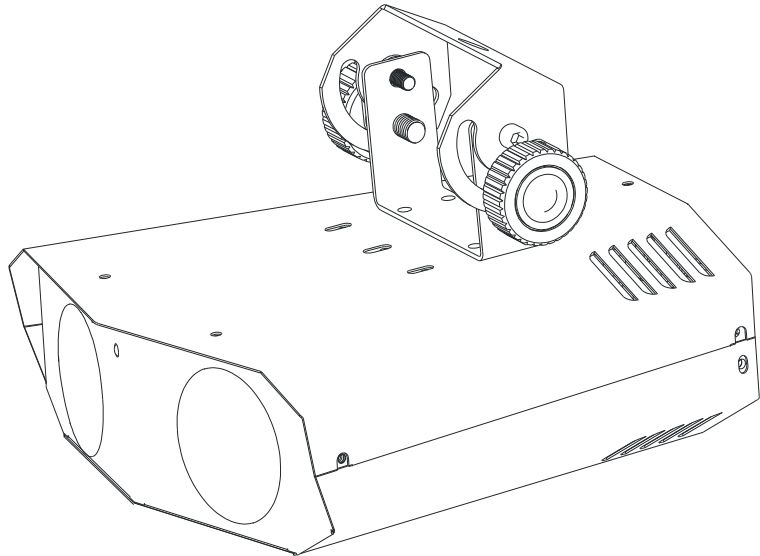




Monster Duo



User Instructions

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Europe Energy Saving Notice

Energy Saving Matters (EuP 2009/125/EC)

Saving electric energy is a key to help protecting the environment. Please turn off all electrical products when they are not in use. To avoid power consumption in idle mode, disconnect all electrical equipment from power when not in use. Thank you!

Unpacking: Thank you for purchasing the Monster Duo by ADJ Products, LLC. Every Monster Duo 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 Monster Duo is a 2-FX-in-1 DMX LED mooflower and strobe lighting effect. The Monster Duo can operate as a stand alone fixture or in a Master/Slave configuration. The Monster Duo has three operating modes; sound active mode, show mode, and DMX control. *For best results use fog or special effects smoke to enhance the beams projections.*

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.

Warning! *This may cause severe eye damage. Avoid looking directly into the light source at all times!*

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.

- DMX-512 Protocol Compatible (1 DMX Channel)
- 3 Operating Modes - Sound Active, Show Mode, and DMX Control
- Internal Microphone
- Digital Display for Address and Function Setting
- UC3 Controller (Not Included)
- Power Cord Daisy Chain (See page 15)

The Monster Duo carries a 2 year (730 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.

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 ADJ Products, LLC.

ADJ Products, LLC will not accept any liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to this unit.

For Your Own Personal Safety, Please Read and Understand This Manual Completely Before You Attempt To Install Or Operate This Unit!

- 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.
- 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.
- 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 cords at plugs, convenience receptacles, and the point where they exit from the appliance.
- Cleaning -The fixture should be cleaned only as recommended by the manufacturer. See page 17 for cleaning details.
- Heat -This 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. Objects have fallen, or liquid has been spilled into the appliance.
 - B. The appliance has been exposed to rain or water.
 - C. The appliance does not appear to operate normally or exhibits a marked change in performance.

Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

Regardless of the rigging option you choose for your Monster Duo always be sure to secure your fixture with a safety cable (not included). Attach a safety cable to the provided safety bolt.

Caution: For added protection mount the fixtures in areas outside of walking paths, seating areas, or areas where the fixture might be reached by unauthorized personal.

Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight.

To avoid injury, never stand directly below the device when mounting, removing, or servicing the fixture.

Always use and install a safety cable (not included) as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

Power Supply: The ADJ Monster Duo 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): The Monster Duo can be controlled via DMX-512 protocol. The Monster Duo is a 1 channel DMX unit. The DMX address is set electronically using the controls on the rear panel of the unit. Your unit and your DMX controller 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



Figure 1

remember that DMX cable must be daisy chained and cannot be split.

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.

