PROLIGHTS

EclProfile FWHPVW
EclProfile FWHPIPVW

450W high quality VariableWhite LED ellipsoidal, compatible with PRL and PRLZ lenses

USER MANUAL

English version

Thank you for choosing PROLIGHTS

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

Any other use, if not expressly indicated, could compromise the good condition/operation of the product and/or be a source of danger.
This product is meant for professional use. Therefore, commercial use of this equipment is subject to the respectively applicable national accident prevention rules and regulations.

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

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

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

**Visit the download area
of the product page**

EclProfile FWHPVW

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INDEX

SAFETY INFORMATION

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

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

Connection to mains supply
- The Connection to the mains supply must be carried out by a qualified electrical installer.
- Use only AC supplies 100-240V 50-60 Hz, the fixture must be electrically connected to ground (earth).
- Select the cable cross section in according with the maximum current draw of the product and the possible number of products connected at the same power line.
- The AC mains power distribution circuit must be equipped with magnetic+residual current circuit breaker protection.
- Do not connect it to a dimmer system; doing so may damage the product.
- The product has XLR sockets for DMX input and output.
- Connection of the control signal: DMX LINE.
- Notice: this control circuit is not isolated.
- Cumulative leakage current of less than 3.5mA on the control circuit.

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

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

1,1 m
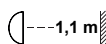
Minimum distance of illuminated objects
- The projector needs to be positioned so that the objects hit by the beam of light are at least 1.1 meters (3.61 ft) from the lens (5°) of the projector.

T_a 45°C

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

T_a -20°C

Minimum operating ambient temperature (Ta)
- Do not operate the fixture if the ambient temperature (Ta) is below -20 °C (-4 °F).

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

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 5.493 m (18,02 ft) is not expected.

Risk Group 2	Risk Group 1

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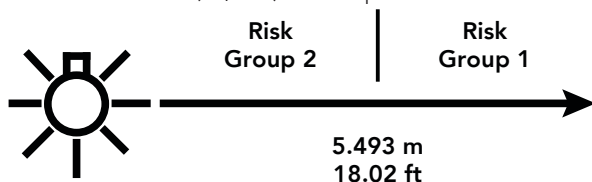
Disposal
- This product is supplied in compliance with European Directive 2012/19/EU – Waste Electrical and Electronic Equipment (WEEE). To preserve the environment please dispose/ recycle this product at the end of its life according to the local regulation.

The products to which this manual refers comply with:
- 2014/35/EU - Safety of electrical equipment supplied at low voltage (LVD).
- 2014/30/EU - Electromagnetic Compatibility (EMC).
- 2011/65/EU - Restriction of the use of certain hazardous substances (RoHS).

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

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

ECLCTPLUSHP - IP20 Version

Indoor use
- This product is designed for indoor and dry environments.
- Do not use in wet location and do not expose the fixture to rain or moisture.
- 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.

Temperature of the external surface

$T_C\,67°C$
- The surface of the fixture can reach up to 67.0 °C (152.6 °F) during operation. Avoid contact with people and materials.

ECLCTPLUSHPIP - IP65 Version

IP65   **Permanent Outdoor use**
- This product is rated with an IP (Ingress protection) for permanent outdoor use when used and serviced according to the instruction contained in this document.
- Never use the fixture in places subject to vibrations or bumps.
- Make certain that no inflammable liquids, water or metal objects enter the fixture.
- Excessive dust, smoke fluid, and particle build up degrades performance, causes overheating and will damage the fixture.
- Damages caused by inadequate cleaning or maintenance are not covered by the product warranty.

Temperature of the external surface

$T_C\,61,8°C$
- The surface of the fixture can reach up to 61.8 °C (143.2 °F) during operation. Avoid contact with people and materials.

1 - PACKAGING

PACKAGE CONTENT

- 1x ECLFWHPVW / ECLFWHPIPVW;
- 1x 1,5 meters power cable (BARE END - NEUTRIK POWERCON TRUE1 IP65);
- 1x User manual

OPTIONAL ACCESSORIES

Check the updated accessories list, description and informations of the product at the following link:
ECLFWHPVW: https://www.prolights.it/product/ECLFWHPVW#accessories
ECLFWHPIPVW: https://www.prolights.it/product/ECLFWHPIPVW#accessories

2 - TECHNICAL DRAWING

537 mm [21.1 in]   291 mm [11.5 in]   597 mm [23.5 in]   628 mm [24.7 in]   267 mm [10.5 in]
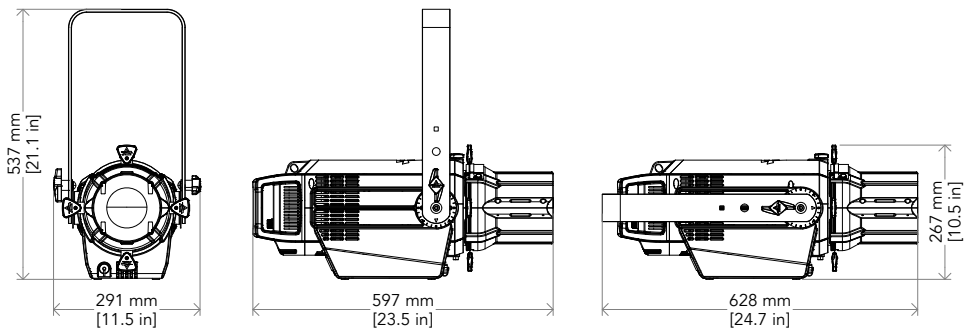
Weight: 8,5 kg - 18,74 lbs   *ECLFWHPVW without optic*

575mm [22.6in]   291mm [11.5in]   616mm [24.2in]   653mm [25.7in]   280mm [11.0in]
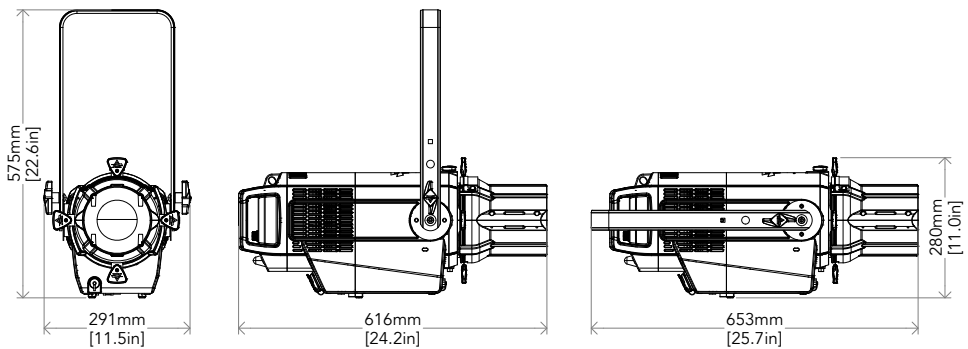
Weight: 12,5 kg - 27,56 lbs   *ECLFWHPIPVW without optic*

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.

C6002 clamp

Steel security cable

3x Ø13 [Ø0.5]

80 [3.1]
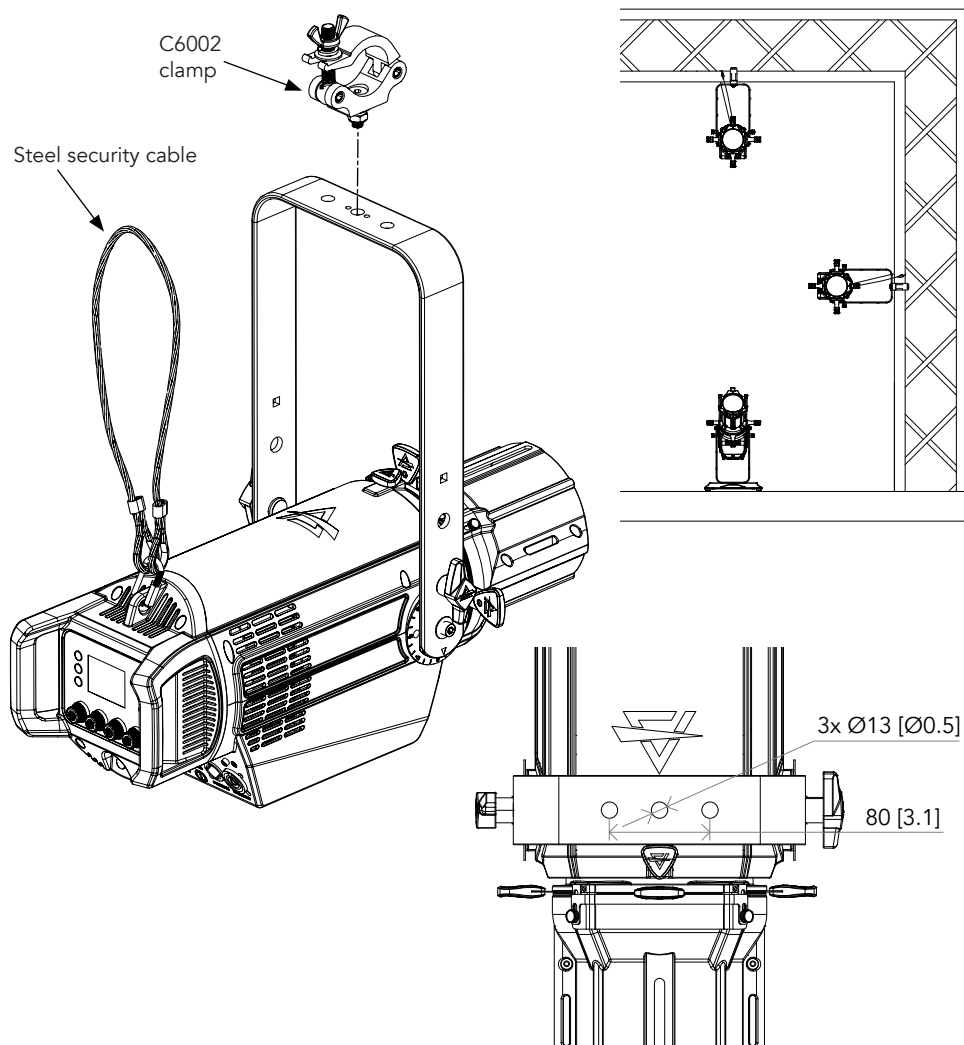
Fig. 02 - Dimensioni in mm/in

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 470W.

