HEXCON

User Instructions

9/15

Europe Energy Saving Notice
Energy Saving Matters (EuP 2009/125/EC)
Saving electric energy is a key to help protecting the enviroment. 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!

Unpacking: Thank you for purchasing the HEXCON by ADJ Products, LLC. Every HEXCON 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 equipment necessary to operate the unit has 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 contacting customer support first.

Introduction: The HEXCON is a 36-channel DMX controller that was specifically designed for our "HEX Series" products. Up to 6 LED fixtures or fixture groups can independently be controlled via six fixture buttons. The units control panel includes; 24 direct access pre-programmed color macro buttons, 6 user programmable color preset buttons which come factory set to control Red, Green, Blue, White, Amber, and UV, 6 multi function channel faders which are used to control individual color intensity, as well as chase speed, fade speed, master dimmer, and strobe. There are 9 "Function" buttons which are used to select the controllers operation mode, including Color Fade, Auto Run, Color Macro, Chase, Sound Active, Strobe, Manual Control, Presets, and Blackout modes. A USB port is conveniently included so a phone can be connected and charged. The HEXCON is one of the simplest and most versatile LED controllers available today. It is ideal for D.J.'s, nightclubs, lounges, bars, and anyone that wants to get the most out of their HEX series LED products.

Customer Support: ADJ provides a toll free customer support line, to provide 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.adj.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.

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.

• 24 Color Macros
• RGBWA+UV Faders To Create Desired Color
• 9 Function Buttons
• Auto, Chase, Fade, RGBWA+UV Manual Control, Color Macro, and Sound Active Modes
• Adjustable Chase and Fade Speed
• Adjustable Sound Sensitivity
• Strobing
• Blackout

The HEXCON carries a 1 year (365 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 ADJ customer support for a R.A. number.

Power Supply: The ADJ HEXCON 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 by most lighting and controller manufactures 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. Therefore, the first fixture controlled by the controller could be the last fixture in the chain. 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 and Master/Slave Operation): DMX controller and unit require a approved DMX-512 110 Ohm Data cable for data input and data output (Figure 1). 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.

