



# ÆtherBox LITE

1 Universe CRMX Wireless Transceiver



## USER MANUAL

## ***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](http://www.prolights.it) , or can be inquired to the official PROLIGHTS distributors of your territory ([https://www.prolights.it/sales\\_network.html](https://www.prolights.it/sales_network.html)).

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



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



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## SAFETY INFORMATION



### WARNING!

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



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



### Connection to mains supply

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



### Protection and Warning against electrical shock

- Do not remove any cover from the product, always disconnect the product from power (batteries or low-voltage DC mains) before servicing.
- Ensure that the fixture is connected to class III equipment operates at safety extra-low voltages (SELV) or protected extra-low voltages (PELV). 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 to power class III devices.
- 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 device.
- 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.
- Do not install the fixture near sources of heat.
- If this device will be operated in any way different to the one described in this manual, it may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short circuit, burns, electric shock, etc

**T<sub>a</sub>45°C**

### Max operating ambient temperature (T<sub>a</sub>)

- Do not operate the fixture if the ambient temperature (T<sub>a</sub>) exceeds 45 °C (113 °F).

**T<sub>a</sub>-10°C**

### Minimum operating ambient temperature (T<sub>a</sub>)

- Do not operate the fixture if the ambient temperature (T<sub>a</sub>) is below -10 °C (14 °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.



### 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.



### Maintenance

- Warning! Before starting any maintenance work or cleaning of the unit, 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.



### Radio receiver/transmitter

This product contains a radio receiver and/or transmitter:

- Maximum output power: 17 dBm.
- Frequency band: 2.4 GHz.
- Frequency range: 2402MHz ~ 2479MHz.
- Channel number: 78 channels.
- Channel spacing: 1MHz.
- Modulation type: GFSK.
- Antenna description: Internal antenna, 2.5dBi (MAX).



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



### The products to which this manual refers comply with:

- 2014/53/UE - Radio Equipment Directive (RED).
- 2011/65/EU - Restriction of the use of certain hazardous substances (RoHS)



### The products to which this manual refers comply with:

- UL 1573 + CSA C22.2 No. 166 - Stage and Studio Luminaires and Connector Strips.



### FCC Compliance:

- This device complies with FCC 47 CFR Part 15 Subpart B of the FCC Rules. Operation is subject to the following two conditions:
1. This device may not cause harmful interference, and
  2. This device must accept any interference received, including interference that may cause undesired operation.



### Other approvals

## 1 - PACKAGING

### PACKAGE CONTENT

- 1 x AETHERBOXLITE
- User Manual

### OPTIONAL ACCESSORIES

Check the updated accessories list, description and informations of the product at the following link:

