PROLIGHTS

Astra PAR7ZIP

7x40W IP65 RGB+WW zoom LED PAR

USER MANUAL

REV.01-04/23 -PRELIMINARY

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

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

Visit the download area of the product page

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SAFETY INFORMATION

WARNING!

- See https://www.prolights.it/product/ASTRAPAR7ZIP#download for installation instructions.
- Please read carefully the instruction reported in this section before installing, powering, operating or servicing the product and observe the indications also for its future handling.

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

Connection to mains supply

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

Protection and Warning against electrical shock

- Do not remove any cover from the product, always disconnect the product from AC power before servicing.
- Ensure that the fixture is electrically connected to ground (earth). And use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault (earth-fault) protection.
- Before using the fixture, check that all power distribution equipment and cables are in perfect condition and rated for the current requirements of all connected devices.
- Isolate the fixture from power immediately if the power plug or any seal, cover, cable, or other components are damaged, defective, deformed or showing signs of overheating.
- Do not reapply power until repairs have been completed.
- Refer any service operation not described in this manual to PROLIGHTS Service team or an authorized PROLIGHTS service center.

Installation

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

Minimum distance of illuminated objects

- The projector needs to be positioned so that the objects hit by the beam of light are at least 0,3 meters (0,98 ft) from the lens of the projector.

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 -15°C

Minimum operating ambient temperature (Ta)

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

Protection from burns and fire

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

IP65

Outdoor (temporary) use

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

Light collimation optical system

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

T_c 62°C

Temperature of the external surface

- The surface of the fixture can reach up to 62 °C (143,6 °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

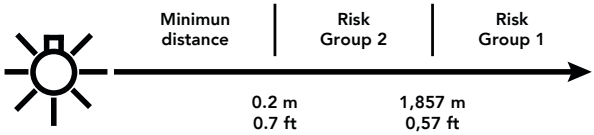
- Warning! Disconnect the fixture from AC mains power and allow to cool for at least 10 minutes before handling.
- Only technicians who are authorized by PROLIGHTS or Authorised service partners are permitted to open the fixture.
- Users may carry out external cleaning, following the warnings and instructions 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 1.857 m (6,09 ft) is not expected.



Disposal

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

The products to which this manual refers comply with:

- 2014/35/EU - Safety of electrical equipment supplied at low voltage (LVD).
- 2014/30/EU - Electromagnetic Compatibility (EMC).
- 2011/65/EU - Restriction of the use of certain hazardous substances (RoHS).
- 2014/53/EU - Radio Equipment Directive (RED).

The products to which this manual refers comply with:

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

FCC Compliance:

- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

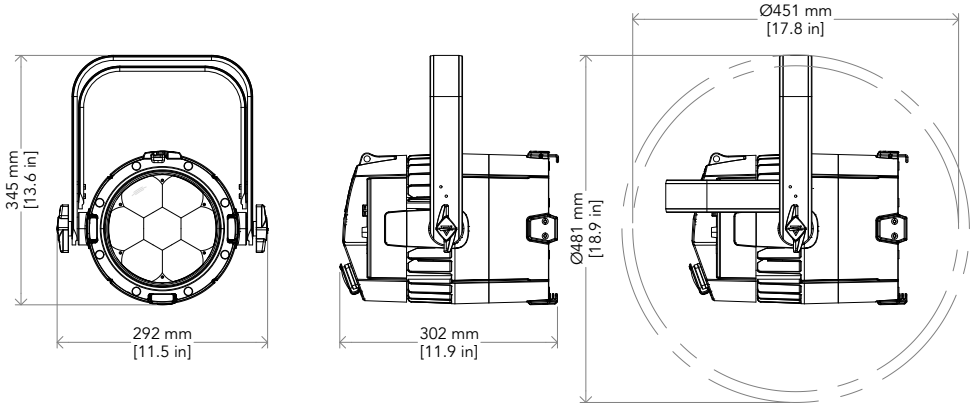
Other approvals

1 - PACKAGING PRODUCT

PACKAGE CONTENT
- 1x ASTRAPAR7ZIP.
- 1x 1,5 meters power cable (BARE END - SEETRONIC POWERCON TRUE1 IP65).
- User Manual.

OPTIONAL ACCESSORIES
- AJP7ZIPBD: barn door with 8 directional flaps to adjust the light beam, ASTRA / JET PAR7ZIP.
- 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: 9,3 kg - 20,50 lbs

