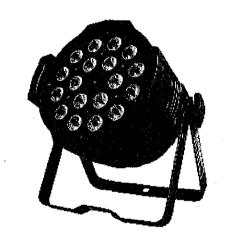
User Manual



LP18*9W-TRI
LED TRICOLOR PAR

	Product details	
	. 1. Specicification	
	2. Features	
1.	3. Fast Instructions	
	4. Master Light	
1.	5. Master/slave	4
	Operating Instructions	
2.	1. Keyboard Functions	-5
	2. 1. 1. Basic Instructions	5
	2. 1. 2. Key Pass Word	-6
	2. Menu Navigation	
2.	3. Menu Description	
	2. 3. 1. Static Mode (STAT)	
	2. 3. 2. Auto Mode (AUTO)	8
	2. 3. Sound Control	
	2. 3. 4. DMX and Slave Mode (RUN)	
	2. 3. 5. DMX Setting (DMX)	
	2. 3. 6. DMX Mode Select (PERS)	
	2. 3. 7. ID Setting (ID)	
	2. 3. 8. Over-tempreature Protection(TEMP)	
	2. 3. 9. Scene Edit (EDIT)	
	2. 3. 10. Setting (SET)	
	2. 3. 11. White Balance Setting (CAL1)	
	2. 3. 12. Color Adjustment (CAL2)	
	2. 3. 13. Key Protection Setting (KEY)	
2.	4. Controller Operation	
	2. 4. 1. DMX Channels	
	2. 4. 2. Color List	
3.	Edit Instructions	20

1. Product Details

1. 1. Specifications

Input Voltage: AC100-240V 50/60Hz

Power: 165W

LED: 18 pcs 9W tricolor LED

Beam Angle: 25

Life: 50,000 hours

Control Mode: DMX, Master/slave, Auto-run, Sound control

DMX Modes: 5 DMX working modes

DMX channel: 10CH/3CH/4CH/5CH/3CH

IP Rating: IP20

Product Size: 280*220*320mm

N.W.: 3.5KG

1. 2. Features

> 4 Control Modes

External Control

- ◆ DMX512 control (5 DMX working modes)
- ♦ Master/slave control

Auto-run

- ◆ Onboard Program
 - Various gradul, puls color change
 - Various strobe effects: speed change (slow to fast),
 mix (strobe+colors, strobe+color change)
- ◆ Editable Programs
 - Functional, useful editable programs. Programs can be edited without external controller. Programs like color change, step change, strobes, can be combined ramdonly.

Prorgams can be downloaded from master light

■ Static Color Mode

◆ A certain color can be set without a controller, and strobe on that color is available.

"Light Cut Software"

- At "STAG" Mode, if the main dimmer is at value "0" when onboard program or edited program is working, the light will be off, while program is still working.
- Difference to "BLACKOUT": it is just for the lights,no effect to the controller.

ID Setting

■ At "STAG"mode, Lights with the same ID(Max 66) can be controlled seperately. Effects includes: light up one by one, color change, strobe, gradul change, etc.

Non-linear and linear dimming

■ 16 bit (60000 steps)

White Balance

white color at different color tempreature

> Color Reset

Software for adjusting the current.

Display Protection

■ Display will turn off if no work for 30 seconds, press any keep to exit the protection mode.

Over-tempreature Protection

■ A certain value of tempreature can be set to protect the lights

> Pass word for button operation

1. 3. Fast Instructions

Mode change and setting

- At main menu, all functions showing on display are under external DMX control.
- DMX512 is the default mode, the lights can only be controlled by DMX, the 4th dot flickers. If not,check the connection.
 - For choosing DMX Mode, press"MENU" until it shows"PERS", then press"ENTER" to confirm.
 - 5 dimming speeds to determine the softness and degree. Press"SET"—"DIM" and the 11CH under "STAG" mode
 - ◆ For choosing master/slave mode, Press"RUN" then choose"SLAV",then it receives data from master light or download edited program from master light.
- Make sure there is only one DMX controller or only one master light. With more than 2, the lights will not work properly due to the signal interferance.
 - Static Mode, press "STAT", then it is master light.
 - Auto-run mode, press "AUTO", Then it is master light.

1. 4. Master Light

- > The fixture becomes master light at the following cases.
 - At "STAT"
 - At "AUTO"
 - At "EDIT"
 - Uploading programs at "UPLD" under "SET"

1. 5. Multi-lights working Synchronously

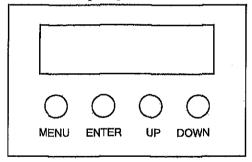
When using a controller to control more lights and use the strobe and auto-run function, the controller can only send data, strobe and auto-run program are determined by the lights themselves. Oscillator frequency for each light is not exactly the

same, so if you don't control them, the lights might not work synchronously after a long time. Anyway, we can solve this problem.

