

ADJ REVO RAVE



WARNING! Due to the magnifying type lens, please keep the lens out of contact with direct sunlight. Direct sunlight can cause heat to build up inside of the unit, which will seriously damage unit.

User Instructions

Revo Rave™

Introduction

Unpacking: Thank you for purchasing the Revo Rave™ by American DJ®. Every Revo Rave™ 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 accessories necessary to operate the unit has arrived intact. In the case 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 Revo Rave™ is part of American DJ's continuing pursuit for creating high quality affordable intelligent fixtures. The Revo Rave™ is a DMX intelligent LED effect. This fixture light weight and compact which makes it a great piece for mobile DJ's and clubs. This unit can be used in a master/slave configuration or stand alone sound-active mode, or can be controlled via DMX controller.

Customer Support: American DJ® provides a toll free customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at www.americandj.com for any comments or suggestions. Service Hours are Monday through Friday 9:00 a.m. to 4:30 p.m. Pacific Standard Time.

Voice: (800) 322-6337

Fax: (323) 582-2941

E-mail: support@americandj.com

To purchase parts online visit <http://parts.americandj.com>

Warning! To prevent or reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.

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 American DJ®.

PLEASE recycle the shipping carton when ever possible.

To optimize the performance of this product, please read these operating instructions carefully to familiarize yourself with the basic operations of this unit. These instructions contain important safety information regarding the use and maintenance of this unit. Please keep this manual with the unit, for future reference.

- RGB + White
- Pattern Strobe
- Electronic Dimming 0-100%
- Built in Microphone
- DMX-512 protocol
- 25 Color Patterns & 25 Chases in DMX Mode
- Uses Five DMX Channels
- UC3 Controller (Not Included)

The Revo Rave™ carries a 3 year (1095 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.americandj.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 American DJ® customer support for a R.A. number.

- 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 match 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 it's cover is removed.
- Never plug this unit in to a dimmer pack
- 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.
- 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 they exit from the unit.
- Cleaning -The fixture should be cleaned only as recommended by the manufacturer. See page 14 for cleaning details.
- 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 has been damaged.
 - B. Objects have fallen, or liquid has been spilled into the appliance.
 - C. The appliance has been exposed to rain or water.
 - D. The appliance does not appear to operate normally or exhibits a marked change in performance.

Power Supply: The American DJ® Revo Rave™ contains an electronic ballast, which will auto sense the voltage when it is plugged into the power source. With the electronic ballast you do not need to worry about wall voltage, this unit can be plugged in anywhere. Also be sure to only use the included I.E.C. power cable supplied with the unit.

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, 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. 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):

The Revo Rave™ can be controlled via DMX-512 protocol. The Revo Rave™ is a five channel DMX unit. The DMX address is set on the rear of the Revo Rave™. Your unit and your DMX controller require a standard 3-pin XLR connector for data input and data output (Figure 1). If you are making your own cables, be sure to use standard two conductor shielded cable (This cable may be purchased at almost all pro 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 can not be split.



Figure 1

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.

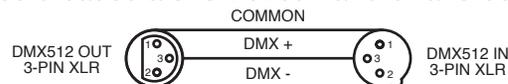


Figure 2

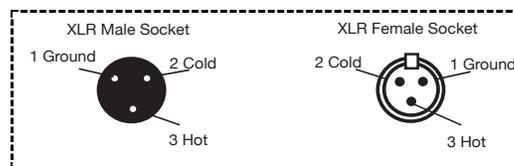


Figure 3

XLR Pin Configuration	
Pin 1 =	Ground
Pin 2 =	Data Compliment (negative)
Pin 3 =	Data True (positive)

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 90-120 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.

