PRO PAR HEX 12
User Manual

Caution: For your safety, please read this user manual carefully before initial use!

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1. Starting Up

What Is Included

- 1 x PRO PAR Quad 12 RGBWA + UV Professional LED PAR
- 1 x powerCON ® Cable

Opening the Box

Thank you for purchasing one of our quality PRO PAR fixtures. Featuring professional power and data connectors, we hope you enjoy our top of the line product. When you open the box for the first time be sure to unpack carefully. Check the box to ensure all of the contents are there. If anything appears to be damaged through transit, notify the shipper immediately and keep the packing material for inspection. You generally have 7 days to do so. If for any reason, the fixture needs to be returned, please save the packing material as it is important that it be returned in the original factory box.

Contacting Us

If you need to contact us for any reason, please do not hesitate!

For a fast response please contact us via e-mail at **contact@stagelightcompany.com**.

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Safety Instructions

- **DO NOT** open this device, there are no user-serviceable parts inside
- **DO NOT** look at the light source when the device is on
- **CAUTION**: This unit's housing may be hot when lights are operating
- **DO NOT** leave any flammable material within 1.5 ft of this unit while operating or connected to power
- **DO NOT** operate this device outdoors or in location where dust, excessive heat, water, or humidity may affect it
- **DO NOT** connect this device to a dimmer or rheostat
- **ONLY** connect this device to a grounded and protected circuit using provided cable
- **Use** a safety cable when mounting this device overhead

2. The Fixture

Rigging

The fixture may be mounted in any safe position provided there is enough room for ventilation.

When mounting the fixture use a certified theatrical rigging clamp. When mounting overhead ensure to use properly rated rigging.

A safety cable is **ALWAYS** required.

Control Board Operation

Press the **MENU** until one of the following displayed:

Display	Function
AddR	To set DMX address
CHA	To set DMX channel modes: CH12, CH08, CH06
dIM	To set dimmer speeds: dIM 1, dIM 2, dIM 3, dIM 4
USER	To set user mode intensity of R, G, B, W, A, U separately for color mixing and strobe
PROM	To set built-in automatic programs: PR 01 ~ PR 05 and speeds 000 ~100
COLR	To set static colors CL 01 ~ CL 36
SOUd	To set sound active mode and the sensitivity (S 000 ~ S 100)
SLAV	To set Master/Slave modes

Keep pressing **MENU** button to select your desired operation, this press **ENTER** to confirm

DMX Addressing

After selecting the "AddR" and pressing ENTER, use UP and DOWN to set the desired DMX address (001~512), press ENTER again to confirm. "d.xxx" will display.

DMX Modes (Three DMX modes)

After selecting the "CHA" and pressing ENTER, use UP and DOWN to set the desired DMX mode (CH12 / CH08 / CH06), press ENTER again to confirm. "d.xxx" will display.

Dimmer Speed Setting

After selecting the "dIM" and pressing ENTER, use UP and DOWN to set the desired dimmer mode (dIM 1 / dIM 2 / dIM 3 / dIM 4), press ENTER again to confirm. "d.xxx" will display.

User Mode

This mode allows the user to set intensity of R, G, B, W, A, U separately to get endless color mixing from the control board without a DMX controller present.

After selecting the "USER" and pressing ENTER, use UP and DOWN to select "R / G / B / W / A / U" for color intensity or "S" for strobe. Use UP and DOWN to set the color intensity values (0~255) or strobe speed values (0~100), then press ENTER to confirm. "US- -" will display.

Automatic Mode

After selecting the "PROM" and pressing ENTER, use UP and DOWN to select the built-in programs (PR 01 ~ PR 05) then press ENTER to confirm. Use UP and DOWN to set the operating speed of the program (000~100), then press ENTER to confirm. "PR- -" will display.

	PR 01	R G B W A U colors switching
	PR 02	36 colors switching
PROM	PR 03	R G B W A U colors fading
	PR 04	36 colors fading
	PR 05	Color macros fading

Sound Mode

After selecting the "SOUd" and pressing ENTER, use UP and DOWN to set sensitive (000 ~ 100), press ENTER again to confirm. "SO- -" will display.