Fig. 01

3 - INSTALLATION

MOUNTING

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

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

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

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

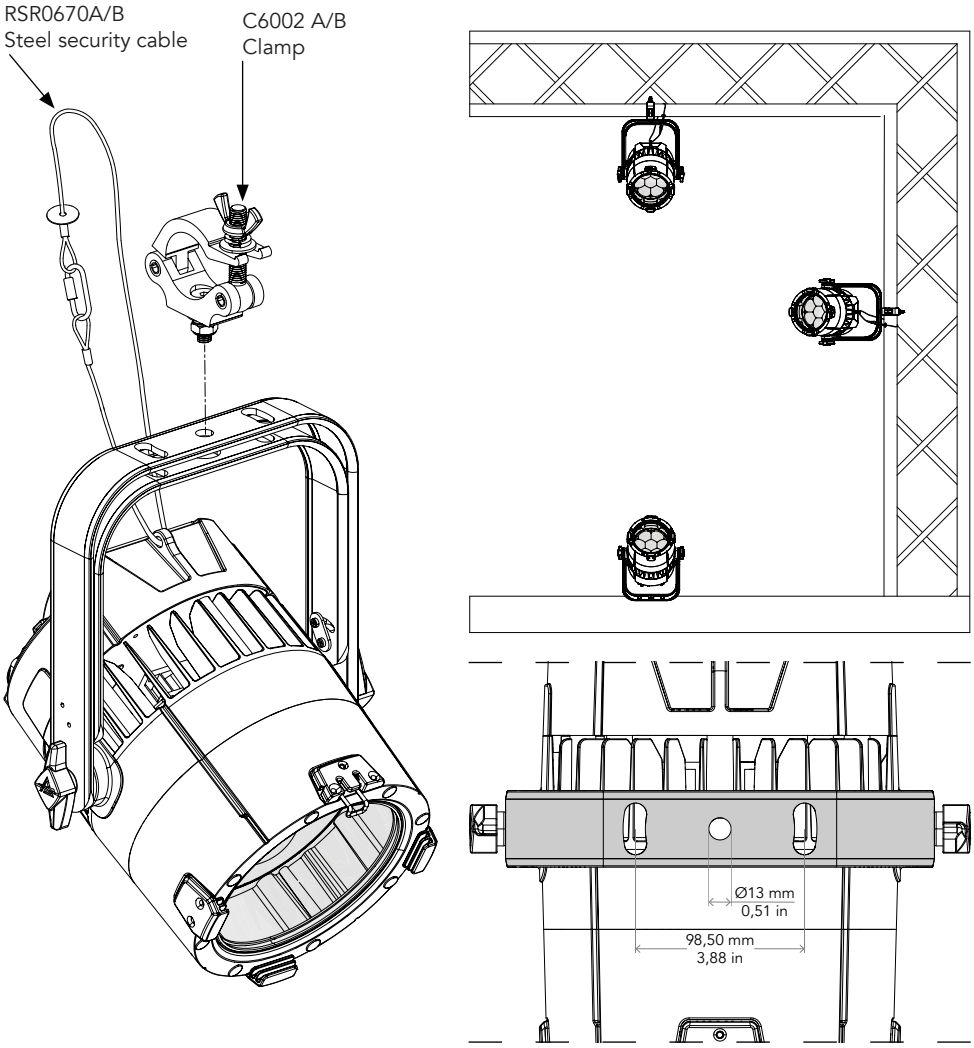


Fig.02

4 - CONNECTION TO THE MAINS SUPPLY

WARNING: For protection from electric shock, the fixture must be earthed!
The product is equipped with auto-switching power supply that automatically adjusts to any 50-60Hz AC power source from 100-240 Volts.
If you need to install a power plug on the power cable to allow connection to power outlets, install a grounding-type (earthed) plug, following the plug manufacturer's instructions. If you have any doubts about proper installation, consult a qualified electrician.
The max power consumption is 205W.

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

5 - START UP

CONNECT AND DISCONNECT POWER FROM THE PRODUCT
To apply and disconnect power to the product:

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

6 - PRODUCT OVERVIEW

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

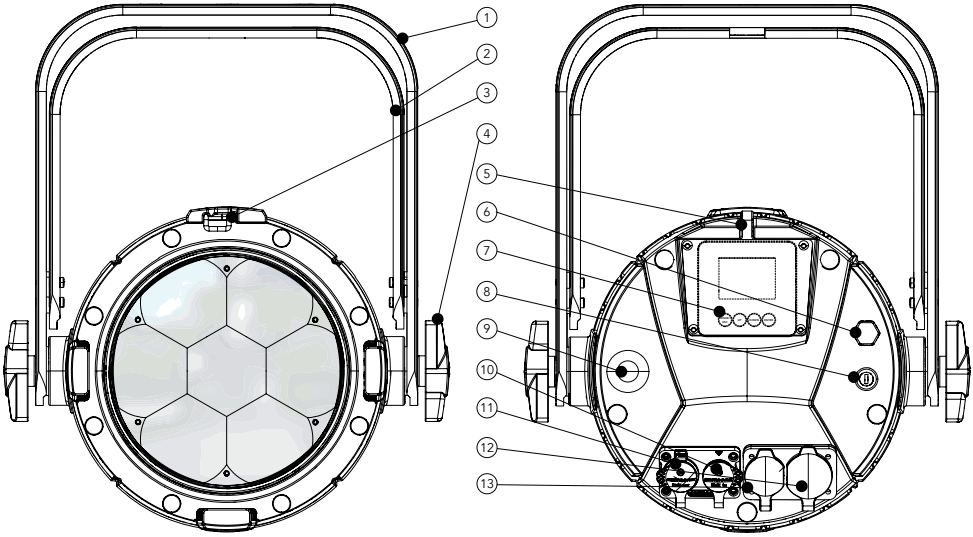


Fig 03

7 - DMX CONNECTION

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

DMX - INPUT
XLR plug

Pin1 : GND - Shield
Pin2 : - Signal
Pin3 : + Signal
Pin4 : N/C
Pin5 : N/C

DMX - OUTPUT
XLR socket

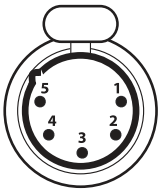


Fig. 05

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:

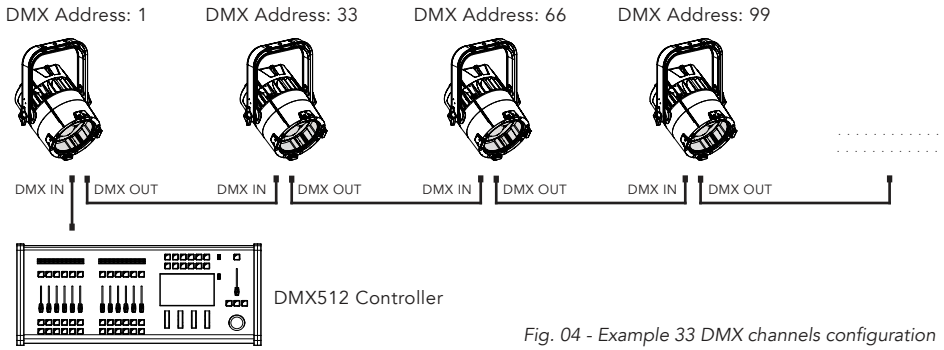
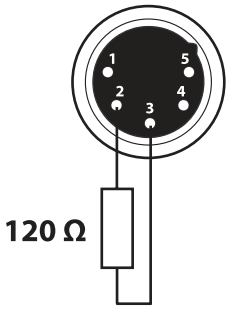
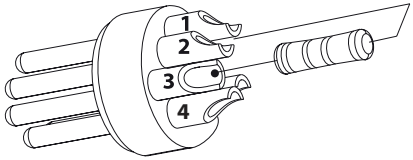


Fig. 04 - Example 33 DMX channels configuration

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.





Example:
5 pin XLR connector

Fig. 05

DMX ADDRESSING
In order to start controlling the product via DMX, the first step is to select a DMX address, also known as the start channel, this is the first channel used to receive instructions from a DMX controller. If you wish to control the product individually, it is necessary to assign a different starting address channel to each fixture.
The number of channels occupied from the product depends on the DMX mode selected, so always verify the DMX Mode in the MENU before start addressing.
If you assign two fixtures the same address, they will be executing the same behaviour. Selecting the same address to multiple fixtures can be useful for diagnostic purposes and symmetrical control.
DMX addressing is limited to make it impossible to set the DMX address so high that you are left without enough control channels for the product.
To set the fixture's DMX address:
1. Press ENTER to open the main menu.
2. Reach the addressing menu, then select the DMX ADDRESS settings.
3. Select the address from 1 to 512 using the navigation arrows/buttons and confirm by pressing ENTER.
4. Press Menu to exit and return to the Home screen.

OPERATION AS A WIRELESS TRANSMITTER
ASTRAPAR7ZIP can be used as wireless transmitter to transmit DMX signal to different wireless receivers. To use ASTRAPAR7ZIP as wireless transmitter, please follow the procedure below:
1. Push ENTER button untill 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 untill 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 throught wireless of the DMX signal from the transmitter side to the receiver.
Any incoming signal (ArtNet, sACN or DMX) is retransmitted throught wireless. It's possible to choose retransmission of Main Fixture or Pixel Engine.
If the ASTRAPAR7ZIP protocol selected is ArtNet / sACN, the WDMX module will retransmit the DMX values contained in the ArtNet / sACN signal received from the ASTRAPAR7ZIP.

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
ASTRAPAR7ZIP can be used as wireless receiver connected to a wireless transmitter.
To use ASTRAPAR7ZIP as wireless receiver, please follow the procedure below:
1. Push ENTER button untill 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 untill 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 throught the DMX port on the receiver side.

