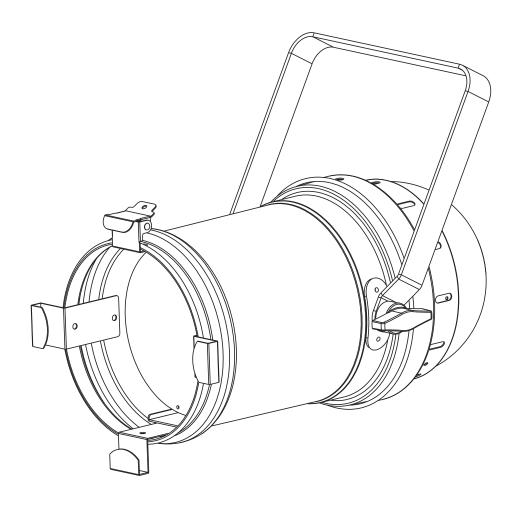


# PAR Z120 RGBW PAR ZP120 RGBW



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### **FCC STATEMENT**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### FCC RADIO FREQUENCY INTERFERENCE WARNINGS & INSTRUCTIONS

This product has been tested and found to comply with the limits as per Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device uses and can radiate radio frequency energy and, if not installed and used in accordance with the included instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following methods:

- Reorient or relocate the device.
- Increase the separation between the device and the receiver.
- Connect the device to an electrical outlet on a circuit different from which the radio receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### **Energy Saving Matters (EuP 2009/125/EC)**

Saving electric energy is a key to help protecting the environment. Please turn off all electrical products when they are not in use. To avoid power consumption in idle mode, disconnect all electrical equipment from power when not in use. Thank you!

**General Instructions:** Please read and understand all instructions in this manual carefully and thoroughly before attempting to operate these products. These instructions contain important safety and use information.

**Unpacking:** Thank you for purchasing the PAR Z120/ZP120 RGBW by ADJ Products, LLC. Every PAR Z120/ZP120 RGBW has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your fixture for any damage and be sure all equipment necessary to operate the unit has arrived intact. In the event damage has been found or parts are missing, please contact our toll free customer support number for further instructions. Please do not return this unit to your dealer without contacting customer support first.

### **CUSTOMER SUPPORT**

Contact ADJ Service for any product related service and support needs. Please visit forums.adj.com with questions, comments or suggestions.

ADJ SERVICE USA - Monday - Friday 8:00am to 4:30pm PST 800-322-6337 | Fax 323-832-2941 | <a href="mailto:support@adj.com">support@adj.com</a>

ADJ SERVICE EUROPE - Monday - Friday 08:30 to 17:00 CET +31 45 546 85 60 | Fax +31 45 546 85 96 | support@adj.eu

**REPLACEMENT PARTS** please visit <u>parts.americandj.com</u>

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### **DOCUMENT VERSION**

Please check www.adj.com for the latest revision/update of this guide.

Date	Document Version	Software Version	DMX Channel Mode	Notes
8/1/18	1	1.0	1/2/3	Initial Release
9/6/18	1.2	N/C	N/C	Updated dimming curve chart
12/14/18	1.21	N/C	N/C	ETL Approved

#### MANUFACTURER'S LIMITED WARRANTY

- A. ADJ Products, LLC hereby warrants, to the original purchaser, ADJ Products, LLC products to be free of manufacturing defects in material and workmanship for a prescribed period from the date of purchase (see specific warranty period on reverse). This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.
- B. For warranty service, you must obtain a Return Authorization number (RA#) before sending back the product-please contact ADJ Products, LLC Service Department at 800-322-6337. Send the product only to the ADJ Products, LLC factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, ADJ Products, LLC will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, ADJ Products, LLC shall have no liability whatsoever for loss of or damage to any such accessories, or for the safe return thereof.
- C. This warranty is void of the serial number has been altered or removed; if the product is modified in any manner which ADJ Products, LLC concludes, after inspection, affects the reliability of the product, if the product has been repaired or service by anyone other than ADJ Products, LLC factory unless prior written authorization was issued to purchaser by ADJ Products, LLC; if the product is damaged because not properly maintained as set forth in the instruction manual.
- D. This is not a service contact, and this warranty does not include maintenance, cleaning or periodic check up. During the period specified above, ADJ Products, LLC will replace defective parts at its expense with new or refurbished parts, and will absorb all expenses for warrant service and repair labor by reason of defects in material or workmanship. The sole responsibility of ADJ Products, LLC under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of ADJ Products, LLC. All products covered by this warranty were manufactured after August 15, 2012, and bear identifying marks to that effect.
- E. ADJ Products, LLC reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.
- F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by ADJ Products, LLC in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and/or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall ADJ Products, LLC be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.
- G. This warranty is the only written warranty applicable to ADJ Products, LLC Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