Setting Static Colors

After selecting the "COLR" and pressing ENTER, use UP and DOWN to set the desired color, press ENTER again to confirm. "CL- -" will display.

	CL 01	Red
	CL 02	Green
	CL 03	Blue
	CL 04	White
	CL 05	Amber
	CL 06	UV
	CL 07	Green + Blue
	CL 08	Red + Green
	CL 09	Red + Blue
	CL 10	Red + White
	CL 11	Green + White
	CL 12	Blue + White
	CL 13	White + Amber
	CL 14	Red + Amber
	CL 15	Green + Amber
COLR	CL 16	Blue + Amber
	CL 17	Red + Green + Blue
	CL 18	Red + Green + White
	CL 19	Red + Blue + White
	CL 20	Green + Blue + White
	CL 21	Green + Blue + Amber
	CL 22	Blue + White + Amber
	CL 23	Red + Green + Amber
	CL 24	Green + White + Amber
	CL 25	Red + White + Amber
	CL 26	Red + Green + Blue + Amber
	CL 27	Green + Blue + White + Amber
	CL 28	Red + Green + Blue + White
	CL 29	RED + Blue + White + Amber
	CL 30	Red + Green + White + Amber
	CL 31	Red + Green + Blue + White + Amber

	CL 32	Red + UV
	CL 33	Green + UV
	CL 34	Amber + UV
	CL 35	Red + Amber + UV
	CL 36	Red + Green + Blue + White + Amber + UV

Master / Slave Operation

This mode allows for multiple slave fixtures to follow a single master fixture

1. Set the master fixture to one of the standalone operating modes: Automatic, Sound, User Mode, or Static Color
2. Set the slave fixtures to SLAVE, press ENTER. "SL- -" will display.

DMX Values

12 Channels Mode

Channel	Value	Function	
1	000-255	Red 0% ~ 100%	
2	000-255	Green 0% ~ 100%	
3	000-255	Blue 0% ~ 100%	
4	000-255	White 0% ~ 100%	
5	000-255	Amber 0% ~ 100%	
6	000-255	UV 0% ~ 100%	
7	000-255	Master Dimmer 0% ~ 100%	
8	000-009	Strobe OFF	
	010-255	Strobe (Slow ~ Fast 1-30Hz)	
9	000-019	No Function	
	020-039	Red 100% / Green 0%~100% / Blue 0%	
	040-059	Red 100%~0% / Green 100% / Blue 0%	
	060-079	Red 0% / Green 100% / Blue 0%~100%	
	080-099	Red 0% / Green 100%~0% / Blue 100%	
	100-119	Red 0%~100% / Green 0% / Blue 100%	
	120-139	Red 100% / Green 0% / Blue 100%~0%	
	140-159	Red 100% / Green 0%~100% / Blue 0%~100%	
	160-179	Red 100%~0% / Green 100%~0% / Blue 100%	
	180-200	Red 100% / Green 100% / Blue 100% / White 100% / Amber 100% / UV 100%	
	201-204	Color Temperature 1	WARM
	205-209	Color Temperature 2	
	210-214	Color Temperature 3	
	215-219	Color Temperature 4	
	220-224	Color Temperature 5	
	225-229	Color Temperature 6	
	230-234	Color Temperature 7	
	235-239	Color Temperature 8	
	240-244	Color Temperature 9	
	245-249	Color Temperature 10	
	250-255	Color Temperature 11	COOL
10	000-009	No Function	
	010-057	Auto Program 1	R G B W A U switching
	058-106	Auto Program 2	36 switching
	107-155	Auto Program 3	R G B W A U fading
	156-204	Auto Program 4	36 colors fading
	205-255	Auto Program 5	Color macros fading
11	000-255	Speed of Auto Programs (Slow ~ Fast)	
12	000-009	Use the dimmer of control board setting	
	010-069	Linear Dimmer	
	070-130	Non-Linear Dimmer 1	
	131-191	Non-Linear Dimmer 2	
	192-252	Non-Linear Dimmer 3	
	253-255	8 Bit digital linear dimming (fast)	

