



Astra Profile600IP

IP65 LED Moving Profile, with a 600W
White source



USER MANUAL

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

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

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



**Visit the download area
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SAFETY INFORMATION



WARNING!

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



This unit is not for household 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 corrosionresistant hardware.
- For a temporary installation with clamps, ensure that the quarter-turn fastener and/or screws are turned fully, and secured with a suitable safety cable.



Minimum distance of illuminated objects

- The projector needs to be positioned so that the objects hit by the beam of light are at least 1,5 meters (4,92 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 -15°C

Minimum operating ambient temperature (T_a)

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



Protection from burns and fire

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

IP65

Outdoor (temporary) use

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



Light collimation optical system

- This product contains internal light collimation optical system. Avoid to expose the optical system to any intense source of light (including sunlight) from any angle.

T_c 59°C

Temperature of the external surface

- The surface of the fixture can reach up to 59 °C (138,2 °F) during operation. Avoid contact with people and materials.



Radio receiver

This product contains a radio receiver and/or transmitter:

- Maximum output power: 17 dBm.
- Frequency band: 2.4 GHz.



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.



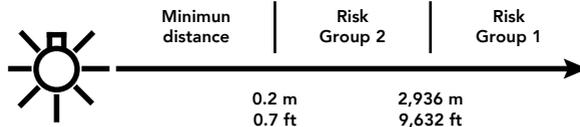
Photobiological safety

- 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 2,936 m (9,632 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 product contains a lithium ion battery

- Don't throw the unit into the garbage at the end of its lifetime.
- Make sure to dispose according to your local ordinances and/or regulations, to avoid polluting the environment!
- The packaging is recyclable and can be disposed.



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).
- 2014/53/EU - Radio Equipment Directive (RED).



Other approvals



1 - PACKAGING

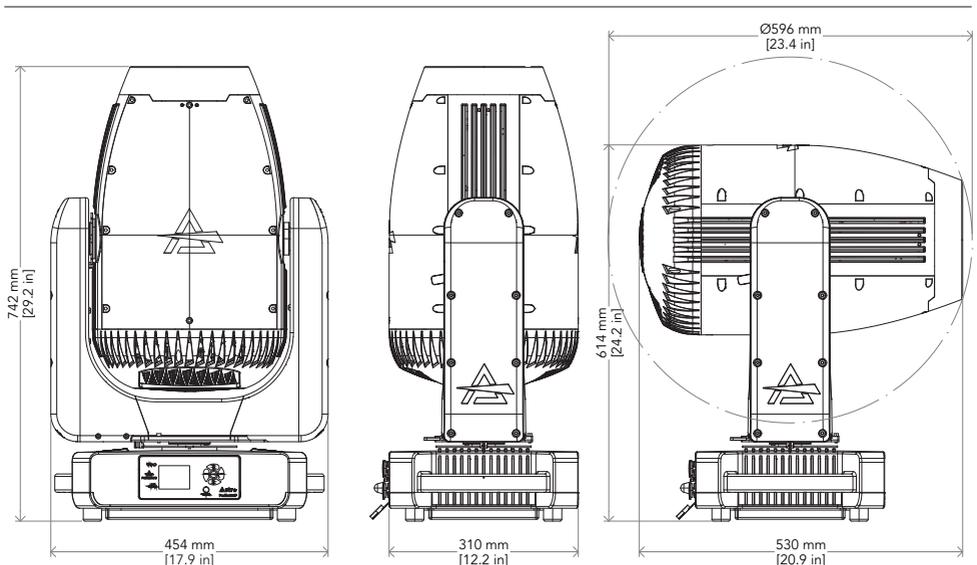
PACKAGE CONTENT

- 1x ASTRAPROFILE600IP.
- 1x 1,5 meters power cable (BARE END - SEETRONIC IP65 power connector).
- 2x OSIP: IP65 quick-lock omega bracket compatible with IP65 moving heads, M10 hole.
- 1x Antenna.
- User Manual.

OPTIONAL ACCESSORIES

- FCLASTRAH420IP: flight case for 2 pcs of ASTRAHYB420 / ASTRAHYB420IP / ASTRAPROFILE600IP.
- IPTESTBOX: portable vacuum and pressure tester for ProLights IP fixtures.
- C6002A/B: slim aluminium clamp, 200 kg loading, 48-51 mm tubes, M10 bolt, aluminium / black.
- RSR0670A/B: steel security cable for hanging bodies, inox steel shackle, aluminium / black.
- WSBBF1G5: blackBox F-1 G5 transmitter, 2,45GHz & 5.2/5,8 GHz, DMX/RDM, 512Ch.
- WSBBF1G6: blackBox F-1 G6 transrec, 512ch, 2.45GHz, DMX&RDM,Bluetooth,G3,G4,G4S, G5, CRMX.
- WSBBR512G5: blackBox R-512 G5 receiver 512Ch, 2.45GHz & 5.8GHz, DMX/RDM optional.
- WSBBR512G6: blackBox R-512 G6 receiver 512Ch, 2.45GHz,DMX&RDM,Bluetooth,G3,G4,G4S,G5,CRMX.
- UPBOX2P5: firmware uploader kit, USB IN, 5-pin XLR DMX OUT.

2 - TECHNICAL DRAWING

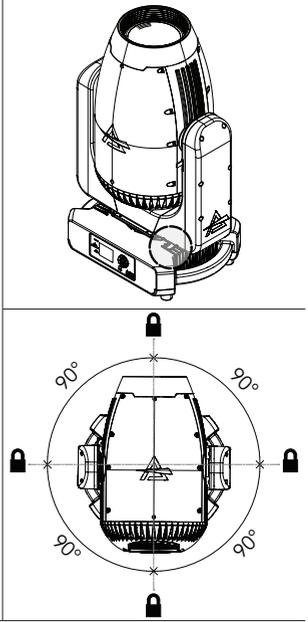
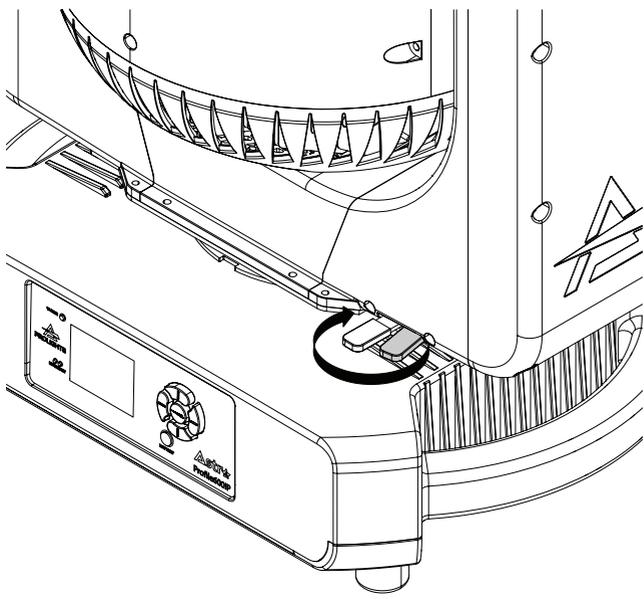


Weight: 45,6 kg - 100,53 lbs

Fig. 01

3 - PAN AND TILT LOCK

PAN Mechanism lock and release



TILT Mechanism lock and release

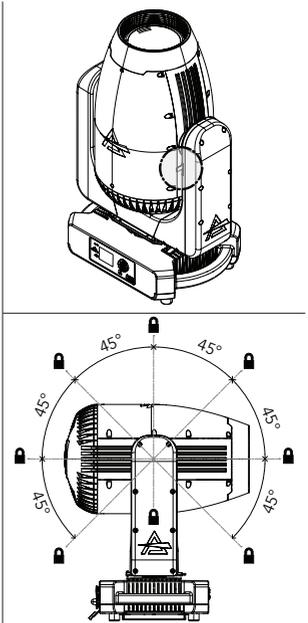
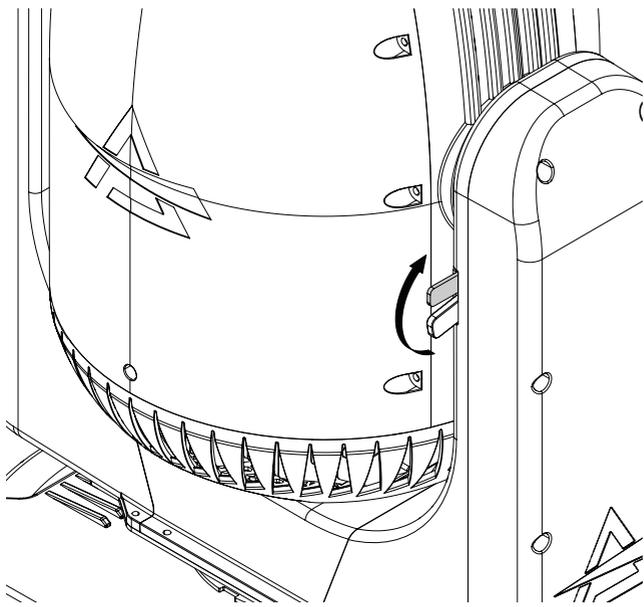


Fig. 02

4 - 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.

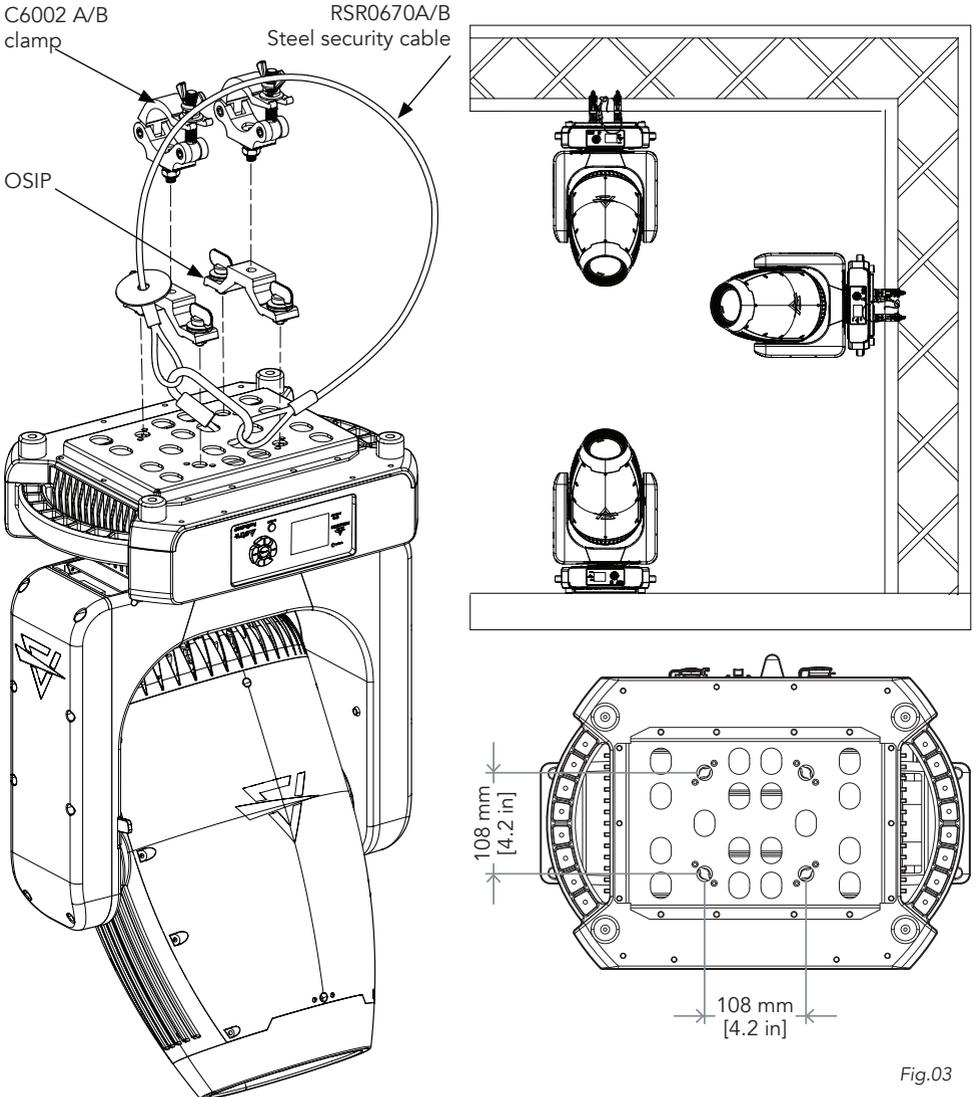


Fig.03

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.

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 800W.

| 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 - PRODUCT OVERVIEW

1. USER INTERFACE with display and buttons for access to the control panel functions.
2. SAFETY EYELETS to attach safety cable.
3. PAN Mechanism lock and release.
4. TILT Mechanism lock and release.
5. DMX IN (5-p XLR): 1 = GND, 2 = sign-, 3 = sign+, 4 N/C, 5 N/C.
6. DMX OUT (5-p XLR): 1 = GND, 2 = sign-, 3 = sign+, 4 N/C, 5 N/C.
7. POWER IN: for connection to the Mains 100-240V~/50-60Hz.
8. ANTENNA of Wireless DMX Receiver internal module.
9. ETHERCON CONNECTORS IN / OUT signal.
10. MAIN FUSE HOLDER: replace a burnt-out fuse by one of the same type only (T10AL 250V).
11. GORE VALVE.

