

American DJ®

Reflex™

LED DMX



User Instructions

American DJ®
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Reflex LED DMX™

Introduction

Unpacking: Thank you for purchasing the Reflex LED DMX™ by American DJ®. Every Reflex LED DMX™ 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: The Reflex LED DMX™ is a dual moving head, DMX intelligent, LED fixture. The dual moving heads operate independently of each other to create two multi-colored moonflower effects. This fixture has two operating modes, sound active and DMX control, and can be used as a stand alone fixture or in a master/slave configuration. To optimize beam intensity use this fixture with a fog machine or other type of special effect smoke.

Customer Support: American DJ® provides a toll free customer support line, to provide set-up and installation 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 for any comments or suggestions. Toll free customer service hours are Monday through Friday 9:00 a.m. to 5:30 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.

Please recycle the shipping carton when ever possible.

Improvements and changes in specifications and design to this manual and unit may be made at any time without prior notice.

Reflex LED DMX™

General Instructions

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.

Reflex LED DMX™

Features

- Includes Built-In Hanging Yoke
- Sound-Active
- Light Weight
- LED Output Similar to dual 250W Lamps
- Voltage is User Selectable
- Power Cord Daisy Chaining

Reflex LED DMX™

Warranty Registration

The Reflex LED DMX™ carries a three year (1095 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.

Reflex LED DMX™

Handling Precautions

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

During operation the housing may become extremely hot. Avoid touching the unit with bare hands while in use.

American DJ® will not accept any liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to this unit.

Reflex LED DMX™

Safety Precautions

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 12 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.

Power Supply: Before plugging your unit in, be sure the source voltage in your area matches the required voltage for your American DJ® Reflex LED DMX™. The American DJ® Reflex LED DMX™ is available in a 120v and 220v version. 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. Also be sure to only use the included I.E.C. power cable supplied with the unit, this cable matches the voltage and current requirements of the unit.

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 X-Move LED™ can be controlled via DMX-512 protocol. The Reflex LED DMX™ is be a six 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

(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.

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.

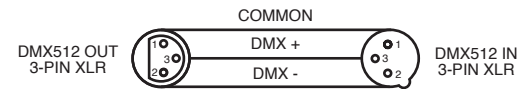


Figure 2

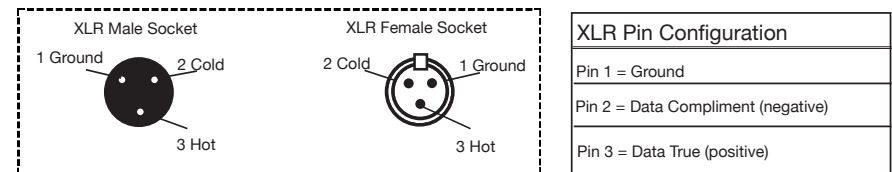


Figure 3

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

ADDR - DMX Address Setting.

1. Tap the either the MENU, UP, or DOWN buttons until “ADDR” is displayed, press ENTER.
2. “1” will now be displayed and flashing. Press the UP or DOWN buttons to find your desired address. Press ENTER to set your desired DMX address.

SLND - This will let you set unit as a master or slave in a master/slave configuration.

1. Tap the either the MENU button until “SLND” is displayed, press ENTER. “MSTR”, “SL 1” or “SL 2” will be displayed.
2. Tap the UP or DOWN buttons until your desired setting is displayed, press ENTER to confirm and exit.

BLND - Blackout or Stand by mode.

1. Tap the either the MENU button until “BLND” is displayed, press ENTER. Either Yes or No will be displayed.
2. To activate Blackout tap the UP or DOWN buttons until Yes is displayed, press ENTER to confirm and exit. The fixture will now be in Blackout mode. To deactivate Blackout mode, select No and press Enter.

LED - With this function you can have the LED display turn off after 10 seconds.

1. Tap the MENU button until “LED” is displayed, press ENTER.
2. The display will show either “ON” or “OFF”. Press the UP or DOWN buttons to select “ON” to keep the LED display on at all times, or “OFF” to switch to have the LED display switch off after 10 seconds.

