



# DOTZ PAR RGBL User Instructions

©2025 ADJ Products, LLC all rights reserved. Information, specifications, diagrams, images, and instructions herein are subject to change without notice. ADJ Products, LLC logo and identifying product names and numbers herein are trademarks of ADJ Products, LLC. Copyright protection claimed includes all forms and matters of copyrightable materials and information now allowed by statutory or judicial law or hereinafter granted. Product names used in this document may be trademarks or registered trademarks of their respective companies and are hereby acknowledged. All non-ADJ Products, LLC brands and product names are trademarks or registered trademarks of their respective companies.

**ADJ Products, LLC** and all affiliated companies hereby disclaim any and all liabilities for property, equipment, building, and electrical damages, injuries to any persons, and direct or indirect economic loss associated with the use or reliance of any information contained within this document, and/or as a result of the improper, unsafe, insufficient and negligent assembly, installation, rigging, and operation of this product.

Europe Energy Saving Notice

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!

### **DOCUMENT VERSION**



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

Please check <u>www.adj.com</u> for the latest revision/update of this manual before beginning installation and/or programming.

Date	Document Version	Software Version	DMX Channels	Notes
01/30/2024	1.0	1.01	4 / 7 / 8 / 10 / 13 / 16 Ch	Initial release
06/11/2024	1.1	N/C	No change	Corrected System Menu and DMX Traits; Updated Specifications
01/22/2025	1.2	N/C	No Change	Updated Specifications, Dimensions

## CONTENTS

Introduction	4
Limited Warranty (USA Only)	5
Warranty Registration I Features	6
Safety Precautions	7
Overview	8
Installation	9
Accessory Installation	14
Remote Device Management (RDM)	15
Control Panel	16
System Menu	17
DMX Set Up	20
DMX Traits	22
Color Macros Chart	24
Dim Speeds	26
Dim Modes	27
Primary-Secondary Set Up	28
Multi Unit Power Linking I Fuse Replacement	29
Maintenance Guidelines	30
<b>Dimensional Drawings</b>	31
Specifications	32

## INTRODUCTION

**Unpacking:** Thank you for purchasing the Dotz Par RGBL by ADJ Products, LLC. Every device 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 have been damaged, carefully inspect your fixture for any damage and be sure all accessories necessary to operate the unit have arrived intact. In the event that damage has been found or parts are missing, please contact our toll free customer support number for further instructions. Do not return this unit to your dealer without first contacting customer support.

**Introduction:** The ADJ Dotz Par RGBL uses the latest advancements in lighting technology with a RGBL (red, green, blue, lime) C.O.B. LED for a smooth, even field, high CRI output, advanced color mixing and linear color temperature control from 2700K to 6500K. **This product is intended to be used by professionally trained personnel only and is not suitable for private use.** 

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

Parts: To purchase parts online visit:

http://parts.adj.com (US) http://www.adjparts.eu (EU)

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

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

### **ADJ PRODUCTS LLC USA**

6122 S. Eastern Ave. Los Angeles, CA. 90040 323-582-2650 I Fax 323-532-2941 I www.adj.com l info@adj.com

#### **ADJ SUPPLY Europe B.V**

Junostraat 2 6468 EW Kerkrade, The Netherlands +31 (0)45 546 85 00 | Fax +31 45 546 85 99 www.adj.eu | info@adj.eu

#### **ADJ PRODUCTS GROUP Mexico**

AV Santa Ana 30 Parque Industrial Lerma, Lerma, Mexico 52000 +52 (728) 282-7070

**Warning!** This unit is intended for indoor use only! Do not expose to rain or moisture!

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

Do not discard the shipping cartoon in the trash. Please recycle when ever possible.

## 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 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

## WARRANTY REGISTRATION

Please fill out the enclosed warranty card to validate your purchase. 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 included in the shipping carton. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. You may obtain an R.A. number by contacting our customer support team. All packages returned to the service department not displaying an R.A. number on the outside of the package will be returned to the shipper.

## **FEATURES**

- Light Source: 16 x 3.5-Watt RGBL C.O.B. LED (4-IN-1: Red, Green, Blue & Lime)
- Linear Color Temperature Control (2700K to 6500K)
- 35° Beam Angle
- 64 built-in Color Macros
- Selectable Dimming Modes, Dim Curves, Strobe effects

#### **INCLUDED ITEMS**

- Power Cord (x1)
- Frost Lens (x1)

## SAFETY PRECAUTIONS



PROTECTION CLASS 1 - FIXTURE MUST BE PROPERLY GROUNDED.