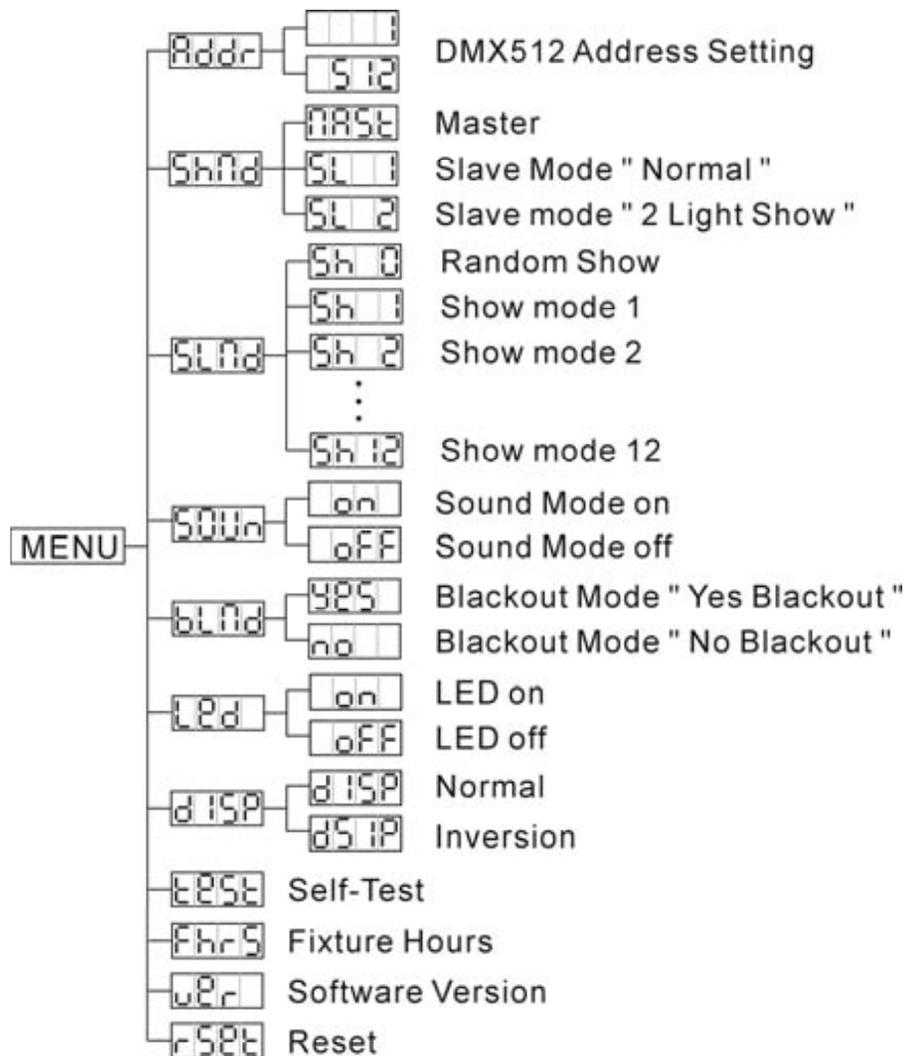


Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal, (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX +) of the last fixture.

Figure 4

5-Pin XLR DMX Connectors. Some manufactures use 5-pin XLR connectors for DATA transmission in place of 3-pin. 5-pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors 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 Compliment (- signal)	Pin 2	Pin 2
Data True (+ signal)	Pin 3	Pin 3
Not Used		Do Not Use
Not Used		Do Not Use



System Menu: When making adjustments you can press **ENTER** to confirm your setup or you can wait 8 seconds for automatic setup. To exit without making any adjustments press the **MENU** button.

ADDR - DMX Address Setting.

1. Tap the either the MENU, UP, or DOWN buttons until “ADDR” is displayed, press ENTER.
2. The current address will now be displayed and flashing. Press the UP or DOWN buttons to find your desired address. Press ENTER to set your desired DMX address.

SLND - This will let you set unit as a master or slave in a master/slave configuration.

1. Tap the MENU button until “SLND” is displayed, press ENTER. Either “FIRST”, “SL 1” or “SL 2” will be displayed.
2. Tap the UP or DOWN buttons until your desired setting is displayed, press ENTER to confirm.

NOTE: In a Master/Slave configuration you can set one fixture to Master and then set the next fixture to “SL 2”, the fixtures will now have contrast movement to each other.

SHND: SH 0 - 12 - Show modes 0-12 (Factory programs). For show mode to run properly, make sure sound active mode is off.

1. Tap the MENU button until “SHND” is displayed, press ENTER.
2. “Sh X” will now be displayed, “X” representing a number between 0-10. Programs 1-12 are factory programs, while “Sh 0” is random mode. Press the UP or DOWN buttons to find your desired show and press the ENTER, then press and hold the MENU button for at least 3 seconds to confirm.

SOUN - Sound Active mode.

1. Tap the MENU button until “SOUN” is displayed, press ENTER.
2. The display will show either “ON” or “OFF”. Press the UP or DOWN buttons to select “ON” to activate sound active mode, or “OFF” to deactivate sound active mode.
3. Press the ENTER, and then press and hold the MENU button for at least 3 seconds to confirm.

BLND - Blackout or Stand by mode.

1. Tap the MENU button until “BLND” is displayed, press ENTER. Either Yes or No will be displayed.
2. To activate Blackout tap the UP or DOWN buttons until “Yes” is displayed, press ENTER to confirm. The fixture will now be in Blackout mode. To deactivate Blackout mode, select “No” and press Enter.

LED - With this function you can have the LED display turn off after 10 seconds.