### LIMITED WARRANTY PERIODS

- Non L.E.D. Lighting Products = 1-year (365 days) Limited Warranty (Such as: Special Effect Lighting, Intelligent Lighting, UV lighting, Strobes, Fog Machines, Bubble Machines, Mirror Balls, Par Cans, Trussing, Lighting Stands etc. excluding LED and lamps)
- Laser Products = 1 Year (365 Days) Limited Warranty (excludes laser diodes which have 6 month limited warranty)
- L.E.D. Products = 2-year (730 days) Limited Warranty (excluding batteries which have a 180 day limited warranty) Note: 2 Year Warranty only applies to purchases within the United States.
- StarTec Series = 1 Year Limited Warranty (excluding batteries which have a 180 day limited warranty)
- ADJ DMX Controllers = 2 Year (730 Days) Limited Warranty

The PAR Z120/ZP120 RGBW is a modern LED twist to the traditional halogen Par Can. The PAR Z120/ZP120 RGBW powered by a potent 115W quad C.O.B. LED (Chip On Board) with red, green, blue & white colors. Its output is comparable to a 1,000W halogen sealed beam Par. It is equipped with 5 different beam angle options (that may be changed by hand) while powerCON In/Out allows for the fixture to be daisy chained. 5-pin DMX control offers a variable strobe rate and 6 different dimming curve options.

### PAR Z120/ZP120 RGBW

Features

- Beam angle: 7°/11.5°/16°/20.5°/25° (manual adjustment)
- 6 DMX Channels (4/5/6/7/8/9 Ch. Modes)
- 4-button DMX menu display on rear panel
- Adjustable latch to manually change beam angle
- Gel frame for diffusion filters (Diffusion filters sold separately)
- Flicker Free Operation
- Electronic Dimming: 0 100% with 6 dimming curves

### PAR Z120/ZP120 RGBW

Warranty Registration

The PAR Z120/ZP120 RGBW carries a 2 year (730 days) limited warranty. Please fill out the enclosed warranty card to validate your purchase and warranty. You may also register your product online at www.adjproducts.com. All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. If the unit is under warranty you must provide a copy of your proof of purchase invoice. Please contact ADJ Products, LLC customer support for a R.A. number.

### PAR Z120/ZP120 RGBW

Handling Precautions

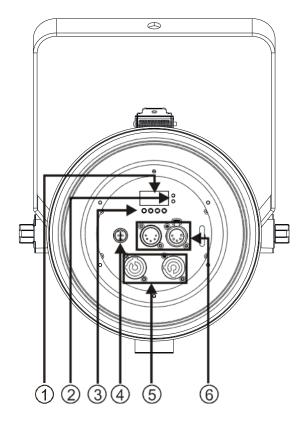
**Caution!** There are no user serviceable parts inside this unit. Do not attempt any repairs yourself; doing so will void your manufactures warranty. In the unlikely event your unit may require service please contact ADJ Products, LLC.

During operation the housing may become extremely hot. Avoid touching the unit with bare hands while in use.

ADJ Products, LLC will not accept any liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to this unit.

# For Your Own Personal Safety, Please Read and Understand This Manual Completely Before You Attempt To Install Or Operate This Unit!

