

# SPL-LED-1940IP



User Manual

Please read the instruction carefully before use

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## 01/ Safety Information

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Please keep this User Manual for future consultation. If you sell the unit to another user, be sure that they also receive this instruction manual.

**Important:**

Damages caused by the disregard of this user manual are not subject to warranty. The dealer

will not accept liability for any resulting defects or problems.

Unpack and check carefully to ensure that there is no transportation damage before using the unit.

This product is suitable for wet locations. Do not immerse in water.

DO install and operate by qualified operator.

DO NOT allow children to operate the fixture.

Use safety chain (made of steel, min. diameter 4.0mm) when fixing the unit. Handle the unit by carrying its base instead of head only.

The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.

Be sure that no ventilation slots is blocked, otherwise the unit will be overheated.

Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.

It's important to ground the yellow/green conductor to earth in order to avoid electric shock.

Minimum ambient temperature TA: -10°C. Maximum ambient temperature TA: 40°C. Do not operate this product at a lower or higher temperature.

DO NOT connect the device to any dimmer pack.

Keep flammable materials away from the fixture while operating to avoid fire hazard.

Make sure the power cord is not crimped or damaged; replace it immediately if damaged.

Unit's surface temperature may reach up to 70°C. DO NOT touch the housing bare-handed during its operation.

Avoid any flammable liquids, water or metal from entering the unit. Once it happens, cut

off the mains power immediately.

DO NOT operate in a dirty or dusty environment. DO clean the fixture regularly.

DO NOT touch any wire during operation as there might be a hazard of electric

shock.

Avoid entanglement of the power cord with other wires.

The minimum distance to objects/surface must be more than 4 meters.

In the event of serious operating problem, stop using the unit immediately.

Never turn on and off the unit time after time.

The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.

DO NOT open the housing as there are no user serviceable parts inside.

DO NOT attempt to operate this unit if it becomes damaged. DO NOT attempt any repairs yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.

Disconnect this product from its power source before servicing.

DO use the original packaging if the device is to be transported.

Check that the head tilt lock is released before packing for transportation.

Avoid direct eye exposure to the light source while the product is on.

DO NOT operate this product if you see damage on the housing, shields, or cables.

Have

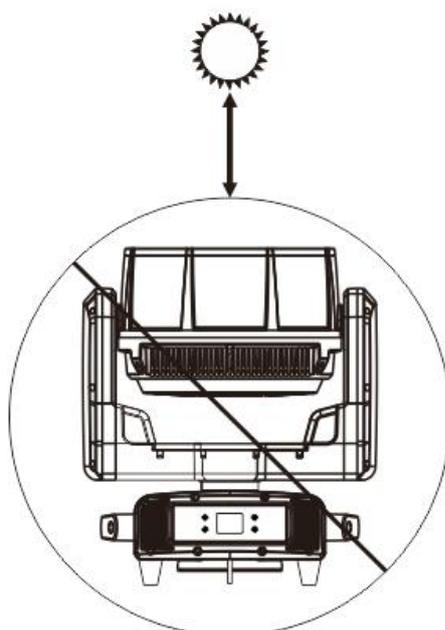
the damaged parts replaced by an authorized technician at once.

External sources of light beams from direct sunlight or any other strong light source, which penetrate the front lens of lighting fixtures, can cause severe internal damage.

DO

NOT expose the fixture front lens to light beams from direct sunlight or any other strong

light source from any angle while unpacking, installation, use, and extended idle times outdoors. DO NOT focus a light beam from one lighting fixture directly towards another.



