

COLOR SPOT **PRO** C7



User Manual

The C7 User Manual includes a description, safety precautions, installation, programming, operation and maintenance instructions for the C7 as of the release date of this edition.

Edition Notes

C7 User Manual includes a description, safety precautions, installation, programming, operation and maintenance instructions for C7 as of the release date of this edition.

Copyright Notice

The works of authorship contained in this manual, including, but not limited to, all designs, text, and images are owned by us.

Manual Use

We authorize its customers to download and print this manual for professional information purposes only. We expressly prohibits the usage, copy, storage, distribution, modification, or printing of this manual or its content for any other purpose without written consent from us.

Document Printing

For best results, print this document in color, on letter size paper (8.5 x 11 in), double-sided. If using A4 paper (210 x 297 mm), configure the printer to scale the content accordingly.

Intended Audience

Any person installing, operating, and/or maintaining this product should completely read through the guide that shipped with the product, as well as this manual, before installing, operating, or maintaining this product.

Disclaimer

We believe that the information contained in this manual is accurate in all respects. However, We assume no responsibility and specifically disclaims any and all liability to any party for any loss, damage or disruption caused by any errors or omissions in this document, whether such errors or omissions result from negligence, accident or any other cause.

We reserve the right to revise the content of this document without any obligation to notify any person or company of such revision.

TABLE OF CONTENTS

1. Before You Begin	3
What Is Included	3
Text Conventions	3
Symbols	3
Safety Notes	3
2. Introduction	5
Description	5
Features	5
Product Overview	5
Product Dimensions	6
3. Setup	6
AC Power	6
AC Plug	6
DMX Linking	6
DMX Personalities	6
Remote Device Management	6
Mounting	8
Orientation	8
Rigging	8
Product Mounting Diagram	8
4. Operation	9
Control Panel Description	9
Programming	9
Control Personalities	9
Starting Address	9
Menu Map	10
DMX Values	12
97CH	12
74CH	17
68CH	19
47CH	24
30CH	26
24CH	29
13CH	32
11CH / 8CH	33
Plate Patterns	34
Beam Patterns	35
Pixel Mapping	36
5. Maintenance	36

1. Before You Begin

What Is Included:

- COLOR SPOT LIGHT PRO C7 *1
- Seetronic Powerkon IP65 power cable *1
- Seetronic Powerkon IP65 signal cable (Optional)
- Safety rope *1 (Optional)
- Omega bracket with mounting hardware *2 or Folded clamps *1 (Optional)
- Cartoon box *1 or Flight case<4 in 1> *1 (Optional)

Text Conventions

Convention	Meaning
1-512	A range of values
50/60	A set of values of which only one can be chosen
Settings	A menu option not to be modified
<ENTER>	A key to be pressed on the product's control panel

Symbols

Symbol	Meaning
	Critical installation, configuration, or operation information. Not following these instructions may make the product not work, cause damage to the product, or cause harm to the operator.
	Important installation or configuration information. The product may not function correctly if this information is not used.
	Useful information.



Any reference to data or power connections in this manual assumes the use of Seetronic IP-rated cables.

The term "DMX" used throughout this manual refers to the USITT DMX512-A digital data transmission protocol. Connection of the control signal: DMX line



- The product has XLR sockets for DMX input and output.
- Notice: This control circuit is isolated and belongs to the Class 2 data port. The control circuit has a cumulative leakage current of less than 3.5 mA.

Safety Notes

Read all the following safety notes before working with this product. These notes contain important information about the installation, usage, and maintenance of this product.



This product contains no user-serviceable parts. Any reference to servicing in this User Manual will only apply to properly trained, certified technicians. Do not open the housing or attempt any repairs.



All applicable local codes and regulations apply to proper installation of this product.

-
- The luminaire is intended for professional use only.
 - If the external flexible cable or cord of this luminaire is damaged, it shall be replaced by a special cord or cord exclusively available from the manufacturer or its service agent.
 - The light source contained in this luminaire shall only be replaced by the manufacturer or its service agent or a similar qualified person.

•**CAUTION:**

- This product's housing may be hot when operating. Mount this product in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces.
- When transferring the product from extreme temperature environments, (e.g., cold truck to warm humid ballroom) condensation may form on the internal electronics of the product. To avoid causing a failure, allow the product to fully acclimate to the surrounding environment before connecting it to power.
- Flashing light is known to trigger epileptic seizures. User must comply with local laws regarding notification of strobe use.