<https://www.prolights.it/product/AETHERBOXLITE#accessories>

## 2 - TECHNICAL DRAWING

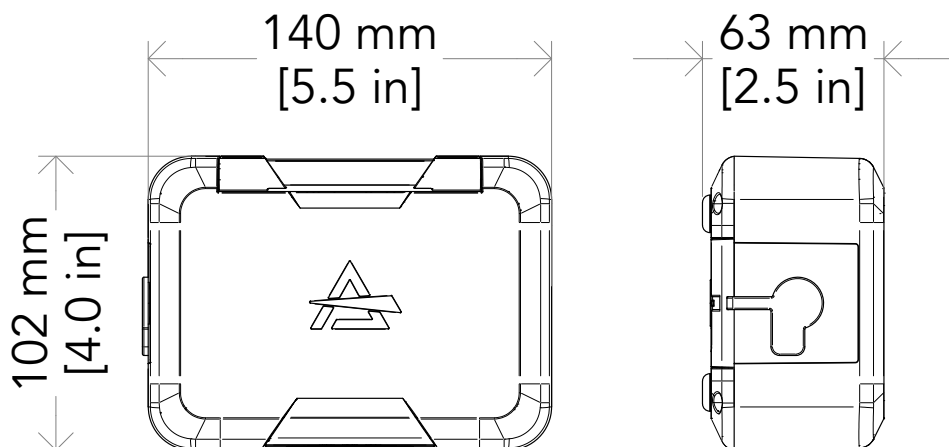


Fig. 01

## 3 - INSTALLATION

### MOUNTING

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

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

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

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

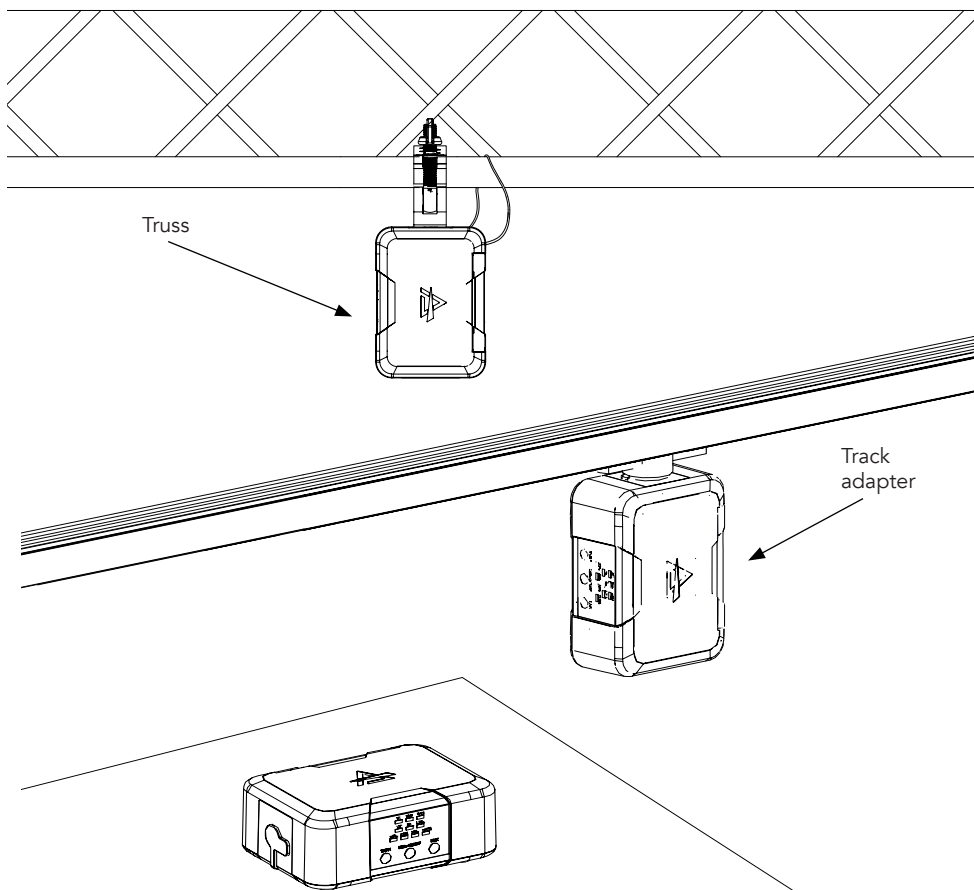



Fig.02

## 4 - CONNECTION TO THE MAINS SUPPLY

**WARNING:** For protection from electric shock, the fixture must be earthed!  
The product is equipped with auto-switching power supply that automatically adjusts to any 50-60Hz AC power source from 100-240 Volts (max absolutes range : 90- 264V).  
If you need to install a power plug on the power cable to allow connection to power outlets, install a grounding-type (earthed) plug, following the plug manufacturer's instructions. If you have any doubts about proper installation, consult a qualified electrician.  
The max power consumption is 5,8W.

**NOTE:** to avoid any risk, the Powercon true and the screw terminal block must not be powered at the same time.

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. USER INTERFACE with buttons and status LEDs for access to the functions;
2. DMX IN (5-p XLR): 1 = GND, 2 = sign-, 3 = sign+, 4 N/C, 5 N/C.;
3. DMX OUT (5-p XLR): 1 = GND, 2 = sign-, 3 = sign+, 4 N/C, 5 N/C.;
4. POWER IN: for connection to the Mains 100-240V~/50-60Hz.
5. SAFETY HOLE: to attach the safety cable;
6. BOTTOM COVER: allows the access to track adapter connections;
7. TRACK ADAPTER PLATE: allows an easy access to install the track adapter accessory;
8. RUBBER COVER: cover for the track adapter hole when not used.