- To reduce the risk of electrical shock or fire, do not expose this unit rain or moisture.
- Do not spill water or other liquids into or on to your unit.
- Be sure that the local power outlet matches that of the required voltage for your unit.
- Do not attempt to operate this unit if the power cord has been frayed or broken.
- Do not attempt to remove or break off the ground prong from the electrical cord.
  This prong is used to reduce the risk of electrical shock and fire in case of an internal short.
- Disconnect from main power before making any type of connection.
- Do not remove the cover under any conditions. There are no user serviceable parts inside.
- Never operate this unit when its cover is removed.
- Always be sure to mount this unit in an area that will allow proper ventilation. Allow about 6" (15cm) between this device and a wall.
- Do not attempt to operate this unit if it becomes damaged.
- This unit is intended for indoor use only; use of this product outdoors voids all warranties.
- Always mount this unit in safe and stable matter.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles and the point where they exit from the appliance.
- The fixture should be cleaned only as recommended by the manufacturer. See page 22 for cleaning details.
- This fixture should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- The fixture should be serviced by qualified service personnel when:
  - A. Objects have fallen, or liquid has been spilled into the appliance.
  - B. The appliance has been exposed to rain or water.
  - C. The appliance does not appear to operate normally or exhibits a marked change in performance.



1 - Display: Show the various menus and the selected functions;

### 2 - LED indicator:

POWER	On	Power On
DMX	On	DMX input present

### 3 - Button

MENU	To select the programming functions
DOWN	To go forward in the selected functions
UP	To go backward in the selected functions
ENTER	To confirm the selected functions

**4 - Fuse:** F 3.15A.

**5 – Mains Input/Output:** Use powerCON true one mains connection.

6 - DMX Input/Output

**Power Supply:** The PAR Z120/ZP120 RGBW contains an automatic voltage switch, which will auto sense the voltage when it is plugged into the power source. With this switch there is no need to worry about the correct power voltage, this unit can be plugged in anywhere.

**DMX-512:** DMX is short for Digital Multiplex. This is a universal protocol used by most lighting and controller manufactures as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture via the DATA "IN" and DATA "OUT" XLR terminals located on all DMX fixtures (most controllers only have a DATA "OUT" terminal).

**DMX Linking:** DMX is a language allowing all makes and models of different manufactures to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. To ensure proper DMX data transmission, when using several DMX fixtures try to use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example, a fixture assigned a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. Therefore, the first fixture controlled by the controller could be the last fixture in the chain. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

### DMX Cable Required (For DMX and Primary/Secondary

**Operation):** The PAR Z120/ZP120 RGBW can be controlled via DMX-512 protocol. The PAR Z120/ZP120 RGBW has 6 DMX channel modes; 4 channel mode, 5 channel mode, 6 channel mode, 7 channel mode, 8 channel mode and 9 channel mode. The DMX address is set electronically using the controls on the rear panel of the unit. Your unit and your DMX controller require an approved DMX-512 110 Ohm Data cable for data input and data output (Figure 1). We

recommend Accu-Cable DMX cables. If you are making your own cables, be sure to use standard 110-120 Ohm shielded cable (This cable can be purchased at almost all professional sound and lighting stores). Your cables should be made with a male and female XLR connector on either end of the cable. Also remember that DMX cable must be daisy chained and cannot be split.



**Notice:** Be sure to follow figures two and three when making your own cables. Do not use the ground lug on the XLR connector. Do not connect the cable's shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR's outer casing. Grounding the shield could cause a short circuit and erratic behavior.

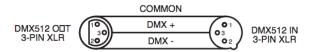


Figure 2



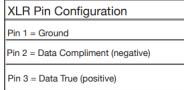


Figure 3

**Special Note: Line Termination.** When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behavior. A terminator is a 110-120 ohm 1/4 watt resistor, which is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). This unit is inserted in the female XLR connector of the last unit in your daisy chain to terminate the line. Using a cable terminator (ADJ part number Z-DMX/T) will decrease the possibilities of erratic behavior.



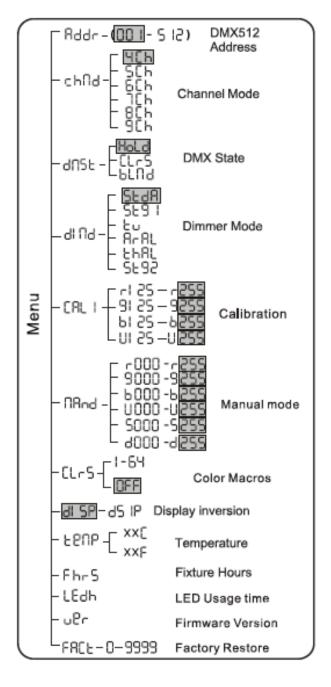


Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal, (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX +) of the last fixture.

