

Dynasty Scan DMX™



User Instructions

American DJ®
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1/07

Dynasty Scan DMX

General Information

Unpacking: Thank you for purchasing the Dynasty Scan DMX by American DJ®. Every Dynasty Scan 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 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 Dynasty Scan DMX is a six channel, intelligent DMX scanner. The fixture can operate in three different operating modes; stand alone, sound-active, or in a Master/Slave configuration. The Dynasty Scan DMX is best used in multiples of four. When used as a stand alone unit or when used in multiples linked in a master/slave configuration. *For best results use fog or special effects smoke to enhance the beams projections.*

During the initial start-up or use of this product a light smoke or smell may arise from the unit. This is a normal process and is cause by the heat associated with the lamp.

Customer Support: American DJ® 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.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) 582-2941

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!*

Dynasty Scan 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.

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®.

Dynasty Scan DMX

Product Registration

The Dynasty Scan DMX carries a one year 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 carton. 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 our customer support team on our toll free customer support number. All packages returned to the service department not displaying a R.A. number on the outside of the package will be returned to the shipper at the shippers cost.

Dynasty Scan DMX

Features

- DMX-512 Protocol Compatible (Uses Six DMX Channels)
- 6 DMX Channels
- X/Y Mirror Movement
- 9 Gobos, Plus Spot - With Gobo Wheel Scroll
- 11 Colors, Plus White - With Rainbow Effect
- 3 Operating Modes - Master/Slave; Stand Alone; Sound Active
- Internal Microphone
- ZB-EFR 15v, 150w
- Manual Focus Lens
- Variable Strobe (1/2-8 fps)
- Digital Display for Address and Function Setting

Dynasty Scan 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 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.

Power Supply: Before plugging your unit in, be sure the source voltage in your area matches the required voltage for your American DJ® Dynasty Scan DMX. The American DJ® Dynasty Scan 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.

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 Dynasty Scan DMX can be controlled via DMX-512 protocol. The Dynasty Scan DMX is a six channel DMX unit. The DMX address is set electronically using the controls on the side panel of the unit. Your unit and your DMX controller require a standard 3-pin XLR connector for data input and data output (Figure 1). If you are making your own cables, be sure to use standard two conductor shielded cable (This cable may be purchased at almost all professional sound and lighting stores). Your cables should be made with



Figure 1

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.

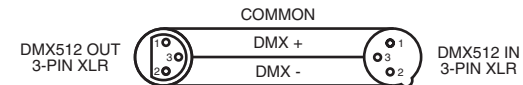


Figure 2

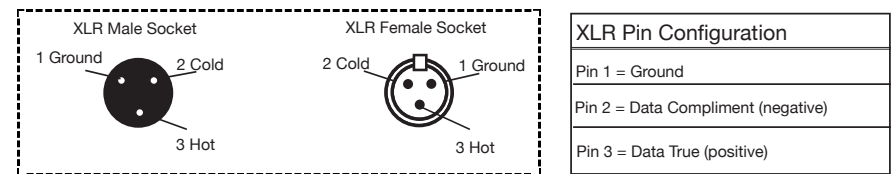


Figure 3

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 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 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 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

ADRES (ADDRESS) - Select the address setting menu by pressing the “LEFT” or “RIGHT” arrow buttons until ADRES is displayed, then press the “UP” or “DOWN” buttons to adjust the address. Press the “RIGHT” arrow button to select/activate the DMX address.

F.TIME (Fixture Running Time) - To view the Fixture Running Time press the “LEFT” or “RIGHT” arrow buttons until F.TIME is displayed, then press either the “UP” or “DOWN” buttons to view the running time. Press the “RIGHT” arrow button to exit.

L.TIME (Lamp Running Time) - To view the Lamp Running Time press the “LEFT” or “RIGHT” arrow buttons until L.TIME is displayed, then press either the “UP” or “DOWN” buttons to view the running time. Press the “RIGHT” arrow button to exit.

R.PAN (Reverse Pan) - To reverse the pan, press the “LEFT” or “RIGHT” arrow buttons until R.PAN is displayed, then press either the “UP” or “DOWN” buttons to enter the submenu. Press either the “UP” or “DOWN” arrow buttons to select either “On” or “Off”. Once you have decided, press the either the “RIGHT” or “LEFT” arrow buttons to exit the submenu.

