American DJ®

H₂O DMX PRO

User Instructions

Introduction:
Thank you for purchasing the H2O DMX PRO by American DJ®. The H2O DMX PRO is an improvement of the very popular H2O LED. This new unit has better optics and brighter LED output producing vibrant colors. The unit has 2 operating modes; manual mode & DMX Controlled. It can be used as a stand alone unit or in a master-slave configuration.

Unpacking: Every H2O DMX PRO 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 units for any damage and be sure all accessories necessary to operate the system have arrived intact. In the event damage has been found or parts are missing, please contact our toll free customer support number for further instructions. Please do not return the system to your dealer without first contacting customer support.

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 8:00 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 cartoon 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.

- Includes Built-In Hanging Yoke
- 5 Colors Plus White
- Mixed Coloring
- Manually Control Color, Rotation Speed, & Dimmer. See page 9.
- 34 Degree Lens & 52 Degree Lens
- Power Cord Daisy Chain (See page14)

The H2O DMX PRO carries a three year (1095 days) limited warranty. 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 accompany 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. You may obtain a R.A. number by contacting customer support at (800) 322-6337.

- 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.
- 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 out` doors 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.

P**ower Supply:** The American DJ® H2O DMX PRO contains a automatic voltage switch, which will auto sense the voltage when it is plugged into the power source. With this switch there is no need to worry about the correct power voltage, this unit can be plugged in anywhere.

DMX-512: DMX is short for Digital Multiplex. This is a universal protocol used 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 H2O DMX PRO is a three channel DMX unit. The DMX address is set on the top panel of the H2O DMX PRO. Your unit and your DMX controller require a approved DMX-512 110 Ohm Data cable 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 professional sound and lighting stores). Your cables should be made with a male and female XLR connector on either end of the cable. Also remember that DMX cable must be daisy chained and cannot be split.

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.
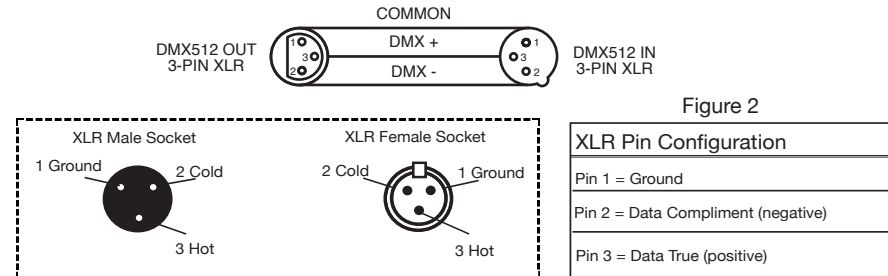

Figure 2

XLR Pin Configuration

Pin 1 = Ground

Pin 2 = Data Compliment (negative)

Pin 3 = Data True (positive)

Figure 3

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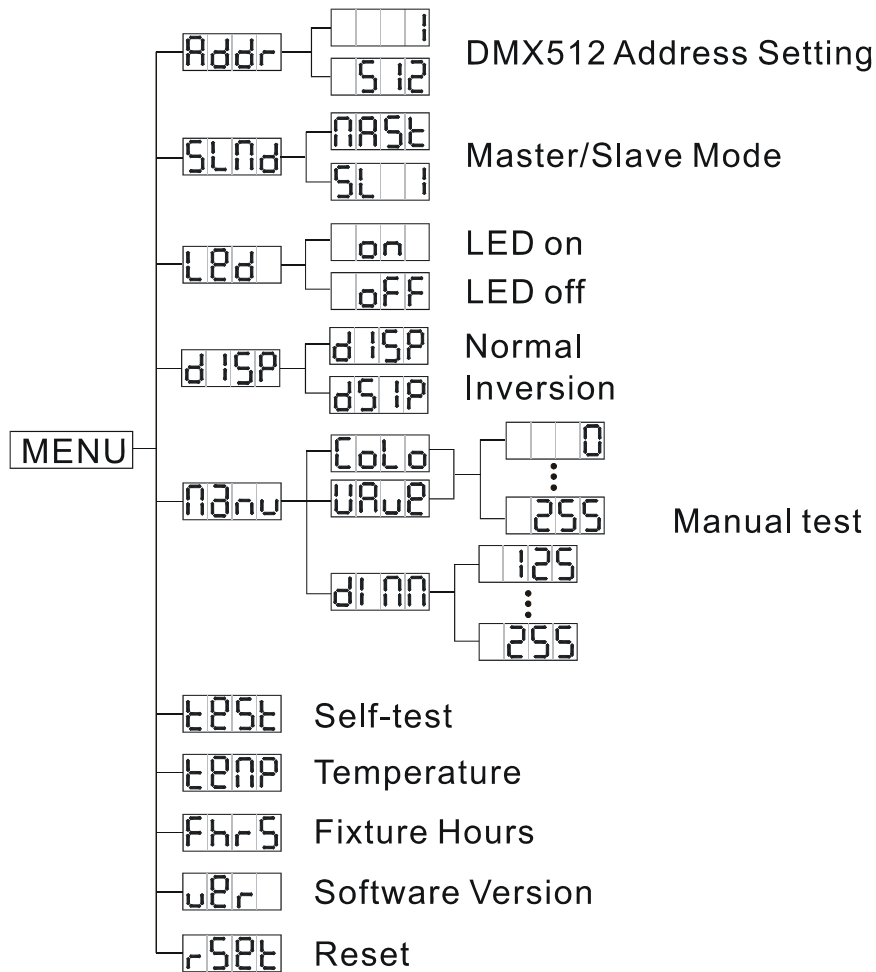

Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal, (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX +) of the last fixture.

