

# Mosaico

250W IP66 zoomable LED image projector



# **USER MANUAL**

English version Rev.08 - 04/24

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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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## SAFETY INFORMATION



#### WARNING!

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



This unit is not for household 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.



#### Minimum distance of illuminated objects

• The projector needs to be positioned so that the objects hit by the beam of light are at least 3 meters (9.84 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.

## IP66

#### Outdoor (temporary) use

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



#### Light collimation optical system\*

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

## T<sub>C</sub>70°C

#### 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.



#### Lamp'

The fitting mounts a high-pressure lamp that needs an external ignitor. This ignitor is fitted onto the apparatus.

- 1. Carefully read the "operating instructions" provided by the lamp and ignitor manufacturer.
- 2. Immediately replace the lamp if damaged or deformed by heat.



#### Photobiological safety

This device emits potentially dangerous optical radiation and is identified in the category of Risk Group 2 according to EN 62471.



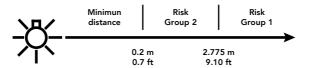
#### Maintenance

- 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.



#### Do not stare at the operating light source

- Do not look directly at the LED source during operation. It can be harmful to the eyes and skin.
- During Installation, operation and maintenance, be prepared for the fixture to light and move suddenly when connected to power.
- The device should be positioned so that prolonged staring into the luminaire at a distance closer than 2.775 m (9.10 ft) is not expected.





#### Disposal

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



#### The product contains a lithium ion battery

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



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

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



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

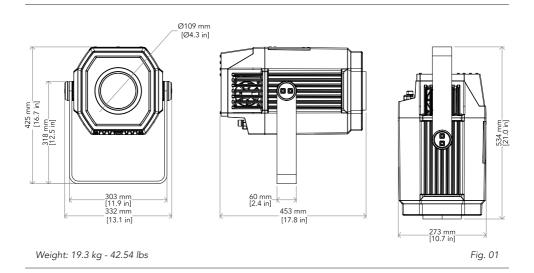
#### PACKAGE CONTENT

- 1x MOSAICO;
- 1x SCHUKO IP connection adapter;
- 1x 5p XLR IP connection male adapter;
- 1x 5p XLR IP connection female adapter;
- User Manual.

#### **OPTIONAL ACCESSORIES**

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

## 2 - TECHNICAL DRAWING



## 3 - INSTALLATION

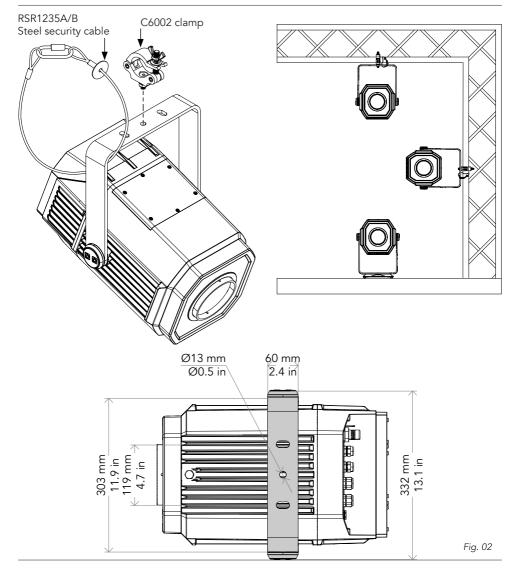
#### MOUNTING

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 320W.

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

#### 5 - START UP

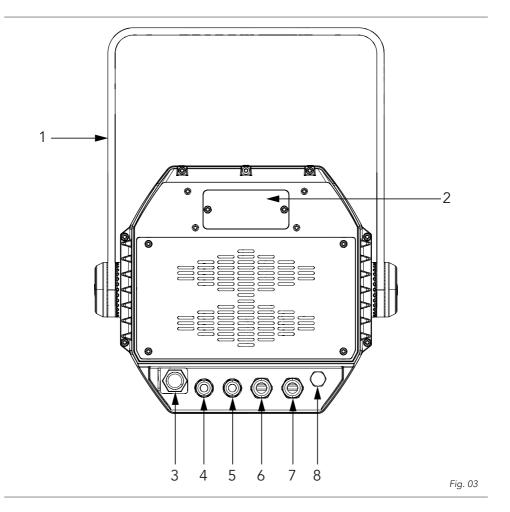
#### CONNECT AND DISCONNECT POWER FROM THE PRODUCT

To apply and disconnect power to the product:

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

## 6 - PRODUCT OVERVIEW

- 1. BRACKET:
- 2. USER INTERFACE with display and buttons for access to the control panel functions;
- 3. GORE VALVE;
- 4. DMX IN (3-p XLR): 1 = GND, 2 = sign-, 3 = sign+;
- 5. DMX OUT (3-p XLR): 1 = GND, 2 = sign-, 3 = sign+;
- 6. POWER IN: for connection to the Mains 100-240V~/50-60Hz;
- 7. POWER OUT: for connection to the Mains 100-240V~/50-60Hz;
- 8. GORE VALVE.



## 7 - DMX CONNECTION

#### CONNECTION OF THE CONTROL SIGNAL: DMX LINE

The product has connectors for DMX input and output.

The default pin-out on both connectors is as the following diagram:

## DMX - INPUT IP67 CONNECTOR



Pin1 : GND - Shield Pin2 : - Signal Pin3 : + Signal

## DMX - OUTPUT IP67 CONNECTOR



Fig. 06

#### 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.

NOTE: To connect the unit to your DMX network, it is necessary to use the adapters XLR 5 pin-IP67 signal connector, supplied with this product.

#### CONNECTION DAISY CHAIN OF THE DMX LINE

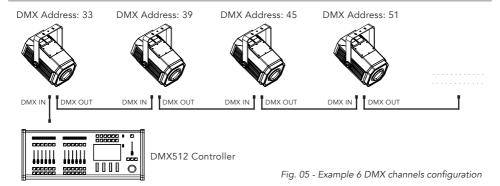
Connect the DMX data output from the DMX source to the product DMX input (male connector). Run the data link from the product DMX output (female connector) connector to the DMX input of the next fixture.

Terminate the data link by connecting a 120 Ohm signal termination.

The termination is prepared by  $120\Omega$  1/4 W resistor between pins 2 and 3 of the male DMX connector. Install a DMX termination plug on the last fixture on the link. If a splitter is used, terminate each branch of the link.

NOTE: when not using the DMX input or DMX output connectors, you must seal the cable ends with the supplied caps.

The following diagram shows the DMX connection:



#### CONNECTION OF THE CONTROL SIGNAL: DMX LINE ADAPTERS

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

## DMX - INPUT XLR plug



Pin1 : GND - Shield Pin2 : - Signal

Pin2 : - Signal Pin3 : + Signal Pin4 : N/C Pin5 : N/C

## DMX - OUTPUT XLR socket



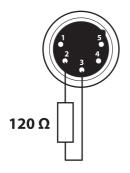
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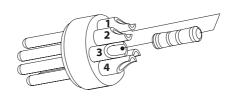
#### CONNECTION OF THE DMX LINE

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

#### 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:





Example: 5 pin XLR connector

Fig. 09

#### 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

MOSAICOL can be used as wireless transmitter to transmit DMX signal to different wireless receivers. To use MOSAICOL as wireless transmitter, please follow the procedure below:

- 1. Push ENTER button untill you show CONNECT on display, then press ENTER button to confirm.
- 2. Use UP/DOWN buttons for select WIRELESS, then press ENTER to confirm.
- 3. Push ENTER button on WDMX ON/OFF function and enable it to ON.
- 4. Select WDMX mode and set it on Transmitter (please note that WDMX mode will be available only if WDMX ON/OFF is set to ON).
- 5. Ensure that the receiver units are not connected to any other transmitter. Please refer to "Reset the receiver" paragraph.
- 6. Enable TX LINK to ON to link transmitter to receivers (please note that TX LINK will be available only if WDMX mode is set to Transmitter).
- The transmitter scans for all unlinked receivers for a period of about 5 seconds.
- If the connection fails, check the position of the receiver.
- The wireless icon on the receiver display indicates the received signal strength.