•**ALWAYS:**

- Disconnect from power before cleaning the product or replacing the fuse.
- When using an IP65-rated product in an outdoor environment, use IP65- (or higher) rated power and data cable.
- Replace and secure IP-rated protective covers to all power, data, USB, or other ports when not in use.
- Replace the fuse with the same type and rating.
- Use a safety cable when mounting this product overhead.
- Connect this product to a grounded and protected circuit.

•**DO NOT:**

- Open this product. It contains no user-serviceable parts.
- Look at the light source when the product is on.
- Leave any flammable material within 20 cm of this product while operating or connected to power.
- Connect this product to a dimmer or rheostat.
- Operate this product if the housing, lenses, or cables appear damaged.
- Submerge this product (adhere to standards for the published IP rating). Regular outdoor operation is fine.
- Permanently install outdoors in locations with extreme environmental conditions. This includes, but is not limited to:
 - Exposure to a marine/saline environment (within 3 miles of a saltwater body of water).
 - Locations where normal temperatures exceed the temperature ranges in this manual.
 - Locations that are prone to flooding or being buried in snow.
 - Other areas where the product will be subject to extreme radiation or caustic substances.
- ONLY use the handles or the hanging/mounting brackets to carry this product.
- The maximum ambient temperature is 113 °F (45 °C). Do not operate this product at higher temperatures.
- The minimum startup temperature is -4°F (-20°C). Do not start the product at lower temperatures.
- The minimum ambient temperature is 14°F (-10°C). Do not operate the product at lower temperatures.
- To eliminate unnecessary wear and improve its lifespan, during periods of non-use completely disconnect the product from power via breaker or by unplugging it.
- In the event of a serious operating problem, stop using immediately.



If a C7 product requires service, contact C7 Technical Support.

2. Introduction

Description

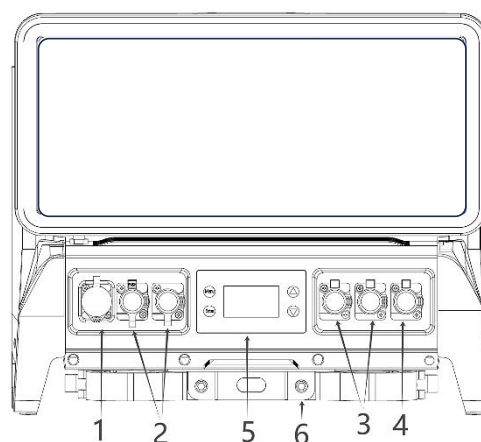
C7 is an IP65-rated motorized strobe/wash with two ultra-bright, white light tube elements surrounded by an electrifying, color-mixing, and pixel-mappable face. This versatile strobe light can double as a wash fixture with 180° tilt range to throw bright saturated color wherever needed. The IP65 casing protects the fixture from any environmental factors or weather and has a folded clamps to mount the fixture horizontally or vertically without any hassle. Multiple programming personalities give a varying amount of control, from simple setups with a multitude of built-in effects, or wider control options to take advantage of the pixel-mappable zones: 14 in the RGB face and 28 in the two tube elements. Built-in alignment pins insure perfectly straight linear arrays to create massive arrangements. DMX, Art-Net, and sACN control. All LEDs feature 16-bit dimming for smooth fades and Pulse Width Modulation (PWM) for on-camera use.