Figure 4

5-Pin XLR DMX Connectors. Some manufactures use 5-pin DMX-512 data cables for DATA transmission in place of 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 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

```
                        ┌──────────┐
              ┌─────────┤    | |  1│  DMX512 Address Setting
        ┌─ Rddr ┤       │  5 |2    │
        │              └──────────┘
        │               ┌──────────┐
        ├─ SLПd ┤       │  ПRSt    │  Master/Slave Mode
        │              │  SL  1    │
        │               └──────────┘
        │               ┌──────────┐
        ├─ LEd  ┤       │   on     │  LED on
        │              │   oFF    │  LED off
        │               └──────────┘
        │               ┌──────────┐
        ├─ d1SP ┤       │  d1SP    │  Normal
        │              │  dS1P    │  Inversion
┌─────┐ │               └──────────┘
│MENU ├─┤               ┌──────┐    ┌──────────┐
└─────┘ │               │ CoLo │    │       0  │
        ├─ ПЗnu ┤       │ URue ├────┤   ⋮      │
        │               └──────┘    │   255    │  Manual test
        │                           └──────────┘
        │               ┌──────┐    ┌──────────┐
        │               │ d1ПП ├────┤   125    │
        │               └──────┘    │   ⋮      │
        │                           │   255    │
        │                           └──────────┘
        │
        ├─ tESt    Self-test
        │
        ├─ tEПP    Temperature
        │
        ├─ FhrS    Fixture Hours
        │
        ├─ uEr     Software Version
        │
        └─ rSEt    Reset
```

On-Board System Menu. The H2O DMX PRO comes with an easy to navigate system menu. This next section will detail the functions of each command in the system menu. ***Please read the next section thoroughly!***

To access the main menu press the MENU button. Press the UP or DOWN buttons until you reach function you wish to change. When you reach the function you wish to change press the ENTER button. When a function is selected use the UP or DOWN buttons to change the function settings. Once your changes are made press the ENTER button, and then press and hold the MENU button for at least three seconds to confirm and lock the change into the system memory. If the MENU button is not pressed and held within eight seconds the fixture will automatically confirm and lock the change into the system memory. To exit without making any changes press the MENU button.

RDDR **- DMX Address Setting via control board -**

1. Press the MENU button until "RDDR" is displayed, press ENTER.

2. "X" will now be displayed, "X" represents the displayed address. Press the UP or DOWN buttons to find your desired address.

3. Press ENTER to confirm, then connect your DMX controller.

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

1. Press the MENU button until "SLПd" is displayed, press ENTER. Either "ПRSt" or "SL 1" will be displayed.

2. Press the UP or DOWN buttons until your desired setting is displayed, press ENTER to confim.

LEd - With this function the LED display will turn off after 2 minutes.

1. Press the MENU button until "LEd" is displayed, press ENTER.

2. Either "ON" or "OFF" will now be displayed. Press the UP or DOWN buttons to select "ON" to keep the LED display on at all times, or "OFF" to allow the LED display to turn off after 2 minutes. Press any button to turn on the LED display again.

3. Press ENTER, and then press and hold the MENU button for at least three seconds to confirm.

DISP - This will "flip" the LED display

1. Press 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 ENTER, and then press and hold the MENU button for at least three seconds to confirm.

MANU - This function will let you manually test the color wheel, water wave, and dimmer. In this function you can also manually adjust and set the color wheel, rotation speed, and dimmer.

1. Press the MENU button until "MANU" is displayed, press ENTER.

2. Use the UP or DOWN buttons to scroll between "COLO" (Color), "WAVE" (Water Wave), or "DIMM" (Dimmer). Select the function you would like to test and press ENTER.

3. Use the UP or DOWN buttons to adjust the values to test/ check the function. Press the MENU button after testing the functions.
If you would set your desired color, rotation speed, and dimmer, press the ENTER button after each submenu is adjusted.
Example: "COLO" is displayed, press ENTER. Make your adjustments using the UP or DOWN buttons until your desired

color projected. After you have found your desired color, press ENTER. Scroll to the next function, adjust, and press ENTER.

4. After you have made your desired settings press and hold the MENU button for at least 3 seconds.

TEST - This function will run a self test program.

