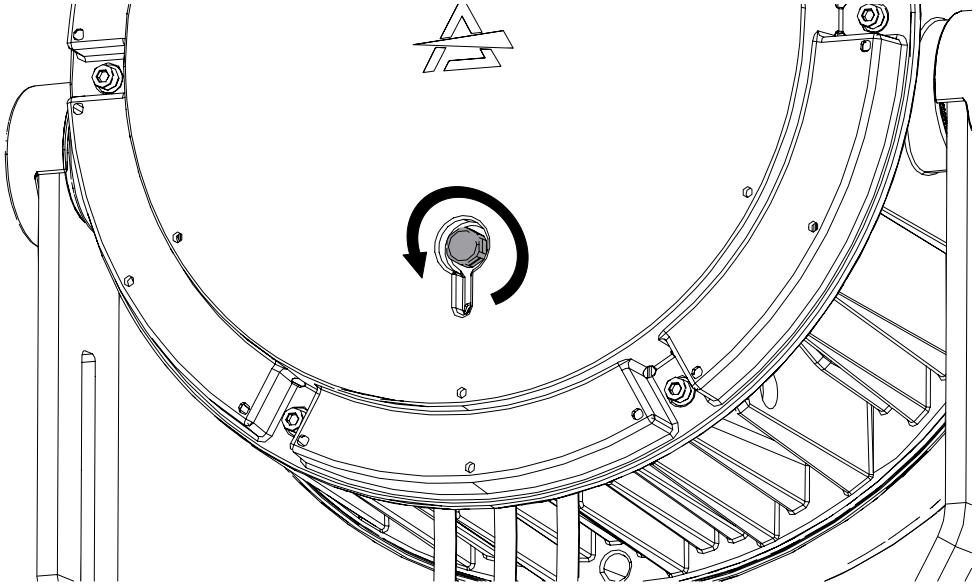


Remove the gore valve from the rear cover.

**2**



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

**3**



Insert the threaded end into the threaded valve hole socket.

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

# Note