RTILT (Reverse Tilt) - To reverse the tilt, press the “LEFT” or “RIGHT” arrow buttons until R.TILT is displayed, then press either the “UP” or “DOWN” buttons to enter the submenu. Press either the “UP” or “DOWN” arrow buttons to select either “On” or “Off”. Once you have decided, press the either the “RIGHT” or “LEFT” arrow buttons to exit the submenu.

FOCUS - Use this feature to project a beam and then manually focus the lens. To project the beam, press the “LEFT” or “RIGHT” arrow buttons until FOCUS is displayed, then press either the “UP” or “DOWN” buttons to enter the submenu. Press either the “UP” or “DOWN” arrow buttons to select either “On” or “Off”. Once you have decided, press the either the “RIGHT” or “LEFT” arrow buttons to exit the submenu.

DEMO - To test all functions, press the “LEFT” or “RIGHT” arrow buttons until DEMO is displayed, then press either the “UP” or “DOWN” buttons to enter the submenu. Press either the “UP” or “DOWN” arrow buttons to select either “On” or “Off”. Once you have decided,

press the either the “RIGHT” or “LEFT” arrow buttons to exit the submenu.

LCD - To turn the LCD “On” or “Off”, press the “LEFT” or “RIGHT” arrow buttons until LCD is displayed, then press either the “UP” or “DOWN” buttons to enter the submenu. Press either the “UP” or “DOWN” arrow buttons to select either “On” or “Off”. Once you have decided, press the either the “RIGHT” or “LEFT” arrow buttons to exit the submenu. You can turn the LCD back “On” by pressing in of the the four buttons.

BACK (Background Light) - To turn the background light “On” or “Off”, press the “LEFT” or “RIGHT” arrow buttons until BACK is displayed, then press either the “UP” or “DOWN” buttons to enter the submenu. Press either the “UP” or “DOWN” arrow buttons to select either “On” or “Off”. Once you have decided, press the either the “RIGHT” or “LEFT” arrow buttons to exit the submenu. You can turn the LCD back “On” by pressing in of the the four buttons.

LAMP - To turn the LAMP “On” or “Off”, press the “LEFT” or “RIGHT” arrow buttons until LAMP is displayed, then press either the “UP” or “DOWN” buttons to enter the submenu. Press either the “UP” or “DOWN” arrow buttons to select either “On” or “Off”. Once you have decided, press the either the “RIGHT” or “LEFT” arrow buttons to exit the submenu.

RESET - To Reset the unit, press the “LEFT” or “RIGHT” arrow buttons until RESET is displayed, then press either the “UP” or “DOWN” buttons to enter the submenu. Press either the “UP” or “DOWN” arrow buttons to select either “On” or “Off”. Once you have decided, press the either the “RIGHT” or “LEFT” arrow buttons to exit the submenu.

TURN - To “flip” the display 180°, press the “LEFT” or “RIGHT” arrow buttons until TURN is displayed, then press either the “UP” or “DOWN” buttons to enter the submenu. Press either the “UP” or “DOWN” arrow buttons to select either “On” or “Off”. Once you have decided, press the either the “RIGHT” or “LEFT” arrow buttons to exit the submenu.

DF.SET (Default Settings) - To return the fixture to its default set-

tings, press the “LEFT” or “RIGHT” arrow buttons until DF.SET is displayed, then press either the “UP” or “DOWN” buttons to enter the submenu. Press either the “UP” or “DOWN” arrow buttons to select either “On” or “Off”. Once you have decided, press the either the “RIGHT” or “LEFT” arrow buttons to exit the submenu.

AUDIO - To activate Sound Active mode, press the “LEFT” or “RIGHT” arrow buttons until AUDIO is displayed, then press either the “UP” or “DOWN” buttons to enter the submenu. Press either the “UP” or “DOWN” arrow buttons to select either “On” or “Off”. Once you have decided, press the either the “RIGHT” or “LEFT” arrow buttons to exit the submenu.

Operating Modes: *The Dynasty Scan DMX can operate in three different modes. This next section will detail the differences in the operating modes.*

- **Stand alone mode -**

The unit will react to sound, chasing through the built-in programs.

- **Master/Slave mode -**

You can daisy chain up to 16 units together to get a synchronized light show without the need of an external controller. The units will react to sound chasing through the several built-in programs.