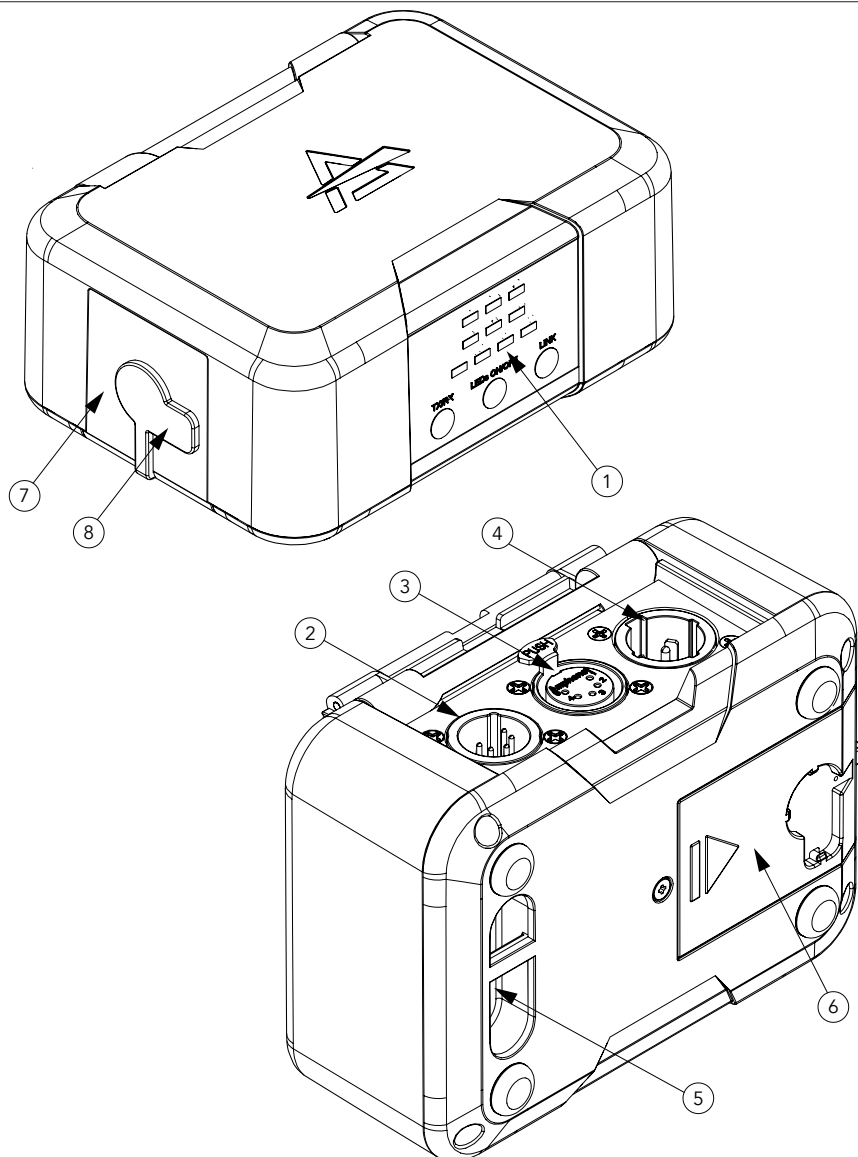


Fig.03

# 7 - CONTROL PANEL

## CONTROL PANEL OVERVIEW

The product has an OLED display and 5 buttons for access to the functions of the control panel.