#### Unlinking the transmitter

Follow the procedure below to unlink the transmitter from all receivers connected with the unit.

- 1. Push ENTER button untill you show CONNECT on display, then press ENTER button to confirm.
- 2. Use UP/DOWN buttons for select Wireless, then press ENTER to confirm.
- 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 DMX incoming signal is retransmitted throught wireless.

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

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

To use MOSAICOL 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.

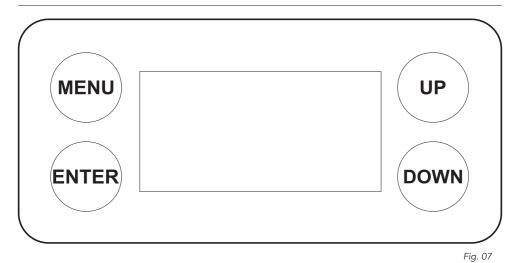
#### WDMX TO DMX (RX)

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.

NOTE: remove the display cover to access the control panel



#### **DISPLAY AND BUTTONS LAYOUT**

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

PROLIGHTS - Mosaico

## 9 - MENU STRUCTURE

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

N°	MENU	LEVEL 1	LEVEL 2	LEVEL 3	DESCRIPTION
1	CONNECT	DMX ADDRESS	<b>1</b> -512		Set address used for Fixture.
		DMX MODE	12CH		Set DMX chart for Main Fixture.
			14CH		
			16CH		
			19CH		
		WIRELESS	RECEIVE ON/OFF	ON	Enable/Disable the wireless card.
				OFF	
			RECEIVE RESET	NO	Allows to choose whether to set the
				YES	wireless on the Transmitter or Receiver. WDMX mode is unlocked only if WDMX ON / OFF is ON.
			WIRELESS TO DMX	NO	Enable/Disable the retransmission of the
				YES	DMX from the receiver to the other units connected by cable to the receiver itself.
2	SETUP	SCREEN	BACKLIGHT	ON	Allows you to select the timing after that
				105	display will switch automatically off when unactive.
				20S	anactive.
				30S	
			FLIP DISPLAY	NO	Allows you to rotate the display by 180°.
				YES	
			WARN CUE	OFF	When WarnCue@ON the display shows
				ON	error warnings.
			KEY LOCK	NO	Allows you lock the buttons on the control
				YES	panel by a password. Press following combinations (password) in order to access to the user menu : UP, DOWN, UP, DOWN.
		FIXTURE	FAN MODE	AUTO	Select Fan behaviour.
				HIGH	
			TEMPERATURE UNIT	°C	Select Temperature unit.
				°F	
		AUTO TEST			To test all the functions.
		MANUAL TEST	SHUTTER	000- <b>255</b>	To test the selected functions.
			DIMMER	000- <b>255</b>	
			COLOR1	<b>000</b> -255	
			COLOR2	<b>000</b> -255	
			GOBO	<b>000</b> -255	
			RGOBO	<b>000</b> -255	
			PRISMROT	<b>000</b> -255	
			FROST	<b>000</b> -255	_
			FOCUS	<b>000</b> -255	_
			ZOOM	<b>000</b> -255	_
			ANIMATION	<b>000</b> -255	_
			RANIMATION	<b>000</b> -255	

N°	MENU	LEVEL 1	LEVEL 2	LEVEL 3	DESCRIPTION
3	ADVANCED	ADV. GOBO INDEX	ON		Reduces indexing errors when rotating in
			OFF		different directions of the gobo.
		ADV. FOCUS INDEX	ON		Reduces indexing errors when moving
			OFF		focus forwards and backwards.
		ADV. ZOOM INDEX	ON		Reduces indexing errors when zooming
			OFF		in/out.
		WARM UP LOW	ON		Low temp value DEF: 20°
		TEMP	OFF		
			LOW TEMP VALUE	0° - 25°	
		RESET	ALL		To reset these functions
			COLOR 1		
			COLOR 2		
			GOBO		
			PRISM		
			FROST		
			FOCUS		
			ZOOM		
			ANIMATION		
		ADJUST	COLOR1 OFFSET	000-255	To adjust these functions
			COLOR2 OFFSET	000-255	
			GOBO OFFSET	000-255	
			RGOBO OFFSET	000-255	
			PRISM OFFSET	000-255	
			PRISM OFFSET	000-255	
			FROST OFFSET	000-255	
			FOCUS OFFSET	000-255	
			ZOOM OFFSET	000-255	
			ANIMATION OFFSET	000-255	
		FACTORY RELOAD	NO		To reset the unit to factory default
			YES		settings.
4	INFORMATION	FIXTURE TIME	0-9999		To see the total working hours of the unit.
		TEMPERATURE	58 °C		To see the temperature of the source.
		FANS SPEED	**%		To see the fan speed.
		SOFTWARE VERSION	"DISP: V1.0 CTR1:V1.0 CTR2:V1.0"		To see the software version.
		UID	15D0*****		To see the RDM UID
5	STAND ALONE	PLAY	OFF		

N°	MENU	LEVEL 1	LEVEL 2	LEVEL 3	DESCRIPTION
			SHOW		
			CHASE		
			SCENE		
		EDIT SHOW	"SHOW 1 SHOW 2 SHOW 3"		
		EDIT CHASE	"CHASE 1 CHASE 2 CHASE 3 CHASE 4 CHASE 5 CHASE 6 CHASE 7 CHASE 8"		
		EDIT SCENES	"EDIT SCENES 01 EDIT SCENES 02 EDIT SCENES 03 EDIT SCENES 30 EDIT SCENES 31 EDIT SCENES 31 EDIT SCENES 32"		
		SCENES RECORD	"SCENES 01 SCENES 02 SCENES 03		
			SCENES 30 SCENES 31 SCENES 32"		
		SLAVE SETUP	"EDIT SCENES 01 EDIT SCENES 02 EDIT SCENES 03		
			EDIT SCENES 30 EDIT SCENES 31 EDIT SCENES 32"		
		SCENES TIME	"SCENE 01 TIME SCENE 02 TIME SCENE 03 TIME		
			SCENE 30 TIME SCENE 31 TIME SCENE 32 TIME"		
		CHASE TIME	"CHASE 1 TIME CHASE 2 TIME CHASE 3 TIME CHASE 4 TIME CHASE 5 TIME CHASE 6 TIME CHASE 7 TIME CHASE 8 TIME		
		MOVE WITH BLACKOUT	"Scenes 01 Scenes 02 Scenes 03  Scenes 30 Scenes 31 Scenes 32"		

#### **WIRELESS**

- To enter the Wireless mode proceed in the following mode:
- Press the MENU button to access the main menu.
- Press the UP/DOWN button to scroll the menu, select Connect, then press the ENTER button to
  enter the next menu.
- Select the Wireless Receive function using the UP/DOWN buttons, then press the ENTER button.
- To activate the Wireless Receive function, use the UP/DOWN buttons and select the **On** option.
- Press the ENTER button to confirm the selection.
- Press the MENU button to go back or wait a few seconds to exit the setup menu.

NOTE - Once you have performed these steps, you must synchronize with any WiFi unit with which you want to communicate by pressing the sync button on it. At this point connect the DMX console to the WiFi unit to open the communication with the MOSAICOXL.

