

# SmartBat Wash

15x20W LED Wash Light, IP65 rated, with an RGB + Warm White LED source, wirelessly controlled with battery or wired with mains power



## **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.

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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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### INDEX

SAFETY INFORMATION	02
1 - PACKAGING	07
PACKAGE CONTENT	07
OPTIONAL ACCESSORIES	07
2 - TECHNICAL DRAWING	07
3 - INSTALLATION	08
MOUNTING	
4 - CONNECTION TO THE MAINS SUPPLY	09
5 - START UP	09
CONNECT AND DISCONNECT POWER FROM THE PRODUCT	
6 - PRODUCT OVERVIEW	10
7 - DMX CONNECTION	11
CONNECTION OF THE CONTROL SIGNAL: DMX LINE	11
INSTRUCTIONS FOR A RELIABLE DMX CONNECTION	11
CONNECTION DAISY CHAIN	11
CONNECTION OF THE DMX LINE	11
CONSTRUCTION OF THE DMX TERMINATION	
DMX ADDRESSING	
OPERATION AS A WIRELESS TRANSMITTER	
IN TO WDMX	
OPERATION AS A WIRELESS RECEIVER	
WDMX TO DMX (RX)	13
8 - CONTROL PANEL	14
DISPLAY AND BUTTONS LAYOUT	14
9 - MENU STRUCTURE	15
10 - SHORTCUT	19
11 - RDM FUNCTIONS	20
12 - DMX CHARTS	24
CHANNEL DEFINITION	25
13 - ERROR MESSAGES	32
14 - ACCESSORIES INSTALLATION	33
LIGHT DIFFUSION FILTER (CODE SBWFILTER25/40/1060 - OPTIONAL)	
BARN DOOR (CODE SBWBD - OPTIONAL)	
15 - TEST OF IP65 RATING	35
16 - MAINTENANCE	36
MAINTENANCE AND CLEANING THE PRODUCT	
VISUAL CHECK OF PRODUCT HOUSING	
TROUBLESHOOTING	

### SAFETY INFORMATION



### WARNING!

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

### Lithium-Ion Battery Maintenance Guidelines

Lithium-Ion rechargeable batteries products require routine maintenance and care in their use and handling. Read and follow the guidelines in this document to safely use Lithium-Ion batteries and achieve the maximum battery life span.

Misusing the battery projector may cause the battery to get hot, break, or ignite, and cause serious injury.

#### Overview

- Only authorised technicians may service the battery.
- Use only Prolights approved batteries in your Prolights products.
- Do not leave the projector unused for extended periods of time in storage.
- Lithium-Ion batteries continue to slowly discharge (self-discharge) when not in use or while in storage. Routinely check the battery's charge status.
- The typical estimated life of a Lithium-Ion battery is about two years or around 300 charge cycles, whichever occurs first. One charge cycle is a period of use from fully charged, to fully discharged, and fully recharged again.
- For batteries that do not complete full charge cycles the life expectancy can be less than two years also.
- Rechargeable Lithium-Ion batteries have a limited life and will gradually lose their capacity to hold a charge. This loss of capacity (ageing) is irreversible. As the battery loses capacity, the length of time it will power the product (run time) decreases.

#### **Battery Maintenance**

- The run time of your battery will vary depending on the product's configuration and the applications that you run.
- Routinely check the battery's charge status.
- Carefully monitor batteries that are approaching the end of their estimated life.
- It is mandatory to replace the battery with a new one to prevent eventual risk of overheating and subsequent explosion, if you note either of the following:
- 1. The battery run time drops below about 70% of the original run time.
- 2. The battery charging time increases significantly.
- 3. The projector heats up while charging beyond normal temperatures.
- 4. In case of any collisions, falls, particular thermal stresses.
- If a battery is stored or otherwise unused for an extended period, be sure to follow the storage instructions in this document.
- Always recharge immediately when the battery is low.
- If you do not follow the instructions, and the battery has no charge remaining when you check it, consider it to be damaged. Do not attempt to recharge it or to use it. Replace it with a new battery.

### Charging

- Refer to your product's user manual and/or online help for detailed information about charging its battery. The latest version of your Prolights product user manual is available at www.prolights.it.
- Avoid charging if the projector has any damage, malfunction, tampering or signs of moisture inside.
- Do not charge unattended.
- Always charge with its packing/flight-case open.
- Always follow the charging instructions provided.
- Only charge the battery mounted in the fixture with the original charger. Do not use a third party charger.
- It is recommended to charge at a temperature between 15°C and 35°C.
- Do not recharge the product longer than required, it will affect the battery capacity and can cause overheating.
- For the IP product you need to make sure that the projector housing and charging connector are dry without any moisture.

#### Storage

- Store the product in an airy, dry place, and away from any inflammable object in order to ensure optimum storage conditions for the battery.
- Do not expose the battery projector to fire or heat.
- Charge or discharge the battery to approximately 50% of capacity before storage.
- Charge the battery to approximately 50% of capacity at least once every six months.
- Store the product projector at temperatures between 5 °C and 20 °C (41 °F and 68 °F).

#### Handling Precautions

- Do not disassemble, crush, or puncture a battery.
- Do not short the external contacts on a battery.
- Do not dispose of a battery in fire or water.
- Do not expose a battery to temperatures above 60 °C (140 °F).
- Avoid exposing the battery to excessive shock or vibration.
- Do not use a damaged battery.
- If a battery pack has leaking fluids, do not touch any fluids. Dispose of a leaking battery pack (see Disposal and Recycling in this document).
- In case of eye contact with fluid, do not rub eyes. Immediately flush eyes thoroughly with water for at least 15 minutes, lifting upper and lower lids, until no evidence of the fluid remains. Seek medical attention.

### Transportation

- Always check all applicable local, national, and international regulations before transporting a Lithium-Ion battery.
- Transporting an end-of-life, damaged, or recalled battery may, in certain cases, be specifically limited or prohibited.

### **Disposal and Recycling**

- Lithium-Ion batteries are subject to disposal and recycling regulations that vary by country and region. Always check and follow your applicable regulations before disposing of any battery. Contact your local battery recycling organisation.
- Many countries prohibit the disposal of waste electronic equipment in standard waste receptacles. Place only discharged batteries in a battery collection container.
- Use electrical tape or other approved covering over the battery connection points to prevent short circuits.



### 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 loadbearing surface with suitable corrosionresistant hardware.
- For a temporary installation with clamps, ensure that the quarter-turn fastener and/or screws are turned fully, and secured with a suitable safety cable.