## 02/ Technical Specifications

Input voltage: AC100-240V 50/60Hz

Power consumption: 760W

LED type: 54\*0.2W 5050 RGB

LED QTY: 19pc

Average lifespan: 50000 hours

Beam angle: 4°- 32°

Electronic Dimming: 0-100%

Strobe: 1S/25

Focus: Yes

Rotate: Yes

Pan: 540° 16bits

Tilt: 270° 16bits

DMX channel: 28CH/30CH/42CH/85CH/99CH/104CH/106CH

Control mode: DMX /RDM

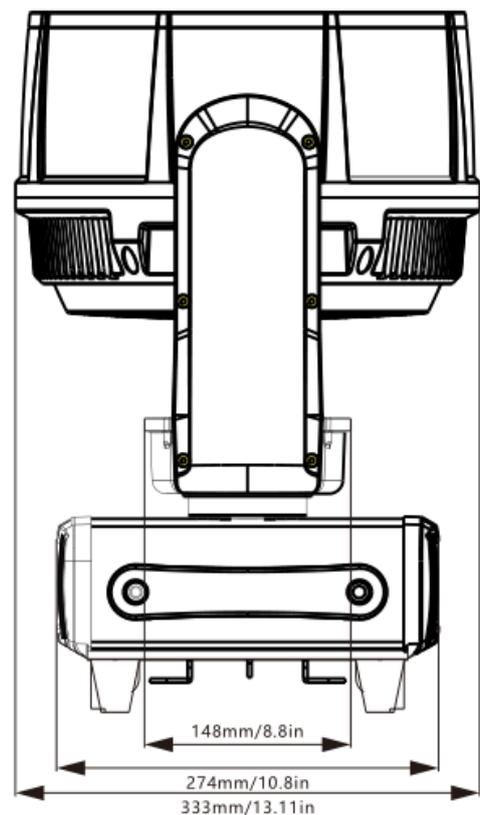
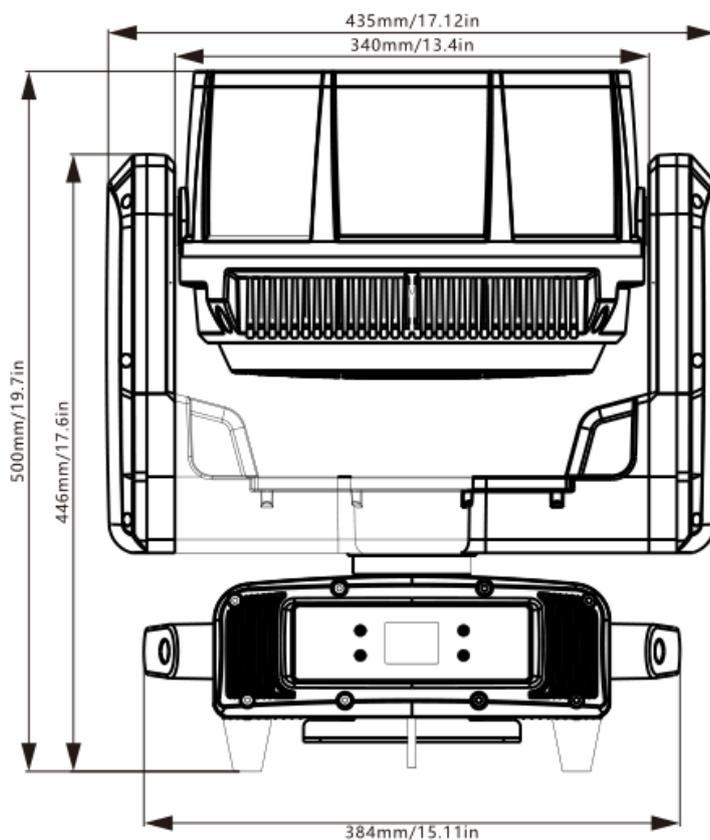
Display mode: LED

IP rating: IP65

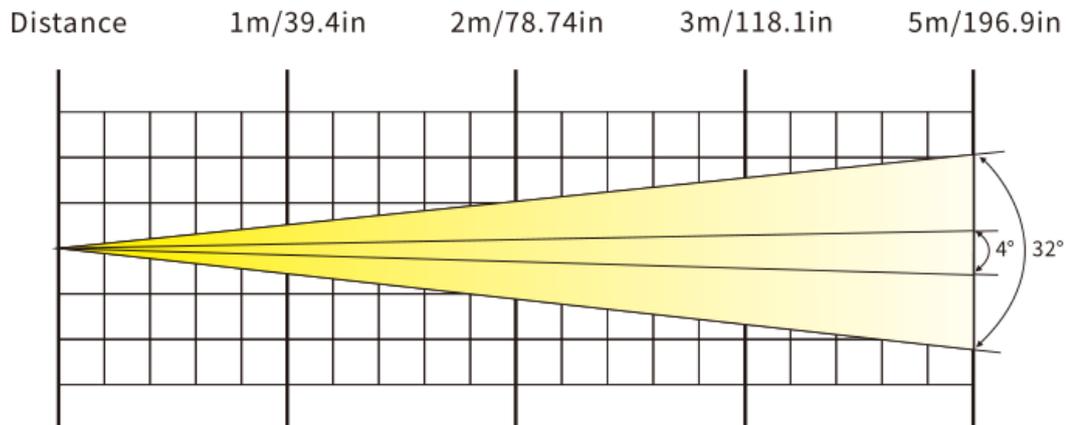
Max ambient temp: 45°

Product dimension: 435\*333\*500 mm

N.W: 21.4KG



**Photometric Diagram:**



| Distance        | 1m/39.4in | 2m/78.74in | 3m/118.1in | 5m/196.9in |
|-----------------|-----------|------------|------------|------------|
| <b>4°(LUX)</b>  |           |            |            |            |
| RGBW            | 250000    | 158000     | 107000     | 40000      |
| R               | 47000     | 3200       | 19000      | 7500       |
| G               | 88400     | 59000      | 38500      | 14780      |
| B               | 2740      | 1600       | 1140       | 481        |
| W               | 134000    | 158000     | 54570      | 20000      |
| Diameter(m)     | 0.07      | 0.14       | 0.21       | 0.35       |
| <b>32°(LUX)</b> |           |            |            |            |
| RGBW            | 76000     | 18000      | 11750      | 4600       |
| R               | 13000     | 3600       | 2085       | 832        |
| G               | 28900     | 7000       | 4664       | 1770       |
| B               | 880       | 207        | 188        | 98         |
| W               | 40000     | 9800       | 6300       | 2400       |
| Diameter(m)     | 0.57      | 1.15       | 1.72       | 2.87       |

### 03/ Connecting Power and Data

To apply power, first check that the head pan and tilt locks are released.

This fixture can operate on any 180-240Vac; 50/60Hz AC mains power supply.

The maximum power consumption is 760W.

The fixture must be grounded/earthed and able to be isolated from AC power. The AC power

supply must incorporate a fuse or circuit breaker for fault protection.

Wiring and connection work must be carried out by a qualified electrician.

The power cable color coding is given in the figure below:

| Wire  | Color (US) | Wire  | Color (EU)   | Symbol              | Conductor      |
|---|------------|---|--------------|---------------------|----------------|
|  | black      |  | brown        | L                   | live           |
|  | white      |  | blue         | N                   | neutral        |
|  | green      |  | yellow/green | $\perp$ or $\oplus$ | ground (earth) |

Power cord set should be used: Listed SJOW flexible cord with rating: 300V, 105°C, VW-1,

14AWG x 3C, molded with 5-20P attachment plug and terminated with cord connector model RCAC3F-X-000-01 with rating 250V, 16A by Neutrik Technology (Ningbo) Co., Ltd.