8 - CONTROL PANEL

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

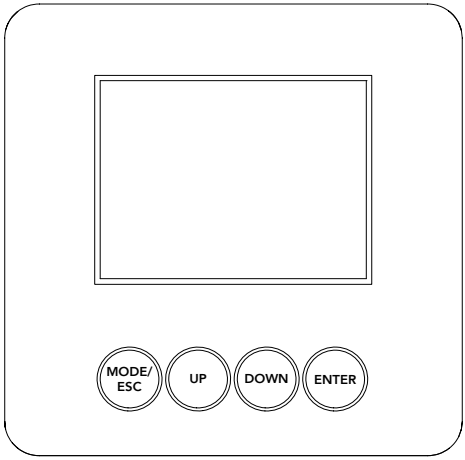


Fig. 06

DISPLAY AND BUTTONS LAYOUT

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

- MODE / ESC: used to access the menu tree or to return a previous menu window.
- UP: browse upwards through the menu list and increases the numeric value displayed.
- DOWN: browse downwards through the menu list and decreases the numeric value displayed.
- ENTER: used to confirm the current menu or confirm the current function value or option within a menu.

9 - MENU STRUCTURE

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

CONNECT	ADDRESS	FIXTURE	**1** - 512			*Set address used for Fixture.*
		PIXELS	**FOLLOW FIXTURE**			
			1 - 512			
	DMX MODE	FIXTURE	UNO			*Set DMX chart for Main Fixture.*
			DUO			
			BASIC			
			BASIC 16BIT			
			STANDARD			
			EXTENDED			
			ADVANCED			
		PIXELS	**OFF**			
			RING			
			PIXELS			
	WIRELESS	WDMX ON/OFF	ON/**OFF**			*Enable/Disable the wireless card.*
		WDMX MODE	TRANSMITTER			*Allows to choose whether to set the wireless on the Transmitter or Receiver. WDMX mode is unlocked only if WDMX ON / OFF is ON.*
			RECEIVER			
		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.*
		IN TO WDMX (TX)	MAIN FIXTURE TO WDMX			*Enable/Disable the transmission of the DMX values via wdmx.*
			PIXEL ENGINE TO WDMX			
			OFF			
		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.*
SET UP	SCREEN	BACKLIGHT	ON/**10S**/20S/30S			*Allows you to select the timing after that display will switch automatically off when unactive.*
		FLIP DISPLAY	ON/**OFF**			*Allows you to rotate the display by 180°.*
		KEY LOCK	ON/**OFF**			*Allows you lock the buttons on the control panel by a password. Press following combinations (password) in order to access to the user menu : UP, DOWN, UP, DOWN.*
	FIXTURE SETTINGS	FAN MODE	**AUTO**			*Select Fan behaviour.*
			SILENT			
			HIGH			
		SPEKTRA CALIBRATION	ON			*View the table.*
			PURE COLORS			
			OFF			
		LED MODE	HIGH QUALITY			*Set led operating mode.*
			HIGH BRIGHTNESS			
		WHITE POINT	3200K			*Select CCT when RGBW@Full.*
			4000K			
			5600K			

			6000K			
			8000K			
		DMX FAULT	**HOLD**			*To choose the behaviour of fixture in case of dmx signal lost.*
			BLACKOUT			
			STANDALONE			
			EMERGENCY			
		DIMMER CURVE	LINEAR			*Select different curve behaviour of dimmer.*
			S-CURVE			
			SQUARE LAW			
			INV. SQUARE LAW			
		DIMMER SPEED	**AUTO**			*Select Dimmer speed.*
			FAST			
			MEDIUM			
			SLOW			
		LED FREQUENCY	600 Hz			*Select PWM frequency.*
			1200 Hz			
			2000 Hz			
			4000 Hz			
			6000 Hz			
			10 kHz			
			12 kHz			
			15 kHz			
			20 kHz			
			25 kHz			
			50 kHz			
		TUNGSTEN EMULATION	ON			*To enable/disable Tungsten Emulation.*
			OFF			
		ZOOM MODE	**STANDARD**			*Select zoom mode.*
			PIXELS			
		INVERT MAPPING	ON			*Invert mapping for Pixel fixture.*
			OFF			
		INVERT ZOOM	ON			*Invert zoom values.*
			OFF			
ADVANCED	RESET FUNCTIONS	ALL				*To reset functions.*
		ZOOM				
	CALIBRATION	PASSWORD ...				*For the calibration of functions. 050 password for user reset*
	MANUAL CONTROL	...				*For manual control of the unit.*
	CONFIGURATION PRESET	PRESET 1	LOAD			
		PRESET 2	SAVE			
		PRESET 3	SET AS DEFAULT	YES		
		PRESET 4		NO		
	TRANSFER CONFIGURATION	FIXTURE	WITHOUT DMX ADDRESS			*To transfer the same menu settings of one fixtures to all the other in the daisy chain, including or not the dmx address. Transfer configuration also works via WDMX.*
			WITH DMX ADDRESS			
		PIXEL	WITHOUT DMX ADDRESS			
			WITH DMX ADDRESS			
	RELOAD DEFAULT	BASIC RELOAD	YES			*050 password for user reset.*
			NO			
		PRESET RELOAD	YES			
			NO			
		FACTORY RELOAD	YES			
			NO			
INFORMATIONS	FIXTURE TIME	FIXTURE HOURS	TOTAL	(READ)		*To check the total working hours of the unit.*
			PARTIAL	(READ AND RESET)		

		CURRENT HOURS	TOTAL	(READ AND RESET)		*To check the current working hours of the unit.*
			PARTIAL	(READ AND RESET)		
		SOURCE HOURS	TOTAL	(READ)		*To see the total operating hours of the LED source.*
			PARTIAL	(READ AND RESET)		
		POWER ON CYCLE	TOTAL	(READ)		*To see the power cycles of the machine.*
			PARTIAL	(READ AND RESET)		
		MAINTENANCE TIME	ELAPSED TIME	(READ AND RESET)		*To choose and reset unit maintenance warning hours.*
			ALERT PERIOD	10 – 750		
	TEMPERATURE	NEAR SOURCE TEMP, DRIVER PCB TEMP, LED PCB TEMP,…				*To see the unit temperature.*
	FAN SPEED	NEAR SOURCE FAN, BASE FAN,…				*To see the speed of the fans.*
	WIRELESS QUALITY					*To see the wireless quality..*
	CHANNEL VALUE					*To see the dmx value of those channels.*
	ERROR MESSAGE					*To see any error messages*
	FIXTURE MODEL	ASTRAPAR-7ZIP				*View informations about fixture model*
	RDM UID	(READ)				*View ID for the RDM control*
	SOFTWARE VERSION	1U01 V1.1.00.0...				*View informations about software version.*
STAND ALONE	MASTER/ SLAVE	MASTER DMX				*Allow you to link and operating in synk multiple units without a DMX console. Choose a unit to perform as the Master. Master No DMX: fixture is not broadcasting signal*
		MASTER NO DMX				
		SLAVE				
	EFFECTS	EFFECT 1 - 5	DIMMER	<1-100>		*Effects modes allows creation and editing of 5 effects maximum. Each effect contains up to 20 colors, a Main Dimmer and a Main Strobe.*
			STROBE	<1-100>		
			COLOR 1	SWITCH	ON	*COLOR section: SWITCH is used to toggle On/Off the color in the sequence. DIMMER is used to individually DIM the selected color. STROBE is used to individually STROBE the selected color. HOLD TIME defines how long the color is hold on the output. FADE IN/OUT TIME defines the timings of fading in/out.* *The effects can be considered as CHASE, once last color has finished playing the sequence will start again*
					OFF	
				DIMMER		
				STROBE		
				HOLD TIME	0 - 360s (Step by 0.5s)	
				FADE IN TIME	0 - 60s (Step by 0.5s)	
				FADE OUT TIME	0 - 60s (Step by 0.5s)	
				COLOR MACRO	Show list of STATIC mode	*List of Color Macro like per Static Mode.*
				WHITE PRESETS	Show list of STATIC mode	*List of White Presets like per Static Mode.*
				MANUAL COLORS	Show list of STATIC mode	*List of Manual Colors like per Static Mode.*
			…	…		

