# ENERGY American Dy.



## **User Instructions**

*American* DJ 4295 Charter Street Los Angeles Ca. 90058 www.americandj.com

#### Energy DMX™

#### Introduction

**Unpacking:** Thank you for purchasing the Energy DMX<sup>™</sup> by American DJ<sub>®</sub>. Every Energy DMX<sup>™</sup> 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 at the number listed below.

**Introduction:** To optimize the performance of this product, please read these operating instructions carefully to familiarize yourself with the basic operations of this unit. The Energy  $DMX^{TM}$  is a 200 watt strobe, and is light weight and compact. Up to 8 units may be linked together and controlled by single controller. A manual dimmer is built in to the unit, allowing the unit's intensity to be customized. The unit also has an adjustable flash rate knob built on to the unit.

**Customer Support:** American  $DJ_{\circledast}$  provides a toll free customer support line, to answer any questions 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. For service related issue please contact American  $DJ_{\circledast}$ . 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	
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.

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

#### Safety Warnings

**Safety Issues:** This unit may blow a fuse if the maximum allotted load of 15 amps is reached. If the fuse needs replacement, always replace the fuse with same exact type that was removed, unless otherwise instructed by an authorized American  $DJ_{\odot}$  service technician. Use of a different type fuse from that which is recommended may cause fire or electric shock and will void the manufactures warranty.

- 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 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. Do not attempt to operate this unit if the power cord has been frayed or broken.
- 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.
- Always be sure to mount this unit in an area that will allow proper ventilation. Allow about 6" (15cm) between this device and a wall.
- Do not attempt to operate this unit, if it becomes damaged.
- This unit is intended for indoor use only, use of this product outdoors voids all warranties.
- During long periods of non-use, disconnect the unit's main power.
- Always mount this unit in safe and stable matter.
- Power cords should be routed so they are not likely to be walked on, pinched by items placed upon or against them.
- Cleaning -The fixture should be cleaned only as recommended by the manufacturer. See page 4 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 unit.
  - C. The unit has been exposed to rain or water.
  - D. The unit does not appear to operate normally or exhibits a marked change in performance.

#### Energy DMX™

#### Warranty Registration

The Energy DMX<sup>™</sup> carries a one year (365 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.

#### Energy DMX™

#### **Cleaning Instructions**

Features

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

- 1. Use normal glass cleaner and a soft cloth to wipe down the outside casing every 20 days.
- 2. Use normal glass cleaner with a soft cloth to wipe down the inside reflector and lens every 30-60 days.
- 3. Always be sure to dry all parts completely before plugging the unit back in.
- 4. Frequent cleaning the unit will extend lamp life and ensure the fixtures 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 light output.

#### Energy DMX™

- Bright 200 Watt Strobe Lamp
- Adjustable Dimming with DMX controller
- Adjustable Strobe Speed with DMX controller
- Large coverage area
- Link Up To 16 Units Together
- Built-In Adjustable Hanging Yoke
- IRC-1 Optional Remote Control (Not Included)

#### Energy DMX™

#### DMX Set Up

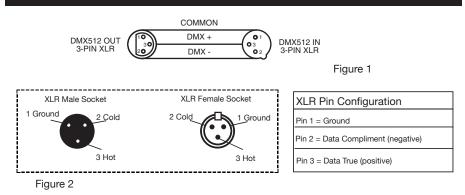
**DMX-512:** *DMX is short for Digital Multiplex. This is a universal protocol used as a form of communication between intelligent fixtures and controllers.* A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture 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 and Master/Slave Operation): The Energy DMX<sup>™</sup> can be controlled via DMX-512 protocol. The Energy DMX<sup>™</sup> is a two channel DMX unit. The DMX address is set in the digital menu of the Energy DMX.<sup>™</sup> Your unit and your DMX controller require a standard 3-pin XLR connector for data input and data output. If you are making your own cables, be sure to use standard two conductor shielded cable (This cable may be purchased at almost all pro sound and lighting stores). Your cables should be made with a male and female XLR connector on either end of the cable. Also remember that DMX cable must be daisy chained and can not be split.