COMMON

DMX512 OUT 3-PIN XLR   DMX +   DMX -   DMX512 IN 3-PIN XLR

Figure 2

XLR Male Socket   XLR Female Socket

1 Ground   2 Cold   2 Cold   1 Ground

3 Hot   3 Hot

Figure 3

XLR Pin Configuration
Pin 1 = Ground
Pin 2 = Data Compliment (negative)
Pin 3 = Data True (positive)
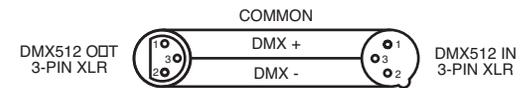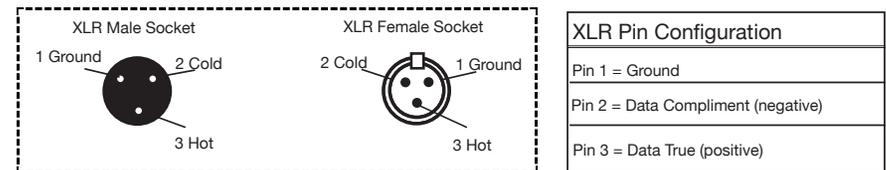
Special Note: Line Termination. When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behavior. A terminator is a 110-120 ohm 1/4 watt resistor which is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). This unit is inserted in 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		Pin 4 - Do Not Use
Not Used		Pin 5 - Do Not Use
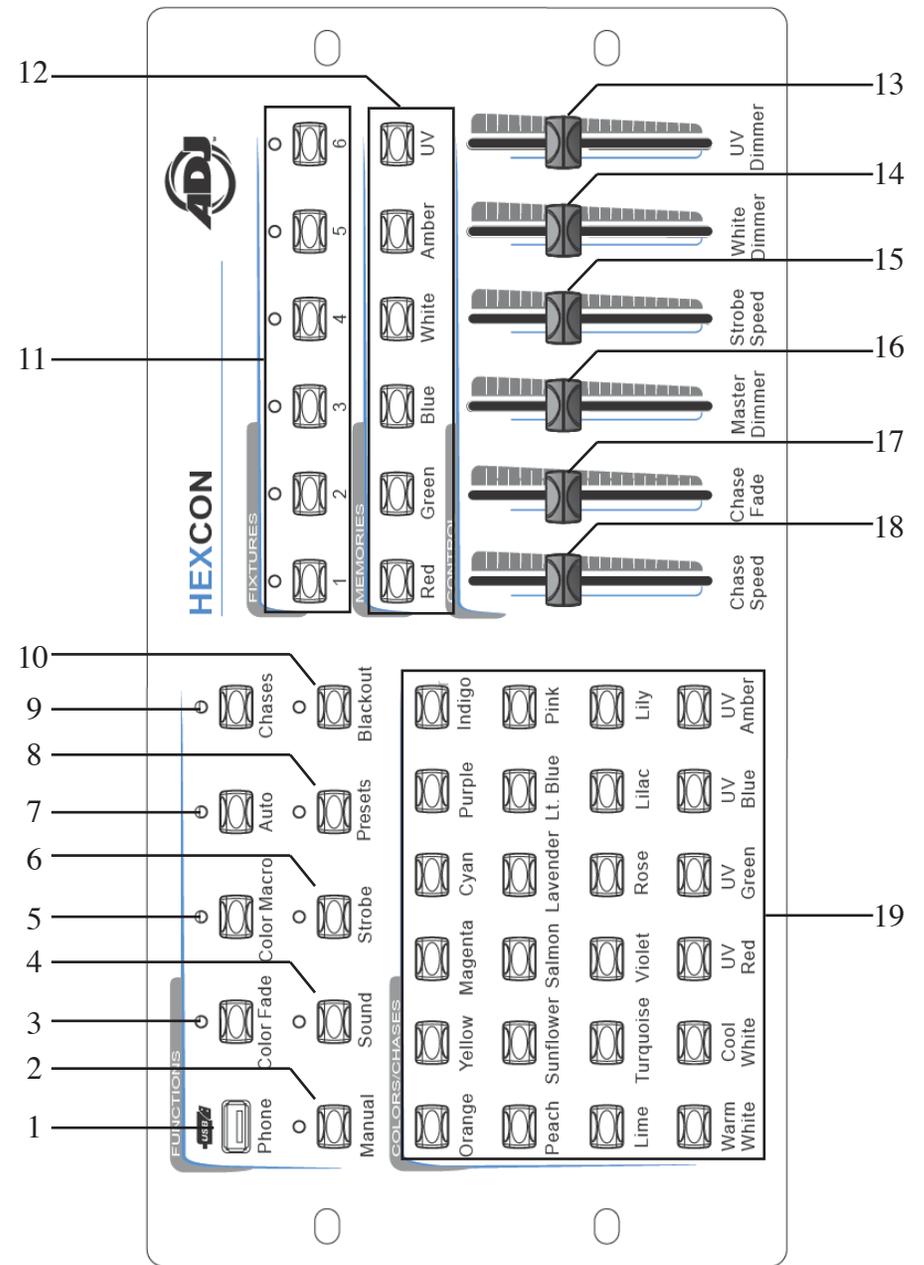
All fixtures must be set to DMX Mode. The DMX addressing for 6 fixture's is as follow's: 1st Fixture = 001, 2nd Fixture = 007, 3rd Fixture = 013, 4th Fixture = 019, 5th Fixture = 025, and the 6th Fixture = 031.

1. USB PORT - The provided USB port can be used to charge your phone or you can attached a 5V gooseneck lamp.

2. MANUAL - Pressing this button activates the color buttons and RGBWA+UV faders. When this mode is active you can press any of the color buttons located in the COLORS/CHASE grid (19), MEMORY BUTTONS (12), or use the RGBWA+UV faders to create your own desired color.

3. COLOR FADE - Pressing this button activates the COLOR FADE. The COLOR FADE can be controlled using the following:
   - The RED/CHASE SPEED FADER (18) will control the chase speed.
   - The GREEN/CHASE FADE FADER (17) will control the fade speed.
   - The BLUE/MASTER DIMMER FADER (16) will control all LED output intensity.
   - The STROBE SPEED FADER (15) will control the strobe speed when the STROBE BUTTON (6) is activated.
   - The WHITE DIMMER FADER (14) will control the White LEDs.
   - The UV DIMMER FADER (13) will control the UV LEDs.