**5-Pin XLR DMX Connectors.** This unit use 5-pin DMX-512 data cables for DATA transmission. 5-pin DMX fixtures may be implemented in a 3-pin DMX line. When inserting standard 5-pin data cables in to a 3-pin line a cable adaptor must be used, these adaptors are readily available at most electric stores. The chart below details a proper cable conversion.

3-PIN XLR TO 5-PIN XLR CONVERSION				
Conductor	3-Pin XLR Female (Out)	5-Pin XLR Male (In)		
Ground/Shield	Pin 1	Pin 1		
Data Compliant (-signal)	Pin 2	Pin 2		
Data True (+signal)	Pin 3	Pin 3		
Not Used		Pin 4 – Do Not Use		
Not Used		Pin 5 – Do Not Use		

To select any functions, press **MENU** button until the required one is shown on the display. Select the function by pressing the **ENTER** button. Use **DOWN** and **UP** button to change the mode. Once the required mode has been selected, press **ENTER** button to setup or it will return to the main functions without any change after idling 8 seconds automatically. To go back to the functions without any change press the **MENU** button. The main functions are shown below:



## Rddr DMX 512 Address Setting

Press the either the **MENU**, **UP**, or **DOWN** buttons until **Podor** is displayed, press **ENTER**.

The current address will now be displayed and flashing. Press the **UP** or **DOWN** buttons to select your desired address. Press **ENTER** to confirm and exit.

## Channel Mode – Select your desired DMX channel mode.

Press the **MENU** button until **Child** is displayed and press **ENTER**. The current DMX channel mode will be displayed.

Press the **UP** or **DOWN** buttons to find your desired DMX channel mode and press **ENTER** to confirm and exit.

DMX State - This mode can be used as a precaution mode. In the event that the DMX signal is lost, interrupted, or power is lost, the operating mode chosen in the setup is the running mode the fixture will go into when the DMX signal is lost. You can also set this as the operating mode you would like the unit to return to when power is applied

Press the **MENU** button until dist is displayed and press **ENTER**. Use the **DOWN** and **UP** button to select (Blackout) /or (Automatic Operation Color Macro) or (Hold the last state). Press **ENTER** and the bottom choice will begin to flash. Use the **UP** or **DOWN** buttons to choose an operating mode you would like the unit to start up in when power is applied or the DMX signal is lost.

- **BLND** (Blackout) If the DMX signal is lost or interrupted, the unit will automatically go into standby mode.
- **HOLD** If the DMX signal is lost the fixture will stay in the last DMX setting. If power is applied and this mode is set, the unit will automatically go into the last DMX set up.

Press **ENTER** to confirm and exit.

## Dimmer Mode – This will let you select your desired dimmer curve.

Press the **MENU** button until dirid is displayed, and press **ENTER**. 1 of 6 dimmer curves will be displayed. "**STDA**" (standard), "**STGE**" (stage), "**TV**" (TV), "**ARAL**" (Architectural), "**THAL**" (Theatre) or "**STG2**" (stage2). See the dimmer curve chart on page 17 for more info.

Press the **UP** or **DOWN** buttons to find your desired dimmer curve and press **ENTER** to confirm and exit or exit menu mode without any change after 8 seconds automatically.

## White Balance - Calibration

Press the MENU button until is displayed and press ENTER. Use the **DOWN** and **UP** button to select Red, Green, Blue or White. You can also choose values between 125-255. Once selected, press ENTER to confirm and exit, or exit menu mode without any change after 8 seconds automatically.

# ∏R∩d Manual mode

Press the **MENU** button until **DRnd** is displayed and press **ENTER**. Use the **DOWN** and **UP** buttons to select the Red **DOUG-255** /Green **DOUG-9255** /Blue **DOUG-9255** /White **DOUG-9255** /Strobe **DOUG-9255** or Dimmer **DOUG-9255**. Press **ENTER** to confirm and exit, or exit menu mode without any change after 8 seconds automatically.

## Color Macros

Press the **MENU** button until is displayed and press **ENTER**. Use the **DOWN** and **UP** button to select the Color Macros 1-64 or OFF. Press **ENTER** to confirm and exit, or exit menu mode without any change after 8 seconds automatically.