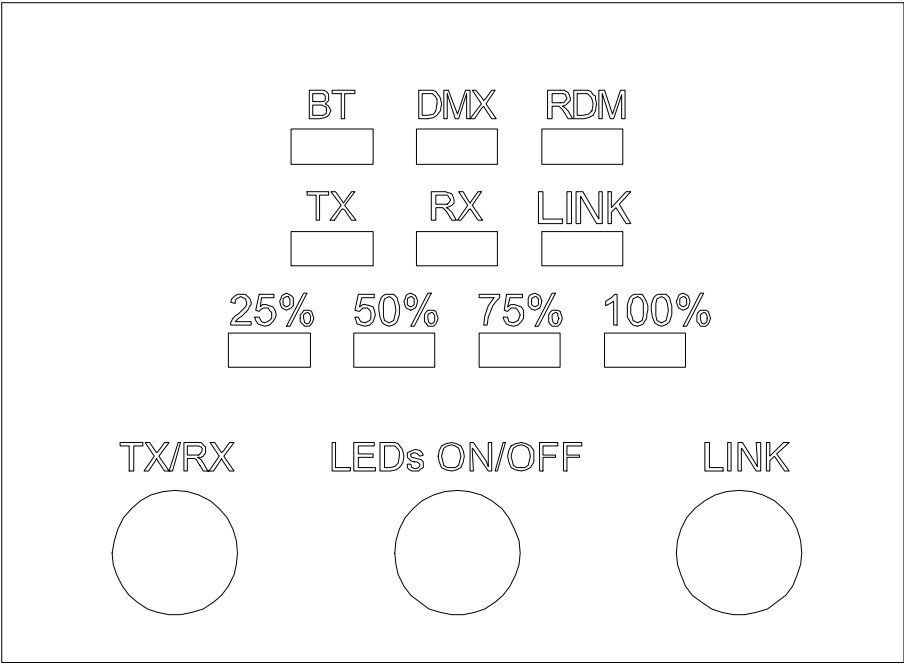


Fig. 04

## BUTTONS LAYOUT

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

TX/RX	<ul style="list-style-type: none"><li>• To select Transmitter or Receiver mode.</li></ul>
LEDs ON/OFF	<ul style="list-style-type: none"><li>• Push to power ON/OFF the LEDs.</li></ul>
LINK	<ul style="list-style-type: none"><li>• To reset connections or link fixtures.</li></ul>

Fig. 05

# 8 - USE

Function	Keys	Description
Switch from TX/RX Mode	Hold TX/RX Button	The status LED of the selected mode will be ON
LINK (TX Mode)	Short press LINK Button (0.1s - 1s)	To search for available fixtures, LINK status LED starts blinking
UNLINK (TX Mode)	Long press LINK Button (3s)	The fixture will be unlinked
UNLINK (RX Mode)	Long press LINK Button (3s)	The fixture will be unlinked
Bluetooth ON/OFF	Short press LINK Button (0.1s - 1s) followed by Long press LINK Button (3s)	The BT status LED will be ON/OFF
PIN Reset	7x short push (0.1-1s) followed by long push (3s)	The BT PIN will reset
Status LEDs ON/OFF	Short press (0.1s - 1s) LED ON/OFF Button	The status LEDs will be ON/OFF
Factory reset	Hold TX/RX + LINK Buttons at the same time while connecting Mains	To reset all factory settings

## CRMX Toolbox app

AETHERBOXLITE can be controlled by CRMX Toolbox app by bluetooth:  
Google Play: [https://play.google.com/store/apps/details?id=com.lumenradio.crmxtoolbox&pcampaignid=web\\_share](https://play.google.com/store/apps/details?id=com.lumenradio.crmxtoolbox&pcampaignid=web_share)  
App Store: <https://apps.apple.com/it/app/crmx-toolbox/id1443673829>

# 9 - 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.

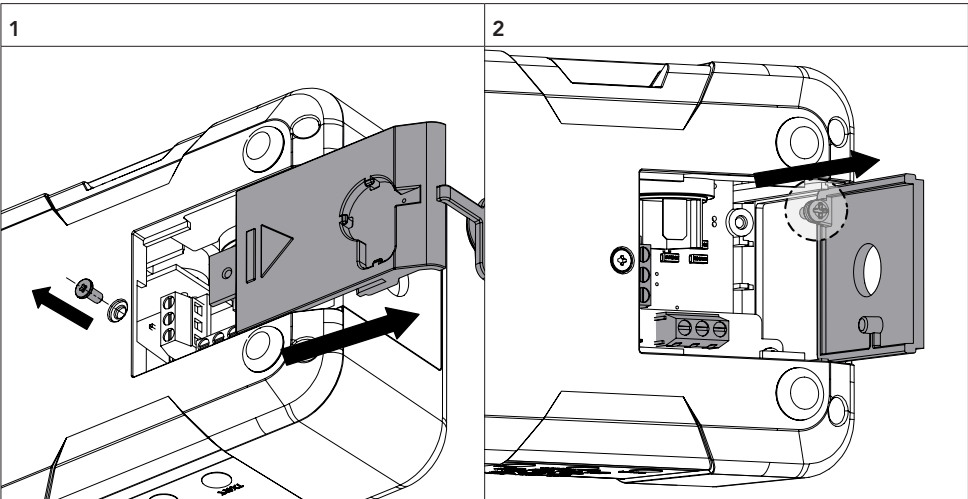
Category	Parameter	Value	GET	SET
<b>Product Information</b>	SUPPORTED_PARAMETERS	0x0050	x	
	PARAMETER_DESCRIPTION	0x0051	x	
	DEVICE_MODEL_DESCRIPTION	0x0080	x	
	MANUFACTURER_LABEL	0x0081	x	
	DEVICE_LABEL	0x0082	x	x
	FACTORY_DEFAULTS	0x0090	x	x
<b>DMX512 Setup</b>	DMX_PERSONALITY	0x00E0	x	x
	DMX_PERSONALITY_DESCRIPTION	0x00E1	x	
	DMX_START_ADDRESS	0x00F0	x	x
<b>Sensors</b>	SENSOR_DEFINITION	0x0200	x	
	SENSOR_VALUE	0x0201	x	x
<b>Power/Lamp Settings</b>	DEVICE_HOURS	0x0400	x	x
	DEVICE_POWER_CYCLES	0x0405	x	x
<b>Control</b>	IDENTIFY_MODE	0x1040	x	x

