


# 18pcs 4in1 Indoor LED Par Light

PAR-MPI1820D



CE RoHS

## User Manual

 Please read this user manual before using this product !

Keep it for further reference!

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Thank you for using our product! Please read this manual carefully and completely. For technical reference in future, please keep this user manual well. This user manual contains all installation and operation information of this LED pAR Light, it's very useful for user to install and operate the light. Please strictly abide by the relevant instruction for the installation and operation.

This light has very beautiful appearance. Combining the features of the LED energy-saving and environment-protective, using high efficiency constant current & new heat dissipation technology, 4096 Grey Scale adjusted and create revise technology to make the dimmer to be more smoothly. This par light is applying for the big show, stage, theatre, and other indoor places.

This light meets the following criteria:

GB7000.1-2007/IEC60598-1:2003

GB7000.217-2008/IEC60598-2-17:1984+A2:1990

## I PRODUCT MAIN FEATURES

- Advantages of LED technology extremely long life, energy-saving and environment-protective;
- Low power consumption, minimal heat emission, maintenance free with brilliant light radiation;
- Equipped with 18pcs 12W RGBW 4-in-1 LEDs;
- Continuous RGBWAUV color changing;
- DMX-controlled operation or stand alone operation with master/slave function;

- Have three kinds of strobe effect (random strobe, pulse-effect in sequences, strobe effect);
- Rainbow-effect with adjustable speed;
- DMX-control via every standard DMX controller.

## II OVERVIEW AND DIMENSIONS



All dimensions are in millimeters

## III SAFETY INFORMATION

### ※Important

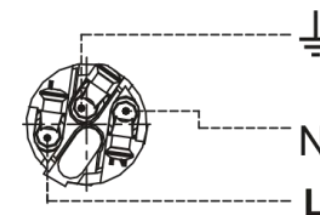
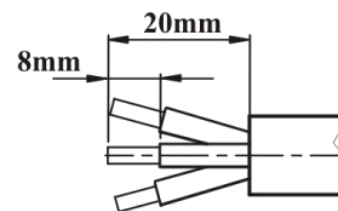
Every person involved with the installation, operation and maintenance of this device has to be qualified and follow the instructions of this manual. Manufacturer will not with responsibility for those operations which are not according to this Instruction.

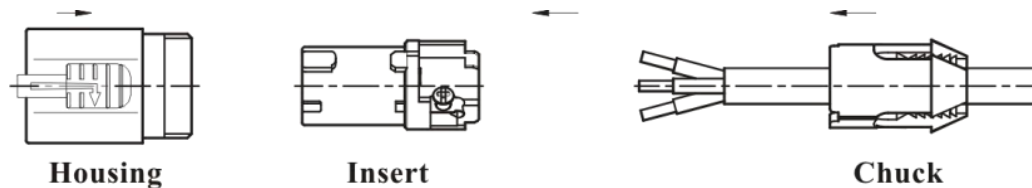
- Verify that the voltage matches the rated voltage.
- When the voltage is 110V, Do not connect more than 10 lightings in total to AC mains power in one interconnected daisy chain

- When the voltage is 220V, Do not connect more than 20 lightings in total to AC mains power in one interconnected daisy chain
- Before using the fixture, check that all power distribution equipment and cables are in perfect condition and rated for the current requirements of all connected devices.
- Always ground (earth) the fixture electrically.
- Avoiding hit the Light when you are move or install the light.
- The minimum distance between light-output and the illuminated surface must be more than 0.5 meters. Keep all combustible materials (for example fabric, wood, paper) at least 0.2 meters away from the fixture.
- Do not expose the fixture to rain or moisture.
- Avoid looking directly into the light source (especially those who suffer from epileptic fits)
- Maximum ambient temperature ( $T_a$ ) is 40°C. Do not operate fixture at temperatures higher than this.
- The Maximum surface temperature is 50°C
- When suspending the fixture above ground level, verify that the structure can hold at least 10 times the weight of all installed devices.
- Verify that all external covers and rigging hardware are securely fastened and use an approved means of secondary attachment such as a safety cable.

## IV POWER CONNECTION

### INSTALLING A NENUTRIK CONNECTOR ON A POWER CABLE





Put bushing and chuck onto the cable.

Prepare cable as shown above. The power cable must be a three-conductor 2.5mm<sup>2</sup> cable.

Insert the wire into the terminals and fasten the clamping device by a flat screw driver.

