

Maintenance

● Clean and use frequency

To confirm the power supply have cut off before disconnect the light or repair it , it is very important to keep the light cleaning .not only can keep the light maximum brightness output but also can prolong their use life . Please use the high quality professional glass and soft cloth to clear up the equipment, not permission to use the alcohol and organic liquid clean at least once each year use vacuum dust collector. When the light does not start, check whether the light power supply fuse blown or not, if blow, install the appropriate fuse, and start the light after find out trouble shooting, but please attention to the technically person allowed to carry out maintenance work.

● Product Return Procedure

If it is the products quality problem, the customer can be based on the actual situation, to decide whether need the product parts to replace.

● Complain

1. The salesman will check the details of complained problem, included the item no、 delivered quantity、 delivery time、 faulty and pictures, and the requirement of customer
2. QC and Technology department will analysis the complained problem, and give a final solution to customer
3. Quality Technology Department analysis of customer complaints and give a preliminary identified. The units must be offer analysis and treatment measures on time.

Faulty Disposal

Familiar Faulty	Disposal
Light can not start	1. Check if the fuse burnt out or not 2. Check if the power connect well or not 3. Check if the circuit board +24V or +5V short circuit of earth
Light can be shine well, but can not be control by controller	1. Check if the light's DMX original address setup right or not. Check the connection details of communication control wire.
Some LED not brightness	1. Check if LED lamp damage or not.

nightSun® 夜太阳



SPD031 LED PAR LIGHT User's Manual

Thank you for choosing our product, please carefully read this manual and operate it obey the specification in order to make sure you can correct and safety installing、 operating and maintaining it; We will not take any responsibility for the damage and body injury which caused by the abnormal operation.

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NIGHTSUN PRO LIGHTING

Preface

This Manual includes the important information of installation and operation. Please install and operate the light according to the instructions strictly. And it must be power off when open the light or before repair.

A: Please read the complete contents of this manual (please keep this manual attach with the light for any preview)

B: In order to make sure the correct and safety installation、operation and maintenance, well know and follow to the instructions of Manual is necessary.

C: We will not take any responsibility to the light damage、property loss or body injure which caused by the incorrect installation、operation and maintenance.

NOTICE: The data which inside the Manual maybe changed due to the continuous improvement, and we'll not make another notice. We will keep the right to any specification update during improvement.

Warning: if the protection screen、lens or UV screen got a visible damage, e.g.: scratch or chasm.

● Packing Content:

(accessories)	(Selectable)
1: Signal Cable(1PCS)	a: Bracket
2: User's Manual(1PCS)	b: Clamp
3: Maintenance Card(1PCS)	d: Safety Cable

● Unpacking Instruction:

Please check if all the contents are completed after unpacking? then, check if the light is undamaged? Please you can keep the original package and return to the factory if it's damaged.

● AC Power: Check if the voltage is accordance with the rated power.

● Safety Specifications: All the safety items of operation (includes installation) and before operating.

A. Safety Introduction

1. This light is belong to I degree protection device, so the light must be connect to the ground, please operate to connect the power by the professional person.
2. Make sure the voltage never beyond or less the rated value. Make sure the power cord haven't be damaged or lacerate by the sharp.
3. You must cut off the power before cleaning or stop using.
4. Only allow to use the plug to connect the power cord, please never rudely pull out the plug for avoid to pull out the power cord.

B. Caution:

1. You must be careful when installing the light .To avoid touch the bare cable, or it will cause the deadly electrical shock
2. Never directly look at the beam when using, or will hurt your eyes.
3. To keep the light away from the children and unprofessional person.

C. Operation Rule:

1. This light is only allow to use at the conditions which accordance with the power supply, and only suit use indoor.
2. Please don't shake the light randomly. Please don't roughly operate when mounting or using the light.
3. Please make sure the light don't be divulged in the place where is extreme hot、moisture or dusty. The distance must be over 0.5m between the light and other

object.

1. Please chose the suitable、 safety cable connect the light.
2. Please operate it after be familiar with the function of the light. Many of the damage are caused by the wrongful operation, so non-professional person is prohibited to operate the light.
3. To use the original package when transporting.
4. Please don't randomly modify the light, if the unauthorized or non-professional person dismantle、 repair、 modify lead the fault of the light, we will not afford any guarantee.