4. SOUND ACTIVE - Pressing this button will activate the sound active mode, the sensitivity of the sound active mode can be adjusted using knob located on the rear of the controller. Other adjustmenst can be made using the following:
   - The GREEN/CHASE FADE FADER (17) will control the fade speed.
   - The BLUE/MASTER DIMMER FADER (16) will control all LED output intensity.
   - The STROBE SPEED FADER (15) will control the strobe speed when the STROBE BUTTON (6) is activated.
   - The WHITE DIMMER FADER (14) will control the White LEDs.
   - The UV DIMMER FADER (13) will control the UV LEDs.

5. COLOR MACROS - Press this button to activate the COLOR MACROS. The COLOR MACROS can be controlled using the following:
   - The COLOR/CHASE grid (19) or MEMORY BUTTONS (12) can be used to select a individual color.
   - The RED/CHASE SPEED FADER (18) will scroll through the various color macros.
   - The GREEN/CHASE FADE FADER (17) will control the fade speed when you press the individual color buttons.

   - The BLUE/MASTER DIMMER FADER (16) will control all LED output intensity.
   - The STROBE SPEED FADER (15) will control the strobe speed when the STROBE BUTTON (6) is activated.
   - The WHITE DIMMER FADER (14) will control the White LEDs.
   - The UV DIMMER FADER (13) will control the UV LEDs.

6. STROBE - Activates and deactivates strobing. Use the STROBE SPEED FADER (15) to adjust the strobe speed. *NOTE: In MANUAL MODE (2) this fader will control WHITE LEDs.*

7. AUTO - Pressing this button will activate the auto program. The Auto Program can be controlled using the following:
   - The RED/CHASE SPEED FADER (18) will control the program speed.
   - The GREEN/ CHASE FADE FADER (17) will control the fade speed.
   - The BLUE/MASTER DIMMER FADER (16) will control all LED output intensity.
   - The STROBE SPEED FADER (15) will control the strobe speed when the STROBE BUTTON (6) is activated.
   - The WHITE DIMMER FADER (14) will control the white LEDs intensity.
   - The UV DIMMER FADER (13) will control the white LEDs intensity.

8. PRESETS - Select a desired color macro, or a chase or fade, then press the PRESET button to activate PRESET mode then press and hold 1 of the 6 MEMORY BUTTONS until all LEDs flash. The color, chase, or fade is now saved into that MEMORY BANK. Press the PRESET BUTTON and the MEMORY BUTTON in which your color, chase, or fade is stored to recall the saved color, chase, or fade.

9. CHASE BUTTON - Press this button to activate chase mode. Press any of COLOR/CHASE BUTTONS (19) located in the COLOR/CHASE grid or 1 of the 6 MEMORY BUTTONS (12) to activate a desired chase. A COLOR CHASE can be controlled using the following:
   - The RED/CHASE SPEED FADER (18) will control the chase speed.
   - The GREEN/CHASE FADE FADER (17) will control the fade speed.
   - The BLUE/MASTER DIMMER FADER (16) will control all LED output intensity.
   - The STROBE SPEED FADER (15) will control the strobe speed when the STROBE BUTTON (6) is activated.
   - The WHITE DIMMER FADER (14) will control the white LEDs intensity.
   - The UV DIMMER FADER (13) will control the white LEDs intensity.

10. BLACKOUT - Activates and deactivates blackout mode

11. FIXTURE SELECTION - The HEXCON can control up to 6 LED fixtures.

Press one of the buttons and the corresponding LED above the button will light indicating which LED fixture can be controlled.

12. MEMORY/RGBWA+UV BUTTONS - Press the PRESET BUTTON and then press and hold 1 of the 6 MEMORY BUTTONS to save a desired color, chase, or fade program into the memory bank. See PRESETS (8) for more info. In MANUAL mode or COLOR MACRO mode, press any of the buttons to activate the corresponding color.

13. UV DIMMER FADER - Use this fader to control the output intensity of the UV LEDs.

14. WHITE DIMMER/AMBER DIMMER FADER - In COLOR MACRO mode, COLOR FADE mode, AUTO mode, CHASE mode, and SOUND ACTIVE mode, this fader will control the output intensity of the white LEDs. ***In MANUAL mode (2) this fader will control the AMBER LEDs.***

15. STROBE SPEED/WHITE DIMMER FADER - When the STROBE BUTTON (6) is activated, this fader will control the strobe speed. In MANUAL mode (2), this fader will control the WHITE LED's.