- **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 universal DMX-512 controller such as the Elation® DMX Operator™ or Elation® Show Designer™ to control head movement, the color wheel, gobo wheel, and the shutter (strobe). A DMX controller allows you to create unique programs tailored to your individual needs.

1. The Dynasty Scan DMX uses six DMX channels. See pages 15-16 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 Operation (Sound Active): This mode allows a single unit or several units linked together, to run to the beat of the music.

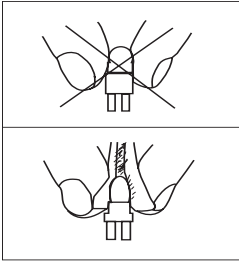
1. Access the main menu.
2. Tap the "LEFT" or "RIGHT" arrow buttons until AUDIO is displayed, then press either the "UP" or "DOWN" buttons to enter

the submenu.

3. Press either the "UP" or "DOWN" arrow buttons to select either "On" or "Off".
4. You may invert the pan and tilt functions by in the system menu by following the directions on page 8.

Master-Slave Operation (Sound Active): This function will allow you to link units together and operate without a controller. The units will be sound activated. 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. 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. **Master:** Tap the "LEFT" or "RIGHT" arrow buttons until AUDIO is displayed, then press either the "UP" or "DOWN" buttons to enter the submenu.
3. Press either the "UP" or "DOWN" arrow buttons to select either "On" or "Off". Once you have decided, press the either the "RIGHT" or "LEFT" arrow buttons to exit the submenu. The Slave units will follow the Master once the Master has been programmed.
3. You may invert the pan and tilt functions by in the system menu by following the directions on page 8.



Halogen Lamp Warning: This fixture is fitted with halogen lamps 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® service technician. Replacing with anything other than the specified part can damage your unit and will void your manufacturer's warranty.

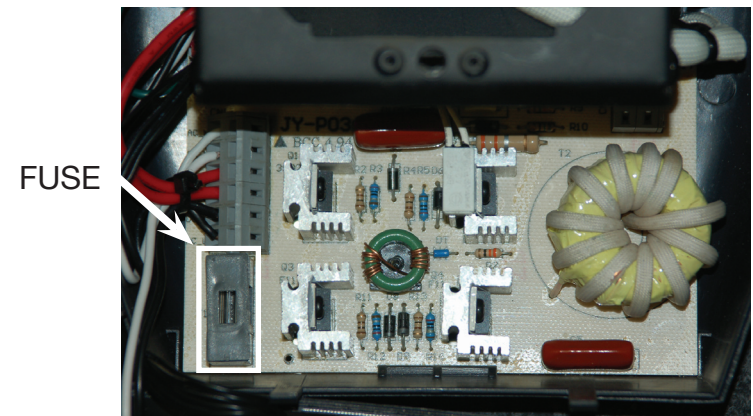
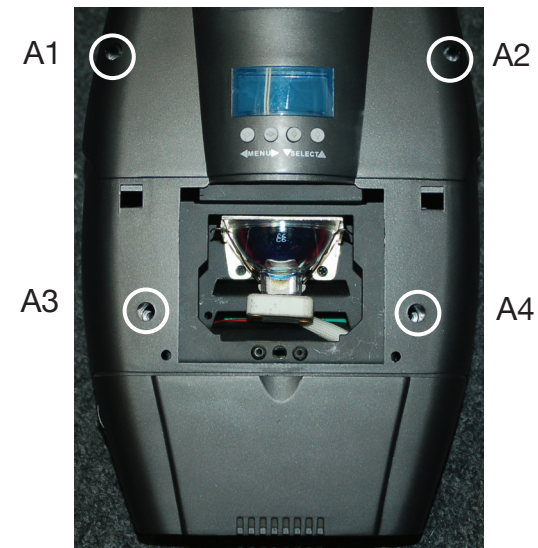
Warning: If you continue to blow lamps or fuses, STOP using the unit. Contact customer support for further instructions, you may have to return the unit for servicing. Continuing to use the unit may cause serious damage.

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 slide out lamp assembly that is retained by two phillips screws.

