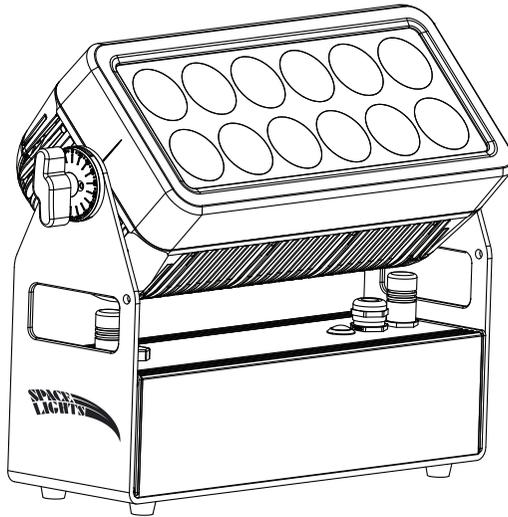


# User Manual



## LUNAR WASH

RGBL

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***Please read carefully before use***

*Please Note: Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.*

# SAFETY INTRODUCTION

Before you operate this unit read the manual carefully. Always make sure to include the manual if you pass/rent/sell the unit to another user. Keep in mind that this manual cannot address all possible dangers and environments. Please use your own caution when operating. This product is for professional use only. It is not for household use.



- Do not operate the unit in areas of high temperature conditions. It will cause abnormal function or damage the product.
- Always use a suitable safety wire when mounting the light overhead.
- Connect the safety wire only to the intended safety mount.
- Always follow local safety requirements.



- Only qualified personnel may repair this product.
- Do not open the product housing.
- Do not apply power if the light is damaged.



- Do not directly look into the light.
- It can cause harm to your eyes.
- Do not look at the LEDs with a magnifying glass or any other optical instrument that may concentrate the light output.
- Please don't look at the light directly when the light's radiation temperature reach 40 °C



- The exterior surfaces of the light can become hot, up to 55°C during normal operation.
- Ensure that accidental physical contact with the device is impossible.
- Install only in ventilated locations.
- Do not cover the light.



- Always charge with the flight case open.
- It is recommended to charge at a temperature between 15°C and 35°C



- Do not look directly at the light source.



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



—2.0m ta 45 °C

# GENERAL PRODUCT INFORMATION

## 1. Standard Configuration

- 1x LUNAR WASH
- 1x True one power cable

## 2. Control Functions

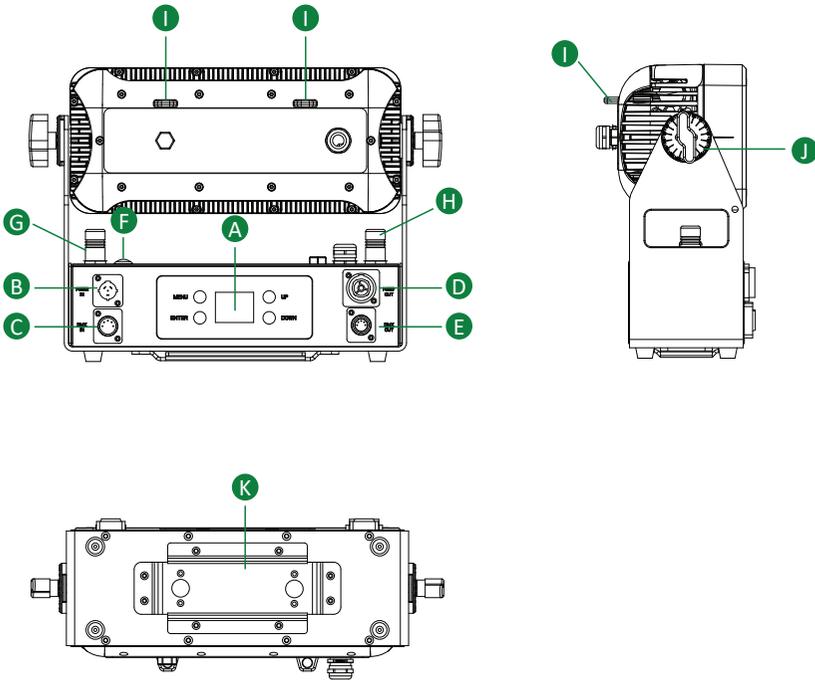
- 1/2/3/4/11/16/18/24/34CH
- Master&Slave mode
- CRMX Wireless DMX(optional)
- VISION APP(optional)