Notice: Please make sure it's power off before any installation、 repair and clean!

Introduction

● Product Features:

1. use of high-quality LED lamp source, blending uniform, bright
2. refresh rate up to 800Hz, to meet the requirements of the professional photography arena
3. gray level 256, linear dimming can be achieved.
4. superior sound control mode, you can choose four kinds of sound control mode, high-quality sensitivity and wide dynamic range adjustment, Change according to the rhythm of music, and volume of sound, to create a strong atmosphere at the scene.
5. address code selecting a master machine, slave machine, sound control, auto running.
6. master machine control of all slaves to follow the master machine synchronous operation, synchronous strobe, synchronized self-propelled
7. 6个DMX control channel number, with DIMMER linear dimmer, channel multiplexing, 13 scene modes, 8 kinds of auto running mode, each mode has separate parameters adjusted to produce different results.
8. run-time of scene and auto running have accurate strobe, speed, run time and over-time control.
9. light weight, low noise, line control adopt the powerful MCU and LED drive circuit of advanced stability.
10. suit for stage performances, bars, home party, entertainment and so on.

● Technical Features

1. Control channel: 6DMX channels
2. Operating modes: standard DMX512 controller control mode
3. Appearance: metal shell, streamlined designs.
4. Working environment: indoor, -20 °C ~ 40 °C
5. IP degree: IP33

Technology Parameter

- Voltage: AC110V-240V 60/50HZ
- Power: 18W
- Outline size: 20 × 20.8 × 14cm
Packing Size: 25 × 25 × 28cm
- N/W: 1.2Kg
G/W: 1.8Kg
- LED lamp: 124PCS high brightness LED(R40、 G42、 B42)
 1. LED size: φ 10
 2. LED light projector angle: 15° ± 1°

Installation

1. Install/replace LED lamp

Note: If there is any damage of LED light-emitting diodes, please arrange the technical personnel to carry out maintenance.



First, after unscrewed the screw of shell and then pull out it. Then unscrewed the 4pcs screw on the fixed LED light board, you can remove the LED light board. If there is some damage to the LED, you need use the thermostat electric iron to be removed. Installation method is just the opposite.

Warning

1: The light power supply must be disconnected when replacement of the LED does not bright

2: you can repair the light before you must use a thermostat with anti-static electric iron, and wear anti-static rings.

● Power supply, wire Connection

Using a dedicated plug to connect the LED PAR light and power, should be pay attention to whether the voltage and frequency between signs and on the power supply are the same or not. Suggested that each light has a separate power supply switch, this can be turned on or off at random for each LED PAR light. The light selection of input voltage and frequency parameters as follows:

Voltage	AC100V ~ 240V	Frequency	60/50Hz
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If the power cable is damaged, please contact the area agents or ask professional to replace; please use the same specification cable when you replace the power cable. Tip: When connecting the power, ground wire must (yellow / green color wire) safety grounding, electrical installation must comply with all relevant standards.

● Fixed installation of lighting (include hook and safety rope)



Before positioned the light, ensure the stability of the installation site. In the reverse hanging installation, use two sets of M10 bolts with a professional big hook, link the hanging screw hole on the bottom of the light, must be ensure that the light will not fell down from support rack, through the support rack and light hand use the safety rope for auxiliary lifting handle to ensure safety, to prevent the light falling and sliding. Light in the installation, the bottom prohibit pedestrians. Safety rope

regularly checked whether there is wear and tear, whether there is loose hook. The manufacturer does not take any responsibility if the light falling because hanging installation is not stable.

Warning

1. Hook use only for light lifting.
2. Hook as a handle move the light to prohibit, carrying, please use the handle.

Operation

1, DIP switch control list (8, 9, 10 functional-bit)

A, the master machine static mode

1	2	3	4	5	6	7	8	9	10	OFF
										ON

Note: enter master machine static mode, 1,2 is dimmer brightness,3,4 is strobe, 5,6,7 is red green blue.

