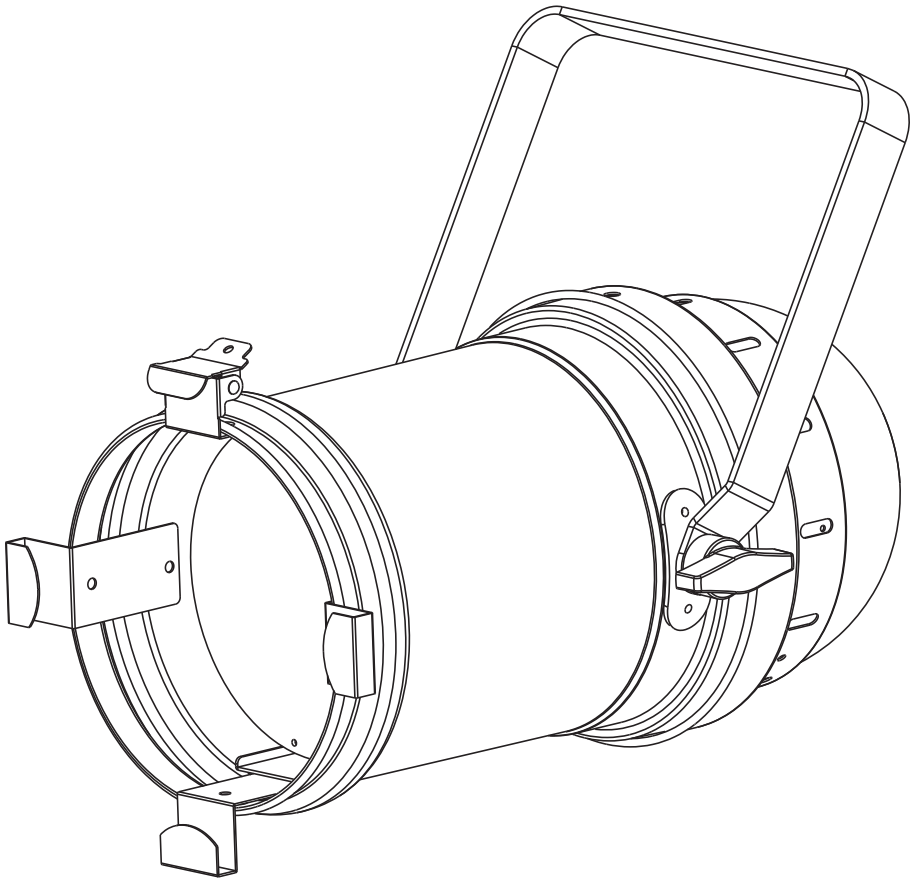

PAR Z120 RGBW
PAR ZP120 RGBW

User Guide

ADJ USA l 6122 S. Eastern Ave. l Los Angeles, CA. 90040
323-582-2650 l 323-532-2941 fax l **www.adj.com l support@americandj.com**

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DOCUMENT VERSION

Due to additional product features and/or enhancements, an updated version of this document may be available online.

Please check ww.adj.com for the latest revision/update of this manual

Date	Document Version	Software Version	DMX Channels	Notes
08/01/2018	1	1.0	1/2/3	Initial Release
09/06/2018	1.2	N/C	N/C	Updated Dimming Curve Chart
12/14/2018	1.4	N/C	N/C	Added ETL Approval
01/30/2023	1.6	N/C	N/C	Updated Format, Specifications, & added RDM

CONTENTS

GENERAL

INTRODUCTION

This fixture has been designed to perform reliably for years when the information in this manual are followed. Please read and understand all the instructions and guidelines carefully and thoroughly before operating this unit. This manual contains important information regarding safety, installation, use, and maintenance.

UNPACKING

Each fixture has been thoroughly tested and shipped in perfect operating condition. Carefully check the outer shipping carton for signs of any damage that may have occurred during shipping. If the outer carton appears to be damaged, carefully inspect the fixture for damage and be sure all included accessories have arrived intact. In the event damage has been found and/or parts are missing, please contact our customer support team for further instructions. Please do NOT return this fixture to your dealer without first contacting customer support at the number listed below. Please do NOT discard the outer shipping carton in the trash. Please recycle whenever possible.

