Operation Manual

LED PAR 4IN1 WITH BATTERY can make very bright colorful and dynamic light scenery effects. It is widely applied to entertainment hall, stage, social club and indoor building decoration. The front operation plant has four digital tube display. You can operate it through the four buttons---MODE, SET UP, UP, DOWN. It can stock running mode when it is off. You can find last running mode when it is on next time.

A, Specification:

• Weight: 5kgs

• Size: $30.5 \times 27 \times 16.3$ cm

● Power input: AC100V-240V/50HZ-60HZ

• Wattage:95W

LEDS: 6PCS 8W (4 in 1)Beam angle of LEDs: 25 degree

• 3PIN female XLR socket and 3PIN male XLR socket

• Built-in microphone

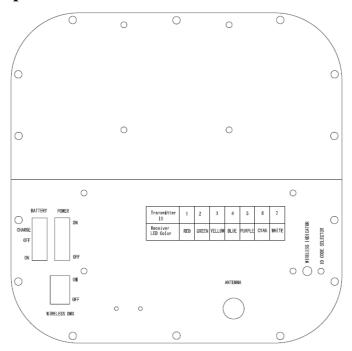
Four button LED digital display

● IR remote and wireless DMX module control available

• Battery inside for convenient use(5.5 hours charge time,7.1 hours full load work time with a full charge)

• Maximum 6pcs fixtures can be daisy chained together

B,The rear panel picture:



Power switch:Set the input power on/off.

Wireless DMX switch: Set the wireless DMX module control on/off.

Battery switch:Manual connect/disconnect the battery with the lighting,to extend the battery life.When this switch is set to CHARGE position means the battery is connected with the LED lighting,the input power will only charge the battery and LED PCB output will be off when the input power is on,the battery is in a fast charging status; when this switch is set to OFF position means the battery is disconnected with the LED

lighting and the battery will not supply power to the LED lighting when the input power is off; when this switch is set to ON position means the battery is connected with the LED lighting and the battery will supply power to the LED lighting when the input power is off.

NOTE: The battery is being charged no matter which position the battery switch is on when the input power is on. When the battery switch is in CHARGE position, it is in a fast charging status, when the battery is in ON and OFF position, it is in a slow charging status.

C,The usage method of the battery:

1. Handling of Batteries

1.1 Prohibition short circuit

Never make short circuit battery. It generates very high current which causes heating of the batteries and may cause electrolyte leakage, gassing or explosion these are very dangerous. The LIR tabs may be easily short-circuited by putting them on conductive surface. Such outer short circuit may lead to heat generation and damage of the battery. An appropriate circuitry with PCM shall be employed to protect accidental short circuit of the battery pack.

1.2 Mechanical shock

Falling, hitting, bending, etc. may cause degradation of LIR characteristics.

2. Notice for Assembling Battery Pack

Shocks, high temperature, or contacts of sharp edge components should not be allowed in battery pack assembling process.

3. Others

- 3.1 Battery connection
- 1) Direct soldering of wire leads or devices to the battery is strictly prohibited.
- 2) Lead tabs with pre-soldered wiring shall be spot welded to the batteries. Direct soldering may cause damage of components, such as separator and insulator, by heat generation.
- 3.2 Prevention of short circuit within a battery pack

Enough insulation layers between wiring and the batteries shall be used to maintain extra safety protection. The battery pack shall be structured with no short circuit within the battery pack, which may cause generation of smoke or firing.

- 3.3 Prohibition of disassembly
- 1) Never disassemble the batteries

The disassembling may generate internal short circuit in the battery, which may cause gassing, firing, explosion, or other problems.

- 2) Electrolyte is harmful
- LIR battery should not have liquid from electrolyte flowing, but in case the electrolyte come into contact with the skin, or eyes, physicians shall flush the electrolyte immediately with fresh water and medical advice is to be sought.
- 3.4 Prohibition of dumping of batteries into fire

Never incinerate nor dispose the batteries in fire. These may cause explosion of the batteries, which is very dangerous and is prohibited.