			COLOR 20	SWITCH	ON	
					OFF	
				DIMMER		
				STROBE		
				HOLD TIME	0 - 360s (Step by 0.5s)	
				FADE IN TIME	0 - 60s (Step by 0.5s)	
				FADE OUT TIME	0 - 60s (Step by 0.5s)	
				COLOR MACRO	Show list of STATIC mode	
				WHITE PRESETS	Show list of STATIC mode	
				MANUAL COLORS	Show list of STATIC mode	
	STATIC	COLOR MACRO	Check Color Macro channel on DMX Charts	Dimmer <000-**255**>		
		WHITE PRESETS	2700K	Dimmer <000-255> G/M Point <-025-025>		
			2800K			
			3200K			
			3500K			
			4000K			
			4500K			
			5000K			
			5600K			
			6000K			
			6500K			
			7000K			
			8000K			
			9000K			
			10000K			
		MANUAL COLORS	RED	<000-255>		
			GREEN	<000-255>		
			BLUE	<000-255>		
			WHITE	<000-255>		

10 - SHORTCUT

Keys	Mode	Description
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.

11 - RDM FUNCTIONS

The product can communicate using RDM (Remote Device Management) protocol over a DMX512 Networks.
RDM is a bi-directional communications protocol for use in DMX512 control systems, it is the open standard for DMX512 device configuration and status monitoring.
The RDM protocol allows data packets to be inserted into a DMX512 data stream without affecting existing non-RDM equipment. It allows a console or dedicated RDM controller to send commands to and receive messages from specific fixtures.
The PIDs in the following tables are supported in the product.
RDM is also available on Wireless. WDMX Tiny's Downstream must be enabled in its custom PIDs to work.

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	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	

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	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
	POWER_ON_SELF_TEST	0x1044	x	x

Category	Parameter	PID	GET	SET	Value	Description	Default Value
Manufacturer PIDs	PIX. ENGINE ADDR. (1-512)	0x0200	x		0-512	Set DMX Address for Pixel Engine 0: Follow Fixture 1-512:Manual DMX Address	0
	PIX. ENGINE MODE (0:Off 1:Ring 2:Pixel)	0x0201	x	x	0-2	Set DMX Mode for Pixel Engine 0:Off 1:Ring 2:Pixel	0
	DMX FAULT	0x0202		x	0-3	0: HOLD 1: BLACKOUT 2: STAND ALONE 3:EMERGENCY	0
	MASTER/ SLAVE	0x0440	x	x	0-2	0:MASTER DMX 1:MASTER NO DMX 2: SLAVE	2

Category	Parameter	PID	GET	SET	Value	Description	Default Value
	ST. AL. MODE	0x0400	x	x	0-3	0:Stand Alone Effects 1:Stand Alone Static Color Macro 2:Stand Alone Static White Presets 3:Stand Alone Static Manual Colors"	2
	EFFECT Selector	0x0401	x	x	1-5		5
	COLOR MACROS	0x0402	x	x	0-66		0
	WHITE PRESETS	0x0403	x	x	0-16		2
	MANUAL RED	0x0404	x	x	0-255		255
	MANUAL GREEN	0x0405	x	x	0-255		255
	MANUAL BLUE	0x0500	x	x	0-255		255
	MANUAL WHITE	0x0501	x	x	0-255		255
	SPEKTRA	0x0640	x	x	0 - 2	0: ON 1: PURE COLORS 2: OFF	1
	LED MODE	0x0641	x	x	0-1	0:HQ 1:HB	0
	WHITE POINT	0x0642	x		0-4	0: 3200K 1: 4000K 2: 5600K 3: 6000K 4: 8000K	3
	TUNGSTEN EMULATION	0x1000	x	x	0-1	0:OFF 1:ON	0
	ERROR MESSAGES	0x1001	x		0-2	0:No Error 1:Temperature Too High 2:LED sensor damaged(open or in short circuit)	0

12 - DMX CHARTS

RDM Model ID
0xA030

RDM Fixture ID	NAME	FOOTPRINT
1	UNO	1CH
2	DUO	2CH
3	BASIC	6CH
4	BASIC 16BIT	11CH
5	STANDARD	14CH
6	EXTENDED	21CH
7	ADVANCED	33CH

Fixture Engine							
Fixture							
Uno	Duo	Basic	Basic 16Bit	Standard	Extended	Advanced	Parameter
1	1	1	1	1	1	1	Dimmer
-	2	-	2	2	2	2	Dimmer Fine
-	-	-	-	3	3	3	CCT
-	-	-	-	-	4	4	CCT Fine
-	-	-	-	4	5	5	G/M Point
-	-	-	-	5	6	6	Crossfade from CCT to Color
-	-	2	3	6	7	7	Red
-	-	-	4	-	8	8	Red Fine
-	-	3	5	7	9	9	Green
-	-	-	6	-	10	10	Green Fine
-	-	4	7	8	11	11	Blue
-	-	-	8	-	12	12	Blue Fine
-	-	5	9	9	13	13	White
-	-	-	10	-	14	14	White Fine
-	-	-	-	10	15	15	Color Macro
-	-	-	-	-	16	16	CTO on colors
-	-	-	-	11	17	17	Shutter / Strobe
-	-	6	11	12	18	18	Zoom
-	-	-	12	13	19	19	Zoom Fine
-	-	-	-	14	20	20	Control
-	-	-	-	-	21	21	Crossfade for Pixel Engine
-	-	-	-	-	-	22	Pattern
-	-	-	-	-	-	23	Pattern Speed
-	-	-	-	-	-	24	Pattern Fade
-	-	-	-	-	-	25	Pattern Transition
-	-	-	-	-	-	26	Foreground Intensity
-	-	-	-	-	-	27	Foreground Strobe
-	-	-	-	-	-	28	Background Intensity
-	-	-	-	-	-	29	Background Strobe
-	-	-	-	-	-	30	Background Red
-	-	-	-	-	-	31	Background Green
-	-	-	-	-	-	32	Background Blue
-	-	-	-	-	-	33	Background White