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. MIDDLE PART to mount optional optics;
2. ADJUSTABLE YOKE: Included tiltable bracket for installations;
3. DMX IN / OUT (5-p XLR): 1 = GND, 2 = sign-, 3 = sign+, 4 N/C, 5 N/C;
4. POWER IN / OUT: for connection to the Mains 100-240V~/50-60Hz;
5. MAIN FUSE HOLDER: replace a burnt-out fuse by one of the same type only (T6.3A, 250 V);
6. ANTENNA of Wireless DMX Receiver internal module (Included in IP65 version).
7. GORE VALVE (Only IP65 version);
8. USER INTERFACE with display and buttons for access to the control panel functions.
9. Hole for antenna (Optional for IP20 version);
10. SAFETY HOLE: to attach safety cable.

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EclProfile FWHPVW
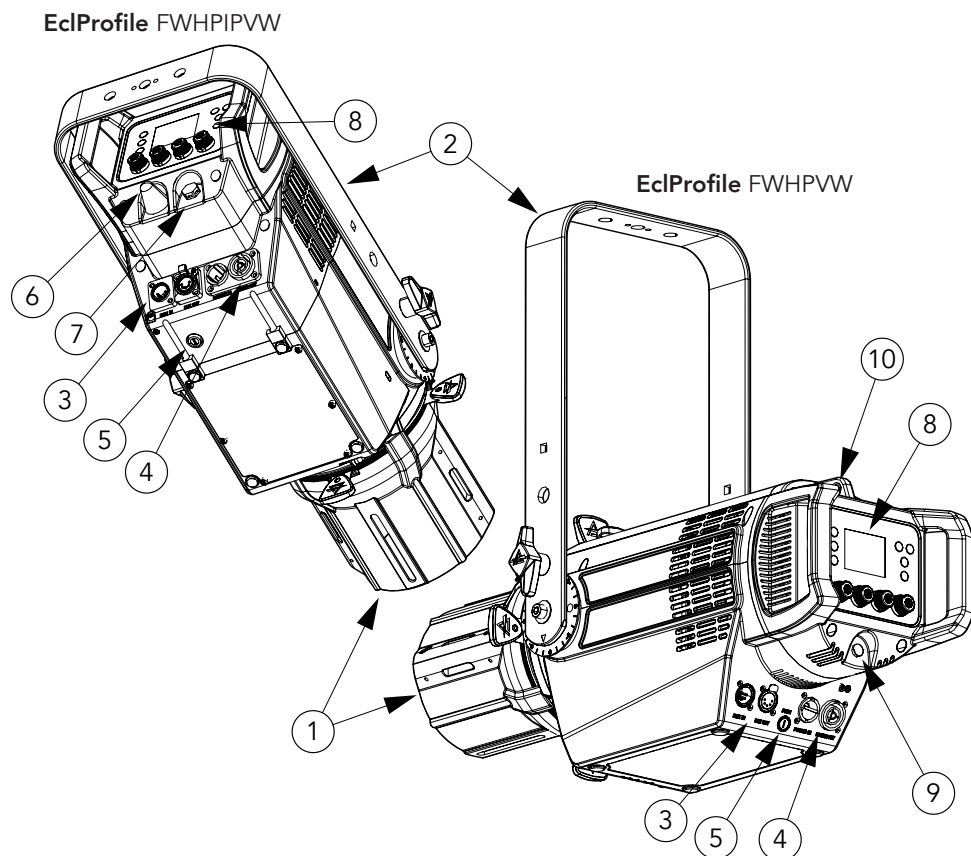
Fig. 03

7 - DMX CONNECTION

CONNECTION OF THE CONTROL SIGNAL: DMX LINE

DMX - INPUT
XLR plug

DMX - OUTPUT
XLR socket

Pin1 : GND - Shield
Pin2 : - Signal
Pin3 : + Signal
Pin4 : N/C
Pin5 : N/C
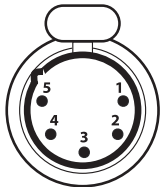
Fig. 04

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

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:

DMX Address: 33   DMX Address: 44   DMX Address: 55   DMX Address: 66

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

DMX512 Controller
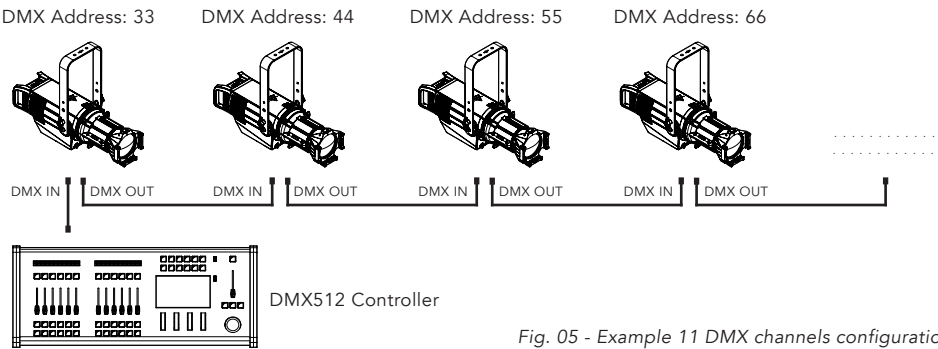
Fig. 05 - Example 11 DMX channels configuration

CONSTRUCTION OF THE DMX TERMINATION

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

120 Ω

Example:
5 pin XLR connector
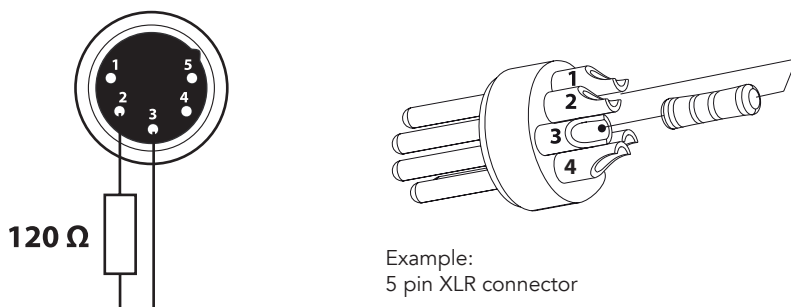
Fig. 06

DMX ADDRESSING

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

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

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

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

To set the fixture's DMX address:

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

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8 - CONTROL PANEL

The product has a display and buttons for access to the control panel functions.
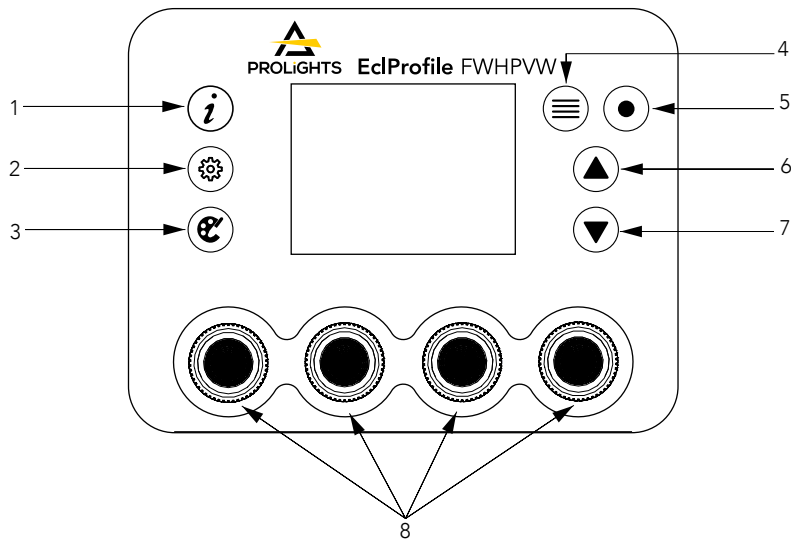
Fig. 07

DISPLAY AND BUTTONS LAYOUT

The product has a display and buttons for access to the control panel functions:
1. **INFO**: used to access in "Information","current output","documentation" windows.
2. **SETTINGS**: used to access in "quick settings" window.
3. **STANDALONE**: open standalone mode CCT RGB HSI CIExy GEL, PRESET, Color Correction
4. **MENU**: used to access the menu tree or to return a previous menu window;
5. **ENTER**: used to confirm the current menu or confirm the current value or option within a menu.
6. **UP**: browse upwards through the menu list and increases the numeric value displayed;
7. **DOWN**: browse downwards through the menu list and decreases the numeric value displayed;
8. **PUSHABLE ENCODERS**: used to control stand alone modes.