13.5 Prohibition of batteries immersion into liquid such as water

The batteries shall never be soaked with liquids such as water, seawater, drinks such as soft drinks, juices, coffee or others.

13.6 Battery batteries replacement

The battery replacement shall be done only by either batteries supplier or device supplier and never be done by the user.

13.7 Prohibition of use of damaged batteries

The batteries might be damaged during shipping by shock. If any abnormal features of the batteries are found such as damages in a plastic envelop of the battery, deformation of the battery package, smelling of an electrolyte, an electrolyte leakage and others, the batteries shall never be used any more. The batteries with a smell of the electrolyte or a leakage shall be placed away from fire to avoid firing or explosion.

4. Storage of the Batteries

The batteries should be stored at room temperature, charged to about 30% to 50% of capacity. We recommend that batteries be charged about once per half a year to prevent over discharge.

5. Other Chemical Reaction

Because batteries utilize a chemical reaction, battery performance will deteriorate over time even if stored for a long period of time without being used. In addition, if the various usage conditions such as charge, discharge, ambient temperature, etc. are not maintained within the specified ranges the life expectancy of the battery may be shortened or the device in which the battery is used may be damaged by electrolyte leakage. If the batteries cannot maintain a charge for long periods of time, even when they are charged correctly, this may indicate it is time to change the battery.

D,The function description of the LED light:

It has ten kinds of operation mode, they are as follows:

Static color select mode,Manual dimmer color mode,Color jumping mode,Color dreaming mode,Auto-run program mode,Sound active mode,Battery quantity display mode,Display on/off select mode,Slave mode,DMX mode

Here above ten kinds running mode are selected by MODE button. Press MODE and UP button at the same time, when it is on, you can initialize it at extra factory setting, running on the auto-run program mode.

MODE	SET UP	UP/DOWN manual	instruction			
manual	manual					
STATIC	Color select	8888.~8888	Select the 15 static colors			
COLOR	Flash	88.88.~88.RB	Adjust the flash speed, \$\overline{B}\over			
SELECT			off, 55.55 is slowest, 55.55 is fastest			
MODE						
	Red dimmer	8.888~8.88B	Adjust the intensity of the red color			
	Green dimmer	8888.~888 <i>8</i>	Adjust the intensity of the green color			
DIMMER	Blue dimmer	8888.~888 <i>8</i>	Adjust the intensity of the blue color Adjust the intensity of the white color			
MODE	White dimmer	R.D.D.D.~R.2.8.S.				
	Flash	88.80.~88.RB	Adjust the flash speed, \(\begin{aligned} \beta \beta \end{aligned} \\ \beta \end{aligned} \] is flash			
			off, 85.00 is slowest, 85.00 is fastest			
COLOR	Jumping speed	88.88.~88.88	Adjust the speed of color jumping			
JUMPING	set		mode, IPBI is slowest, IPBI is fastest			
MODE	Flash	88.88.~88.RS	Adjust the flash speed, \$\overline{B}\over			
			off, 888 is slowest, 888 is fastest			
COLOR	Dreaming	88.8H.~88.H8	Adjust the speed of color dreaming			
DREAMING	speed set		mode, #200 is slowest, #200 is fastest			