16. BLUE/MASTER DIMMER FADER - This fader has two functions.
    - This fader can be used to control the blue LEDs intensity in MANUAL MODE.
    - In AUTO PROGRAM, CHASE MODE, COLOR FADE, COLOR MACROS, & SOUND ACTIVE MODE this fader will control all LED output intensity.

17. GREEN/CHASE FADE FADER - This fader has two functions.
    - This fader can be used to control the green LEDs intensity in MANUAL MODE.
    - In AUTO PROGRAM, CHASE MODE, COLOR FADE, COLOR MACROS, & SOUND ACTIVE MODE this fader will control the fade speed.

18. RED/CHASE SPEED FADER - This fader has three functions.
    - This fader can be used to control the red LEDs intensity in MANUAL MODE.
    - In AUTO MODE, CHASE MODE & COLOR FADE this fader will control chase speed.
    - In COLOR MACROS MODE this fader will scroll through the different color macros.

19. COLORS/CHASES - Press the either the COLOR MACRO button (5) or the MANUAL button (2) to activate color mode. Press any of the

COLOR buttons for corresponding color. Press the CHASE button (9) to activate chase mode and press any of the color buttons to activate individual chases.
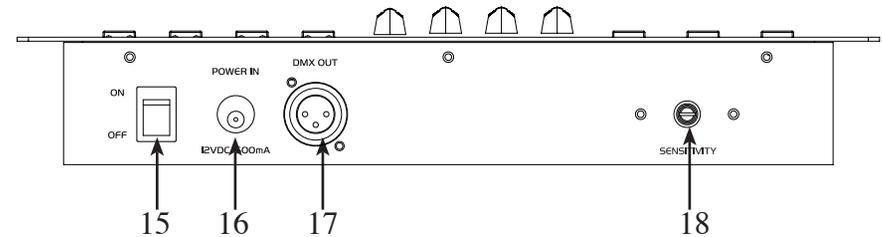
15. POWER SWITCH - This switch will power the controller ON/OFF.

16. DC INPUT - Accepts a DC 12V, 500mA minimum, power supply.

17. DMX OUT - Used to send DMX signal to the compatable LED fixtures.

18. SOUND SENSITIVITY - Use this knob to adjust the sound sensitivity.

Note: When the power is switched Off and then back On, the controller will return to the last operating mode.

Color Fade Mode:
1. Press the COLOR FADE button (3) and the corresponding LED above the button will light.
2. Use faders (16, 17 & 18) to adjust output intensity, fade speed, and chase speed. Use faders (13 & 14) to adjust the White LEDs and UV LEDs intensity.
3. Press the STROBE button (6) to activate the strobe function and use the STROBE SPEED fader (15) to adjust the strobe speed.

Color Macro Mode:
1. Press the COLOR MACRO button (5) and the corresponding LED above the button will light.
2. You can use the COLORS/CHASE GRID (19) or MEMORY BUT-TONS (12) to select a desired color. You can use the RED/CHASE SPEED fader (18) to scroll through the color macros.
3. Use faders (16 & 17) to adjust all LED intensity and fade speed. Use faders (13 & 14) to adjust the White LEDs and UV LEDs intensity.
4. Press the STROBE button (6) to activate the strobe function and use the STROBE SPEED fader (15) to adjust the strobe speed.

Auto Mode:
1. Press the AUTO button (7) and the corresponding LED above the button will light.
2. Use the faders (16, 17 & 18) to adjust output intensity, fade time, and chase speed. Use faders (13 & 14) to adjust the White LEDs and UV LEDs intensity.
3. Press the STROBE button (6) to activate the strobe function and use the STROBE SPEED fader (15) to adjust the strobe speed.

Chase Mode:
1. Press the CHASE button (9) and the corresponding LED above the button will light.
2. Press 1 of the 24 COLOR buttons (19) located in the Color/Chases grid, or 1 of the 6 MEMORY BUTTONS (12) to activate a chase.
3. Once your desired chase program has been selected, use the faders (16, 17 & 18) to adjust output intensity, fade speed, and

chase speed. Use faders (13 & 14) to adjust the White LEDs and UV LEDs intensity.
4. Press the STROBE button (6) to activate the strobe function and use the STROBE SPEED fader (15) to adjust the strobe speed.

Manual RGBWA+UV Color Mode:
1. Press the MANUAL button (2) and the corresponding LED above the button will light.
2. Press any of the COLOR/CHASE BUTTONS (19), MEMORY but-tons, or use the RGBWA+UV faders (13, 14, 15, 16, 17, & 18) to adjust the LED intensities and create your own desired color.
3. Press the STROBE button (6) to activate the strobe function and use the STROBE SPEED fader (15) to adjust the strobe speed.
NOTE: When strobe is activated the WHITE ouput will be disabled.