CUSTOMER

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

ADJ SERVICE USA – Monday – Friday 8:00am to 4:30pm PST
Voice: 800-322-6337 I Fax: 323-582-2941 I support@adj.com

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

REPLACEMENT PARTS please visit **parts.adj.com**

WARRANTY RETURNS

All returned service items, whether under warranty or not, must be freight pre-paid and accompanied by a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without an R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain an R.A. number by contacting customer support.

LIMITED WARRANTY (USA ONLY)

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 periods below). 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 if 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 serviced by anyone other than the 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 contract, and this warranty does not include maintenance, cleaning or periodic checkup. 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 warranty 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. 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. 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 ARRANTY PERIODS

- **Non-LED Lighting Products = 1-Year (365 Days)** (Including Special Effect Lighting, Intelligent Lighting, UV lighting, Strobes, Fog Machines, Bubble Machines, Mirror Balls, Par Cans, Trussing, Lighting Stands, Power/Data Distribution, etc. excluding LED and lamps)
- **Laser Products = 1-Year (365 Days)** (excluding laser diodes which have a 6-Month Limited Warranty)
- **LED Products = 2-Year (730 Days)** (excluding batteries which have a 180 Day Limited Warranty) **PLEASE NOTE: 2-Year (730 Days) Limited Warranty ONLY applies to product purchased within the USA.**
- **StarTec Series = 1-Year 365 Days)** (excluding batteries which have a 180 Day Limited Warranty)
- **ADJ DMX Controllers = 2 Year (730 Days)**
- **American Audio Products = 1 Year (365 Days)**

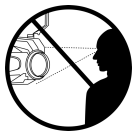
SAFETY GUIDELINES

This fixture is a sophisticated piece of electronic equipment. To guarantee smooth operation, it is important to follow all instructions and guidelines in this manual. ADJ is not responsible for injury and/or damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual. Only qualified and/or certified personnel should perform installation of this fixture and only the original rigging parts (omega brackets) included with this fixture should be used for installation. Any modifications to the fixture and/or the included mounting hardware will void the original manufacturer's warranty and increase the risk of damage and/or personal injury.

PROTECTION LASS 1 – FIXTURE MUST BE PROPERLY GROUNDED.

THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT. DO NOT ATTEMPT ANY REPAIRS YOURSELF, AS DOING SO WILL VOID YOUR MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURER'S WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.

DO NOT PLUG FIXTURE INTO A DIMMERPACK!
NEVER OPEN THIS FIXTURE WHILE IN USE!
DISCONNECT FIXTURE FROM POWER BEFORE SERVICING!
NEVER TOUCH THE FIXTURE DURING OPERATION, AS IT MAY BE HOT!
KEEP FLAMMABLE MATERIALS AWAY FROM THE FIXTURE!



NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!
RETINA INJURY RISK – MAY INDUCE BLINDNESS!
SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!

MAXIMUM EXTERNAL SURFACE TEMPERATURE: 185° F (85° C)
MAXIMUM AMBIENT TEMPERATURE: 104° F (40° C)

- **DO NOT TOUCH** the fixture housing during operation.
- Turn **OFF** the power and allow approximately 15 minutes for the fixture to cool down before serving.
- **DO NOT** shake fixture, avoid brute force when installing and/or operating fixture.
- **DO NOT** operate fixture if the power cord is frayed, crimped, damaged and/or if any of the power cord connectors are damaged and do not insert into the fixture securely with ease.
- **NEVER** force a power cord connector into the fixture. If the power cord or any of its connectors are damaged, replace it immediately with a new one of similar power rating.
- **DO NOT** block any air ventilation slots. All fan and air inlets must remain clean and never blocked. Allow approx. 6" (15cm) between fixture and a wall for proper cooling.
- When installing fixture in a suspended environment, always use mounting hardware that is at least M10 x 25 mm, and always install fixture with an appropriately rated safety cable.
- Always disconnect fixture from main power source before performing any type of service and/or cleaning procedure.
- Only handle the power cord by the plug end, and never pull out the plug by tugging the wire portion of the cord.
- During the initial operation of this fixture, a light smoke or smell may emit from the interior of the fixture. This is a normal process and is caused by excess paint in the interior of the casing burning off from the heat associated with the lamp and will decrease gradually over time.
- Consistent operational breaks will ensure fixture will function properly for many years.
- If the fixture needs to be returned for servicing, use only the original packaging and materials to transport the fixture.