- To reset the unit, select the Receive Reset function using the UP/DOWN buttons, press the RIGHT button until the display shows Connect, then select Receive Reset using the UP/DOWN buttons, then press the ENTER button.
- To activate the mode use the UP / DOWN keys and select the Yes option.
- Press the ENTER button to confirm the selection.
- Press the MENU button to go back or wait a few seconds to exit the setup menu.
- To activate the Wireless to DMX function, use the UP / DOWN buttons to press the ENTER button until the display shows Connect, then select Wireless to DMX, then press the RIGHT button.
- To activate the mode use the UP/DOWN buttons and select the Yes option.
- Press the ENTER button to confirm the selection.
- Press the MENU button to go back or wait a few seconds to exit the setup menu.

#### **SCREEN**

It is possible to modify the following parameters, related to the display, following the same procedure:

- Press the MENU button to access the main menu.
- Press the UP/DOWN button to scroll through the menu, select Set Up, then press the ENTER button
  access the next menu.
- Press the UP/DOWN button to select **Screen** and press the ENTER button to proceed.
- Select the proposed option with the UP/DOWN button and press the ENTER button to confirm.
  - Backlight Auto Off display backlight. This function allows you to switch off automatically the
    backlighting of the display after a certain time which can be set using the directional keys. To
    have the display always on select On or set a value between those shown (10s, 20s, 30s) to turn
    off the display once the chosen time has elapsed, after exiting the menu.
  - Flip Display Display orientation. This feature allows you to rotate the display by 180 ° to get a
    better view of the display when the unit is hanging upside down. Select Yes to activate the function, No to deactivate it or Auto.
  - Warn Cue Warning of error. Use the arrow keys to select Off or On depending on whether or not the display shows error warnings.
  - Key lock With this function, you can lock the keys on the control panel to prevent, for example, tampering with the settings. If this function is activated, the keys are locked automatically. To disable or temporarily disable or disable the key lock function, press the keys in the following order to regain access to the menu commands: UP, DOWN, UP, DOWN, ENTER. Select Yes to activate the function or No to deactivate it.
- Press the ENTER button to confirm the selection.
- Press the MENU button repeatedly to exit the menu and to save the changes made.

#### **FIXTURE SETTINGS**

You can change the parameters for the device by following these steps:

- Press the button MENU to enter the menu mode.
- Use the buttons UP/DOWN to select Set Up. Press the button ENTER to confirm.
- Use the buttons UP/DOWN to select Fixture. Press the button ENTER to confirm.
- Press the buttons UP/DOWN to select the desired option and press the button ENTER to confirm:

- Fan Mode Fan speed. Select the desired fan speed Auto, Silent, High through the button UP/ DOWN.
- Temperature unit. Select Temperature unit function and then choose Celsius / Fahrenheit measurement unit then press the ENTER button to confirm the selection.
- Press the MENU button repeatedly to exit the menu and to save the changes made.

#### **AUTO TEST**

Allow checking the proper functioning of the unit. Start the automatic test in the following way:

- Press the button MENU to enter the menu mode.
- Use the buttons UP/DOWN to select the Set Up. Press the button ENTER to confirm.
- Press the buttons UP/DOWN to select the Auto Test and press ENTER to confirm.
- To confirm and start the automatic test press the MENU button.

#### MANUAL TEST

It allows to do adjustments on the effects through comands pannel to obtain a perfect balance between the projectors.

- Press the button MENU to enter the menu mode.
- Press the buttons UP/DOWN to select the item Set Up. Then press the button ENTER.
- Press the buttons UP/DOWN to select the Manual Test. Then press the button ENTER.
- Select the effect you want change (Shutter, Dimmer, Color, Gobo, RGobo, Focus, Zoom.Then press the button ENTER to confirm.
- Use the directional buttons to calibrate the effect setting a value between 0 255. Then press the button ENTER to confirm.
- Press repeatedly the button MENU to return the menu mode.

#### **ADVANCED**

It is possible to modify the following parameters following the same procedure:

- Press the MENU button to access the main menu.
- Press the UP/DOWN button to scroll through the menu, select Advanced, then press the ENTER button to enter the next menu.
- Press the UP/DOWN button to select one off the following parametres:
  - Advance Gobo Index: Reduces indexing errors when rotating in different directions of the gobo.
  - Advance Focus Index: Reduces indexing errors when moving focus forwards and backwards. This function is disabled by default.
  - Advance Zoom Index: Reduces indexing errors when zooming in/out. This function is deactivated by default.
  - Warm Up Low Temperature: The Warm Up function works as follows:
    - OFF = at power-up the device never warms up;
    - ON = when switched on, the device will always warm up (regardless of the temperature);
    - LOW TEMP VALUE = when switched on, the device will warm up for 10 minutes if it is below a certain temperature threshold. The threshold is user selectable in a range of extremes 0° 25° (default is set at 20°). During Warm Up the light source is on but the blades are closed, so no light escapes. Once the warm-up is complete, the device restarts and is ready for use.
  - Reset To start a preset program to restore the selected function (All, Cyan, Magenta, Yellow, CTO, Color, Gobo, RGobo, Focus, Zoom.
  - Adjust To allows you to change all parameters. Insert the password "050" to enter. Select the desired function (Cyan, Magenta, Yellow, CTO, Color, Gobo, RGobo, Focus, Zoom, and the choose the value (0 - 255).
  - Factory Reload To reset the unit. Select Yes or No and select ENTER to confirm.
- Press the ENTER button to confirm the selection and wait for the selected function to be restored.
- Press the MENU button repeatedly to exit the menu and to save the changes made.

#### INFORMATION ON THE DEVICE

To view all the information on the device, proceed as follows:

- Press the MENU button to access the main menu. Press the UP/DOWN button to select Information, then press the ENTER button to access the next menu.
- Press the UP/DOWN button to scroll through the menu, then select one of the following informationand press the ENTER button to display it.- Fixture Time Through the Fixture Time function, the operating time of the projector can be shown on the display.
  - Fixture Time To view the operating time of the projector.
  - Temperature To view the temperature of the device in °C/°F on the display.
  - Fans Speed to view on the display the fan speed present near the lamp.
  - Software Version To view the firmware version will show on the display.
  - UID To view the identification ID for the RDM control.
- Press the MENU button repeatedly to exit the menu and to save the changes made.

#### **OPERATIONS IN STANDALONE MODE**

#### Play Show

The unit independently runs through its show. Before you send an automatic program you need to set the drive as Master/Alone:

- Press the MENU button to access the main menu.
- Press the UP/DOWN button to scroll the menu, select the Stand Alone, then press the ENTER button to enter the next menu.
- Press the UP/DOWN button to scroll through the menu, select Play and press the ENTER button to enter the next menu.
- Press the UP/DOWN button to scroll through the menu, select Show and press ENTER to confirm
  your choice.
- Press the UP/DOWN button to select the mode of operation: Show 1, Show 2, Show 3.
- Press the ENTER button to confirm your choice.
- Press the MENU button repeatedly to exit the menu and save changes.

The unit will go into automatic mode by executing the program automatically.

#### Play Chase

The function Chase lets you choose the automatic program to actually run.

- Press the MENU button to access the main menu.
- Press the UP/DOWN button to scroll the menu, select Stand Alone, then press the ENTER button
  to enter the next menu.
- Press the UP/DOWN button to scroll through the menu, select Play and press the ENTER button to
  enter the next menu.
- Press the UP/DOWN button to scroll through the menu, select Chase and press the ENTER button to enter the next menu.
- Press the UP/DOWN button to scroll through the menu, then select Chase 1 ~ Chase 8 and press ENTER to confirm.
- Press the MENU button repeatedly to exit the menu and save changes.