Sound Active Mode:
1. Press the SOUND button (4) and the corresponding LED above the button will light.
2. Use the SOUND SENSITIVITY knob located at the rear to adjust the sound sensitivity level.
3. Use the faders (16 & 17) to adjust output intensity and fade speed. Use faders (13 & 14) to adjust the White LEDs and UV LEDs intensity.
4. Press the STROBE button (6) to activate the strobe function and use the STROBE SPEED fader (15) to adjust the strobe speed.

Strobe:
1. Press the STROBE button (6) and the corresponding LED above the button will light.
2. Use the STROBE SPEED fader (15) to adjust the strobe speed.

Preset Mode: Using these buttons you are able to save and recall a chase, fade, or color.
1. To save a chase, fade, or color, press the PRESET button (8) to acitvate. To save the chase, fade, or color, press 1 of the 6 MEMORY/RGBWA+UV buttons (12) for at least 3 seconds. When all of the LEDs flash 3 times, this informs you that the save was successful.
2. To recall the saved chase, fade, or color, press the PRESET button

(8) then press the MEMORY/RGBWA+UV button (12) that contains your desired chase, fade, or color.
3. Press the STROBE button (6) to activate the strobe function and use the STROBE SPEED fader (15) to adjust the strobe speed.

Blackout:
1. Press the BLACKOUT button (10) and the corresponding LED above the button will light.
2. Pressing the button will blackout all LED activity.

Default: This will reset all functions, it will also erase any chases, fades, or colors stored in the MEMORY BUTTONS (12).
1. Switch the controllers power to OFF. Simultaneously press and hold down the Red, Green, Blue, and Amber buttons (12).
2. While pressing all four buttons, switch the controllers power to ON. The unit will now be reset to default settings.

MANUFACTURER'S LIMITED WARRANTY

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 it's 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, 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 ADJ Products, LLC concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the ADJ Products, LLC factory unless prior written authorization was issued to purchaser by ADJ Products, LLC; if the product is damaged because not properly maintained as set forth in the instruction manual.

D. This is not a service contract, and this warranty does not include maintnance, 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 warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of ADJ Products, LLC under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of ADJ Products, LLC. All products covered by this warranty were manufactured after August 15, 2012, and bear indentifying marks to that effect.

E. ADJ Products, LLC reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.

No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by ADJ Products, LLC in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and/or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall ADJ Products, LLC be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.

This warranty is the only written warranty applicable to ADJ Products, LLC Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

MANUFACTURER'S LIMITED WARRANTY PERIODS:
  • **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** (excluding laser diodes which have a 6 month limited warranty)
  • **L.E.D. Products = 2-year (730 days) Limited Warranty** (excluding motors, PCB boards, and power supplies, which have a 1-year (365 day Limited Warranty) batteries which have a 180 day limited war-ranty). Only the L.E.D.s carry a 2-year warranty (**excluding StarTec Series which a carries a 1 Year Limited Warranty) Note: 2 Year Warranty only applies to purchases within the United States.**
  • **ADJ DMX Controllers = 2 Year (730 Days) Limited Warranty** (excluding faders and tact switches)

Specifications

POWER SUPPLY:	12V DC, 500mA UL Approved.
POWER CONSUMPTION:	3.6W
OUTPUT:	3-Pin XLR
AUDIO TRIGGER:	Built-In Microphone
DIMENSIONS:	361mm(L) x 185mm(W) x 65mm(H)
	14.2" (L) x 5.25" (W) x 2.5" (H)
WEIGHT:	4Lbs./ 1.74Kgs.
WARRANTY:	1 Year (365 Days)

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

ADJ Products, LLC
6122 S. Eastern Ave. Los Angeles, CA 90040 USA
Tel: 323-582-2650 / Fax: 323-725-6100
Web: www.adj.com / E-mail: info@americandj.com

A.D.J. Supply Europe B.V.
Junostraat 2
6468 EW Kerkrade
The Netherlands
service@adjgroup.eu / www.adj.eu
Tel: +31 45 546 85 00 / Fax: +31 45 546 85 99

Follow Us On:

facebook.com/americandj
twitter.com/americandj
youtube.com/adjlighting