SHORTCUT

Mode	KEYS	WHEN/WHERE	TIMING	Description
FLIP DISPLAY	UP + DOWN	Home screen	Keep 3 sec	Directly flip display without enter inside menu
BOOTLOADER	DOWN + ENTER	Boot / Before power on	Keep 3 sec	Lamp waits in Bootloader to receive an update via DMX

9 - MENU STRUCTURE

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

MENU: CONNECT

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	DESCRIPTION
DMX ADDRESS	**1**-512			Set DMX Address for Main fixture
DMX MODE	MODE	UNO	USER PRESETS	
			FACTORY PRESETS	
		DUO	USER PRESETS	
			FACTORY PRESETS	
		BASIC		
		STANDARD		
		EXTENDED		
		ADVANCED		
	ACCESSORY CONTROL	**Off**		
		GOBO ROTATOR		
		IRIS MODULE		
WIRELESS (Optional)	CRMX ON/OFF	ON		Enable/Disable the wireless card. If CRMX@ OFF all other CRMX settings are not available.
		OFF		
	CRMX MODE	TX CRMX		Allows configuration of the wireless card as either a Transmitter or Receiver. G4s and G3 are supported protocols for connection with Wireless Solution products.
		TX G3		
		TX G4S		
		RX		
	TX LINK RECEIVERS	YES		Enables the transmission link when the unit is set as a Transmitter.
		NO		
	TX UNLINK ALL RECEIVERS	YES		Disconnects the transmitter from all connected receivers. TX Unlink can only be used when the unit is in Transmitter mode in CRMX settings.
		NO		
	RX UNLINK RECEIVER	YES		Disconnects the CRMX card, set as a Receiver, from any connected transmitters.
		NO		
	USE LINKING KEY	YES		To enable Linking key.
		NO		
	SET LINKING KEY	xxxxxxxx 0-9		Set Linking key. Only available if SET LINKING KEY@YES. Encoder 1 = allows the increase/decrease of the digit value and the confirmation of the entire setting. Encoder 4 = Allows switching between the different digits of the Linking Key.
	SET LINKING MODE	**CRMX**		SET LINKING MODE is available when the unit is set as a receiver.
		CRMX2		
	SET LINKING UNIVERSE	**A**		SET LINKING UNIVERSE is available when the unit is set as a receiver.
		B (ONLY IN CRMX2)		
		C		
		D (ONLY IN CRMX2)		
		E		
		F (ONLY IN CRMX2)		
		G		
		H (ONLY IN CRMX2)		

MENU: CONNECT

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	DESCRIPTION
WIRELESS (Optional)	USE BLUETOOTH	YES		*To enable Bluetooth.*
		NO		
	USE BLUETOOTH KEY	YES		*To enable bluetooth key.*
		NO		
	SET BLUETOOTH KEY	xxxxxxxx		
	UNIVERSE RGB COLOR	RED		*If CRMX@TX universe color can be set; If CRMX@RX universe color shows the universe set on the TX.*
		GREEN		
		BLUE		
		CYAN		
		MAGENTA		
		YELLOW		
		WHITE		
		OFF		
	UNIVERSE NAME	xxx		*If CRMX MODE@TX: Universe name coincides with the device name; If CRMX MODE@RX: Universe name shows the one set on the TX.*
	CRMX STATUS	Not connected / Not Available / Linked		*CRMX status.*
	LINK STRENGTH	0 - 100 %		*Show Wireless quality by percentage.*
	Software Version	V x.x.x.x		*Show firmware version of Timo module.*
	CRMX MODULE	TimoTwo: V x.x.x.x		*Show hardware version of Timo module.*

MENU: SETUP

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	DESCRIPTION
LIGHT CONTROL	DIMMER SPEED	**AUTO**		See pag.17 for further informations
		SLOW		
		MEDIUM		
		FAST		
		OFF		
	DIMMER CURVE	LINEAR		See pag.18 for further informations
		S-CURVE		
		SQUARE LAW		
		INVERSE SQUARE LAW		
		HIGH RES @ LOW		
		TUNGSTEN		
FIXTURE CONTROL	FAN MODE	**AUTO**		
		TURBO		
		MANUAL	0-100%	
		QUIET 1 DLO		
		QUIET 2 DLO		
		OFF DLO		
		QUIET 1 CLO		
		QUIET 2 CLO		
		OFF CLO		
	SIGNAL FAULT BEHAVIOUR	HOLD		Define the behaviour of fixture in case of DMX signal lost.
		HOLD - ON ENCODER TOUCH	**CCT MODE**	
			WW-CW	
		STANDALONE	**CCT MODE**	
			WW-CW	
		BLACKOUT		
		EMERGENCY		
	STARTUP BEHAVIOUR	**ON ENCODER TOUCH**	**CCT MODE**	Define the behaviour of fixture in case of start up without DMX signal.
			WW-CW	
		STANDALONE	**CCT MODE**	
			WW-CW	
		BLACKOUT		
		EMERGENCY		
	LED FREQUENCY	**1282HZ**		To select LED PWM frequency.
		2000HZ		
		4000HZ		
		6000HZ		
		10KHZ		
		12KHZ		
		15KHZ		
		20KHZ		
	POWER LIMIT	**100%**		To select Power Limit.
		75%		
		50%		
		25%		

MENU: SETUP

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	DESCRIPTION
UI SETTINGS	VALUES FORMAT	TEMPERATURE	**°C**	*To select the temperature unit.*
			°F	
	BACKLIGHT SETTINGS	BACKLIGHT TIMEOUT	ALWAYS ON	*Sets the time after which the display will automatically turn off when inactive.*
			10S	
			30S	
			60S	
		BACKLIGHT DIMMER	25%	*Select backlight intensity.*
			50%	
			75%	
			100%	
		BACKLIGHT ENCODER	OFF	*Switch ON or OFF backlight of Push Knob Encoder.*
			ON	
	FLIP DISPLAY	**OFF**		*Enables the display to be rotated by 180°.*
		ON		
	KEYLOCK	**OFF**		*Lock the buttons on the control panel with a password.*
		ON		*To access the user menu, enter the following button sequence (password): UP, DOWN, UP, DOWN, ENTER.*
CONFIG. PRESETS	PRESET 1	SAVE	YES	
	PRESET 2		NO	
	PRESET 3	RECALL	YES	
	PRESET 4		NO	

MENU: ADVANCED

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	DESCRIPTION
BASIC RELOAD	RELOAD?			*Restores all default settings except the Presets saved in Stand Alone and Configuration Presets.*
	CANCEL			
FACTORY RELOAD	RELOAD?			*Return all settings to default. Also deletes Presets saved in Stand Alone and Configuration Presets."*
	CANCEL			

MENU: STANDALONE

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	DESCRIPTION
MASTER / SLAVE	MASTER DMX			
	MASTER NO DMX			
	SLAVE			
CCT MODE	**CCT**			*See pag.21 for further informations*
WW-CW	WW	0-255		
	CW	0-255		

MENU: INFORMATION

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	DESCRIPTION
Fixture Hours	<99999H>			
Source Hours	<99999H>			
Power Cycles	<99999>			
Power Consumption	x W			
Fan Speeds				*Submenu listing speed of all Fans*
Temperatures	LED Temperature			
	CPU Temperature			
Voltages	48V			
	12V			
	5V			
Calibration State				*Active / Flash Error / Not Calibrated / Disabled*
Error Messages				*Submenu listing errors*
Version	Vx.x.xx.xxxx			
CRMX Module	TimoTwo: Vx.x.x.x			
RDM UID				
Documentation				*See Documentation page sheet*

UNO/DUO PRESETS

USER Presets		FACTORY Presets
Preset 01		CCT - 2700K
Preset 02		CCT - 2800K
Preset 03		CCT - 3000K
Preset 04		CCT - 3200K
Preset 05		CCT - 3600K
Preset 06		CCT - 4000K
Preset 07		CCT - 4200K
Preset 08		CCT - 5000K
Preset 09		CCT - 5600K
Preset 10		CCT - 6000K
Preset 11		
Preset 12		
Preset 13		
Preset 14		
Preset 15		
Preset 16		
Preset 17		
Preset 18		
Preset 19		
Preset 20		

Five dimming speeds are available:
1. **AUTO** - When the DMX value changes by more than 50 DMX values, the intensity will instantly adjust to the new value. For changes less than 50 DMX values, the fast dimming curve will be applied.
2. **FAST** - Indicates the fast speed dimming curve. Refer to the diagram for reference.
3. **MEDIUM** - Indicates the medium speed dimming curve. Refer to the diagram for reference.
4. **SLOW** - Indicates the slow dimming curve. Refer to the diagram for reference.
5. **OFF** - The intensity will immediately adjust to the new value (essentially no delay effect).

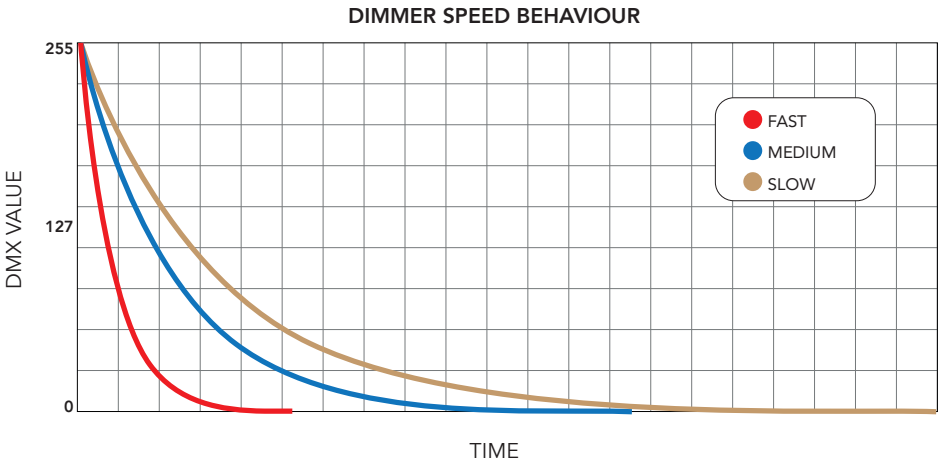NOTE: *When setting the dimmer curve @tungsten, the dimmer speed settings is not available.*

DIMMER SPEED BEHAVIOUR

Fig. 08

Five dimming modes are available:
1. **LINEAR** - Light intensity increases proportionally to the DMX value, creating a linear perception.
2. **S-CURVE** - Light intensity is finer at low and high levels, with coarser control at mid-levels.
3. **SQUARE LAW** - Light intensity is finer at low levels and becomes coarser at higher levels.
4. **INVERSE SQUARE LAW** - Light intensity is coarser at low levels and finer at higher levels.
5. **HIGHRES@LOW** - Provides very fine control at low light intensities, with coarser control at medium and high levels.
6. **TUNGSTEN** - Emulates the behaviour of an incandescent lamp.