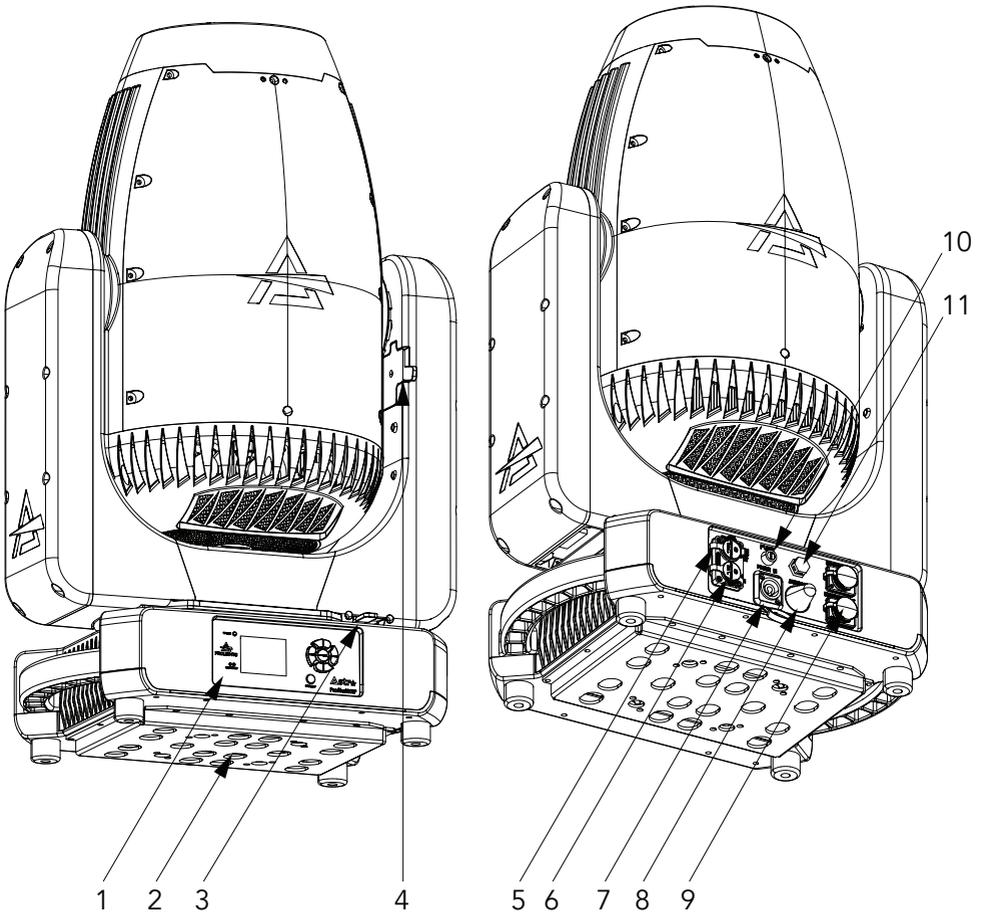


Fig 04

8 - 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

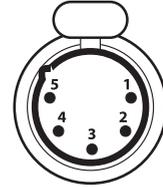


Fig. 05

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:

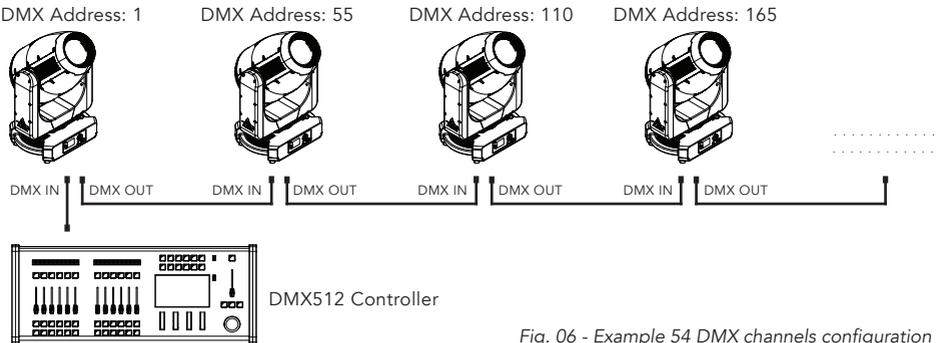


Fig. 06 - Example 54 DMX channels configuration

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.

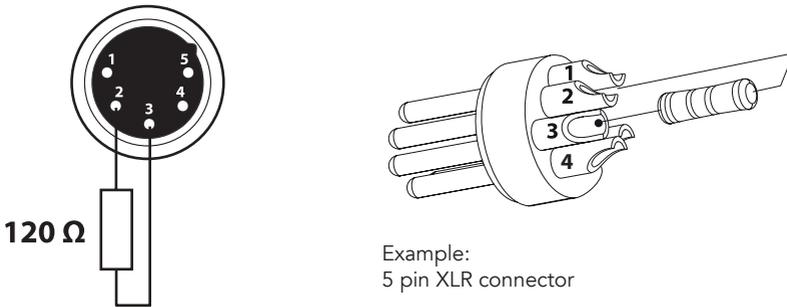


Fig. 07

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.

ETHERNET CONNECTION

The products is provided with two 8-pin RJ-45 sockets for Ethernet input/output for a simple daisy chain connection to the network.

The product can be controlled with ArtNet/sACN/Klingnet communication protocol.

Use a network cable category 5 (with four "twisted" wire pairs) and standard RJ-45 plugs.

ETHERNET OPERATION

Please refer to the section MENU STRUCTURE contained in this document for detailed informations about the parameters of setting on the fixture (Protocol, Net, Subnet, Universe, Start Channel and IP Address, Ethernet to DMX No/Yes).

- IP addresses recommended: 002.xxx.xxx.xxx or 010.xxx.xxx.xxx.
- The submask net is fixed at 255.0.0.0.

ETHERNET TO DMX OPERATIONS

Please refer to the section MENU STRUCTURE contained in this document for detailed informations. This function allow a product receiving an ethernet signal protocol to re-transmit the incoming signal onto a wired DMX line through its onboard XLR-out connector.

- An Ethernet protocol (Artnet, sACN or others available) has to be enabled from Ethernet menu at first fixture. **Please make sure that wireless receiver is switched to OFF if you use Ethernet communication.**
- Enable the option Ethernet To DMX choosing which fixture needs to be retransmitted (Main Fixture or Pixel Engine) from the Ethernet menu at the first product (connected to the Ethernet) in the signal chain, next products have standard DMX setting.
- Connect the Ethernet input of the first product in the data chain with the network. Connect the DMX output of this product with the input of the next product until all products are connected to the DMX chain.
- Caution: At the last product, the DMX chain has to be terminated with a terminator. Solder a 120 Ω resistor between Signal (-) and Signal (+) into a XLR-plug and connect it in the DMX-output of the last product.

OPERATION AS A WIRELESS TRANSMITTER

ASTRAPROFILE600IP can be used as wireless transmitter to transmit DMX signal to different wireless receivers. To use ASTRAPROFILE600IP 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 WDMX ON/OFF function and enable it to ON.
 4. Select WDMX mode and set it on Transmitter (please note that WDMX mode will be available only if WDMX 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 WDMX 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 WDMX mode is set to Transmitter).
- All connected receivers will be unlinked.

IN TO WDMX

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 ASTRAPROFILE600IP protocol selected is ArtNet / sACN, the WDMX module will retransmit the DMX values contained in the ArtNet / sACN signal received from the ASTRAPROFILE600IP.

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

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

OPERATION AS A WIRELESS RECEIVER

ASTRAPROFILE600IP can be used as wireless receiver connected to a wireless transmitter.

To use ASTRAPROFILE600IP 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 WDMX ON/OFF function and enable it to ON.
4. Select WDMX mode and set it on Receiver (please note that WDMX mode will be available only if WDMX 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 WDMX 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 the display on the receiver unit will shows the DMX address. If DMX signal is not available, the display will shows "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.

WDMX TO DMX (RX)

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

9 - CONTROL PANEL

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

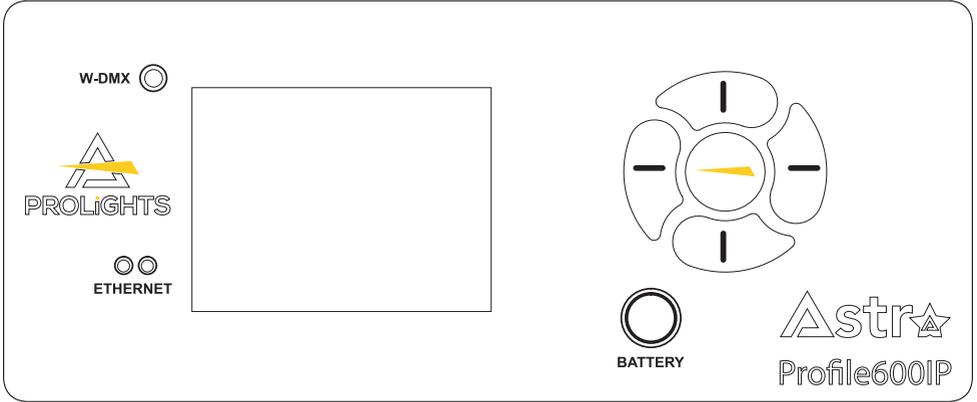


Fig. 08

DISPLAY AND BUTTONS LAYOUT

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

| | | |
|------------------|---|---|
| | <p>1 </p> <p>2 </p> <p>3 </p> <p>4 </p> <p>5 </p> | <ul style="list-style-type: none"> • Browse upwards through the menu list and increases the numeric value displayed. • Return to the top level. • Browse downwards through the menu list and decreases the numeric value displayed. • Commute from units, tens, hundred in the menu. • Used to access the menu tree or to return a previous menu window. |
| <p>BATTERY</p> | <ul style="list-style-type: none"> • Switch on the display using backup battery. Hold for 5s. • Switch off display by pressing button 4 for 5s while on being on Home screen. | |
| <p>W-DMX </p> | <ul style="list-style-type: none"> • LED indicator for Wireless dmx (color red and green). | |
| <p>ETHERNET </p> | <ul style="list-style-type: none"> • LED indicator for Ethernet network.(color orange). | |

10 - MENU STRUCTURE

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

| | | | | | |
|-----|---------|------------------|------------------|---------------------------------|---|
| 1 | CONNECT | ADDRESS | DMX / WDMX | VALUE (1-512) | Set address used for Fixture. |
| | | | sACN | | |
| | | | ARTNET | | |
| | | DMX MODE | BASIC | | Set DMX chart for Main Fixture. |
| | | | STANDARD | | |
| | | | EXTENDED | | |
| | | WIRELESS | WDMX ON/OFF | ON/OFF | Enable/Disable the wireless card. |
| | | | WDMX MODE | TRANSMITTER/ RECEIVER | Allows to choose whether to set the wireless on the Transmitter or Receiver. WDMX mode is unlocked only if WDMX 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 WDMX mode is on transmitter |
| | | | RX RESET | ON/OFF | Total reset of the receiver. RX reset unlocks only if WDMX mode is receiver. |
| | | | DMX TO WDMX (TX) | ON/OFF | Enable/Disable the transmission of the DMX values via wdmx. Main Fixture to WDMX; transmit main fixture DMX values Pixel Engine to WDMX; transmit pixel engine dmx values |
| | | | WDMX 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. |
| | | ETHERNET SETTING | ARTNET SETTINGS | IP ADDRESS | Set IP address of the fixture. |
| | | | | NET | Set Net for ArtNet protocol. (Default 0) |
| | | | | SUBNET | Set Subnet for ArtNet protocol. (Default 0) |
| | | | | UNIVERSE | Set Universe for ArtNet protocol. (Default 0) |
| | | | sACN SETTINGS | IP ADDRESS | Set IP address of the fixture. |
| | | | | UNIVERSE | Set Universe for sACN protocol. (Default 1) |
| | | | | MERGE MODE | Set Merge Mode for sACN protocol. (Default OFF) |
| | | | ETHERNET TO DMX | ON | Enable / Disable DMX retransmission from sACN/ArtNet signal to DMX out port. |
| OFF | | | | | |
| 2 | SET UP | | SCREEN | BACKLIGHT | ON/ 10S /20S/30S |
| | | FLIP DISPLAY | | ON/OFF/ AUTO | 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. | |
| MOVE- MENT | PAN REVERSE | ON/OFF | Allows you to reverse Pan movement. | |
| | TILT REVERSE | ON/OFF | Allows you to reverse Tilt movement. | |
| | PAN/TILT FEEDBACK | ON/OFF | To activate / deactivate the reading of the feedbacks given by the encoders. | |
| | MOVEMENT BLACKOUT | ON/OFF | Make fixture goes blackout OFF while moving. | |
| | PAN/TILT MODE | SLOW/MEDIUM/FAST | To choose the horizontal/vertical movement speed. SYNC mode will sync movement speed with the whole ASTRAWASH family fixtures. | |
| | | | To choose the home position. | |
| | CUSTOM P DEGREE | STANDARD | To choose pan values in case of Custom position. | |
| | | CUSTOM | | |
| | | 0° | | |
| | | 45° | | |
| | | 90° | | |
| | | 135° | | |
| | | 180° | | |
| | | 225° | | |
| CUSTOM T DEGREE | 0% | To choose tilt values in case of Custom position. | | |
| | 12.5% | | | |
| | 25% | | | |
| | 50% | | | |
| | 75% | | | |
| | 87.5% | | | |
| | 100% | | | |
| FIXTURE SETTINGS | FAN MODE | AUTO/ HIGH/SILENT/ SUPER SILENT | Select Fan behaviour. | |
| | DMX FAULT | HOLD/BLACKOUT | To choose the behaviour of fixture in case of dmx signal lost. | |
| | STATUS LED | ON/OFF | To turn the status LEDs on the front panel on or off. | |
| | DIMMER CURVE | LINEAR/S-CURVE/ SQUARE LAW/ IN- VERSE SQUARE LAW | Select different curve behaviour of dimmer. | |
| | DIMMER SPEED | AUTO/FAST/ MEDIUM/SLOW | Linear dimmer behaviour. Dimmer curve adding long fade. Dimmer curve adding medium fade. Dimmer curve adding little fade. | |
| | LED FREQUENCY | 600HZ/1200HZ/ 2000 HZ/ 4000 HZ/ 6000HZ/25KHZ/50KHz | Select PWM frequency. | |