### (] 0.5 m Minimum distance of illuminated objects

• The projector needs to be positioned so that the objects hit by the beam of light are at least 0,5 meters (1,64 ft) from the lens of the projector.

### Ta45°C Max operating ambient temperature (Ta)

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

### Ta-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.



#### 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.

#### Temperature of the external surface

 The surface of the fixture can reach up to 70 °C (158 °F) during operation. Avoid contact with people and materials.



T<sub>c</sub>70°C

#### Maintenance

- Warning! Disconnect the fixture from AC mains power and allow to cool for at least 10 minutes before handling.
- Only technicians who are authorized by PROLIGHTS or Authorised service partners are permitted to open the fixture.
- Users may carry out external cleaning, following the warnings and instructions provided, but any service operation not described in this manual must be referred to a qualified service technician.
- Important! Excessive dust, smoke fluid, and particle build up degrades performance, causes overheating and will damage the fixture. Damages caused by inadequate cleaning or maintenance is not covered by the product warranty.



#### Photobiological safety

• This device emits potentially dangerous optical radiation and is identified in the category of Risk Group 1 according to EN 62471.



### Do not stare at the operating light source

- Do not look directly at the LED source during operation. It can be harmful to the eyes and skin.
- During Installation, operation and maintenance, be prepared for the fixture to light and move suddenly when connected to power.



#### 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:
- 5. This device may not cause harmful interference, and
- 6. 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.

### 1 - PACKAGING

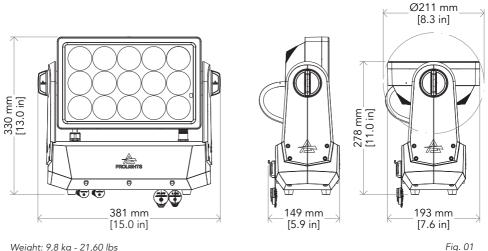
### PACKAGE CONTENT

- 1x SMARTBATWASH.
- 1x SBWFILTER25: 25° symmetric light diffusion filter for SMARTBATWASH.
- 1x OS25D13: guick-Lock omega bracket, M13 hole.
- 1x 1,5 meters power cable (BARE END NEUTRIK POWERCON TRUE1 IP65).
- User Manual.

### **OPTIONAL ACCESSORIES**

- FCLSMARTBATWASH: flight case for 4 SMARTBATPLUSWASH, internal AC battery charging.
- SBWFILTER25: 25° symmetric light diffusion filter for SMARTBATWASH.
- SBWFILTER40: 40° symmetric light diffusion filter for SMARTBATWASH.
- SBWFILTER1060: 10x60° asymmetric light diffusion filter for SMARTBATWASH.
- SBWBD: black barn door 4 directional flaps to adjust the light beam, comp. SMARTBATWASH.
- OS25D13: quick-Lock omega bracket, M13 hole.
- SBWPOWER: single charger for SMARTBATWASH.
- PRL-IRC: RGBWA IR controller, 29 buttons, manual/static colours, auto programs, fade.
- C6002A/B: slim aluminium clamp, 200 kg loading, 48-51 mm tubes, M10 bolt, silver/black.
- RSR0630A/B: steel security cable for hanging bodies, inox steel shackle, L=60 cm, silver/black.
- 9513FXWL03: ass. 3x2.5mm TH07 cable, 16A 3p 230V CEE plug, MENAC3FXW socket, L.3 m.
- 9533FXWL03: ass. 3x2.5mm TH07 cable, SHUKO plug, MENAC3FXW socket, L.3m.
- WSBBR512G5: blackBox R-512 G5 receiver 512Ch, 2.45GHz & 5.8GHz, DMX/RDM optional.
- WSBBF1G6: BlackBox F-1 G6 transrec, 512ch, 2.45GHz, DMX&RDM,Bluetooth,G3,G4,G4S, G5, CRMX.
- WSBBF1G5: blackBox F-1 G5 transmitter, 2,45GHz & 5.2/5.8 GHz, DMX/RDM, 512Ch.
- WSBBR512G6: blackBox R-512 G6 receiver 512Ch, 2.45GHz,DMX&RDM,Bluetooth,G3,G4,G4S,G 5.CRMX.
- UPBOX1UP5: firmware uploader kit, USB IN, 5pin XLR DMX OUT, USB OUT.

### 2 - TECHNICAL DRAWING



Weight: 9,8 kg - 21,60 lbs

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### **3 - INSTALLATION**

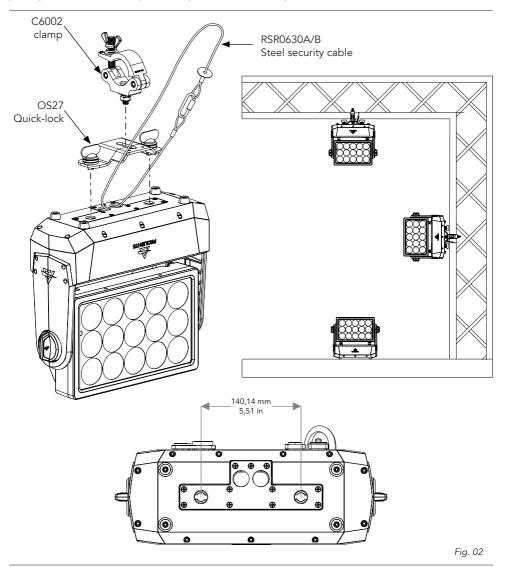
### MOUNTING

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.



### 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 180W.

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

### 5 - START UP

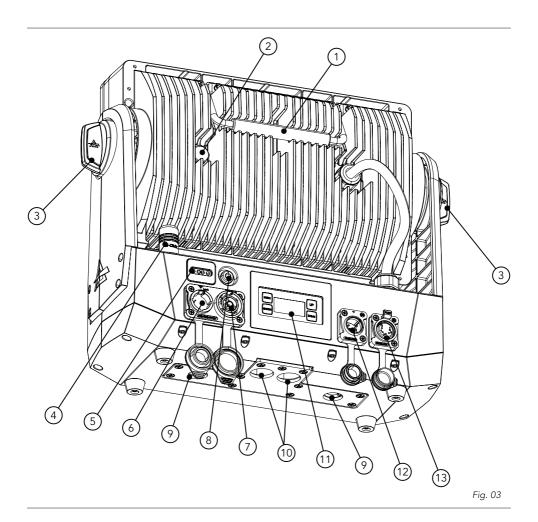
### CONNECT AND DISCONNECT POWER FROM THE PRODUCT