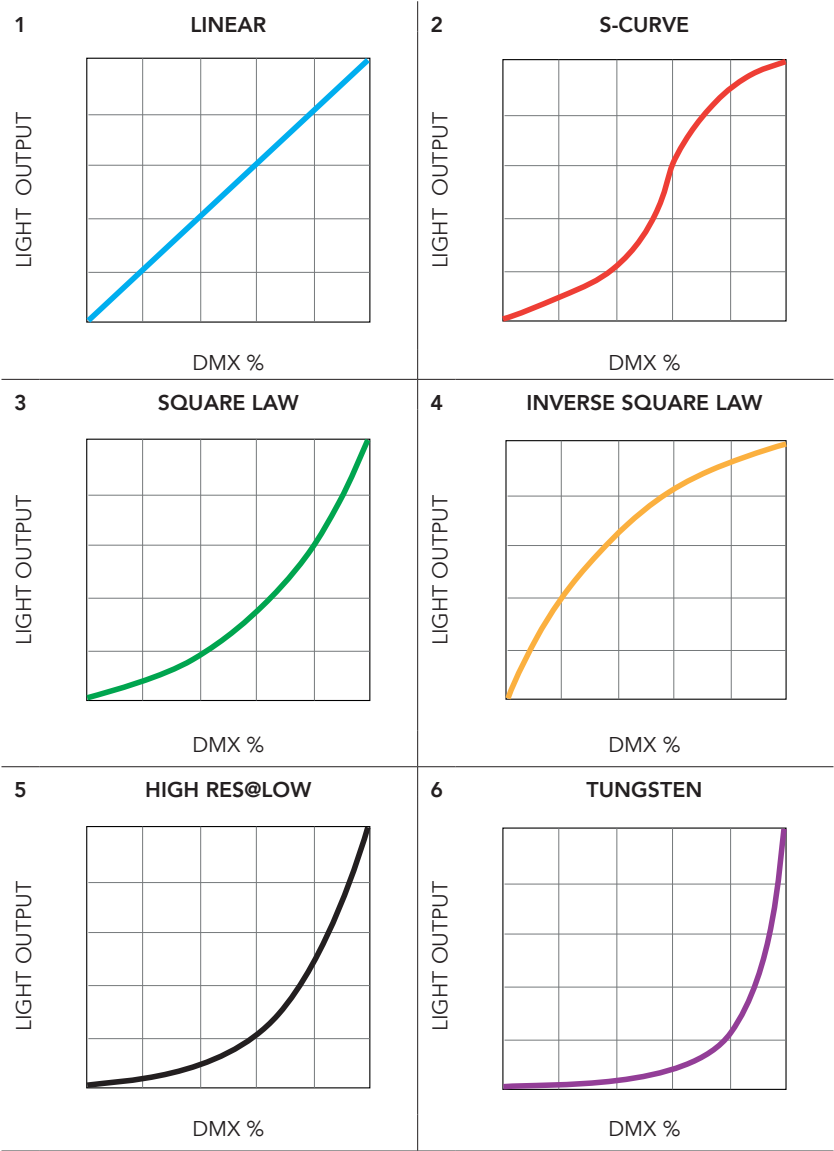| 1	LINEAR

2	S-CURVE

3	SQUARE LAW

4	INVERSE SQUARE LAW

5	HIGH RES@LOW

6	TUNGSTEN

Fig. 09

10 - RDM FUNCTIONS

RDM Model ID	HEX	DEC
ECLFWHPVW	A042	41026
ECLFWHPIPVW	A043	41027

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.

Category	Parameter	Value	GET	SET
RDM Information	SUPPORTED PARAMETERS	0x0050	x	
	PARAMETER DESCRIPTION	0x0051	x	
Product Information	DEVICE_MODEL_DESCRIPTION	0x0080	x	
	MANUFACTURER_LABEL	0x0081	x	
DMX512 Setup	DMX_PERSONALITY	0x00E0	x	x
	DMX_PERSONALITY_DESCRIPTION	0x00E1	x	
	DMX_START_ADDRESS	0x00F0	x	x
Sensors	SENSOR_DEFINITION	0x0200	x	
	SENSOR_VALUE	0x0201	x	x
Dimmer Settings	CURVE	0x0343	x	x
	CURVE_DESCRIPTION	0x0344	x	x
	OUTPUT_RESPONSE_TIME	0x0345	x	x
	OUTPUT_RESPONSE_TIME_ DESCRIPTION	0x0346	x	

11 - DMX CHARTS

RDM Model ID	HEX	DEC
ECLFWHPVW	A042	41026
ECLFWHPIPVW	A043	41027

DMX MODES LIST

RDM ID	DMX Mode	Footprint
1	UNO	1 ch
2	DUO	2 ch
3	BASIC	6 ch
4	STANDARD	6 ch
5	EXTENDED	9 ch
6	ADVANCED	14 ch

DMX MODES

Ch	UNO	DUO	IRGB	STANDARD	EXTENDED	ADVANCED
1	Dimmer	Dimmer	Dimmer	Dimmer	Dimmer	Dimmer
2	Accessory	Dimmer Fine	Dimmer Fine	Dimmer Fine	Dimmer Fine	Dimmer Fine
3	Accessory fine	Accessory	Warm White	CCT	CCT	CCT
4		Accessory fine	Cold White	CCT Fine	CCT Fine	CCT Fine
5			Strobe	Strobe	Control	Crossfade
6			Control	Control	Strobe	Warm White
7			Accessory	Accessory	Preset	Warm White Fine
8			Accessory fine	Accessory fine	Fan Control	Cold White
9					Reserved	Cold White Fine
10					Accessory	Control
11					Accessory fine	Strobe
12						Preset
13						Fan Control
14						Reserved
15						Accessory
16						Accessory fine

Dimmer					
Function	**8 bit value**		**16 bit value**		**Note**
	From	**To**	**From**	**To**	
Dimmer	0	255	0	65535	Default @ 0 (Linear Dimmer 0 - 100%)

CCT (Range Selector @ 2700K - 6500K)

CCT (K)		8 bit value		16 bit value	
From	**To**	**From**	**To**	**From**	**To**
2700	2800	0	7	0	1725
2800	2900	7	13	1725	3449
2900	3000	13	20	3449	5174
3000	3100	20	27	5174	6898
3100	3200	27	34	6898	8623
3200	3300	34	40	8623	10348
3300	3400	40	47	10348	12072
3400	3500	47	54	12072	13797
3500	3600	54	60	13797	15521
3600	3700	60	67	15521	17246
3700	3800	67	74	17246	18971
3800	3900	74	81	18971	20695
3900	4000	81	87	20695	22420
4000	4100	87	94	22420	24144
4100	4200	94	101	24144	25869
4200	4300	101	107	25869	27594
4300	4400	107	114	27594	29318
4400	4500	114	121	29318	31043
4500	4600	121	128	31043	32768
4600	4700	128	134	32768	34492
4700	4800	134	141	34492	36217
4800	4900	141	148	36217	37941
4900	5000	148	154	37941	39666
5000	5100	154	161	39666	41391
5100	5200	161	168	41391	43115
5200	5300	168	174	43115	44840
5300	5400	174	181	44840	46564
5400	5500	181	188	46564	48289
5500	5600	188	195	48289	50014
5600	5700	195	201	50014	51738
5700	5800	201	208	51738	53463
5800	5900	208	215	53463	55187
5900	6000	215	221	55187	56912
6000	6100	221	228	56912	58637
6100	6200	228	235	58637	60361
6200	6300	235	242	60361	62086
6300	6400	242	248	62086	63810
6400	6500	248	255	63810	65535

Warm White / Cold White

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

Strobe

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Open	0	1	-	-	Default @ 0
0,9 Hz to 20 Hz Strobing Duty Cycle Open Time: 100 ms to 25 ms Duty Cycle Closed Time: 1000 ms to 25 ms	2	62	-	-	
Open	63	64	-	-	
0,8 Hz to 6,6 Hz Pulse-In Strobing Duty Cycle Puls-In Time: 250 ms to 50 ms Duty Cycle Closed Time: 1000 ms to 100 ms	65	125	-	-	
Open	126	127	-	-	
0,8 Hz to 6,6 Hz Pulse-Out Strobing Duty Cycle Puls-Out Time: 250 ms to 50 ms Duty Cycle Closed Time: 1000 ms to 100 ms	128	188	-	-	
Open	189	190	-	-	
0,9 Hz to 20 Hz Random Strobing Duty Cycle Open Time: 100 ms to 25 ms Duty Cycle Closed Time: 1000 ±500 ms to 25 ±12 ms	191	251	-	-	
Open	252	255			

Fan Control Channel

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Safe					
No Function	0	1	-	-	Use Fan Mode Setting of Fixture Menu
Auto	2	3	-	-	Automatically regulates fan speed - Drops light only if passing the thermal protection treshold.
Turbo	4	5	-	-	Fixed - 100%
Fan Speed	6	107	-	-	Manual Fan Speed: 0% at 6 dmx value - 20% to 100% from 7 to 107 dmx value in linear progression
Dynamic Light Output					
Quiet 1 DLO	108	109	-	-	Fixed Fan Speed (50%) - Power drop -15%
Quiet 2 DLO	110	111	-	-	Fixed Fan Speed (40%) - Power drop -25%
Off DLO	112	113	-	-	Fixed Fan Speed (0%)
Constant Light Output					
Quiet 1 CLO	114	115	-	-	Fixed Fan Speed (50%) - Power limit 70%
Quiet 2 CLO	116	117	-	-	Fixed Fan Speed (40%) - Power limit 60%
Off CLO	118	119	-	-	Fixed Fan Speed (0%) - Power limit 35%
Reserved	120	255	-	-	---