Features

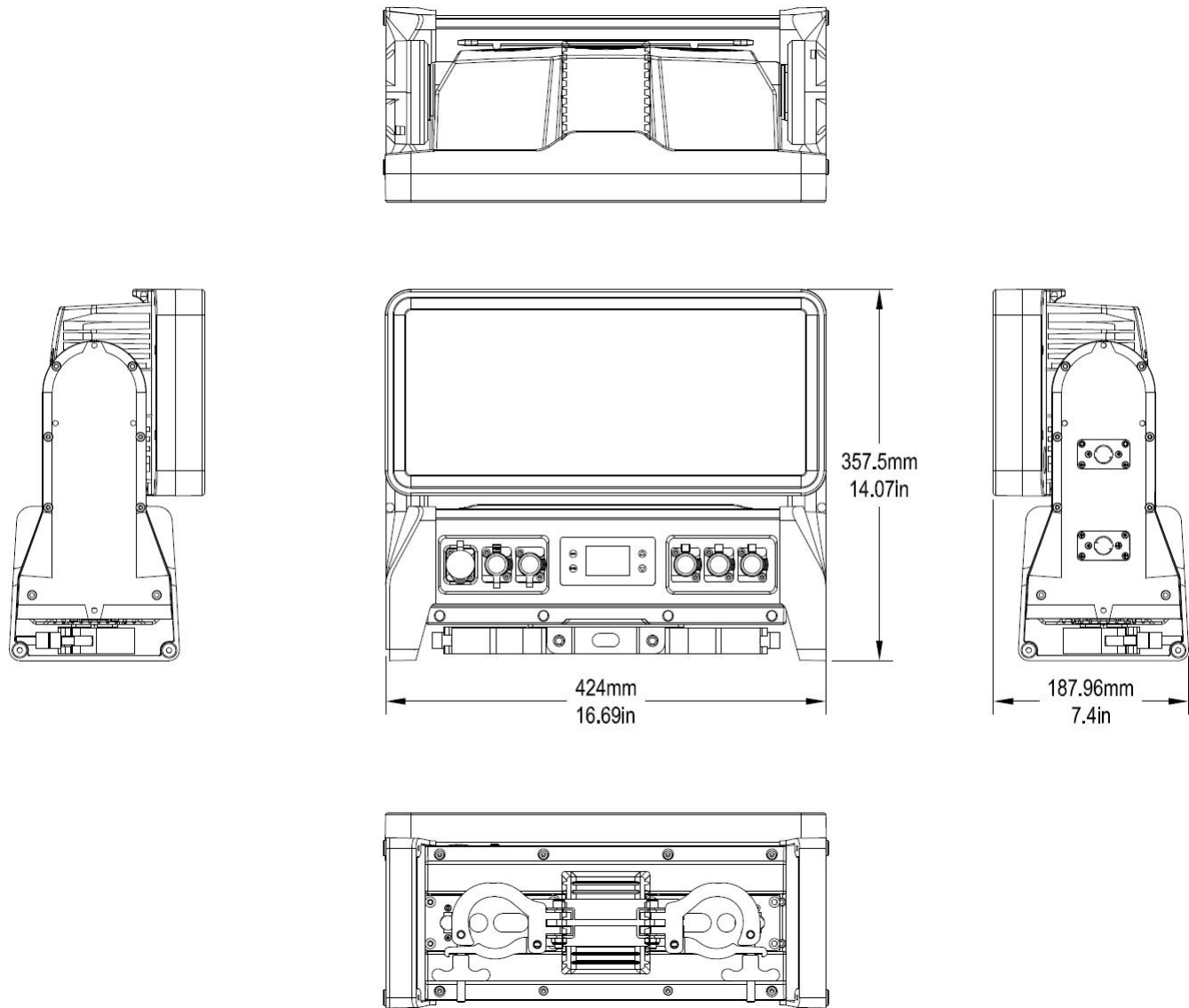
- High-power, 180° tilting hybrid strobe/wash with IP65 rating for all-weather use
- 14 controllable sections of RGB LEDs and 28 sections of control of the white strobe LEDs
- Multiple mounting locations and a yoke that can be repositioned with ¼ turn adapters for creative and convenient rigging options in vertical and horizontal orientations
- Multitude of built-in effect macros with control parameters
- DMX, Art-Net, and sACN control capability
- 16-bit dimming control for smooth, perfect fades
- Easy-to-use OLED display
- Rugged design for years of rough use in the most extreme conditions
- Adjustable PWM and Remote Device Management (RDM) for added flexibility
- USB port for fixture software updates
- Built-in alignment pins to ensure perfectly straight linear arrays

Product Overview

#	NAME
1	Power in
2	3 or 5-pin DMX in/out
3	Network in/out
4	USB-C port
5	Touchscreen display/control panel
6	Folded clamps



Product Dimensions



3. Setup

AC Power

The C7 has an auto-ranging power supply, and it can work with an input voltage range of 100 to 240 VAC, 50/60Hz. To determine the product's power requirements (circuit breaker, power outlet, and wiring), use the current value listed on the label affixed to the product's back panel, or refer to the product's specifications chart. The listed current rating indicates the product's average current draw under normal conditions.