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

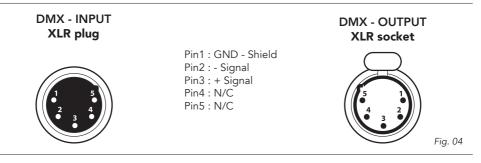
- 1. HANDLE for trasport.
- 2. GORE VALVE.
- 3. HANDLE for rotation.
- 4. ANTENNA.
- 5. SOCKET for recharge.
- 6. POWER IN: for connection to the Mains 100-240V~/50-60Hz.
- 7. POWER OUT: power output for connection of multiple units in series.
- 8. BUTTON to turn on/ff the unit.
- 9. HOLES to attach Quick-lock.
- 10.USER INTERFACE with display and buttons for access to the control panel functions.
- 11.SAFETY EYE to attach safety cable.
- 12.DMX IN (5-p XLR): 1 = GND, 2 = sign-, 3 = sign+, 4 N/C, 5 N/C.
- 13.DMX OUT (5-p XLR): 1 = GND, 2 = sign-, 3 = sign+, 4 N/C, 5 N/C.



## 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:



### 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.

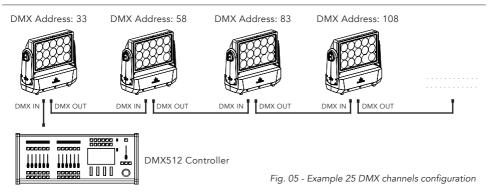
Terminate the data link by connecting a 120 Ohm signal termination. If a splitter is used, terminate each branch of the link.

Install a DMX termination plug on the last fixture on the link.

### CONNECTION OF THE DMX LINE

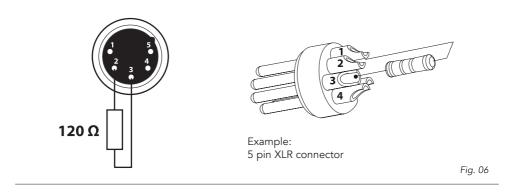
DMX connection employs standard XLR connectors. Use shielded pair-twisted cables with  $120\Omega$  impedance and low capacity.

The following diagram shows the connection mode:



### CONSTRUCTION OF THE DMX TERMINATION

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



### 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**

SMARTBATWASH can be used as wireless transmitter to transmit DMX signal to different wireless receivers. To use SMARTBATWASH 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.
- 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.

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#### 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.

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

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

### **OPERATION AS A WIRELESS RECEIVER**

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

- To use SMARTBATWASH 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.
- 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.

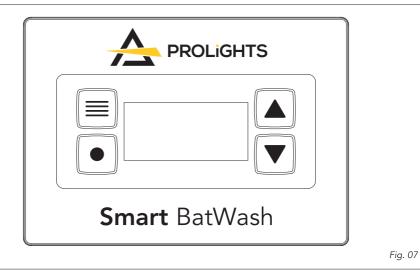
- 1. Push MENU button untill you show CONNECT on display, then press ENTER button to confirm.
- 2. Use UP/DOWN buttons for select Wireless, then press ENTER to confirm.
- 3. Enable RX RESET to ON.
- The wireless icon on the receiver display indicates the received signal strength.

#### 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.



### DISPLAY AND BUTTONS LAYOUT

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

Used to access the menu tree or to return a previous menu window.
Browse upwards through the menu list and increases the numeric value displayed.
Browse downwards through the menu list and decreases the numeric value displayed.
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.

ECTION	MAIN MENU	MENU LEVEL 2	MENU LEVEL 3	MENU LEVEL 4	MENU LEVEL 5	MENU LEVEL 6	MENU LEVEL 7	Description		
1	CONNECT	DMX ADDRESS	<b>1</b> -512					Set DMX Address.		
		DMX MODE	FIXTURE	UNO	FIXED	R		Set DMX Mode.		
		DIWIX WIGDL	TIXTONE	UNO	COLORS	IX.				
						G				
						В				
						W				
						RG				
						RB				
						RW				
						GB				
						GW				
						BW				
						RGB				
						RGW				
						RBW				
						GBW				
						RGBW				
					COLOR	See Color				
					MACRO	Macro page				
					WHITE PRESETS	2700K				
					PRESEIS	2800K				
						3200K				
						3500K				
						4000K				
						4500K				
						5000K				
						5600K				
						6000K				
						6500K				
						7000K				
					-			8000K		
							9000K			
							10000K			
						MANUAL	RED			
						COLORS	GREEN			
						BLUE				
						WHITE				
				DUO	FIXED	R				
					COLORS	G				
						В				
						W				
						RG				
						RB				
						RW				
						GB				
						GW				
						BW				
						RGB				
						RGW				
						RBW	]			
						GBW	]			
						RGBW				
					COLOR	See Color				
					MACRO	Macro page				
					WHITE	2700K				
					PRESETS	2800K				
						3200K				
						3500K				
						4000K				

						4500K	
						5000K	
						5600K	
						6000K	
						6500K	
						7000K	
						8000K	
						9000K	
						10000K	
					MANUAL	RED	
					COLORS	GREEN	
						BLUE	
						WHITE	
				BASIC			
				STANDARD			
				EXTENDED			
		WIRELESS	WDMX ON/OFF	ON			Enable/Disable the wireless card
				OFF			
			WDMX MODE	TRANSMITTER			Choose whether to se
				RECEIVER			the wireless card a Transmitter or Receive WDMX mode is unlocked only WDMX ON / OFF is ON.
			TX LINK	ON OFF			TX link unlock when the unit is se as a transmitter.
			TX UNLINK	OFF			Disconnect the transmitter from
			in one internet	OFF			all receivers. TX unlink unlocks only if WDMX
			RX RESET	ON			mode is on transmitter. Total reset of the receiver. RX reset unlocks only if WDMX
				OFF			mode is receiver.
			DMX TO WDMX	ON			Enable/Disable the transmission
			(TX)	OFF			of the dmx from the transmitte to the receiver via wdmx.
			WDMX TO DMX (RX)	OFF			Enable/Disable the retransmis sion of the DMX from the receiv er to the other units connected
							by cable to the receiver itself.
2	SETUP	SCREEN	BACKLIGHT	ON			Select the timing after that dis
				105			play will switch automatically of
				20S			when unactive.
				30S			
			FLIP DISPLAY	ON			Allows you to rotate the display
				OFF			by 180°.
			KEY LOCK	ON			Lock the buttons on the control
			KET LOCK	OFF			panel by a password. Press following combination (password) in order to access to
			TEMPERATURE	°c			the user menu : UP, DOWN, UP DOWN, ENTER.
		TRANSFER	UNIT	°F			Allows you to choose tempera ture unit showed in home screen
		TRANSFER CONFIGURATION	WITHOUT DMX ADDRESS WITH DMX				To transfer the same ment settings of one fixtures to all the other in the daisy chain, including
			ADDRESS				or not the dmx address.
3	ADVANCED	WHITE	OFF				
		CALIBRATION	STUDIO	RED	<125-255>		
				GREEN	<125-255>		
				BLUE	<125-255>		
				WARM WHITE	<125-255>		
			MANUAL				
			IVIAINUAL	RED	<0-255>		
				GREEN	<0-255>		
				BLUE	<0-255>		
				WARM WHITE	<0-255>		
			CALIBRATED				
		DIMMER	LINEAR				Choose dimmer curve.
		CURVE	S-CURVE	]			
							1
			SQUARE LAW				
			SQUARE LAW				