The power cord shall be at least 914mm (It is to be measured from the face of attachment plug to the face of connector).

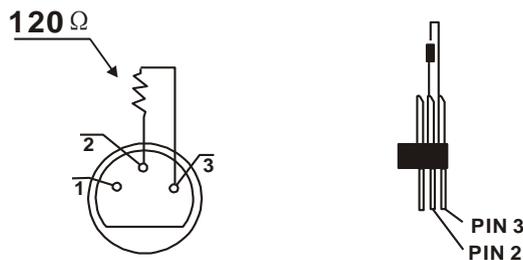
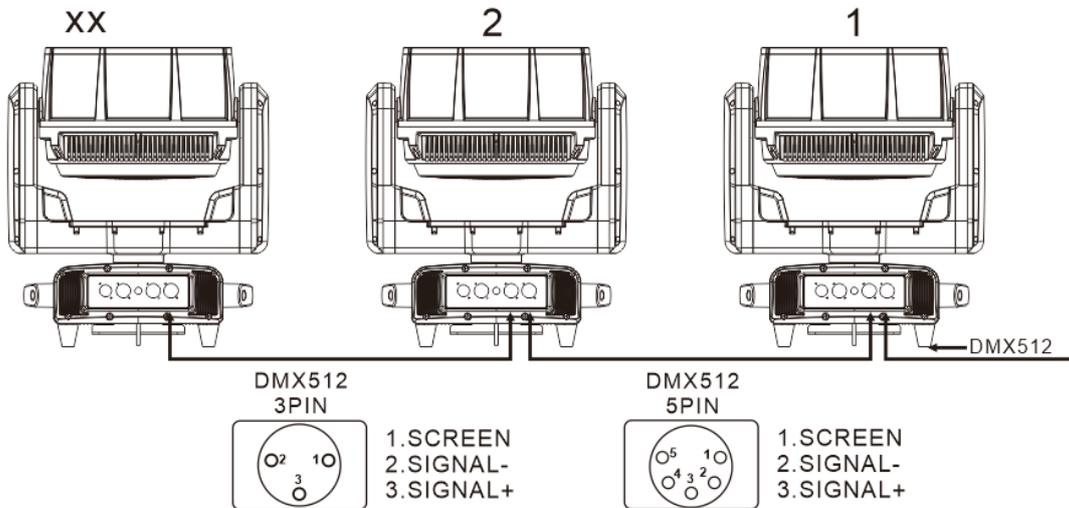
**CAUTION!**

**DO NOT CONNECT THE FIXTURE TO AN ELECTRICAL DIMMER SYSTEM AS DOING SO MAY CAUSE DAMAGE.**

## 04/ Connecting Data

The fixture is equipped with 5-pin (or 3-pin) XLR sockets for DMX input and output. Use a high-quality DMX cable designed for RS-485 and 5-pin (or 3-pin) XLR-plugs and connectors in order to connect the controller with the fixture or one fixture with another. For outdoor installations, use only IP-rated XLR connectors suitable for outdoor use.

**Building a serial DMX chain:**  
 Connect the DMX data output from the controller to the fixture's data input socket. Connect the DMX output of the first fixture in the DMX chain with the DMX input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected. Up to 32 fixtures can be connected to the same DMX link. Terminate the DMX out cable of the last fixture in the data link with a 120 ohm DMX terminator.



## 05/ Address Setting

All fixtures should be given a DMX starting address when operating with a DMX controller, in order to ensure that the correct fixture responds to the correct control signal. Incorrect settings will result in unpredictable responses from the lighting controller.

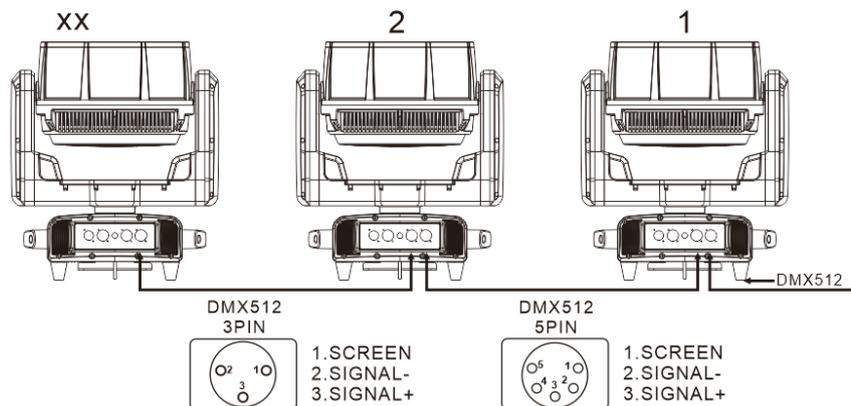
You can set the same starting address for all fixtures or a group of fixtures, or set different addresses for each individual fixture.

Setting all fixtures to the same DMX address will cause all fixtures to react in the same way. In this case, please note that changing the settings of one channel will affect all the fixtures simultaneously.

If you set each fixture to a different DMX address, each unit will “listen” starting at the channel number you have set, based on the quantity of DMX channels of each fixture. That means changing the settings of one channel will only affect the selected fixture.