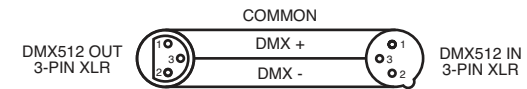


Figure 2

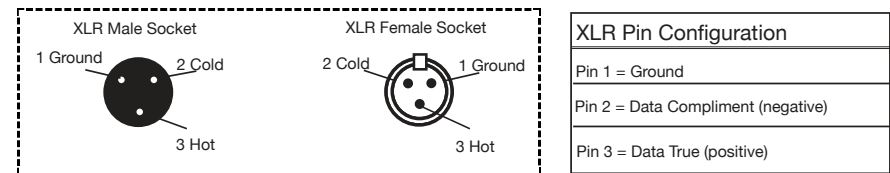


Figure 3

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.

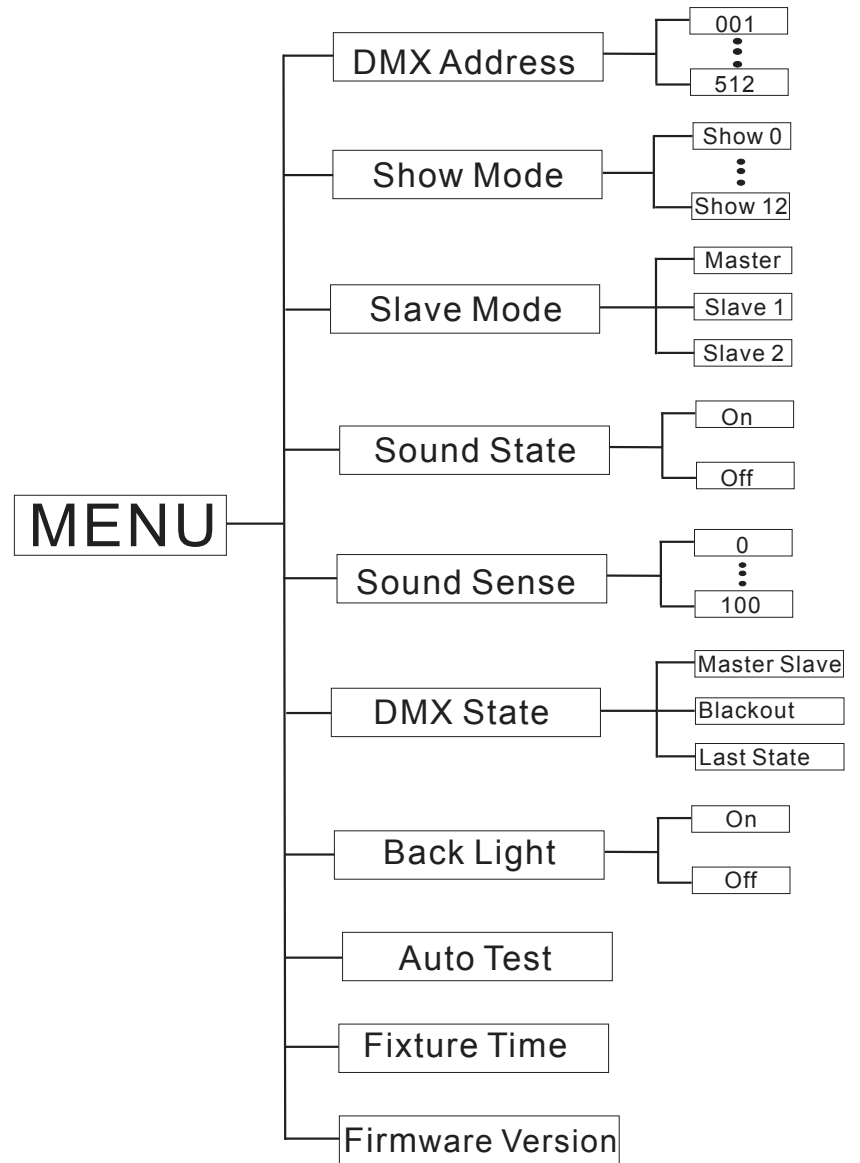


Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal, (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX +) of the last fixture.

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 |



System Menu: When making adjustments press ENTER to confirm your setup then press and hold the MENU button for at least 3 seconds. To exit without making any adjustments press the MENU button. The display will lock after 30 seconds, press the MENU button for 3 seconds to unlock.

DMX Address - Set the DMX Address -

1. Press the MENU button until “DMX Address” is displayed, press ENTER.
2. “XXX” will now be displayed, “XXX” represents the displayed address. Press the UP or DOWN buttons to find your desired address.
3. Press ENTER to confirm, and then press and hold the MENU button for at least three seconds to assign.

Show Mode - Show modes 0 - 12 (Factory Shows).