# Display Inverse – Reverse the display 180°.

Select the disp, press the **ENTER** button. Use the **DOWN** and **UP** button to select disp (Display Normal) or display Inverse). Once selected press **ENTER** to confirm and exit or exit menu mode without any change after 8 seconds automatically.

# Temperature Display – Check the temperature of the fixture.

Select the LENP, press **ENTER** button and the display will show Fahrenheit degree and Centigrade. Press **ENTER** to confirm and exit or exit menu mode without any change after 8 seconds automatically.

# Fh-5 Fixture Hour – Display the running time of the unit.

Select the Fhr5, press **ENTER** button and the display will show the number of working hours of the unit. Press **ENTER** to confirm and exit or exit menu mode without any change after 8 seconds automatically.

## LEdh LED Usage time

Select the LED, press **ENTER** button and the display will show the number of working hours of the LED. To go back to the functions, press the **MENU** button.

### Firmware Version

Select the Lerin, press **ENTER** button and the display will show the version of software of the unit. To go back to the functions, press the **MENU** button.

# FREE Factory Restore

Select the FREE, press the **ENTER** button. Use the **DOWN** and **UP** button to select 0-9999. To restore the unit to factory settings, enter the password, "11" and press the **ENTER** button.

### PAR Z120/ZP120 RGBW

**DMX** Operation

**Universal DMX Control:** This function allows you to use a universal DMX-512 controller to control the dimmer, fine dimmer and strobe. A DMX controller allows you to create unique programs tailored to your individual needs.

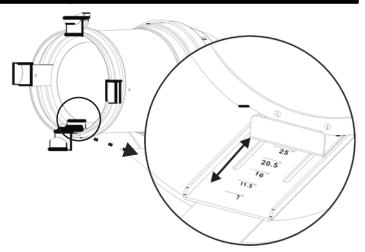
- 1. The PAR Z120/ZP120 RGBW has 3 DMX channel modes; 1-channel mode, 2-channel mode and 3-channel mode. See page 18 for a detailed description of the DMX values and traits.
- 2. To control your fixture in DMX mode, follow the set-up procedures on pages 12-15 as well as the set-up specifications that are included with your DMX controller.
- 3. Use the controller's faders to control the various DMX fixture traits.
- 4. This will allow you to create your own programs.
- 5. Follow the instructions on page 9 to select your DMX channel mode and set your desired DMX address.
- 6. For longer cable runs (more than a 100 feet) use a terminator on the last fixture
- 7. For help operating in DMX mode consult the manual included with your DMX controller.

### PAR Z120/ZP120 RGBW

Beam Angle Adjustment

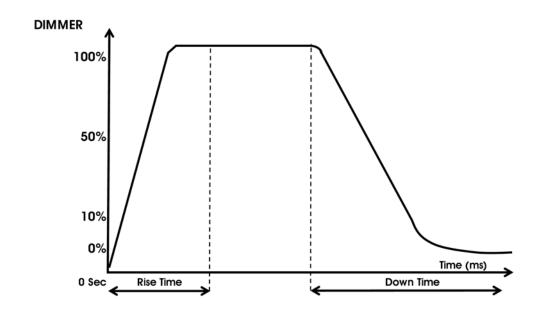
To adjust the beam angle, slide the beam angle adjuster located inside/in front of the lens. See diagram below.

The beam angle can be adjusted manually, between 7%11.5%16%20.5%25°.



### **DMX** controller

No need to turn the unit off when you change the DMX address, as new DMX address setting will be affected at once. Turn on the unit, under the DMX signal; the LED will display the saved channel address (001-512).



	0 sec Fo	ide Time	1 sec Fo	ıde Time
Dimming Curve Ramp Effect	0 —	255		255
	Rise Time (ms)	Down Time (ms)	Rise Time (ms)	Down Time (ms)
Standard (default)	0	0	0	0
Stage	780	1100	1540	1660
TV	1180	1520	1860	1940
Architectural	1380	1730	2040	2120
Theatre	1580	1940	2230	2280
Stage 2	0	1100	0	1660

### **Channel Mode:**

### 4 Channel Mode

Ch	annel	Value	Function
1	R	0-255	Dimmer 0-+100%
2	G	0-255	Dimmer 0-+100%
3	В	0-255	Dimmer 0-+100%
4	W	0-255	Dimmer 0-+100%