	г — ¬	DIMMER	AUTO	г — ¬		Set Dimmer Speed.
		SPEED	FAST	]		This parameter defines interpola-
			MEDIUM			tion of DMX Changes for main functions.
			SLOW			Off turns off interpolation
		LED FREQUENCY	600HZ	-		Select PWM frequency.
		TREQUENCE	1200HZ	-		
			2000HZ 4000HZ	-		
			6000HZ			
			25KHZ	1		
		RUN TIME	3Н			Select Run Time of the fixture.
			6Н	]		2H: Max power available 30W. 6H: Max power available 12W.
			8H			8H: Max power available 12W.
			12H	-		12H: Max power available 6W. 18H: Max power available 4W.
			18H			Run Time is calculated using fixture RGBW @ Full with
		IR SETUP	ON			Calibration on. Enable/Disable IR Remote
		in octor	OFF	1		control.
		DMX	HOLD			Define the behaviour of fixture in
		FAULT	BLACKOUT	]		case of DMX signal lost.
			STAND ALONE			
			EMERGENCY			
		AC FAULT	NO ACTION	-		Define the behaviour of fixture
		FAULI	BLACKOUT	-		in case of AC/DC signal lost. AC Fault has priority over DMX Fault.
		AC	EMERGENCY NO ACTION			Define the behaviour of fixture
		MODE	NOACTION	-		in case of
			BLACKOUT			AC/DC signal presence. AC Mode has priority over DMX Fault.
		BATTERY	Αυτο			AUTO: Fixture will charge im-
		RECHARGE	DISABLE	]		mediately in case of no signal at startup.
			ENABLE			Fixture will charge after 10mins of signal present with dimmer @ 0. Fixture will run over AC/DC Pow- er while signal present without charging battery. DISABLE: Recharge disabled, fix- ture will run over AC/DC Power without charging battery. ENABLE: Recharge forced, fix- ture will go blackout and start charging battery immediately.
		TUNGSTEN	ON			Enable/Disable Tungsten
		EMULATION	OFF			emulation.
		FACTORY	ON			Reload fixture with Standard set-
		RELOAD	OFF			tings.
4	INFORMATION	DEVICE TIME	FIXTURE HOURS	<99999H>		To view infromation about the
			SOURCE	<99999H>		
			HOURS	<99999H>		
			AC POWER ON CYCLE	<300>		
			MAINTENANCE	ELAPSED TIME		
			TIME	ALERT PERIOD	10 - 300	
		POWER CONSUMPTION	CONSUMPTION, VOLTAGE, CURRENT			
		TEMPERATURE				
		BATTERY CYCLE	<300>			
		BATTERY STATE	<100%>			
		ESTIMATED BATTER	3h 5m			
		LIFE WIRELESS QUALITY				
		CHANNEL VALUE				
		ERROR				
		MESSAGE	L			⊥

		FIXTURE MODEL						
		DEVICE						
		SOFTWARE	<v1.0></v1.0>					
	-	RDM UID	15D00228****					
5	STAND ALONE	MASTER/	MASTER DMX					Allow you to link and operati
		SLAVE	MASTER NO DMX					in synk multiple units without DMX console. Choose a unit to perform as t
			SLAVE					Master. This unit must be the first unit line; Set the successive units be slave.
	-	EFFECTS	EFFECT 1 to 5	DIMMER	<1-100>			Effects modes allows creation a
				STROBE	<1-100>			editing of 5 effects maximu
				COLOR 1	SWITCH	ON - OFF		Each effect contains to 20 colors, a Main Di
					DIMMER			mer and a Main Strol
					STROBE			
					HOLD TIME	0 - 360s	Step by 0.5S	COLOR section SWITCH is used to toggle C Off the color in the sequen
					FADE IN TIME	0 - 60s	0.55	DIMMER is used to individ ally DIM the selected co
					FADE OUT TIME SAME	0 - 60s	Step by 0.5S	ally STROBE the selected co HOLD TIME defines how lo
					STRUCTURE OF STATIC			the color is hold on the outp FADE IN/OUT TIME define the timings of fading in/o
					IN STAND ALONE			The effects can be considered
				COLOR 20	SWITCH	ON - OFF		CHASE, once last color has ished playing the sequence
				COLOR 20	DIMMER	UN - OFF		start again.
					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	-
					SAME STRUCTURE OF STATIC IN STAND ALONE			
		STATIC	FIXED COLORS	R				Static mode for Standalone v
				G	DIMMER <000-255>			keep the selected Color on
				В	<000-255>			the selected dimmer level
				W	1			
				RG	1			
				RB	1			
				RW	1			
				GB	]			
				GW	]			
				BW	]			
				RGB	]			
				RGW				
				RBW				
				GBW				
				RGBW				
		COLOR MACRO	SEE COLOR MACRO PAGE	DIMMER <000-255>				

WHITE PRESETS	2700K 2800K 3200K 3500K 4000K 4500K 5600K 6500K 6500K 6500K 8000K 9000K	DIMMER <000- <b>255</b> > HUE <-025- 025>	_		 _
	10000K	-			
	RED	<000-255>			
MANUAL	GREEN	<000-255>			
COLORS	BLUE	<000-255>			
	WHITE	<000-255>			

### **10 - SHORTCUT**

	SHORTCUTS	
Keys	Mode	Description
UP + DOWN after power on	Flip Display	Directly flip display without enter inside menu
MENU + ENTER then power on	CLEAR ALL	Clear all the infor, reset counter and set all to default value

### **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 and Tiny's Downstead must be enabled in its custom PIDs to work.