1. Press the MENU button until “Show Mode” is displayed, press ENTER.
2. “Show X” will now be displayed, “X” representing a number between 0-12. Shows 1-12 are preset shows, while “Show 0” is random show. Press the UP or DOWN buttons to find your desired show and press ENTER to confirm. After pressing ENTER, press and hold the MENU button for at least 3 seconds to activate.

Slave Mode - This will let you set the unit as a slave in a master/slave configuration.

1. Press the MENU button until “Slave Mode” is displayed, press ENTER. Either “Slave 1” or “Slave 2” will be displayed.
2. Press the UP or DOWN buttons until your desired setting is displayed, press ENTER to confirm.

NOTE: In a Master/Slave configuration you can make one

fixture the Master and then set the next fixture to “Slave 2”, the fixtures will now have contrast movement to each other.

Sound State - In this mode the unit will run in sound active mode.

1. Press the MENU button until “Sound State” is displayed, press ENTER.
2. Either “On” or “Off” will now be displayed. Use the UP or DOWN buttons to toggle between “On” and “Off”.
3. Press ENTER to confirm your selection, the press and hold the MENU button to activate.

Sound Sense - This function will let you adjust the sound sensitivity of the sound active mode.

1. Press the MENU button until “Sound Sense” is displayed, press ENTER.
2. Press the UP or DOWN buttons to adjust the sensitivity level. The sensitivity level can be adjusted between 0 (least sensitive) and 100 (most sensitive).
3. Press ENTER to set you desired level.

DMX State - This mode is used as a precaution mode. In case the DMX signal is lost, the operating mode chosen in the setup is the running mode the fixture will go into when the DMX signal is lost. You can also set this as the operating mode you would like the unit to return to when power is applied.

1. Press the MENU button until “DMX State” is displayed, press ENTER.
2. Either “Master/Slave”, “Blackout”, or “Last State” will be displayed. Choose an operating mode you would like the unit to start up in when either power is applied or the DMX signal is lost.

- **Blackout** - If the DMX signal is lost or power is lost then applied, the unit will automatically go into stand by mode.
 - **Last State** - If the DMX signal is lost or power is lost then applied, the fixture will stay in the last DMX set up. If power is applied and this mode is set, the unit will automatically go into the last DMX set up.
 - **Master/Slave** - If the DMX signal is lost or power is lost then applied, the unit will automatically go into Master/Slave mode.
3. Press ENTER to confirm your desired set up.

Back Light - With this function you can make the LCD backlight automatically turn off after two minutes.

1. Press the MENU button until “Back Light” 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 backlight on at all times, or “Off” to allow the backlight to turn off after 2 minutes. Press any button to turn the backlight on again.
3. Press ENTER to confirm.

Auto Test - This function will run a self test program.

1. Press the MENU button until “Auto Test” is displayed, press ENTER.
2. The fixture will now run a self test. Press the MENU button to exit.

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

1. Press the MENU button until “Fixture Time” is displayed, press ENTER.
2. The running time of the fixture will now be displayed. Press

MENU to exit.

Firmware Version - This will display the software version

1. Press the MENU button until “Firmware Version” is displayed. Press the ENTER button and the software version will be displayed.
2. Press the MENU button to leave this function.

The optional UC-IR infrared remote (sold separately) has many different functions and gives you complete control of your Monster Duo. To control the your desired fixture you must aim the controller at the front of the fixture and be no more the 30 feet away.

STAND BY - Pressing this button will blackout the fixture.

FULL ON - Invalid for this fixture.

FADE/GOBO - When sound mode is off, this button will make the fixture fade from one color to the other.

COLOR - Press this button, use buttons 1-5 to select a static color.

STROBE - Press and hold this button for at least 3 seconds to activate random strobe. Press this button quickly to activate sound active strobe.

SPEED - Invalid for this fixture.

SOUND ON & OFF - These buttons activate and deactivate the sound active mode.

SHOW - Press this button, then use buttons 1-9 to change the internal program.

“DIMMER +” and “DIMMER -” - These buttons are are not used for this fixture.

Operating Modes: *The Monster Duo 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.™

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 Monster Duo can is a 1 channel DMX fixture. See page 16 for detailed description of the DMX values and traits.
2. To control your fixture in DMX mode, follow the set-up procedures on pages 6-8 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 10 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. Press the MENU button until "**Sound State**" is displayed, and press ENTER.
2. Press the UP or DOWN buttons to choose either OFF or ON, and press ENTER, then press and hold MENU for 3 seconds to confirm. To adjust sound sensitivity see page 11.