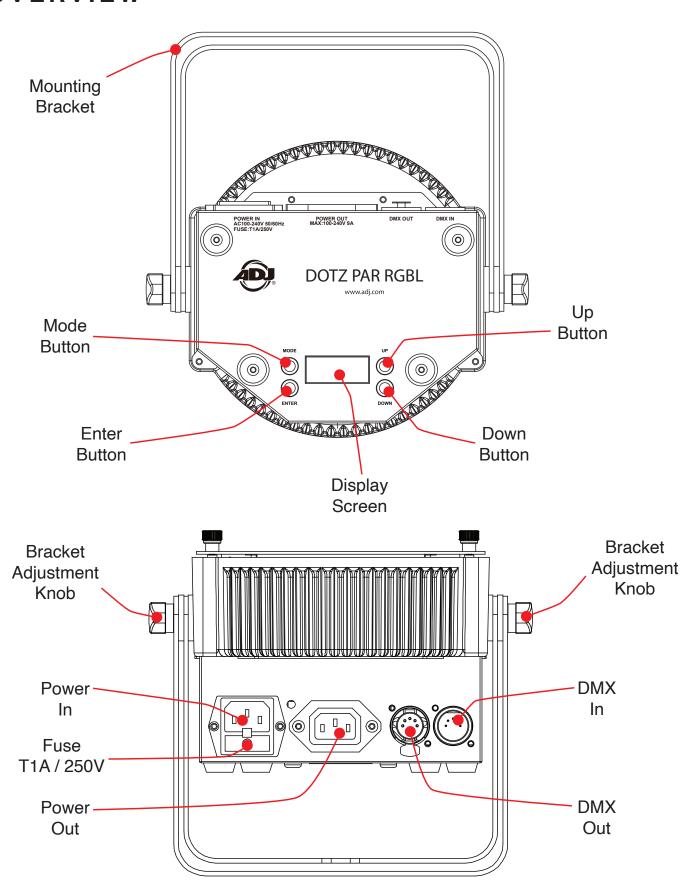
THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT. DO NOT ATTEMPT ANY REPAIRS YOURSELF, AS DOING SO WILL VOID YOUR MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURER'S WARRANTY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

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

mum ambient operating temperature is 113°F (45°C)!

- DO NOT TOUCH the fixture housing during operation. Disconnect the power and allow approximately 15 minutes for the fixture to cool down before servicing.
- DO NOT shake the fixture, and avoid brute force when installing and/or operating the fixture.
- DO NOT operate the fixture if the power cord has become frayed, crimped and/or damaged. If the power cord is damaged, replace immediately with a new one of the same power rating.
- 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.
- DO NOT attempt to operate this unit if it has been damaged in any way.
- Disconnect from main power before making any type of connection.
- 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 other devices or a wall for proper cooling.
- 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.
- This device is intended for indoor use only! Outdoors usage voids all manufacturer's warranties.
- DO NOT remove the cover for any reason.
- When installing fixture in a suspended environment, always use mounting hardware that is no less than M10 x 25mm, and always install fixture with an appropriately rated safety cable.
- Never plug this unit in to a dimmer pack.
- During long periods of non-use, disconnect the unit's main power.
- 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 the point where they exit from the unit.
- Cleaning The fixture should be cleaned only as recommended by the manufacturer.
- Heat The appliance 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. The power-supply cord or the plug have been damaged.
  - B. Objects have fallen onto, or liquids have been spilled into, the fixture.
  - C. The fixture does not appear to operate normally or exhibits a marked change in performance.
  - D. The fixture has fallen and/or has been subjected to extreme handling.

## **OVERVIEW**





### DO NOT INSTALL THE FIXTURE IF YOU ARE NOT QUALIFIED TO DO SO!

Fixture **MUST** be installed following all local, national, and country commercial electrical and construction codes and regulations.

When installing the unit, the trussing or area of installation must be able to hold 10 times the weight of the unit and any attached accessories without any deformation. The unit must be secured with a secondary safety attachment, e.g. an appropriately-rated safety cable.

Before rigging/mounting a single fixture to any metal truss/structure or placing the fixture(s) on any surface, a professional equipment installer MUST be consulted to determine if the metal truss/structure or surface is properly certified to safely hold the combined weight of the fixture(s), clamps, cables, and accessories.

Maximum ambient operating temperature is range 113°F (45°C). Do not operate this device when ambient temperature exceeds this value!

Fixture(s) should be installed away from walking paths, seating areas, or areas where unauthorized personnel might reach the fixture by hand.

**NEVER** stand directly below the fixture(s) when rigging, removing, or servicing.

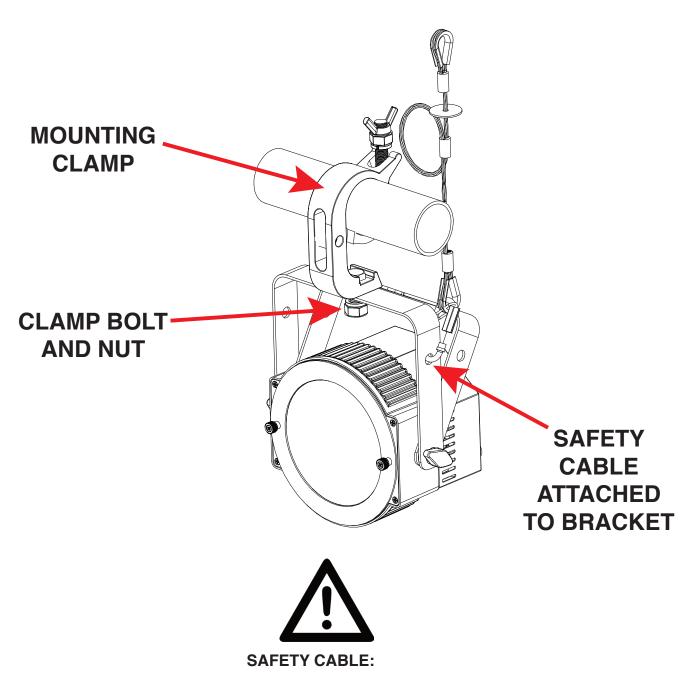
Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable that can hold 10 times the weight of the fixture.

Overhead mounting requires extensive experience, including calculating working load limits, knowledge of installation material being used, and perodic safety inspection of all installation material as well as the unit itself. If you lack these qualifications, do not attempt the installation yourself.

The installation should be checked by a skilled person once a year.