- Always connect the product to a protected circuit (a circuit breaker or fuse). Make sure the product has an appropriate electrical ground to avoid the risk of electrocution or fire.
- To eliminate unnecessary wear and improve its lifespan, during periods of non-use completely disconnect the product from power via breaker or by unplugging it.



All applicable local codes and regulations apply to proper installation of this product.

AC Plug

The C7 comes with a power input cable terminated with a Seetronic Powerkon IP65 connector on one end and an Edison plug on the other end (U.S. market).

DMX Linking

The C7 can be linked to a DMX controller using a 3-pin DMX connection. If using other DMX compatible products with this product, it is possible to control each individually with a single DMX controller.

DMX Personalities

The C7 uses a 5-pin DMX data connection for the **14Ch**, **18Ch**, **30Ch**, **66Ch**, and **70CH** DMX personalities.

- Refer to the Introduction for a brief description of each DMX personality.
- Refer to the Operation chapter to learn how to configure the C7 to work in these personalities.
- The Control Channel Assignments and Values section provides detailed information regarding the DMX personalities.

Remote Device Management

Remote Device Management (RDM) is a standard for allowing DMX-enabled devices to communicate bi-directionally along existing DMX cabling. Check the DMX controller's User Manual or with the manufacturer as not all DMX controllers have this capability. The C7 supports RDM protocol that allows feedback to make changes to menu map options.

Mounting

Before mounting the product, read and follow the safety recommendations indicated in the Safety Notes.

Orientation

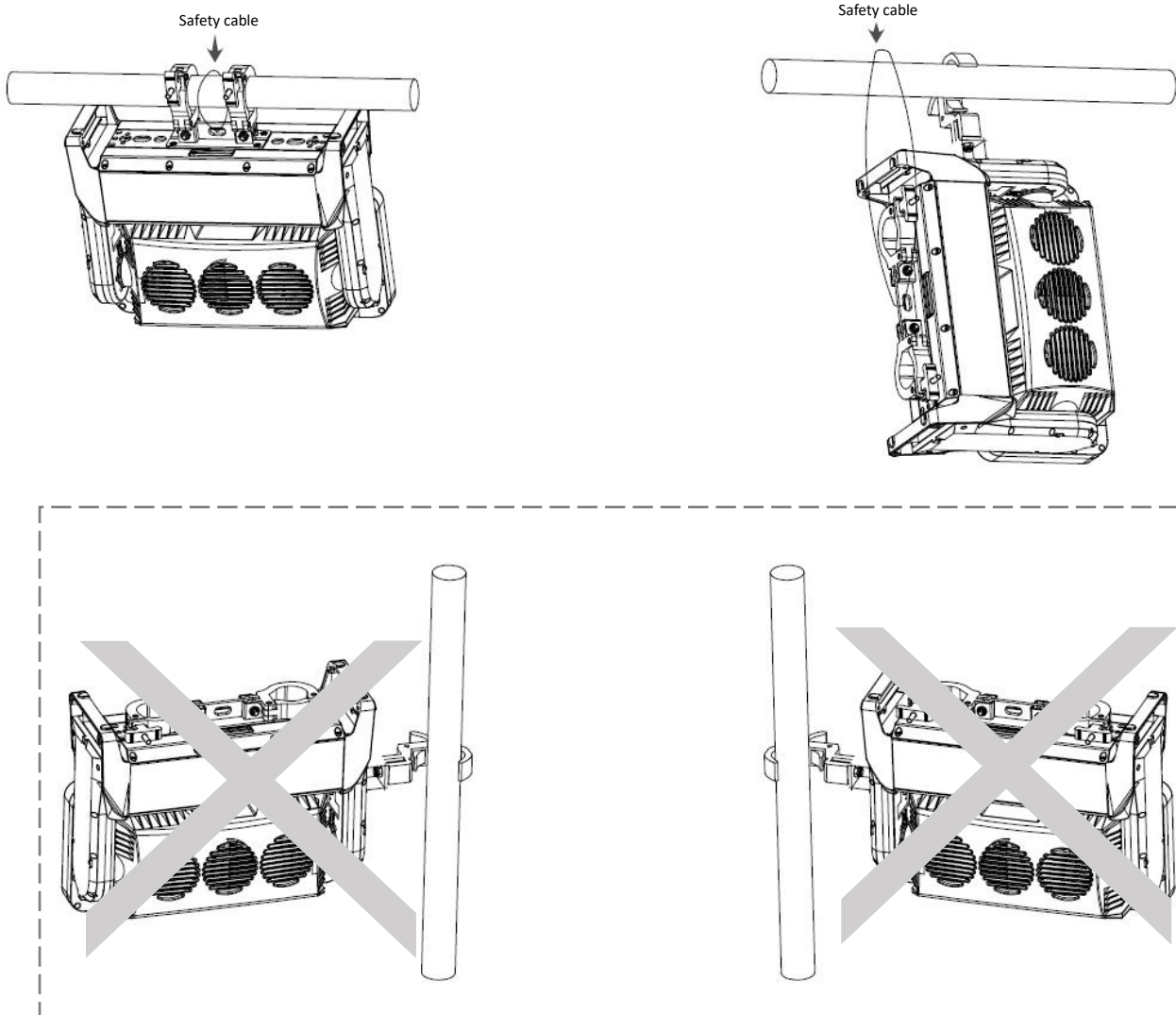
Always mount this product in a safe position, making sure there is adequate room for ventilation, configuration, and maintenance.