#### Play Scenes

The function **Scenes** lets you choose the scene to actually run.

- Press the MENU button to access the main menu.
- Press the UP/DOWN button to scroll the menu, select Stand Alone, then press the ENTER button
  to enter the next menu.
- Press the UP/DOWN button to scroll through the menu, select Play and press the ENTER button to enter the next menu.
- Press the UP/DOWN button to scroll through the menu, select Scenes and press the ENTER button
  to enter the next menu.
- Press the UP/DOWN button to scroll through the menu, then select Scene 1 ~ Scene 32 and press ENTER to confirm.
- Press the MENU button repeatedly to exit the menu and save changes.

#### **Edit Show**

The function Edit Show allows you to create individual scenes to be included in the Chase Step.

- Press the MENU button to access the main menu.
- Press the UP/DOWN button to scroll the menu, select Stand Alone, then press the ENTER button
  to enter the next menu.
- Press the UP/DOWN button to scroll through the menu, select **Edit Show** and press the ENTER button to enter the next menu.
- Press the UP/DOWN button to scroll through the menu, select Show 1/Show 2/Show 3, then press
  the ENTER button to confirm.
- Press the UP/DOWN button to scroll through the menu, select Chase 1 ~ Chase 8, then press the ENTER button to confirm.
- Press the UP/DOWN button to change the value of the function, then press the ENTER button to confirm.
- Press the MENU button repeatedly to exit the menu and save changes.

#### **Edit Chase**

The function Edit Chase allows you to create automatic pre-programmed show.

The automatic programs Chase1 ~ Chase8. Each Chase can be composed of 1 ~ 16 step that can be configured through the following procedure:

- Press the MENU button to access the main menu.
- Press the UP/DOWN button to scroll the menu, select the Stand Alone, then press the ENTER button to enter the next menu.
- Press the UP/DOWN button to scroll through the menu, select Edit Chases and press the ENTER button to enter the next menu.
- Press the UP/DOWN button to scroll through the menu, select Edit Chase 1 ~ Edit Chase 8, then
  press the ENTER button to confirm.
- Press the UP/DOWN button to select the Step 01 ~ Step 16, and press ENTER to confirm.
- Press the UP/DOWN button to select the Scene 1 ~ 32 you want to set for the Step chosen, and then press ENTER to confirm.
- Press the MENU button repeatedly to exit the menu and save changes.

#### **Edit Scenes**

The function Edit Scenes allows you to create individual scenes to be included in the Chase Step.

- Press the MENU button to access the main menu.
- Press the UP/DOWN button to scroll the menu, select the Stand Alone, then press the ENTER button to enter the next menu.
- Press the UP/DOWN button to scroll through the menu, select Edit Scenes and press the ENTER button to enter the next menu.
- Press the UP/DOWN button to scroll through the menu, select Edit Scene 1 ~ Edit Scene 32, then
  press the ENTER button to confirm.
- Then choose the desired function: New / Edit Scene or Copy Scene.
- Press the UP/DOWN button to select the desired function you want to edit (Shutter, Dimmer, etc..),
   Then press the ENTER button to confirm.
- Press the UP/DOWN button to change the value of the function, then press the ENTER button to confirm.
- Press the MENU button repeatedly to exit the menu and save changes.

#### Scenes Record

The Scenes Record function allows the recording of MOSAICOXL scenes through the console on which the fixture was stored in Scene Record, capable of driving the fixture functions expressed in DMX.

- Press the MENU button to access the main menu.
- Press the UP/DOWN button to scroll through the menu, select Stand Alone, then press the ENTER button to enter the next menu.
- Press the UP/DOWN button to scroll through the menu, select **Scenes Record** and press the ENTER button to enter the next menu.
- Press the UP/DOWN button to select the scene to be inserted in the automatic program, then press

- the ENTER button to confirm.
- Press the UP/DOWN button to select the scene to edit in the automatic program, then press the ENTER button to confirm. After pushing ENTER button, MOSAICOXL will wait for the confirm.
- From the DMX console, change the parameters of the MOSAICOXL based on the scene to be created.
- After creating the scene, press ENTER on the MOSAICOXL (the message STORED will appear).
- Press the MENU button repeatedly to exit the menu and save changes.

#### Slave Setup

The function Slave Setup allows you to execute automatic pre-programmed show set on the master projector.

- Press the MENU button to access the main menu.
- Press the UP/DOWN button to scroll the menu, select Stand Alone, then press the ENTER button
  to enter the next menu.
- Press the UP/DOWN button to scroll through the menu, select Slave Setup and press the ENTER button to enter the next menu.
- Press the UP/DOWN button to scroll through the menu, select Edit Scene 1 ~ Edit Scene 32, then
  press the ENTER button to confirm.
- Press the UP/DOWN button to select the desired function you want to edit (RGobo, Focus, Zoom),
   Then press the ENTER button to confirm.
- Press the UP/DOWN button to change the value of the function, then press the ENTER button to confirm.
- Press the MENU button repeatedly to exit the menu and save changes.

NOTE: if the Slave units have to do the same operation as the MASTER, during a recording, the values of Focus, Zoom and RGobo will not be stored. These values must be adjusted manually on the Slave units, via this section.

#### Scenes Time

The Scenes Time function allows you to set the input, duration and output times of each single scene.

- Press the ENTER key to access the main menu.
- Press the UP / DOWN button to scroll through the menu, select Stand Alone, then press the ENTER button to access the next menu.
- Press the UP / DOWN button to select Scenes Time and press the ENTER button to access the next menu.
- Press the UP / DOWN button to select Scene 01 Time ~ Scene 32 Time, then press the ENTER button
- Press the UP / DOWN button to change the following times, then press the ENTER button to confirm:
  - Fade in Time scene entry time.
  - Hold Time time duration of the scene.
  - Fade Out Time time out of the scene.

Press the MENU key several times to exit the menu and to save the changes made.

#### Move blackout

The Move Blackout function allows you not to display the scroll between one scene and another; any kind of change between a scene and the next occurs "in the dark".

- Press the ENTER key to access the main menu.
- Press the UP / DOWN button to scroll through the menu, select Stand Alone, then press the ENTER button to access the next menu.
- Press the UP / DOWN button to select Move Blackout and press the ENTER button to access the next menu.
- Press the UP / DOWN button to select On or Off then press the ENTER button.
- Press the MENU key several times to exit the menu and to save the changes made.

When the projector is in Stand Alone it turns out to be MASTER, as well as if you enter or connect the projector to the DMX. When you exit the menu or disconnect the DMX connection, the projector restarts the show execution from the last scene interrupted by these two actions.

## 10 - SHORTCUT

KEYS	MODE	DESCRIPTION
UP + DOWN after power on	Flip Display	Directly flip display without enter inside menu.
DOWN then power on	Reset without pan/tilt movements	Fixture will be powered on without reset on pan/tilt movements.
DOWN for 5s on home screen after power on	Calibration process	Disable Lamp Fan Error for Lamp calibration.
ENTER + UP then power on	Bootloader	Force firmware upgrade.

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## 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.