1. Press the MENU button until "TEST" is displayed, press ENTER.

2. The fixture will now run a self test. Press the MENU button to exit.

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

1. Press the MENU button until "FHRS" is displayed, press ENTER.

2. The running time of the fixture will now be displayed. Press the MENU button to exit.

VER - This will display the software version

1. Press the MENU button until "VER" is displayed. Press the ENTER button and the software vesion will be displayed.

2. Press the MENU button to exit.

RSET - This will display the software version

1. Press the MENU button until "RSET" is displayed. Press the ENTER button and the unit will reset itself.

Universal DMX Control: This function allows you to use a Elation® universal DMX-512 controller **to control the individual lasers, rotation and macros.** A DMX controller allows you to create unique programs tailored to your individual needs.

1. The Hypnotic RGB is a 3 channel DMX fixture. See page 12 for detailed description of the DMX values and traits.
2. To control your fixture in DMX mode, follow the set-up procedures on pages 5-6 as well as the set-up specifications that are included with your DMX controller. Follow the instructions on page 8 to set the DMX address.
3. Use the controller's faders to control the various DMX fixture traits.
4. For longer cable runs (more than a 100 feet) use a terminator on the last fixture.
5. For help operating in DMX mode consult the manual included with your DMX controller.

Focusing Lens: The lens can be focused by turning it clockwise or counter-clockwise to focus the lens to your desire.

Master-Slave Configuration 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 press the MENU button until "SLND" is displayed, and press ENTER. Press the UP or DOWN buttons so that "MAST" is displayed and press ENTER.
3. On the slave units press the MENU button until "SLND" is displayed, and press ENTER. Press the UP or DOWN buttons so that "SL 1" is displayed and press ENTER.
4. The slave units will now follow the Master unit.

Channel	Value	Function
1		MASTER DIMMER
	1 - 255	0% - 100%
2		ROTATION
	0 - 9	NO ROTATION
	10 - 120	CLOCKWISE ROTATION SLOW - FAST
	121 - 134	NO ROTATION
	135 - 245	COUNTER-CLOCKWISE SLOW - FAST
	246 - 255	NO ROTATION
3		COLOR
	0 - 10	WHITE
	11 - 21	WHITE & ORANGE
	22 - 32	ORANGE
	33 - 43	ORANGE & GREEN
	44 - 54	GREEN
	55 - 65	GREEN & BLUE
	66 - 76	BLUE
	77 - 87	BLUE & YELLOW
	88 - 98	YELLOW
	99 - 109	YELLOW & PURPLE
	110 - 120	PURPLE
	121 - 127	PURPLE & WHITE
	128 - 186	CLOCKWISE COLOR ROTATION FAST - SLOW
	187 - 196	STOP
	197 - 255	COUNTER-CLOCKWISE ROTATION SLOW - FAST

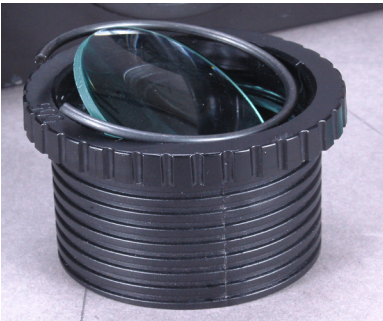| Stand By	Blackout the unit		
Function	Water Wave Glasses Speed Fast Middle Slow	Hold 3 seconds change rotation Press to change the color	Color Speed Fast Middle Slow
Mode	LED OFF	LED ON	LED Blinking

The install of the 52 Degree lens is a pretty easy process. Please be very carefull when doing this install.

Unscrew and remove the focus lens. Using your thumb, gently push the lens outward until it "pops" out.

When the lens "pops" out, the picture to the left is what you should see. Remove the lens and retainer ring.

Flip the focus lens barrel over and insert the 52 degree lens. Carefully insert the retainer ring. Please do this very carefully. Make sure retainer ring is in correctly, flesh against the lens. Now you can screw the focus lens back into the H2O DMX PRO.

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 5 fixtures maximum. After 5 fixtures you will need to use a new power outlet. They must be the same fixtures. DO NOT mix fixtures.

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.

Warning: If after replacing the fuse you continue to blow fuses, STOP using the unit. Contact customer support for further instructions. Continuing to use the unit may cause serious damage.

Fixture Cleaning: Due to fog residue, smoke, and dust cleaning the internal and external lenses should 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). In heavy use we recommend cleaning on a monthly basis. Periodic cleaning will ensure longevity, and crisp beam output.

Trouble Shooting: Listed below is a problem that you may encounter, with a solution.

No light output from the unit;
1. Be sure the fuse has not blown. The fuse is located on the rear panel inside the power socket. See Fuse Replacement.

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 it's 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, Strobes, 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)

MODEL:	H2O DMX PRO
VOLTAGE:	100V~240V 50/60Hz
LED:	1 X 45W LED
POWER CONSUMPTION:	69W
DIMENSIONS:	11.5"(L) x 8.75"(W) x 4.75"(H)
	292 x 236 x 121mm
WEIGHT:	9 Lbs/ 4 Kgs
POWER CORD DAISY CHAIN:	5 Fixtures Max.
FUSE:	7 Amp
WORKING POSITION:	Any Safe Position
BEAM ANGLE:	34 Degrees or 52 Degrees
COLORS:	6
WARRANTY:	3 YEARS (1095 DAYS)

Auto Sensing Voltage: *This fixture contains a automatic voltage switch, 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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