Preset Channel

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Safe					
No Function	0	1	-	-	Default @ 0
User Defined Presets					
Preset 01	2	3	-	-	Preset saved by user
Preset 02	4	5	-	-	
Preset 03	6	7	-	-	
Preset 04	8	9	-	-	
Preset 05	10	11	-	-	
Preset 06	12	13	-	-	
Preset 07	14	15	-	-	
Preset 08	16	17	-	-	
Preset 09	18	19	-	-	
Preset 10	20	21	-	-	
Preset 11	22	23	-	-	
Preset 12	24	25	-	-	
Preset 13	26	27	-	-	
Preset 14	28	29	-	-	
Preset 15	30	31	-	-	
Preset 16	32	33	-	-	
Preset 17	34	35	-	-	
Preset 18	36	37	-	-	
Preset 19	38	39	-	-	
Preset 20	40	41	-	-	
Reserved	42	167	-	-	
Factory Presets					
Preset 01	168	169	-	-	CCT - 2700K
Preset 02	170	171	-	-	CCT - 3000K
Preset 03	172	173	-	-	CCT - 3200K
Preset 04	174	175	-	-	CCT - 3600K
Preset 05	176	177	-	-	CCT - 4000K
Preset 06	178	179	-	-	CCT - 5000K
Preset 07	180	181	-	-	CCT - 5600K
Preset 08	182	183	-	-	CCT - 6000K
Preset 09	184	185	-	-	CCT - 6500K
Reserved	186	255	-	-	---

Control Channel

Function			8 bit value		Note
			From	**To**	
No Function / Safe			0	1	Default @ 0
Dimmer Speed		**Auto**	2	3	Hold 3s to take function
		Fast	4	5	
		Medium	6	7	
		Slow	8	9	
		Off	10	11	
Dimmer Curve		Linear	12	13	
		S-Curve	14	15	
		Square Law	16	17	
		Inv. Square Law	18	19	
		High Res @ Low	20	21	
		Tungsten	22	23	
Reserved			24	45	
Fan Mode		**Auto**	46	47	
		Turbo	48	49	
		Manual	50	51	
		Quiet 1 DLO	52	53	
		Quiet 2 DLO	54	55	
		Off DLO	56	57	
		Quiet 1 CLO	58	59	
		Quiet 2 CLO	60	61	
		Off CLO	62	63	
Signal Fault		Hold	64	65	
	Hold On Encoder Touch	**CCT Mode**	66	67	
		WW-CW Mode	68	69	
	Reserved		70	77	
	Standalone		78	79	
	Blackout		80	81	
	Emergency		82	83	
Startup Behaviour On Encoder Touch	**On Encoder Touch**	**CCT Mode**	84	85	
		WW-CW Mode	86	87	
	Reserved		88	95	
	Standalone		96	97	
	Blackout		98	99	
	Emergency		100	101	
Led Frequency		**1282Hz**	102	103	
		2000Hz	104	105	
		4000Hz	106	107	
		6000Hz	108	109	
		10kHz	110	111	
		12kHz	112	113	
		15kHz	114	115	
		20kHz	116	117	
Reserved			118	123	
Power Limit		**100%**	124	125	
		75%	126	127	
		50%	128	129	
		25%	130	131	
Reserved			132	135	

<p align="center">**Control Channel**</p>

Function		8 bit value		Note
		From	To	
Backlight Timeout	Always On	136	137	Default @ 0
	10s	138	139	Hold 3s to take function
	30s	140	141	
	60s	142	143	
Backlight Display	25%	144	145	
	50%	146	147	
	75%	148	149	
	100%	150	151	
Backlight Encoder	Off	152	153	
	On	154	155	
Flip display	On	156	157	
	Off	158	159	
Keylock	On	160	161	
	Off	162	163	
Stand Alone Mode	Master DMX	164	165	
	Master NO DMX	166	167	
	Slave	168	169	
Stand Alone	**CCT Mode**	170	171	
	WW-CW Mode	172	173	
Reserved		174	181	
Stand Alone Preset	Mode 1	182	183	
	Mode 2	184	185	
	Mode 3	186	187	
	Mode 4	188	189	
	Mode 5	190	191	
	Mode 6	192	193	
	Mode 7	194	195	
	Mode 8	196	197	
	Mode 9	198	199	
	Mode 10	200	201	
Stand Alone Preset	Mode 11	202	203	
	Mode 12	204	205	
	Mode 13	206	207	
	Mode 14	208	209	
	Mode 15	210	211	
	Mode 16	212	213	
	Mode 17	214	215	
	Mode 18	216	217	
	Mode 19	218	219	
	Mode 20	220	221	
Configuration Presets	Preset 1	222	223	
	Preset 2	224	225	
	Preset 3	226	227	
	Preset 4	228	229	
Reserved		230	251	
Factory Default of control functions		252	253	
Reserved		254	255	

Gobo Rotation

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Gobo Index 0° to 360°	0	127	0	32767	Default @ 0
CW rotation 40 rpm to 0,10 rpm	128	190	32768	48895	
Stop	191	192	48896	49407	
CCW Rotation 0,10 rpm to 40 rpm	193	255	49408	65535	

Iris Module

Function	8 bit value		16 bit value		Note
	From	To	From	To	
Iris Open to Close	0	127	0	32767	Default @ 0
Pulse close Slow to fast	128	190	32768	48895	
Pulse Stop	191	192	48896	49407	
Pulse open Slow to fast	193	255	49408	65535	

12 - 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).

ERROR SHOWED ON SCREEN	POSSIBLE CAUSES	CATEGORY
Factory Reload Failed	The fixture was unable to reload Factory Defaults. Internal error during read or apply of factory data.	FACTORY DEFAULTS
Factory Reload Timeout	Factory reload operation did not complete in the expected time. Possible communication issue with internal memory.	FACTORY DEFAULTS
Factory Reload Done	Information: Factory defaults restored successful	FACTORY DEFAULTS
Preset N Save Failed	Error while saving the selected preset. Memory write failed or internal communication error.	PRESETS
Preset N Save Timeout	Saving the preset took too long and timed out. Possible memory access issue.	PRESETS
Preset N Saved	Information: Preset stored successful	PRESETS
Preset N Recalled	Information: Preset recalled successful	PRESETS
Preset N Not Available	Preset not available in Memory	PRESETS
Screen is disabled with active DMX!	Information: Screen is disabled with active DMX, Stand Alone Mode not possible	STAND ALONE

13 - ACCESSORIES INSTALLATION

OPTIC (CODE ECLPRL)

Optics are available as optional accessories.
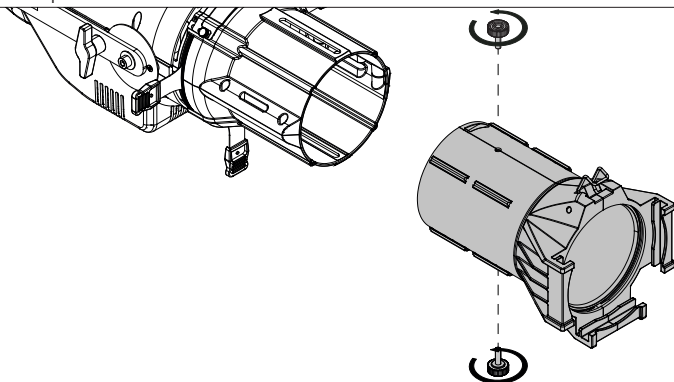
1. Loosen and remove the two marked knobs.
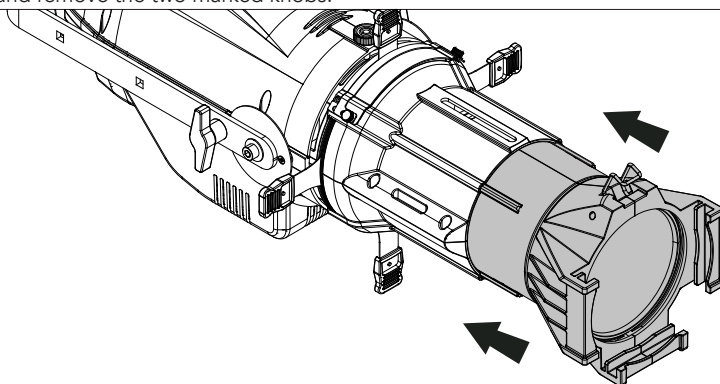
2. Mount the side desired optic.
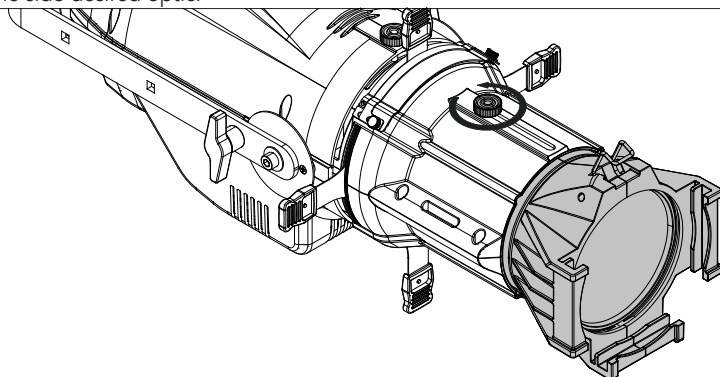
3. Insert and tighten the knobs.