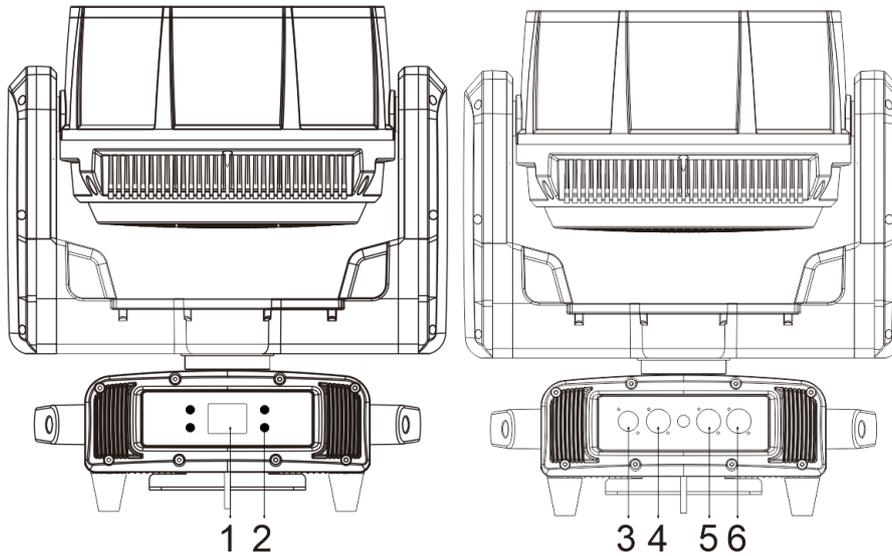
For example, if the first fixture is set to 43 ch DMX mode with a start DMX address of 1, the following fixture in the DMX chain should then be set to a DMX address of 44. As the first fixture uses all the first 43 DMX channels, the next available channel is 44 ( $43+1=44 >> 44$ ).

See the chart below for more details:



| Channel Mode | Unit 1 Address | Unit 2 Address | Unit 3 Address | Unit 4 Address | Unit xxx Address |
|--------------|----------------|----------------|----------------|----------------|------------------|
| 43 channels  | 1              | 44             | 87             | 130            | .....            |
| 34 channels  | 1              | 35             | 69             | 103            | .....            |
| 32 channels  | 1              | 33             | 65             | 97             | .....            |
| 23 channels  | 1              | 24             | 47             | 90             | .....            |

## 06/ Overview



|                |   |   |
|----------------|---|---|
| ● 1. Display   | To show the various menus and the selected function   |   |
| ● 2. Buttons   | MENU  | To enter into move backward or leave the menu |
|                | UP  | To go backward to move up in the menu         |
|                | DOWN  | To go forward to move down in the menu        |
|                | ENTER   | To perform the desired functions              |
| ● 3. DMX IN    | For DMX512 link, use 5-pin XLR cable to link the unit and DMX controller to input DMX signal (optional with 3-pin IP XLR) |   |
| ● 4. DMX OUT   | For DMX512 link, use 5-pin XLR cable to link the next units to output DMX signal (optional with 3-pin IP XLR)             |   |
| ● 5.6 POWER IN | To connect to supply power  |   |

## 07/ Display and operation

| Main menu   | Sub-MENU    | Parameter   |
|-------------|-------------|---|
| DMX Address | 001 - 512   | Value plus or minus one   |
| DMX Mode    | Dmx Select  | Channel 28/Channel 30/<br>Channel 42/Channel 85/<br>Channel 99/Channel 104/<br>Channel 106  |
| Stand Alone | Show Mode   | Self-propel led program (1-10)<br>Speed70<br>Auto Program(1-10)<br>Speed 70   |
|             | Color Macro | Pan/Tilt//Dimmer/C.M  |
|             | CCT Macro   | (3000K-7000K)<br>Pan/Tilt//Dimmer/CCT   |
|             | Manual Test | LED1-R、LED1-G、LED1-B、LED2-R、LED2-G、<br>LED2-B、LED3-R、LED3-G、LED3-B、LED4-R、<br>LED4-G、LED4-B、LED5-R、LED5-G、LED5-B、<br>LED6-R、LED6-G、LED6-B、LED7-R、LED7-G、<br>LED7-B、LED8-R、LED8-G、LED8-B、LED9-R、<br>LED9-G、LED9-B、LED10-R、LED10-G、LED10-<br>B、LED11-R、LED11-G、LED11-B、LED12-R、<br>LED12-G、LED12-B、LED13-R、LED13-G、<br>LED13-B、LED14-R、LED14-G、LED14-B、<br>LED15-R、LED15-G、LED15-B、LED16-R、<br>LED16-G、LED16-B、LED17-R、LED17-G、<br>LED17-B、LED18-R、LED18-G、LED18-B、 |

|              |             |   |
|--------------|-------------|---|
|              |             | <p>LED19-R、LED19-G、LED19-Red/Red Fine/Green/Green Fine/Blue/Blue Fine/White/White Fine/Linear CT0/Macro Colour/Strobe/Dimmer/Dimmer Fine/Pan/Pan Fine/Tilt/Tilt Fine/Function/Reset/Zoom/Zoom Rotation/</p> <p>LED1-R、LED1-G、LED1-B、LED2-R、LED2-G、LED2-B、LED3-R、LED3-G、LED3-B、LED4-R、LED4-G、LED4-B、LED5-R、LED5-G、LED5-B、LED6-R、LED6-G、LED6-B、LED7-R、LED7-G、LED7-B、LED8-R、LED8-G、LED8-B、LED9-R、LED9-G、LED9-B、LED10-R、LED10-G、LED10-B、LED11-R、LED11-G、LED11-B、LED12-R、LED12-G、LED12-B、LED13-R、LED13-G、LED13-B、LED14-R、LED14-G、LED14-B、LED15-R、LED15-G、LED15-B、LED16-R、LED16-G、LED16-B、LED17-R、LED17-G、LED17-B、LED18-R、LED18-G、LED18-B、LED19-R、LED19-G、LED19-B/Rope Dimmer/Rope Strobe/Rope R/Rope G/Rope B/Rope Eff/Rope Eff SP</p> |
| System Setup | DMX Fail    | Blackout/Auto/Hold  |
|              | Dim Freq    | 1200Hz/2400Hz/3600Hz/4800Hz/6000Hz  |
|              | Dim Curve   | Exp/Log/Line/S-Curve  |
|              | Dim Resp    | Led/Halogen   |
|              | FAN Mode    | Auto/High/Low   |
|              | P/T Encoder | ON/OFF  |