## 3. Features

- Light Source: Main Led Panel:12\*20W RGLB
- Native beam angle(s):30°
- Initial field of view (spot angle):25°
- Power consumption: 160W
- Battery working time @ full light:3-4H
- Battery working time @ auto:7H
- Battery charging time:10H
- Input voltage,nominal:100 - 240V 50/60Hz
- Light output all LEDs on: 7040 LM
- Illuminance Lux @ 2m:14136 lx
- Illuminance Lux @ 5m:2262 lx
- Illuminance Lux @ 8m:883 lx
- Illuminance Lux @ 10m:565 lx
- Run Mode: DMX 512 /Master Slave/Auto Run
- Maximum 66 ID setting for easy separately control
- Wireless DMX from Sweden
- 10 internal programs and 10 customerize programs
- 4 different dimming curve
- Strobe:0 - 20Hz adjustable
- Tilt:0-120°
- Pixel control: 6 Sections
- IP65
- Temperature: -40℃~45℃
- N.W: 10.11 KG
- Dimensions: 399 x 140 x 270mm

# INSTALLATION&SETUP

## 1. Connections



A: LCD Screen

B: Power In

C: DMX In

D: Power Out

E: DMX Out

F: Power button

G: Wireless

H: Antenna of bluetooth

I: Safety rope hole

J: Dial plate

K: Hanging panel

# OPERATION

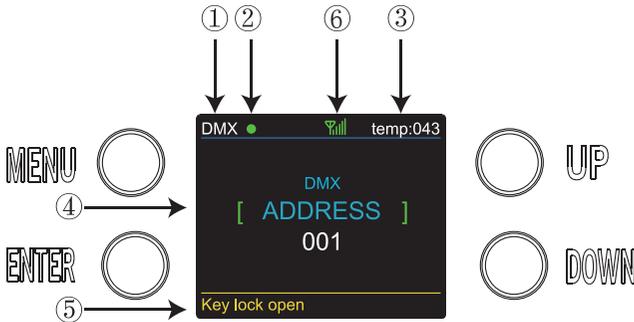
## 1. Control Display

 LCD Touch Screen

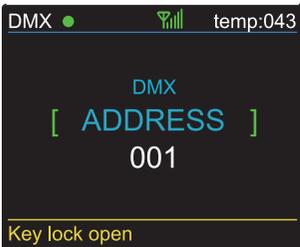
  Press arrows to scroll up and down inside the menu and change values, such as DMX address

 Press ENTER to access theselection menu for system settings or confirm changes

## 2. Displayer Introduction



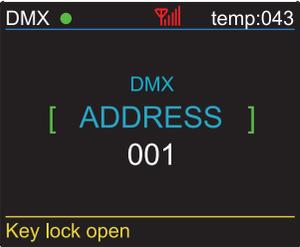
1. When you enter DMX Mode, it will be showed DMX, when you enter SLAVE Mode, it will be showed SLAVE.
2. This shows the condition of signal transmission. Green is connected. Red is disconnected.
3. This shows the temperature of the lights.
4. This shows the menus you can select.
5. This shows the condition of key lock. "Key lock open" means it is open and "Key lock off" means it is close.
6. This shows the condition of wireless signal. Green is connected. Red is disconnected.



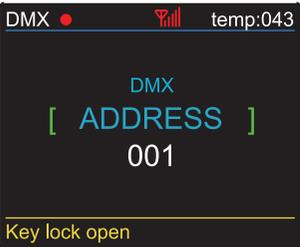
While DMX and Wireless signal are green, it means DMX Mode and Wireless are connected.



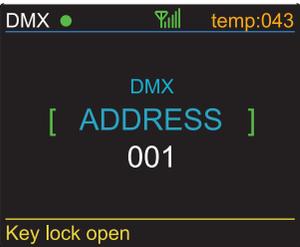
While DMX shows red but Wireless signal shows green, it means DMX Mode is disconnected and Wireless is connected.



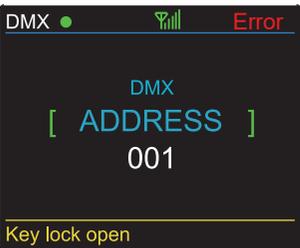
While DMX shows green but Wireless signal shows red, it means DMX Mode is connected and Wireless is disconnected.



While DMX and Wireless are shown red, it means DMX Mode and Wireless are disconnected.

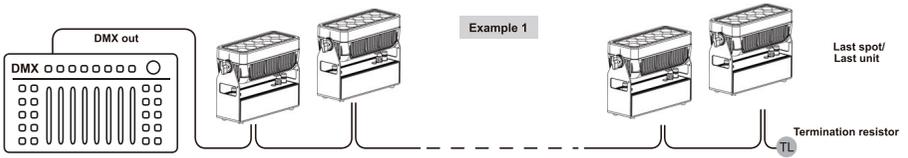


While the letters and number show change from white to yellow, it means the temperature is beyond the maximum temperature of default settings.

