

# American DJ®

# RAINBOW PP

## POWER PACK CONTROLLER



## User Instructions

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Rev. 12/04

### Rainbow PP™

### Introduction

**Introduction:** Thank you for purchasing the Rainbow PP™ by American DJ®. The Rainbow PP™ is used to control the American DJ® Rainbow Tubes™ (not included). The Rainbow PP™ come with 30 different programs, including static colors, and flowing chases, and strobing. The speed in which this unit chases and strobes is adjustable. You can also connect the Rainbow PP™ to a DMX controller and design your own programs. The Rainbow Tubes™ are waterproof, and can be used outdoors, the Rainbow PP™ is **NOT** waterproof. This system is great for retail stores, displays, mood, architectural, interior and exterior decoration, and clubs.

**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](http://www.americandj.com) for any comments or suggestions. For service related issue please contact American DJ®. Service Hours are Monday through Friday 9:00 a.m. to 5:00 p.m. Pacific Standard Time.

Voice: (800) 322-6337

Fax: (323) 582-2610

E-mail: [support@americandj.com](mailto: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 manufacturer's warranty. In the unlikely event your unit may require service please contact American DJ®.

**PLEASE do not discard the shipping carton in the trash. Please recycle when ever possible.**

## Rainbow PP™

## Unpacking

Every Rainbow PP™ 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 unit for damage and be sure all accessories necessary to operate the unit 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 this unit to your dealer without first contacting customer support.

## Rainbow PP™

## Features

- Adjustable Interval, Speed, and Flash (Strobe) controls
- 30 Internal Programs
- Up to 1,000 Rainbow Tubes™ can be linked together and controlled by the Rainbow PP™ Controller
- Light Weight, Compact Case Design.
- Built-In Mounting Plate.
- Low Power Consumption.

## Rainbow PP™

## Warranty Registration

The Rainbow PP™ carries a 1 Year (365 Days) limited warranty. We recommend you 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. 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.

## Rainbow PP™

## Precautions

- Do not spill water or other liquids into or on to your unit.
- Be sure that the local power outlet matches that of the required voltage for your unit.
- Do not attempt to operate this unit if the power supply cord has been frayed or broken. Please route your power supply cord away from foot traffic.
- Disconnect from main power before making any type of connection.
- There are no user serviceable parts inside.
- 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 in any way.
- Never operate this unit when it's front cover is removed.
- To reduce the risk of electrical shock or fire, do not expose this unit rain or moisture
- 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-Cord Protection - Power-supply cords should be routed so they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords a plugs, convenience receptacles, and the point where they exit from the fixture.
- Cleaning -The fixture should be cleaned only as recommended by the manufacturer.
- Heat -The fixture should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- The fixture should be serviced by qualified service personnel when:
  - A. 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 fixture does not appear to operate normally or exhibits a marked change in performance.

Please carefully read and understand the instructions in this manual thoroughly before attempting to operate 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.

**Power Supply:** Before plugging your unit in, be sure the source voltage in your area matches the required voltage for your American DJ® Rainbow PP™. The American DJ® Rainbow PP™ are available in a 120v and 220v version. Because line voltage may vary from venue to venue, be sure to plug your fixture into a wall outlet with a matching power supply before attempting to operate.

#### **Operating Modes and Set Up:**

**Rainbow PP™ Control:** This will allow you to control your Rainbow Tubes with the Rainbow PP controller. You can choose one of the 30 programs to run, and control the speed and interval time of each program.

1. The Rainbow Tubes™ connect to the Rainbow PP™ by the 3-pin cables that are attached to the Rainbow Tubes™.
2. Connect your first Rainbow Tube™ in your chain to the 3-pin Output connection on the Rainbow PP™.
3. Continue to daisy chain the Rainbow Tubes™ in your chain. Attached to each Rainbow Tube™ is a Male 3-pin connector and a Female 3-pin connector. Use the attached 3-pin cables to link your units together. Remember that the Male 3-pin connector is the input and the Female 3-pin connector is the output. The first unit in the chain will use the female 3-pin connector only. The last unit in the chain will use the male 3-pin connector only.
4. You will also have to link the power cords to each other, as you did with the 3-pin cables.