	RDM	PIDs	_				
Parameter	Category	PID Address	GET	SET	Value	Description	Default Value
DEVICE_INFO	Product Information	0x0060	x			N/A	
PRODUCT_DETAIL_ID_LIST	Product Information	0x0070	x			N/A	
DEVICE_MODEL_DESCRIPTION	Product Information	0x0080	x			N/A	x
MANUFACTURER_LABEL	Product Information	0x0081	x			N/A	
DEVICE_LABEL	Product Information	0x0082	x	х		N/A	
FACTORY_DEFAULTS	Product Information	0x0090	x	x		N/A	
SOFTWARE_VERSION_LABEL	Product Information	0x00C0	x			N/A	
BOOT_SOFTWARE_VERSION_ID	Product Information	0x00C1	x			N/A	
BOOT_SOFTWARE_VERSION_LABEL	Product Information	0x00C2	x			N/A	x
DMX_PERSONALITY	DMX512 Setup	0x00E0	x	x		N/A	
DMX_PERSONALITY_DESCRIPTION	DMX512 Setup	0x00E1	x			N/A	
DMX_START_ADDRESS	DMX512 Setup	0x00F0	x	х		N/A	
SLOT_INFO	DMX512 Setup	0x0120	x			N/A	
SLOT_DESCRIPTION	DMX512 Setup	0x0121	x			N/A	
DEFAULT_SLOT_VALUE	DMX512 Setup	0x0122	x			N/A	
DMX_BLOCK_ADDRESS	DMX512 Setup	0x0140	x	х		N/A	×*
DMX_FAIL_MODE	DMX512 Setup	0x0141	x	x		N/A	
DMX_STARTUP_MODE	DMX512 Setup	0x0142	x	x		N/A	
DIMMER_INFO	Dimmer Settings	0x0340	x			N/A	
MINIMUM_LEVEL	Dimmer Settings	0x0341	x	x		N/A	
MAXIMUM_LEVEL	Dimmer Settings	0x0342	x	x		N/A	

	RDM	PIDs					
Parameter	Category	PID Address	GET	SET	Value	Description	Defaul Value
CURVE	Dimmer Settings	0x0343	x	x		N/A	
CURVE_DESCRIPTION	Dimmer Settings	0x0344	x	х		N/A	
OUTPUT_RESPONSE_TIME	Dimmer Settings	0x0345	x	x		N/A	
OUTPUT_RESPONSE_TIME_ DESCRIPTION	Dimmer Settings	0x0346	x			N/A	
MODULATION_FREQUENCY	Dimmer Settings	0x0347	x	х		N/A	
MODULATION_FREQUENCY_ DESCRIPTION	Dimmer Settings	0x0348	x			N/A	
SENSOR_DEFINITION	Sensors	0x0200	x			N/A	
SENSOR_VALUE	Sensors	0x0201	x	х		N/A	x*
RECORD_SENSORS	Sensors	0x0202		х		N/A	
BURN_IN	Sensors	0x0440	x	х		N/A	x*
DEVICE_HOURS	Power/Lamp Settings	0x0400	x	х		N/A	
LAMP_HOURS	Power/Lamp Settings	0x0401	x	x		N/A	x*
LAMP_STRIKES	Power/Lamp Settings	0x0402	x	х		N/A	
LAMP_STATE	Power/Lamp Settings	0x0403	x	х		N/A	
LAMP_ON_MODE	Power/Lamp Settings	0x0404	x	x		N/A	
DEVICE_POWER_CYCLES	Power/Lamp Settings	0x0405	x	x		N/A	
DISPLAY_INVERT	Display Settings	0x0500	x	х		N/A	
DISPLAY_LEVEL	Display Settings	0x0501	x	x		N/A	
LOCK_PIN	Configuration	0x0640	x	х		N/A	
LOCK_STATE	Configuration	0x0641	x	х		N/A	
LOCK_STATE_DESCRIPTION	Configuration	0x0642	x			N/A	
IDENTIFY_DEVICE	Control	0x1000	x	х		N/A	
RESET_DEVICE	Control	0x1001		х		N/A	
POWER_STATE	Control	0x1010	X	х		N/A	
PERFORM_SELFTEST	Control	0x1020	x	х		N/A	
SELF_TEST_DESCRIPTION	Control	0x1021	x			N/A	
CAPTURE_PRESET	Control	0x1030	X	х		N/A	
PRESET_PLAYBACK	Control	0x1031	X	х		N/A	
IDENTIFY_MODE	Control	0x1040	X	х		N/A	
PRESET_INFO	Control	0x1041	X			N/A	
PRESET_STATUS	Control	0x1042	X	х		N/A	
POWER_ON_SELF_TEST	Control	0x1044	X	х		N/A	
DMX FAULT	Manufacturer PIDs		x	x	0-3	0: HOLD 1: BLCK 2:SA 3:EMGENCY	
AC FAULT	Manufacturer PIDs		x	x	0-2	0:NO ACTION, 1:BLACKOUT, 2:EMERGENCY	