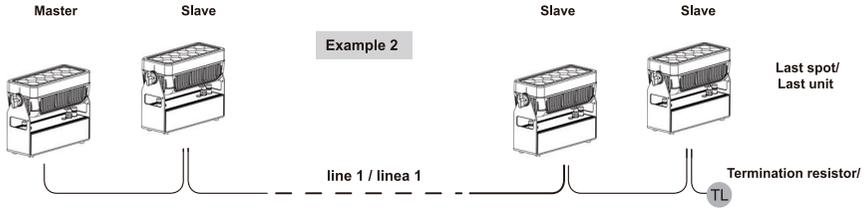


While the letters and number show Error, it means there are some problems with the temperature.

### 3. DMX connection



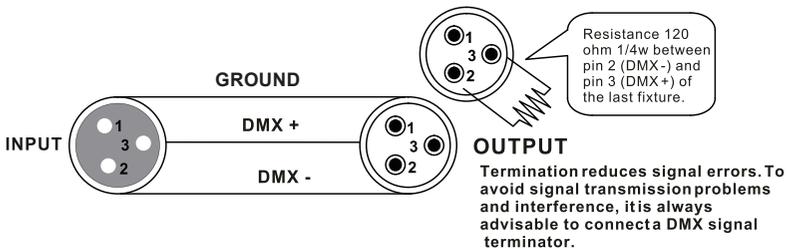
### 4. Master / Slave connection



### 5. CABLE CONNECTORS

Cabling must have a male XLR connector on one's end and a female XLR connector on the other's end.

#### DMX connector configuration



Caution: Do not allow contact between the ground and the fixture's chassis ground. Grounding the ground can cause a ground loop, and your fixture may perform erratically. Test cables with an ohm meter to verify positive pole and to make sure the pins are not grounded or shorted to the shield or each other.