## Manufacturer Specific PIDs

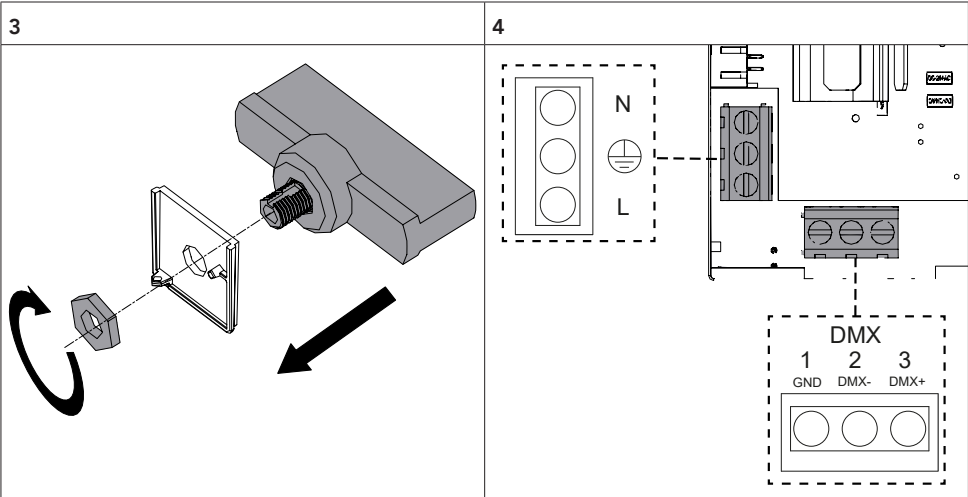
Parameter	PID	GET	SET	Value	Description
CRMX MODE	0x8213	x	x	0-3	<b>0: TX CRMX</b> 1: TX G4S 2: TX G3 3: RX
RX	0x8337	x		0-1	0: Not Linked 1: Linked
TX	0x8338	x		0-1	0: Not Linked 1: Linked
TX LINK	0x8214		x	0-1	<b>0: Not Link</b> 1: Link
RX RESET	0x8215		x	0-1	<b>0: No</b> 1: Yes
TX RESET	0x8347		x	0-1	<b>0: No</b> 1: Yes
BLUETOOTH	0x8319	x	x	0-1	0: Off <b>1: On</b>
RDM DOWNSTREAM	0x8316	x	x	0-1	0: Off <b>1: On</b>
IDENTIFY	0x8317	x	x	0-1	0: No identify <b>1: RDM identify active</b>
TX RF OUTPUT POWER	0x8318	x	x	0-3	0: 20 1: 16 2: 11 <b>3: 5 dBm</b>
LED STATUS	0x833D	x	x	0-1	0: Disable <b>1: Enable</b>
LINK QUALITY	0x831A	x		0-255	

# 10 - ACCESSORIES INSTALLATION

## TRACK ADAPTER (CODE NAKKT30600)



Unscrew the bottom screw and remove the bottom cover (1), it is possible also to remove the track adapter cover, to easy mounting (2).