Address code	Function	Function bit status	
1	DIMMER1		
2	DIMMER2		
3	STROBE1		
4	STROBE2		
5	RED		
6	GREEN		
7	BLUE		
8	SOUND		
9	AUTO		OFF
10	MASTER/SLAVE	ON	OFF

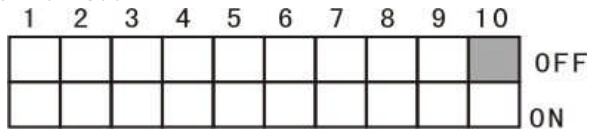
B、master machine auto running mode

1	2	3	4	5	6	7	8	9	10	OFF
										ON

Note: enter master machine auto running mode, 1,2,3 is mode speed.4,5,6 is select auto running mode.

Address code	Function	Function bit status	
1	INVALID		
2	INVALID		
3	INVALID		
4	AUTO1		
5	AUTO2		
6	AUTO3		
7	INVALID		
8	SOUND	ON	
9	AUTO		OFF
10	MASTER/SLAVE	ON	

D、slave machine mode



Note:when enter slave machine mode,1,2,3,4,5,6,7,8,9 is address code.

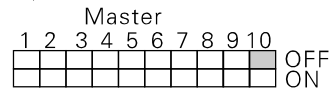
Address code	Function	Function bit status	
1	ADDR1		
2	ADDR2		
3	ADDR3		
4	ADDR4		
5	ADDR5		
6	ADDR6		
7	ADDR7		
8	ADDR8	ON	
9	ADDR9		OFF
10	MASTER/SLAVE	ON	

Appendix

1. an example master-slave connection

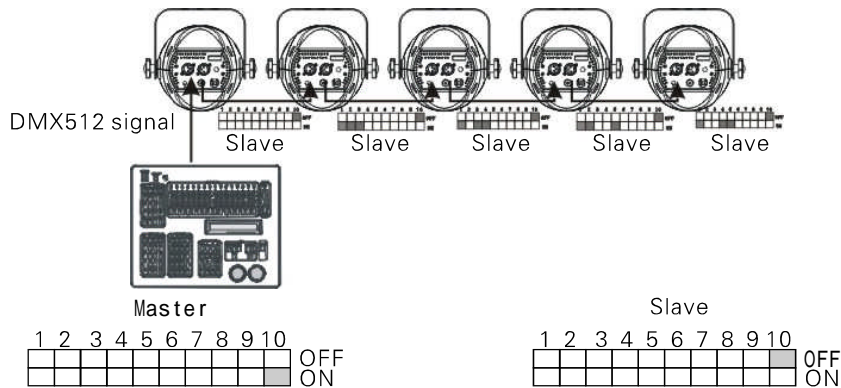
Note: Due to the signal-driven approach is the 485 drivers, the main cable connect the lights of the largest illuminated best not more than 32 units, if need connect more lights, Please add DMX amplifier on the main cable, otherwise the signal will be disturbance.

A、With DMX512 controller slave mode

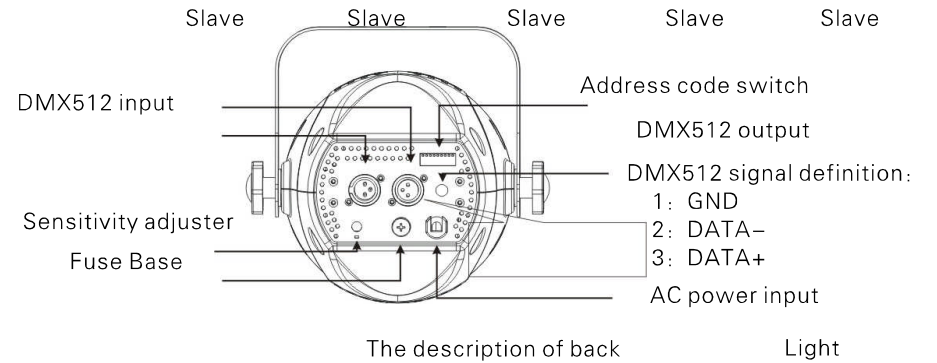
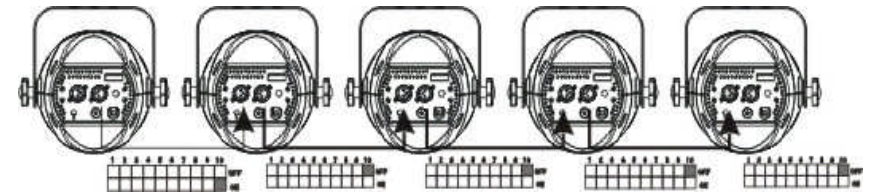


Note:when enter slave machine mode,1,2,3,4,5,6,7,8,9 is address selection switch.