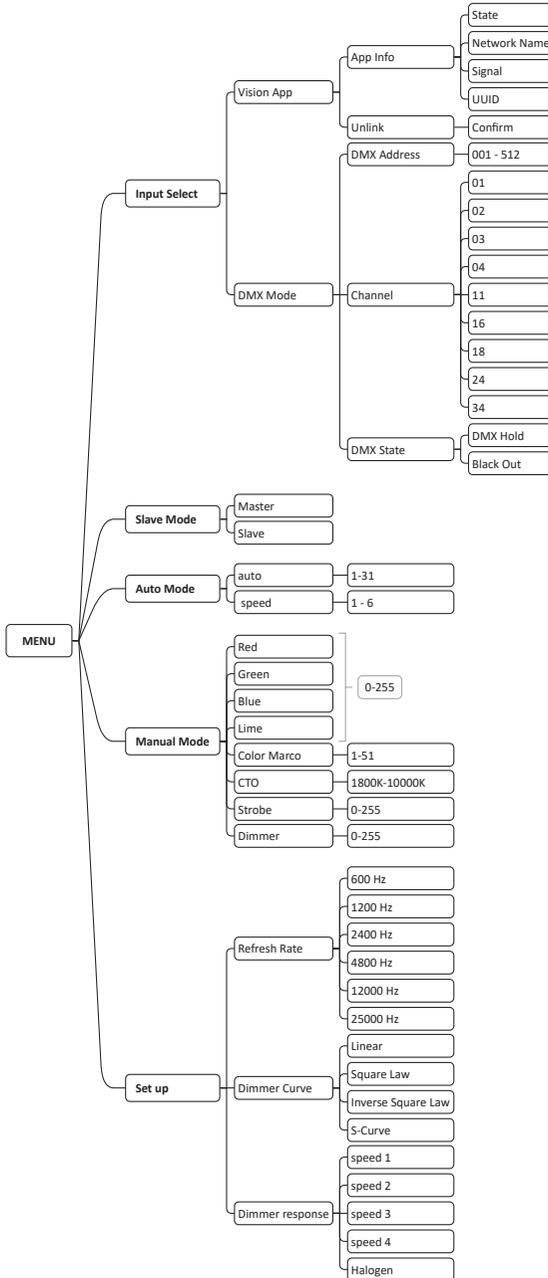
### 3-PIN TO 5-PIN CONVERSION CHART

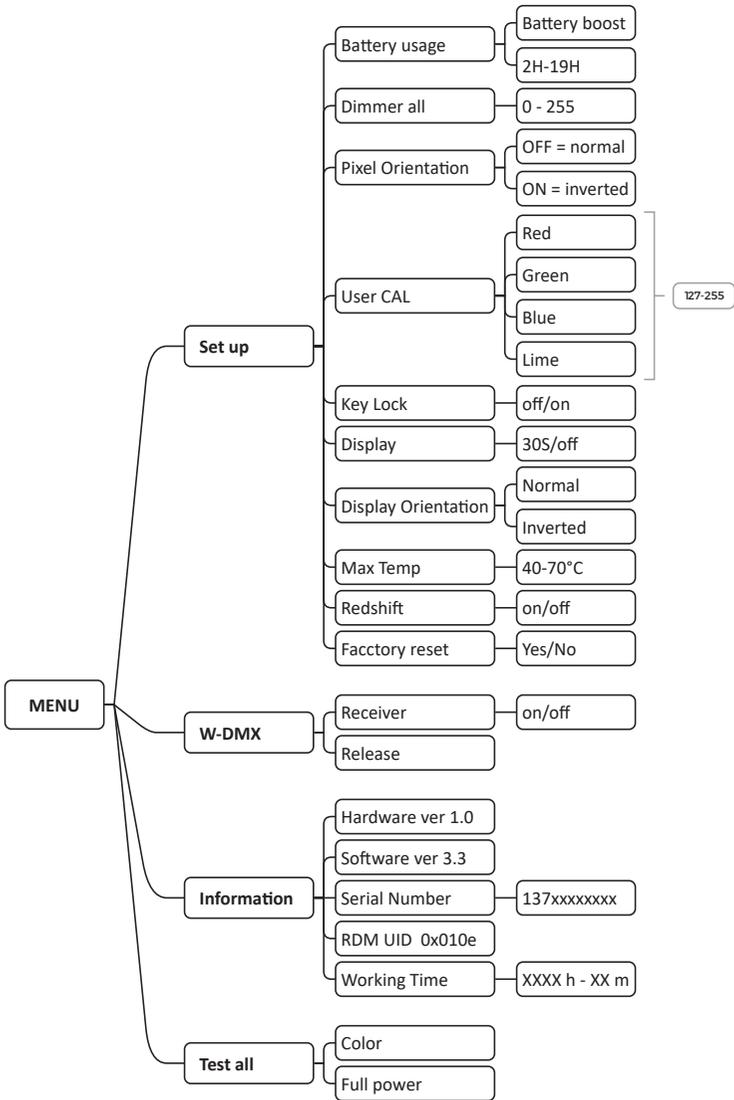
Please note if you use a controller with a 5 pin DMX output connector, you need to use a 5 pin to 3 pin adapter. The chart below details a proper cable conversion:

3-PIN TO 5-PIN CONVERSION CHART

Conductor	3 Pin Female (output)	5 Pin Male (Input)
Ground/Shield	Pin 1	Pin 1
Data ( - ) signal	Pin 2	Pin 2
Data ( + ) signal	Pin 3	Pin 3
Do not use		Do not use
Do not use		Do not use

# PROGRAMME MENU





**DMX Address and Channels Mode**-In these menu,you can connect several pieces of lights with DMX cable and control them with control console.

1. Press "ENTER" and then press "UP" or "DOWN" to "DMX Address" or "Channels Mode" and press "ENTER".

1) "XXX" will be showed in "DMX Address", "XXX" means the Address 1-512. You can press "UP" or "DOWN" to select the address you desired.

2) "Channel [xx]" will be showed in "Channels Mode", "XX" means 9 kinds of DMX Channels Modes. You can press "UP" or "DOWN" to select the Channel Mode you desired.

3) DMX STATE-In this menu,you can choose the DMX signal you desired. Press "ENTER" and you can choose "BLACKOUT" or "DMX HOLD";"BLACKOUT" means cut off the DMX signal and "DMX HOLD" means connect DMX signal.

**SLAVE MODE**-In this menu, you can select one light as the MASTER light and other lights in SLAVE Mode will run following the MASTER light.

1. Press "ENTER" and then press "UP" or "DOWN" to "SLAVE Mode".

2.Press "ENTER" and "SLAVE" will be showed, then press "ENTER" to select.

**AUTO MODE**-In this menu, you can select your desire AUTO Mode and adjust the running speed.

1. Press "ENTER" and then press "UP" or "DOWN" to "AUTO MODE".

2. Press "ENTER" then "SPEED" or "AUTO MODE" is showed.Then press "ENTER" and you can see 2 items as below:

1) SPEED - It provides "01-10" for you choose.

2) AUTO MODE - It provides "AUTO 1- AUTO 30" for you choose.

**Manual MODE**-In this menu,you can adjust dimmer, halogen, strobe you desired.

1. Press "ENTER" and then press "UP" or "DOWN" to "MANUAL MODE".

2. Press "ENTER" and there has 8 options then press "UP" or "DOWN" to select the value you desired as below:

1) Dimmer - You can adjust the overall brightness in this menu.

2) Red - You can adjust the brightness of Red in this menu.

3) Green - You can adjust the brightness of Green in this menu.

4) Blue - You can adjust the brightness of Blue in this menu.

5) Lime - You can adjust the brightness of Lime in this menu.

6) Color Macro - You can select color 0-51 in this menu.

7) CTO - You can adjust the color temperature in this menu.

8) STROBE - You can adjust the speed of strobe in this menu.