Set via custom pids	NAME	FOOTPRINT
1	OFF	0CH
2	RING	8CH
3	PIXEL	28CH

Pixels Engine			
Mode			
Off	Ring	Pixel	Parameter
-	1	1	**Red 1**
-	2	2	**Green 1**
-	3	3	**Blue 1**
-	4	4	**White 1**
-	5	5	**Red 2**
-	6	6	**Green 2**
-	7	7	**Blue 2**
-	8	8	**White 2**
-	-	9	**Red 3**
-	-	10	**Green 3**
-	-	11	**Blue 3**
-	-	12	**White 3**
-	-	13	**Red 4**
-	-	14	**Green 4**
-	-	15	**Blue 4**
-	-	16	**White 4**
-	-	17	**Red 5**
-	-	18	**Green 5**
-	-	19	**Blue 5**
-	-	20	**White 5**
-	-	21	**Red 6**
-	-	22	**Green 6**
-	-	23	**Blue 6**
-	-	24	**White 6**
-	-	25	**Red 7**
-	-	26	**Green 7**
-	-	27	**Blue 7**
-	-	28	**White 7**

Dimmer

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

CCT

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

CCT

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

Tint

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

Crossfade from CCT to Color

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

Red

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

Green

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

Blue

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

White

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

Strobe

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

Color Macro

Function	8 bit value		16 bit value		Note
	From	To	From	To	
No Function	0	1	-	-	Default @ 0
Red	2	3	-	-	
Green	4	5	-	-	
Blue	6	7	-	-	
Cyan	8	9	-	-	
Magenta	10	11	-	-	
Yellow	12	13	-	-	

Color Macro					
Function	8 bit value		16 bit value		Note
	From	To	From	To	
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	-	-	
Medium Pink	102	103	-	-	

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

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

Control Channel					
Function	8 bit value		16 bit value		Note
	From	To	From	To	
No Function/Safe	0	1	-	-	Default @ 0
DISPLAY ON	2	3	-	-	Hold 3s to take function
DISPLAY 10S	4	5	-	-	
DISPLAY 20S	6	7	-	-	
DISPLAY 30S	8	9	-	-	
FLIP DISPLAY ON	10	11	-	-	
FLIP DISPLAY OFF	12	13	-	-	
KEY LOCK ON	14	15	-	-	
KEY LOCK OFF	16	17	-	-	
FAN MODE AUTO	18	19	-	-	
FAN MODE SILENT	20	21	-	-	
FAN MODE HIGH	22	23	-	-	
SPEKTRA CALIB. ON	24	25	-	-	
SPEKTRA CALIB. PURE COLORS	26	27	-	-	
SPEKTRA CALIB. OFF	28	29	-	-	
LED MODE HIGH QUALITY	30	31	-	-	
LED MODE HIGH BRIGHTNESS	32	33	-	-	
WHITE POINT 3200K	34	35	-	-	
WHITE POINT 4000K	36	37	-	-	
WHITE POINT 5600K	38	39	-	-	
WHITE POINT 6000K	40	41	-	-	
WHITE POINT 8000K	42	43	-	-	
DMX FAULT HOLD	44	45	-	-	
DMX FAULT BLACKOUT	46	47	-	-	
DMX FAULT STANDALONE	48	49	-	-	
DMX FAULT EMERGENCY	50	51	-	-	
DIMMER CURVE LINEAR	52	53	-	-	
DIMMER CURVE S-CURVE	54	55	-	-	
DIMMER CURVE SQUARE LAW	56	57	-	-	
DIMMER CURVE INV. SQUARE LAW	58	59	-	-	
DIMMER SPEED AUTO	60	61	-	-	
DIMMER SPEED FAST	62	63	-	-	
DIMMER SPEED MEDIUM	64	65	-	-	
DIMMER SPEED SLOW	66	67	-	-	
LED FREQUENCY 600HZ	68	69	-	-	
LED FREQUENCY 1200HZ	70	71	-	-	
LED FREQUENCY 2000HZ	72	73	-	-	
LED FREQUENCY 4000HZ	74	75	-	-	
LED FREQUENCY 6000HZ	76	77	-	-	
LED FREQUENCY 10KHZ	78	79	-	-	
LED FREQUENCY 12KHZ	80	81	-	-	
LED FREQUENCY 15KHZ	82	83	-	-	
LED FREQUENCY 20KHZ	84	85	-	-	
LED FREQUENCY 25KHZ	86	87	-	-	

Control Channel					
Function	8 bit value		16 bit value		Note
	From	To	From	To	
LED FREQUENCY 50KHZ	88	89	-	-	
TUNGSTEN EMULATION ON	90	91	-	-	
TUNGSTEN EMULATION OFF	92	93	-	-	
ZOOM MODE STANDARD	94	95	-	-	
ZOOM MODE PIXELS	96	97	-	-	
INVERT ZOOM OFF	98	99	-	-	
INVERT ZOOM ON	100	101	-	-	
INVERT MAPPING ON	102	103	-	-	
INVERT MAPPING OFF	104	105	-	-	
Reserved	106	107	-	-	
Reserved	108	109	-	-	
Reserved	110	111	-	-	
Reserved	112	113	-	-	
Reserved	114	115	-	-	
Reserved	116	117	-	-	
Reserved	118	119	-	-	
Reserved	120	121	-	-	
Reserved	122	123	-	-	
Reserved	124	125	-	-	
Reserved	126	127	-	-	
Reserved	128	129	-	-	
Reserved	130	131	-	-	
Reserved	132	133	-	-	
Reload using Configuraiton Preset 1	242	243	-	-	(No change on DMX Address / Mode)
Reload using Configuraiton Preset 2	244	245	-	-	(No change on DMX Address / Mode)
Reload using Configuraiton Preset 3	246	247	-	-	(No change on DMX Address / Mode)
Reload using Configuraiton Preset 4	248	249	-	-	(No change on DMX Address / Mode)
Basic Reload	250	251	-	-	(No change on DMX Address / Mode)
Reserved	252	255	-	-	

Crossfade from Color to Pixel Engine					
Function	8 bit value		16 bit value		Note
	From	To	From	To	
Linear Crossfade	0	255	0	65535	Default @ 0 / 0

Pattern					
Function	8 bit value		16 bit value		Note
	From	To	From	To	
No FX	0	16	-	-	Default @ 0
FX 1	17	22	-	-	
FX 2	23	28	-	-	
FX 3	29	34	-	-	
FX 4	35	40	-	-	
FX 5	41	46	-	-	
FX 6	47	52	-	-	
FX 7	53	58	-	-	
FX 8	59	64	-	-	
FX 9	65	70	-	-	
FX 10	71	76	-	-	
FX 11	77	82	-	-	
FX 12	83	88	-	-	
FX 13	89	94	-	-	
FX 14	95	100	-	-	
FX 15	101	106	-	-	
FX 16	107	112	-	-	
FX 17	113	118	-	-	
FX 18	119	124	-	-	
FX 19	125	130	-	-	
FX 20	131	136	-	-	
FX 21	137	142	-	-	
FX 22	143	148	-	-	
FX 23	149	154	-	-	
FX 24	155	160	-	-	
FX 25	161	166	-	-	
FX 26	167	172	-	-	
FX 27	173	178	-	-	
FX 28	179	184	-	-	
FX 29	185	190	-	-	
FX 30	191	196	-	-	
FX 31	197	202	-	-	
FX 32	203	208	-	-	
FX 33	209	214	-	-	
FX 34	215	220	-	-	
FX 35	221	226	-	-	
FX 36	227	232	-	-	
FX 37	233	238	-	-	
FX 38	239	244	-	-	
FX 39	245	250	-	-	
FX 40	251	255	-	-	

Pattern Speed

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Indexing	0	127	-	-	Default @ 0
CW from fast to slow	128	190	-	-	
Stop	191	192	-	-	
CCW from slow to fast	193	255	-	-	

Pattern Fade

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

Pattern Transition

Function	8 bit value		16 bit value		Note
	From	To	From	To	
0 - 100%	0	255	-	-	Default @ 0 Set Fade rate when moving from a Pattern to another.