| | | | | | |
|---|-----------|-----------------|------------------------|---------------------|--|
| | | | INVERT ZOOM | ON/OFF | <i>Invert zoom values.</i> |
| | | | COLOR WHEEL BLACKOUT | ON/OFF | <i>To set Gobo Wheel Movement in blackout mode.</i> |
| | | | COLOR WHEEL MODE | STEP | <i>To set Color Wheel Movement scrolling mode.</i> |
| | | | | COUNTINUOUS | |
| | | | GOBO WHEEL BLACKOUT | ON/OFF | <i>To set Gobo Wheel Movement scrolling mode.</i> |
| | | | GOBO WHEEL MODE | STEP | <i>To set Gobo Wheel Movement scrolling mode.</i> |
| | | | | COUNTINUOUS | |
| | | | TRANSFER CONFIGURATION | WITHOUT DMX ADDRESS | <i>To transfer the same menu settings of one fixtures to all the other in the daisy chain, including or not the dmx address.</i> |
| | | | | WITH DMX ADDRESS | |
| 3 | AD-VANCED | RESET FUNCTIONS | ALL | | <i>To reset these functions.</i> |
| | | | PAN | | |
| | | | TILT | | |
| | | | PAN & TILT | | |
| | | | CYAN | | |
| | | | MAGENTA | | |
| | | | YELLOW | | |
| | | | CTO | | |
| | | | COLOR WHEEL | | |
| | | | GOBO WHEEL | | |
| | | | GOBO ROTATION | | |
| | | | ANIMATION | | |
| | | | ANIMATION ROTATION | | |
| | | | PRISM | | |
| | | | PRISM ROTATION | | |
| | | | FROST | | |
| | | | IRIS | | |
| | | | ZOOM | | |
| | | | FOCUS | | |
| | | | FRAME ROT | | |
| | | | BLADE 1 POSITON | | |
| | | | BLADE 1 ROT | | |
| | | | ... | | |
| | | | BLADE 4 POSITON | | |
| | | | BLADE 4 ROT | | |
| | | CALIBRATION | PASSWORD | | <i>For the calibration of these functions. 050 password for user reset.</i> |

| | |
|--------------------|-------|
| PASSWORD | |
| PAN (16 BIT) | |
| TILT (16 BIT) | |
| DIMMER (16 BIT) | |
| CYAN | |
| MAGENTA | |
| YELLOW | |
| CTO | |
| COLOR WHEEL | |
| ROT GOBO | |
| PRISM | |
| PRISM ROTATION | |
| ANIMATION ROTATION | |
| FROST | |
| GOBO 1 FOCUS | |
| ... | |
| GOBO 7 FOCUS | |
| GOBO1 INDEX | |
| ... | |
| GOBO 7 INDEX | FOCUS |
| IRIS | |
| ZOOM | FOCUS |
| FOCUS | INDEX |
| ANIMATION INS | |
| ANIMATION FOCUS | INDEX |
| ANIMATION ROTATION | |
| BLADE 1 POSITION | |
| BLADE 1 ROT | |
| BLADE 2 POSITION | |
| BLADE 2 ROT | |
| BLADE 3 POSITION | |
| BLADE 3 ROT | |
| BLADE 4 POSITON | |
| BLADE 4 ROT | |
| ENCODER RESET | |
| FRAME ROT | |
| PAN ANGLE | |

| | | | |
|----------------|--------------------|----------|--|
| | TILT ANGLE | | |
| | IRIS FOCUS | | |
| | BLADE FOCUS | | |
| | ENCODER RESET | YES / NO | |
| MANUAL CONTROL | CONTROL | | <i>For manual control of the unit.</i> |
| | PAN | | |
| | PAN FINE | | |
| | TILT | | |
| | TILT FINE | | |
| | DIMMER | | |
| | DIMMER FINE | | |
| | SHUTTER | | |
| | CYAN | | |
| | CYAN FINE | | |
| | MAGENTA | | |
| | MAGENTA FINE | | |
| | YELLOW | | |
| | YELLOW FINE | | |
| | CTO | | |
| | CTO FINE | | |
| | COLOR WHEEL | | |
| | ROT GOBO | | |
| | ROT GOBO FINE | | |
| | 4F PRISM | | |
| | 4F PRISM ROT | | |
| | 4F PRISM ROT FINE | | |
| | FROST | | |
| | FROSTO FINE | | |
| | IRIS | | |
| | IRIS FINE | | |
| | ZOOM | | |
| | ZOOM FINE | | |
| | FOCUS | | |
| | FOCUS FINE | | |
| | ANIMATION INS | | |
| | ANIMATION ROTATION | | |
| | ANIMATION ROT FINE | | |

| | | | | | |
|---|------------------|-----------------------|---|---|---|
| | | BLADE 1 POSITON | | | |
| | | BLADE 1 POSITON FINE | | | |
| | | BLADE 1 ROT | | | |
| | | BLADE 1 ROT FINE | | | |
| | | BLADE 2 POSITION | | | |
| | | BLADE 2 POSITION FINE | | | |
| | | BLADE 2 ROT | | | |
| | | BLADE 2 ROT FINE | | | |
| | | ... | | | |
| | | BLADE 4 ROT FINE | | | |
| | | FRAME ROT | | | |
| | | FRAME ROT FINE | | | |
| | | FRAME MACROS | | | |
| | | FRAME MACROS SPEED | | | |
| | RELOAD DEFAULT | BASIC RELOAD | YES/NO | 050 password for user reset. | |
| | | FACTORY RELOAD | Password 050 then YES/NO | | |
| 4 | INFORMATIONS | FIXTURE 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 | ... | | |
| | | POWER LED | ... | | |
| | | TEMPERATURE | NEAR SOURCE TEMP, DRIVER PCB TEMP, LED PCB TEMP,... | °C AND °F | To see the unit temperature. |
| | | FAN SPEED | NEAR SOURCE FAN, BASE FAN,... | RPM AND % | To see the speed of the fans. |
| | WIRELESS QUALITY | | | To check the wireless quality. | |
| | CHANNEL VALUE | PAN... | | To see the dmx value of those channels. | |

| | | | | |
|--|------------------|-----------------|--|--|
| | ERROR MESSAGE | PAN, TILT... | | <i>To see any error messages.</i> |
| | FIXTURE MODEL | XXXXXXXXXX | | <i>View informations about fixture model.</i> |
| | RDM UID | | | <i>View ID for the RDM control.</i> |
| | SOFTWARE VERSION | 1U01 V1.0.00... | | <i>View informations about software version.</i> |

11 - SHORTCUT

| Keys | Mode | Description |
|--------------------------|----------------------------------|---|
| UP + DOWN after power on | Flip Display | Directly flip display without enter inside menu. |
| DOWN then power on | Reset without pan/tilt movements | Fixture will be powered on without reset on pan/tilt movements. |
| ENTER + UP then power on | Bootloader | Force firmware upgrade. |

12 - 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.

| Category | Parameter | PID | GET | SET |
|----------------------------|--|--------|-----|-----|
| Product Information | DEVICE_INFO | 0x0060 | 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 |
| | SOFTWARE_VERSION_LABEL | 0x00C0 | x | |
| | BOOT_SOFTWARE_VERSION_ID | 0x00C1 | x | |
| | BOOT_SOFTWARE_VERSION_LABEL | 0x00C2 | 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 | |
| | DMX_BLOCK_ADDRESS (Support required if device uses aDMX512 Slot) | 0x0140 | x | x |
| | DMX_FAIL_MODE | 0x0141 | x | x |
| | DMX_STARTUP_MODE | 0x0142 | x | x |
| Dimmer Settings | DIMMER_INFO | 0x0340 | x | |
| | MINIMUM_LEVEL | 0x0341 | x | x |
| | MAXIMUM_LEVEL | 0x0342 | x | x |
| | CURVE | 0x0343 | x | x |
| | CURVE_DESCRIPTION (Support required only if CURVE is supported) | 0x0344 | x | x |
| | OUTPUT_RESPONSE_TIME | 0x0345 | x | x |
| | OUTPUT_RESPONSE_TIME_DESCRIPTION (Support required only if OUTPUT_RESPONSE_TIME is supported) | 0x0346 | x | |
| | MODULATION_FREQUENCY | 0x0347 | x | x |
| | MODULATION_FREQUENCY_DESCRIPTION (Support required only if MODULATION_FREQUENCY is supported) | 0x0348 | x | |

| Category | Parameter | PID | GET | SET |
|-----------------------------------|------------------------|------------|------------|------------|
| Sensors | SENSOR_DEFINITION | 0x0200 | x | |
| | SENSOR_VALUE | 0x0201 | x | x |
| | RECORD_SENSORS | 0x0202 | | x |
| Power/Lamp Settings | BURN_IN | 0x0440 | x | x |
| | DEVICE_HOURS | 0x0400 | x | x |
| | LAMP_HOURS | 0x0401 | x | x |
| | LAMP_STRIKES | 0x0402 | x | x |
| | LAMP_STATE | 0x0403 | x | x |
| | LAMP_ON_MODE | 0x0404 | x | x |
| | DEVICE_POWER_CYCLES | 0x0405 | x | x |
| | | | | |
| Display Settings | DISPLAY_INVERT | 0x0500 | x | x |
| | DISPLAY_LEVEL | 0x0501 | x | x |
| Configuration | PAN_INVERT | 0x0600 | x | x |
| | TILT_INVERT | 0x0601 | x | x |
| | PAN_TILT_SWAP | 0x0602 | x | x |
| | REAL_TIME_CLOCK | 0x0603 | x | x |
| | LOCK_PIN | 0x0640 | x | x |
| | LOCK_STATE | 0x0641 | x | x |
| | LOCK_STATE_DESCRIPTION | 0x0642 | x | |
| Control | IDENTIFY_DEVICE | 0x1000 | x | x |
| | RESET_DEVICE | 0x1001 | | x |
| | POWER_STATE | 0x1010 | x | x |
| | PERFORM_SELFTEST | 0x1020 | x | x |
| | SELF_TEST_DESCRIPTION | 0x1021 | x | |
| | CAPTURE_PRESET | 0x1030 | x | x |
| | PRESET_PLAYBACK | 0x1031 | x | x |
| | IDENTIFY_MODE | 0x1040 | x | x |
| | PRESET_INFO | 0x1041 | x | |
| | PRESET_STATUS | 0x1042 | x | x |
| | PRESET_MERGEMODE | 0x1043 | x | x |
| POWER_ON_SELF_TEST | 0x1044 | x | x | |
| IP & DNS Configuration | IPV4_CURRENT_ADDRESS | 0x0705 | x | |
| | IPV4_STATIC_ADDRESS | 0x0706 | x | x |

13 - DMX CHARTS

RDM Personality ID List

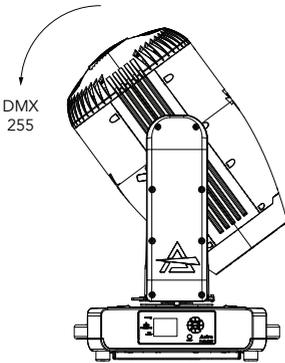
| ID | Mode | DMX Footprint |
|----|----------|---------------|
| 1 | BASIC | 29 |
| 2 | STANDARD | 39 |
| 3 | EXTENDED | 54 |