Category	Parameter	Value	GET	SET
	SUPPORTED_PARAMETERS	0x0050	х	
	PARAMETER_DESCRIPTION	0x0051	x	
	PRODUCT_DETAIL_ID_LIST	0x0070	x	
Product Information	DEVICE_MODEL_DESCRIPTION	0x0080	x	
imormation	MANUFACTURER_LABEL	0x0081	x	
	DEVICE_LABEL	0x0082	х	х
	FACTORY_DEFAULTS	0x0090	х	х
	DMX_PERSONALITY	0x00E0	х	х
DMX512 Setup	DMX_PERSONALITY_DESCRIPTION	0x00E1	х	
	DMX_START_ADDRESS	0x00F0	х	х
	SENSOR_DEFINITION	0x0200	х	
Sensors	SENSOR_VALUE	0x0201	х	х
Power/Lamp Settings	DEVICE_HOURS	0x0400	х	х
Display Settings	DISPLAY_INVERT	0x0500	х	х

Manufacturer Specific PIDs

IVICITO	lacturer	Spec		100	
Parameter	PID	GET	SET	Value	Description
CLEAN DEVICE HOURS	0x8206	x	х	0-1	<b>0: No</b> 1: Yes
ADVANCED GOBO INDEX	0x830E	×	×	0-1	0: Off <b>1: On</b>
ADVANCED FOCUS INDEX	0x8310	×	x	0-1	<b>0: Off</b> 1: On
ADVANCED ZOOM INDEX	0x8311	x	x	0-1	<b>0: Off</b> 1: On
WARM UP	0x8312	×	х	0-2	0: Off 1: On 2: Value
LOW TEMP VALUE	0x8313	x	х	0-25	0: 0° 1: 1°  <b>20: 20°</b>  25: 25°
PLAY OFF	0x8230	×	×	0	0: Off
PLAY SHOW	0x8231	х	х	1-3	1: Show 1 2: Show 2 3: Show 3
PLAY CHASE	0x8232	x	x	1-8	1: Chase 1  8: Chase 8
PLAY SCENE	0x8233	x	x	1-32	1: Scene 1  32: Scene 32

## 12 - DMX CHARTS

**DMX Chart Summary** 

2	Diff. Girar Summary								
Channel 12 CH		14 CH	16 CH	19 CH					
1	Shutter	Shutter	Shutter	Shutter					
2	Dimmer	Dimmer	Dimmer	Dimmer					
3	Color 1	Color 1	Color 1	Dimmer fine					
4	Color 2	Color 2	Color 2	Color 1					
5	Rotating gobo wheel	Rotating gobo wheel	Rotating gobo wheel	Color 2					
6	Gobo rotation	Gobo rotation	Gobo rotation	Rotating gobo wheel					
7	Prism rotation	Prism	Prism rotation	Gobo rotation					
8	Frost	RPrism	Frost	Gobo fine					
9	Focus	Frost	Focus	Prism					
10	Zoom	Focus	Zoom	RPrism					
11	Animation wheel	Zoom	Animation	RPrism fine					
12	Control	Animation	Animation rotation	Frost					
13		Animation rotation	Show	Focus					
14		Control	Chase	Focus fine					
15			Scene	Zoom					
16			Record scenes	Zoom fine					
17				Animation					
18				Animation rotation					
19				Control					

12 CH	14 CH	16 CH	19 CH	Function	DMX Value	Default
1	1	1	1	SHUTTER Shutter closed No function (shutter open) Shutter effect slow to fast No function (shutter open) Pulse-effect in sequences No function (shutter open) Random Shutter effect slow to fast No function (shutter open)	000÷031 032÷063 064÷095 096÷127 128÷159 160÷191 192÷223 224÷255	255
2	2	2	2	<b>DIMMER</b> Linear from 0% to 100%	000 ÷ 255	000
-	-	-	3	<b>DIMMER FINE</b> Linear from 0% to 100%	000 ÷ 255	000
3	3	3	4	COLOR 1 Open Position 1 Position 2 Position 3 Position 5 Position 6 Position 7 Position 8 Position 9 Position 10 Position 12 Position 12 Position 13 Position 15 Fast to Slow(Forward Spin) Stop (Stop Rotation) Slow to Fast(Revers Spin) Positing from Position 1 to Position 15	000÷003 004÷007 008÷011 012÷015 016÷019 020÷023 024÷027 028÷031 032÷035 036÷039 040÷043 044÷047 048÷051 052÷055 056÷059 060÷063 064÷094 097÷127 128÷255	000
4	4	4	5	COLOR 2 Open Position 1 Position 2 Position 3 Position 4 Position 5 Position 6 Position 7 Position 8 Position 9 Position 10 Position 11 Position 12 Position 13 Position 14 Position 15 Fast to Slow(Forward Spin) Stop (Stop Rotation) Slow to Fast(Revers Spin) Positing from Position 1 to Position 15	000÷003 004÷007 008÷011 012÷015 016÷019 020÷023 024÷027 028÷031 032÷035 036÷039 040÷043 044÷047 048÷051 052÷055 056÷059 060÷063 064÷094 095÷096 097÷127 128÷255	000