Foreground Strobe

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Close	0	1	-	-	Default @ 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	-	-	
Random from slow to fast	191	251	-	-	
Open	252	255	-	-	

Foreground Red

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

Foreground Green

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

Foreground Blue

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

Foreground White

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

Background Intensity

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

Background Strobe

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Close	0	1	-	-	Default @ 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	-	-	
Random from slow to fast	191	251	-	-	
Open	252	255	-	-	

Background Red

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

Background Green

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

Background Blue

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

Background White

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

13 - RING LAYOUT

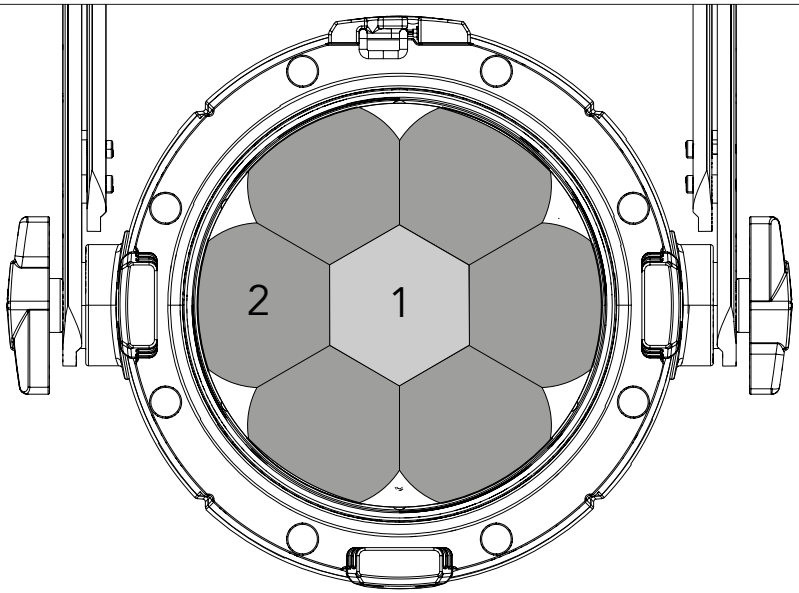


Fig. 07

14 - PIXEL LAYOUT

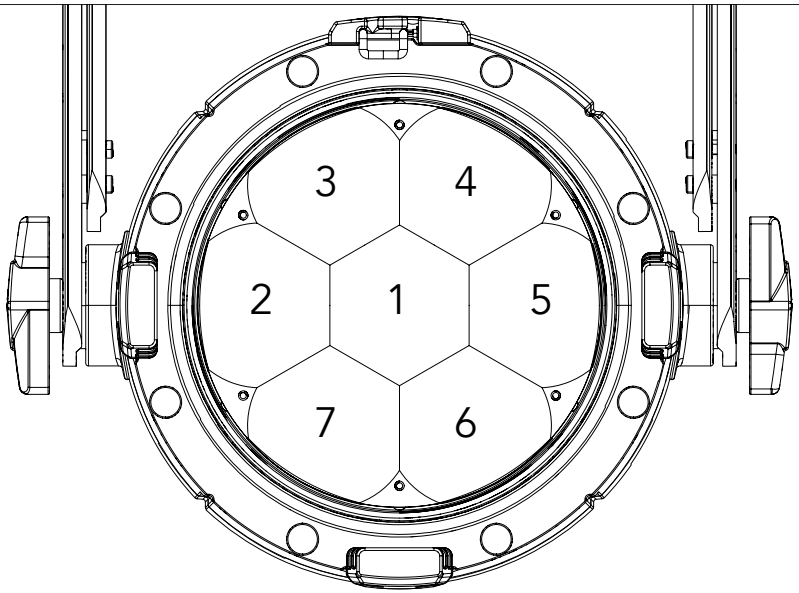


Fig. 08

15 - 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).
Below you can see the location of the various pcb boards.

Errror showed On screen	**Possible causes**	**Possible PCB with anomaly**
[DISPLAY BATTERY ERROR]	Recharge The battery on the display board, keeping the product ON for some hours.	1U
	If the error still occurrs, the battery is faulty . Replace the battery on the display board.	
[BASE FAN ERROR]	One of the blowers for cooling the base failed	1U
[DMX ACTIVE]		1U
[MAINTENANCE TIME]		
[LED FAN ERROR]	One of the blowers for cooling the lamp failed, the lamp has been switched OFF.	2U
[DRIVER/LED PCB ERROR]	Led driver pcb not detecteld.	2U
[ZOOM ERROR]	Failure detected during the reset of the ZOOM system, if the zoom lens is not located in its default position.	2U
[LED DRIVER TEMPERATURE ERROR]	This error message indicates that an overheating in the head has occurred and the lamp has been switched OFF by the product protection system.	2U
[LED PCB ERROR]	LED PCB not detected during reset.	2U