RDM Model ID

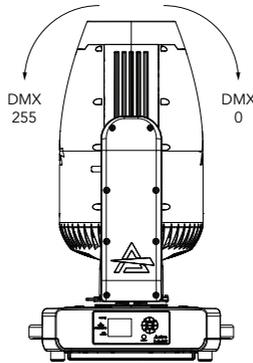
0xA018

PAN/TILT VALUES

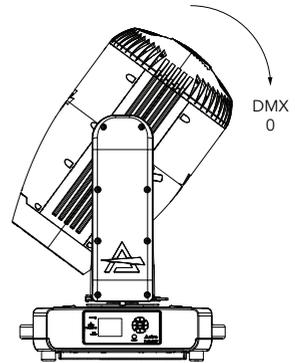
Pan = 128
Tilt = 0



Pan = 128
Tilt = 128

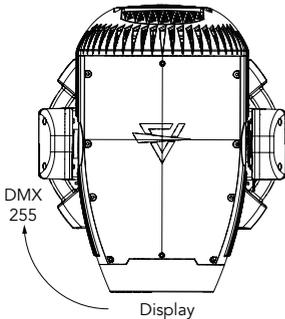


Pan = 128
Tilt = 255

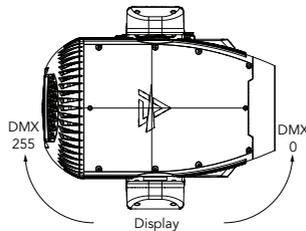


Tilt movement range: 270°
Pan movement range: 540

Pan = 0
Tilt = 80



Pan = 128
Tilt = 80



Pan = 255
Tilt = 80

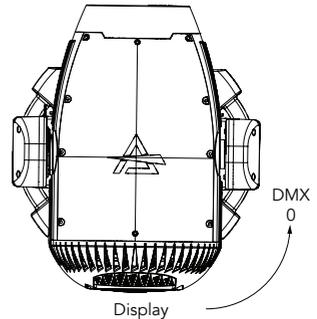


Fig. 09

DMX Chart Summary

| Channel | Basic | Standard | Extended |
|---------|---------------------|---------------------|-----------------------|
| 1 | Pan | Pan | Pan |
| 2 | Tilt | Pan fine | Pan fine |
| 3 | Dimmer | Tilt | Tilt |
| 4 | Shutter | Tilt fine | Tilt fine |
| 5 | Cyan | Dimmer | Dimmer |
| 6 | Magenta | Dimmer Fine | Dimmer Fine |
| 7 | Yellow | Shutter | Shutter |
| 8 | CTO | Cyan | Cyan |
| 9 | Color Wheel | Magenta | Cyan Fine |
| 10 | Rot Gobo | Yellow | Magenta |
| 11 | Gobo Rot | CTO | Magenta Fine |
| 12 | 4f Prism | Color Wheel | Yellow |
| 13 | 4f Prism Rotation | Rot Gobo | Yellow Fine |
| 14 | Frost | Gobo Rot | CTO |
| 15 | Iris | Gobo Rot Fine | CTO Fine |
| 16 | Zoom | 4f Prism | Color Wheel |
| 17 | Focus | 4f Prism Rotation | Rot Gobo |
| 18 | Animation Insertion | 4f Prism Rot. Fine | Gobo Rot |
| 19 | Animation Rotation | Frost | Gobo Rot Fine |
| 20 | Blade 1 position | Iris | 4f Prism |
| 21 | Blade 1 rotation | Zoom | 4f Prism Rotation |
| 22 | Blade 2 position | Zoom Fine | 4f Prism Rot. Fine |
| 23 | Blade 2 rotation | Focus | Frost |
| 24 | Blade 3 position | Focus Fine | Frost Fine |
| 25 | Blade 3 rotation | Animation Insertion | Iris |
| 26 | Blade 4 position | Animation Rotation | Iris Fine |
| 27 | Blade 4 rotation | Animation Rot. Fine | Zoom |
| 28 | Frame Rotation | Blade 1 position | Zoom Fine |
| 29 | Control | Blade 1 rotation | Focus |
| 30 | | Blade 2 position | Focus Fine |
| 31 | | Blade 2 rotation | Animation Insertion |
| 32 | | Blade 3 position | Animation Rotation |
| 33 | | Blade 3 rotation | Animation Rot. Fine |
| 34 | | Blade 4 position | Blade 1 position |
| 35 | | Blade 4 rotation | Blade 1 position fine |

DMX Chart Summary

| Channel | Basic | Standard | Extended |
|---------|-------|--------------------|-----------------------|
| 36 | | Frame rotation | Blade 1 rotation |
| 37 | | Frame macros | Blade 1 rotation fine |
| 38 | | Frame macros speed | Blade 2 position |
| 39 | | Control | Blade 2 position fine |
| 40 | | | Blade 2 rotation |
| 41 | | | Blade 2 rotation fine |
| 42 | | | Blade 3 position |
| 43 | | | Blade 3 position fine |
| 44 | | | Blade 3 rotation |
| 45 | | | Blade 3 rotation fine |
| 46 | | | Blade 4 position |
| 47 | | | Blade 4 position fine |
| 48 | | | Blade 4 rotation |
| 49 | | | Blade 4 rotation fine |
| 50 | | | Frame rotation |
| 51 | | | Frame rotation fine |
| 52 | | | Frame macros |
| 53 | | | Frame macros speed |
| 54 | | | Control |

| CHANNEL | | | Name | Function | Min DMX | Max DMX | Default |
|-------------------|-----|-----|--------------|-----------------------------|---------|---------|---------|
| BAS | STD | EXT | | | | | |
| 1 | 1 | 1 | Pan | Lineary from 0% to 100% | 0 | 255 | 128 |
| - | 2 | 2 | Pan fine | Lineary from 0% to 100% | 0 | 255 | 128 |
| 2 | 3 | 3 | Tilt | Lineary from 0% to 100% | 0 | 255 | 128 |
| - | 4 | 4 | Tilt fine | Lineary from 0% to 100% | 0 | 255 | 128 |
| 3 | 5 | 5 | Dimmer | Lineary from close to open | 0 | 255 | 000 |
| - | 6 | 6 | Dimmer Fine | Lineary from close to open | 0 | 255 | 000 |
| 4 | 7 | 7 | Shutter | Close | 0 | 1 | 255 |
| | | | | Strobe from slow to fast | 2 | 62 | |
| | | | | Open | 63 | 64 | |
| | | | | Pulse in from slow to fast | 65 | 125 | |
| | | | | Open | 126 | 127 | |
| | | | | Pulse out from slow to fast | 128 | 188 | |
| | | | | Open | 189 | 190 | |
| | | | | Randon from slow to fast | 191 | 251 | |
| Open | 252 | 255 | | | | | |
| 5 | 8 | 8 | Cyan | Lineary from 0% to 100% | 0 | 255 | 000 |
| - | - | 9 | Cyan Fine | Lineary from 0% to 100% | 0 | 255 | 000 |
| 6 | 9 | 10 | Magenta | Lineary from 0% to 100% | 0 | 255 | 000 |
| - | - | 11 | Magenta Fine | Lineary from 0% to 100% | 0 | 255 | 000 |
| 7 | 10 | 12 | Yellow | Lineary from 0% to 100% | 0 | 255 | 000 |
| - | - | 13 | Yellow Fine | Lineary from 0% to 100% | 0 | 255 | 000 |
| 8 | 11 | 14 | CTO | Lineary from 0% to 100% | 0 | 255 | 000 |
| - | - | 15 | CTO Fine | Lineary from 0% to 100% | 0 | 255 | 000 |
| 9 | 12 | 16 | Color Wheel | Indexed | | | 0 |
| | | | | Open | 0 | 8 | |
| | | | | Open + CTC 5600K | 9 | 15 | |
| | | | | CTC 5600K | 16 | 22 | |
| | | | | CTC 5600K + BRIGHT RED | 23 | 29 | |
| | | | | BRIGHT RED | 30 | 36 | |
| | | | | BRIGHT RED + DEEPER BLUE | 37 | 43 | |
| | | | | DEEPER BLUE | 44 | 50 | |
| | | | | DEEPER BLUE + FOREST GREEN | 51 | 57 | |
| | | | | FOREST GREEN | 58 | 64 | |
| | | | | FOREST GREEN + DEEP ORANGE | 65 | 71 | |
| | | | | DEEP ORANGE | 72 | 78 | |
| | | | | DEEP ORANGE + MAGENTA | 79 | 85 | |
| | | | | MAGENTA | 86 | 92 | |
| | | | | MAGENTA + CONGO BLUE | 93 | 99 | |
| | | | | CONGO BLUE | 100 | 106 | |
| | | | | CONGO BLUE + OPEN | 107 | 113 | |
| | | | | Reserved | 114 | 120 | |
| | | | | Reserved | 121 | 127 | |
| | | | | Forward Spin | | | |
| From fast to slow | 128 | 190 | | | | | |
| Stop | | | | | | | |
| Stop | 191 | 192 | | | | | |
| Reverse Spin | | | | | | | |
| From slow to fast | 193 | 255 | | | | | |

| CHANNEL | | | Name | Function | Min DMX | Max DMX | Default |
|----------------------------------|-----|-----|--------------------|-----------------------------------|---------|---------|---------|
| BAS | STD | EXT | | | | | |
| 10 | 13 | 17 | Rot Gobo | Indexed | | | 000 |
| | | | | Open | 0 | 7 | |
| | | | | GOBO 1 | 8 | 15 | |
| | | | | GOBO 2 | 16 | 23 | |
| | | | | GOBO 3 | 24 | 31 | |
| | | | | GOBO 4 | 32 | 39 | |
| | | | | GOBO 5 | 40 | 47 | |
| | | | | GOBO 6 | 48 | 55 | |
| | | | | GOBO 7 | 56 | 63 | |
| | | | | Forward Spin | | | |
| | | | | From fast to slow | 64 | 130 | |
| | | | | Stop | | | |
| | | | | Stop | 131 | 132 | |
| | | | | Reverse Spin | | | |
| | | | | From slow to fast | 133 | 199 | |
| | | | | Shake | | | |
| | | | | GOBO 1 from slow to fast | 200 | 207 | |
| | | | | GOBO 2 from slow to fast | 208 | 215 | |
| | | | | GOBO 3 from slow to fast | 216 | 223 | |
| | | | | GOBO 4 from slow to fast | 224 | 231 | |
| GOBO 5 from slow to fast | 232 | 239 | | | | | |
| GOBO 6 from slow to fast | 240 | 247 | | | | | |
| GOBO 7 from slow to fast | 248 | 255 | | | | | |
| 11 | 14 | 18 | Gobo Rot | Indexed | | | 000 |
| | | | | Lineary from 0° to 360° | 0 | 127 | |
| | | | | Forward Spin | | | |
| | | | | From fast to slow | 128 | 190 | |
| | | | | Stop | | | |
| | | | | Stop | 191 | 192 | |
| | | | | Reverse Spin | | | |
| From slow to fast | 193 | 255 | | | | | |
| - | 15 | 19 | Gobo Rot Fine | Lineary from 0° to 360° (Indexed) | 0 | 255 | 000 |
| 12 | 16 | 20 | 4f Prism | Open | 0 | 127 | 000 |
| | | | | Prism insert | 128 | 255 | |
| 13 | 17 | 21 | 4f Prism Rotation | Indexed | | | 000 |
| | | | | Lineary from 0° to 360° | 0 | 127 | |
| | | | | Forward Spin | | | |
| | | | | From fast to slow | 128 | 190 | |
| | | | | Stop | | | |
| | | | | Stop | 191 | 192 | |
| | | | | Reverse Spin | | | |
| From slow to fast | 193 | 255 | | | | | |
| - | 18 | 22 | 4f Prism Rot. Fine | Lineary from 0° to 360° (Indexed) | 0 | 255 | 000 |
| 14 | 19 | 23 | Frost | Continuous | | | 000 |
| | | | | Lineary from 0% to 100% | 0 | 255 | |
| - | - | 24 | Frost Fine | Lineary from 0% to 100% | 0 | 255 | 000 |
| 15 | 20 | 25 | Iris | Indexed | | | 000 |
| | | | | Lineary from Large to Small | 0 | 63 | |
| | | | | Effect 1 | | | |
| | | | | Close from fast to slow | 64 | 127 | |
| | | | | Effect 2 | | | |
| | | | | Open from slow to fast | 128 | 191 | |
| | | | | Effect 3 | | | |
| Open and close from slow to fast | 192 | 255 | | | | | |
| - | - | 26 | Iris Fine | Lineary from 0% to 100% (Indexed) | 0 | 255 | 000 |
| 16 | 21 | 27 | Zoom | Lineary from in to out | 0 | 255 | 000 |
| - | 22 | 28 | Zoom Fine | Lineary from in to out | 0 | 255 | 000 |
| 17 | 23 | 29 | Focus | Lineary from in to out | 0 | 255 | 000 |