**SET UP**-In this menu, you can adjust the value of the function.

1. Press "ENTER" and then press "UP" or "DOWN" to "SET UP".

2. Press "ENTER" and there has 13 options then press "ENTER" to select the options and press "UP" or "DOWN" to select the value you desired as below:

1)RedShift - In this item,the lamp displays the halogen effect when you select ON,and the lamp turns off the halogen effect when you select OFF.

2)Refresh Rate - it provides 1-18KHz of refresh rates for your choose

3)Dimmer Curve - It provides 4 kinds of dimmer curves for you choose.

4)Dimmer response - It provides 4 kinds of dimmer speed for you choose.

5)Pixel Orientation - You can select "OFF" or "ON" set the forward and reverse direction of the auxiliary light and white light scrolling.

6)User CAL - You can adjust the brightness of Red, Green, Blue, Lime.

7)Key Lock - You can select "OFF" or "ON" to make the Key Lock turn off all the time or turns on.

8)Display - You can select "OFF" or "30s".

- 9) Display Orientation - You can select "Normal" or "Invertde".
- 10) Bat Time - You can select different battery usage times for "4H/6H/8H/12H"
- 11) Max Temp - The max temperature range for use is 40-70°C
- 12) Redshift - You can select "on" or "off" to enable the Redshift.
- 13) FACTORY RESET-In this item, you can reset all the value of the system.

**Wireless-In this menu,you can receiver and release wireless signals.**

- 1.Press"ENTER"button and then UP or DOWN button until "Wireless" is showed.
- 2.Press"ENTER""button,and "Receiver" or "Release" will be showed. Then press ENTER,and you can see two items as below:
  - 1)Receiver- In this item,you can select "ON"or "OFF".If you select ON,you can use the wireless reception function.And if you select OFF,wireless reception will be turned off.
  - 2)Release-In this item, you can clear wireless signals."SUCCEESS" will be displayed when the wireless signal is successfully cleared.

**INFORMATION-In this menu, you can learn about the information of RDM, software, hardware , serial number, temperatures and the run time of the light.**

1. Press "ENTER" and then press "UP" or "DOWN" to "INFORMATION".
2. Press "ENTER" and select "RDM" , "Serial number" , "Software" , "Hardware" or "Working Time".Then press "ENTER",you can see 5 items as below:
  - 1) Serial number - It shows the serial number information.
  - 2) Hardware - It shows the Hardware information.
  - 3) Software - It shows the Software information.
  - 4) RDMUID - It shows RDM information.
  - 5) Working Time - It shows the working hours of the light.

**Test mode - In this menu,you can test if the light work normally.**

1. Press "ENTER" and then press "UP" or "DOWN" to "Test mode".
- 2.Press"ENTER""button,and "Color" or "Full power" will be showed. Then press ENTER,and you can see two items as below:
  - 1) Color - Test RGB LED twice.
  - 2) Full power - Test RGB and white light full brightness for 5s.

## DMX CONTROL MODE

1 CHANNELS		
Channel	Value	Function
1	000 - 255	Halogen

2 CHANNELS		
Channel	Value	Function
1	000 - 255	Dimmer
2	000 - 255	Color marco (1-51)

3 CHANNELS		
Channel	Value	Function
1	000 - 255	Dimmer
2	000 - 255	Color marco (1-51)
3	000 - 255	CTO (1800-10000K)

4 CHANNELS		
Channel	Value	Function
1	000 - 255	RED
2	000 - 255	GREEN
3	000 - 255	BLUE
4	000 - 255	Lime

11 CHANNEL		
Channel	Value	Function
1	000 - 255	Master dimmer
2	000 - 255	Shutter
3	000 - 255	RED
4	000 - 255	GREEN
5	000 - 255	BLUE
6	000 - 255	Lime
7	000 - 255	Color marco
8	000 - 255	CTO
9	000 - 255	Auto
10	000 - 255	Auto speed
11	000 - 255	Fade

18 CHANNELS		
Channel	Value	Function
1	000 - 255	Master Dimmer
2	000 - 255	Fine dimmer
3	000 - 255	Shutter
4	000 - 255	Red
5	000 - 255	Red fine
6	000 - 255	Green
7	000 - 255	Green fine
8	000 - 255	Blue
9	000 - 255	Blue fine
10	000 - 255	Lime
11	000 - 255	Lime fine
12	000 - 255	Color marco 0-51
13	000 - 255	CTO (1800-10000K)
14	000 - 255	Dimmer speed
15	000 - 255	Auto
16	000 - 255	Auto speed
17	000 - 255	Fade
18	000 - 255	Device setting