### 5 Channel Mode

Cha	annel	Value	Function
1	R	0-255	Dimmer 0-+100%
2	G	0-255	Dimmer 0-+100%
3	В	0-255	Dimmer 0-+100%
4	W	0-255	Dimmer 0-+100%
5		0-255	Total Dimmer 0-+100%

### 6 Channel Mode

Cha	annel	Value	Function
1	R	0-255	Dimmer 0-+100%
2	G	0-255	Dimmer 0-+100%
3	В	0-255	Dimmer 0-+100%
4	W	0-255	Dimmer 0-+100%
5		0-255	Total Dimmer 0-+100%
6		0-255	Dimming Fine

### 7 Channel Mode

Channel	Value	Function
1 R	0-255	Dimmer 0-+100%
2 G	0-255	Dimmer 0-+100%
3 B	0-255	Dimmer 0-+100%
4 W	0-255	Dimmer 0-+100%
	0-31	Shutter Closed (LEDs OFF)
	32-63	Shutter OPEN (LEDs ON)
	64-95	Strobe Effect Slow to Fast
5	96-127	Shutter OPEN (LEDs ON)
Strobe	128-159	Strobe Pulse Slow to Fast
	160-191	Shutter OPEN (LEDs ON)
	192-223	Random Strobe Slow to Fast
	224-255	Shutter OPEN (LEDs ON)
6	0-255	TotalDimmer 0-+100%
7	0-255	Dimming fine

### 8 Channel Mode

Channel	Value	Function
1 R	0-255	Dimmer 0-+100%
2 G	0-255	Dimmer 0-+100%
3 B	0-255	Dimmer 0-+100%
4 W	0-255	Dimmer 0-+100%
	0-31	Shutter Closed (LEDs OFF)
	32-63	Shutter OPEN (LEDs ON)
	64-95	Strobe Effect Slow to Fast
5	96-127	Shutter OPEN (LEDs ON)
Strobe	128-159	Strobe Pulse Slow to Fast
	160-191	Shutter OPEN (LEDs ON)
	192-223	Random Strobe Slow to Fast
	224-255	Shutter OPEN (LEDs ON)
6 0-255 TotalDimmer 0-+100%		TotalDimmer 0-+100%
7	0-255	Dimming fine
	0-20	Standard
	21-40	Stage
8 Dim	41-60	TV
	61-80	Architectural
Curves	81-100	Theater
	101-120	Stage 2
	121-255	Default to unit curve setting

### 9 Channel Mode

Channel	Value	Function		
1 R	0-255	Dimmer 0→100%		
2 G	0-255	Dimmer 0→100%		
3 B	0-255	Dimmer 0→100%		
4 W	0-255	Dimmer 0→100%		
5	1-4	Color Macro 1 129-132 Color Macro 33		
Color	5-8	Color Macro 2 133-136 Color Macro 34		
Macros	9-12	Color Macro 3 137-140 Color Macro 35		
	13-16	Color Macro 4 141-144 Color Macro 36		
	17-20	Color Macro 5 145-148 Color Macro 37		
	21-24 25-28	Color Macro 6 149-152 Color Macro 38 Color Macro 7 153-156 Color Macro 39		
	29-32	Color Macro 8 157-160 Color Macro 40		
	33-36	Color Macro 9 161-164 Color Macro 41		
	37-40	Color Macro 10 165-168 Color Macro 42		
	41-44	Color Macro 11 169-172 Color Macro 43		
	45-48	Color Macro 12 173-176 Color Macro 44		
	49-52	Color Macro 13 177-180 Color Macro 45		
	53-56	Color Macro 14 181-184 Color Macro 46		
	57-60	Color Macro 15   185-188   Color Macro 47   Color Macro 16   189-192   Color Macro 48		
	61-64	Color Macro 16 189-192 Color Macro 48 Color Macro 17 193-196 Color Macro 49		
	65-68 69 <b>-</b> 72	Color Macro 18 197-200 Color Macro 50		
	73-76	Color Macro 19 201-204 Color Macro 51		
	77-80	Color Macro 20 205-208 Color Macro 52		
	81-84	Color Macro 21 209-212 Color Macro 53		
	85-88	Color Macro 22 213-216 Color Macro 54		
	89-92	Color Macro 23 217-220 Color Macro 55		
	93-96	Color Macro 24 221-224 Color Macro 56		
	97-100 101-104	Color Macro 25 225-228 Color Macro 57 Color Macro 26 229-232 Color Macro 58		
	105-108	Color Macro 27 233-236 Color Macro 59		
	109-112	Color Macro 28 237-240 Color Macro 60		
	113-116	Color Macro 29 241=244 Color Macro 61		
	117-120	Color Macro 30 245-248 Color Macro 62		
	121-124	Color Macro 31 249-252 Color Macro 63		
	125-128	Color Macro 32 253-255 Color Macro 64		
6	0-31	Shutter Closed(LEDs OFF)		
Strobe	32-63	Shutter OPEN(LEDs ON)		
0020	64-95	Strobe effect slow to fast		
	96-127	Shutter OPEN(LEDs ON)		
	128-159	Strobe Pulse Slowto Fast		
	160-191	Shutter OPEN(LEDs ON)		
	192-223	Random strobe Slow toFast		
	224-255			
7	0-255	Total Dimmer 0→100%		
8	0-255	Dimming fine		
	0-20	Standard		
9	21-40			
Dim		Stage TV		
Curves	41-60			
	61-80	Architectural		
	81-100	Theatre		
	101-120	Stage 2		
	121-255	Default to unit curve setting		