| CHANNEL | | | Name | Function | Min DMX | Max DMX | Default |
|---------|-----|-----|-----------------------|---|---------|---------|---------|
| BAS | STD | EXT | | | | | |
| - | 24 | 30 | Focus Fine | Lineary from in to out | 0 | 255 | 000 |
| 18 | 25 | 31 | Animation Insertion | Continuous | | | 000 |
| | | | | Lineary from 0% to 100% | 0 | 255 | |
| 19 | 26 | 32 | Animation Rotation | Indexed | | | 000 |
| | | | | Lineary from 0° to 360° | 0 | 127 | |
| | | | | Forward Spin | | | |
| | | | | From fast to slow | 128 | 190 | |
| | | | | Stop | | | |
| | | | | Stop | 191 | 192 | |
| | | | | Reverse Spin | | | |
| | | | From slow to fast | 193 | 255 | | |
| - | 27 | 33 | Animation Rot. Fine | Lineary from 0° to 360° (Indexed) | 0 | 255 | 000 |
| 20 | 28 | 34 | Blade 1 position | Movement from outward to inward | 0 | 255 | 000 |
| - | - | 35 | Blade 1 position fine | Movement from outward to inward | 0 | 255 | 000 |
| 21 | 29 | 36 | Blade 1 rotation | Swivelling from -30 degrees towards 0 degrees | 0 | 127 | 128 |
| | | | | 0 degrees | 128 | 128 | |
| | | | | Swivelling from 0 degrees to +30 degrees | 129 | 255 | |
| - | - | 37 | Blade 1 rotation fine | Lineary from 0 to 100% | 0 | 255 | 000 |
| 22 | 30 | 38 | Blade 2 position | Movement from outward to inward | 0 | 255 | 000 |
| - | - | 39 | Blade 2 position fine | Movement from outward to inward | 0 | 255 | 000 |
| 23 | 31 | 40 | Blade 2 rotation | Swivelling from -30 degrees towards 0 degrees | 0 | 127 | 128 |
| | | | | 0 degrees | 128 | 128 | |
| | | | | Swivelling from 0 degrees to +30 degrees | 129 | 255 | |
| - | - | 41 | Blade 2 rotation fine | Lineary from 0 to 100% | 0 | 255 | 000 |
| 24 | 32 | 42 | Blade 3 position | Movement from outward to inward | 0 | 255 | 000 |
| - | - | 43 | Blade 3 position fine | Movement from outward to inward | 0 | 255 | 000 |
| 25 | 33 | 44 | Blade 3 rotation | Swivelling from -30 degrees towards 0 degrees | 0 | 127 | 128 |
| | | | | 0 degrees | 128 | 128 | |
| | | | | Swivelling from 0 degrees to +30 degrees | 129 | 255 | |
| - | - | 45 | Blade 3 rotation fine | Lineary from 0 to 100% | 0 | 255 | 000 |
| 26 | 34 | 46 | Blade 4 position | Movement from outward to inward | 0 | 255 | 000 |
| - | - | 47 | Blade 4 position fine | Movement from outward to inward | 0 | 255 | 000 |
| 27 | 35 | 48 | Blade 4 rotation | Swivelling from -30 degrees towards 0 degrees | 0 | 127 | 128 |
| | | | | 0 degrees | 128 | 128 | |
| | | | | Swivelling from 0 degrees to +30 degrees | 129 | 255 | |
| - | - | 49 | Blade 4 rotation fine | Lineary from 0 to 100% | 0 | 255 | 000 |
| 28 | 36 | 50 | Frame rotation | Swivelling from -45 degrees towards 0 degrees | 0 | 127 | 128 |
| | | | | 0 degrees | 128 | 128 | |
| | | | | Swivelling from 0 degrees to +45 degrees | 129 | 255 | |
| - | - | 51 | Frame rotation fine | Lineary from 0 to 100% | 0 | 255 | 000 |

| CHANNEL | | | Name | Function | Min DMX | Max DMX | Default |
|--|-----|-----|--------------------|---|---------|---------|---------|
| BAS | STD | EXT | | | | | |
| - | 37 | 52 | Frame macros | No Function | 0 | 3 | 000 |
| | | | | Macro 1 | 4 | 10 | |
| | | | | Macro 2 | 11 | 17 | |
| | | | | Macro 3 | 18 | 24 | |
| | | | | Macro 4 | 25 | 31 | |
| | | | | Macro 5 | 32 | 38 | |
| | | | | Macro 6 | 39 | 45 | |
| | | | | Macro 7 | 46 | 52 | |
| | | | | Macro 8 | 53 | 59 | |
| | | | | Macro 9 | 60 | 66 | |
| | | | | Macro 10 | 67 | 73 | |
| | | | | Macro 11 | 74 | 80 | |
| | | | | Macro 12 | 81 | 87 | |
| | | | | Macro 13 | 88 | 94 | |
| | | | | Macro 14 | 95 | 101 | |
| | | | | Macro 15 | 102 | 108 | |
| | | | | Macro 16 | 109 | 115 | |
| | | | | Macro 17 | 116 | 122 | |
| | | | | Macro 18 | 123 | 129 | |
| | | | | Macro 19 | 130 | 136 | |
| | | | | Macro 20 | 137 | 143 | |
| | | | | Macro 21 | 144 | 150 | |
| | | | | Macro 22 | 151 | 157 | |
| | | | | Macro 23 | 158 | 164 | |
| | | | | Macro 24 | 165 | 171 | |
| | | | | Macro 25 | 172 | 178 | |
| | | | | Macro 26 | 179 | 185 | |
| | | | | Macro 27 | 186 | 192 | |
| | | | | Macro 28 | 193 | 199 | |
| | | | | Macro 29 | 200 | 206 | |
| | | | | Macro 30 | 207 | 213 | |
| | | | | Macro 31 | 214 | 220 | |
| | | | | Macro 32 | 221 | 227 | |
| | | | | Macro 33 | 228 | 234 | |
| | | | | Macro 34 | 235 | 241 | |
| | | | | Macro 35 | 242 | 248 | |
| | | | | Macro 36 | 249 | 255 | |
| - | 38 | 53 | Frame macros speed | Lineary from 0 to 100% | 0 | 255 | 000 |
| 29 | 39 | 54 | Control | No Function/Safe | 0 | 1 | 000 |
| | | | | PAN REVERSE ON | 2 | 3 | |
| | | | | PAN REVERSE OFF | 4 | 5 | |
| | | | | TILT REVERSE ON | 6 | 7 | |
| | | | | TILT REVERSE OFF | 8 | 9 | |
| | | | | PAN/TILT MODE FAST | 10 | 11 | |
| | | | | PAN/TILT MODE MEDIUM | 12 | 13 | |
| | | | | PAN/TILT MODE SLOW | 14 | 15 | |
| | | | | HOME MODE STANDARD | 16 | 17 | |
| | | | | HOME MODE CUSTOM | 18 | 19 | |
| | | | | MOVEMENT IN BLACKOUT ON | 20 | 21 | |
| | | | | MOVEMENT IN BLACKOUT OFF | 22 | 23 | |
| | | | | COLOR WHEEL BLACKOUT ON (index) | 24 | 25 | |
| | | | | COLOR WHEEL BLACKOUT OFF (index) | 26 | 27 | |
| | | | | COLOR WHEEL CONTINUOUS MOVEMENT (index) | 28 | 29 | |
| | | | | COLOR WHEEL STEP MOVEMENT (index) | 30 | 31 | |
| | | | | ROTATING GOBO WHEEL BLACKOUT ON (index) | 32 | 33 | |
| ROTATING GOBO WHEEL BLACKOUT OFF (index) | 34 | 35 | | | | | |

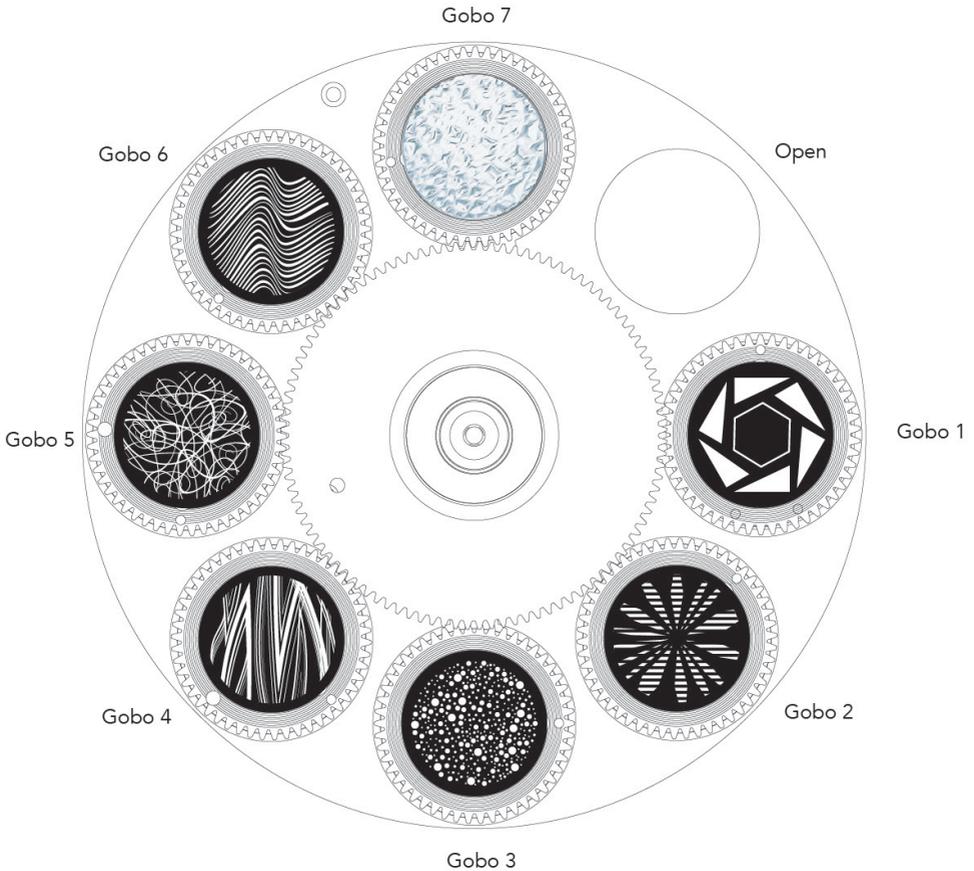
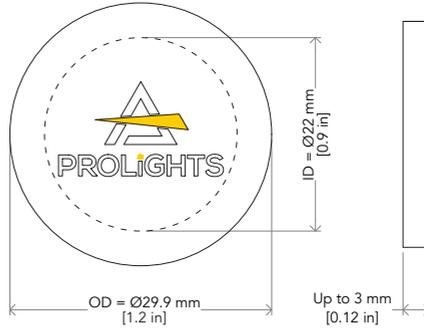
| CHANNEL | | | Name | Function | Min DMX | Max DMX | Default |
|---------|-----|-----|------|---|---------|---------|---------|
| BAS | STD | EXT | | | | | |
| | | | | ROTATING GOBO WHEEL CONTINUOUS MOVEMENT (index) | 36 | 37 | |
| | | | | ROTATING GOBO WHEEL STEP MOVEMENT (index) | 38 | 39 | |
| | | | | DISPLAY ON | 40 | 41 | |
| | | | | DISPLAY 10S | 42 | 43 | |
| | | | | DISPLAY 20S | 44 | 45 | |
| | | | | DISPLAY 30S | 46 | 47 | |
| | | | | FLIP DISPLAY ON | 48 | 49 | |
| | | | | FLIP DISPLAY OFF | 50 | 51 | |
| | | | | FLIP DISPLAY AUTO | 52 | 53 | |
| | | | | KEY LOCK ON | 54 | 55 | |
| | | | | KEY LOCK OFF | 56 | 57 | |
| | | | | FAN MODE AUTO | 58 | 59 | |
| | | | | FAN MODE SILENT | 60 | 61 | |
| | | | | FAN MODE HIGH | 62 | 63 | |
| | | | | NO SIGNAL HOLD | 64 | 65 | |
| | | | | NO SIGNAL BLACKOUT | 66 | 67 | |
| | | | | STATUS LED ON | 68 | 69 | |
| | | | | STATUS LED OFF | 70 | 71 | |
| | | | | DIMMER CURVE LINEAR | 72 | 73 | |
| | | | | DIMMER CURVE S-CURVE | 74 | 75 | |
| | | | | DIMMER CURVE SQUARE LAW | 76 | 77 | |
| | | | | DIMMER CURVE INVERSE SQUARE LAW | 78 | 79 | |
| | | | | DIMMER SPEED AUTO | 80 | 81 | |
| | | | | DIMMER SPEED FAST | 82 | 83 | |
| | | | | DIMMER SPEED MEDIUM | 84 | 85 | |
| | | | | DIMMER SPEED SLOW | 86 | 87 | |
| | | | | LED FREQUENCY 600HZ | 88 | 89 | |
| | | | | LED FREQUENCY 1200HZ | 90 | 91 | |
| | | | | LED FREQUENCY 2000HZ | 92 | 93 | |
| | | | | LED FREQUENCY 4000HZ | 94 | 95 | |
| | | | | LED FREQUENCY 6000HZ | 96 | 97 | |
| | | | | LED FREQUENCY 25KHZ | 98 | 99 | |
| | | | | LED FREQUENCY 50KHZ | 100 | 101 | |
| | | | | INVERT ZOOM OFF | 102 | 103 | |
| | | | | INVERT ZOOM ON | 104 | 105 | |
| | | | | RESET ALL | 106 | 107 | |
| | | | | RESET PAN | 108 | 109 | |
| | | | | RESET TILT | 110 | 111 | |
| | | | | RESET PAN & TILT | 112 | 113 | |
| | | | | RESET CYAN | 114 | 115 | |
| | | | | RESET MAGENTA | 116 | 117 | |
| | | | | RESET YELLOW | 118 | 119 | |
| | | | | RESET CTO | 120 | 121 | |
| | | | | RESET COLOR WHEEL | 122 | 123 | |
| | | | | RESET GOBO WHEEL | 124 | 125 | |
| | | | | RESET GOBO ROTATION | 126 | 127 | |
| | | | | RESET ANIMATION | 128 | 129 | |
| | | | | RESET ANIMATION ROTATION | 130 | 131 | |
| | | | | RESET PRISM | 132 | 133 | |
| | | | | RESET PRISM ROTATION | 134 | 135 | |
| | | | | RESET FROST | 136 | 137 | |
| | | | | RESET IRIS | 138 | 139 | |
| | | | | RESET ZOOM | 140 | 141 | |
| | | | | RESET FOCUS | 142 | 143 | |
| | | | | RESET FRAME ROT | 144 | 145 | |
| | | | | RESET BLADE 1 POSITON | 146 | 147 | |
| | | | | RESET BLADE 1 ROT | 148 | 149 | |