- 1. In actual usage, all lights might be powered on at different time, and the connection to controller might be at different time too, then they might be not able to work synchronously. If this happens, change the value of the push on controller, for example, push the putter from 20 to 0, then push back to 20, then they will work synchronously.
- 2. Using a controller to edit the strobe and prorgams, they will work synchronously.
- 3. Lights under master/slave mode will work synchronously.

2. Operating Instructions

2. 1. Display information



2. 1. 1. Basic Usage

【MENU】 Main Menu Select or Exit

【ENTER】 Enter or Choose the Submenu

【UP】 Menu Select or data Increase【DOWN】 Menu Select or data Decrease

2. 1. 2. Key Pass Word

[UP、DOWN、UP、DOWN] + [ENTER]
Press[UP], then press[DOWN], then press[UP], then press[DOWN],
then press [ENTER] to confirm

2. 2. Menu Navigation

```
| PERS → | STAG.
           I ARC.1
           AR1.D
           ARC.2
           AR2.D
           AR2.S
           I HSV
| ID \rightarrow | ID.01 (1~66)
[TEMP \rightarrow | CURR. \rightarrow | 0
           |TOP| \rightarrow |085 (20~150)
| EDIT \rightarrow | PR.01 \rightarrow | SC.01 \rightarrow | R.000 (0~255)
                                        (0~255)
                                 G.000
          PR.10
                    SC.30
                                 B.000 (0~255)
                                | W.000 (0~255)
                               I ST.00 (0~20)
                                T.000 (0~255)
                               F.000 (0~255)
| SET → | UPLD.
           REST.
           ID → | OFF.
                     ON.
          IRGBW. → | OFF
                    ION.
          | POW → | HIGH
                    NORM.
          DIM: → OFF
                    DIM1.
                    DIM2.
                    DIM3.
                     DIM4.
```

2. 3. Menu Description

2. 3. 1. Static Mode (STAT)

$$\begin{array}{c|c} \textbf{STAT} & \rightarrow & \textbf{R.000} & (0~255) \\ \hline \textbf{G.000} & (0~255) \\ \hline \textbf{B.000} & (0~255) \\ \hline \textbf{ST.00} & (0~20) \\ \end{array}$$

- ◆ At 【STAT】, press 【ENTER】 to enter static mode, then the light is master light
- ◆ Press 【ENTER】 to choose the submenu : 【Red】、【Green】、【Blue】
 【Strobe】
- ◆ Press 【UP】 / 【DOWN】 to choose the value
- ◆ Press 【MENU】 to exit, then it comes to erternal control mode

2. 3. 2. Auto Mode

- ◆ At 【AUT()】,press 【ENTER】 to enter auto mode, then the light is master light
- ◆ PressKUF3/KDOWN3to choose the onboard program on the edited program
- ◆ Press 【MENU】 to exit, then it comes to erternal control mode

2. 3. 3 Sound Control(SOUND)

SOLD → [NOD2

- ◆ At【SOUND】, press 【ENTER】to enter Sound Control mode, then the light is master light
- ◆ Press 【UP】 / 【COWN】 to choose the 【MOD1】 or 【MOD2】
- ◆ Press 【MENU】 to exit, then it comes to erternal control mode.

2. 3. 4. DMX and Slave Mode (RUN)

.XMC_ ← NUR_ SSLAV

- ◆ At 【RUN】,press 【ENTER】 to enter, the the light is at external control mode
- ◆ Press 【UP】 / 【DOWN】 to choose 【DMX】 or 【SLAV】

by a controller.

- ◆ Press 【UP】/【DOWN】 to choose 【1~512】, press 【MENU】 to exit.
 - 【DMX】 means the light can only controlled by a controller
 - 【SLAV】 means it only receives signal from master light
- ◆ Press 【MENU】 to exit

2. 3. 5. DMX Setting (DMX)

 $\boxed{DMX} \rightarrow \boxed{D.001} (1~512)$

At 【DMX】, press 【ENTER】 to enter, then the light is controlled

♦ can be activated by DMX Channel 6.

2. 3. 6. DMX512 Mode Select (PERS)

PERS → STAG.
ARC.41
AR1.0
ARC.2
AR2.0
AR2.8
HSV.

- ◆ At 【PERS】, press 【ENTER】 to enter, then it's controlled by an external controller.
- ◆ Press 【UP】 / 【DOWN】 to choose the DMX working mode(check the channel list for the specific modes)
- ◆ Press 【MENU】 to exit

2. 3. 7. ID Setting (ID)

◆ At 【ID】, press 【ENTER】 to enter, then the lights can be controlled by an external controller.

Press [UP] / [DOWN] to choose [1~66], press [MENU] to exit.