**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.

Energy DMX<sup>™</sup>



**Special Note: Line Termination.** When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behavior. A terminator is a 90-120 ohm 1/4 watt resistor which is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). This unit is inserted in the female XLR socket 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.

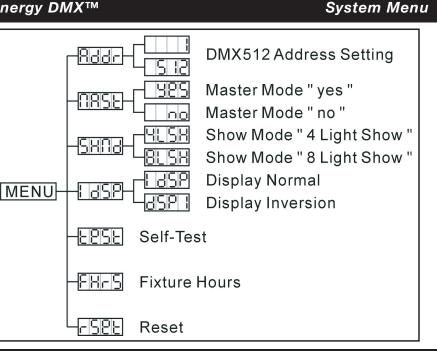


Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal, (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX +) of the last fixture. Figure 3

**5-Pin XLR DMX Connectors.** Some manufactures use 5-pin XLR connectors for DATA transmission in place of 3-pin. 5-pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors in to a 3-pin line a cable adaptor must be used, these adaptors are readily available at most electric stores. The chart below details a proper cable conversion.

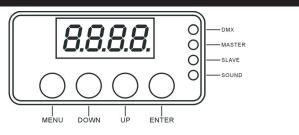
3-Pin XLR to 5-Pin XLR Conversion			
Conductor	3-Pin XLR Female (Out)	5-Pin XLR Male (In)	
Ground/Shield	Pin 1	Pin 1	
Data Compliment (- signal)	Pin 2	Pin 2	
Data True (+ signal)	Pin 3	Pin 3	
Not Used		Pin 4 - Do Not Use	
Not Used		Pin 5 - Do Not Use	

©American DJ® - www.americandj.com - Energy DMX™ Instruction Manual Page 6



Energy DMX<sup>™</sup>

**Control Panel** 



DMX	On	DMX input present
MASTER	On	Master mode
SLAVE	On	Slave mode
SOUND	Blinking	Sound activation

MENU	To select the programming functions
DOWN	To go backward in the selected functions
UP	To go forward in the selected functions
ENTER	To confirm the selected functions

#### Energy DMX<sup>™</sup>

Power Supply: This unit is available only in 120v. Before plugging your unit in be sure the source voltage in your area matches the required voltage for your American DJ<sub>®</sub> Energy DMX<sup>™</sup>.

General Operation: This fixture is designed to operate as a stand alone, sound-active unit, or in a Master/Slave configuration. It can also operate via DMX controller. The Energy DMX<sup>™</sup> is ready to be plugged in out of the box. After plugging the power cord into a power outlet the unit will immediately begin to strobe.

#### **Duty Cycle:**

Because the Energy DMX<sup>™</sup> can be used for continuous output (ie while simulating lightning), it can build up intense heat. Due to the build up of intense heat the unit should not run for 15 minutes continuously. After 15 minutes of continuous use, allow the unit to cool for about fifteen minutes, this will greatly increase the lamp life and insure product longevity.

#### **Optional Remote:**

American DJ<sub>®</sub> offers a blackout control that may be used to control the unit by remote such as the IRC-1 controller. Some remote controls will allow you to chase several strobes and some may allow you to only adjust the flash rate. The remote operations very by model, please see your dealer or visit our web site for more information on the available remote controls.

### **Operating Modes:**

#### Sound Active:

In sound active mode the unit will run to the beat of the music.

- 1. To set your Energy DMX<sup>™</sup> to sound active mode, press the MENU button once until the LCD shows "NBST", and press FNTFR.
- 2. Press the UP button so that the LCD shows "SES", and press ENTER.
- 3. If you have done it correctly the LED next to MASTER will light up. Also, whenever it receives a low frequency sound the LED next to SOUND will light up.