OVERVIEW

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

DMX SETUP

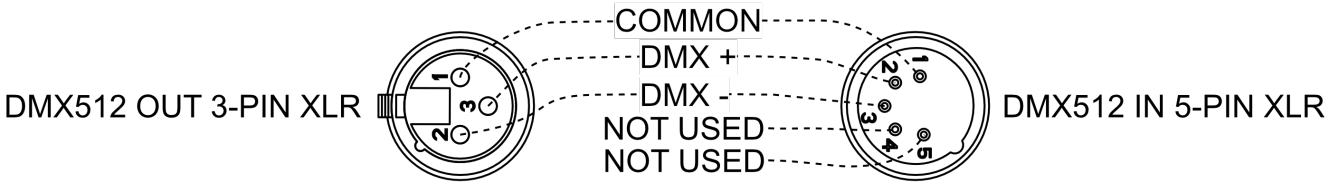
DMX-512: DMX is short for Digital Multiplex. This is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture 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 if 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. 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 in the DMX chain.

Data Cable (DMX Cable) Requirements (For DMX Operation): This fixture can be controlled via DMX-512 protocol. The DMX address is set using the control panel. Your unit and your DMX controller require a 5-pin XLR connector for data input and data output. 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 may be purchased at almost all pro 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.

5-Pin XLR DMX Connectors: This fixture uses 5-pin DMX-512 data cables for DATA transmission in place of a 3-pin. 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 adapter must be used, these adapters are readily available at most electric stores. The chart below details a proper cable conversion.

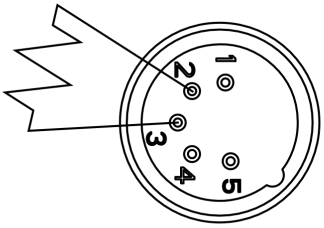
Note: Do not connect the cable’s shield conductor to the ground lug, or allow the shield conductor to contact the XLR’s outer casing. Grounding the shield could cause a short circuit.

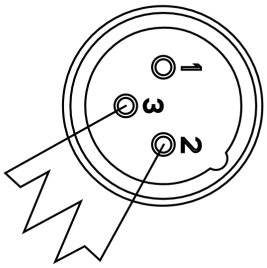


3-Pin XLR to 5-Pin XLR Conversion		
Ground/Shield	Pin 1	Pin 1
Data Compliment (- signal)	Pin 2	Pin 2
Data True (+ signal)	Pin 3	Pin 3
Not Used		Do Not Use
Not Used		Do Not Use

DMX SETUP

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 110120-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.