Position 2 Shaking slow to fast	12 CH	14 CH	16 CH	19 CH	Function	DMX Value	Default
Position 1					ROTATING GOBO WHEEL		
Position 2						000÷005	
Position 3					Position 1	006÷010	
Position 4					Position 2	011÷015	
Position 5					Position 3	016÷020	
Position 5							
Position 6							
Position 7							
S							
Position 2 Shaking slow to fast	5	5	5	6			000
Position 3 Shaking slow to fast							000
Position 4 Shaking slow to fast							
Position 5 Shaking slow to fast							
Position 6 Shaking slow to fast							
Position 7 Shaking slow to fast							
Fast to Slow(Forward Spin)   146+199   200+201   Stop (Stop Rotation)   200+201   Slow to Fast(Revers Spin)   202+255							
Stop (Stop Rotation)   200+201   202+255							
Slow to Fast(Revers Spin)   202÷255							
GOBO ROTATION   Positioning from 0-360 degrees (Indexing)   000+191   192+221   000   192+221   192+221   192+221   192+221   192+221   192+221   192+221   192+221   192+221   192+221   192+221   192+225   192+255							
Positioning from 0-360 degrees (Indexing)					•	202÷255	
6 6 6 7 Fast to Slow Stop 222+225 226+255					GOBO ROTATION		
Stop   Slow to Fast   222+225   226+255					Positioning from 0-360 degrees (Indexing)	000÷191	
Slow to Fast   226÷255   00	6	6	6	7	Fast to Slow	192÷221	000
8 GOBO ROTATION FINE					Stop	222÷225	
PRISM ROTATION					Slow to Fast	226÷255	
Prism Off	-	-	-	8	GOBO ROTATION FINE	000 ÷ 255	000
Prism Off					PRISM POTATION		
7 - 7 - Index						000-000	
7 - 7 - Fast to Slow Stop Slow to Fast 190+193 Slow to Fast 190+193 Slow to Fast 190+193 Slow to Fast 194+255  PRISM							
Stop   190÷193   194÷255	7	-	7	-	1		000
Slow to Fast   194÷255   PRISM     000÷020   001÷127   000   10dexed   021÷127   128÷255   R PRISM   10dex   000÷255     000÷255     000÷255     000÷255     000÷255     000÷255     000÷255     000÷255     000÷255     000÷255     000÷255     000÷255   000÷255     000×255     000×2							
- 7 6 9 PRISM Prism Off Indexed 021÷127 Rotation 128÷255  R PRISM Index 000÷255  - 8 6 10 Fast to Slow Stop 128÷128 Slow to Fast 129÷255  11 R PRISM FINE 000÷255  8 9 8 12 FROST Linear insertion from 0% to 100% 000÷255  9 10 9 13 FOCUS 112 Lineary from in to out 000÷255  10000000000000000000000000000000000							
- 7 6 9 Prism Off   000÷020   021÷127   128÷255   R PRISM   10dex   000÷255						194÷255	
- 7 6 9 Indexed Rotation 128÷255  R PRISM Index 000÷255  - 8 6 10 Fast to Slow Stop 128÷128 129÷255  11 R PRISM FINE 000 ÷ 255  R PRISM Index 000÷255  11 R PRISM FINE 000 ÷ 255 000  8 9 8 12 FROST Linear insertion from 0% to 100% 000 ÷ 255 000  9 10 9 13 FOCUS Lineary from in to out 000 ÷ 255 12					1		
Indexed   021÷127   128÷255   R Rotation   128÷255   R PRISM   Index   000÷255     000±255     000±255     000±255     000±255     000±255     000±255     000±255	_	7	6	9			000
R PRISM		·		,			000
Index					Rotation	128÷255	
- 8 6 10 Fast to Slow Stop 128÷128 Slow to Fast 129÷255  11 R PRISM FINE 000 ÷ 255 00  8 9 8 12 FROST Linear insertion from 0% to 100% 000 ÷ 255 00  9 10 9 13 FOCUS 120 140 TOOMS 120 140 TOOMS 120 140 TOOMS 140					R PRISM		
Fast to Slow Stop 128+128 Slow to Fast 129+255  11 R PRISM FINE 000 ÷ 255 00  8 9 8 12 FROST Linear insertion from 0% to 100% 000 ÷ 255 00  9 10 9 13 FOCUS Lineary from in to out 000 ÷ 255 12					Index	000÷255	
Fast to Slow Stop 128+128 Slow to Fast 129+255  11 R PRISM FINE 000 ÷ 255 00  8 9 8 12 FROST Linear insertion from 0% to 100% 000 ÷ 255 00  9 10 9 13 FOCUS Lineary from in to out 000 ÷ 255 12			,	10			000
Slow to Fast   129÷255	-	0	0	10	Fast to Slow	000÷127	000
Slow to Fast   129÷255					Stop	128÷128	
-     -     -     11     R PRISM FINE     000 ÷ 255     00       8     9     8     12     FROST Linear insertion from 0% to 100%     000 ÷ 255     00       9     10     9     13     FOCUS Lineary from in to out     000 ÷ 255     12					l ·	129÷255	
8     9     8     12     FROST Linear insertion from 0% to 100%     000 ÷ 255     00       9     10     9     13     FOCUS Lineary from in to out     000 ÷ 255     12	-	_	_	11			000
8     9     8     12     Linear insertion from 0% to 100%     000 ÷ 255     00       9     10     9     13     FOCUS Lineary from in to out     000 ÷ 255     12							
9 10 9 13 FOCUS Lineary from in to out 000 ÷ 255 12	8	9	8	12		000 - 255	000
9 10 9 13 Lineary from in to out 000 ÷ 255 12						000 ÷ 255	000
Lineary from in to out 000 ÷ 255	9	10	9	13		000 ===	128
14 FOCUS FINE 000 - 355 12		-		-	Lineary from in to out	000 ÷ 255	
1 1 1 1 255	-	-	-	14	FOCUS FINE	000 ÷ 255	128
10 11 10 15 ZOOM					ZOOM		
1 10 1 11 1 10 1 15 1	10	11	10	15		000 ÷ 255	128
44	_	_	_	16			
16 ZOOM FINE 000 ÷ 255 12				-		000 ÷ 255	128
						000 000	
Open/No Function 000÷003					Open/No Function		
	11	-	-	-			000
Reverse stop to fastest 132÷255						132÷255	
ANIMATION							
	-	12	11	17			000
Linear insertion 008÷255	1	1			Linear insertion	008÷255	1

12 CH	14 CH	16 CH	19 CH	Function	DMX Value	Default
-	13	12	18	ANIMATION ROTATION Positioning 0°~360° Slowest to fastest (Forward Spin) Stop Fastest to Slowest (Reverse Spin)	000÷191 192÷221 222÷225 226÷255	000
12	14	-	19	CONTROL  No Function  Enable blackout while color change (Hold 3 Second)  Disable blackout while color change (Hold 3 Second)  Enable blackout while gobo change (Hold 3 Second)  Disable blackout while gobo change (Hold 3 Second)  Disable blackout while gobo change (Hold 3 Second)  Color1 Reset (Hold 3 Second)  Color2 Reset (Hold 3 Second)  Gobo1 Reset (Hold 3 Second)  Focus Reset (Hold 3 Second)  Focus Reset (Hold 3 Second)  Frost Reset (Hold 3 Second)  Frost Reset (Hold 3 Second)  Effect Reset (Hold 3 Second)  Adv. Gobo Index ON  Adv. Gobo Index OFF  Adv. Focus Index OFF  Adv. Focus Index OFF  Adv. Zoom Index OFF  Warm Up Low Temp ON  Warm Up Low Temp OFF  Warm Up Low Temp OFF  Warm Up Low Temp VALUE  No function  Reset all (Hold 3 Second)  No function	000÷059 060÷069 070÷079 080÷089 090÷099 100÷109 110÷119 120÷129 130÷139 140÷149 150÷159 160÷169 170÷179 180÷181 182÷183 184÷185 186÷187 188÷189 190÷191 192÷193 194÷195 196÷197 198÷197 198÷199 200÷209 210÷255	000
-	-	13	-	SHOW No Function Show 1 Show 2 Show 3	000÷063 064÷127 128÷191 192÷255	000
-	-	14	-	CHASE No Function Chase 1 Chase 2 Chase 3 Chase 4 Chase 5 Chase 6 Chase 7 Chase 8	000÷028 029÷056 057÷085 086÷113 114÷141 142÷170 171÷198 199÷226 227÷255	000

12 CH	14 CH	16 CH	19 CH	Function		DMX Value	Default
-	-	15	-	SCENE No Function Scene 1 Scene 2 Scene 3 Scene 4 Scene 5 Scene 6 Scene 7 Scene 8 Scene 9 Scene 10 Scene 11 Scene 12 Scene 13 Scene 14 Scene 15 Scene 14 Scene 15 Scene 16 Scene 17 Scene 18 Scene 19 Scene 20 Scene 21 Scene 20 Scene 21 Scene 22 Scene 23 Scene 24 Scene 25 Scene 25 Scene 26 Scene 27 Scene 28 Scene 29 Scene 30 Scene 31 Scene 31 Scene 32		000÷007 008÷015 016÷023 024÷030 031÷038 039÷046 047÷054 055÷061 062÷069 070÷077 078÷085 086÷092 093÷100 101÷108 109÷115 116÷123 124÷131 132÷139 140÷146 147÷155+162 163÷170 171÷177 178÷185 186÷193 194÷200 201÷208 209÷216 217÷224 225÷231 232÷239 240÷247 248÷255	128
-	-	16	-	RECORD SCENES No Function Edit Scene Mode Record Scene Mode (Hold 3S and Save)	This function is valid only when the value of channel 15 is 8-255; the record function is 129-255 and can be saved once every time for 3 seconds	000÷010 011÷128 129÷255	000