| CHANNEL | | | Name | Function | Min DMX | Max DMX | Default |
|---------|-----|-----|------|--------------------------------------|---------|---------|---------|
| BAS | STD | EXT | | | | | |
| | | | | RESET BLADE 2 POSITON | 150 | 151 | |
| | | | | RESET BLADE 2 ROT | 152 | 153 | |
| | | | | RESET BLADE 3 POSITON | 154 | 155 | |
| | | | | RESET BLADE 3 ROT | 156 | 157 | |
| | | | | RESET BLADE 4 POSITON | 158 | 159 | |
| | | | | RESET BLADE 4 ROT | 160 | 161 | |
| | | | | FAN MODE SUPER SILENT | 162 | 163 | |
| | | | | Reserved | 164 | 165 | |
| | | | | Reserved | 166 | 167 | |
| | | | | Reserved | 168 | 169 | |
| | | | | Reserved | 170 | 171 | |
| | | | | Reserved | 172 | 173 | |
| | | | | Reserved | 174 | 175 | |
| | | | | Reserved | 176 | 177 | |
| | | | | Reserved | 178 | 179 | |
| | | | | Reserved | 180 | 181 | |
| | | | | Reserved | 182 | 183 | |
| | | | | Reserved | 184 | 185 | |
| | | | | Reserved | 186 | 187 | |
| | | | | Reserved | 188 | 189 | |
| | | | | Reserved | 190 | 191 | |
| | | | | Reserved | 192 | 193 | |
| | | | | Reserved | 194 | 195 | |
| | | | | Reserved | 196 | 197 | |
| | | | | Reserved | 198 | 199 | |
| | | | | Reserved | 200 | 201 | |
| | | | | Reserved | 202 | 203 | |
| | | | | Reserved | 204 | 205 | |
| | | | | Reserved | 206 | 207 | |
| | | | | Reserved | 208 | 209 | |
| | | | | Reserved | 210 | 211 | |
| | | | | Reserved | 212 | 213 | |
| | | | | Reserved | 214 | 215 | |
| | | | | Reserved | 216 | 217 | |
| | | | | Reserved | 218 | 219 | |
| | | | | Reserved | 220 | 221 | |
| | | | | Reserved | 222 | 223 | |
| | | | | Reserved | 224 | 225 | |
| | | | | Reserved | 226 | 227 | |
| | | | | Reserved | 228 | 229 | |
| | | | | Reserved | 230 | 231 | |
| | | | | Reserved | 232 | 233 | |
| | | | | Reserved | 234 | 235 | |
| | | | | Reserved | 236 | 237 | |
| | | | | Reserved | 238 | 239 | |
| | | | | Reserved | 240 | 241 | |
| | | | | Reserved | 242 | 243 | |
| | | | | Reserved | 244 | 245 | |
| | | | | Reserved | 246 | 247 | |
| | | | | Reserved | 248 | 249 | |
| | | | | Reserved | 250 | 251 | |
| | | | | Reserved | 252 | 253 | |
| | | | | FACTORY DEFAULT OF CONTROL FUNCTIONS | 254 | 255 | |

14 - ROTATING GOBOS WHEEL

Gobo dimensions:

- Type B
- \varnothing external (OD)= 29,9 mm.
- \varnothing of image (ID)= 22 mm.
- Thickness= up to 3 mm.



ATTENTION! Load with mirror surface toward the light source.

Fig. 10

15 - COLOR WHEEL

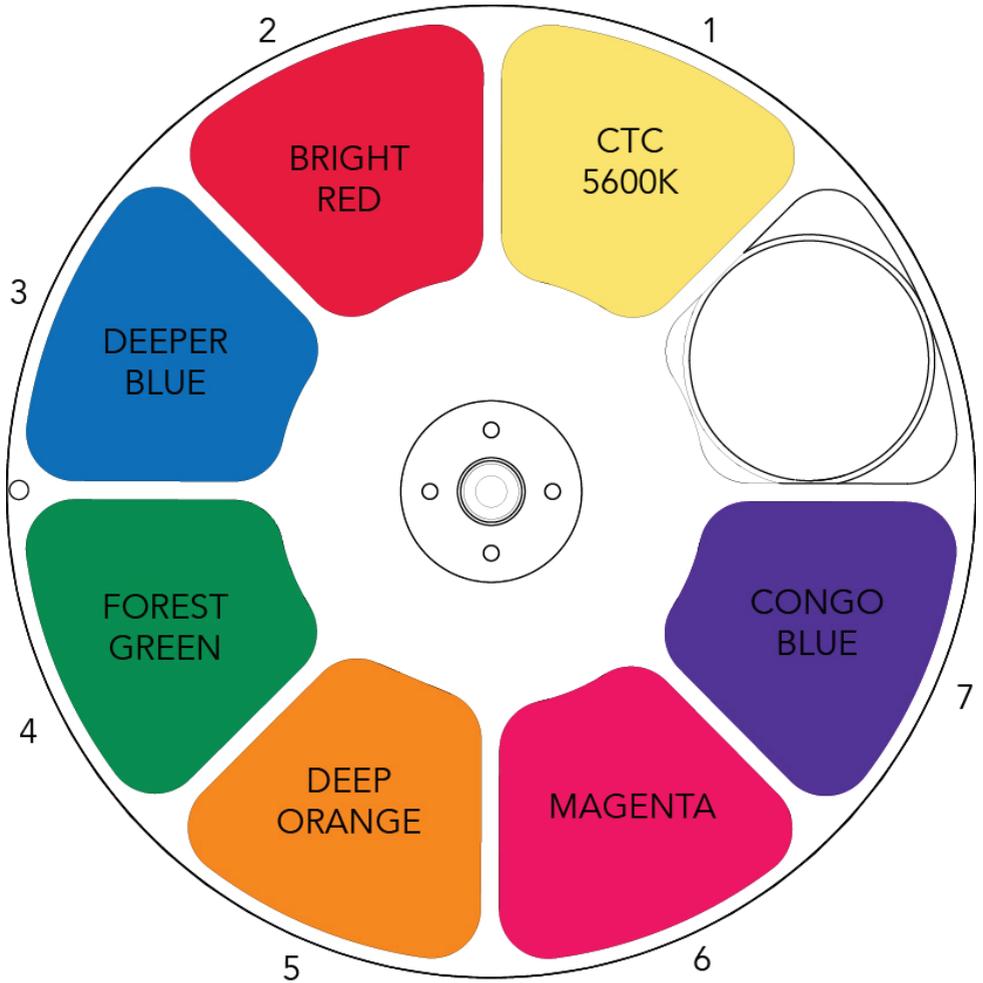


Fig. 11

16 - ANIMATION WHEEL

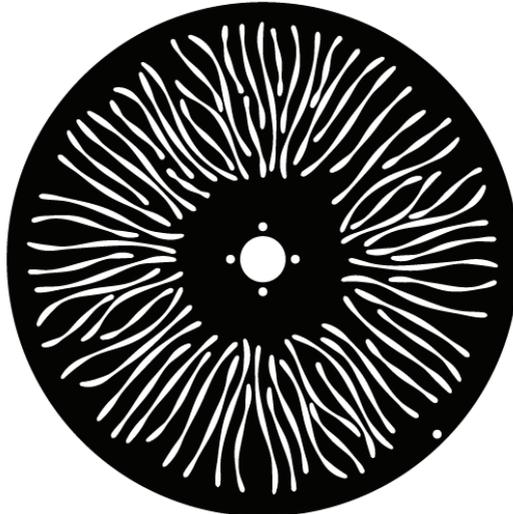
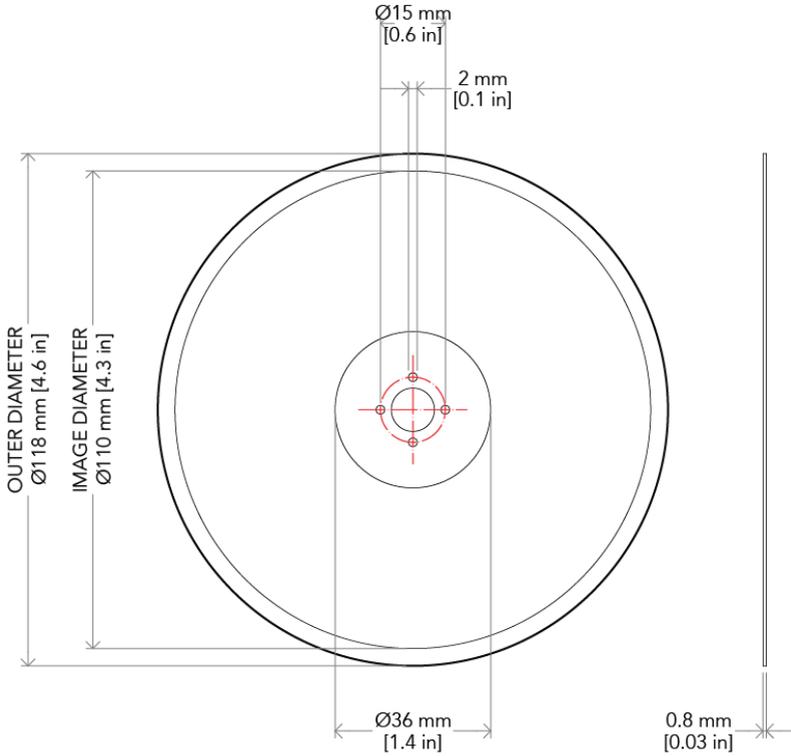


Fig. 12

17 - 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).

On page 39 you can see the location of the various pcb boards.

| ERROR SHOWED ON SCREEN | POSSIBLE CAUSES | POSSIBLE PCB WITH ANOMALY |
|--------------------------|--|---------------------------|
| [PAN MOTOR ERROR] | This message will appear after the reset of the product if: | 2U |
| | the PAN magnetic-indexing circuit detect a failure (sensor failed or magnet is missing). | 2U |
| | or the stepping motor is defective. | 2U |
| | or its driving IC on the PCB is defective. | 2U |
| | or the product is not located in the default position after the reset of the fixture. | 2U |
| [PAN LOCKED] | Pan is locked. | 2U |
| [TILT MOTOR ERROR] | This message will appear after the reset of the product if: | 2U |
| | the TILT magnetic-indexing circuit detect a failure (sensor failed or magnet is missing) . | 2U |
| | or the stepping motor is defective. | 2U |
| | or its driving IC on the PCB is defective. | 2U |
| | or the product is not located in the default position after the reset of the fixture. | 2U |
| [TILT LOCKED] | Tilt is locked. | 2U |
| [PAN ENCODER ERROR] | Pan encoder not detecteld. | 2U |
| [TILT ENCODER ERROR] | Tilt encoder not detecteld. | 2U |
| [PAN ERROR] | Pan sensor not detecteld. | 2U |
| [TILT ERROR] | Tilt sensor not detecteld. | 2U |
| [DISPLAY BATTERY ERROR] | Recharge The battery on the display board, keeping the product ON for some hours. | 1U |
| | If the error still occurs, the battery is faulty . Replace the battery on the display board. | 1U |
| [LED ERROR] | This error message is displayed when the lamp is switched OFF without a command from the product control system. | 3U |
| [LED TEMPERATURE ERROR] | This error message indicates that an overheating on the lamp has occurred and the lamp has been switched OFF by the product protection system. | 3U |
| [LED TEMP. SENSOR ERROR] | LAMP sensor damaged (open or in short circuit). | 3U |

| ERROR SHOWED ON SCREEN | POSSIBLE CAUSES | POSSIBLE PCB WITH ANOMALY |
|-------------------------------|---|----------------------------------|
| [LED AIR IN (LOW) FAN ERR.] | Air in blower for cooling the lamp failed, the lamp has been switched OFF. | 3U |
| [LED AIR OUT (UP) FAN ERR.] | Air out blower for cooling the lamp failed, the lamp has been switched OFF. | 3U |
| [POWER SUPPLY FAN ERROR] | Blower for cooling the power supply failed. | 1U |
| [BASE FAN 1 ERROR] | First of the blowers for cooling the base failed. | 1U |
| [BASE FAN 2 ERROR] | Second of the blowers for cooling the base failed. | 1U |
| [PAN/TILT PCB ERROR] | Pan tilt pcb not detected. | 2U |
| [MOTOR PCB 2 ERROR] | Motor pcb 3U not detected. | 4U |
| [MOTOR PCB 3 ERROR] | Motor pcb 4U not detected. | 5U |
| [MOTOR PCB 4 ERROR] | Motor pcb 5U not detected. | 6U |
| [MOTOR PCB 5 ERROR] | Motor pcb 6U not detected. | 7U |
| [FAN PCB ERROR] | Fan PCB not detected. | 3U |
| [FOCUS ERROR] | Failure detected during the reset of the FOCUS, if the focus lens is not located in its default position. | 7U |
| [GOBO WHEEL ERROR] | Failure detected during the reset of the gobo wheel, if this wheel is not located in the default position. | 5U |
| [4F PRISM ERROR] | Failure detected during the reset of the 4F effect prism, if this effect is not located in the default position. | 7U |
| [4F PRISM ROTATION ERROR] | Failure detected during the reset of the 4F effect prism rotation, if this effect is not located in the default position. | 7U |
| [FROST ERROR] | Failure detected during the reset of the effect FROST, if this effect is not located in the default position. | 7U |
| [CYAN ERROR] | Failure detected during the reset of the Cyan flag, if the Cyan flag of the CMY module is not located in its default position. | 4U |
| [MAGENTA ERROR] | Failure detected during the reset of the Magenta flag, if the Magenta flag of the CMY module is not located in its default position. | 4U |
| [YELLOW ERROR] | Failure detected during the reset of the Yellow flag, if the Yellow flag of the CMY module is not located in its default position. | 4U |
| [GOBO ROTATION ERROR] | Failure detected during the reset of the rotation of the rotating gobo, if the rotating gobos are not located in the default positions. | 5U |
| [ZOOM ERROR] | Failure detected during the reset of the ZOOM system, if the focus lens is not located in its default position. | 7U |
| [ANIMATION WHEEL ERROR] | Failure detected during the reset of the animation wheel, if this wheel is not located in the default position. | 5U |