|             |               |                     |
|-------------|---------------|---------------------|
|             | Invert Pan    | ON/OFF              |
|             | Invert Tilt   | ON/OFF              |
|             | Invert Screen | ON/OFF              |
|             | Dis Backlight | ON/OFF              |
|             | Screen Lock   | ON/OFF              |
|             | Language      | 中文/EN               |
|             | Pactory Reset | OK                  |
|             |               | Cancel              |
| Calibration | Password8888  | Lamp calibration    |
| System Info | Err Info      | System OK           |
|             | Firmware      | Display Board Ver30 |
|             |               | Motor Board Ver27   |
|             |               | LED Board Ver52     |
|             | OP.Hours      | 118. 7H             |
|             | LED.Hours     | 107. 0H             |
|             | Temp          | 26°C                |

## 08/ DMX Protoco

CH30.CH106-CHANNEL MODE:

| CH30 | CH106 | Function      | Value   | Instruction                        |
|------|-------|---------------|---------|------------------------------------|
| 1    | 1     | X             | 0-255   |                                    |
| 2    | 2     | X fine        | 0-255   |                                    |
| 3    | 3     | Y             | 0-255   |                                    |
| 4    | 4     | Y             | 0-255   |                                    |
| 5    | 5     | XY speed      | 0-255   | From fast to slow                  |
| 6    | 6     | Zoom          | 0-255   | Small to big                       |
| 7    | 7     | Lens rotation | 0-127   | 0~60°                              |
|      |       |               | 128-188 | Endless rotation from fast to slow |
|      |       |               | 189-193 | stop                               |
|      |       |               | 194-255 | Endless rotation from slow to fast |
| 8    | 8     | Total dimmer  | 0-255   | 0-100%                             |
| 9    | 9     | 频闪            | 0-3     | on                                 |
|      |       |               | 4-200   | From slow to fast (1HZ-25HZ)       |
|      |       |               | 201-215 | Low speed random strobe            |
|      |       |               | 216-234 | middle speed random strobe         |
|      |       |               | 235-255 | high speed random strobe           |
| 10   | 10    | Red           | 0-255   | 0-100%                             |
| 11   | 11    | Green         | 0-255   | 0-100%                             |
| 12   | 12    | Blue          | 0-255   | 0-100%                             |

|         |      |                   |                             |             |
|---------|------|-------------------|-----------------------------|-------------|
| 13      | 13   | Whit              | 0-255                       | 0-100%      |
| 14      | 14   | Color temp adjust | 0-255                       | 3200K-6500K |
| 15      | 15   | 颜色宏               | 0-255                       | 内置颜色渐变      |
| 16      | 16   | Static effect     | 0-9                         | no function |
|         |      |                   | 10-14                       | Effect1     |
|         |      |                   | 15-19                       | Effect 2    |
|         |      |                   | 20-24                       | Effect 3    |
|         |      |                   | ...                         |             |
|         |      |                   | Every 5 datas as one effect |             |
|         |      |                   | ...                         |             |
|         |      |                   | 175-179                     | Effect 34   |
|         |      |                   | 180-184                     | Effect 35   |
|         |      |                   | 185-255                     | Effect 36   |
| 17      | 17   | Dynamic effect    | 0-9                         | no function |
|         |      |                   | 10-14                       | Effect 1    |
|         |      |                   | 15-19                       | Effect 2    |
|         |      |                   | 20-24                       | Effect 3    |
|         |      |                   | ...                         |             |
|         |      |                   | Every 5 datas as one effect |             |
|         |      |                   | 220-224                     | Effect 43   |
|         |      |                   | 225-229                     | Effect 44   |
|         |      |                   | 230-255                     | Effect 45   |
|         |      |                   | 18                          | 18          |
| 127-128 | stop |                   |                             |             |