8 Channels Mode:

Channel	Value	Function	
1	000-255	Red 0% ~ 100%	
2	000-255	Green 0% ~ 100%	
3	000-255	Blue 0% ~ 100%	
4	000-255	White 0% ~ 100%	
5	000-255	Amber 0% ~ 100%	
6	000-255	UV 0% ~ 100%	
7	000-255	Master Dimmer 0% ~ 100%	
8	000-009	Strobe OFF	
	010-019	Sound Active	
	020-255	Strobe (Slow ~ Fast 1-30Hz)	

6 Channels Mode (RGBWAUV):

Channel	Value	Function	
1	000-255	Red 0% ~ 100%	
2	000-255	Green 0% ~ 100%	
3	000-255	Blue 0% ~ 100%	
4	000-255	White 0% ~ 100%	
5	000-255	Amber 0% ~ 100%	
6	000-255	UV 0% ~ 100%	

Technical Specifications

PRO PAR HEX 12

Power Supply: 100~240 V AC, 50/60Hz~
Power Consumption: 120 W
DMX Control Channels: 6/8/12
Sound-Control: via Built-In Microphone
LED Type: 12 W Quad-color RGBWA + UV
Number of LEDs: 12
Beam Angle: 22°
Dimensions (LxWxH): 98 x 263 x 292.5 mm
Weight: 7lbs
Maximum Ambient Temperature: 113 ° F
Maximum Housing Temperature: 176 ° F
Min Distance from Flammable Surface: 0.5m
Min Distance to Lighted Object: 0.1m
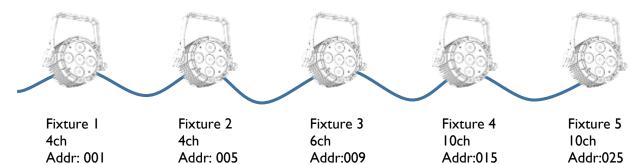Fuse: T 2A, 250V

3. LEDs & DMX

LED Expected Lifespan

Over time LEDs gradually decline in brightness. This is mostly caused by heat given off by clustered LEDs. Using clustered LEDs at their full intensity is not recommended as it significantly reduces the lifespan of the LEDs. On average, an LED can have the lifespan of 40,000 to 50,000 hours. To extend this lifespan, ensure proper ventilation near the fixture to reduce the overall ambient temperature.

Starting Out with DMX

DMX is a data protocol most commonly used in lighting and stage equipment. DMX or DMX-512 provides control of up to 512 channels per run. A run is commonly known as a universe. Essentially each universe provides you with 512 channels.

When connecting DMX, each fixture is daisy chained. This means that the cable comes out of the lighting console or usb module into the first light, then the data comes out of the first light into the second light. Please see diagram below.

Fixture 1	Fixture 2	Fixture 3	Fixture 4	Fixture 5
4ch	4ch	6ch	10ch	10ch
Addr: 001	Addr: 005	Addr:009	Addr:015	Addr:025

Each fixture must also have an address. This address is the starting channel number. You can see in the example above we have a range of fixtures. Some use 4 channels, some use 6 channels, etc. All of this depends on the fixture and parameters, each fixture is different in the amount of channels it uses. The easiest for a PRO PAR fixture is to use the 4 channel profile. You can see that before we add a new fixture, we have to make sure we do not start the address in a channel of a previous fixture. For Fixture 1 there are 4 channels it needs to run so it occupies channels 1, 2, 3, and 4. Which means Fixture 2 will start at channel 5 and take up 4 channels as well. Fixture 2 occupies channels 5, 6, 7, and 8. Fixture 3 will now start at channel 9. Since it uses a profile of 6 channels, it occupies channels 9, 10, 11, 12, 13, and 14. Try the next 2 on your own. Did you get that Fixture 5 should start at channel 25 and Fixture 6 would start at channel 35?

Lighting Console Profiles

We are currently working with manufacturers to incorporate our products into their software. If you do not see SLC as a manufacturer, the best place to look is under the generic section. On the PRO PAR fixtures, set the "CHA" to 6 channels and most digital lighting consoles have a generic RGBWA + UV profile. This is the one you want to use.

For more information please visit our site at www.stagelightcompany.com