Fig. 10

GEL FILTER FRAME (CODE ECLPRTPG)

Gel filter frame is available as optional accessory.
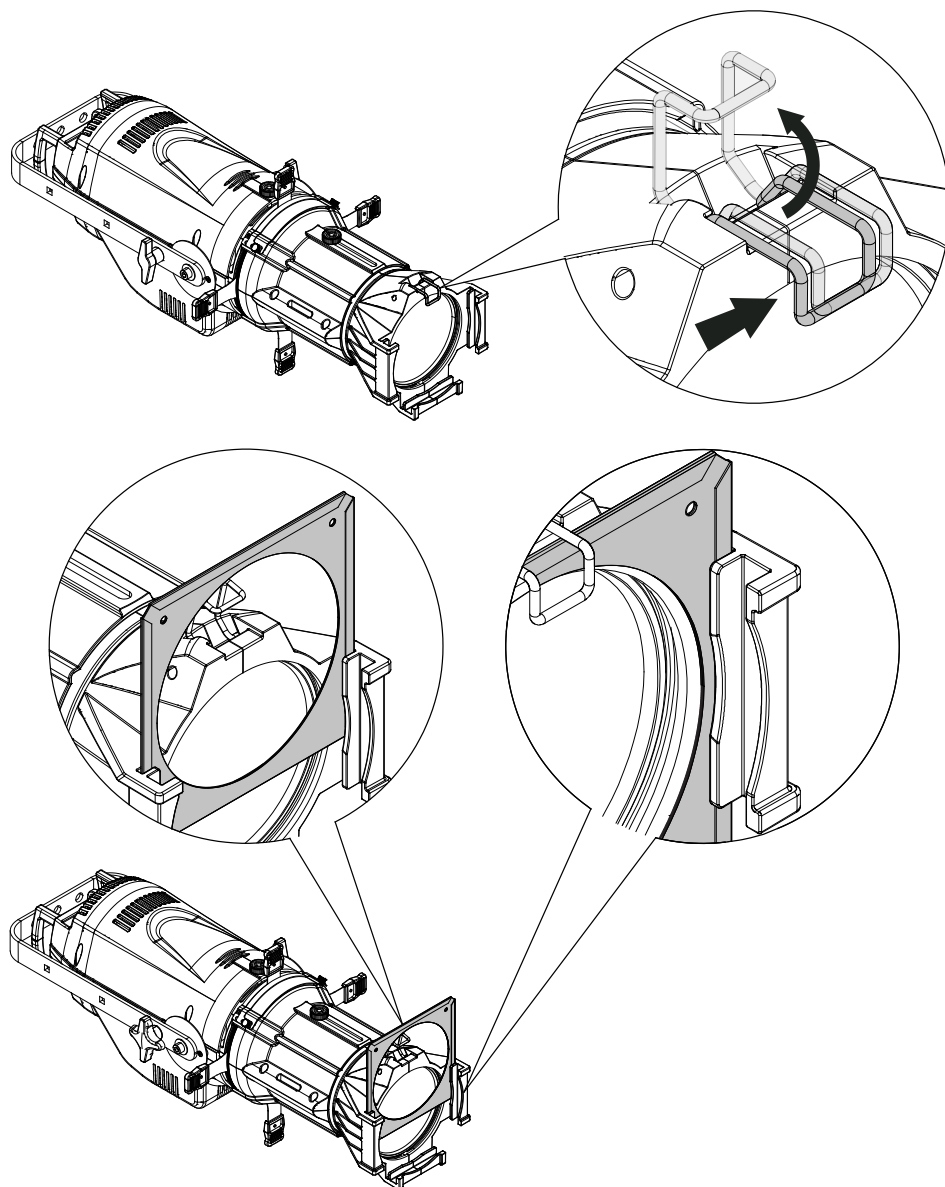
1. Push the clip, located at the top of the optics body, outwards and lift it. Then insert the filter into the marked track and close the clip, always applying an outward push.

NOTE: To remove the accessory, reverse the procedure.

Fig. 11

SNOOT (CODE ECLPRHSNOOT, ECLPRFSNOOT)

Full snoot and half snoot are available as optional accessory.
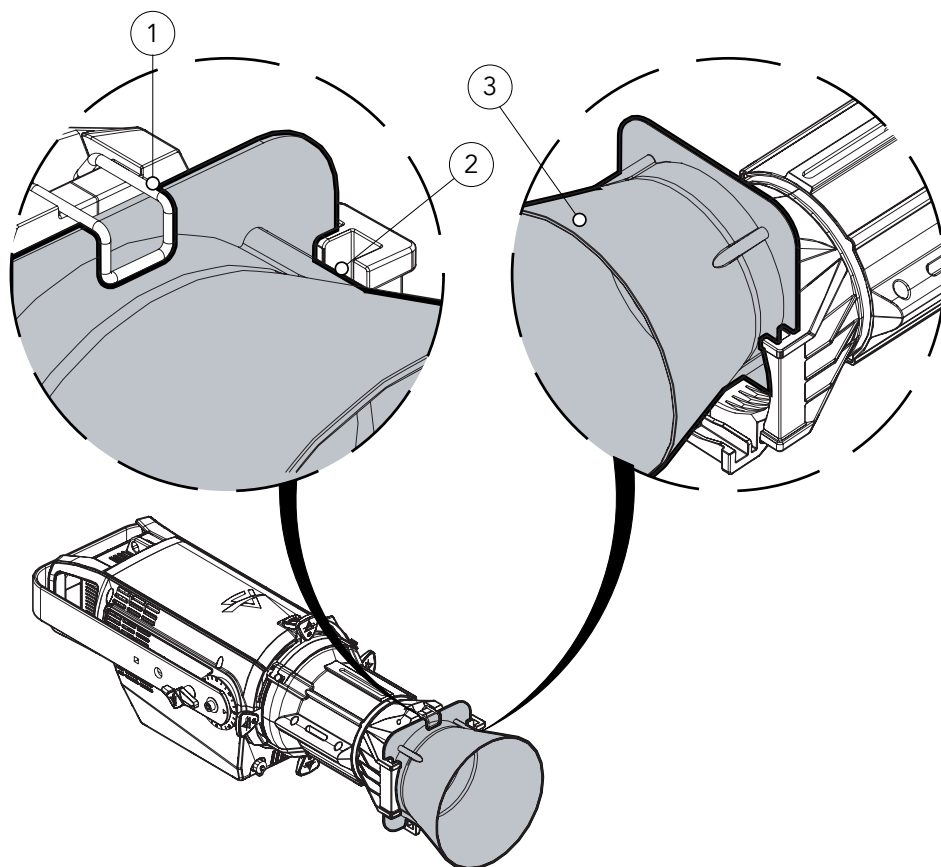
1. Push the clip, located at the top of the optics body, outwards and lift it. Then insert the snoot into the marked track and close the clip, always applying an outward push.
NOTE: To remove the accessory, reverse the procedure.

Fig. 12

GOBO HOLDER (CODE ECLPRGH)

Gobo holder is available as optional accessory.

Gobo dimensions:

• Type B

• Ø external= 86 mm;

• Ø of image= 64.5 mm;

• Thinckness= 1.1 mm.
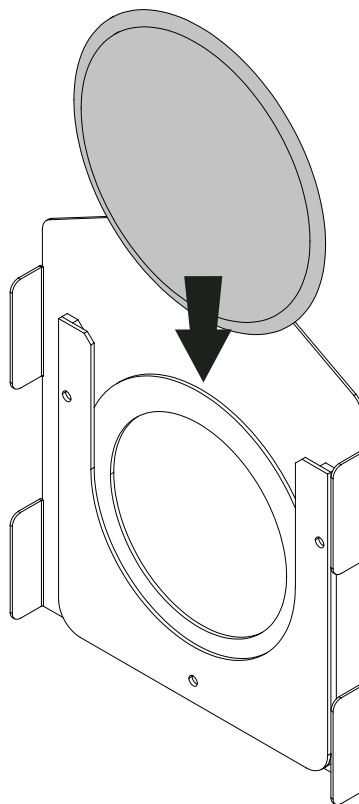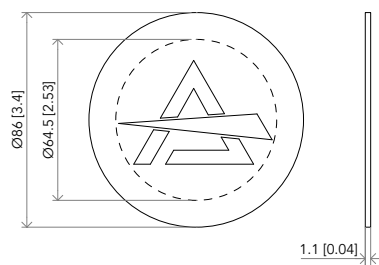
Put in place the Gobo.

Fig. 13
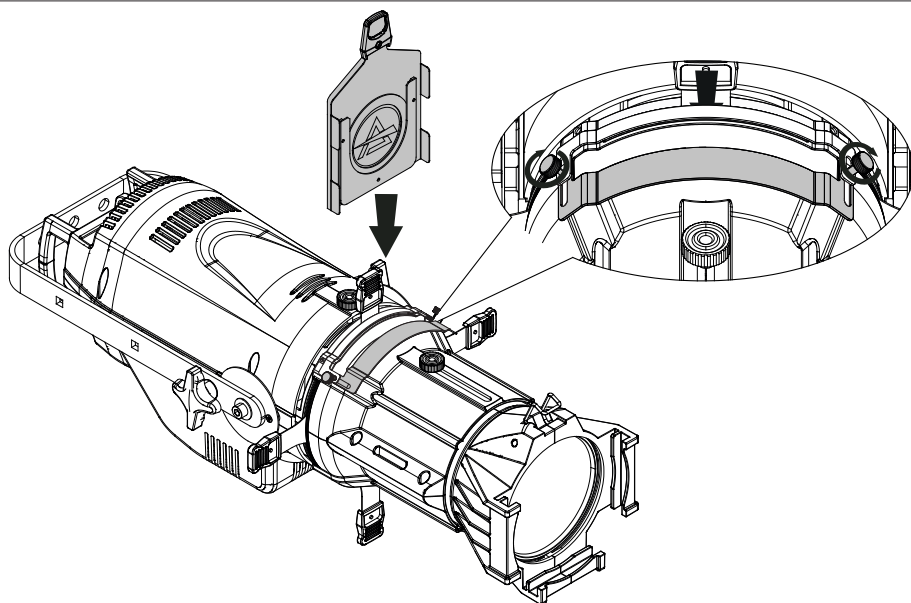
1. Loosen the marked screws. Then open the slot of the middle part.
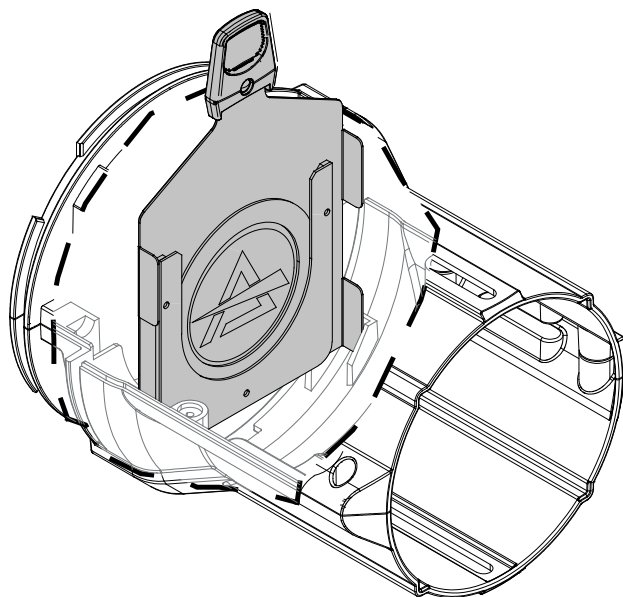
2. Insert the gobo holder into the slot. The flaps will go into the appropriate size.
NOTE: To remove the accessory, reverse the procedure.

