

# EPSILON

American DJ®



## User Instructions



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American DJ®  
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### Epsilon™

### Introduction

**Unpacking:** Thank you for purchasing the Epsilon™ by American DJ®. Every Epsilon™ 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 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.

**Introduction:** The Epsilon™ is a colorful hightech effect with 32 multi-colored, sharp beams of light that bounce up and down to the beat of music. This unit is part of the Advanced Drive Series (ADS). Any unit that has the ADS logo is designed to interconnect and work together. When several ADS effects are linked together they can form an inexpensive system that creates an intelligent look. This unit is best used in multiples of four or more. For best results mix and match several ADS units together with a fog or haze machine to enhance the beam output. An optional MINI/C controller may be purchased separately and will control a blackout function.

**Warning!** The 1/4" phone plug on the unit is for the optional MINI/C. Do not attempt to connect an audio signal to this jack, this will damage the PC board and void your manufactures warranty!

**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. 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)

**Caution!** There are no user serviceable parts inside this unit. Do not attempt any repairs yourself, doing so will void your manufactures warranty. In the unlikely event your unit may require service please contact American DJ® customer support.

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- Advanced Drive Series Lighting Effect - Units Link Together with other Advanced Drive Series Lights via XLR In and Out
- MINI/C Blackout Controller (Sold Separately)
- 30 Rich, Sharp Beams of Multi-Colored Light
- Fan Cooled
- 2 Sound Activated Modes: Slow Sound Active or Fast Sound Active
- Master/Slave Compatible
- Includes Built-In Mounting Bracket
- Two LL-64514 120v/300w Lamps
- Volume Sensitivity Knob

The Epsilon™ 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.

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.

- To reduce the risk of electrical shock or fire, do not expose this unit rain or moisture
- Do not spill water or other liquids into or on to your unit
- Do not attempt to operate this unit if the power cord has been frayed or broken. Do not attempt to remove or break off the ground prong from the electrical cord. This prong is used to reduce the risk of electrical shock and fire in case of an internal short
- Disconnect from main power before making any type of connection
- Do not remove the cover under any conditions. There are no user serviceable parts inside
- Never plug this unit in to a dimmer pack
- Always be sure to mount this unit in an area that will allow proper ventilation. Allow about 6" (15cm) between this device and a wall
- Do not attempt to operate this unit, if it becomes damaged
- This unit is intended for indoor use only, use of this product 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 7 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 appliance does not appear to operate normally or exhibits a marked change in performance.

**Operating Modes:** You can operate the Epsilon™ in two different modes:

- *Stand-Alone mode (Usually for single unit operation)* - The unit will react to sound, chasing through the built-in program. You can also use the optional MINI/C remote control to blackout the unit.
- *Master/Slave mode* - Allows you to daisy chain up to 16 ADS fixtures together for a synchronized light show. The fixtures will react to sound chasing through the built-in program. You can also use the optional MINI/C remote control to blackout the units.

**NOTE:** *Stand-Alone and Master/Slave operation require a sound source to operate properly. The units will blackout to conserve lamp life when inactive for more than 15 seconds. A single sound source will reactivate the units.*

**Power Supply:** Before plugging your unit in, be sure the source voltage in your area matches the required voltage for your American DJ® Epsilon.™ Because line voltage may vary from venue to venue, you should be sure your unit voltage matches the wall outlet voltage before attempting to operate you fixture.

### Stand Alone Mode:

1. To operate a single unit or several units as individuals in stand alone mode, flip dip switch number 1 to the “on” position (see page 6) and plug the unit(s) in. If you are running more than one unit in stand alone mode do not link the units together.
2. Adjust the reaction dip switch (dip switch 2) on the side the unit to create the effect you want. When this dip switch is in the “on” position the light will have a slower reaction to sound, when this switch is in the “off” position this unit will react faster to sound.
3. Use the sound sensitivity knob on the side of the unit to make the unit more or less sensitive to sound. This will effect sound sensitivity and not the reaction. Turing the knob clockwise will make the unit more sensitive to sound and turning the knob counter-clockwise will make the unit less sensitive to sound.

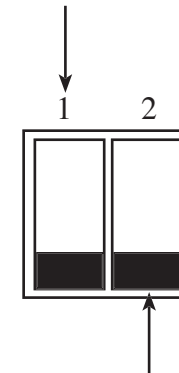
**Master-Slave Operation (Sound Active):** This operations allows you to link up to 16 ADS units together to create a synchronized light show with an intelligent look. In Master-Slave operation one unit will act as the controlling unit, the others will react to the controlling units

programs. Any unit can act as a master or a slave.