	RDM	PIDs					
Parameter	Category	PID Address	GET	SET	Value	Description	Default Value
AC MODE:	Manufacturer PIDs		x	x	0-1	0:NO ACTION, 1:BLACKOUT	
BATTERY RECHARGE	Manufacturer PIDs		x	x	0-2	0:AUTO, 1:DISABLE, 2:ENABLE	
DMX FAULT	Manufacturer PIDs		x	x	0-3	0: HOLD 1: BLCK 2:SA 3:EMGENCY	
MASTER/SLAVE	Manufacturer PIDs		x	x	0-2	0:MST DMX 1:MST NO DMX 2:SLAVE	
ST. AL. MODE	Manufacturer PIDs		x	x	0-4	0:STATIC; 1:CCT; 2:MACRO; 3:RGBW; 4:FX	
STATIC COLORS	Manufacturer PIDs		x	x	0-15	Refer to menu section	
WHITE PRESETS	Manufacturer PIDs		x	x	0-13	Refer to menu section	
COLOR MACROS	Manufacturer PIDs		x	x	0-64	Refer to menu section	
MANUAL RED	Manufacturer PIDs		x	x	0-255	Refer to menu section	
MANUAL GREEN	Manufacturer PIDs		x	x	0-255	Refer to menu section	
MANUAL BLUE	Manufacturer PIDs		x	x	0-255	Refer to menu section	
MANUAL WHITE	Manufacturer PIDs		x	x	0-255	Refer to menu section	
FX	Manufacturer PIDs		×	×	0-4	Refer to menu section	
WH. CAL.: 0:OFF 1:STUDIO 2:MANUAL 3:CALIBRATED	Manufacturer PIDs		x	x	0-3	Refer to menu section	
STUDIO-RED	Manufacturer PIDs		x	x	0-255	PID for service purpose	
STUDIO-GREEN	Manufacturer PIDs		x	x	0-255	PID for service purpose	
STUDIO-BLUE	Manufacturer PIDs		x	x	0-255	PID for service purpose	
STUDIO-WHITE	Manufacturer PIDs		x	x	0-255	PID for service purpose	
MANUAL-RED	Manufacturer PIDs		x	x	0-255	PID for service purpose	
MANUAL-GREEN	Manufacturer PIDs		x	x	0-255	PID for service purpose	
MANUAL-BLUE	Manufacturer PIDs		x	x	0-255	PID for service purpose	
MANUAL-WHITE	Manufacturer PIDs		x	x	0-255	PID for service purpose	
IR SETUP 0:OFF 1:ON	Manufacturer PIDs		x	x	0-1	Enable/Disable IR control	
RUN TIME	Manufacturer PIDs		x	x	0-4	0:3H 1:6H 2:8H 3:12H 4:18H	
CLEAN ALL DATA	Manufacturer PIDs		x	x	0-1	0:NO,1:YES	

	RDM PIDs									
Parameter	Category	PID Address	GET	SET	Value	Description	Default Value			
CURRENT HOURS	Manufacturer PIDs		x							
MAINTENANCE TIME:ALERT PERIOD	Manufacturer PIDs		x	x						
MAINTENANCE TIME:ELAPSED TIME	Manufacturer PIDs		x	x						
WIRELESS QUALITY	Manufacturer PIDs		x			**%				
ERROR MESSAGE	Manufacturer PIDs		x							

### 12 - DMX CHARTS

#### RDM Model ID: 0xD097 RDM Personality ID List

ID	DMX Mode	Footprint
1	UNO	1
2	DUO	2
3	BASIC	5
4	STANDARD	6
5	EXTENDED	17

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

### CHANNEL DEFINITION

Dimmer								
<b>F</b>	8 bit	value	16 bit	value	NL 1			
Function	From	То	From	То	Note			
Dimmer	0	255	0	65535	Default @ 0			

Strobe									
<b>F</b>	8 bit	value	16 bit	value	N. I				
Function	From	То	From	То	Note				
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	-	-					

Function		8 bit v		16 bi	t value	Note
CCT From	CCT To	From	То	From	То	
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	105	26396	27306	-
						-
5800	5900	106	110	27306	28216 29127	-
5900	6000	110	113 117	28216		_
6000	6100	113		29127	30037	_
6100	6200	117	120	30037	30947	_
6200	6300	120	124	30947	31857	_
6300	6400	124	128	31857	32768	_
6400	6500	128	131	32768	33678	_
6500	6600	131	135	33678	34588	-
6600	6700	135	138	34588	35498	_
6700	6800	138	142	35498	36408	_
6800	6900	142	145	36408	37319	_
6900	7000	145	149	37319	38229	_
7000	7100	149	152	38229	39139	-
7100	7200	152	156	39139	40049	-
7200	7300	156	159	40049	40959	-
7300	7400	159	163	40959	41870	-
7400	7500	163	166	41870	42780	_
7500	7600	166	170	42780	43690	_
7600	7700	170	174	43690	44600	_
7700	7800	174	177	44600	45510	_
7800	7900	177	181	45510	46421	

	ССТ								
Function	n 8 bit value 16 bit value				NI .				
CCT From	CCT To	From	То	From	То	Note			
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									
Europhian.	8 bit value		8 bit value 16 bit value							
Function	From	То	From	То	Note					
-25% to 0	0	127	-	-	Default @ 128					
Neutral	128	128	-	-	Linear tint					
0 to 25%	129	255	-	-	correction from -0.25 to +0.25					

Crossfade from CCT to Color								
<b>F</b> (1)	8 bit	value	16 bit					
Function	From	То	From	То	Note			
Linear Crossfade	0	255	0	65535	Default @ 255			

Red									
<b>F 1</b>	8 bit value		16 bit	NL 1					
Function	From	То	From	То	Note				
0 - 100%	0	255	0	65535	Default @ 255				

Green								
E	8 bit	value	16 bit	value	N .			
Function	From	То	From	То	Note			
0 - 100%	0	255	0	65535	Default @ 255			

Blue									
	8 bit	value	16 bit	value	NL I				
Function	From	То	From	То	Note				
0 - 100%	0	255	0	65535	Default @ 255				

### PROLIGHTS - SmartBat Wash

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

Color Macro					
Function	8 bit value		16 bit	t value	Note
Function	From	То	From	То	INOTE
No Function	0	1	-	-	Default @ 0
RED	2	3	-	-	
GREEN	4	5	-	-	_
BLUE	6	7	-	-	
CYAN	8	9	-	-	_
MAGENTA	10	11	-	-	
YELLOW	12	13	-	-	
DIRTY WHITE	14	15	-	-	
ALICE BLLUE	16	17	-	-	
CONGO BLUE	18	19	-	-	
DARK STEEL BLUE	20	21	-	-	
DEEP LAVENDER	22	23	-	-	
LILAC TING	24	25	-	-	
DAYLIGHT BLUE	26	27	-	-	
FLAME RED	28	29	-	-	
BASTARD AMBER	30	31	-	-	
DEEP ORANGE	32	33	-	-	
PALE GOLD	34	35	-	-	
APRICOT	36	37	-	-	
BRIGHT BLUE	38	39	-	-	
PRIMARY GREEN	40	41	-	-	
SPECIAL LAVENDER	42	43	-	-	
PALE LAVENDER	44	45	-	-	
DEEP GOLDEN AMBER	46	47	-	-	
MEDIUM BLUE	48	49	-	-	
BRIGHT PINK	50	51	-	-	
MAUVE	52	53	-	-	
DARK GREEN	54	55	-	-	
LEE GREEN	56	57	-	-	
DARK BLUE	58	59	-	-	
LIGHT BLUE	60	61	-	-	
STEEL BLUE	62	63	-	-	
MEDIUM BLUE-GREEN	64	65	-	-	
PEACOCK BLUE	66	67	-	-	
MAGENTA	68	69	-	-	
DARK PINK	70	71	-	-	
MIDDLE ROSE	72	73	-	-	
LIGHT SALMON	74	75	-	-	
ENGLISH ROSE	76	77	-	-	
LIGHT ROSE	78	79	-	-	
ORANGE	80	81	-	-	
DEEP AMBER	82	83	-	-	
STRAW	84	85	-	-	
LIGHT AMBER	86	87	-	-	
SPRING YELLOW	88	89	-	-	