Rigging

OUR COMPANY recommends using the following general guidelines when mounting this product.

- Before deciding on a location for the product, always make sure there is easy access to the product for maintenance and programming.
- Make sure that the structure and attachment points can support the weight before hanging the product (see the Technical Specifications for weight information).
- When mounting the product overhead, always use a safety cable. Mount the product securely to a rigging point, whether an elevated platform or a truss.
- When rigging the product onto a truss, use a mounting clamp of appropriate weight capacity.

Product Mounting Diagram



4. Operation

Control Panel Description

Button	Function
<MENU>	Exits from the current menu or function
<UP>	Enables the selected menu or sets the selected value in to the current function
<DOWN>	Navigates upward through the menu list or increases the numeric value when in a function
<ENTER>	Navigates downward through the menu list or decreases the numeric value when in a function

Programming

Refer to the Menu Map to understand the menu options. The menu map shows the main level and a variable number of programming levels for each option.

- To go to the desired main level, press <MENU> repeatedly until the option shows on the display. Press <ENTER> to select. This will show the first programming level for that option.
- To select an option or value within the current programming level, press <UP> OR <DOWN> until the option shows on the display. Press <ENTER> to select. This will show the selected value or the first option of the next programming level.
- press <MENU> repeatedly to exit to the previous main level.

Control Personalities

To set the control personality:

1. Go to the DMX Channel main level.
2. Select the desired personality, from **14Ch**, **18Ch**, **30Ch**, **66Ch**, and **70CH**.
 - See the Starting Address personality. section for the highest starting address available for each personality.
 - Make sure that the starting addresses on the various products do not overlap due to the new personality setting.



Starting Address

Each product will respond to a unique starting address from the controller. All products with the same starting address will respond in unison. To set the starting address:

1. Go to the Start Address main level.
2. Select the starting address (1–512).
 - The highest recommended starting address for 14CH is 499.
 - The highest recommended starting address for 18CH is 495.
 - The highest recommended starting address for 30CH is 483.
 - The highest recommended starting address for 66CH is 447.
 - The highest recommended starting address for 70CH is 443.

Menu Map

Main Menu	Submenu	Menu function options and instructions	
DMX SETTINGS	DMX Address	Set the DMX start address	
		1-499 (14CH)	
		1-495 (18CH)	
		1-483 (30CH)	
		1-447 (66CH)	
		1-443 (70CH)	
		/	
		/	
	DMX Channel Mode	Set the DMX channel mode	
		14CH	
		18CH	
		30CH	
		66CH	
		70CH	
		/	
	No DMX Status	Blackout	Takes all traits to 0 when DMX signal is lost or interrupted.
		Hold	Holds all traits at last received value when DMX signal is lost or interrupted.
		Manual	Defaults to values set in Manual Mode when DMX signal is lost or interrupted.
	Connect	DMX	
		Art-Net	
		sACN	
	Network	IP address XXX.XXX.XXX.XXX	
		Subnet Mask XXX.XXX.XXX.XXX	
		Net (0-127)	
	Art-Net Settings	Sub-Net(0-15)	
		Universe (0-15)	
		Universe(1-32000)	
	sACN Settings	Priority (0-200)	
PERSONALITY	Dim Modes	Standard	
		Stage	
		TV	
		Architectural	
		Theatre	
		Stage 2	
	Dimmer Curve	Linear	
		Square	
		Inv. Sq	
		S-Curve	