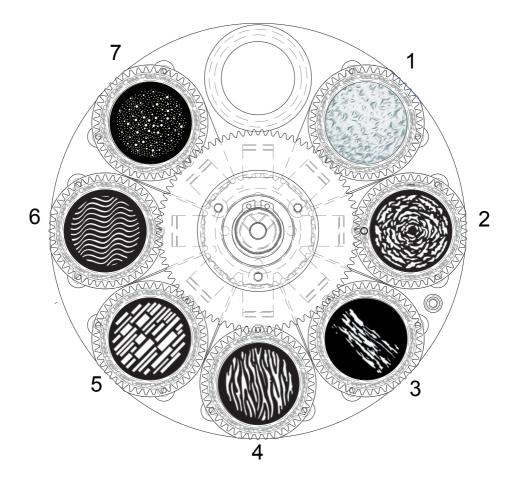


Fig. 08

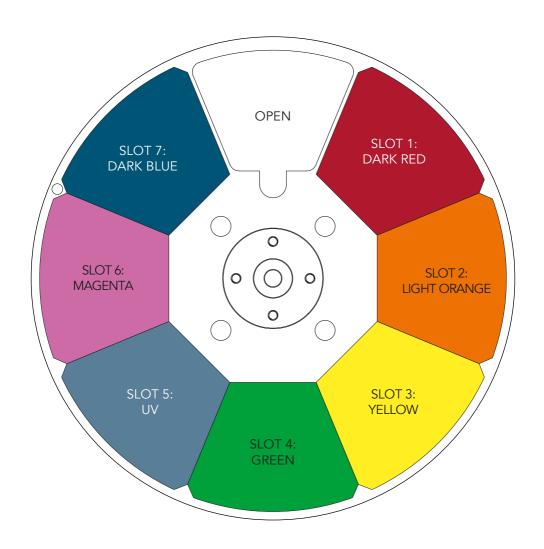


Fig. 09

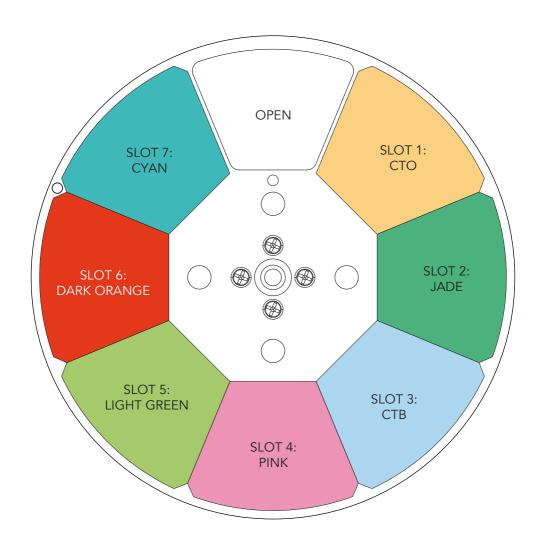


Fig. 09

## 16 - ANIMATION WHEEL

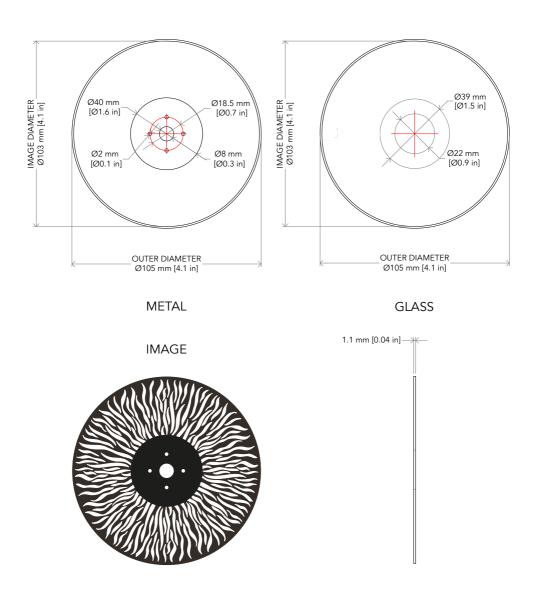
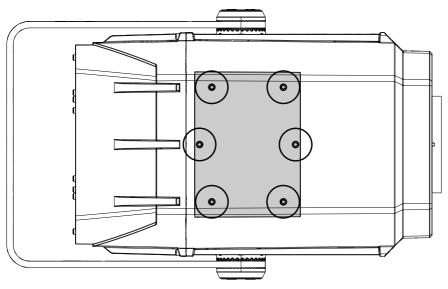


Fig. 10

# 17 - REPLACING THE ANIMATION WHEEL

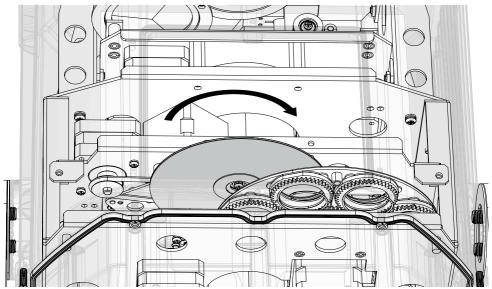
WARNING! Turn OFF power and allow approximately 20 minutes for the fixture to cool down.

1

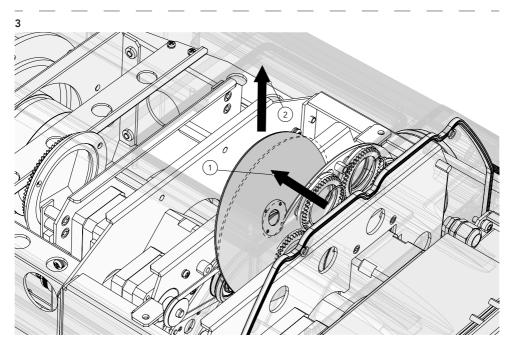


Use a 4 mm allen key (hex wrench) to remove the marked six screws of the top cover and remove it.

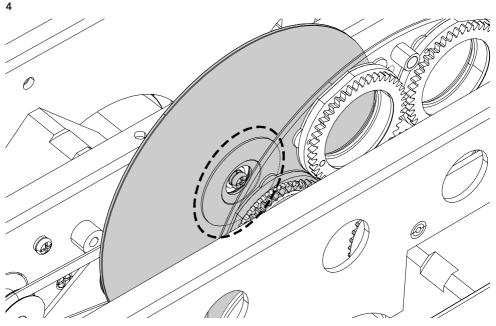
2



Move the animation wheel to the right.



Apply a little pressure on the animation wheel (1) and slide it upwards.(2).

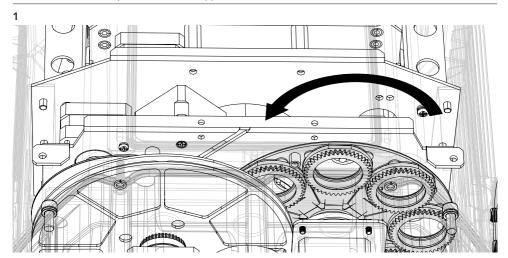


Insert the animation wheel into the central hole provided on the hardware.

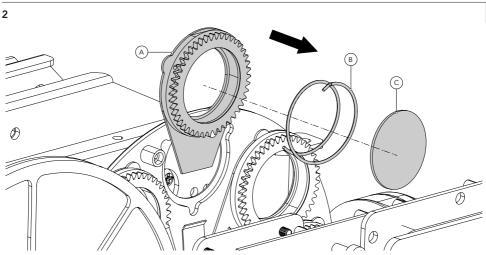
Fig. 11

## 18 - GOBOS REPLACEMENT

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



Remove the top cover (see paragraph "Replacement of the animation wheel" ). Rotate the animation wheel to position the gobo holder to be extracted upwards.



Apply a push to the gobo holder and extract it (A) from the gobo wheel. Then remove the spring (2) and the gobo (C). To insert the new gobo, follow the reverse procedure respecting the direction of the painted part. Verify that the gobos run without hindrance and reassemble the group following the procedure in reverse. NOTES: gobo holder with magnet need to be fit obligatory inside slot number 3 (see paragraph "Gobos wheel").

For fixing the gobos inside the support, we recommend the use of a silicone glue resistant to high temperatures. Before proceeding with the insertion of the gobo, make sure that the glue spread on the support is perfectly dry.