Color Macro					
Fun ation	8 bit value 16 b			t value	Nete
Function	From	То	From	То	Note
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	-	-	
LIGHT PINK	104	105	-	-	
SUNSET RED	106	107	-	-	
DARK AMBER	108	109	-	-	
GOLD AMBER	110	111	-	-	]
MEDIUM AMBER	112	113	-	-	
FIRE	114	115	-	-	
SURPRISE PEACH	116	117	-	-	]
STRAW TINT	118	119	-	-	]
MEDIUM YELLOW	120	121	-	-	
LEE MINUS GREEN	122	123	-	-	
PALE GOLD	124	125	-	-	]
ORANGE	126	127	-	-	
DEEP STRAW	128	129	-	-	
ROSE PURPLE	130	131	-	-	
DEEP PURPLE	132	133	-	-	
SOFT GREEN	134	135	-	-	
Reserved for future use	136	209	-	-	
2700K	210	211	-	-	
2800K	212	213	-	-	
3000K	214	215	_	-	
3200K	216	217	_	-	
3400K	218	219		-	-
3600K	220	221		-	-
3800K	222	223	_	-	
4000K	224	225		-	-
4200K	226	227	_	-	-
4400K	228	229			-
4600K	230	231		-	-
4800K	230	233	-	-	-
5000K	232	235	-	-	-
5200K	234	235	-		-
5400K			-	-	-
	238	239	-		1
5600K	240	241	-	-	
6000K	242	243	-	-	-
6500K	244	245	-	-	
7000K	246	247	-	-	1
8000K	248	249	-	-	
9000K	250	251	-	-	-
10000K	252	253	-	-	1
FULL ON	254	255	-	-	

CTO on Colors						
8 bit value 16 bit value				value		
Function	From	То	From	То	Note	
Linear CTO 0 - 100%	0	255	0	65535	Default @ 0	

		Control Chan	nel		
	8 bit	t value	16 bit	value	
Function	From	То	From	То	Note
No Functon	0	1	-	-	Default @ 0
BACKLIGHT ON	2	3	-	-	Hold 3s to take function
BACKLIGHT 10S	4	5	-	-	
BACKLIGHTS 20S	6	7	-	-	
BACKLIGHTS 30S	8	9	-	-	
FLIP DISPLAY ON	10	11	-	-	
FLIP DISPLAY OFF	12	13	-	-	
KEY LOCK ON	14	15	-	-	
KEY LOCK OFF	16	17	-	-	
WHITE CALIBRATION OFF	18	19	-	-	
WHITE CALIBRATION STUDIO	20	21	-	-	
WHITE CALIBRATION MANUAL	22	23	-	-	
WHITE CALIBRATION CALIBRATED	24	25	-	-	
DIMMER CURVE LINEAR	26	27	-	-	
DIMMER CURVE S-CURVE	28	29	-	-	
DIMMER CURVE SQUARE LAW	30	31	-	-	
DIMMER CURVE INVERSE SQUARE LAW	32	33	-	-	
DIMMER SPEED AUTO	34	35	-	-	
DIMMER SPEED FAST	36	37	-	-	
DIMMER SPEED MEDIUM	38	39	-	-	
DIMMER SPEED SLOW	40	41	-	-	
LED FREQUENCY 600HZ	42	43	-	-	
LED FREQUENCY 1200HZ	44	45	-	-	
LED FREQUENCY 2000HZ	46	47	-	-	
LED FREQUENCY 4000HZ	48	49	-	-	
LED FREQUENCY 6000HZ	50	51	-	-	
LED FREQUENCY 25KHZ	52	53	-	-	
RUN TIME 3 H	54	55	-	-	
RUN TIME 6 H	56	57	-	-	
RUN TIME 8 H	58	59	-	-	
RUN TIME 12 H	60	61	-	-	
RUN TIME 18 H	62	63	-	-	
IR SETUP ON	64	65	-	-	
IR SETUP OFF	66	67	-	-	
DMX FAULT HOLD	68	69	-	-	_
DMX HOLD BLACKOUT	70	71	-	-	_
DMX FAULT STAND ALONE	72	73	-	-	_
DMX FAULT EMERGENCY	74	75	-	-	_
AC FAULT NO ACTION	76	77	-	-	_
AC FAULT BLACKOUT	78	79	-	-	

Control Channel					
Function	8 bit value		16 bit value		Note
Tunction	From	То	From	То	Note
AC FAULT EMERGENCY	80	81	-	-	
AC MODE NO ACTION	82	83	-	-	
AC MODE BLACKOUT	84	85	-	-	
BATTERY RECHARGE AUTO	86	87	-	-	
BATTERY RECHARGE DISABLE	88	89	-	-	
BATTERY RECHARGE ENABLE	90	91	-	-	
TUNGSTEN EMULATION OFF	92	93	-	-	
TUNGSTEN EMULATION ON	94	95	-	-	
STAND ALONE MASTER DMX	96	97	-	-	
STAND ALONE MASTER NO DMX	98	99	-	-	
STAND ALONE SLAVE	100	101	-	-	
STAND ALONE EFFECT 1	102	103	-	-	
STAND ALONE EFFECT 2	104	105	-	-	
STAND ALONE EFFECT 3	106	107	-	-	
STAND ALONE EFFECT 4	108	109	-	-	
STAND ALONE EFFECT 5	110	111	-	-	
STAND ALONE STATIC FIXED COLORS	112	113	-	-	
STAND ALONE STATIC COLOR MACRO	114	115	-	-	
STAND ALONE STATIC WHITE PRESETS	116	117	-	-	
STAND ALONE STATIC MANUAL COLORS	118	119	-	-	
Reserved	120	253	-	-	
Reset all channel controlled	254	255	-	-	

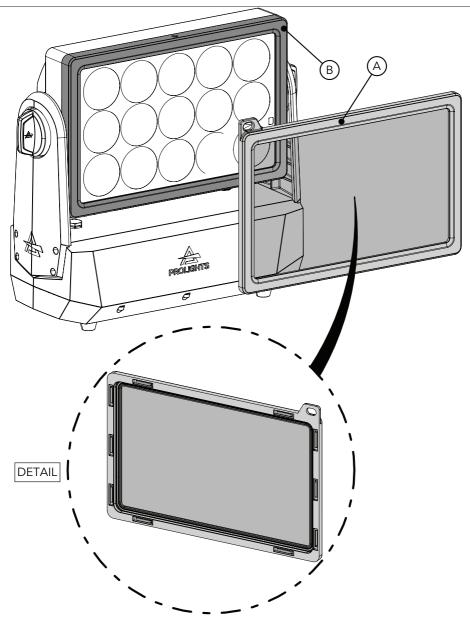
### **13 - ERROR MESSAGES**

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) and a code error.