#### **CLAMP MOUNTING**

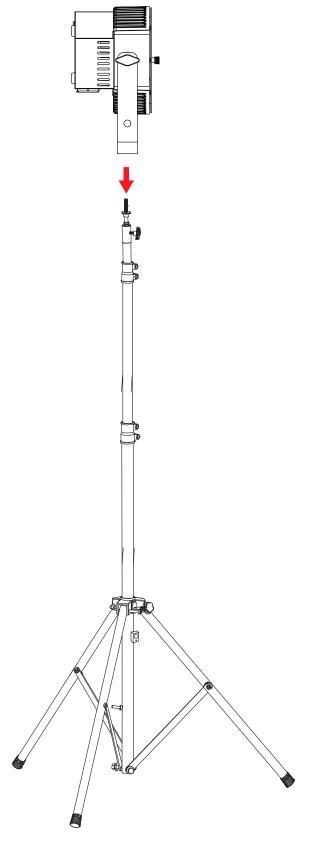
When mounting the fixture to a truss or any other suspended structure, be sure to secure an appropriately rated clamp to the hole on the top of the mounting bracket. Insert a bolt of appropriate size through the bottom of the mounting clamp and the hole on the mounting bracket, and secure them together with a matching nut. Additionally, a safety cable of the appropriate weight rating should be secured through one of the holes in the side of the mounting bracket.



ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THAT THE FIXTURE WILL NOT FALL IF THE CLAMP FAILS.

### STAND MOUNTING

This unit can also be installed atop a tripod stand. Simply secure the Omega bracket to the bottom face of the device, then insert the threaded bolt on the top of the tripod stand through the hole in the Omega bracket. Tighten the nut onto the threaded bolt to secure the mounted device in place.





### **CAUTION!**

MAKE SURE THAT THE TRIPOD LEGS AND ALL TELESCOPING ELEMENTS OF THE TRIPOD STAND ARE LOCKED IN PLACE BEFORE INSTALLING THE DEVICE ATOP THE STAND!

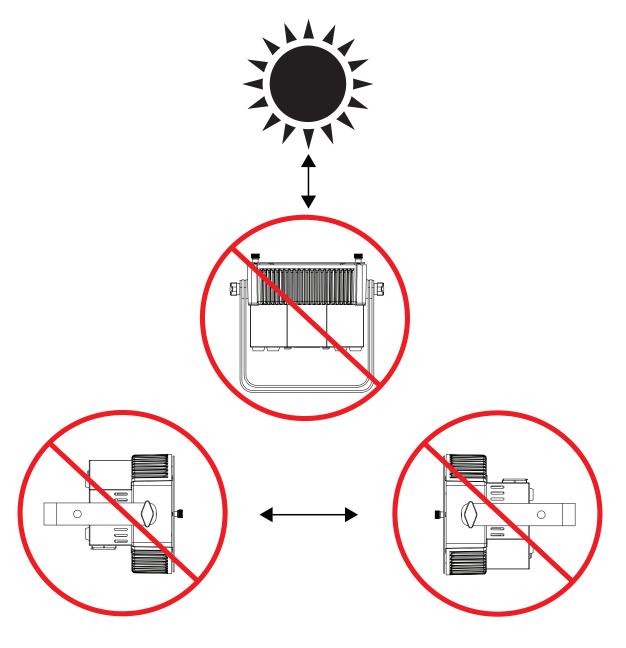
POSITION THE TRIPOD STAND AND MOUNTED DEVICE ONLY ON FLAT, STABLE SURFACES! DEPLOY TRIPOD LEGS FULLY IN ORDER TO MAXIMIZE STABILITY!

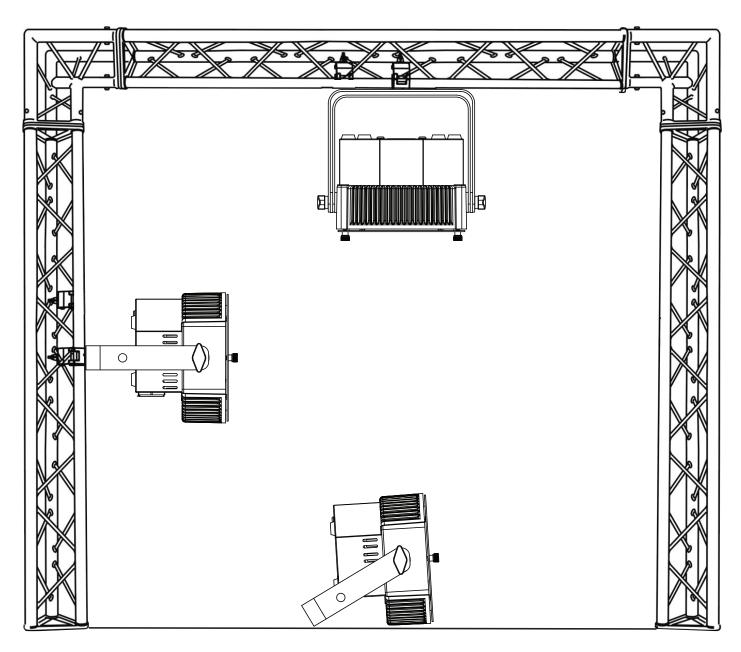
#### POTENTIAL INTERNAL FIXTURE DAMAGE FROM EXTERNAL SOURCES OF LIGHT BEAMS

External sources of light beams from direct sunlight, lighting moving head fixtures, and lasers, which are focused directly towards the exterior housing and/or penetrate the front lens opening of ADJ lighting fixtures, can cause severe internal damage including burning to optics, dichroic color filters, glass and metal gobos, prisms, animation wheels, frost filters, iris, shutters, motors, belts, wiring, discharge lamps, and LEDs.