|    |                    |                     |                    |                     |
|----|--------------------|---------------------|--------------------|---------------------|
|    |                    |                     | 129-255            | From slow to fast   |
| 19 | 19                 | Background red      | 0-255              | 0-100%              |
| 20 | 20                 | Background green    | 0-255              | 0-100%              |
| 21 | 21                 | Background blue     | 0-255              | 0-100%              |
| 22 | 22                 | Background white    | 0-255              | 0-100%              |
| 23 | 23                 | Reset               | 0-25               | No function         |
|    |                    |                     | 26-76              | Head reset after 5s |
|    |                    |                     | 77-127             | XY reset after 5s   |
|    |                    |                     | 128-255            | All reset after 5s  |
| 24 | 24                 | Red 1 led dimmer    | 0-255              | Red 1 led dimmer    |
|    | 25                 | Green 1 led dimmer  | 0-255              | Green 1 led dimmer  |
|    | 26                 | Blue 1 led dimmer   | 0-255              | Blue 1 led dimmer   |
|    | 27                 | Whit 1 led dimmer   | 0-255              | Whit 1 led dimmer   |
|    | ...                | ...                 | .....              | .....               |
|    | ...                | ...                 | .....              | .....               |
|    | 96                 | Red 19 led dimmer   | 0-255              | Red 19 led dimmer   |
|    | 97                 | Green 19 led dimmer | 0-255              | Green 19 led dimmer |
|    | 98                 | Blue 19 led dimmer  | 0-255              | Blue 19 led dimmer  |
| 99 | Whit 19 led dimmer | 0-255               | Whit 19 led dimmer |                     |
| 24 | 100                | 灯带调光                | 0-255              | 灯带从暗到亮进行线性调光        |
| 25 | 101                | 灯带频闪                | 0-4                | 亮灯                  |
|    |                    |                     | 5-250              | 同步频闪由慢到快            |

|    |     |                      |         |  |
|----|-----|----------------------|---------|--|
|    |     |                      | 251-255 | 亮灯   |
| 26 | 102 | Red 1 led dimmer     | 0-255   | 0-100%   |
| 27 | 103 | Green 1 led dimmer   | 0-255   | 0-100%   |
| 28 | 104 | Blue 1 led dimmer    | 0-255   | 0-100%   |
| 29 | 105 | SMD led rings        | 0-11    | No function                                    |
|    |     |                      | 12-13   | Red  |
|    |     |                      | 14-15   | Green  |
|    |     |                      | 16-17   | Blue   |
|    |     |                      | 18-19   | Red + Green                                    |
|    |     |                      | 20-51   | Two numerical values and a color mixing effect |
|    |     |                      | 52-255  | Dynamic effect                                 |
| 30 | 106 | Dynamic effect speed | 0-255   | From fast to slow                              |

CH28.CH42. CH85.CH99. CH104-CHANNEL MODE:

| CH28 | CH42 | CH85 | CH99 | CH104 | Function   | Value | Instruction |
|------|------|------|------|-------|------------|-------|-------------|
| 1    | 1    | 1    | 1    | 1     | Red        | 0-255 | 0-100%      |
| 2    | 2    | 2    | 2    | 2     | Red fine   | 0-255 |             |
| 3    | 3    | 3    | 3    | 3     | Green      | 0-255 | 0-100%      |
| 4    | 4    | 4    | 4    | 4     | Green fine | 0-255 |             |
| 5    | 5    | 5    | 5    | 5     | Blue       | 0-255 | 0-100%      |
| 6    | 6    | 6    | 6    | 6     | Blue fine  | 0-255 |             |
| 7    | 7    | 7    | 7    | 7     | white      | 0-255 | 0-100%      |
| 8    | 8    | 8    | 8    | 8     | White fine | 0-255 |             |
| 9    | 9    | 9    | 9    | 9     | Color temp | 0-255 |             |

|    |    |    |    |    |                      |         |                            |
|----|----|----|----|----|----------------------|---------|----------------------------|
|    |    |    |    |    | adjust               |         |                            |
| 10 | 10 | 10 | 10 | 10 | Color macro          | 0-255   | Inner color change         |
| 11 | 11 | 11 | 11 | 11 | Strobe               | 0-3     | open                       |
|    |    |    |    |    |                      | 4-200   | From slow to fast          |
|    |    |    |    |    |                      | 201-225 | Low speed random strobe    |
|    |    |    |    |    |                      | 226-234 | middle speed random strobe |
|    |    |    |    |    |                      | 235-255 | high speed random strobe   |
| 12 | 12 | 12 | 12 | 12 | Total dimmer         | 0-255   | 0-100%                     |
| 13 | 13 | 13 | 13 | 13 | Total dimmer<br>fine | 0-255   |                            |
| 14 | 14 | 14 | 14 | 14 | X                    | 0-255   | pan                        |
| 15 | 15 | 15 | 15 | 15 | X fine               | 0-255   | Pan fine                   |
| 16 | 16 | 16 | 16 | 16 | Y                    | 0-255   | Tilt                       |
| 17 | 17 | 17 | 17 | 17 | Y fine               | 0-255   | Tilt fine                  |
| 18 | 18 | 18 | 18 | 18 | Marco<br>function    | 0-255   | No function                |
| 19 | 19 | 19 | 19 | 19 | Reset                | 0-25    | No function                |
|    |    |    |    |    |                      | 26-76   | Head reset after 5s        |

|    |                  |    |    |    |               |         |                                    |
|----|------------------|----|----|----|---------------|---------|------------------------------------|
|    |                  |    |    |    |               | 77-127  | XY reset after 5s                  |
|    |                  |    |    |    |               | 128-255 | full reset after 5s                |
| 20 | 20               | 20 | 20 | 20 | Zoom          | 0-255   | 0-100%                             |
| 21 | 21               | 21 | 21 | 21 | Lens rotation | 0-127   | 0-60 degrees                       |
|    |                  |    |    |    |               | 128-188 | Endless rotation from fast to slow |
|    |                  |    |    |    |               | 189-193 | Stop                               |
|    |                  |    |    |    |               | 194-255 | Endless rotation from slow to fast |
| /  | 22               | /  | 22 | /  | Inner effect  | 0-7     | No function                        |
|    |                  |    |    |    |               | 8       | Static effect 1                    |
|    |                  |    |    |    |               | 9       | Static effect 2                    |
|    |                  |    |    |    |               | 10      | Static effect 3                    |
|    |                  |    |    |    |               | 11      | No function                        |
|    |                  |    |    |    |               | 12      | Static effect 4                    |
|    |                  |    |    |    |               | 13      | Static effect 5                    |
|    |                  |    |    |    |               | 14      | No function                        |
|    |                  |    |    |    |               | 15      | Dynamic effect 1                   |
|    |                  |    |    |    |               | 16      | Dynamic effect 2                   |
|    |                  |    |    |    |               | 17      | Dynamic effect 3                   |
|    |                  |    |    |    |               | 18      | Dynamic effect 4                   |
|    |                  |    |    |    |               | 19      | Single color random                |
|    |                  |    |    |    |               | 20      | Full color random                  |
| 21 | Rainbow effect 1 |    |    |    |               |         |                                    |
| 22 | Rainbow effect 2 |    |    |    |               |         |                                    |