16 CHANNELS		
Channel	Value	Function
1	000 - 255	Master Dimmer
2	000 - 255	Fine dimmerr
3	000 - 255	Shutter
4	000 - 255	Red
5	000 - 255	Green
6	000 - 255	Blue
7	000 - 255	Lime
8	000 - 255	....
	000 - 255	CTO (1800-10000K)
9	000 - 255	Dimmer speed
10	000 - 255	LED 1 dimmer
11	000 - 255	LED 2 dimmer
12	000 - 255	LED 3 dimmer
13	000 - 255	LED 4 dimmer
14	000 - 255	LED 5 dimmer
15	000 - 255	LED 6 dimmer
16	000 - 255	Device setting

24 CHANNELS		
Channel	Value	Function
1	000 - 255	LED 1 Red
2	000 - 255	LED 1 Green
3	000 - 255	LED 1 Blue
4	000 - 255	LED 1 Lime
5	000 - 255	LED 2 Red
6	000 - 255	LED 2 Green
7	000 - 255	LED 2 Blue
8	000 - 255	LED 2 Lime
9	000 - 255	LED 3 Red
10	000 - 255	LED 3 Green
11	000 - 255	LED 3 Blue
12	000 - 255	LED 3 Lime
13	000 - 255	LED 4 Red
14	000 - 255	LED 4 Green
15	000 - 255	LED 4 Blue
16	000 - 255	LED 4 Lime
17	000 - 255	LED 5 Red
18	000 - 255	LED 5 Green
19	000 - 255	LED 5 Blue
20	000 - 255	LED 5 Lime
21	000 - 255	LED 6 Red
22	000 - 255	LED 6 Green
23	000 - 255	LED 6 Blue
24	000 - 255	LED 6 Lime

34 CHANNELS		
Channel	Value	Function
1	000 - 255	Master Dimmer
2	000 - 255	Fine dimmer
3	000 - 255	Shutter
4	000 - 255	LED 1 Red
5	000 - 255	LED 1 Green
6	000 - 255	LED 1 Blue
7	000 - 255	LED 1 Lime
8	000 - 255	LED 2 Red
9	000 - 255	LED 2 Green
10	000 - 255	LED 2 Blue
11	000 - 255	LED 2 Lime
12	000 - 255	LED 3 Red
13	000 - 255	LED 3 Green
14	000 - 255	LED 3 Blue
15	000 - 255	LED 3 Lime
16	000 - 255	LED 4 Red

17	000 - 255	LED 4 Green
18	000 - 255	LED 4 Blue
19	000 - 255	LED 4 Lime
20	000 - 255	LED 5 Red
21	000 - 255	LED 5 Green
22	000 - 255	LED 5 Blue
23	000 - 255	LED 5 Lime
24	000 - 255	LED 6 Red
25	000 - 255	LED 6 Green
26	000 - 255	LED 6 Blue
27	000 - 255	LED 6 Lime
28	000 - 255	Dimmer speed
29	000 - 255	Color marco
30	000 - 255	CTO (1800-10000K)
31	000 - 255	Auto
32	000 - 255	Auto speed
33	000 - 255	Fade
34	000 - 255	Function set

## DMX CONTROL SHEET

Shutter	
000 - 045	No Function
046 - 075	Strobe ALL : Slow to Fast
076 - 135	Random Strobe : Slow to Fast
136 - 165	Pulse strobe Slow to Fast
166 - 195	Pulse RND strobe Slow to Fast
196 - 225	Fade up strobe
226 - 255	Fade down strobe

Function set	
000 - 045	No function
046 - 050	Pixel on
051 - 055	Pixel off
056 - 060	Dimmer curve Linear
061 - 065	Dimmer curve Square Law
066 - 070	Dimmer curve inverse Square Law
071 - 075	Dimmer curve S-Curve
076 - 089	No function
090 - 099	Calibrated color output mode - COLOR CALIB = On
100 - 109	No function
110 - 119	Raw color ouput mode - COLOR CALIB = OFF
120 - 129	No function
130 - 139	600Hz refresh rate
140 - 149	1200Hz refresh rate
150 - 159	2400Hz refresh rate
160 - 169	4800Hz refresh rate
170 - 179	12000Hz refresh rate
180 - 189	25000Hz refresh rate
190 - 229	No function
230 - 234	Red shift on
235 - 239	Red shift off
240 - 244	Display off
245 - 249	Display 30s
250 - 255	Factory reset

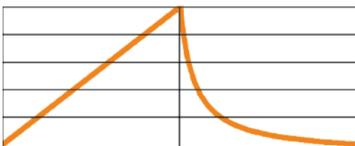
CTO		
8	16	1800K
17	25	2000K
26	34	2200K
35	43	2400K
44	52	2600K
53	61	2800K
62	70	3000K
71	79	3200K
80	88	3400K
89	97	3600K
98	106	3800K
107	115	4000K
116	124	4200K
125	133	4400K
134	142	4600K
143	151	4800K
152	160	5000K
161	169	5500K
170	178	6000K
179	187	6500K
188	196	7000K
197	205	7500K
206	214	8000K
215	223	8500K
224	232	9000K
233	241	9500K
242	255	10000K