B、Without DMX512 controller master slave machine mode.



1,2,3,4,5,6,7,8,9 is address selection switch.



2、DMX channel function list

Channel	DMX value	Function
CH1	0-255	DIMMER
CH2	0-255	RED
CH3	0-255	GREEN(SPEED/FADE)
CH4	0-255	BLUE(RUN TIME)
CH5	0-255	STROBE(STROBE)
Ch6	0-255	AUTO

(1) 、 channel CH5 control Strobe speed

DMX value	Strobe Speed
0-5	NO function
6-12	1Hz
13-25	2Hz
26-38	3Hz
39-51	4Hz
52-64	5Hz
65-77	6Hz
78-90	7Hz
91-103	8Hz
104-116	9Hz
117-129	10Hz
130-142	11Hz
143-155	12Hz

156-168	13Hz
169-181	14Hz
182-194	15Hz
195-207	16Hz
208-220	17Hz
221-233	18Hz
234-246	19Hz
247-255	20Hz

(2), AUTO running select channel CH6 multiplexing capabilities

Note: when the value of AUTO running channel CH6 is 0 ~ 9, does not work, DMX channel function in accordance with the above fifth point of DMX channel menu; when the value of AUTO running channel CH6 is 10 ~ 255, AUTO-channel can work, DMX channel function in the following menu

AUTO channel CH6 channel list	
DMX value	Function
0-9	Ineffective
10-19	SCENE1 R-G-B
20-29	SCENE2 R-RG-GB
30-39	SCENE3 R-RB-G
40-49	SCENE4 G-B-R
50-59	SCENE5 G-RG-B
60-69	SCENE6 G-RG-RB
70-79	SCENE7 B-G-R
80-89	SCENE8 B-GB-RB
90-99	SCENE9 B-GR-RG
100-109	SCENE10 RG-GB-RB
110-119	SCENE11 RB-GB-RG
120-129	SCENE12 RB-R-RG
130-139	SCENE13 GB-B-R
140-149	AUTO1 Colorful light enter and back
150-159	AUTO2 Colorful fast enter slow back
160-169	AUTO3 Colorful slow enter fast back
170-179	AUTO4 Strobe from slow to fast
180-189	AUTO5 Sync Strobe
190-199	AUTO6 Two kinds of color changes at different speeds
200-209	AUTO7 Asynchronous Strobe
210-219	AUTO8 Model combined cycle
220-229	SOUND1 Colorful jump
230-239	SOUND2 Colorful flicker
240-249	SOUND3 Brightness is brightness and dark flicker
250-255	SOUND4 Maximum brightness flicker

3.channel CH3 multiplexing function (CH6 effective)1

Channel CH3 control AUTO speed	
DMX value	Function
0-35	Speed1
36-71	Speed2
72-107	Speed3
108-143	Speed4
144-179	Speed5
180-215	Speed6
216-251	Speed7
252-255	Speed8

Channel CH3 control scene over-time Fade		
DMX value	Function	Time Seconds
0-19	Fade1	1 second
20-39	Fade2	2 second
40-59	Fade3	3 second
60-79	Fade4	4 second
80-99	Fade5	5 second
100-119	Fade6	6 second
120-139	Fade7	7 second
140-159	Fade8	8 second
160-179	Fade9	9 second
180-199	Fade10	10 second
200-239	Fade11	11 second
240-255	Fade12	12 second

(4)、channel CH4 multiplexing function(CH6 effective)

Channel CH4 control the running time of the scene Run time		
DMX value	Function	Time (minutes)
0-24	Time1	0.5 minute
25-49	Time2	1 minute
50-74	Time3	1.5 minute
75-99	Time4	2 minute
100-124	Time5	2.5 minute
125-149	Time6	3 minute
150-174	Time7	3.5 minute
175-199	Time8	4 minute
200-224	Time9	4.5 minute
225-249	Time10	5 minute
250-255	Time11	5.5 minute