MODE	Flash	88.80.~88.HB	Adjust the flash speed, \$\int \beta
			off, FBBB is slowest, BBBB is fastest
AUTO	Auto run speed	AB.BA.~AB.AB.	Adjust the speed of auto run mode, All is
RUN	set		slowest, #### is fastest
MODE	Flash	<i>66.00.~66.</i> 46	Adjust the flash speed, \$\overline{15.00}\$ is flash off, \$\overline{5.00}\$ is slowest, \$\overline{5.00}\$ is fastest
SOUND	Sensitivity	8888.~888 8	Adjust the sensitivity of the sound-active,
MODE	select		8000 is sound-active off, 8000 is the
			lowest level, 548 is the highest level
BATTERY	Battery	BHHH/	Display the remaining battery electric quantity.
QUANTITY	remaining	8880~8H88	BREE means that the battery is disconnected;
DISPALY	electric		8000~8000 means that the battery is
MODE	quantity		connected: DDD means the remaining battery
	display		electric quantity is empty, 5HDD means that
			the remaining battery electric quantity is full.
DISPLAY	Display on/off	8888	LED digital tube display always on
ON/OFF	select	8688.	LED digital tube display off
MODE			LED digital tube display off
SLAVE	Slave mode	8888.	Set the unit into slave mode
MODE			
DMX MODE	Address set	8.8.8H~8.8B8	Sets the DMX starting address

1. Static color select mode

Press"MODE"button, select the static color select mode. There are two modes in the static color select mode. You can select them by pressing the "SET UP" button.

1) Static color select

Press"SET UP"button until the four digital tube displays" \[\begin{align*} \begi

2) Flash speed select

Press"SET UP"button until the four digital tube displays" $BBB \sim BBB \sim BBB$ ", then press"UP"or "DOWN"button to select the static color flash speed 00-15,00 is flash off,01 is the slowest flash speed,15 is the fastest flash speed.

2. Manual dimmer color mode

1) Manual dimmer color select

2) Flash speed select

Press"SET UP"to choose the flash speed select mode.At this time,the four digital tube displays" \$\overline{1}\over

3. Color jumping mode

Press"MODE"button, select the color jumping mode. There are two modes in the color jumping mode. You can select them by pressing the "SET UP" button.

1) Color jumping speed set

2) Flash speed select

Press"SET UP"button until the four digital tube displays" $BBB \sim BBB = 1000$ ", then press"UP"or "DOWN"button to select the color jumping flash speed 00-15,00 is flash off,01 is the slowest flash speed,15 is the fastest flash speed.

4. Color dreaming mode

Press"MODE"button, select the color dreaming mode. There are two modes in the color dreaming mode. You can select them by pressing the "SET UP" button.

1) Color dreaming speed set

Press"SET UP"button until the four digital tube displays" \$\overline{\pi} \overline{\pi} \overli

2) Flash speed set

Press"SET UP"button until the four digital tube displays" \$\overline{\pi} \overline{\pi} \overli

5. Auto-run program mode

Press"MODE"button, select the auto-run program mode. There are two modes in the auto-run program mode. You can select them by pressing the "SET UP" button.

1) Auto run speed set

Press"SET UP"button until the four digital tube displays" ALD ~ ALD ... Press"UP"or "DOWN"button to select the auto run speed 01-16,01 is the slowest speed,16 is the fastest speed.

2) Flash speed select

Press"SET UP"button until the four digital tube displays" \$\overline{\pmathbb{I}} \overline{\pmathbb{B}} \overline{\pmathbb{B}}\$ ",then press"UP"or "DOWN"button to select the color dreaming flash speed 00-15,00 is flash off,01 is the slowest flash speed,15 is the fastest flash speed.

6. Sound active mode

Press"MODE"button, select the sound active program mode, the four digital tube displays" \$\frac{1}{2} \frac{1}{2} \frac{1}{2}

7. Battery quantity display mode

When the battery is being charged or the remain electric quantity is less than 30%, the digital tube display will be flicker.

8. Display off/on select mode

Press"MODE" button ,select display off/on select mode. Press UP or DOWN to select the four digital tube display on/off. When the digital tube displays "3500" means that the display will on in any situation, when the digital tube displays "3500" means that the display will be automatically off after 20 seconds if there is no operation.

9. Slave mode

Press"MODE"button, select salve mode, the four digital tube displays" \$\overline{\pmathbb{B}} \overline{\pmathbb{B}}\$." The unit will be controlled by the master unit now.