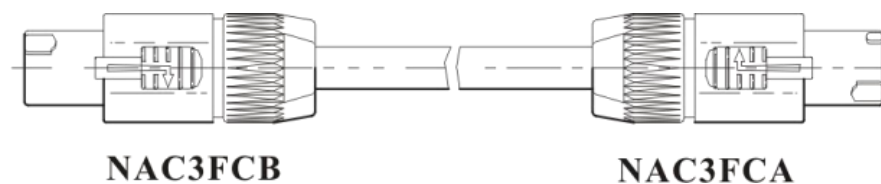
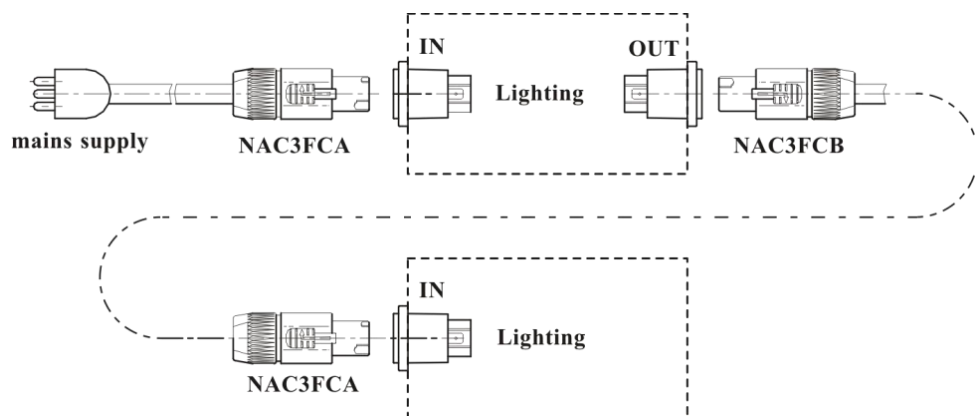
Push insert and chuck into housing (pay attention to the guiding keyway).

Fasten bushing.

The color-coding schemes and some possible pin identification schemes; if pins are not clearly identified, or if you have any doubts about proper installation, consult a qualified electrician.

### RELAYING POWER TO OTHER DEVICES

The lightings can be linked in a chain by power cables which installed a blue and a light-gray connectors on the two ends. The light-gray connector connects to the power out socket of the first lighting, and the blue connector connects to the power in socket of the subsequent lighting, and so on.



The power cable must be a three-conductor 2.5mm<sup>2</sup> cable.

When the voltage is 110V, Do not connect more than 10 lightings in total to AC mains power in one interconnected daisy chain.

When the voltage is 220V, Do not connect more than 20 lightings in total to AC mains power in one interconnected daisy chain.

Wire color	Conductor	Symbol
Brown	Live	L
Blue	Neutral	N
Yellow/green	ground	

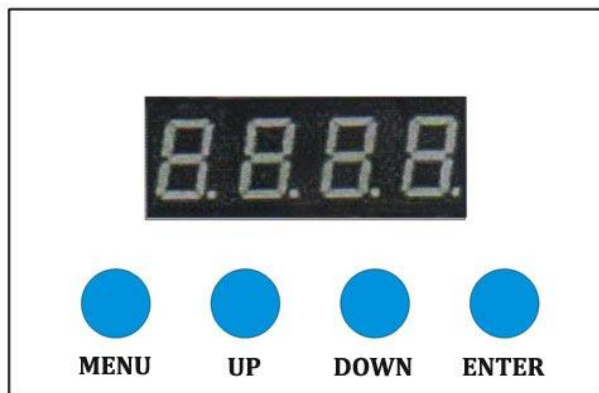
### PHYSICAL INSTALLATION

This lighting can be placed on a horizontal surface such as a stage or clamped to a truss or similar rigging structure in any orientation using a rigging clamp.

When suspending the fixture above ground level, verify that the structure can hold at least 10 times the weight of all installed devices.

Verify that all external covers and rigging hardware are securely fastened and use an approved means of secondary attachment such as a safety cable.

### V CONTROL PANNEL

**BUTTON**

- SET/MENU** Call the main menu, or escape the current menu, (i.e. return to the upper menu and give up the selected item or parameter).
- UP** Browse the menu item forward or increase the parameter.
- DOWN** Browse the menu item backward or decrease the parameter.
- ENTER** Confirm the selected item or parameter, (i.e. enter into the next menu, or escape the current menu and save the selected item or parameter).

**INDICATOR**

There are 4 dots at the bottom of the digital tube, from left to right as:

1. DMX signal LED indicator;
2. Memory writing indicator, (Press **ENTER** after amending the DATA, This Dot will be light up, it means the Data is saving);
3. Power indicator;
4. Keyboard available indicator.

**MAIN MENU**

Press **SET/MENU** to turn the sub-menu

DISPLAY	FUNCTION	OPERATION
06 A.***	DMX mode(the "A" will flash when control mode not confirmed, the "." will not flash under in slave mode, "****" will flash when the DMX address is not confirmed.	When show "A.****", press <b>ENTER</b> button, the "****" will flash, then press <b>UP/DOWN</b> to adjust the DMX address value, then press <b>ENTER</b> keep the setting.
AF.**	Gradual change automatic running mode(**is the running speed, from 1-99.)	Press <b>SET</b> button choose "AF.**", then press <b>ENTER</b> button change into gradual change automatic mode, then press <b>ENTER</b> button, the "***" will flash, then press <b>UP/DOWN</b> button to adjust the speed which you need.
AL.**	Jump change automatic running mode(**is the running speed, from 1-99.)	Press <b>SET</b> button choose "AL.**", then press <b>ENTER</b> button change into jump change automatic mode, then press <b>ENTER</b> button, the "***" will flash, then press <b>UP/DOWN</b> button to adjust the speed which you need.
MS.**	Sound active running mode(**is the sensitivity value, from 0-99-FL.)Note: only some item has sound active function	Press <b>SET</b> button choose "MS.**", then press <b>ENTER</b> button change into sound active mode, then press <b>ENTER</b> button, the "***" will flash, then press <b>UP/DOWN</b> button to adjust the speed which you need.
d1.**	Red signal cyclorama running mode(**is the LEDx dimmer value 0-99-FL	Press <b>SET</b> button choose "d1.**", then press <b>ENTER</b> button change into red signal cyclorama mode, then press <b>ENTER</b> button, the "***" will flash, then press <b>UP/DOWN</b> button to adjust the brightness which you need.