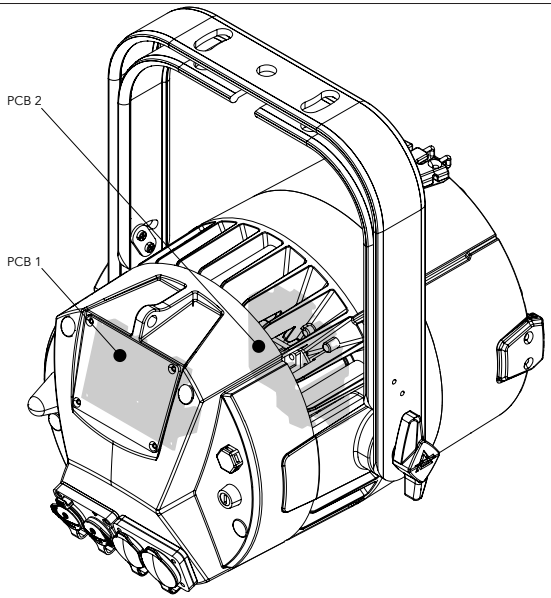
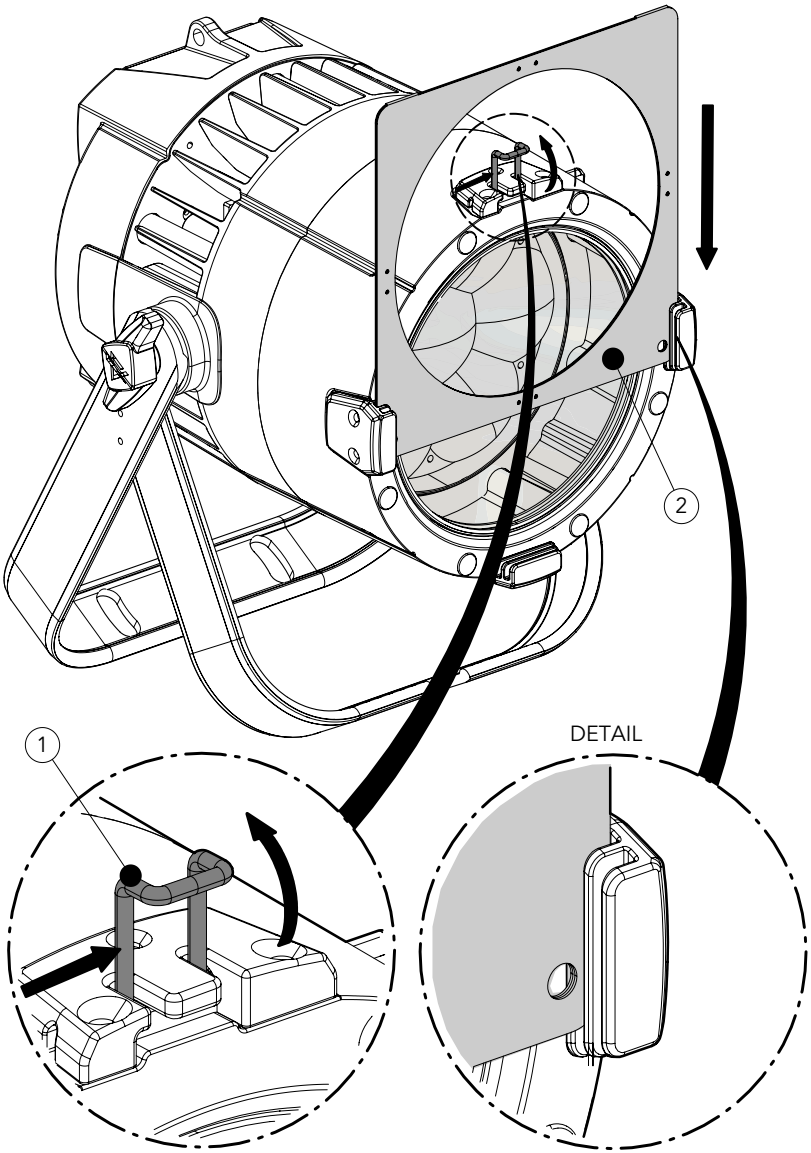


Fig. 09

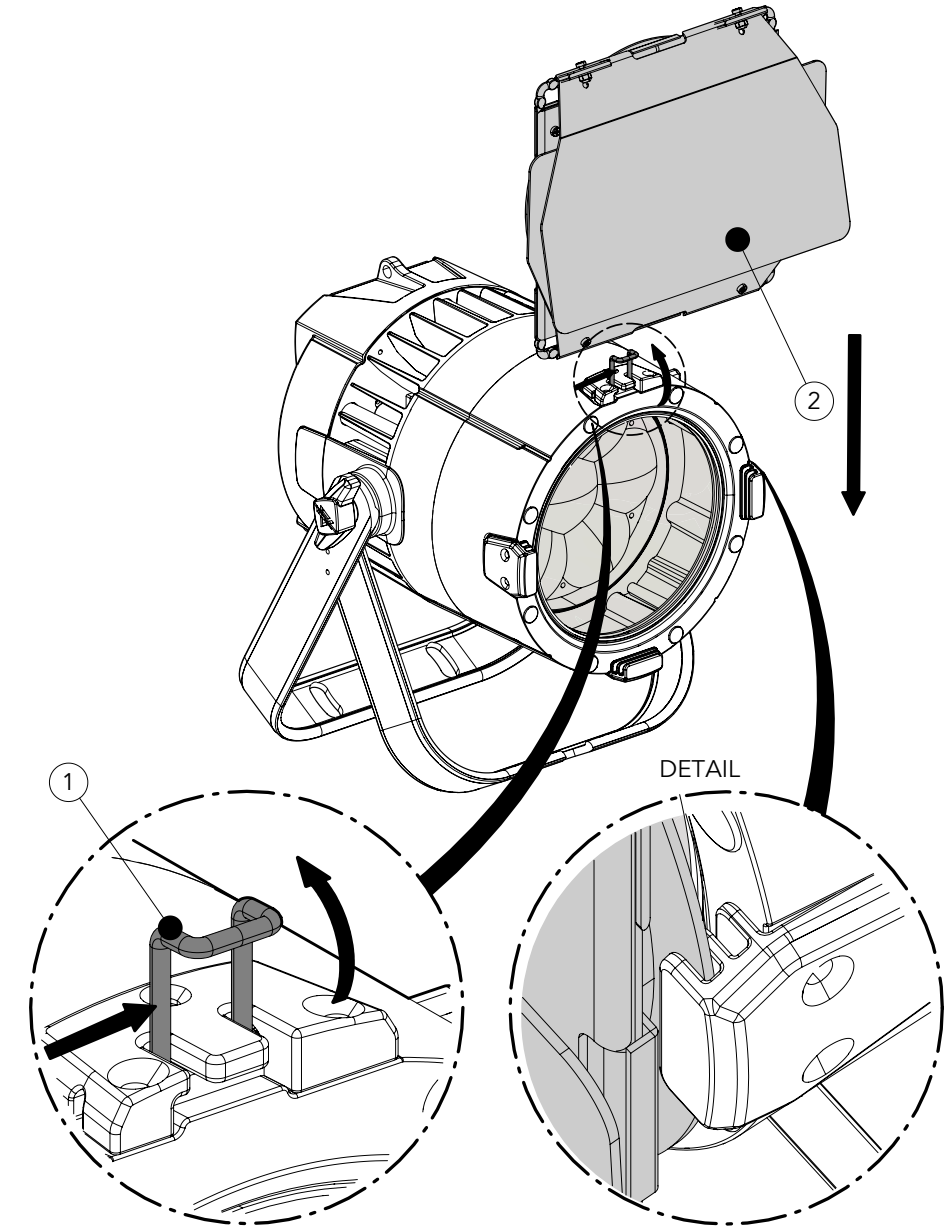
16 - ACCESSORIES INSTALLATION

FILTER FRAME (CODE AJP7ZIPBD - OPTIONAL)