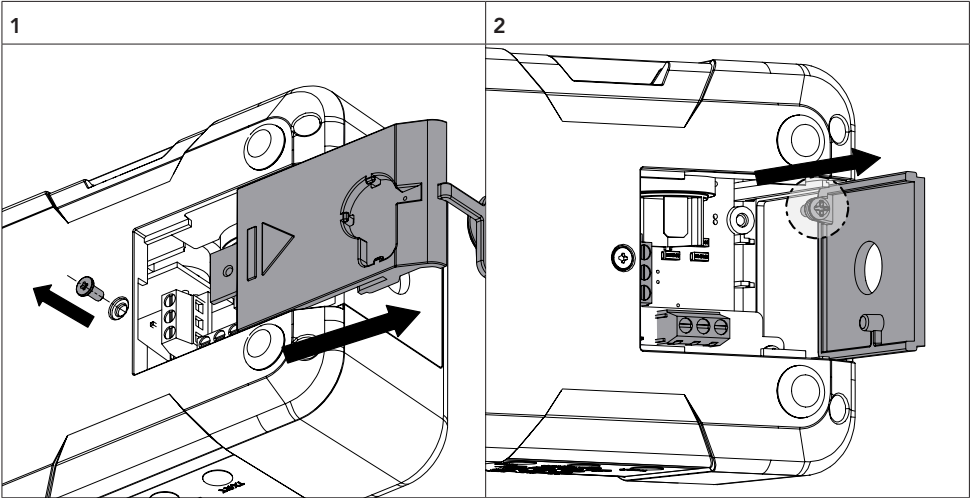


Assemble the track adapter as shown in figure (3), then connect the screw terminal blocks as shown in figure (4).

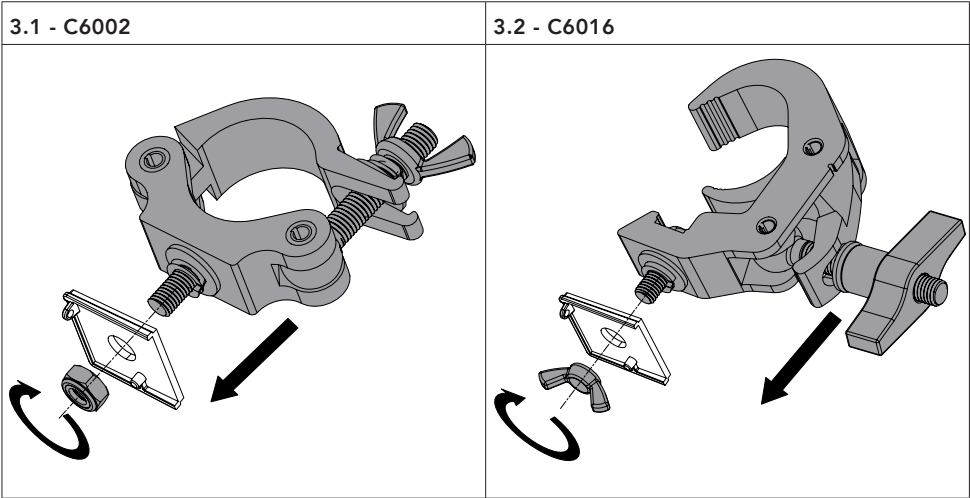
**NOTE:** to avoid any risk, the Powercon true and the screw terminal block must not be powered at the same time.

Fig. 06

CLAMP (CODE C6002, C6016)



Unscrew the bottom screw and remove the bottom cover (1), it is possible also to remove the track adapter cover, to easy mounting (2).



Assemble the clamp as shown in figure (3.1, 3.2).

Fig. 07

# 11 - MAINTENANCE

## MAINTENANCE THE PRODUCT

It is recommended that the product be checked at regular intervals.

- For cleaning use a soft, clean cloth moistened with a mild detergent. Never use a liquid, it might penetrate the unit and cause damage to it.
- The user may also upload firmware (product software) to the fixture via the DMX signal input port using UPBOXPRO or UPBOX2 and instructions from PROLIGHTS.
- It is recommended to check at least annually if new firmware is available and a visual check of the status of the device and mechanical parts.

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 use the best quality materials available to ensure optimum performance and the longest possible component lifetimes. However, components are subject to wear and tear over the life of the product. 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 components if their characteristics are affected by wear and tear after an extended period of use.
- 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. 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.

## TROUBLESHOOTING

Problems	Possible causes	Checks and remedies
	<ul style="list-style-type: none"><li>• Internal fault</li></ul>	<ul style="list-style-type: none"><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>

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.

## This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



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