This issue is not specific only to ADJ lighting fixtures, it is a common issue with lighting fixtures from all manufacturers. Although there is no true way to fully prevent this issue from happening, the guidelines below can prevent any potential damage from occurring if followed. Contact ADJ Service for more details.

DO NOT EXPOSE THE FIXTURE AND/OR FRONT LENS OPENING TO LIGHT BEAMS FROM DIRECT SUNLIGHT, OTHER LIGHTING MOVING HEAD FIXTURES, AND LASERS WHILE UNPACKING, INSTALLATION, USE, AND EXTENDED IDLE TIMES OUTDOORS. DO NOT FOCUS A LIGHT BEAM FROM ONE LIGHTING FIXTURE DIRECTLY TOWARDS ANOTHER.





The unit is fully operational in three different mounting positions: hanging upside-down from the ceiling or trussing, sideways on trussing, or set on a flat level surface. Be sure this fixture is kept at least 12m (40ft) away from any flammable materials (decorations, etc). Always use and install a safety cable (not included) as a safety measure to prevent accidental damage and/or injury in the event the clamp fails. Never use the carrying handles for secondary attachment.



FALLING FIXTURES CAN CAUSE SEVERE INJURY OR SERIOUS EQUIPMENT DAMAGE! FOR THIS REASON, FIXTURES SHOULD BE INSTALLED AND INSPECTED ONLY BY QUALIFIED PERSONNEL. DO NOT INSTALL THE UNIT IF YOU LACK THE QUALIFICATIONS TO DO SO, OR IF YOU HAVE DOUBTS ABOUT THE SAFETY AND SECURITY OF THE INSTALLATION SETUP OR LOCATION!

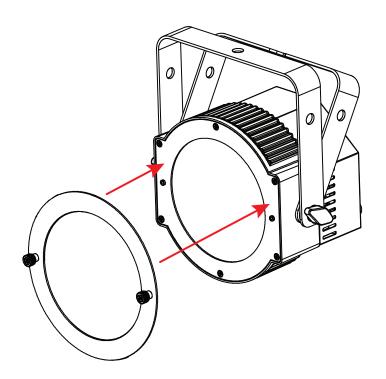


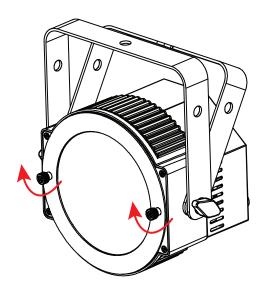
ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THAT THE FIXTURE WILL NOT FALL IF THE CLAMP FAILS.

## **ACCESSORY INSTALLATION**

### **FROST LENS**

A removeable frost lens is included with the fixture. To install, insert the two thumb screws on the frost lens into the installation holes on the fixture lens frame, then tighten the thumb screws to secure the frost lens in place.





## REMOTE DEVICE MANAGEMENT (RDM)

NOTE: In order 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 fixtures to be modified and monitored remotely. This proto-col is ideal for instances in which a unit is installed in a location that is not easily accessible.

With RDM, the DMX512 system becomes bi-directional, allowing a compatible RDM enabled con-troller 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 its *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:

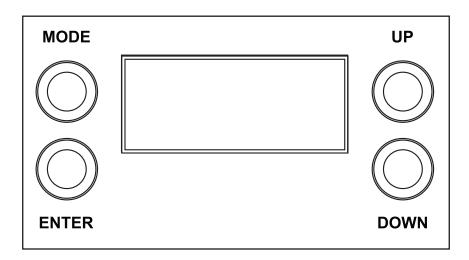
RDM Code	Device ID	Device Model ID	Personality ID
1900	0000-FFFF	Δン Δン	4Ch (1); 7Ch (2); 8Ch (3); 10Ch (4); 13Ch (5); 16Ch (6)

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 of the fea-tures that you require.

[0x0200] Sensor Definition
[0x0201] Sensor Value
[0x0080] Device Model Description
[0x0081] Manufacturer Label
[0x0082] Device Label
[0x00E0] DMX Personality
[0x00E1] DMX Personality Description
[0x0400] Device Hours

This unit features a display screen with a 4-button control pad, which can be used to easily adjust any device settings.

Pressing the MODE button will cycle through the various Main Menu options. When the desired Main Menu option is displayed on the screen, press the ENTER button to enter the sub-menu, then use the UP and DOWN buttons to scroll through sub-menu options. In some cases, there will be a second sub-menu that can be navigated in the same way.



### **SCREEN LOCK**

The control panel screen will lock after a period of inactivity which can be set by navigating to Personality > Display > Lock. Default time is 30 seconds. To unlock the screen, press and hold the MODE button for 3 seconds.