10. DMX mode

DMX MODE:7 DMX channels

CH7		СН6	CH5	CH4	СНЗ	CH2	CH1	
MODE	DMX VALUE	FUNCTION						
1	0-13	No function			White 0-255 (dim→ bright)	Blue 0-255 (dim→ bright)	Green 0-255 (dim→ bright)	Red 0-255 (dim→ bright)
2	14-26	Red						
3	27-38	Green						
4	39-51	Blue						
5	52-64	White						
6	65-76	R+G						
7	77-89	R+B						
8	90-102	R+W	0-15=No use					
9	103-114	G+B	16-255=Flash	-				
10	115-127	G+W	$(slow \rightarrow fast)$	0-255				
11	128-140	B+W		(dim→				
12	141-152	R+G+B		bright)	No function	No	No	No
13	153-165	R+G+W				function	function	function
14	166-178	R+B+W						
15	179-190	G+B+W						
16	191-204	R+G+B+W						
17	205-217	Color jumping			Speed			
18	218-230	Color dreaming	-		0-255			
19	231-242	Auto run			(slow→ fast)			
20	243-255	Sound active	Sensitivity 32-255 (insensitive→ sensitive)		No function			

Note:R---red G---green B---blue W---white

E. Operation by IR remote:

You can also operate this product by IR remote, the distance available is at most 10M.

Notice: IR remote is ready to control the light which is in any working mode.

The picture of the IR remote:



Select program Mode

Press SELECT PROG button to cycle among static color select mode, color dreaming mode, color jumping mode and auto run mode. Each press of this button will change to the next mode.

- 1. When the red color glow and then automatically off indicates that the LED par goes into the static color select mode. You can press "+" and "-" or put in two number 00-15 to choose the 16 static colors in this mode. You can also press FLASH to turn on flash and press "+" and "-" or put in two numbers 00-15 to adjust the flash speed, 00 is to turn off flash, 01 is the slowest speed, 15 is the fastest speed.
- 2. When the green color glow and then automatically off indicates that the LED par goes into color jumping mode,press "+"and "-" or put in two numbers 01-16 to adjust the color jumping speed,01 is slowest,16 is the fastest. You can also press FLASH to turn on flash and press "+"and "-" or put in two numbers 00-15 to adjust the flash speed,00 is to turn off flash,01 is the slowest speed,15 is the fastest speed.
- 3. When the blue color glow and then automatically off indicates that the LED par goes into color dreaming mode,press "+"and "-" or put in two numbers 01-16 to adjust the color dreaming speed,01 is slowest,16 is the fastest. You can also press FLASH to turn on flash and press "+"and "-" or put in two numbers 00-15 to adjust the flash speed,00 is to turn off flash,01 is the slowest speed,15 is the fastest speed.
- 4. When the white color glow and then automatically off indicates that the LED par goes into auto run mode, press "+"and "-" or put in two numbers 01-16 to adjust the auto run speed,01 is slowest,16 is the fastest. You can also press FLASH to turn on flash and press "+"and "-" or put in two numbers 00-15 to adjust the flash speed,00 is to turn off flash,01 is the slowest speed,15 is the fastest speed.

Sound Active Mode

Press SL/SA button to cycle among slave mode and sound active mode to choose sound active mode. Each press of this button will change to the next mode.

You can press "+" and "-" or put in number 1-8 to adjust sound active sensitivity level,1 is the lowest level,8 is the highest level.

M/S mode

Press SL/SA button to cycle among slave mode and sound active mode to choose slave mode. Each press of this button will change to the next mode.

Select light program mode

Press R/G/B/W to choose the four different colors, then press "+" and "-" or put in three numbers 000-255 to adjust the intensity of the light. You can press FLASH to turn on flash and press "+" and "-" or put in two numbers 00-15 to adjust the flash speed, 00 is to turn off flash, 01 is the slowest speed, 15 is the fastest speed.

DMX MODE

Press D to display DMX mode.