**Note:** You should **ONLY** link up to 140 Rainbow Tubes™ to

**one power source. If more Rainbow Tubes are being used you can continue to link them by the 3-pin cables but you should use more than one power source.**

5. After you set up your complete system, switch on the power to the Rainbow PP™.
6. Press the SET UP button, and the LCD screen will read “Tube QTY: 0000”. You have to set the number of Rainbow Tubes™ that you have connected to the Rainbow PP™. Press the UP or DOWN buttons to select the quantity of tubes. Press the MODE button to go to the program mode.
7. Press the MODE button to go through the different programs. See page 8 for a list of the programs.
8. To adjust the interval, and speed time and flash rate of a program, choose your program and press the SET UP button.

**NOTE: Programs 1-8 and 30 do not have adjustable features.**

9. **Interval** time adjustment is 0 -100, 0 is shortest time between color changes and chases, and 100 being longest. **Run Speed** adjustment is 0 - 100, 0 is the slowest speed and 100 is the fastest speed. **Flash** (strobing) adjustment is 0 -100, 0 is the slowest stobe, and 100 is the fastest is will strobe.

**Universal DMX Control:** This mode allows you to use a universal DMX-512 controller such as the Elation® DMX Operator™ or Show Designer™. **The DMX address of the Rainbow PP must be “001”.**

1. To control the Rainbow Tubes in DMX mode, follow the set-up procedures under **Rainbow PP Control**, as well as the set-up procedures included with your DMX controller.
2. Connect your DMX controller to the Rainbow PP™ XLR Input connection. Set the quantity of Rainbow Tubes™ that are connected to the Rainbow PP™. Press the SET UP button, and the LCD screen will read “Tube QTY: 0000”. You have to set the number of Rainbow Tubes™ that you have connected to the Rainbow PP™. Press the UP or DOWN buttons to

- select the quantity of tubes.
- Press the MODE button on the Rainbow PP until the LCD screen shows “DMX 512 MODE”.
  - Press the SET UP button to enter the address setting.
  - The screen will show “DMX addr: 000”. **The DMX address must be “001” for the Rainbow PP™. It cannot be addressed for example “003” or “005”. The address must be “001” or it will not work properly.**
  - Press the MODE button when you have set the DMX address. The screen will go back to “DMX 512 MODE”.
  - The Rainbow Tubes use four DMX channels. See pages 9 - 10 for detailed description of the DMX traits. Use your DMX controller to activate the programs and chases.

**Fixture Cleaning:**

Due to fog residue, smoke, and dust cleaning the fixture should be carried out periodically to optimize light output.

- Use normal glass cleaner and a soft cloth to wipe down the outside casing every 20 days.
- Always be sure to dry all parts completely before plugging the unit back in.
- Frequent cleaning will ensure fixture reliability.

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.

1	BLACKOUT
2	STATIC RED
3	STATIC GREEN
4	STATIC BLUE
5	STATIC YELLOW
6	STATIC PURPLE
7	STATIC CYAN
8	STATIC WHITE
9	COLOR CHANGING
10	FLOW CHASE 1
11	MULTI-COLOR
12	CORUSCATE RUN
13	FAST FLOW 1
14	FAST FLOW 2
15	ROLL CHASE
16	ROLL COLOR
17	MULTICOLOR 1
18	MULTICOLOR 2
19	MULTICOLOR 3
20	BLUE & WHITE FLOW
21	RED & GREEN FLOW
22	GREEN & BLUE FLOW
23	RED & BLUE FLOW
24	RED & GREEN CHASE
25	RED & BLUE CHASE
26	RED & WHITE CHASE
27	BLUE & GREEN CHASE
28	WHITE & GREEN FLOW
29	RAINBOW CHASE
30	AUTO PROGRAM
31	DMX 512 MODE