	Addr (Address)	<b>A001</b> - A512	Set DMX starting address	
		4ch		
		7ch		
	CHnd (Channel	8ch		Select DMX chan-
	Mode)	10ch		nel mode
		13ch		
		16ch		
dn (DMX)		Hold		Fixture holds last configuration received before DMX signal was lost or interrupted
	nodn (No DMX)	blAc (Blackout)	Fixture takes all channels to 0 if DMX signal is lost or interrupted	
		InPr (Internal P	Fixture defaults to internal program if DMX signal is lost or interrupted	
	Prin (Primary)	On / <i>Off</i>		Set fixture as a primary unit
	Secd (Secondary)	On / <i>Off</i>		Set fixture as a secondary unit
		On / <i>Off</i>		Activate or deactivate sound active
PErS	Soun	SEnS	1 - 30 (default = <b>15</b> )	Set sound sensitivity level. 1 is least sensitive, 30 is most sensitive
(Personality)	rF	On / <i>Off</i>		Enable or disable remote control
		dn00 (Standar	rd)	
		dn01 (Stage)		
		dn02 (TV)		Oalaat allos os al
	dnXX	dn03 (Archi)		Select dim mode and set dim
	(Dim Mode)	dn04 (Theatre)		speed
		dn05 (Stage 2)		
		dSXX (Dim Speed)	0.1s - 10s	

dCXX (Dim C	``\	dC01 (Linear)			1	
(Dim C	أ ۱ ، ، ، ، ، ۱		Soloot dim ourvo			
	urve)	dC02 (Inv. Squa)		-	Select dim curve	
i	-	dC03 (S. Curve)				
diSP (	Display)	SdlY (Save Delay)	1 - <b>10</b>		Screen turns off after selected period of inactivity	
PErS	ызріау)	LOC (Lock)	<i>Off,</i> 1min - 10min	ı	Screen locks after selected period of inactivity	
(Personality) (continued)				rXXX (Red) 000 - 255		
			bAln	GXXX (Green) 000 - 255	Calibrate white	
SEr (S	ervice)	PASS (Passcode = 050)	(White Balance)	bXXX (Blue) 000 - 255	balance	
				LXXX (Lime) 000 - 255		
			rESt (Restore)	Yes / <i>No</i>	Returns fixture to default factory settings	
rEd (R	ed)	r000 - r255				
GrEn (	Green)	G000 - G255				
bluE (f	Blue)					
LInE (I	_ime)	L000 - L255				
Clrn (C	Or Macro)	C00 - C64				
Clrt (C	Ir Temp)	C000 - C255		Manually act acch		
	Color Macro)	C000 - C255		Manually set each parameter; Color Macros take prior-		
(Manual) Strb (S	Strobe)	S000 - S255			ity over RGBL	
dlnr (D	immer)	d000 - d255		settings		
ProG (Progr	ams)	P000 - P255				
PrSP ( Speed	Program )	P000 - P255				
PrFd ( Fade)	Program	P000 - P255				

	_				1	
	PrG0	Speed	S000 - S255			
	(cycles thru Programs 1-7 at	Fade	F000 - F255			
	random)	Sound	On / <b>Off</b> S000 - S255			
ProG		Speed	S000 - S255		Soloot and con	
(Internal	PrG1	Fade	F000 - F255		Select and configure internal	
Programs)		Sound	On / <i>Off</i>	S000 - S255	program settings	
		Speed	S000 - S255			
	PrG7	Fade	F000 - F255		_	
		Sound	On / <i>Off</i>	S000 - S255		
		Hon1 (Pwr On Hr 1)	xxxxxx Hours		Total lifetime hours that fixture has been powered on	
	Hour	Hon2 (Pwr On Hr 2)	xxxxxx Hours		Hours fixture has been powered on since last reset	
		HrSt (Pwr On Rst)	P.XXX Passcode = 050	Reset Pwr On Hr 2 value		
		xxx°	xxx° F / xxx° C	Display current temp reading		
InFO	tEnP	ntP1 (Max Temp 1)	Lvvv° E / vvv° C		Max recorded temp since last reset	
(Information)	(Temperature)	ntP2 (Max Temp 2)	xxx° F / xxx° C		Lifetime max recorded temp	
		tr (Temp Rst)	Yes / <b>No</b> P.xxx (Passcode = 050)		Reset value for Max Temp 2	
		rEd (Red)	r000 - r255			
	UAlu	GrEn (Green)	G000 - G255		Display current	
	(DMX Value)				DMX value for	
	, , , , , ,	PrFd (Program Fade)	P000 - P255		each parameter	
	SoFt (Software Version)	x.xx		Display current software version		

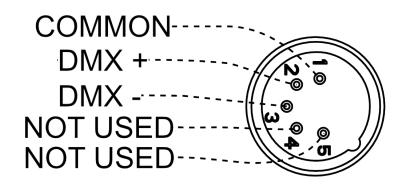
### **DMX SETUP**

**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 manufacturers 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, try to use the shortest cable path possible when linking several DMX fixtures. 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 located in the DMX chain.

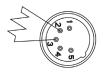
Data Cable (DMX Cable) Requirements (For DMX Operation): This unit can be controlled via DMX-512 protocol. The DMX address is set on the rear panel of the unit. Your unit and your DMX controller require a standard 5-pin XLR connector for data input and data output. We recommend Accu-Cable DMX cables. 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 XLR connector at one end and a female XLR connector at the other. Also remember that DMX cable must be daisy chained and cannot be split.

**Notice:** Be sure to follow fthe illustration below 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.



### **DMX SETUP**

**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 reduce the risk 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.

#### DMX ADDRESSING.

All fixtures should be given a DMX starting address when using a DMX controller, so the correct fixture responds to the correct control signal. This digital starting address is the channel number from which the fixture starts to "listen" to the digital control signal sent out from the DMX controller. The assignment of this starting DMX address is achieved by setting the correct DMX address on the digital control display on the fixture.