	ERRORS				
ERROR SHOWED ON SCREEN	POSSIBLE CAUSES	CODE ERROR			
[DMX ACTIVE]	DMX Signal is present when using TRANSFER CONFIG function	1			
[TEMPERATURE ERROR]	TEMPERATURE is out of standard temperature range use (minus or plus)	2			
	Recharge the main battery, keeping the product under charge for some hours.	3			
[BATTERY ERROR]	If the error still occurrs, the battery is faulty . Replace the battery.	4			
[NO BATTERY]	Battery not detected. It may be faulty or disconnected.	5			
[LOW BATTERY]	Battery is almost empty (20%). Need to recharge	6			
[BATTERY CHARGER ERROR]	Battery charger circuit not working	7			

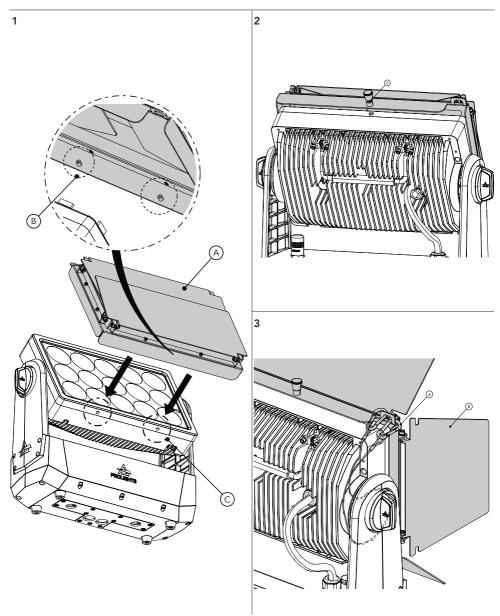
### **14 - ACCESSORIES INSTALLATION**

### LIGHT DIFFUSION FILTER (CODE SBWFILTER25/40/1060 - OPTIONAL)



Mount the accessory light diffusion filter (A) on the front cover (B); the hooking is magnetic due to the magnets on the frame of the accessory light diffusion filter (DETAIL) and inside the front cover.

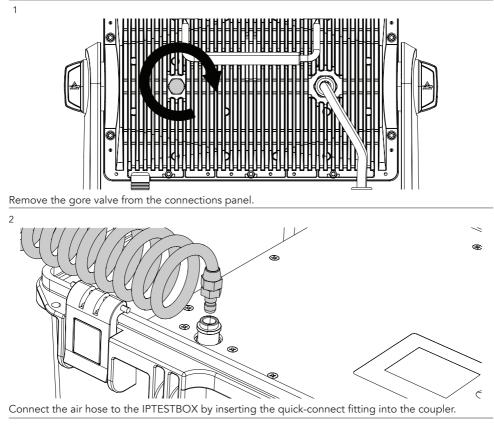
Fig. 08



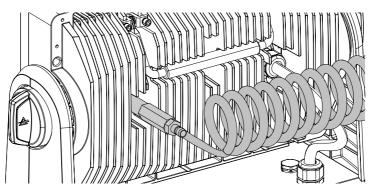
- 1. To mount the accessory barn door (A) insert the two marked pin on down edge of the barn door (B) into the holes provided on the bottom edge of the unit head (C).
- 2. Then positioning the spring pin on the hardware into the hole provided on the top of the unit head (A).
- 3. Hook the safety cable (A) and adjust the angle of the four leafs (B).

### 15 - TEST OF IP65 RATING

To check sealing after servicing use the IPTESTBOX.







Insert the threaded end into the threaded valve hole socket. For the operating procedure using the instrument, refer to the IPTESTBOX user manual.

Fig. 10

### **16 - 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.

### VISUAL CHECK OF PRODUCT HOUSING

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

#### TROUBLESHOOTING

Problems	Possible causes	Checks and remedies
Product doesn't power ON.	<ul> <li>No power to the product.</li> </ul>	<ul> <li>Check that power is switched ON and cables are plugged in.</li> </ul>
	<ul> <li>Fuse blown or internal fault.</li> </ul>	<ul> <li>Check if the Fuse is intact and eventually replace it if necessary.</li> <li>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.</li> </ul>
Product reset correctly but does not respond correctly	Bad signal connection.	<ul> <li>Inspect connections and cables. Fix eventual bad connections. Repair or replace damaged cables.</li> </ul>
to the contoller.	• Signal connection not terminated.	<ul> <li>Insert DMX termination plug in signal output socket of the last product on the signal line.</li> </ul>
	• Incorrect addressing of the product.	Check the product address and control settings.
	• One of the product is defective and is corrupt- ing the signal transmis- sion 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.	<ul> <li>Check product stored error messages for more information. Contact PROLIGHTS Service or an authorized service partner.</li> </ul>
Mechanical effect loses position.	<ul> <li>Mechanical hardware require cleaning, adjustment or lubrification.</li> </ul>	<ul> <li>Check product stored error messages for more information. Contact PROLIGHTS Service or an authorized service partner.</li> </ul>
Light output turn OFF Intermittently.	Fixture is too hot.	<ul> <li>Check product stored error messages.</li> <li>Allow product to cool.</li> <li>Clean the product and airflow filters.</li> <li>Reduce ambient temperature.</li> </ul>
	<ul> <li>Hardware failure (tem- perature sensor, fans, Light source).</li> </ul>	<ul> <li>Check product stored error messages for more information. Contact. PROLIGHTS Service or an authorized service partner.</li> </ul>
General low light intensity.	<ul><li>Dirty lens assembly.</li><li>Dirty or damaged filters.</li></ul>	<ul><li>Clean the fixture regularly.</li><li>Install lens assembly properly.</li></ul>

Contact an authorized service center in case of technical problems or not reported in the table can not be resolved by the procedure given in the table.




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