Universal DMX Control: This mode allows you to use a universal DMX-512 controller such as the LSC<sub>®</sub> DMX Operator™ or Show

#### **Operating Instructions**

#### Designer.™

- 1. To control your fixture in DMX mode, follow the set-up procedures on pages 5-6 as well as the set-up procedures included with your DMX controller.
- 2. For longer cable runs (more than a 100 feet) use a terminator on the last fixture.
- 3. Press the MENU button until "Addr" is shown in the display. Press the UP or DOWN button to change the DMX address. Once you have found your desired address press the ENTER button.
- The Energy DMX<sup>™</sup> uses two DMX channels. See page 11 for detailed description of the DMX traits. Use your DMX controller to activate the various built-in patterns.
- 5. For help operating in DMX mode consult the manual included with your DMX controller.
- **NOTE:** If running in Master/Slave address configuration while using a DMX controller, follow the DMX address setttings on page 10 for either a 4-light show or 8-light show.

**Master-Slave Operation (Built-In Programs):** This mode will allow you to link up to 16 units together and operate without a controller. In Master-Slave mode, the units will strobe to a built-in program. 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 standard XLR microphone 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. For longer cable runs we suggest a terminator at the last fixture.
- 2. Choose a unit to function as the Master and set the DMX address to 1.
- 3. Follow the DMX addresses on page 10 for either a 4-light show or 8-light show.

Energy D	МХ™	Master/Slave Programs
Patterns in a 4-light show.		DMX Address for a 4-light show:
Pattern	Activation	
SH-0	1234 FULL ON	Master Slave 1 Slave 2 Slave 3
SH-1	1-2-3-4	
SH-2	4-3-2-1	
SH-3	1-2-3-4-3-2	
SH-4	12-34	
SH-5	24-13	
SH-6	23-14	
SH-7 SH-8	1-12-123-1234-12 4-43-432-4321-43	
Sп-о SH-9	1-2-1-2-3-4-3-4	2-43-4-510P
SH-A	4-1-4-1-2-3-2-3	
SH-B	3-1-3-1-2-4-2-4	
0.1.2	0.0.2.2.	DMX Address for a 8-light show:
		Master Slave 1 Slave 2 Slave 3
Patterns in a	<u>a 8-light show.</u>	
Pattern	Activation	Slave 4 Slave 5 Slave 6 Slave 7
SH-0	12345678 FULL O	Ν
SH-1	1-2-3-4-5-6-7-8	
SH-2	8-7-6-5-4-3-2-1	
SH-3	81-72-63-54-63-72	2-81
SH-4	15-26-37-48	
SH-5	84-73-62-51	
SH-6	1357-2468	
SH-7	1234-5678	
SH-8	1256-3478	
SH-9	12-23-34-45-56-67	
SH-A	87-76-65-54-43-32	2-21-18
SH-B	54-63-72-81	

#### Energy DMX™

#### DMX Traits

DMX512 configuration		
DMX512	Channel 1	Channel 2
Level range 0~255	Strobe Speed	Dimmer
240~255	Speed 15	Dimmer 15
224~239	Speed 14	Dimmer 14
208~223	Speed 13	Dimmer 13
192~207	Speed 12	Dimmer 12
176~191	Speed 11	Dimmer 11
160~175	Speed 10	Dimmer 10
144~159	Speed 9	Dimmer 9
128~143	Speed 8	Dimmer 8
112~127	Speed 7	Dimmer 7
96~111	Speed 6	Dimmer 6
80~95	Speed 5	Dimmer 5
64~79	Speed 4	Dimmer 4
48~63	Speed 3	Dimmer 3
32~47	Speed 2	Dimmer 2
16~31	Speed 1	Dimmer 1
0~15	Stopped	Blackout

#### Energy DMX™

#### Fuse Replacement

Locate and remove the unit's power cord. Once the cord has been removed locate the fuse holder inside the power socket. Insert a flathead screwdriver 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.

#### Energy DMX™

**Strobe Lamp Warning!** This fixture is fitted with a strobe lamp which are highly susceptible to damage if improperly handled. Never touch the lamps with your bare fingers as the oil from your hands will shorten lamp life. Also, never move the fixture until the lamps have had ample time to cool. Remember, lamps are not covered under warranty conditions.

**Caution:** Always replace with the exact same type lamp and fuse, unless otherwise specified by an authorized American DJ® technician. Replace with anything other than the specified part can damage your unit and will void your manufactures warranty.