|  |  |  |  |  |  |    |                   |
|--|--|--|--|--|--|----|-------------------|
|  |  |  |  |  |  | 23 | Dynamic effect 5  |
|  |  |  |  |  |  | 24 | Dynamic effect 6  |
|  |  |  |  |  |  | 25 | Dynamic effect 7  |
|  |  |  |  |  |  | 26 | Dynamic effect 8  |
|  |  |  |  |  |  | 27 | Dynamic effect 9  |
|  |  |  |  |  |  | 28 | Dynamic effect 10 |
|  |  |  |  |  |  | 29 | Dynamic effect 11 |
|  |  |  |  |  |  | 30 | Dynamic effect 12 |
|  |  |  |  |  |  | 31 | Dynamic effect 13 |
|  |  |  |  |  |  | 32 | Dynamic effect 14 |
|  |  |  |  |  |  | 33 | No function       |
|  |  |  |  |  |  | 34 | No function       |
|  |  |  |  |  |  | 35 | Dynamic effect 15 |
|  |  |  |  |  |  | 36 | Dynamic effect 16 |
|  |  |  |  |  |  | 37 | Dynamic effect 17 |
|  |  |  |  |  |  | 38 | Dynamic effect 18 |
|  |  |  |  |  |  | 39 | Dynamic effect 19 |
|  |  |  |  |  |  | 40 | Dynamic effect 20 |
|  |  |  |  |  |  | 41 | No function       |
|  |  |  |  |  |  | 42 | Dynamic effect 21 |
|  |  |  |  |  |  | 43 | No function       |
|  |  |  |  |  |  | 44 | Dynamic effect 22 |
|  |  |  |  |  |  | 45 | Dynamic effect 23 |
|  |  |  |  |  |  | 46 | Dynamic effect 24 |

|  |  |  |  |  |    |                   |
|--|--|--|--|--|----|-------------------|
|  |  |  |  |  | 47 | Dynamic effect 25 |
|  |  |  |  |  | 48 | Dynamic effect 26 |
|  |  |  |  |  | 49 | Dynamic effect 27 |
|  |  |  |  |  | 50 | Dynamic effect 28 |
|  |  |  |  |  | 51 | Dynamic effect 29 |
|  |  |  |  |  | 52 | Dynamic effect 30 |
|  |  |  |  |  | 53 | Dynamic effect 31 |
|  |  |  |  |  | 54 | Dynamic effect 32 |
|  |  |  |  |  | 55 | Dynamic effect 33 |
|  |  |  |  |  | 56 | Dynamic effect 34 |
|  |  |  |  |  | 57 | Dynamic effect 35 |
|  |  |  |  |  | 58 | Dynamic effect 36 |
|  |  |  |  |  | 59 | Dynamic effect 37 |
|  |  |  |  |  | 60 | Dynamic effect 38 |
|  |  |  |  |  | 61 | Random position 1 |
|  |  |  |  |  | 62 | Random position 2 |
|  |  |  |  |  | 63 | Random position 3 |
|  |  |  |  |  | 64 | No function       |
|  |  |  |  |  | 65 | Random position 4 |
|  |  |  |  |  | 66 | Random position 5 |
|  |  |  |  |  | 67 | Dynamic effect 39 |
|  |  |  |  |  | 68 | Dynamic effect 40 |
|  |  |  |  |  | 69 | No function       |
|  |  |  |  |  | 70 | Dynamic effect 41 |

|    |    |                   |         |                          |             |
|----|----|-------------------|---------|--------------------------|-------------|
|    |    |                   |         | 71-255                   | No function |
| 23 | 23 | Effect speed      | 0-63    | Static effect            |             |
|    |    |                   | 64-158  | Flow slow to fast        |             |
|    |    |                   | 159-160 | Dynamic effect desalting |             |
|    |    |                   | 161-255 | Flow slow to fast        |             |
|    |    |                   |         |                          |             |
| 24 | 24 | Effect desalting  | 0-255   | Dynamic effect desalting |             |
| 25 | 25 | Effect red        | 0-255   | Dynamic effect red       |             |
| 26 | 26 | Effect green      | 0-255   | Dynamic effect green     |             |
| 27 | 27 | Effect blue       | 0-255   | Dynamic effect blue      |             |
| 28 | 28 | Effect white      | 0-255   | Dynamic effect white     |             |
| 29 | 29 | Effect dimmer     | 0-255   | 0-100%                   |             |
| 30 | 30 | Background dimmer | 0-255   | 0-100%                   |             |
| 31 | 31 | Effect transition | 0-255   | Patterns change          |             |
| 32 | 32 | Effect replenish  | 0-255   | Patterns moving          |             |
| 33 | 33 | Forecolor strobe  | 0-255   | Same with CH11           |             |