Fig. 14

STEEL IRIS DIAPHRAM (CODE ECLPRIRIS)

Steel iris diaphram is available as optional accessory.
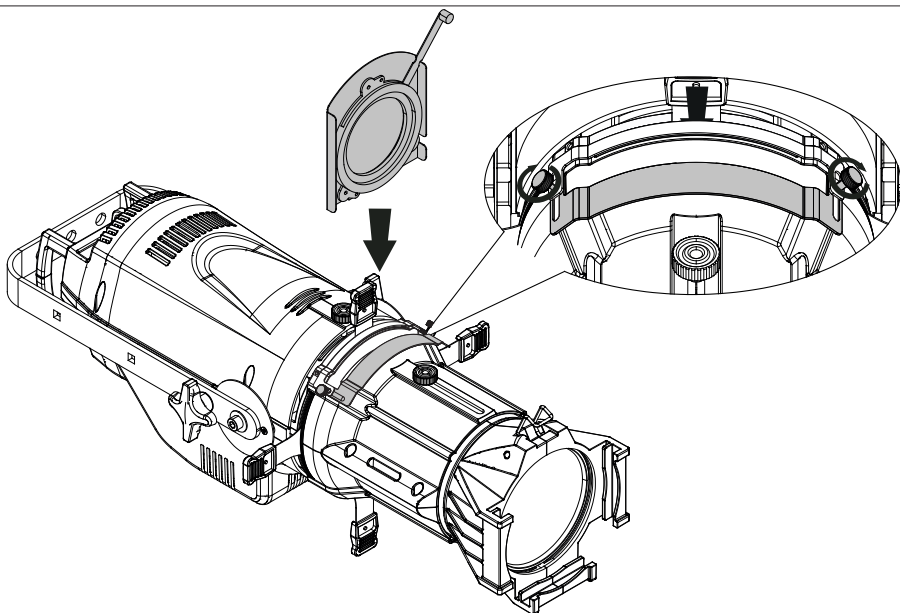
1. Loosen the marked screws. Then open the slot of the middle part.
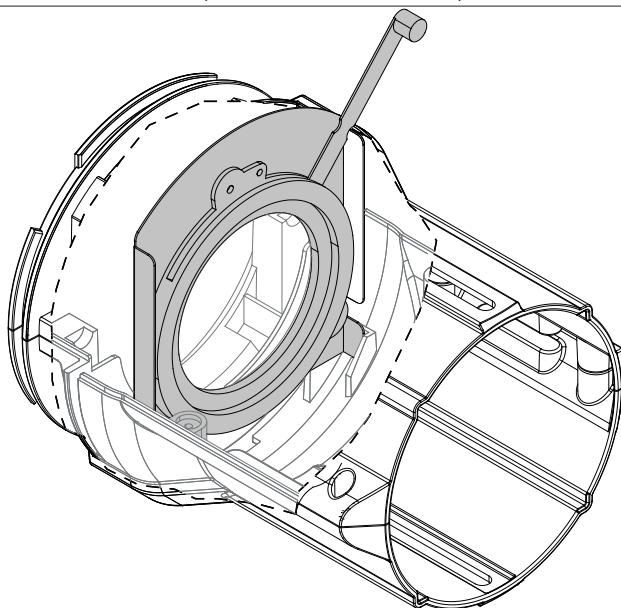
2. Insert the steel iris diaphram into the slot. The flaps will go into the appropriate size.
NOTE: To remove the accessory, reverse the procedure.

Fig. 15

SOFT EDGE FILTER (CODE ECLPRSEF1)

Soft edge filter is available as optional accessory.
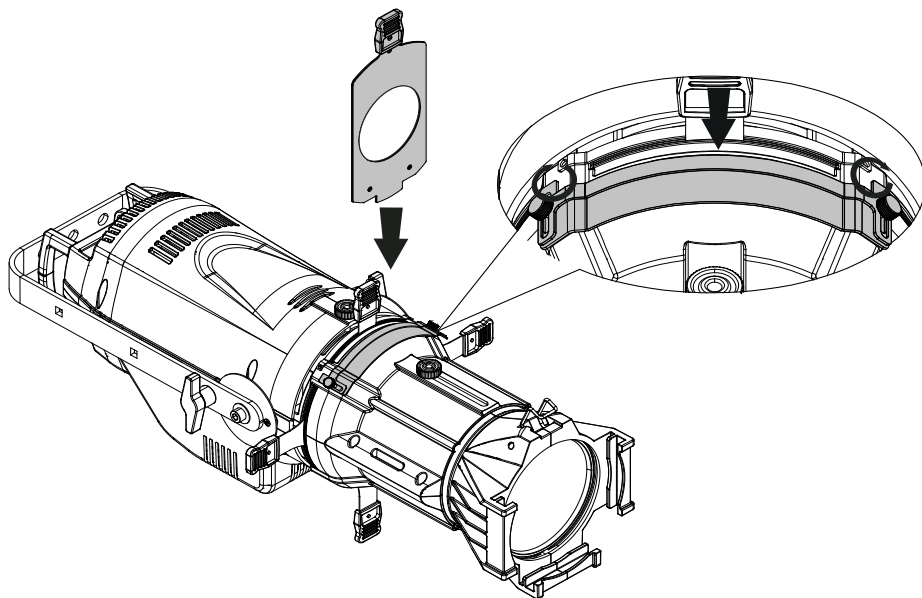
1. Loosen the marked screws. Then open the slot of the middle part.
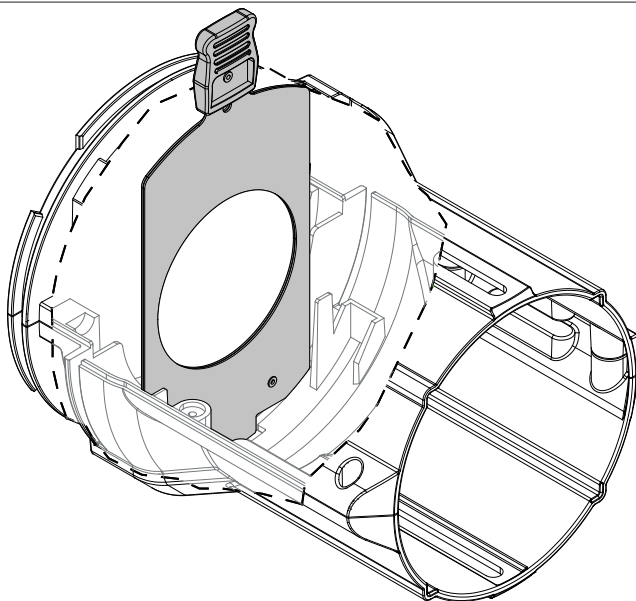
2. Insert the Soft edge filter into the slot.
NOTE: To remove the accessory, reverse the procedure.

Fig. 16

Smooth/homogenizer filter (CODE ECLPRSMOOTHF3)

ECL Profiles Smooth/homogenizer filter kit is available as optional accessory. Quick mounting through magnets inside the middle part.
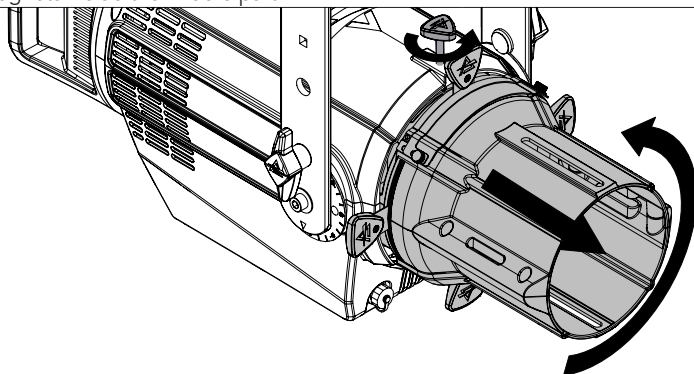
1. Loosen the marked knob and screw. Then rotate the middle part and remove it.
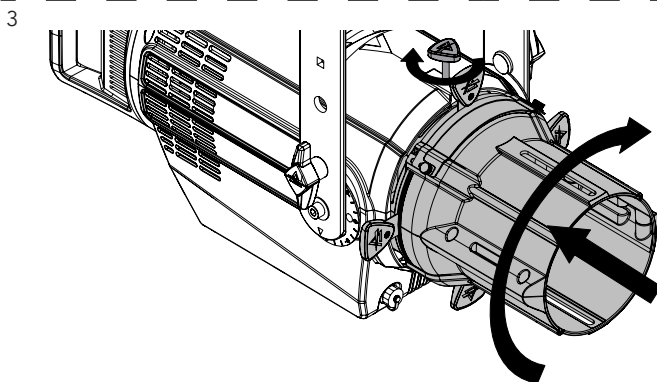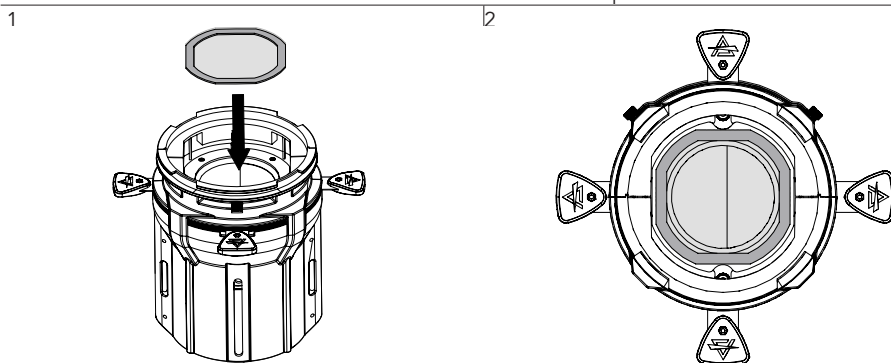
2. Insert the smooth filter by placing it on the back of the framing system of the middle part (1-2). Assembly the middle part with the smooth filter onboard (3).