| ERROR SHOWN ON SCREEN | POSSIBLE CAUSES | POSSIBLE PCB WITH ANOMALY |
|------------------------------|---|----------------------------------|
| [ANIMATION WHEEL ROT. ERROR] | Failure detected during the reset of the rotation of the animation wheel, if this wheel is not located in the default position. | 5U |
| [CMY FAN ERROR] | Blower for cooling the CMY module failed. | 4U |
| [GOBO FAN ERROR] | Blower for cooling the GOBO wheel failed. | 5U |
| [CTO ERROR] | Failure detected during the reset of the CTO flag, if the CTO flag is not located in its default position. | 4U |
| [COLOR WHEEL ERROR] | Failure detected during the reset of the color wheel, if this wheel is not located in the default position. | 5U |
| [PRISM ERROR] | Failure detected during the reset of the PRISM, if the focus lens is not located in its default position. | 7U |
| [PRISM ROTATION ERROR] | Failure detected during the reset of the PRISM ROTATION, if the focus lens is not located in its default position. | 7U |
| [FROST ERROR] | Failure detected during the reset of the FROST, if the focus lens is not located in its default position. | 7U |
| [IRIS ERROR] | Failure detected during the reset of the IRIS, if the focus lens is not located in its default position. | 7U |
| [BLADE ROTATION ERROR] | Failure detected during the reset of the BLADE ROTATION, if the focus lens is not located in its default position. | 6U |
| [BLADE 1 MOVEMENT ERROR] | Failure detected during the reset of the BLADE 1 MOVEMENT, if the focus lens is not located in its default position. | 6U |
| [BLADE 1 ROTATION ERROR] | Failure detected during the reset of the BLADE 1 ROTATION, if the focus lens is not located in its default position. | 6U |
| [BLADE 2 MOVEMENT ERROR] | Failure detected during the reset of the BLADE 2 MOVEMENT, if the focus lens is not located in its default position. | 6U |
| [BLADE 2 ROTATION ERROR] | Failure detected during the reset of the BLADE 2 ROTATION, if the focus lens is not located in its default position. | 6U |
| [BLADE 3 MOVEMENT ERROR] | Failure detected during the reset of the BLADE 3 MOVEMENT, if the focus lens is not located in its default position. | 6U |
| [BLADE 3 ROTATION ERROR] | Failure detected during the reset of the BLADE31 ROTATION, if the focus lens is not located in its default position. | 6U |
| [BLADE 4 MOVEMENT ERROR] | Failure detected during the reset of the BLADE 4 MOVEMENT, if the focus lens is not located in its default position. | 6U |
| [BLADE 4 ROTATION ERROR] | Failure detected during the reset of the BLADE 4 ROTATION, if the focus lens is not located in its default position. | 6U |

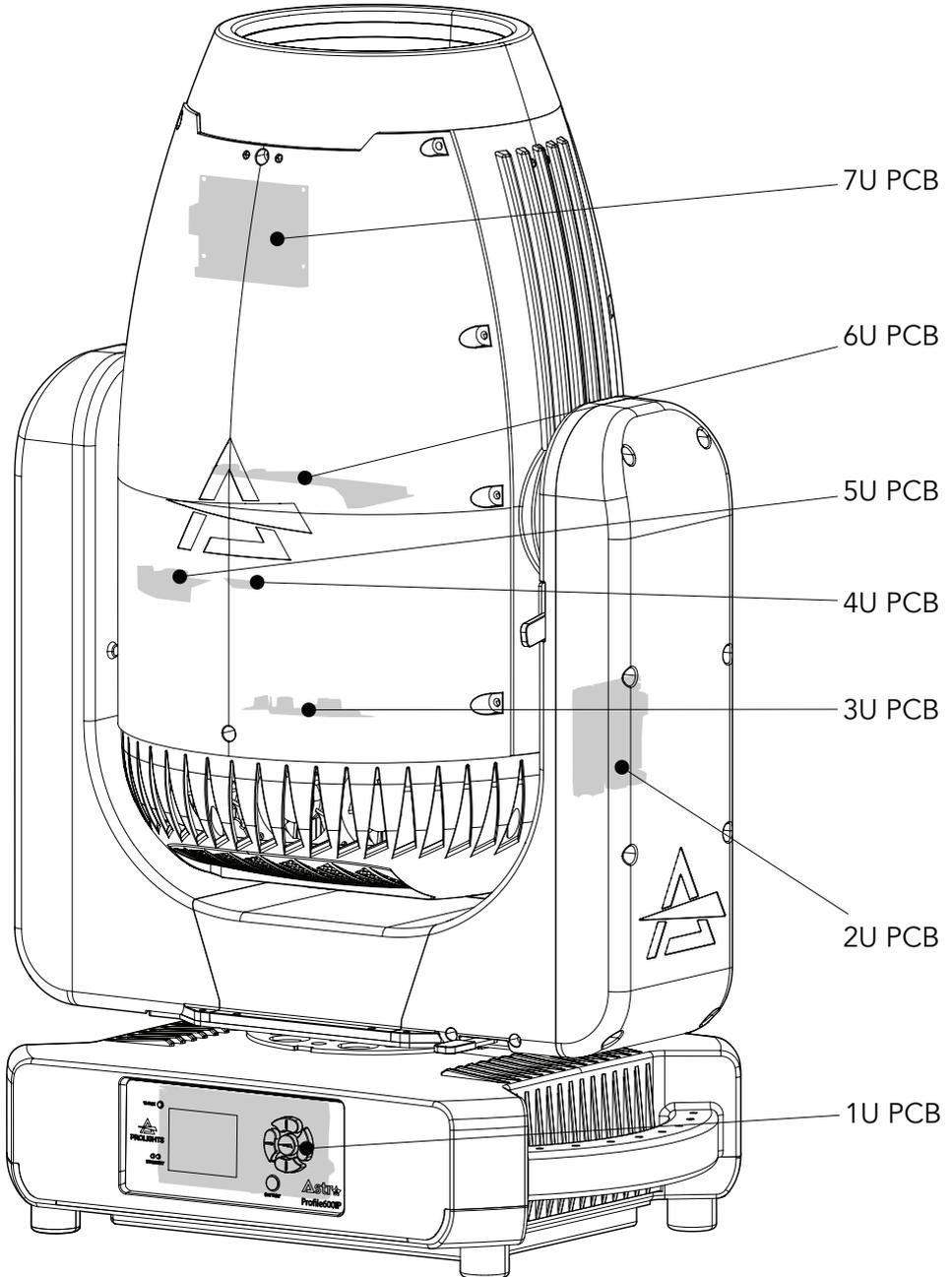
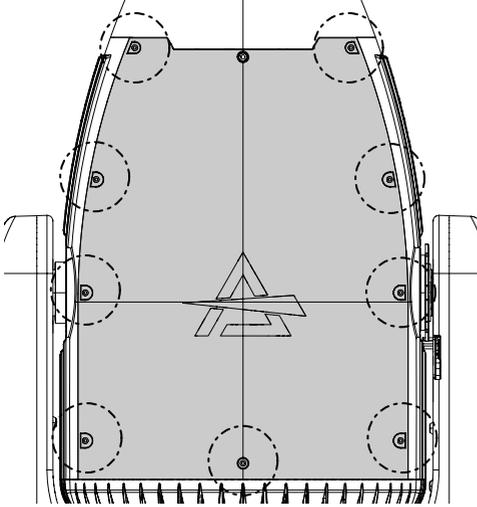


Fig. 13

18 - PERIODICAL CLEANING

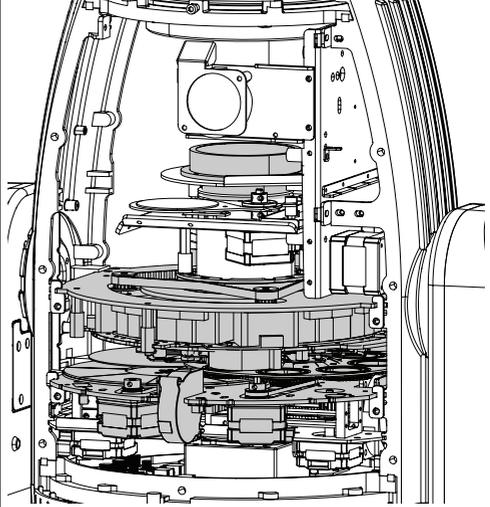
WARNING! Turn OFF power and allow approximately 20 minutes for the fixture to cool down.

1



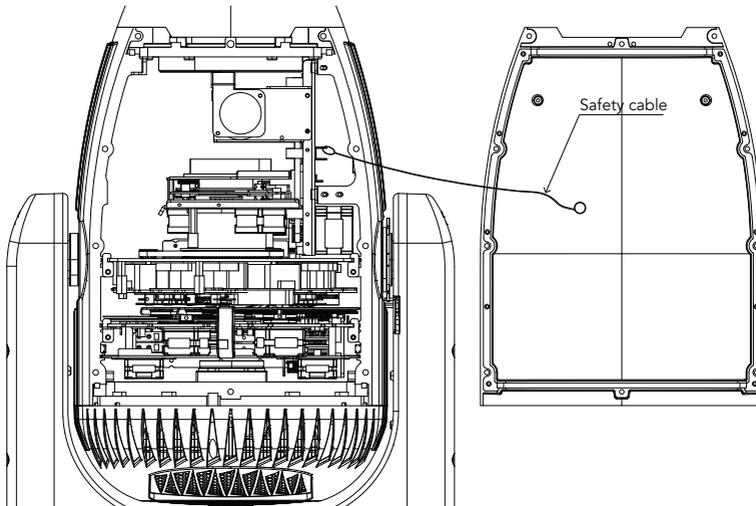
Before removing rear cover, place the head in a horizontal position and engage both the PAN and TILT locks for added stability. See the "PAN AND TILT LOCK" paragraph (pag. 6). Loosen and remove the marked screws and opening the head covers (1) from both sides.

3



Use a soft cloth dampened with any detergent liquid for cleaning glass to remove the dirt from the reflectors, lenses, filters and modules.

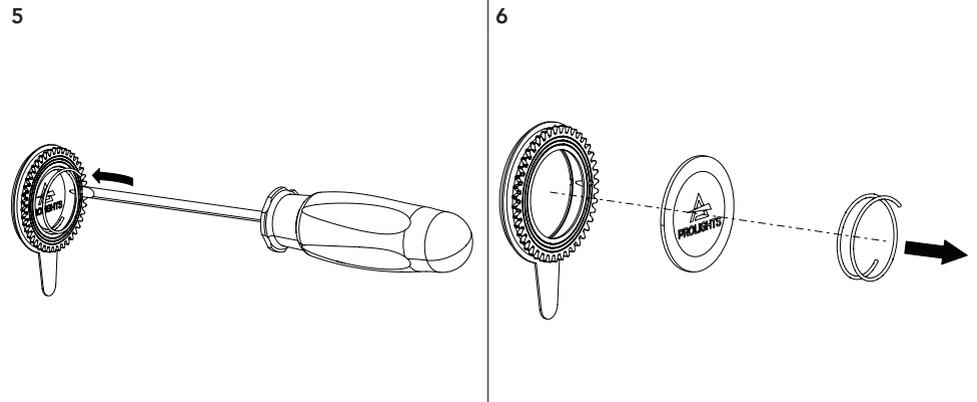
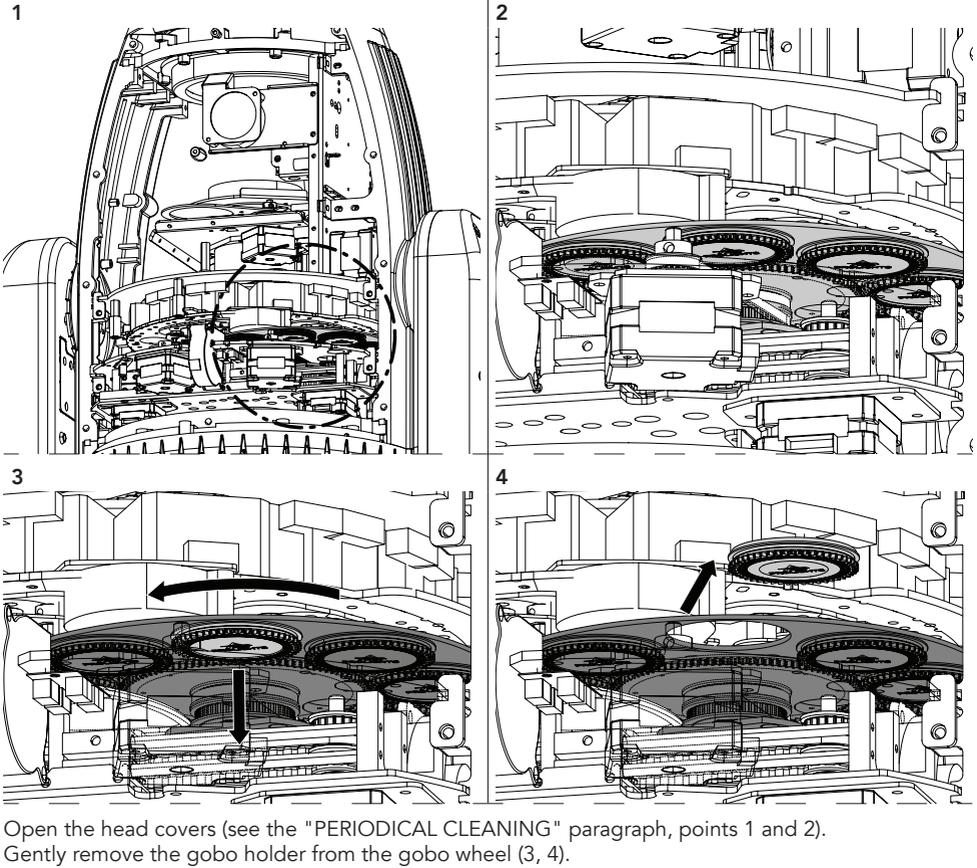
2



Unclip the safety cable on both sides (2).