1. Tap the MENU button until “LED” is displayed, press ENTER.
2. The display will show either “ON” or “OFF”. Press the UP or DOWN buttons to select “ON” to keep the LED display on at all times, or “OFF” to switch to have the LED display switch off after 10 seconds.
3. Press ENTER to confirm.

DISP - This will “flip” the LED display 180°.

1. Tap the MENU button until “DISP” is displayed, press ENTER.
2. Either “DISP” or “dSiP” will now be displayed. Press the UP or DOWN buttons to select one or the other.
3. Press the ENTER, and then press and hold the MENU button

for at least 3 seconds to confirm.

TEST - This function will run a self test program.

1. Tap the MENU button until “TEST” is displayed, press ENTER.
2. The fixture will now run a self test.

FHRS - With this function you can display the running time of the fixture.

1. Tap the MENU button until “FHRS” is displayed, press ENTER.
2. The running time of the fixture will now be displayed. Press MENU to exit.

VER - With this function you can display the version software of the fixture.

1. Tap the MENU button until “VER” is displayed, press ENTER.
2. The software version will now be displayed. Press MENU to exit

RSET - Use this function to reset the unit.

1. Tap the MENU button until “RSET” is displayed, press ENTER.
2. The fixture will now reset

Operating Modes: The Revo Rave can operate in three different modes. In each mode you can run the fixture as a stand alone fixture or in a master/slave configuration. This next section will detail the differences in the operating modes.

- **Sound Active mode -**

The fixture will react to sound, chasing through the built-in programs.

- **Show mode -**

Choose 1 of 12 show modes to run.

- **DMX control mode -**

This function will allow you to control each individual fixtures traits with a standard DMX-512 controller such as the Elation® Show Designer.™

Master-Slave Operation This function will allow you to link up to 16 units together and operate without a controller. The units will be sound activated. In Master-Slave operation one unit will act as the controlling unit and the others will react to the controlling units programs. Any unit can act as a Master or as a Slave.

1. Using approved DMX data cables, daisy chain your units together via the XLR connector on the rear of the units. Remember the Male XLR connector is the input and the Female XLR connector is the output. The first unit in the chain (master) will use the female XLR connector only - The last unit in the chain will use the male XLR connector only. For longer cable runs we suggest a terminator at the last fixture.
2. On the Master unit find your desired show and set that show by pressing the ENTER button.
3. On the slave units tap the MENU button until “SLND” is displayed, and Press ENTER.
4. The slave units will now follow the Master unit.

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

1. The Revo Rave 5 Channel fixture. See page 13 for detailed description of the DMX values and traits.
2. To control your fixture in DMX mode, follow the set-up procedures

on pages 5-7 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 set the 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.

Sound Active Mode: This mode allows either single unit or several units linked together, to run to the beat of the music.

1. Tap the MENU button until “SOUN” is displayed, and press ENTER.
2. Tap the UP or DOWN buttons to choose either OFF or ON, and press ENTER, then press and hold MENU for 3 seconds to confirm.
3. The optional *UC3 Controller* (not included) may be used to control different functions including blackout.

Show Mode: In this mode you can choose 1 of 12 show modes to run.

1. Tap the MENU button until “SHND” is displayed, and press ENTER.
2. Tap the UP or DOWN buttons until you find your desired show, and press ENTER then press and hold MENU for 3 seconds to confirm. See pages 9-10 for more info.
3. The optional *UC3 Controller* (not included) may be used to control different functions including blackout.

With this feature you can connect the fixtures to one another using the IEC input and output sockets. The quantity that can be connected is 50 fixtures maximum. After 50 fixtures you will need to use a new power outlet. They must be the same fixtures. DO NOT mix fixtures.

Revo Rave™

DMX Traits

Ch1	Ch2		Ch3		Ch4	Ch5
Function	Pattern CH1=0-119	Chase CH1=120-239	Pattern Strobe CH1=0-119	Chase Speed CH1=120-239	Dimmer	Rotation
240-255 Sound Active	250-255 R+G+B+W	250-255 Chase 25				
	240-249 G+B+W	240-249 Chase 24				
	230-239 R+B+W	230-239 Chase 23				
	220-229 R+G+B	220-229 Chase 22				
	210-219 R+G+B	210-219 Chase 21				
	200-209 B+W	200-209 Chase 20				
	190-199 G+W	190-199 Chase 19				
	180-189 G+B	180-189 Chase 18				
	170-179 R+W	170-179 Chase 17				
	160-169 R+B	160-169 Chase 16				
120-239 Chase	150-159 R+G	150-159 Chase 15				
	140-149 R+G+B+W	140-149 Chase 14				
	130-139 G+B+W	130-139 Chase 13				
	120-129 R+B+W	120-129 Chase 12				
	110-119 R+G+W	110-119 Chase 11				
	100-109 R+G+B	100-109 Chase 10				
	090-099 B+W	090-099 Chase 9				
	080-089 G+W	080-089 Chase 8				
	070-079 G+B	070-079 Chase 7				
	060-069 R+W	060-069 Chase 6				
0-119 Pattern	050-059 R+B	050-059 Chase 5				
	040-049 R+G	040-049 Chase 4				
	030-039 W	030-039 Chase 3				
	020-029 B	020-029 Chase 2				
	010-019 G	010-019 Chase 1				
	000-009 R	000-009 Blackout				