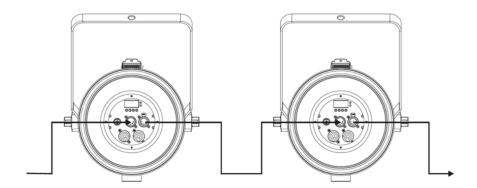
The unit should be mounted using a mounting clamp (not provided), affixing it to the mounting bracket that is provided with the unit. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. Always ensure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times the unit's weight. Also, always use a safety cable that can hold 12 times the weight of the unit when installing the fixture. It is recommended that a professional install the equipment and it must be installed in a place where it is out of the reach of people's grasp in the height of 0 to 30m.

### PAR Z120/ZP120 RGBW

Multiple Unit Power Linking

Connect the fixtures together in a "daisy chain" by connecting a XLR cable from the output of one fixture to the input of the next fixture. The DMX output and input connectors are pass-through to maintain the DMX circuit when the power to one of the units is disconnected. At the last fixture, use a line terminator (see DMX Set Up on page 9). Each lighting fixture needs to have an address set to receive the data sent by the controller. The address number is between 0-512 (usually 0 & 1 are equal to 1). The maximum number of fixtures that can be connected on one power cable is 15 fixtures at 120V or 24 fixtures at 240V (including the first fixture).

Note: Use caution when power linking other fixtures to the PAR Z120/ZP120 RGBW as the power consumption of other lighting fixtures will vary. The XLR cable cannot be branched or split to a "Y" cable. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system.



### PAR Z120/ZP120 RGBW

Fuse Replacement

Unplug the unit from any power source it may be connected to. Once the power has been disconnected, use a Phillips-head screwdriver to unscrew the fuse holder located above the power input. Remove the bad fuse and replace with a new one, and screw the fuse holder back in.

Due to fog residue, smoke and dust, cleaning the internal and external optical lenses and mirror should be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates (I.e. smoke, fog residue, dust, dew). In heavy club use we recommend cleaning on a monthly basis. Periodic cleaning will ensure longevity, and crisp output.

- 1. Use normal glass cleaner and a soft cloth to wipe down the outside casing.
- 2. Use a brush to wipe down the cooling vents and fan grill.
- 3. Clean the external optics with glass cleaner and a soft cloth every 20 days.
- 4. Clean the internal optics with glass cleaner and a soft cloth every 30-60 days.
- 5. Always be sure to dry all parts completely before plugging the unit back in.

### PAR Z120/ZP120 RGBW

Troubleshooting

**Trouble Shooting:** Listed below are a few common problems that you may encounter, with solutions.

### No light output from the unit;

- 1. Be sure the external fuse has not blown. The fuse is located on the rear panel of the unit.
- 2. Be sure the fuse holder is completely and properly seated.