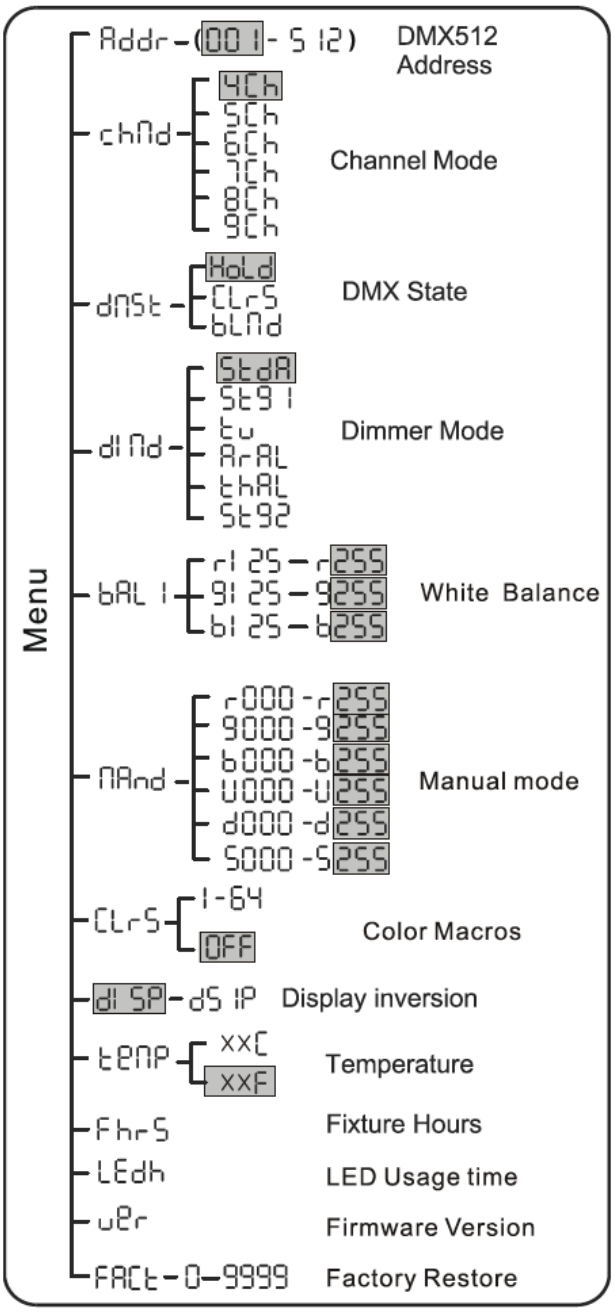




A DMX512 terminator reduces signal errors, avoiding most signal reflection interference. Connect PIN 2 (DMX-) and PIN 3 (DMX+) of the last fixture in series with a 120 Ohm, 1/4 W Resistor to terminate the DMX512.

SYSTEM MENU

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:



SYSTEM MENU

Addr DMX 512 Address Setting

Press the either the **MENU**, **UP**, or **DOWN** buttons until Addr 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.

ChNd Channel Mode – Select your desired DMX channel mode.

Press the **MENU** button until ChNd 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.

dnSt 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 dnSt is displayed and press **ENTER**. Use the **DOWN** and **UP** button to select (Blackout) /or CLrS (Automatic Operation Color Macro) or HoLd (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.

SYSTEM MENU

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

Press the **MENU** button until dIMd 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.

bAL I White Balance - Calibration

Press the MENU button until bAL I is displayed and press **ENTER**. Use the **DOWN** and **UP** button to select Red, Green or Blue. 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.

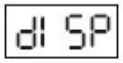
MAnd Manual mode

Press the **MENU** button until MAnd is displayed and press **ENTER**. Use the **DOWN** and **UP** buttons to select the Red r000-r255 /Green 9000-9255 /Blue b000-b255 /White U000-U255/Dimmer d000-d255 or Strobe S000-S255. Press **ENTER** to confirm and exit, or exit menu mode without any change after 8 seconds automatically.

CLrS Color Macros

Press the **MENU** button until CLrS 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.

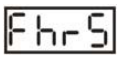
SYSTEM MENU

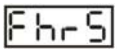
 **Display Inverse – Reverse the display 180°.**

Select the  , press the **ENTER** button. Use the **DOWN** and **UP** button to select  (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.**

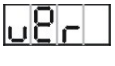
Select the  , press **ENTER** button and the display will show Fahrenheit degree and Centigrade. Press **ENTER** to confirm and exit or exit menu mode without any change after 8 seconds automatically.

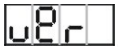
 **Fixture Hour – Display the running time of the unit.**

Select the  , 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.

 **LED Usage time**

Select the  , 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  , 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.