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

Fig. 10

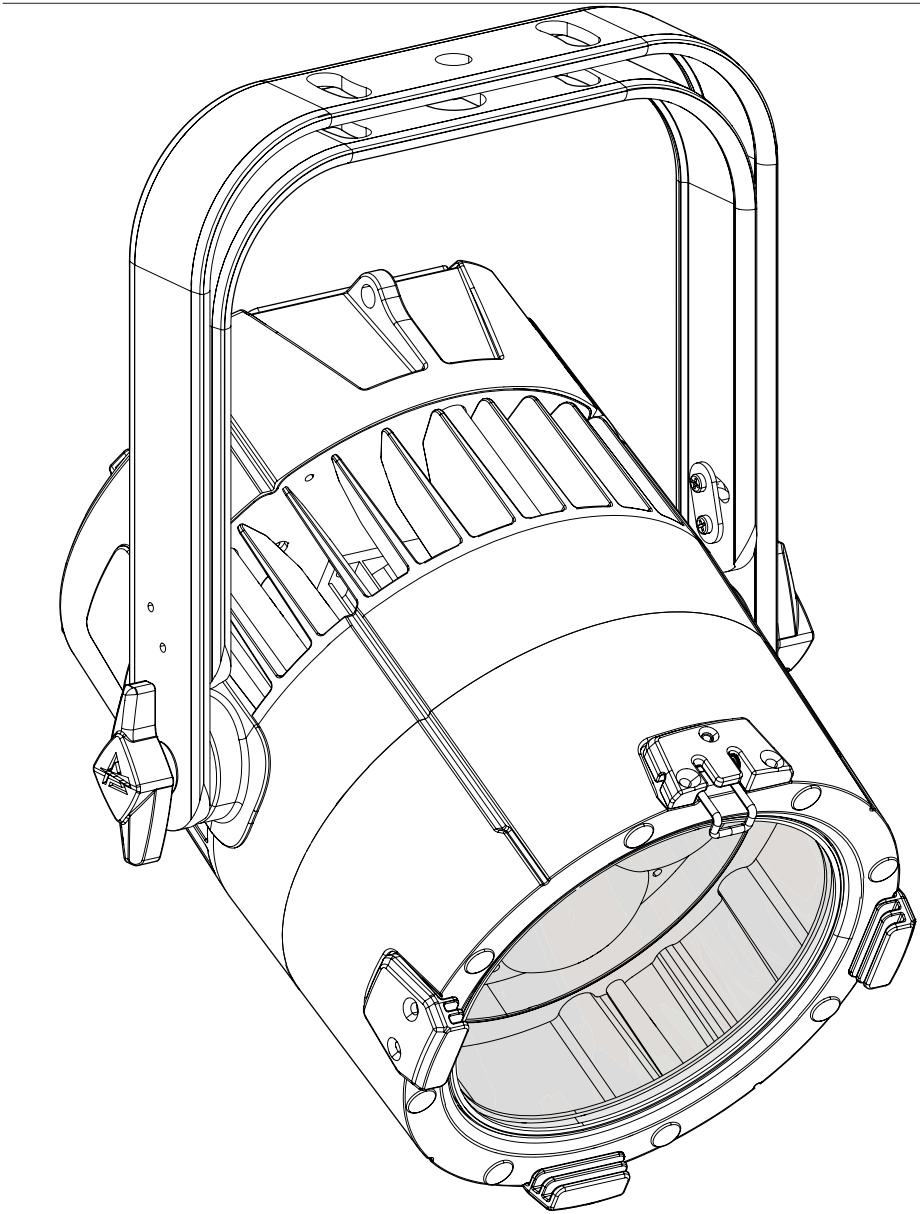


Lift the pin (1) upwards. Insert the barn door (2) into the gel frame lock (DETAIL) and close down the snap.
NOTE: To remove the accessory, reverse the procedure.

Fig.11

17 - PERIODICAL CLEANING

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



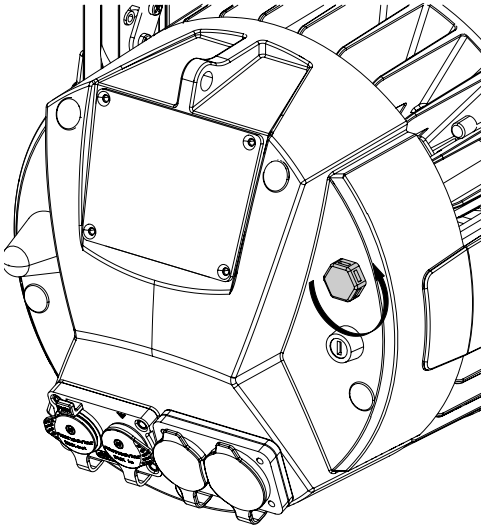
Use a soft cloth dampened with any detergent liquid for cleaning to remove the dirt from the optics.

Fig. 12

18 - TEST OF IP65 RATING

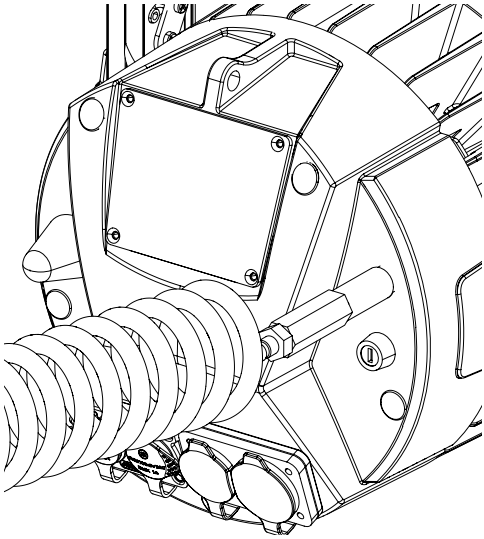
To check sealing after servicing use the IPTESTBOX.

1



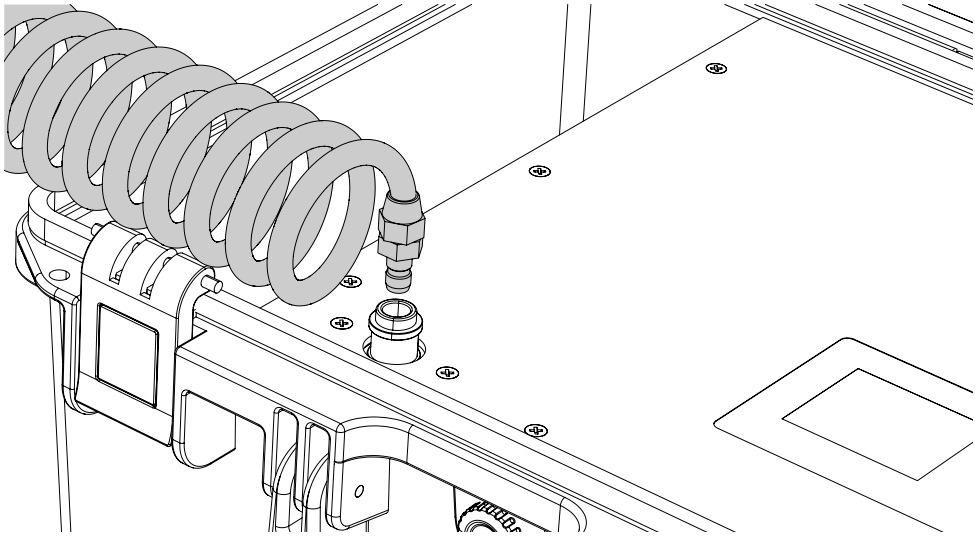
Remove the gore valve from the connections panel.

2



Insert the threaded end into the threaded valve hole socket.

2



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

Fig. 13

19 - 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 (5A).

VISUAL CHECK OF PRODUCT HOUSING

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

TROUBLESHOOTING

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

Note

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