3. Press ENTER to confirm and exit.

1OSP - This function will reverse the display 180°.

1. Tap the MENU button until “1OSP” is displayed, press ENTER.
2. Press ENTER to “flip” the display. Press ENTER to “flip” it again. To save the adjustment press any other button.

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

1. Tap the either the MENU button until “FHRS” is displayed, press ENTER.
2. The display shows the running time of the unit. Press MENU to exit.

VER - Use this function to display the Software version of the unit.

1. Tap the either the MENU button until “VER” is displayed, press ENTER.
2. The display will show the software version.

RSET - Use this function to reset the unit.

1. Tap the MENU button until “RSET” is displayed, press ENTER.
2. The fixture will now reset.

Universal DMX Control: This function allows you to use a Elation® universal DMX-512 controller to control the pan feature, chases and patterns, and strobe effect. A DMX controller allows you to create unique programs tailored to your individual needs.

1. The Reflex LED DMX™ has six DMX Channels. See pages 12 -13 for detailed description of the DMX traits.
2. To control your fixture in DMX mode, follow the set-up procedures on pages 5-7 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 instruction on page 8 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.

Stand Alone:

1. Once the fixture is plugged in it will automatically respond to sound via the microphone. If it does not press the MENU button until “SLND” is displayed, and press ENTER. Then press the UP or DOWN buttons until “RST” is displayed and press ENTER. After you have finished setting the mode it will take at least 8 seconds for sound active mode to respond.
2. The optional UC3 Controller (not included) may be used to control different functions including blackout.

Master-Slave Operation:

This function will allow you to link fixtures 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.

Reflex LED DMX™ Operating Instructions

2. On the Master unit press the MENU button until "SLND" is displayed, press ENTER. Either "FIRST", "SL 1" (slave mode normal) or "SL 2" (slave mode 2 light show) will be displayed. Press the UP or DOWN buttons to set the fixture to "FIRST", and press ENTER.
3. On the slave units tap the MENU button until "SLND" is displayed, press ENTER. Set the fixture to either "SL 1" or "SL 2" and press ENTER.
4. The slave units will now follow the Master unit.
5. The optional UC3 Controller (not included) may be used to control different functions including blackout. If you want to use the optional remote control, connect the UC3 controller to the first fixture in the line (master).

Reflex LED DMX™ Power Cord Daisy Chaining

With this feature you can connect the fixtures to one another using the IEC input and output sockets. The quantity that can be connected is 30 fixtures maximum. After 30 fixtures you will need to use a new power outlet. They must be the same fixtures. DO NOT mix fixtures.

Reflex LED DMX™ UC3 Control

Stand By	Blackout the unit		
Function	1. Synchronous Strobe 2. Sound Strobe 3. Two light Show Strobe	Select Pattern	Select Chase
Mode	Sound (LED Off)	Pattern (Led On)	Chase (Led SlowStrobe)

Reflex LED DMX™ DMX Traits

Channel	Value	Function (Left Side)
1	0 - 255	PAN
2	0 - 255	<u>PATTERNS & CHASES</u>
	0 - 9	BLACKOUT
	10 - 19	PATTERN 1
	20 - 29	PATTERN 2
	30 - 39	PATTERN 3
	40 - 49	PATTERN 4
	50 - 59	PATTERN 5
	60 - 69	PATTERN 6
	70 - 79	PATTERN 7
	80 - 89	PATTERN 8
	90 - 99	PATTERN 9
	100 - 109	PATTERN 10
	110 - 119	PATTERN 11
	120 - 129	PATTERN 12
	130 - 139	PATTERN 13
	140 - 149	PATTERN 14
	150 - 159	PATTERN 15
	160 - 169	CHASE 1
	170 - 179	CHASE 2
	180 - 189	CHASE 3
190 - 199	CHASE 4	
200 - 209	CHASE 5	
210 - 219	CHASE 6	
220 - 229	CHASE 7	
230 - 239	CHASE 8	
240 - 249	CHASE 9	
250 - 255	CHASE 10	
3		<u>STROBE</u>
	0 - 9	NO STROBE
	10 - 255	STROBE SLOW - FAST