2. 3. 8. Over-tempreature Protection (TEMP)

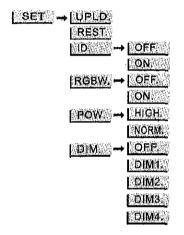
$$\begin{array}{c|c}
\hline
\text{TEMP} \rightarrow \boxed{\text{CURR.}} \rightarrow \boxed{0} \\
\hline
\text{TOP} \rightarrow \boxed{0.85} (20\sim160)
\end{array}$$

- ◆ At 【TEMP】 Press 【ENTER】, then the lights can be controlled by an external controller.
- ◆ Press 【UP】 / 【DOWN】 to choose 【CURR】 or 【TOP】
- ◆ At 【CURR】 press 【ENTER】, the current temp is shown (Notes: the tempreature might not be accurate due to the materal and location, it is just for reference Press 【MENU】 to exit.
- ◆ At 【TOP】 press 【ENTER】, set the tempreature. (default 85 degree), press 【UP】/【DOWN】 to choose from (20~150), Press 【MENU】 to exit.

2. 3. 9. Scene Edit (EDIT)

- ◆ At 【EDIT】 press 【ENTER】, then it can be edited and becomes the master light.
- ◆ Press 【ENTER】 to the submenu or data selece, Press 【MENU】 to exit.
- ◆ Press 【UP】 / 【DOWN】 tochoose the program, scene or data value. (See detailed information at Edit Instructions)

2. 3. 10. Setting (SET)



- ◆ At 【SET】 Press 【ENTER】, then the light exits the external control mode.
- ◆ 【UPLD】means sending edited programs, press【ENTER】to enter the pass word confirmation, then press 【UP、DOWN、UP、DOWN】 + 【ENTER】, the light turns yellow, it emans data is being sending, and it shows the sending process, after sending, the light turns green. Slave light will turn green after receiving. If it stays yellow, it means the data sending is failed. If this happens, power off the slave light and do it again.
- ◆ 【REST】 means restore the factory default, press【ENTER】 to enter, password:
 【UP、DOWN、UP、DOWN】 + 【ENTER】

- ◆ 【ID】 means ID switch setting, press 【ENTER】 to enter, then press 【UP】/ 【DOWN】 to choose 【ON】 ID setting is allowed, 【OFF】 ID setting is forbiden.
- ◆ 【RGBW】means color adjustment, press【ENTER】to enter, then press【UP】/【DOWN】to choose【ON】color adjustment is allowed, or 【OFF】forbidden. RGB ratio can be setting under 【CAL2】
- ◆ 【POW】 means power setting, press 【ENTER】 to enter, press 【UP】/【DOWN】 to choose 【Normal】 or 【High】, 【Normal=33%】, 【High=100%】
- ◆ 【DIM】 means non-linear dimming speed setting, press 【UP】/ 【DOWN】 to choose, 【OFF】 means close the function of dimming speed, 【DIM1】 means speed1(fastest), 【DIM2】 means speed 2, 【DIM3】 means speed 3, 【DIM4】 means speed 4(the slowest), The slower the speed, the smoother the dimming.

2. 3. 11. White Balance Setting (CAL1)

- At [CAL1], press [ENTER] to enter, then the light is at the mode of external control
- ◆ Press 【UP】 / 【DOWN】 to choose 【White 1~11】, press 【ENTER】 to set.
 - Press [ENTER]to choose [Red], [Green], [Blue], [Yellow], [White]
 - Press 【UP】 / 【DOWN】 to choose 【0~255】

Note: When it is in DMX mode [STAG], These 11 white balance

2. 3. 12. Color Adjustment (CAL2)

- ◆ At 【CAL2】 press 【ENTER】 to enter 【RGBW】, then the light is at the mode of external control
- ◆ Press 【ENTER】 to choose 【Red】、【Green】、【Blue】、【Yellow】
- ◆ Press 【UP】/【DOWN】 to choose the color ratio 【25~255】

2. 3. 13. Key Protection Setting (KEY)

- ◆ At 【KEY】, press 【ENTER】 to enter, then the light is at the mode of external control
- ◆ Press [UP] / [DOWN] to choose [ON] / [OFF]
 - If you choose 【ON】, the keys will be locked once the light is in protection mode. Even if you restart it again, they will be still locked. For unlocking, please press the pass word 【UP、DOWN、UP、DOWN】 + 【ENTER】
 - If you choose 【OFF】, the keys will be never locked.