	Display	Display Backlight	Off - 2 min
		Display Lock	Off - 10 min
		Display Invert	Auto / No / Yes
		Language (语言设置)	English/中文
		Tilt Reverse	No / Yes
	Pixel Reverse	No / Yes	
	Temperature Unit	°C / °F	
	Fan Speed	Auto	
		High	
Auto			
MANUAL	Tilt	000 - 255	
	Red	000 - 255	
	Green	000 - 255	
	Blue	000 - 255	
	White	000 - 255	
	Dimmer	000 - 255	
	Strobe Effect	000 - 255	
	Strobe Rat	000 - 255	
	Strobe Duration	000 - 255	
FIXTURE TEST	All Test		
	Tilt Test		
	Lamp Test		
FIXTURE INFO	Fixture Use Hour		
	LED Use Hour	Total LED Hour	
		LED On Hour	
		LED Hours Rese	
	Temperature		
	Fan State		
	RDM UID (设备ID)	XXXXXX	
	Error Log	Fixture Errors	LED Fan Error
			Temperature Error
		Reset Error Log	No / Yes
		Firmware Version	xxx
RESET	All Reset	No / Yes	

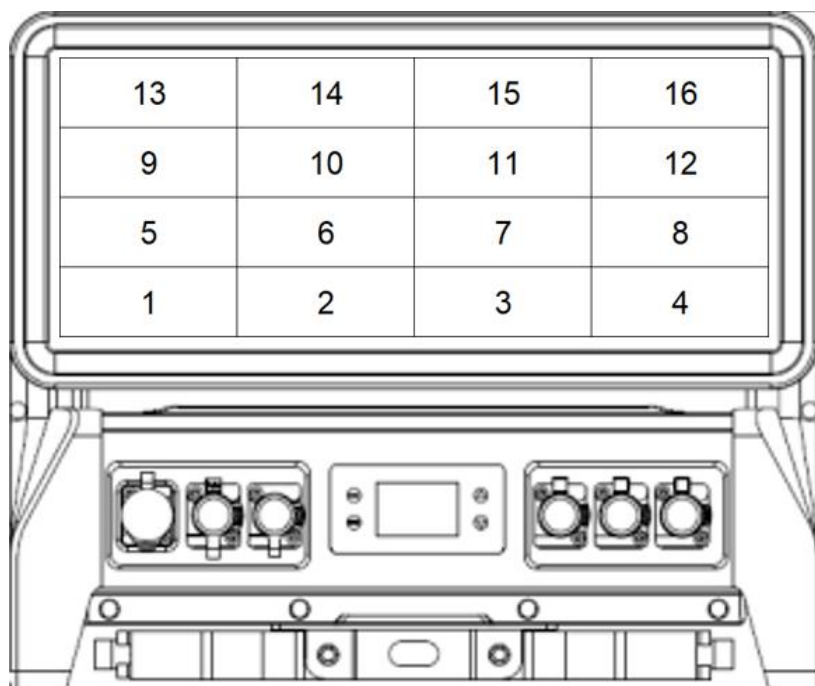
DMX Chrat

CHANNEL	DMX	FUNCTION
14 CH	VALUES	
1	000 - 255	TILT
2	000 - 255	TILT FINE
3	000 - 255	Dimmer, 0% to 100%
4		Strobe Effect
	000 - 002	Open
	003 - 005	Strobe
	006 - 050	Ramp up
	051 - 100	Ramp down
	101 - 150	Ramp up-down
	151 - 200	Lightning
	201 - 255	Random
5	000 - 255	Strobe Rate, slow to fast
6	000 - 255	Strobe Duration, slow to fast
7	000 - 255	CCT
8	000 - 255	Color
9	000 - 255	Red
10	000 - 255	Green
11	000 - 255	Blue
12	000 - 255	White
13	000 - 255	Program
14	000 - 255	Speed
CHANNEL	DMX	FUNCTION
18 CH	VALUES	
1	000 - 255	TILT
2	000 - 255	TILT FINE
3	000 - 255	Red1
4	000 - 255	Green1
5	000 - 255	Blue1
6	000 - 255	White1
7	000 - 255	Red2
8	000 - 255	Green2
9	000 - 255	Blue2
10	000 - 255	White2
11	000 - 255	Red3
12	000 - 255	Green3
13	000 - 255	Blue3
14	000 - 255	White3
15	000 - 255	Red4
16	000 - 255	Green4
17	000 - 255	Blue4

18	000 - 255	White4
CHANNEL	DMX	FUNCTION
30 CH	VALUES	
1	000 - 255	TILT
2	000 - 255	TILT FINE
3	000 - 255	Dimmer, 0% to 100%
4		Strobe Effect
	000 - 002	Open
	003 - 005	Strobe
	006 - 050	Ramp up
	051 - 100	Ramp down
	101 - 150	Ramp up-down
	151 - 200	Lightning
	201 - 255	Random
5	000 - 255	Strobe Rate, slow to fast
6	000 - 255	Strobe Duration, slow to fast
7	000 - 255	CCT
8	000 - 255	Color
9	000 - 255	Red
10	000 - 255	Green
11	000 - 255	Blue
12	000 - 255	White
13	000 - 255	Program
14	000 - 255	Speed