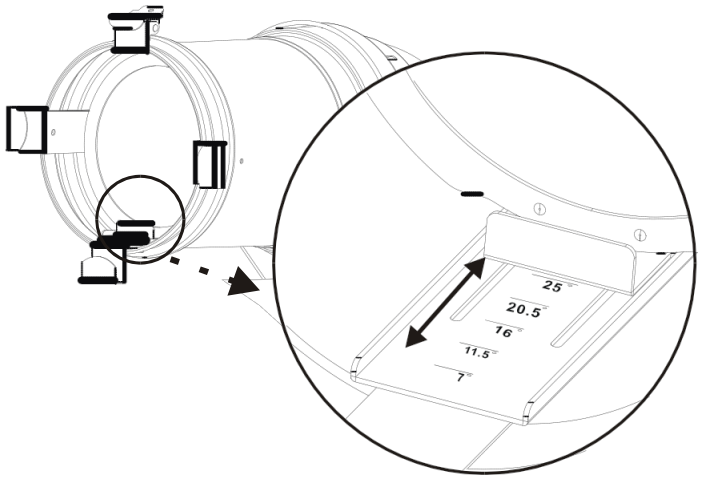
 **Factory Restore**

Select the  , 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.

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 OPERATION

DMX Controller

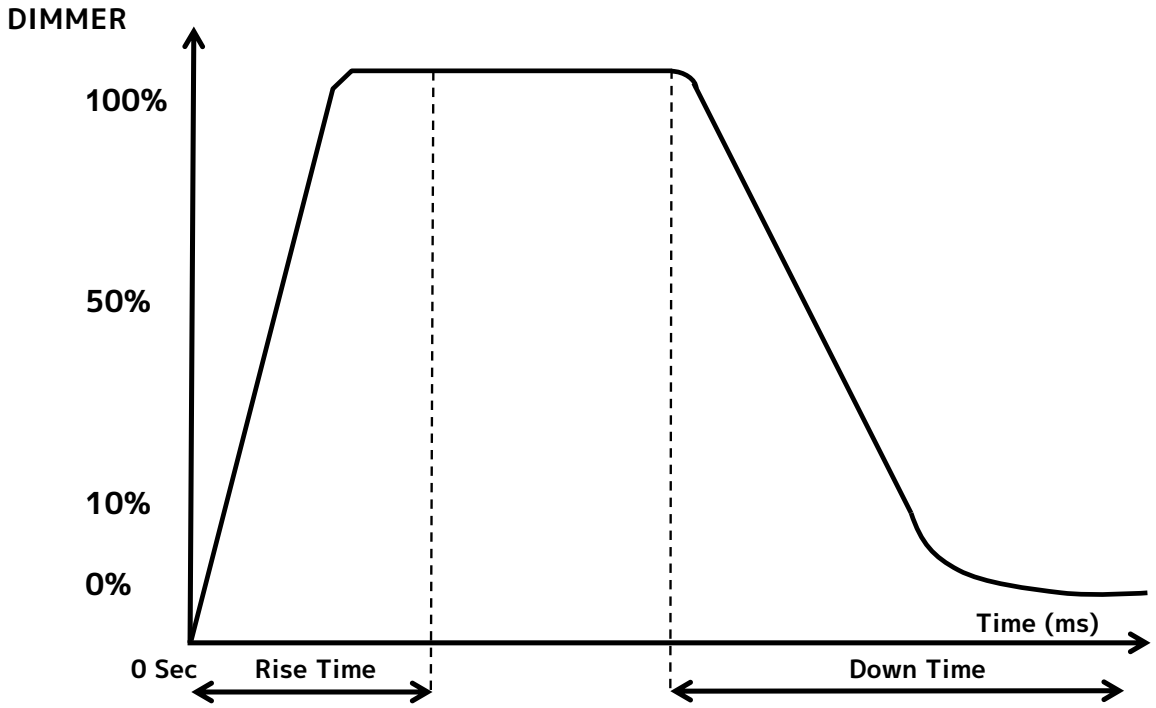
No need to turn the unit off when you change the DMX address, as new DMX address setting will be affected at once. Turn on the unit, under the DMX signal; the LED will display the saved channel address (001-512).

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.

DIMMING CURVE

The fixture includes 6 different dimming curve modes that can selected from either the system menu or via DMX. The graph below provides details on each dimming curve mode.