NOTE 1: To remove the accessory, reverse the procedure.
NOTE 2: it is not compatible with zoom lenses ECLLZ. It is compatible only with fix lenses ECLPRL and zoom lenses ECLPRLZ.
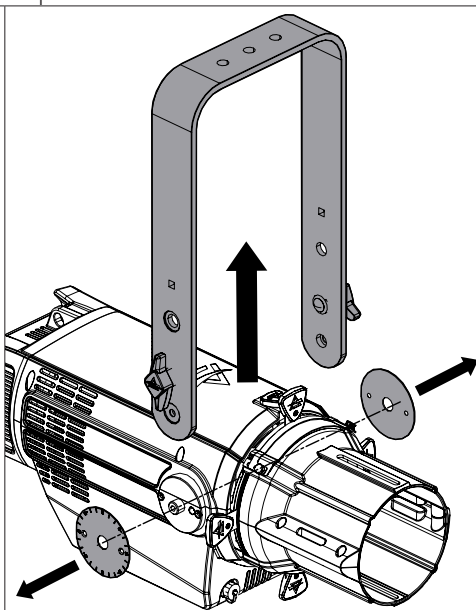
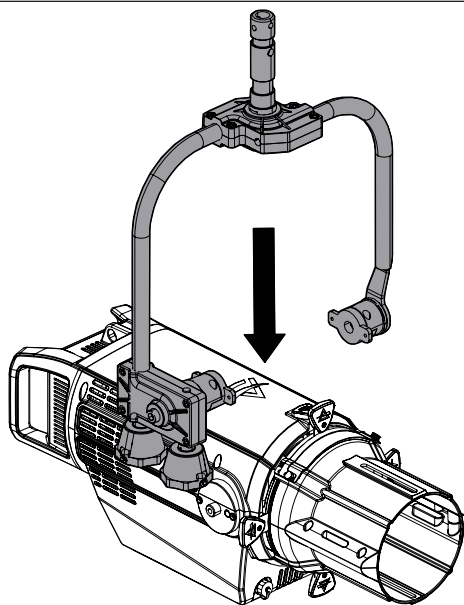*Fig. 17*

THE POLE OPERATED YOKE (CODE ECLPRHPPOYO)

The pole operated yoke bracket is available as accessory and it can be mounted from the users, see the following drawing which shows the process for Yoke replacement.
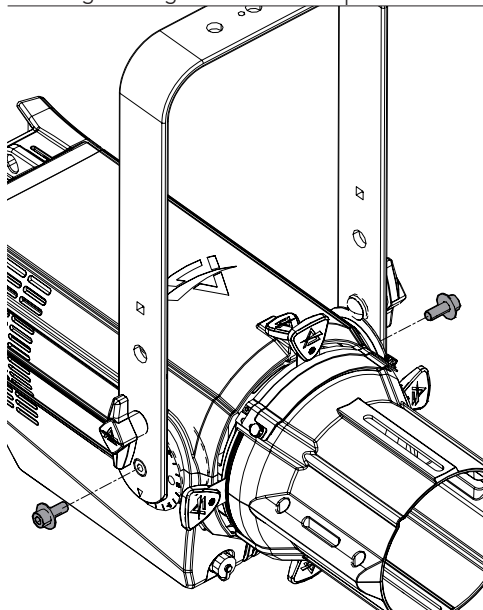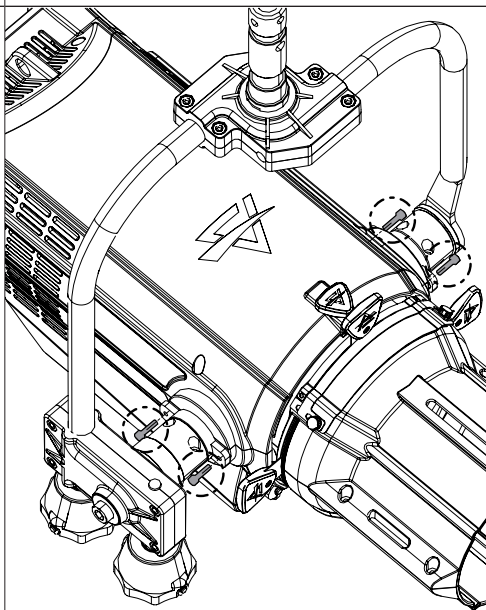

1. Loosen and remove the marked screws.

2. Remove the bracket and the tilt scales.

3. Mount the Pole Operated Yoke bracket.

4. Tighten the screws.

NOTE: To remove the tilt scales (point 2), you can use a heat gun to warm the glue and loosen the screws.

Fig. 18

14 - 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.

- **Only for IP65/IP66 projectors**: It is recommended to verify IP grade using IPTESTBOX every time the bodies are removed for maintenance, this tool helps to double check the correct assembling of the covers with a check of the IP grade of the fixture.

- All other service operations on the product must be carried out by PROLIGHTS, its approved service agents or trained and qualified personnel.

- It is PROLIGHTS policy to apply the strictest possible calibration procedures and use the best quality materials available to ensure optimum performance and the longest possible component lifetimes. However, optical components are subject to wear and tear over the life of the product, resulting in gradual changes in colours over many thousands of hours of use. The extent of wear and tear depends heavily on operating conditions and environment, so it is impossible to specify precisely whether and to what extent performance will be affected. However, you may eventually need to 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 (T6.3A, 250 V).

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 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.
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.

15 - TEST OF IP65 RATING

To check sealing after servicing use the IPTESTBOX. (*Only for ECLFWHPIPVW*).
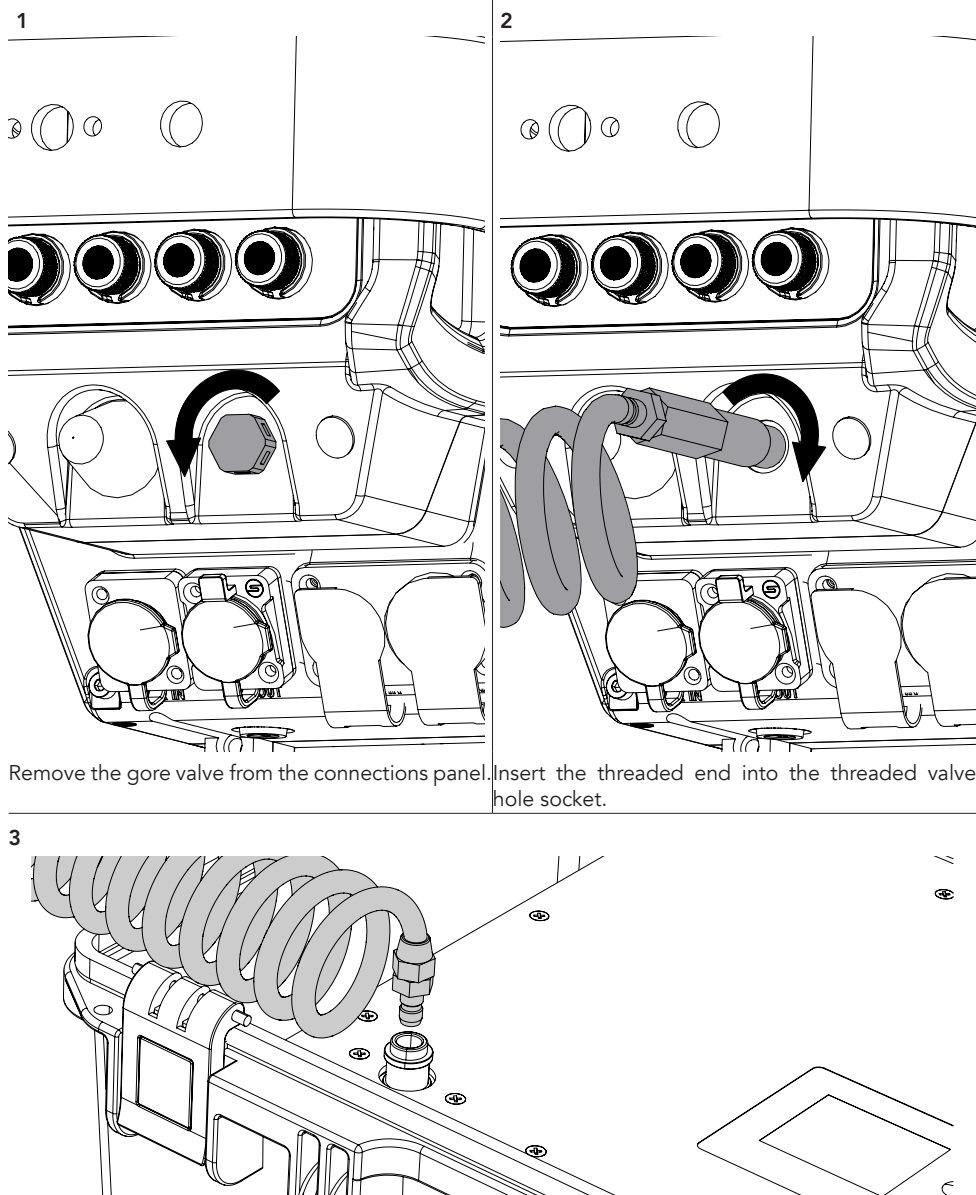
1	2
Remove the gore valve from the connections panel.	Insert the threaded end into the threaded valve hole socket.

3

Connect the air hose to the IPTESTBOX by inserting the quick-connect fitting into the coupler.
For the operating procedure using the instrument, refer to the IPTESTBOX user manual.

Fig. 19

Note

PROLIGHTS - EclProfile FWHPVW / FWHPIPVW