You can set the same starting address for all fixtures or a group of fixtures, or set different addresses for each individual fixture. Setting all fixtures to the same DMX address will cause all fixtures to react in the same way. In other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set each fixture to a different DMX address, each unit will start to "listen" to the channel number you have set, based on the quantity of DMX channels of each fixture. That means changing the settings of one channel will only affect the selected fixture.

For example, when this unit is operating in 4 channel mode, you should set the starting DMX address of the first unit to 1, the second unit to 5 (1 + 4), the third unit to 9 (1 + 4 + 4), and so on. See the chart below for more details.

CHANNEL MODE	UNIT 1 ADDRESS	UNIT 2 ADDRESS	<b>UNIT 3 ADDRESS</b>	UNIT 4 ADDRESS
4Ch	1	5	9	13
7Ch	1	8	15	22
8Ch	1	9	17	25
10Ch	1	11	21	31
13Ch	1	14	27	40
16Ch	1	17	33	49

## **DMX TRAITS**

	CHANNEL		DMX				
4CH	7CH	8CH	10CH	13CH	16CH	VALUES	FUNCTION
1	1	1	1	1	1	000 - 255	<b>Red,</b> 0 - 100%
		2				000 - 255	Red Fine 16-bit
2	2	3	2	2	2	000 - 255	<i>Green,</i> 0 - 100%
		4				000 - 255	Green Fine 16-bit
3	3	5	3	3	3	000 - 255	<i>Blue,</i> 0 - 100%
		6				000 - 255	Blue Fine 16-bit
4	4	7	4	4	4	000 - 255	<i>Lime,</i> 0 - 100%
		8				000 - 255	Lime Fine 16-bit
			5	5	5	000 - 255	Color Macros, see Color Macros Chart section
			6	6	6	000 - 255	Color Temperature, 2700 - 6500K Linear
							Color Temperature Macros
						000	Off
						001 - 054	2700K
			7	7	7	055 - 109	3200K
						110 - 164	4000K
						165 - 219	5600K
						220 - 255	6500K
							Shutter, Strobe
						000 - 031	LEDs Off
						032 - 063	LEDs On
						064 - 095	Strobe Effect, slow to fast
	5		8	8	8	096 - 127	LEDs On
						128 - 159	Pulse Effect in Sequences
						160 - 191	LEDs On
						192 - 223	Random Strobe Effect, slow to fast
						224 - 255	LEDs On
	6		9	9	9	000 - 255	Dimmer Intensity, 0 - 100%
	7		10	10	10	000 - 255	Dimmer Fine 16-bit
							Auto Programs
						000 - 031	Off
						032 - 063	Program 1
						064 - 095	Program 2
					11	096 - 127	Program 3
						128 - 159	Program 4
						160 - 191	Program 5
						192 - 223	Program 6
						224 - 255	Program 7
					12	000 - 255	Auto Programs Speed, slow to fast
					13	000 - 255	Auto Programs Fade, least to most

## **DMX TRAITS**

		CHA	ANNEL			DMX	
4CH	7CH	8CH	10CH	13CH	16CH	VALUES	FUNCTION
							Dim Mode
						000 - 020	Default to Unit Setting
						021 - 040	Standard
						041 - 060	Stage
				11	14	061 - 080	TV
				''	14	081 - 100	Architectural
						101 - 120	Theatre
						121 - 140	Stage 2
						141 - 160	Dim Speed, 0.1s to 10s
						161 - 255	Default to Unit Setting
							Dim Curves
						000 - 020	Square
				12	15	021 - 040	Linear
				12		041 - 060	Inv. Squa
						061 - 080	S. Curve
						081 - 255	No Function
							Special Functions
						000 - 015	Default to Unit Setting
						016 - 030	900 Hz
						031 - 045	1000 Hz
						046 - 060	1100 Hz
						061 - 075	1200 Hz
						076 - 090	1300 Hz
						091 - 105	1400 Hz
				13	16	106 - 120	1500 Hz
						121 - 135	2500 Hz
						136 - 150	4000 Hz
						151 - 165	5000 Hz
						166 - 180	10000 Hz
						181 - 195	15000 Hz
						196 - 210	20000 Hz
						211 - 225	25000 Hz
						226 - 255	No Function