d2.**	Green signal cyclorama running mode(**is the LEDx dimmer value 0-99-FL	Press <b>SET</b> button choose "d2.**", then press <b>ENTER</b> button change into green signal cyclorama mode, then press <b>ENTER</b> button, the "***" will flash, then press <b>UP/DOWN</b> button to adjust the brightness which you need.
d3.**	Blue signal cyclorama running mode(**is the LEDx dimmer value 0-99-FL	Press <b>SET</b> button choose "d3.**", then press <b>ENTER</b> button change into blue signal cyclorama mode, then press <b>ENTER</b> button, the "***" will flash, then press <b>UP/DOWN</b> button to adjust the brightness which you need.
d4.**	White signal cyclorama running mode(**is the LEDx dimmer value 0-99-FL	Press <b>SET</b> button choose "d4.**", then press <b>ENTER</b> button change into white signal cyclorama mode, then press <b>ENTER</b> button, the "***" will flash, then press <b>UP/DOWN</b> button to adjust the brightness which you need.
dF.**	Strobe running mode(**is the strobe speed 0-99-FL	Press <b>SET</b> button choose "dF.**", then press <b>ENTER</b> button change into strobe running mode, then press <b>ENTER</b> button, the "***" will flash, then press <b>UP/DOWN</b> button to adjust the speed which you need.
t.**	current temperature of the led lamp board(℃)	
V.**	Version of software	
H.on/H.oF F	Lose DMX setting(on means keep the last value, oFF means delay reset	Press <b>SET</b> button to choose H.on/H.off, then press <b>ENTER</b> , the on/off is flash, press <b>UP/DOWN</b> to choose the function which you need, then press <b>ENTER</b> save.

Under DMX mode, the last "." flicker means the signal connection succeed.

Under other master mode, the last "." keep light;

When color temperature control error, the "...." keep light on.

## VI DMX PROTOCOL

CH	Value	Function
CH1	000←→255	<b>Dimmer, 0~100%</b>
CH2	000←→255	<b>Red dimmer, 0-100%</b>
CH3	000←→255	<b>Green dimmer, 0-100%</b>
CH4	000←→255	<b>Blue dimmer, 0-100%</b>
CH5	000←→255	<b>White dimmer, 0-100%</b>
CH6	000←→004	<b>Strobe</b> No strobe
	005←→255	Strobe, from slow to fast
CH7	000←→009	<b>Color change</b> No Function
	010←→026	Preset Color 1
	027←→043	Preset Color 2
	044←→060	Preset Color 3
	061←→077	Preset Color 4
	078←→094	Preset Color 5
	095←→111	Preset Color 6
	112←→128	Preset Color 7
	129←→145	Preset Color 8
	146←→162	Preset Color 9
	163←→179	Preset Color 10
	180←→196	Preset Color 11
	197←→213	Preset Color 12
	214←→230	Preset Color 13
	231←→247	Preset Color 14
	248←→255	Preset Color 15

CH8	000←→004	<b>Macro Function</b>
	005←→100	No Function
	101←→200	Skip
	201←→255	Slip
CH9	000←→255	Audio
		<b>Speed, Skip or Slip speed</b>

Note: under DMX512 mode, there is no light setting into master/sound active/strobe mode, if not, the signal will mutual interference. Press SET when power on, the display shows Axxx OR Sxxx means the light under DMX 512 mode, if shows other information means the light is not under DMX 512 mode.

## VII TECHNICAL SPECIFICATION

### Light Sources

- LED: 18pcs 12W 4in1 RGBW LEDs
- Lifespan: 500,000h
- Color: RGBW color mixing

### Optics

- Beam angle: 25degree(45degree is optional)
- Dimmer: 0-100% linear dimmer
- Strobe: 1-25 times/second

### Light Output

- Optimal projection distance: 4-15m
- Grey scale: 4096degree

### Control

- Control mode: DMX-512 mode, Auto mode, Master/slave mode
- DMX channel: 4CH, 9CH
- Display of control panel: digital tube + buttons
- Effect: 0~100% dimmer, strobe, color change, color fade

### Power Supply

- Related voltage: AC100V-240V, 50/60Hz

- Related power: 180W

### Construction

- Body dimension: D315\*W295\*H248mm
- Net weight: 3kg
- Shell color: black
- Shell material: Aluminum die casting housing

### Working Environment

- Working temperature: -25-40℃
- Cooling: Fan
- Protection rating: IP20

**Innovation, Quality, Performance, Achieving Users' Value!**