**Warning:** If after you have replaced the lamp or fuse and you continue to blow either one, STOP using the unit. Contact customer support for further instructions, you may have to return the unit for servicing. Continuing to use the unit may cause serious damage.

**Lamp Replacement:** Caution! Never open the unit when in use. Always disconnect the main power and allow the fixture ample time to cool before attempting to replace the lamp. Again, please remember to always replace with the exact same type lamp.

- 1. Be sure to follow the proper procedures when handling strobe lamps. Never touch the new lamp with your bare fingers.
- 2. Unscrew the six phillips screws that run along the bottom sides of of the unit (three on each side).
- 3. Seperate the base and the cover.
- 4. Unscrew and disconnect the three wires from the PCB. *Remember which wire went where.*
- 5. Push the lamp holders out to remove the lamp.
- 6. Remove and replace the lamp with an exact match. Remove the silicon wire covers from the old lamp, and use them to cover the new lamp wires'.
- 7. Connect the three wires to the correct points on the PCB.
- 8. Reassemble in reverse order.

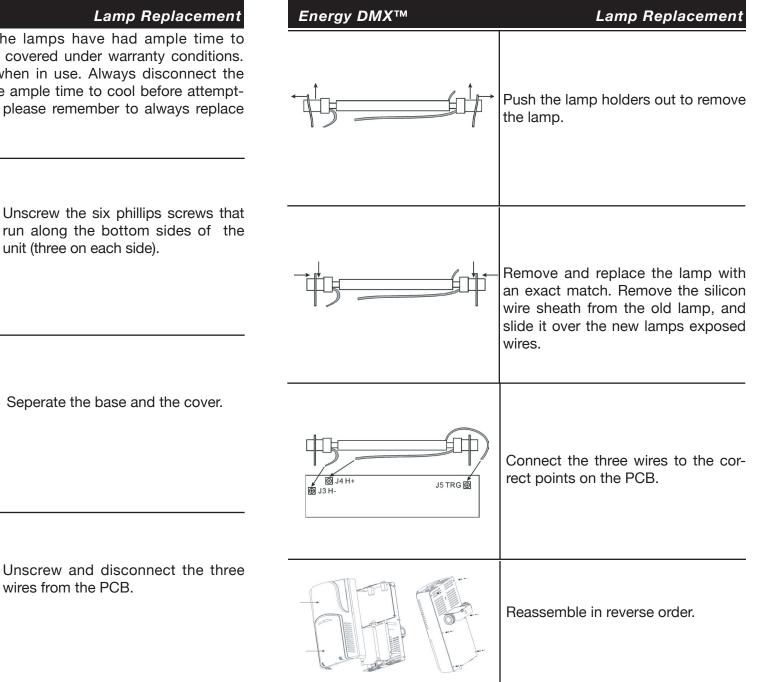
## For illustrated instructions on how to replace the lamp, see the next page.

#### Lamp Replacement

⊕ J4 H+

🗑 ЈЗ Н-

Never move the fixture until the lamps have had ample time to cool. Remember, lamps are not covered under warranty conditions. Caution! Never open the unit when in use. Always disconnect the main power and allow the fixture ample time to cool before attempting to replace the lamp. Again, please remember to always replace with the exact same type lamp.



J5 TRG 🗑

#### Energy DMX™

#### Warranty

#### **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 one 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.

#### Energy DMX™

#### **Specifications**

#### Model: Enerav DMX™

	,
Voltage*:	120v~60Hz
Lamp:	ZB-E200S 200w Strobe lamp
Fuse:	120v = 15A
Dimensions:	13" (L) x 8.1" (W) x 3.94" (H)
Weight:	4.93 Lbs./ 2.24 Kgs
Duty Cycle:	15 minutes on/off
Ventilation:	Air Cooled
Warranty:	1 Year (365 Days)
*Voltage is preset at the fa	actory and can not be changed by the user.

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

©American DJ® American DJ World Headquarters: 4295 Charter Street Los Angeles, CA 90058 USA Tel: 323-582-2650 / Fax: 323-582-2610 Web: www.americandj.com / E-mail: info@americandj.com