|    |     |    |    |    |                      |       |                |
|----|-----|----|----|----|----------------------|-------|----------------|
|    | 34  |    | 34 |    | Background<br>strobe | 0-255 | Same with CH11 |
|    | 35  |    | 35 |    | Background<br>option | 0-255 |                |
| /  | 22  | 36 | 22 |    | R1 LED<br>dimmer     | 0-255 | 0-100%         |
|    | 23  | 37 | 23 |    | G1 LED<br>dimmer     | 0-255 | 0-100%         |
|    | 24  | 38 | 24 |    | B1 LED<br>dimmer     | 0-255 | 0-100%         |
|    |     |    | 25 |    | W1 LED<br>dimmer     | 0-255 | 0-100%         |
|    | 25  | 39 | 26 |    | R2 LED<br>dimmer     | 0-255 | 0-100%         |
|    | ... |    |    |    | ...                  | 0-255 | .....          |
|    | 76  | 91 | 94 |    | R19 LED<br>dimmer    | 0-255 | 0-100%         |
|    | 77  | 90 | 95 |    | G19 LED<br>dimmer    | 0-255 | 0-100%         |
|    | 78  | 92 | 96 |    | B19 LED<br>dimmer    | 0-255 | 0-100%         |
|    | /   | /  | 97 |    | W19 LED<br>dimmer    | 0-255 | 0-100%         |
| 22 | 36  | 79 | 93 | 98 | Color temp<br>adjust | 0-255 | 0-100%         |
| 23 | 37  | 80 | 94 | 99 | Strobe               | 0-4   | On             |

|        |                |    |    |     |                      |         |  |
|--------|----------------|----|----|-----|----------------------|---------|--|
|        |                |    |    |     |                      | 5-250   | Flow slow to fast                              |
|        |                |    |    |     |                      | 251-255 | On   |
| 24     | 38             | 81 | 95 | 100 | Red                  | 0-255   | 0-100%   |
| 25     | 39             | 82 | 96 | 101 | Green                | 0-255   | 0-100%   |
| 26     | 40             | 83 | 97 | 102 | Blue                 | 0-255   | 0-100%   |
| 27     | 41             | 84 | 98 | 103 | Effect               | 0-11    | No function                                    |
|        |                |    |    |     |                      | 12-13   | Red  |
|        |                |    |    |     |                      | 14-15   | Green  |
|        |                |    |    |     |                      | 16-17   | Blue   |
|        |                |    |    |     |                      | 18-19   | Red+Green                                      |
|        |                |    |    |     |                      | 20-51   | Two numerical values and a color mixing effect |
| 52-255 | Dynamic effect |    |    |     |                      |         |  |
| 28     | 42             | 85 | 99 | 104 | Dynamic effect speed | 0-255   | From fast to slow                              |

## 09/ Troubleshooting

| Problem  | Potential cause(s)  | Remedies   |
|--|---|--|
| Fixture does not respond or appears to be off. | No power to the fixture.  | Confirm that the power is switched on and cables are plugged in.   |
|  | No output from PSU.   | Replace the PSU.   |
| Fixture suddenly turned off.                   | Power was turned off.   | Check the power supply, switches and breakers  |
| Light output cuts out intermittently.          | Fixture is too hot.   | Check fixture's stored error messages for more information.<br>Allow fixture to cool.<br>Clean fixture.<br>Reduce ambient temperature. |
| Fixture suddenly stopped responding.           | DMX cables were disconnected.   | Inspect DMX cables.  |
| Fixture operates irregularly / abnormal.       | Incorrect DMX address or DMX mode.  | Inspect and enter the correct DMX address or mode  |
|  | DMX link is not terminated.   | Install a XLR 120ohm DMX termination at the end of the DMX link.   |
|  | Bad data link.  | Replace or repair defective cables and/or connections  |
|  | One of the fixtures is defective and is disturbing data transmission on the link. | Track and isolate the corrupted fixture.<br>Have the fixture serviced by a qualified technician.                                       |
| Pan / tilt is skipping / shuddering            | Pan/ tilt locks are not released.   | Release the pan / tilt locks   |
|  | Obstacles are within the required pan / tilt clearance.                           | Inspect and remove any obstacles constraining free operation of the pan / tilt.  |
|  | The Hall element is damaged   | Replace the Hall element   |
|  | The magnetic steel fell out   | Replace the magnetic steel   |

## 10/ Fixture Cleaning

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Regular cleaning is very important for fixture life and performance. Buildup of dust, dirt, smoke particles, fog fluid residues, etc. degrades the fixture's light output and cooling ability.

Cleaning schedules for lighting fixtures vary greatly depending on the operating environment.

It is therefore impossible to specify precise cleaning intervals for the fixture.

Environmental

factors that may result in a need for frequent cleaning include:

- Use of smoke or fog machines.

- High airflow rates (near air conditioning vents, for example).

- Airborne dust (from stage effects, building structures and fittings or the natural environment at outdoor events, for example).

If one or more of these factors is present, inspect fixtures within their first few hours of operation to see whether cleaning is necessary. Check again at frequent intervals. This procedure will allow you to assess cleaning requirements in your particular situation.

Follow these precautions when cleaning the fixture:

- Work in a clean, dry, well-lit area.

- Use gentle pressure only. A soft lint-free cloth dampened with a solution of water and a mild detergent is recommended, under no circumstances should alcohol, solvents or abrasives be used! Use care when cleaning optical components: surfaces are fragile and easily scratched.

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