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

1. Press the MENU button until "**Show Mode**" is displayed, and press ENTER.
2. Press 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 page 11 for more info.

Master-Slave configuration This function will allow you to link up to 16 units together and operate without a controller. 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. Set the Master unit to your desired operating mode.
3. For the slave units press the MENU button until "**Slave Mode**" is displayed, and Press ENTER. Set the slave units to either "**Slave 1**" or "**Slave 2**".
4. The slave units will now follow the Master unit.

With this feature you can connect the fixtures to one another using the I.E.C input and output sockets. The quantity that can be connected is 12 fixtures maximum for 120V and 20 fixtures maximum for 240V. After the maximum fixtures has been reached you will need to use a new power outlet. They must be the same fixtures. DO NOT mix fixtures.

| Monster Duo | | 1 DMX Channel Mode |
|-------------|--------------|--------------------|
| Channel | Value | Function |
| 1 | 0 - 7 | SHOWS BLACKOUT |
| | 8 - 27 | SHOW 1 |
| | 28 - 47 | SHOW 2 |
| | 48 - 67 | SHOW 3 |
| | 68 - 87 | SHOW 4 |
| | 88 - 107 | SHOW 5 |
| | 108 - 127 | SHOW 6 |
| | 128 - 147 | SHOW 7 |
| | 148 - 167 | SHOW 8 |
| | 168 - 187 | SHOW 9 |
| | 188 - 207 | SHOW 10 |
| | 208 - 227 | SHOW 11 |
| | 228 - 247 | SHOW 12 |
| 248 - 255 | SOUND ACTIVE | |

Monster Duo Fuse Replacement

Disconnect the unit from its power source. Using a philips screw driver unscrew and remove the fuse holder. Remove the bad fuse and replace with a new one.

Monster Duo Cleaning

Fixture Cleaning: Due to fog residue, smoke, and dust cleaning the internal and external optical lenses and mirror should be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates (I.e. smoke, fog residue, dust, dew). In heavy club use we recommend cleaning on a monthly basis. Periodic cleaning will ensure longevity, and crisp output.

1. Use normal glass cleaner and a soft cloth to wipe down the outside casing.
2. Use a brush to wipe down the cooling vents and fan grill.
3. Clean the external optics and mirror with glass cleaner and a soft cloth every 20 days.
4. Clean the internal optics with glass cleaner and a soft cloth every 30-60 days.
5. Always be sure to dry all parts completely before plugging the unit back in.

Monster Duo Trouble Shooting

Trouble Shooting: Listed below are a few common problems that you may encounter, with solutions.

No light output from the unit;

1. Be sure the external fuse has not blown. The fuse is located on the rear panel of the unit.
2. Be sure the fuse holder is completely and properly seated.

Unit does not respond to sound;

1. Low frequencies (bass) should cause the unit to react to sound. Tapping on the microphone, quiet or high pitched sounds may not activate the unit.

Monster Duo

Warranty

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 its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, ADJ Products, LLC shall have no liability whatsoever for loss of or damage to any such accessories, 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 maintenance, cleaning or periodic check up. During the period specified above, ADJ Products, LLC will replace defective parts at its expense with new or refurbished parts, and will absorb all expenses for 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 = 90-Day 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) and batteries which have a 180 day limited warranty).

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Monster Duo

Specifications

| | |
|--------------------------------|--|
| Model: | Monster Duo |
| Voltage: | 100V ~ 240V/50~60Hz |
| LEDs: | 18 x 1W LEDs (4 Red, 4 Green, 4 Blue, 4 White & 2 Amber) |
| LED Angle: | 140 Degrees |
| Power Consumption: | 41W |
| Power Cord Daisy Chain: | 12 Fixtures Max. (120V) 20 Fixtures Max. (230V) |
| Dimensions: | 10.75"(L) x 10"(W) x 7"(H) 271mm x 251mm x 176mm |
| Weight: | 5 Lbs. / 2.2 kgs. |
| Colors: | RGBWA |
| Fuse: | 3.15A |
| Duty Cycle: | None |
| DMX: | 1 DMX Channel |
| Sound Active: | Yes |
| Working Position: | Any Safe, Secure Position |
| Warranty: | 2 Year (730 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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