Dimming Curve Ramp Effect	0 sec Fade Time		1 sec Fade Time	
	255 / 0		255 / 0	
	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

DMX TRAITS: CHANNEL FUNCTIONS AND VALUES

4 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 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	0-255	Total Dimmer 0-+100%

6 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	0-255	Total Dimmer 0-+100%
6	0-255	Dimming Fine

DMX TRAITS: CHANNEL FUNCTIONS AND VALUES

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%
5 Strobe	0-31	Shutter Closed {LEDs OFF)
	32-63	Shutter OPEN (LEDs ON)
	64-95	Strobe Effect Slow to Fast
	96-127	Shutter OPEN (LEDs ON)
	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	Total Dimmer 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%
5 Strobe	0-31	Shutter Closed (LEDs OFF)
	32-63	Shutter OPEN (LEDs ON)
	64-95	Strobe Effect Slow to Fast
	96-127	Shutter OPEN (LEDs ON)
	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	Total Dimmer 0-+100%
7	0-255	Dimming fine
8 Dim Curves	0-20	Standard
	21-40	Stage
	41-60	TV
	61-80	Architectural
	81-100	Theater
	101-120	Stage 2
	121-255	Default to unit curve setting

DMX TRAITS: CHANNEL FUNCTIONS AND VALUES

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 Color Macros	1-4	Color Macro 1	129-132	Color Macro 33
	5-8	Color Macro 2	133-136	Color Macro 34
	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	Color Macro 6	149-152	Color Macro 38
	25-28	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
	61-64	Color Macro 16	189-192	Color Macro 48
	65-68	Color Macro 17	193-196	Color Macro 49
	69-72	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	Color Macro 25	225-228	Color Macro 57
	101-104	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 Strobe	0-31	Shutter Closed(LEDs OFF)		
	32-63	Shutter OPEN(LEDs ON)		
	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	Shutter OPEN(LEDs ON)		
7	0-255	Total Dimmer 0→100%		
8	0-255	Dimming fine		
9 Dim Curves	0-20	Standard		
	21-40	Stage		
	41-60	TV		
	61-80	Architectural		
	81-100	Theatre		
	101-120	Stage 2		
	121-255	Default to unit curve setting		

REMOTE DEVICE MANAGEMENT (RDM)

NOTE: For RDM to work properly, RDM enabled equipment must be used throughout the entire system, including DMX data splitters and wireless systems.

Remote Device Management (RDM) is a protocol that sits on top of the DMX512 data standard for lighting, allowing the DMX systems of the device to be managed, modified, and monitored remotely (hence, remote device management). This protocol is ideal for fixtures installed in locations that are not easily accessible.

With RDM, the DMX512 system becomes bi-directional, allowing a compatible RDM enabled controller to send out a signal to devices on the wire, as well as allowing the fixture to respond (known as a GET command). The controller can then use it's SET command to modify settings that would typically have to be changed or viewed directly via the unit's display screen, including the DMX Address, DMX Channel Mode, and Temperature Sensors.

FIXTURE RDM INFORMATION:

RDM Code	Device ID	Device Model ID	Personality ID
0X667	OPEN	1639	OPEN

Please be aware that not all RDM devices support all RDM features, and therefore it is important to check beforehand to ensure that the equipment that you are considering includes all the features that you require.

The following parameters are accessible in RDM on this device:

PARAMETER ID	DISCOVERY COMMAND	SET COMMAND	GET COMMAND
DISC_UNIQUE_BRANC H	V	V	V
DISC_MUTE	V	V	V
DISC_UN_MUTE	V	V	V
DEVICE_INFO	V		
SOFTWARE_VERSION_ LABEL			V
DMX_START_ADDRESS		V	V
IDENTIFY_DEVICE		V	V
DEVICE_MODEL_DESC RIPTION			V
COMMS_STATUS	V	V	
QUEUED_MESSAGE	V		V
STATUS_MESSAGES	V		V
STATUS_ID_DESCRIPTI ON	V		V
CLEAR_STATUS_ID	V	V	
PRODUCT_DETAIL_ID_L IST	V		
MANUFACTURER_LABE L	V		V
DEVICE_LABEL	V	V	V
BOOT_SOFTWARE_VER SION_ID			V
DMX_PERSONALITY		V	V
DMX_PERSONALITY_D ESCRIPTION	V		V
SLOT_INFO			V
SLOT_DESCRIPTION			V
DEFAULT_SLOT_VALUE			V
SENSOR_DEFINITION	V		V
SENSOR_VALUE	V		V
DEVICE_HOURS			V
RESET_DEVICE		V	
DMX_STATE		V	