## **COLOR MACROS CHART**

Color	DMY Value	RGB\	N COLO	R INTE	NSITY	Color	DMY Volue	RGBW COLOR INTENSITY				
Color	DMX Value	RED	GREEN	BLUE	LIME	Color	DMX Value	RED	GREEN	BLUE	LIME	
Off	0	0	0	0	0	Color Macro 33	129-132	255	206	143	0	
Color Macro 1	1-4	80	255	234	80	Color Macro 34	133-136	254	177	153	0	
Color Macro 2	5-8	80	255	164	80	Color Macro 35	137-140	254	192	138	0	
Color Macro 3	9-12	77	255	112	77	Color Macro 36	141-144	254	165	98	0	
Color Macro 4	13-16	117	255	83	83	Color Macro 37	145-148	254	121	0	0	
Color Macro 5	17-20	160	255	77	77	Color Macro 38	149-152	176	17	0	0	
Color Macro 6	21-24	223	255	83	83	Color Macro 39	153-156	96	0	11	0	
Color Macro 7	25-28	255	243	77	77	Color Macro 40	157-160	234	139	171	0	
Color Macro 8	29-32	255	200	74	74	Color Macro 41	161-164	224	5	97	0	
Color Macro 9	33-36	255	166	77	77	Color Macro 42	165-168	175	77	173	0	
Color Macro 10	37-40	255	125	74	74	Color Macro 43	169-172	119	130	199	0	
Color Macro 11	41-44	255	97	77	71	Color Macro 44	173-176	147	164	212	0	
Color Macro 12	45-48	255	74	77	71	Color Macro 45	177-180	88	2	163	0	
Color Macro 13	49-52	255	83	134	83	Color Macro 46	181-184	0	38	86	0	
Color Macro 14	53-56	255	93	182	93	Color Macro 47	185-188	0	142	208	0	
Color Macro 15	57-60	255	96	236	96	Color Macro 48	189-192	52	148	209	0	
Color Macro 16	61-64	238	93	255	93	Color Macro 49	193-196	1	134	204	0	
Color Macro 17	65-68	163	87	255	87	Color Macro 50	197-200	0	145	212	0	
Color Macro 18	69-72	150	90	255	90	Color Macro 51	201-204	0	121	192	0	
Color Macro 19	73-76	100	77	255	77	Color Macro 52	205-208	0	129	184	0	
Color Macro 20	77-80	77	100	255	77	Color Macro 53	209-212	0	83	115	0	
Color Macro 21	81-84	67	148	255	67	Color Macro 54	213-216	0	97	166	0	
Color Macro 22	85-88	77	195	255	77	Color Macro 55	217-220	1	100	167	0	
Color Macro 23	89-92	77	234	255	77	Color Macro 56	221-224	0	40	86	0	
Color Macro 24	93-96	158	255	144	144	Color Macro 57	225-228	209	219	182	0	
Color Macro 25	97-100	255	251	153	153	Color Macro 58	229-232	42	165	85	0	
Color Macro 26	101-104	255	175	147	147	Color Macro 59	233-236	0	46	35	0	
Color Macro 27	105-108	255	138	186	138	Color Macro 60	237-240	8	107	222	0	
Color Macro 28	109-112	255	147	251	147	Color Macro 61	241-244	255	0	0	0	
Color Macro 29	113-116	151	135	255	138	Color Macro 62	245-248	0	255	0	0	
Color Macro 30	117-120	99	0	255	100	Color Macro 63	249-252	0	0	255	0	
Color Macro 31	121-124	138	169	255	138	Color Macro 64	253-255	0	0	0	255	
Color Macro 32	128-128	255	255	255	255							

## **DIM SPEEDS**

DMX VALUES	DELAY TIME
121	0.1 sec
122	0.2 sec
123	0.3 sec
124	0.4 sec
125	0.5 sec
126	0.6 sec
127	0.7 sec
128	0.8 sec
129	0.9 sec
130	1.0 sec
131	1.5 sec
132	2.0 sec
133	3.0 sec
134	4.0 sec
135	5.0 sec
136	6.0 sec
137	7.0 sec
138	8.0 sec
139	9.0 sec
140	10.0 sec

### PRIMARY-SECONDARY SETUP

This function allows you to link units together to run in a Primary-Secondary set-up, in which one unit will act as the controlling unit and the others will react to the controlling unit's built-in programs. Any unit can be configured to act as a Primary or as a Secondary, but only one unit in a given system can be programmed to act as the Primary.

### **Primary-Secondary Connections and Settings:**

- Daisy chain your units via the XLR connectors on the rear panels of each unit. Use standard XLR data cables to link your units together. Remember that the male XLR connector is the input and the female XLR connector is the ouput. The first unit in the chain (primary) will use the female XLR connector only. The last unit in the chain will use the male XLR connector only.
- On the unit that you want to designate as the primary, use the display screen and control panel to navigate to Personality > Primary. Select this sub-menu using the ENTER button, and use the UP and DOWN buttons to set this to ON. Press SETUP to confirm your selection, then configure the unit's operation as desired.
- 3. On the units that you want to designate as secondaries, use the display screen and control panel to navigate to Personality > Secondary. Select this sub-menu using the ENTER button, and use the UP and DOWN buttons to set this to ON. Press SETUP to confirm your selection. Make sure that only one unit is designated as the Primary, while all other units are designated as Secondaries.
- 4. The secondary units will now follow the behavior of the primary unit.

#### NOES:

- Only one unit should be configured as the primary, while all the other units should be configured as secondaries.
- All units should be set to the same DMX channel mode.
- If fixtures fail to sync, verify that all settings mentioned above are the same, then power all devices off, then switch them on again to re-establish the link.

## MULTI UNIT POWER LINKING

This features allows you to connect the fixtures to one another using the power cable input and output sockets.

The maximum number of units that can be linked in this manner is as follows:

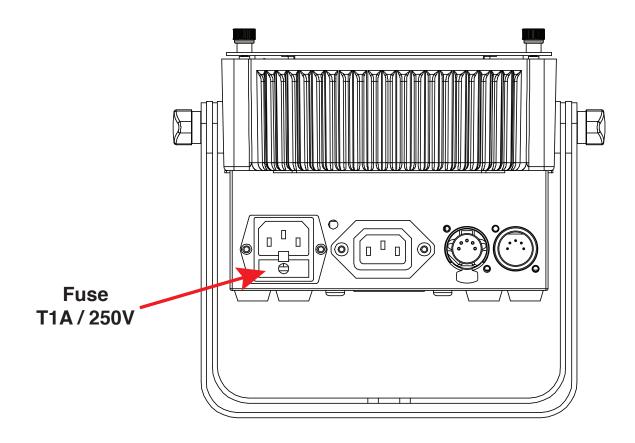
- 29 units when running on 120V power.
- 49 units when running on 230V power.