1. 网络

2. 4. Controller Operation

2. 4. 1. DMX Channels

5 DMX working modes: **[STAG]**, **[**ARC.1], **[**AR2.d], **[**AR2.S], **[**HSV]

♦ STAG Mode

CH	Value	Function								
1	0~255	Dimming								
2	0~255	Red (when at CH8, if PR01~10 is chosen , CH2 controls TIME)								
3	0~255	Green (when at CH8, if PR01~10 is chosen, CH3 controls FADE)								
4	0~255	Blue								
	0~5	No funtion								
5	6~20	High power (only when in NORMAL POWER model)								
	21~30	no function								
	31~255	color Change (see color list)								
6	0~10	No strobe								
	11~255	Strobe speed (255 the fastest)								
	0~20	No function								
7	21~30	Inbuilt program 1								
,	814517	(each 10 values for one program)								
	110~120	Inbult program 10								

	121~130	Editable program 1				
7	piquta	(each 10 values for one program)				
f	211~220	Editable program10				
	221~255	Sound Control 1 & 2				
	0.005	Editable program speed adjust (CH2,				
8	0~255	CH3)				
	0~9	Dimming speed (0~9 is the speed at				
	0.09	menu"set")				
	10~29	Close				
9	30~69	Speed 1 (fast)				
	70~129	Speed 2				
	130~189	Speed 3				
	190~255	Speed 4 (slow)				
	0~9	ID no function				
	10~19	ID1				
	*****	(10 values is for one ID)				
4.8	200~209	ID20				
10	210	ID21				
	614614	(10 values is for one ID)				
	254	ID65				
	255	ID66				
	L	l				

♦ ARC.1 Mode

СН	Value	Function
1	0~255	Red
2	0~255	Green
3	0~255	Blue

◆ AR1.d Mode

СН	Value	Function
1	0~255	Dimmer for all
2	0~255	Red
3	0~255	Green
4	0~255	Blue

♦ AR2.S Mode

1	0~255	Dimmer for all
СН	Value	Function

2	0~255	Red
3	0~255	Green
4	0~255	Blue
5	0~10	No strobe
	11~255	Strobe spped (255 fast)

♦ HSV Mode

	CH Value	Function
1	0~255	H(hues)色调(0~100%)
2	0~255	S(saturation)饱和度(0~100%)
3	0~255	V(value)亮度(0~100%)

• 2. 4. 2. Color List

CH Value	Function						
31~50	R 100% / G ,up / B 0% /						
51~70	R,down / G 100% / B 0% /						
71~90	R 0% / G 100% / B, up/						
91~110	R 0% / G,down / B 100% /						
111~130	R,up / G 0% / B 100% /						
131~150	R 100% / G 0% / B,down /						
151~170	R 100% / G,up / B,up /						
171~190	R,down / G,down / B 100% /						
191~200	R 100% / G 100% / B 100% /						
201~255	Color tempreature (adjust at [CAL1])						
,	5 value is for one, for example:						
	201~205: 3200K						
	206~210: 3400K						
	211~215: 4200K						
	216~220: 4900K						
	221~225: 5600K						
	226~230: 5900K						
	231~235: 6500K						
-	236~240: 7200K						
	241~245: 8000K						
	246~250: 8500K						
	251~255: 10000K						

3. Edit Instructions

Max 10 programs can be edited, each program has 30 scenes, each scene has 8 functions:

R-red, G-green, B-blue, Y-yellow, W-white, ST-strobe, T-timing, F-fading time

For better understanding on the functions, we provide an example as follows:

Scene	R	G	B	ST	1	F	Effect
SC.01	255	0	0	0	2	2	R,gradual brighter (2
							sec)
SC.02	0	0	0	0	2	2	R,gradual dim off
SC.03	0	255	0	0	4	2	G,gradual brighter (2
		-					sec), stay for 2 sec
SC.04	0	0	0	0	4	2	G, stay for 2 sec, then
							dim off (2 sec)
SC.05	0	255	255	0	2	2	GB,gradual brighter
SC.06	0	0	255	0	2	2	G,dim off; B,stay
SC.07	255	0	0	0	2	2	R gradual brighter,
							and B dim off
SC.08	255	0	0	0	1	0	R, stay for 1 sec
SC.09	0	255	0	0	1	0	From R step change
							to G, G stay for 1 sec
SC.10	0	0	255	0	1	0	from G step change to
			<u> </u>				B, B stay for 1 sec

SC.11	0	0	0	0	1	0	Off for 1 sec
SC.12	255	255	255	2	5	0	RGB strobe
1111,	0	0	0	0	0	0	Scenes with timming of 0 will not work, until the next one
	<u> </u>						(not 0) turns up.

- Fading is determined by two scenes beside each other, the efect can only be seen when the whole prorgam is running.
- > If the timming value is 0,this scene will be ignored. If the fading time is longer than timming time, the timming time will become the fading time.
- > Strobe and fading time can be setted together.
- > If you are not familiar with the setting, please takes notes on paper, then set according to what you write, check the effect, and adjust the value.
- > EDIT is not difficult, you can start from the easy ones, then try the complex ones. Once you master it, you will find it very helpful.
- > When you reset the default function under" SET", the edited programs will be still there.