Dimmer speed		
0	49	No function
50	89	Dimmer speed 1
90	129	Dimmer speed 2
130	169	Dimmer speed 3
170	209	Dimmer speed 4
210	255	Halogen

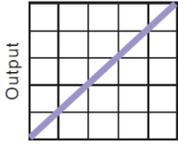
COLOR					
5	9	COLOR 1	135	139	COLOR 27
10	14	COLOR 2	140	144	COLOR 28
15	19	COLOR 3	145	149	COLOR 29
20	24	COLOR 4	150	154	COLOR 30
25	29	COLOR 5	155	159	COLOR 31
30	34	COLOR 6	160	164	COLOR 32
35	39	COLOR 7	165	169	COLOR 33
40	44	COLOR 8	170	174	COLOR 34
45	49	COLOR 9	175	179	COLOR 35
50	54	COLOR 10	180	184	COLOR 36
55	59	COLOR 11	185	189	COLOR 37
60	64	COLOR 12	190	194	COLOR 38
65	69	COLOR 13	195	199	COLOR 39
70	74	COLOR 14	200	204	COLOR 40
75	79	COLOR 15	205	209	COLOR 41
80	84	COLOR 16	210	214	COLOR 42
85	89	COLOR 17	215	219	COLOR 43
90	94	COLOR 18	220	224	COLOR 44
95	99	COLOR 19	225	229	COLOR 45
100	104	COLOR 20	230	234	COLOR 46
105	109	COLOR 21	235	239	COLOR 47
110	114	COLOR 22	240	244	COLOR 48
115	119	COLOR 23	245	249	COLOR 49
120	124	COLOR 24	250	254	COLOR 50
125	129	COLOR 25	255		COLOR 51
130	134	COLOR 26			

AUTO					
6	12	Auto 1	133	140	Auto 17
13	20	Auto 2	141	148	Auto 18
21	28	Auto 3	149	156	Auto 19
29	36	Auto 4	157	164	Auto 20
37	44	Auto 5	165	172	Auto 21
45	52	Auto 6	173	180	Auto 22
53	60	Auto 7	181	188	Auto 23
61	68	Auto 8	189	196	Auto 24
69	76	Auto 9	197	204	Auto 25
77	84	Auto 10	205	212	Auto 26
85	92	Auto 11	213	220	Auto 27
93	100	Auto 12	221	228	Auto 28
101	108	Auto 13	229	236	Auto 29
109	116	Auto 14	237	239	Auto 30
117	124	Auto 15	240	255	Auto 31
125	132	Auto 16			

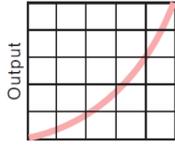
## HALOGEN DIMMER CURVE



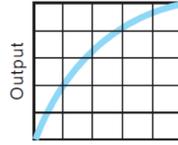
## DIMMER CURVE



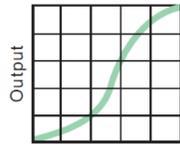
DMX %  
LINEAR



DMX %  
SQUARE LAW

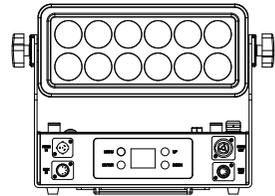
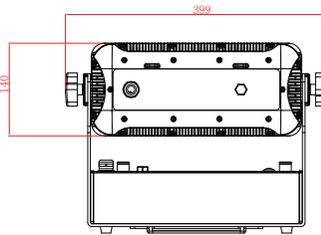
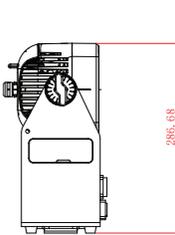


DMX %  
INVERSE SQUARE LAW

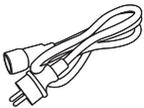


DMX %  
S-CURVE

## MECHANICAL SPECIFICATION



## ACCESSORY

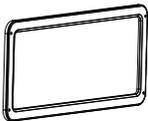


Power cable

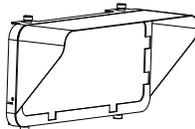


Fast lock

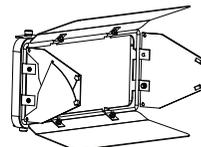
## OPTIONAL ACCESSORIES



Magnetic frost filter



One-sided barndoor

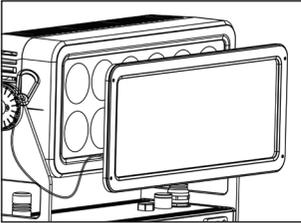


Two-sided barndoor

## INSTALLATION

1. Customize your setup with various accessories to achieve diverse lighting effects and installation configurations. Options include:

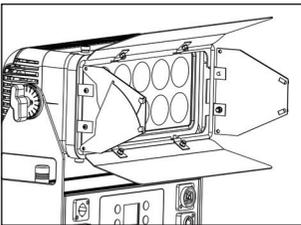
- *Magnetic frost filter*



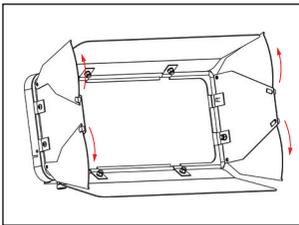
*Magnetic frost filter*

Both the light and the frost filter contain powerful magnets, enabling magnetic attachment upon the light. Includes a safety wire to ensure secure installation.