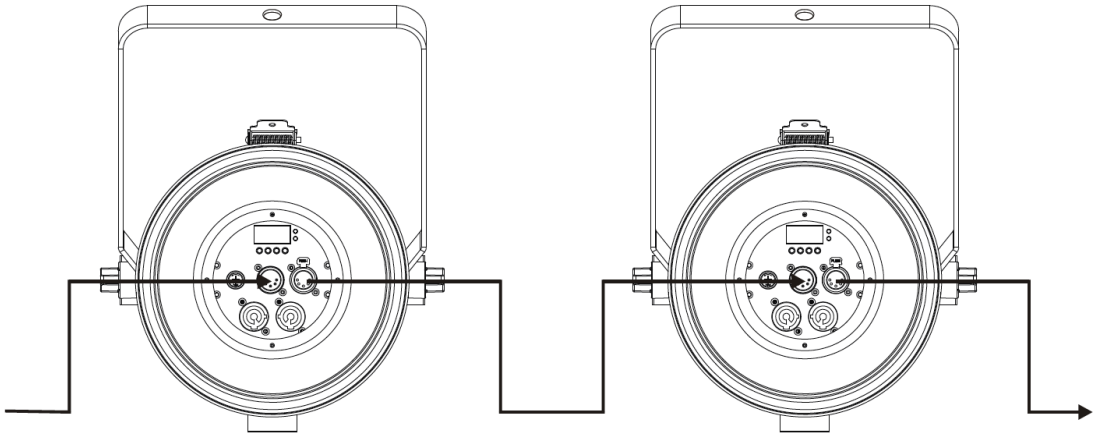
INSTALLATION

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 can 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.

MULTI 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.



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 powerCON input. Remove the bad fuse and replace with a new one, and screw the fuse holder back in.

MAINTENANCE

Cleaning

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.

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.

SPECIFICATIONS

Optical:
• 115 Watt Quad RGBW C.O.B. LED (Chip On Board - Red, Green, Blue & White)
• Life expectancy: rated at 50,000 hrs.
• Beam angle: 7, 11.5, 16, 20.5 or 25-degree (manual adjustment)

Connection:
• DMX: 5-pin DMX In/Out
• With Wired Digital Communication Network
• Locking power In/Out connections

Control:
• Control protocol: DMX-512
• 6 DMX Channels (4/5/6/7/8/9 Ch. modes)
• 64 Built-in Color Macros
• RDM (Remote Device Management)

Features:
• 4-button DMX menu display on rear panel
• Adjustable latch to manually change beam angle
• Includes gel frame for diffusion filters (Diffusion filter sold separately)
• Strobe effect
• Flicker Free Operation
• Electronic Dimming: 0 - 100% with 5 dimming curves
• Run all night – No duty cycle

Electrical:
• Power Draw Total (All LED's @ Full On): 107W
• Multi-voltage operation: AC 100-240V, 50/60Hz
• Daisy chain: 14 fixtures @ 120V; 27 fixtures @ 230V