Fig. 12

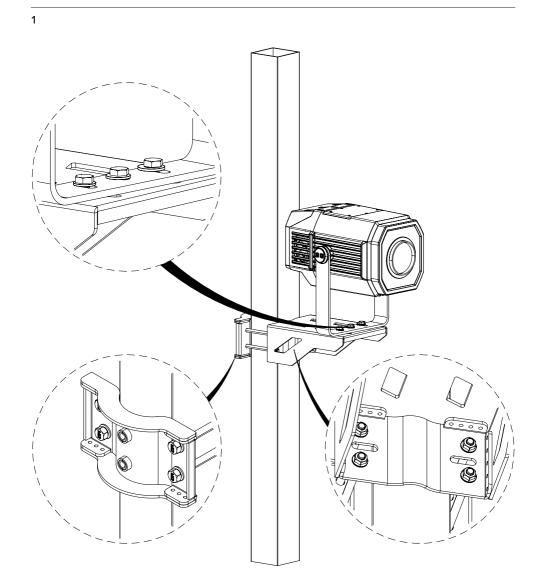
# 19 - ERROR MESSAGES

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			
[LED ERROR]	This error message is displayed when the LED is switched OFF without a command from the product control system			
[LED TEMPERATURE ERROR]	This error message indicates that an overheating on the LED has occurred and the lamp has been switched OFF by the product protection system.			
[LED TEMPERATURE SENSOR ERROR]	LED sensor damaged (open or in short circuit)			
[LED DRIVER TEMPERATURE ERROR]	This error message indicates that an overheating on the LED DRIV- ER has occurred and the lamp has been switched OFF by the prod- uct protection system.			
[LED DRIVER TEMPERATURE SENSOR ERROR]	LED DRIVER sensor damaged (open or in short circuit)			
[LED AIR IN (LOWER) FAN ERROR]	Air in blower for cooling the lamp failed, the lamp has been switched OFF.			
[LED AIR OUT (UPPER) FAN ERROR]	Air out blower for cooling the lamp failed, the lamp has been switched OFF.			
[GOBO FAN ERROR]	Blower for cooling the gobo failed			
[MOTOR PCB 1 ERROR]	Motor pcb 1 not detected			
[MOTOR PCB 2 ERROR]	Motor pcb 2 not detected			
[MOTOR PCB 3 ERROR]	Motor pcb 3 not detected			
[FOCUS ERROR]	Failure detected during the reset of the FOCUS system, if the focus lens is not located in its default position.			
[GOBO WHEEL ERROR]	Failure detected during the reset of the rotating gobo wheel, if this wheel is not located in the default position			
[PRISM ERROR]	Failure detected during the reset of the prism, if this effect is not located in the default position.			
[PRISM ROTATION ERROR]	Failure detected during the reset of the prism rotation, if this effect is not located in the default position.			
[FROST ERROR]	Failure detected during the reset of the effect FROST 1, if this effect is not located in the default position.			
[GOBO ROTATION ERROR]	Failure detected during the reset of the rotation of the rotating gobo, if the rotating gobos are not located in the default positions			
[ZOOM ERROR]	Failure detected during the reset of the ZOOM system, if the focus lens is not located in its default position.			
[ANIMATION WHEEL ERROR]	Failure detected during the reset of the animation wheel, if this wheel is not located in the default position			
[COLOR WHEEL ERROR]	Failure detected during the reset of the color wheel, if this wheel is not located in the default position			
[FRAME ROTATION ERROR]	Failure detected during the reset of the frame rotation, if this frame is not located in the default position			
[MEMORY ERROR]	SD card not detected			
[DISPLAY BATTERY ERROR]	Recharge The battery on the display board, keeping the product ON for some hours.			

# 20 - ACCESSORIES INSTALLATION

## BRACKET FOR WALL MOUNTING AND SUSPENSION ON POLES (CODE MOSUNIBRACK)



## NOTE

Do not mount the bracket on a support whose surface shows deformations, injuries, crushing, etc. Both the bracket and the unit must be secured with a safety cable.

Fig. 13

### 21 - MAINTENANCE

#### MAINTENANCE AND CLEANING THE PRODUCT

WARNING: Disconnect from the mains before starting any maintenance work

It is recommended to clean the front at regular intervals, from impurities caused by dust, smoke, or other particles to ensure that the light is radiated at maximum brightness.

- For cleaning, disconnect the main plug from the socket. Use a soft, clean cloth moistened with a mild detergent. Then carefully wipe the part dry. For cleaning other housing parts use only a soft, clean cloth. Never use a liquid, it might penetrate the unit and cause damage to it.
- The user must clean the product periodically to maintain optimum performance and cooling. The
  user may also upload firmware (product software) to the fixture via the DMX signal input port or USB
  port using firmware and instructions from PROLIGHTS.
- The frequency of such maintenance operations is to be performed according to various factors, such
  as the amount of the use and the condition of the installation environment (air humidity, presence
  of dust, salinity, etc.). It is recommended that the product is subject to annual service by a qualified
  technician for special maintenance involving at least the following procedures:
- General cleaning of internal parts.
- For all the parts subject to friction, using lubricants specifically supplied by PROLIGHTS.
- General visual check of the internal components, cabling, mechanical parts, etc.
- Electrical, photometric and functional checks; eventual repairs.
- Cleaning the lenses. Only use neutral soap and water to clean the lenses, then dry it carefully with a soft, non-abrasive cloth.

WARNING: the use of alcohol or any other detergent could damage the lenses.

- All other service operations on the product must be carried out by PROLIGHTS, its approved service
  agents or trained and qualified personnel.
- It is PROLIGHTS policy to apply the strictest possible calibration procedures and use the best quality materials available to ensure optimum performance and the longest possible component lifetimes. However, optical components are subject to wear and tear over the life of the product, resulting in gradual changes in colours over many thousands of hours of use. The extent of wear and tear depends heavily on operating conditions and environment, so it is impossible to specify precisely whether and to what extent performance will be affected. However, you may eventually need to replace optical components if their characteristics are affected by wear and tear after an extended period of use and if you require fixtures to perform within very precise optical and colour parameters.
- Do not apply filters, lenses or other materials on lenses or other optical components. Use only accessories approved by PROLIGHTS.

#### REPLACING THE FUSE

WARNING: Before replacing the fuse, unplug the product from the mains.

• Remove the old fuse from the housing with a suitable screwdriver (anticlockwise) and replace it with one of the same type and of the same classification (TBC, 5A).

### VISUAL CHECK OF PRODUCT HOUSING

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

#### **TROUBLESHOOTING**

Problems	Possible causes	Checks and remedies		
Product doesn't power ON	No power to the product.	Check that power is switched ON and cables are plugged in.		
	Fuse blown or internal fault.	Check if the Fuse is intact and eventually replace it if necessary.     Contact the PROLIGHTS Service or authorized service partner. Do not remove parts and/or covers, or carry out any repairs or service that are not described in this Safety and User Manual unless you have both authorization from PROLIGHTS and the service documentation.		
Product reset correctly but does not respond correctly to the contoller.	Bad signal connection.	Inspect connections and cables. Fix eventual bad connections. Repair or replace damaged cables.		
	Signal connection not terminated.	Insert DMX termination plug in signal output socket of the last product on the signal line.		
	• Incorrect addressing of the product.	Check the product address and control settings		
	One of the product is defective and is 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.	Check product stored error messages for more information. Contact PROLIGHTS Service or an authorized service partner.		
Mechanical effect loses position	Mechanical hardware require cleaning, adjust- ment 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.	<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>		
	Hardware failure (tem- perature sensor, fans, Light source).	Check product stored error messages for more information. Contact. PROLIGHTS Service or an authorized service partner.		
General low light intensity	<ul><li>Dirty lens assembly.</li><li>Dirty or damaged filters.</li></ul>	Clean the fixture regularly. Install lens assembly properly.		

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

Note	

Note	

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