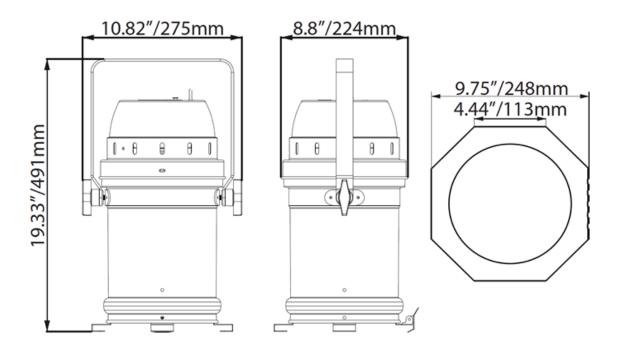
### Not responding to DMX controller;

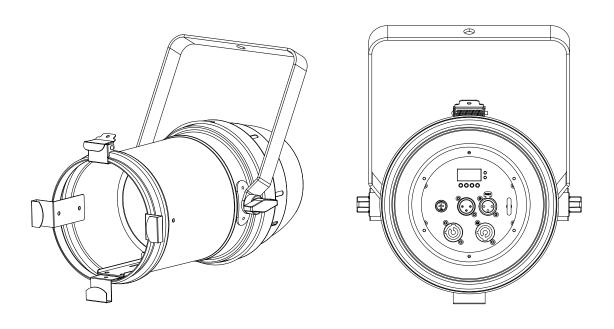
- 1. DMX LED should be on. If not, check DMX connectors, cables to see if link properly.
- 2. If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.
- 3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the fixture or the previous one.
- 4. Try to use another DMX controller.
- 5. Check if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.

Model:	PAR Z120 / ZP120 RGBW	
Voltage:	AC 100-240V, 50/60Hz	
LED:	115 Watt Quad RGBW LED (Red, Green, Blue & White)	
LED Source	RGBA 4-IN-1 COB	
Beam Angle:	7°/11.5°/16°/20.5°/25° (manual adjustment)	
Electronic Dimming:	0 - 100% with 5 dimming curves	
Strobe Rate:	Min 0.4Hz, Max 25Hz	
Total Power Consumption:	107W	
Power Linking:	120V: 15 Units, 240V: 24 Units	
Connection:	5-pin DMX In/Out	
Control Protocol	DMX-512, RDM (Remote Device Management)	
DMX:	6 DMX Channels (4/5/6/7/8/9 Ch. modes)	
Fuse:	3.15 Amp	
Duty Cycle:	None	
IP Grade:	IP20	
Working Position:	Any Safe, Secure Position	
LED Life:	50,000 Hour Average LED Life*	
Dimensions (LxWxH):	19.5" x 11" x 9" / 491 x 275 x 224mm	
Weight:	8.5 lbs. / 3.9kg.	
Warranty:	2 Year (730 days)	

**Please Note:** Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.

<sup>\*</sup> May vary depending on several factors including but not limited to: Environmental Conditions, Power/Voltage, Usage Patterns (On-Off Cycling), Control, and Dimming.





Order Code	Description	
AC5PDMX3	3' DMX cable with 5-pin male to 5-pin female connection.*	
AC5PDMX3PRO	Pro Series 3' DMX cable - 5-pin male to 5-pin female connection.*	
AC5PDMX10PRO	Pro Series 10' DMX cable - 5-pin male to 5-pin female connection.*	
AC5PDMX15PRO	Pro Series 15' DMX cable - 5-pin male to 5-pin female connection.*	
AC5PDMX25PRO	Pro Series 25' DMX cable - 5-pin male to 5-pin female connection.*	
AC5PDMX50PRO	Pro Series 50' DMX cable - 5-pin male to 5-pin female connection.*	
Z-PROGEL/SH	ADJ plastic color gel sheets 21"x24"	
LSF20-22	Light Shaping Filter – 20 degrees 24"x20" sheet	
LSF30-24	Light Shaping Filter – 30 degrees 24"x20" sheet	
LSF601-24	Light Shaping Filter - 60 degrees 24"x20" sheet	
S-Cable/60	Safety Cable with 60-pound weight rating	
O-CLAMP	360-Degree clamp that wraps around truss tubing.	
PRO-CLAMP	360-Degree aluminum clamp with a max rating of 1100 lbs.	

\*Additional lengths available at www.adj.com