15	000 - 255	Red1
16	000 - 255	Green1
17	000 - 255	Blue1
18	000 - 255	White1
19	000 - 255	Red2
20	000 - 255	Green2
21	000 - 255	Blue2
22	000 - 255	White2
23	000 - 255	Red3
24	000 - 255	Green3
25	000 - 255	Blue3
26	000 - 255	White3
27	000 - 255	Red4
28	000 - 255	Green4
29	000 - 255	Blue4
30	000 - 255	White4
CHANNEL	DMX	FUNCTION
66 CH	VALUES	
1	000 - 255	TILT

2	000 - 255	TILT FINE
3	000 - 255	Red1
4	000 - 255	Green1
5	000 - 255	Blue1
6	000 - 255	White1
...		
63	000 - 255	Red16
64	000 - 255	Green16
65	000 - 255	Blue16
66	000 - 255	White16
CHANNEL	DMX	FUNCTION
70 CH	VALUES	
1	000 - 255	TILT
2	000 - 255	TILT FINE
3	000 - 255	Dimmer, 0% to 100%
4		Strobe Effect
	000 - 002	Open
	003 - 005	Strobe
	006 - 050	Ramp up
	051 - 100	Ramp down
	101 - 150	Ramp up-down
	151 - 200	Lightning
	201 - 255	Random
5	000 - 255	Strobe Rate, slow to fast
6	000 - 255	Strobe Duration, slow to fast
7	000 - 255	Red1
8	000 - 255	Green1
9	000 - 255	Blue1
10	000 - 255	White1
...		
67	000 - 255	Red16
68	000 - 255	Green16
69	000 - 255	Blue16
70	000 - 255	White16

Pixel Mapping



5. Maintenance

Product Maintenance

Dust build-up reduces light output performance and can cause overheating. This can lead to reduction of the light source's life and/or mechanical wear. To maintain optimum performance and minimize wear, clean all lighting products at least twice a month. However, be aware that usage and environmental conditions could be contributing factors to increase the cleaning frequency.

To clean the product, follow the instructions below:

1. Unplug the product from power.
2. Wait until the product is at room temperature.
3. Use a vacuum (or dry compressed air) and a soft brush to remove dust collected on the external surface/vents.
4. Clean all transparent surfaces with a mild soap solution, ammonia-free glass cleaner, or isopropyl alcohol.
5. Apply the solution directly to a soft, lint free cotton cloth or a lens cleaning tissue.
6. Softly drag any dirt or grime to the outside of the transparent surface.
7. Gently polish the transparent surfaces until they are free of haze and lint.



Always dry the transparent surfaces carefully after cleaning them.