Reflex LED DMX™		DMX Traits
Channel	Value	Function (Right Side)
4	0 - 255	PAN
5	0 - 255	<u>PATTERNS & CHASES</u>
	0 - 9	BLACKOUT
	10 - 19	PATTERN 1
	20 - 29	PATTERN 2
	30 - 39	PATTERN 3
	40 - 49	PATTERN 4
	50 - 59	PATTERN 5
	60 - 69	PATTERN 6
	70 - 79	PATTERN 7
	80 - 89	PATTERN 8
	90 - 99	PATTERN 9
	100 - 109	PATTERN 10
	110 - 119	PATTERN 11
	120 - 129	PATTERN 12
	130 - 139	PATTERN 13
	140 - 149	PATTERN 14
	150 - 159	PATTERN 15
	160 - 169	CHASE 1
	170 - 179	CHASE 2
	180 - 189	CHASE 3
190 - 199	CHASE 4	
200 - 209	CHASE 5	
210 - 219	CHASE 6	
220 - 229	CHASE 7	
230 - 239	CHASE 8	
240 - 249	CHASE 9	
250 - 255	CHASE 10	
6		<u>STROBE</u>
	0 - 9	NO STROBE
	10 - 255	STROBE SLOW - FAST

Reflex LED DMX™ Cleaning

Due to fog residue, smoke, and dust, cleaning the internal and external optical lenses must be carried out periodically to optimize light output.

1. Use normal glass cleaner and a soft cloth to wipe down the outside casing.
2. Use a brush to wipe down the fan grill.
3. Clean the external optics with glass cleaner and a soft cloth every 20 days. Situation may vary. If used heavily in clubs with lots of fog, cleaning may be required more often.
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 in.

Cleaning frequency depends on the environment in which the fixture operates (i.e. smoke, fog residue, dust, dew).

Reflex LED DMX™ 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 you have connected your unit into a standard 110V wall outlet.
2. Be sure the fuse has not blown. The fuse is located on the rear panel.

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.

Reflex LED DMX™

Warranty

MANUFACTURER'S LIMITED WARRANTY

A. American DJ, Inc. hereby warrants, to the original purchaser, American DJ and American Audio 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. Contact American DJ, Inc. Service Department at 800-322-6337. Send the product only to the American DJ, Inc. 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, Inc. 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, Inc. 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, Inc. concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the American DJ, Inc. factory unless prior written authorization was issued to purchaser by American DJ, Inc.; 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, Inc. 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 American DJ, Inc. 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, Inc. 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 American DJ, Inc. 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, Inc. 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 American DJ and American Audio Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

MANUFACTURER'S LIMITED WARRANTY PERIODS:

- All American Audio Products = 1-year (365 day) Limited Warranty (except V-Plus Series Amplifiers)
- All American Audio V-Plus Series Amplifiers = 3-year (1095 day) Limited Warranty
- American DJ Lighting and American DJ Branded Products = 1-year (365 day) 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 Laser Products and lamps)
- American DJ Laser Products = 90-Day Limited Warranty
- American DJ L.E.D. Products = 3-year (1095 day) Limited Warranty (excluding motors which have a 1-year (365 day Limited Warranty))

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Reflex LED DMX™

Specifications

MODEL:	Reflex LED DMX™
Voltage:	100v~240v 60Hz /50Hz
LEDS:	92 LEDS (32 Red, 30 Green, & 30 Blue)
Power Consumption:	20W
Fuse:	7 Amp
Power Cord Daisy Chain:	30 Fixtures Max.
Weight:	10 Lbs. / 4.2 Kgs
Dimensions:	14.5" (L) x 13.5" (W) x 6.5" (H)
DMX Channels:	6
Colors:	RGB
Duty Cycle:	None
Working Position:	Any Safe Position
Warranty:	3 Years (1095 Days)

Auto Sensing Voltage: *This fixture contains a electronic ballast, 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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