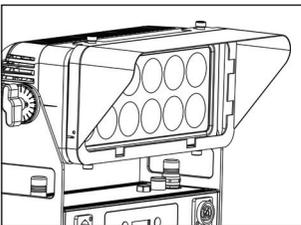
- *Barndoor*



*Two-sided barndoor*



The barndoor equipped captive screws. Align the barndoor with the mounting holes, tighten the screws to secure it, then unfold for operation. The side opening page design effectively prevents light leakage.



*One-sided barndoor*

The barndoor is equipped with captive screws. Align it with the chassis holes and tighten the screws for secure installation.

# RDM---REMOTE DEVICE MANAGEMENT

RDM is a wild version of the DMX512-A protocol, allowing dimming stations and other control devices to be discovered through a DMX512 network, and then configuring, status monitoring, and managing intermediate and line end devices.

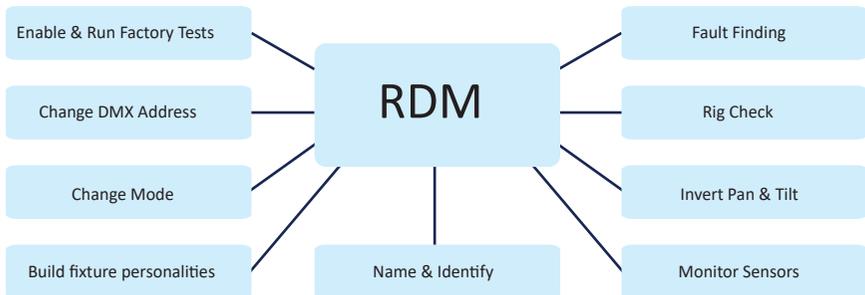
It allows two-way communication between the lighting device or system controller and the connected RDM compatible device through the standard DMX. This protocol will allow these devices to be configured, monitored, and managed in a manner that does not interfere with the normal operation of standard DMX512 devices that do not recognize the RDM protocol.

Allow a controller or test device to find other devices that can be RDM, such as computer lights or dimming cabinets, and remotely manage them through this connection intelligence. Including the ability to remotely set the initial address of the DMX512, query the device's errors or statistics, and achieve most of the configuration settings that are usually done on the front panel of the device. RDM can run with the new RDM device or any original DMX512 product on the same data link without any performance impact. Since RDM runs on the first team DMX512 link, the only infrastructure upgrade required by RDM is to upgrade the existing data distributor to implement a two-way mode to support RDM.

The RDM information is transmitted through the first pair of DMX512 data channels. RDM uses packets that include non-zero initial codes to start and control communications. This alternating(rotating) session and waiting for indicative responses is performed in a semi-duplex format. The second data pair is not used for any RDM function.

Two-way data transmission-each vendor's equipment can exchange data, Art-net can only transmit data, can not exchange with each other.

*Its functions are as followed:*



RDM compliance:ANSI/ESTA E.120

Parameter ID	Command 'Discovery'	Command 'Set'	Command 'Get'
DISC_UNIQUE_BRANCH	√		
DISC_MUTE	√		
DISC_UN_MUTE	√		
DEVICE_INFO			√
SUPPORTED_PARAMETERS			√
SOFTWARE_VERSION_LABEL			√
DMX_START_ADDRESS		√	√
IDENTIFY_DEVICE		√	√
DEVICE_MODEL_DESCRIPTION			√
PARAMETER_DESCRIPTION			√
MANUFACTURER_LABEL			√
DEVICE_LABEL		√	√
FACTORY_DEFAULTS		√	√
BOOT_SOFTWARE_VERSION_ID			√
BOOT_SOFTWARE_VERSION_LABEL			√
DMX_PERSONALITY		√	√
DMX_PERSONALITY_DESCRIPTION			√
SLOT_INFO			√
SLOT_DESCRIPTION			√
SENSOR_DEFINITION			√
SENSOR_VALUE			√
DEVICE_HOURS			√
LAMP_HOURS			√
RESET_DEVICE		√	
DIMMER CURVE		√	√
DMX STATE		√	√
DIMMER SPEED		√	√