Fig. 14

19 - GOBOS REPLACEMENT

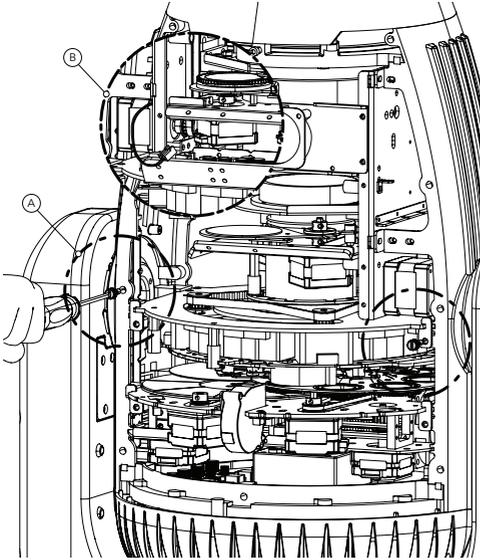


Remove the spring and the gobo (5, 6).

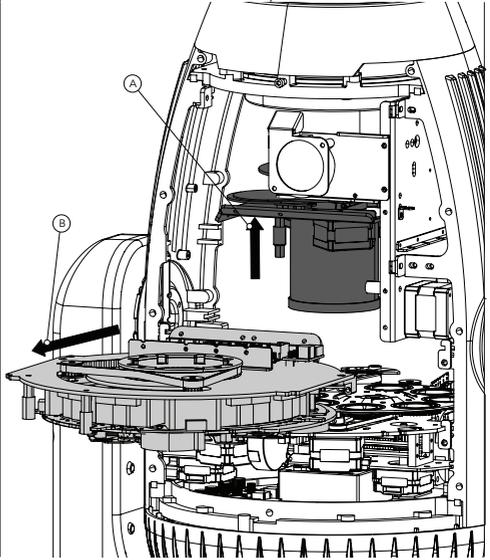
Fig. 15

20 - BLADE AND CMY MODULES REMOVAL

1

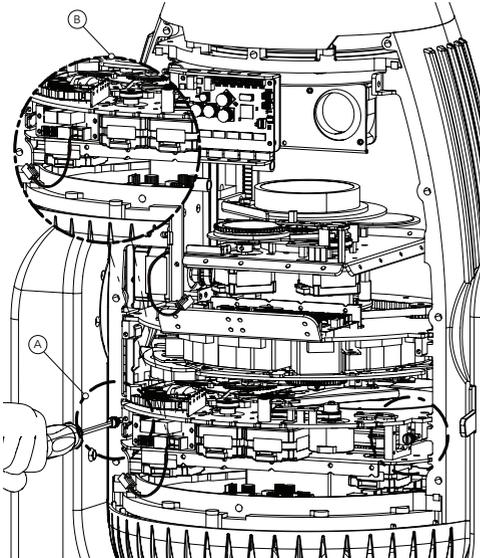


2

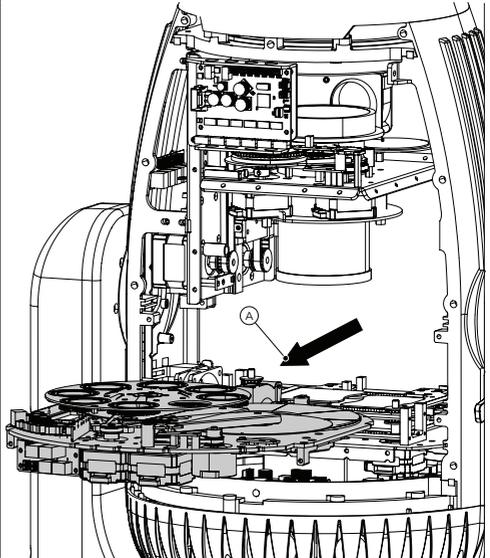


Open the head covers (see the "PERIODICAL CLEANING" paragraph, points 1 and 2). Unscrew the two screws marked on the front view (1-A) and disconnect the two connectors on the other side (1-B). Push up the focus lens (2-A) and then remove the Blade module (2-B).

3



4



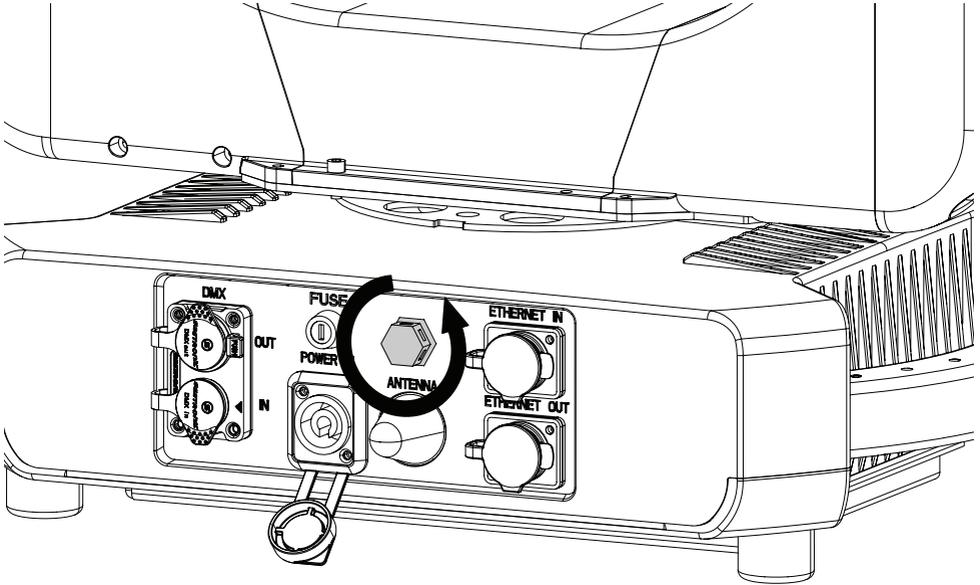
Unscrew the two marked screws on the other side(3-A) and disconnect the two connectors (3-B). Then remove the CMY module (4-A).

Fig. 16

21 - TEST OF IP65 RATING

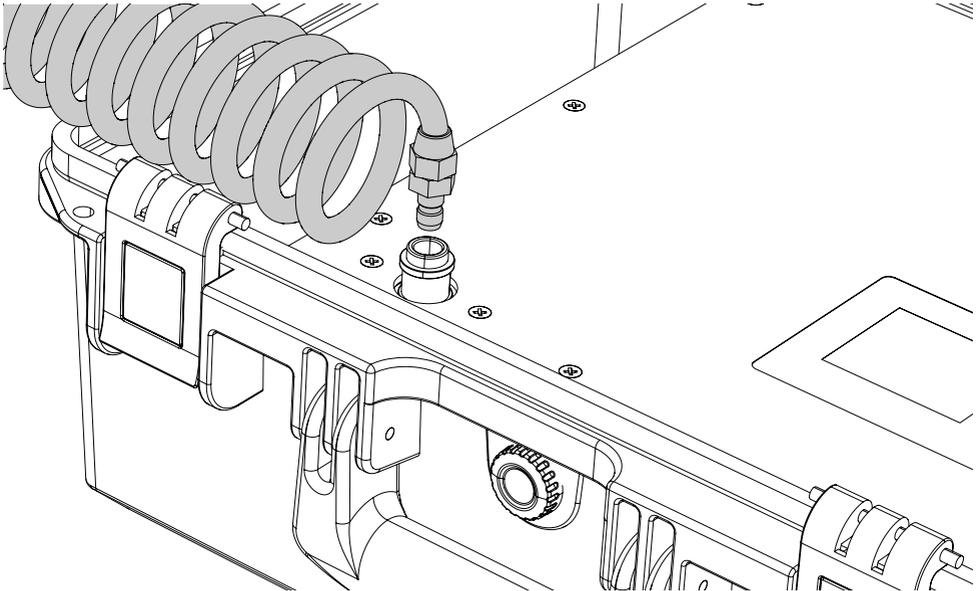
To check sealing after servicing use the IPTESTBOX.

1



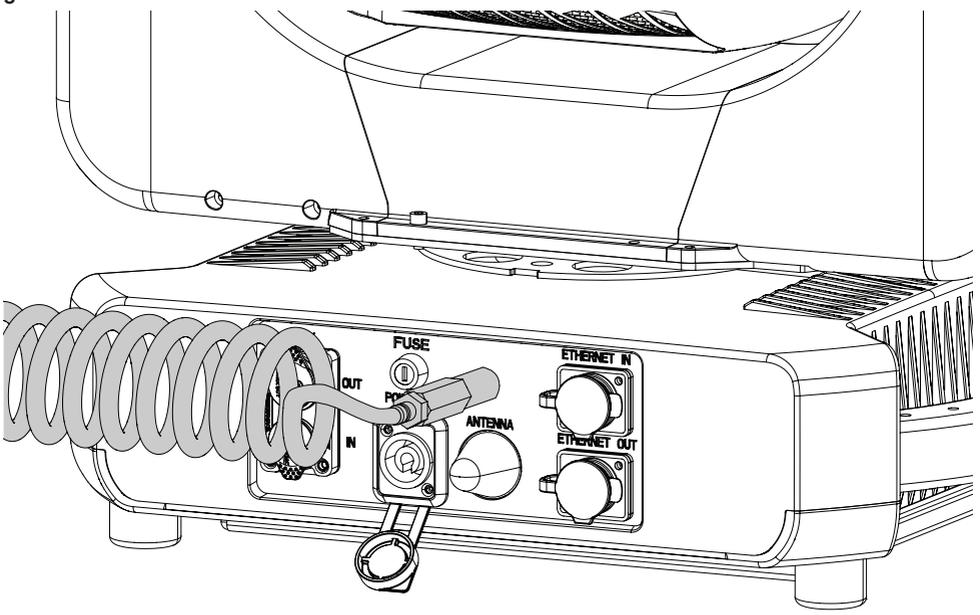
Remove the gore valve from the connections panel.

2



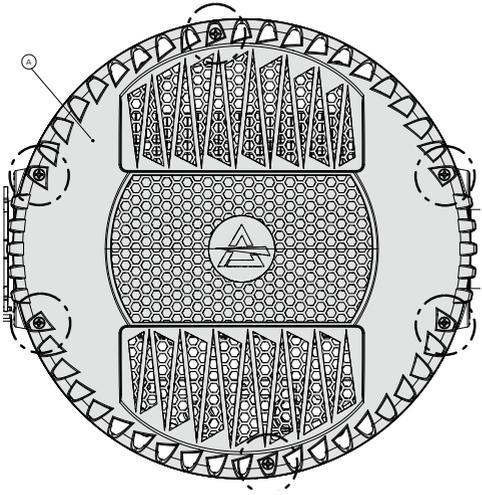
Connect the air hose to the IPTESTBOX by inserting the quick-connect fitting into the coupler.

3

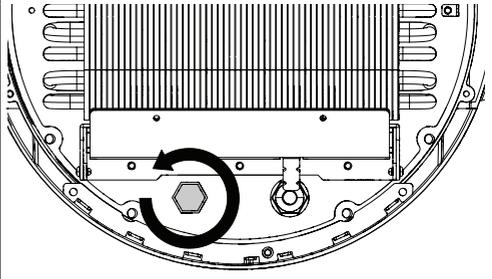


Insert the threaded end into the threaded valve hole socket.

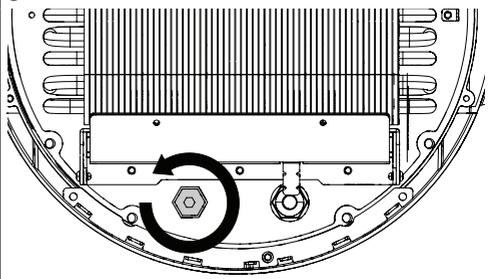
4



5



6



Remove the rear cover by unscrewing the six screws (4). Then remove the gore valve on the rear connection heatsilk module (5) and insert the hex socket cap head included in the IPTESTBOX box (6). For the operating procedure using the instrument, refer to the IPTESTBOX user manual.

Fig. 17

22 - 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 (T10AL 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.



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