1. Using standard XLR microphone cables, daisy chain your ADS units together via the XLR connectors on the rear of the unit. Remember the Male XLR connector is the input and the Female XLR is the output. The first unit in (master) will use the female XLR connector only. Refer to the set-up procedures beginning on page 7.
2. Follow the Master-Slave dip-switch chart below for proper dip-switch settings.
3. The optional MINI/C Controller may be used in this operation mode to control a blackout function.
4. Adjust the reaction dip switch (dip switch 2) on the side the unit to create the effect you want. When this dip switch is in the “on” position the light will have a slower reaction to sound, when this switch is in the “off” position this unit will react faster to sound.
5. Use the sound sensitivity knob on the side of the unit to make the unit more or less sensitive to sound. This will effect sound sensitivity and not the reaction. Turing the knob clockwise will make the unit more sensitive to sound and turning the knob counter-clockwise will make the unit less sensitive to sound.

Dip Switch 1 - Controls Master/Slave Mode  
Dip Switch “ON” = Master Mode  
Dip Switch “OFF” = Slave Mode

Dip Switches are located on the side panel of the unit.



Dip Switch 2 - Controls Sound Active Mode  
Dip Switch “ON” = Slow Reaction to Sound  
Dip Switch “OFF” = Fast Reaction to Sound

**Data Cable Requirements (For DMX and Master/Slave Operation):** Your unit expects 3-pin XLR connector for data input and data output (Figure 5) when linking for Master-Slave operation. 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.

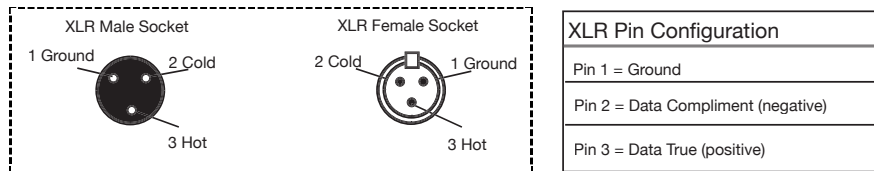


Figure 6

**Notice:** Be sure to follow figures 6 and 7 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.

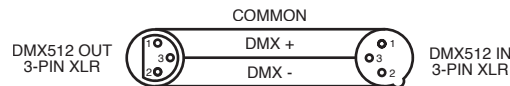


Figure 7

**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 connector of the last unit in your daisy chain to terminate the line. Using a cable terminator (ADJ part number ZDMX/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 8

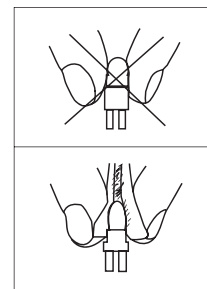
This unit uses a protective breaker to protect the unit in the event of power surges or fluctuations. To reset the breaker, push the breaker button in until you hear it pop back in to place. If the breaker continues to pop, stop using the unit and contact customer support the unit may require service.

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

**Warning:** If, after replacing the lamp or fuse either one continues to blow, 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 attempt to change the lamp while the fixture is plugged in. Always disconnect the main power and allow the unit ample time to cool before attempting to replace the lamp. Lamp replacement has been made simple by incorporating the use of a flip-down dome cover that is retained by a single thumb screw.

1. Be sure to follow the proper handling procedures that deal with halogen lamps.
2. Remove the single thumb screw located on the front dome section of the unit.
3. Carefully pull back the top section of the dome. The dome is on hinges and will not fall off.
4. Carefully remove the old lamp(s) and discard it(them) in the trash.
5. Replace the lamps with an exact match and reassemble.



### Halogen Lamp Warning:

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

**Trouble Shooting:**

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

**No light output from the unit;**

1. Be sure you have connected your unit into a standard 120v (or 220v depending on the models voltage requirements) wall outlet.
2. Be sure the protective breaker has not popped. The breaker is located on the rear panel of the unit.
3. Remove the lamp cover and be sure the lamp is seated in its socket properly. Occasionally lamps become loose during shipping be sure the lamp is push in to its socket all the way. Remember not to touch the lamp with your bare fingers.
4. 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.
2. Be sure the volume sensitivity knob is not set to a low setting. To increase sensitivity turn the knob in a clockwise direction.

**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/or fan grill.
3. Clean the external lens with glass cleaner and a soft cloth every 20 days.
4. Clean the internal lens 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.

**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. All lamps and fuses are not covered under this warranty.

**MODEL: EPSILON™**

**SPECIFICATIONS:**

<b>VOLTAGE*:</b>	120V~60Hz / 220V~50Hz
<b>LAMP:</b>	2 x LL-64514 120v/300w or 2 x LL-64516 220v/300w
<b>DIMENSIONS:</b>	9.5"H x 11"W x 11"L
<b>WEIGHT:</b>	9 LBS
<b>BREAKER:</b>	120V = 10 AMP GMA 220V = 5 AMP GMA
<b>WORKING POSITION:</b>	ANY SAFE POSITION
<b>DUTY CYCLE:</b>	NONE
<b>COLORS:</b>	MULTIPLE
<b>WARRANTY:</b>	1 YEAR (365 DAYS)

\* Voltage is preset at the factory

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