### DO NOT EXCEED THIS MAXIMUM NUMBER WHEN POWER LINKING UNITS!

All linked units must be of the same make and model type. Do not mix and match units!

## **FUSE REPLACEMENT**

Disconnect the unit from its power source. Locate the fuse holder, which is beside the power port on the top of the unit, as shown in the diagram below. Use the flat head screwdriver to gently remove the fuse holder, then remove the used fuse and install a fresh fuse in its place. Always use a fuse of the same T1A / 250V rating for replacement.



## MAINTENANCE GUIDELINES



## **DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!**

#### **CLEANING**

Frequent cleaning is recommended to ensure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the fixture operates: damp, smoky, or particularly dirty environments can cause greater accumulation of dirt on the fixture's optics. Clean the external lens surface regularly with a soft cloth to avoid dirt/debris accumulation.

**NEVER** use alcohol, solvents, or ammonia-based cleaners.

#### **MAINTENANCE**

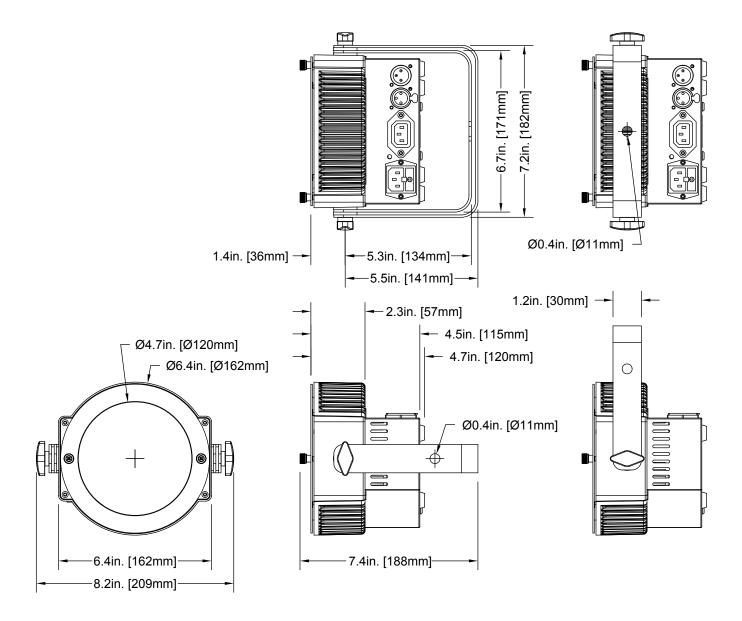
Regular inspections are recommended to ensure proper function and extended life. There are no user serviceable parts inside this fixture. Please refer all other service issues to an authorized ADJ service technician. Should you need any spare parts, please order genuine parts from your local ADJ dealer.

Please refer to the following points during routine inspections:

- A. A detailed electrical check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.
- B. Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation, resulting in damage or injury as larger parts could fall.
- C. Check for any deformations on the housing, color lenses, rigging hardware, and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust to enter into the fixture. Damaged rigging points or unsecured rigging could cause the fixture to fall and seriously injure a person(s).
- D. Electric power supply cables must not show any damage, material fatigue, or sediments.

**NEVER** remove the ground prong from the power cable.

## **DIMENSIONAL DRAWINGS**



### DIMENSIONAL DRAWINGS

#### SOURCE:

- Light Source: 16x 3.5-Watt RGBL C.O.B. LED (4x Red, 4x Green, 4x Blue & 4x Lime)
- 20,000 Hours Rated Life

#### PHOTOMETRIC DATA:

- 18° Beam Angle (With Included Lens)
- 29.7° Field Angle (With Included Lens)
- CRI: 85.3
- CRI R9: 79.1
- Lux: 957 (@ 3m, Full On)
- Footcandles: 89 (@ 3m, Full On)
- Lumens: 1102

### **EFFECTS:**

- Linear Color Temperature Control (2700K to 6500K)
- **Preset Color Temperatures**
- 16-Bit Fine Color Control (Red, Green, Blue & Lime)
- 64 built-in Color Macros

#### **CONTROL:**

- 4-button, DMX digital display on rear panel
- 6 Operational modes: Static Color Mode, RGBL Dimmer Mode, Program Mode, Sound Active Mode, Wireless RF and DMX Controlled
- Supports RDM (Remote Device Management)
- With Wired Digital Communication Network
- 6 selectable Dimming Modes (Standard, Stage, TV, Architectural, Theatre & Stage 2)
- 4 selectable Dim Curves (Linear, Square Inv. Squa, S-Curve)
- 1200Hz LED Refresh Rate
- LED pulse and strobe effect
- Electronic Dimming: 0 100%

### **CONSTRUCTION / CONNECTIONS:**

- Plastic construction
- IEC Locking, In/Out Power connectors
- Indoor 5-pin, XLR DMX, In/Out sockets
- Scissor Yoke

#### **ELECTRICAL / THERMAL:**

- Multi-voltage operation: AC 100-240V, 50/60Hz
- Max Power Llnk: 30 @120V., 57 @230V.
- Max power consumption: 36W
- Fuse protected: T1A/250V (5\*20mm)

#### **DIMENSIONS / WEIGHT:**

- Length: 6.4" (162mm)
- Width: 8.2" (209mm)
- Height: 7.4" (188mm)
- Weight: 4.76lbs. / 2.16kg.

#### **APPROVALS / RATINGS:**

PROVALS / RATINGS: CE, cETLus (4010765), FCC, IP20



### **INCLUDED ACCESSORIES:**

- (1) Power Cord
- (1) Lens Kit