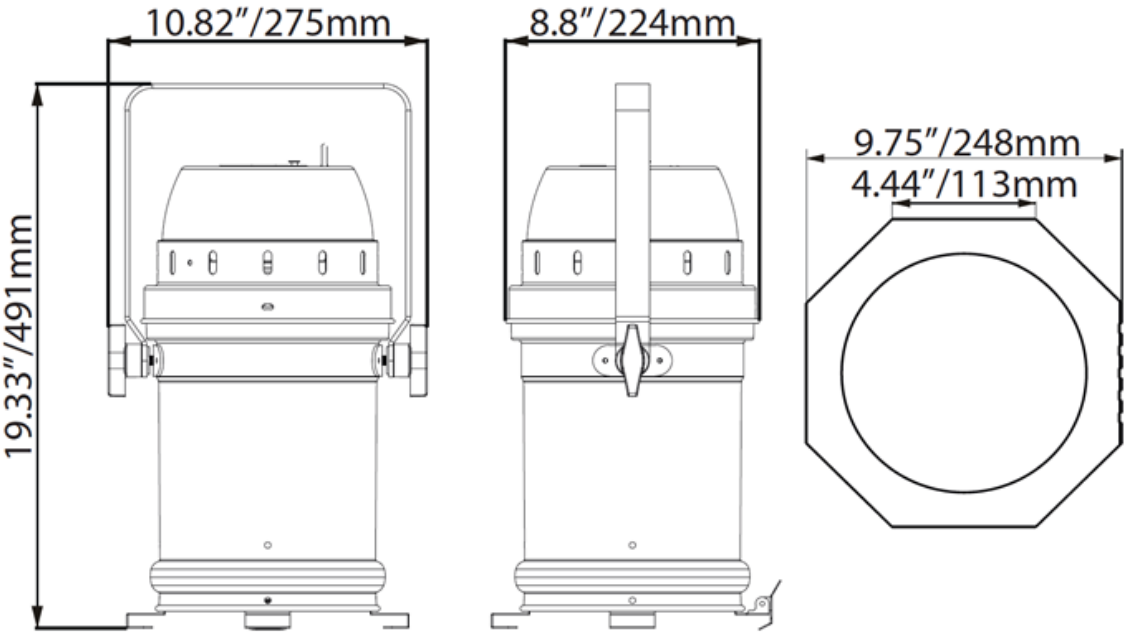
Dimensions / Weight:
• Dimensions (LxWxH): 19.5” x 11” x 9” / 491 x 275 x 224mm
• Weight: 8.5 lbs. / 3.9kg.
ETL Approved

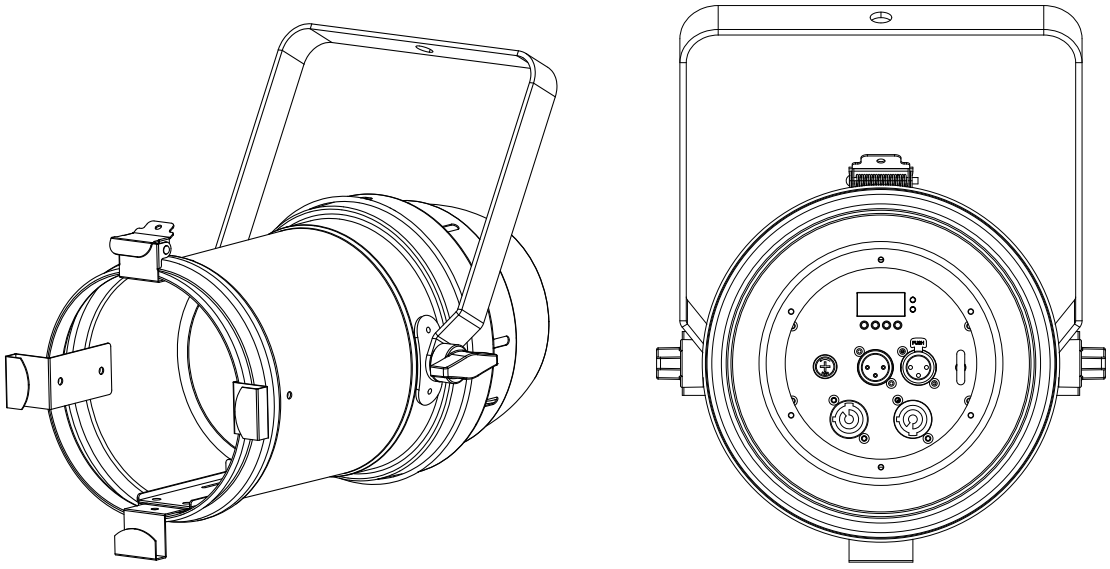
Please Note: Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.

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

DIMENSIONS

Dimensions not to scale





ACCESSORIES

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

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 deter- mined 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!