Auto Program will cycle through all 29 programs

Rainbow PP™		DMX Traits
Channel	Value	Function
1	0 - 255	<u>PROGRAM SELECTION</u>
	0 - 8	BLACKOUT
	9 - 17	STATIC RED
	18 - 26	STATIC GREEN
	27 - 35	STATIC BLUE
	36 - 42	STATIC YELLOW
	43 - 51	STATIC PURPLE
	52 - 60	STATIC CYAN
	61 - 69	STATIC WHITE
	70 - 78	COLOR CHANGING
	79 - 87	FLOW CHASE 1
	88 - 96	MULTI-COLOR
	97 - 105	CORUSCATE RUN
	106 - 114	FAST FLOW 1
	115 - 123	FAST FLOW 2
	124 - 132	ROLL CHASE
	133 - 141	ROLL COLOR
	142 - 150	MULTICOLOR 1
	151 - 159	MULTICOLOR 2
	160 - 168	MULTICOLOR 3
	169 - 177	BLUE & WHITE FLOW
	178 - 186	RED & GREEN FLOW
	187 - 195	GREEN & BLUE FLOW
	196 - 204	RED & BLUE FLOW
	205 - 213	RED & GREEN CHASE
214 - 222	RED & BLUE CHASE	
223 - 231	RED & WHITE CHASE	
232 - 240	BLUE & GREEN CHASE	
241 - 249	WHITE & GREEN FLOW	
250 - 255	RAINBOW CHASE	
2	0 - 255	SPEED SLOW → FAST

Rainbow PP™		DMX Traits cont.
Channel	Value	Function
2	0 - 255	SPEED SLOW → FAST
3	0 - 255	TIME INTERVAL
4	0 - 255	STROBE SPEED SLOW → FAST

### Rainbow PP™ Trouble Shooting

Listed below are a few common problems and solutions you should try before contacting customer support.

#### **The beginning of the Rainbow Tubes™ work but the end tubes do not work;**

1. Check the tube quantity setting on the Rainbow PP™.
2. Check the connection of the first blacked out Rainbow Tube™.
3. Change the blacked out Rainbow Tube™, it could be dead.

#### **The middle Rainbow Tubes™ do not work but the others do;**

1. Change the blacked out Rainbow Tube™.

#### **Certain parts of a Rainbow Tube™ do not work;**

1. Change the Rainbow Tube™.

#### **The Rainbow Tubes™ cannot be controlled by the Rainbow PP™;**

1. Change the Rainbow PP™.
2. The area might have a strong interference signal.
3. Reduce the the Rainbow Tube quantity that are linked to a single power socket. Seperate and use more power outlets.

#### **Neither the Rainbow Tubes™ or Rainbow PP™ are work-**

1. Change power outlets.
2. Change the Rainbow PP™

**1 YEAR LIMITED WARRANTY**

A. American DJ® hereby warrants, to the original purchaser, American DJ® products to be free of manufacturing defects in material and workmanship for a period of 1 Year (365 days) from the date of purchase. 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, send the product only to the American DJ® 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® 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® 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® concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the American DJ® factory unless prior written authorization was issued to purchaser by American DJ®; 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® will replace defective parts at its expense, 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® 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® 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 American DJ® 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® 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 American DJ® Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

H. Lamps are not covered under this or any other warranty either written or implied.

**Model: Rainbow PP™**

<b>Voltage*:</b>	120v~60Hz or 220v~50/60Hz
<b>Dimensions:</b>	21cm (L) X 12.5cm (W) X 4.7cm (H) 8.3" (L) X 4.92" (W) X 1.9"(H)
<b>Working Position:</b>	Any Safe Position
<b>Weight:</b>	1.5 lbs/ 0.8 Kgs.
<b>Warranty:</b>	1 Year (365 Days)

\* Voltage is preset at the factory and is not user selectable.

**Model: Rainbow Tube™**

<b>Voltage*:</b>	120v~60Hz or 220v~50/60Hz
<b>Dimensions:</b>	100cm (L) X 5cm (W) X 7.5cm (H) 39.7" (L) X 1.96" (W) X 2.95"(H)
<b>Working Position:</b>	Any Safe Position
<b>Weight:</b>	3.9 lbs/ 1.8 Kgs.
<b>Warranty:</b>	1 Year (365 Days)

\* Voltage is preset at the factory and is not user selectable.

**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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