Set ADDR

Press this button to set the DMX address or initialize the program, then the red, green, blue and white lights will flash 2~3 times. Please put in 3 number, for example, 1 2 3. After the red light is on, please put in the first number. After the first number is accessed the green light will be on, then put in the second number. When the blue light will be on, please put in the third number. After all the three number are put in, the red, green and blue lights will flash 2~3 times, which indicate that the DMX address is right and it go in to the DMX MODE automatically. If the address is wrong the red light will be on. New DMX address should be put in.

If the 951 are put in, red and green lights will be on. Put "0" to initialize the program. If the wrong address is put in, the red light will be on, indicating new address should be put in. Then the system will run in the auto run mode.

Black Out mode

Press "BLACK OUT" to set the LED lights power on or power off by pressing this button.

F. Operation by wireless DMX module:

You can also operate this product by wireless DMX module, the distance available is 400M at most. NOTE:

- 1. You have to set the wireless DMX switch to on position when using it.
- 2. This wireless DMX controller board can both be used as receiver and transmitter. When the LED lighting is set to slave mode and DMX mode, this wireless DMX controller board will be as receiver automatically; when the LED lighting is set to static color select mode, manual dimmer color mode, color jumping mode, color dreaming mode, auto-run program mode and sound active mode, this wireless DMX controller board will be as transmitter automatically.
- 3. The ID code of the receiver and the transmitter board must be set to the same.

Brief:

DMX512 wireless receiver/transmitter transmits standard DMX512 protocol data(generated by console)by wireless way, which solves lighting control issues of wireless transmitting completely between console and lighting, lighting and lighting and so on, It get rid of connecting cable limited completely.

And also can ensure without any time delay when signal data is transmitting, signal data is real time and reliably.

This product adopt 2.4G ISM frequency section(global opening section)without permission limited. High effective GFSK modulate, communication design; 126 channels jumping frequecy automatically, high anti-jamming ability.

Product picture:



1: Terminal 2: LED indicator 3: ID code selector button 4: Antenna port 5: PCB hole for fixed 6+7: Antenna

Product Feature:

- 1. Small size, Esay to suit for interior of accessed lighting
- 2. Single button to operate, tri-color LED displaying
- 3. Transmitting standard DMX512 protocol data of console, also can transmitting lighting and lighting DMX512 protocol data.
- 4. 126 channels jumping frenquecy automatically, high anti-jamming ability to ensure works reliability.
- 5. 7 groups ID code settable. User can use 7 groups individual wireless net without any interfere with each other in the same place.
- 6. Input voltage: 5VDC
- 7. Communication distance: 400M (visible distance, it has some different base on environment)
- 8. Work frequency section: 2.4G ISM,126 channels frequency section
- 9. Max transmitting power rate: 20dBm
- 10. Receiver sensitive: -94dBm
- 11. Signal port: RS485 or CPU series port AURT

Operating manual:

- 1. ID code and LED color corresponding relationship:
 - 1: RED
 - 2: GREEN
 - 3: YELLOW
 - 4: BLUE
 - 5: PURPLE
 - 6: CYAN
 - 7: WHITE
- 2. Press ID CODE SELECTOR button one time to indicate current ID code. Then press this button again to set your preferable ID code, the ID code value will add 1 each time by press.
- 3. Working condition:
 - LED constant lit up: no DMX or wireless signal.
 - Red LED flash: transmitting
 - Green LED flash: receiveing

- 4. RF frequency-----2. 400-2. 525 G, total 126 channels, it's searching automatically.
- 5. ID Code- - "1-7" groups ID code, press ID code selector button for setting, it only can works under same ID code of transmitter and receiver.

Establishing Communication:

- 1. Power on DMX512 wireless received board and transmitted board.
- 2. Press ID CODE SLELECTOR button to set same ID value of transmitted board and received board, please use different ID value if you need use more than 1 group wireless net at same time in same place.
- 3. The red LED flash when transmitter transmits DMX data by no interfered frequency section, then receiver changes communicated frequency section. Green LED flash till received corrected same ID value, LED flash more fast once DMX data more fast.
- 4. Communication was established correctly then.