Revo Rave™

UC3 Control

Blackout	Blackout the unit	
Function	1. Synchronous Strobe 2. Sound Strobe 3. Two light Strobe	Chase Select (Chase 1-12)
Mode	Sound/Strobe (LED OFF)	Chase (LED ON)

Revo Rave™

Fuse Replacement

Locate and remove the unit's power cord. Once the cord has been removed located the fuse holder located inside the power socket. Insert a flat-head screw driver into the power socket and gently pry out the fuse holder. Remove the bad fuse and replace with a new one. The fuse holder has a built-in socket for a spare fuse be sure not to confuse the spare fuse with active fuse.

Revo Rave™

Cleaning

Due to fog residue, smoke, and dust cleaning the internal and external optical lenses must be carried out periodically to optimize light output.

1. Use normal glass cleaner and a soft cloth to wipe down the outside casing.
2. Clean the external optics with glass cleaner and a soft cloth every 20 days.
3. Always be sure to dry all parts completely before plugging the unit back in.

Cleaning frequency depends on the environment in which the fixture operates (i.e. smoke, fog residue, dust, dew).

Revo Rave™

Trouble Shooting

Listed below are a few common problems the user may encounter, with solutions.

Unit not responding to DMX:

1. Check that the DMX cables are connected properly and are wired correctly (pin 3 is "hot"; on some other DMX devices pin 2 may be 'hot'). Also, check that all cables are connected to the right connectors; it does matter which way the inputs and outputs are connected.

Unit does not respond to sound:

1. Quiet or high pitched sounds will not activate the unit.

*If problems are not resolved; Contact American DJ® for service.
1-800-322-6337*

MANUFACTURER'S LIMITED WARRANTY

A. American DJ, Inc. hereby warrants, to the original purchaser, American DJ and American Audio 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. Contact American DJ, Inc. Service Department at 800-322-6337. Send the product only to the American DJ, Inc. factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, American DJ, Inc. 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, American DJ, Inc. shall have no liability whatsoever for loss of or damage to any such accessories, nor 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 American DJ, Inc. concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the American DJ, Inc. factory unless prior written authorization was issued to purchaser by American DJ, Inc.; 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 check-up. During the period specified above, American DJ, Inc. 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 American DJ, Inc. under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of American DJ. All products covered by this warranty were manufactured after January 1, 1990, and bear identifying marks to that effect.

E. American DJ, Inc. 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 American DJ, Inc. 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 American DJ, Inc. 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 American DJ and American Audio Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

MANUFACTURER'S LIMITED WARRANTY PERIODS:

- All American Audio Products = 1-year (365 day) Limited Warranty (except V-Plus Series Amplifiers)
- All American Audio V-Plus Series Amplifiers = 3-year (1095 day) Limited Warranty
- American DJ Lighting and American DJ Branded Products = 1-year (365 day) Limited Warranty (Such as: Special Effect Lighting, Intelligent Lighting, UV lighting, Strobos, Fog Machines, Bubble Machines, Mirror Balls, Par Cans, Trussing, Lighting Stands etc. excluding Laser Products, lamps, and Star Tec Series)
- American DJ Laser Products and Star Tec Products = 90-Day Limited Warranty
- American DJ L.E.D. Products = 3-year (1095 day) Limited Warranty (excluding motors which have a 1-year (365 day Limited Warranty)

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Model: Revo Rave™

SPECIFICATIONS:

Working Position:	Any safe working position
Lamp:	162 LEDs Total: 48 Red, 36 Green, 42 Blue, & 36 White
Voltage:	100~240V 50Hz/60Hz "Auto Sensing"
Power Consumption:	12W
Fuse:	7 Amp
Power Cord Daisy Chain:	50 Fixtures Max.
Weight:	9lbs./ 3.8Kgs.
Dimensions:	12" (L) x 12.5" (W) x 9.5" (H) 312 x 316 x 239mm
DMX Channels:	5
Colors:	RGBW
Warranty:	3 Year (1095 days)

Auto Sensing Voltage: *This fixture contains a electronic ballast, which will auto sense the voltage when it is plugged into the power source.*

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

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