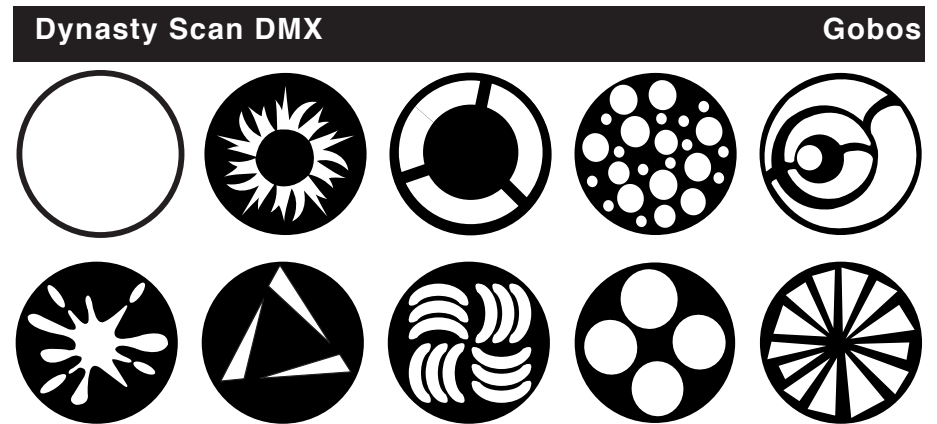
1. Be sure to follow the proper handling procedures that deal with halogen lamps.
2. Loosen the small screw located on the front of the unit
3. After loosening the screw, remove the socket assembly cover to expose the lamp.
4. Carefully remove the old lamp and discard it in the trash.
5. Replace the lamp with an exact match and reassemble in reverse order.

Fuse Replacement: CAUTION! Never attempt to change the fuse while the fixture is plugged in. **ALWAYS** disconnect the main power before attempting to replace the fuse.

1. Loosen the small lock screw located on the front of the unit
2. After loosening the screw, remove the socket assembly cover.
3. Unscrew and remove the four phillips screws (A1, A2, A3, and A4).
4. The fuse box is located on the PC board on the bottom left side, pull the fuse box up to replace the fuse.



Dynasty Scan DMX		DMX Traits
Channel	Value	Function
1	0 - 255	PAN
2	0 - 255	TILT
3 ↓		<u>COLOR</u>
	0 - 15	WHITE
	16 - 31	RED
	32 - 47	DARK BLUE
	48 - 63	GREEN
	64 - 79	YELLOW
	80 - 95	ORANGE
	96 - 111	ROSE PINK
	112 - 127	VIOLET
	128 - 143	SEA BLUE
	144 - 159	PURPLE
	160 - 175	YELLOW/RED
	176 - 191	DARK GREEN/ORANGE
192 - 255	RAINBOW EFFECT SLOW → FAST	
4 ↓		<u>GOBO</u>
	0 - 15	NOTHING
	16 - 31	SPOT
	32 - 47	GOBO 1
	48 - 63	GOBO 2
	64 - 79	GOBO 3
	80 - 95	GOBO 4
	96 - 111	GOBO 5
	112 - 127	GOBO 6
	128 - 143	GOBO 7
	144 - 159	GOBO 8
	160 - 180	GOBO 9
	181 - 255	GOBO WHEEL ROTATION SLOW → FAST



Dynasty Scan DMX		DMX Traits cont.
Channel	Value	Function
5 ↓		<u>SHUTTER/STROBE</u>
	0 - 7	NO STROBE
	8 - 255	ADJUSTABLE STROBE SLOW → FAST (1/2 - 8 fps)
6 ↓		<u>RESET & LAMP CONTROL</u>
	0 - 63	NO FUNCTION
	64 - 127	RESET AFTER 3 SECONDS
	128 - 191	LAMP OFF AFTER 3 SECONDS
	192 - 255	LAMP ON AFTER 3 SECONDS

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.

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 wall outlet.
2. Be sure the fuse has not blown. The fuse is located inside the unit, please see page 14 to replace fuse.
3. 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.
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.

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. Lamps are not covered under this or any other warranty, either written or implied.

Model:	Dynasty Scan DMX
Voltage*:	120v/60Hz or 230v/50Hz
Lamp:	ZB-EFR 15v/150w
Dimensions:	18.11"(L) x 7.28"(W) x 7.6"(H) 460mm x 185mm x 195mm
Colors:	11 Plus White
Gobos:	9 Gobos + Spot
Weight:	7.3 Lbs. / 3.3 kgs.
Fuse:	2A (120v) / 1.25A (220v)
Duty Cycle:	None
DMX:	6 Channels
Sound Active:	Yes
Working Position:	Any Safe, Secure Position
Warranty:	1 Year (365 days)

*Voltage is preset at the factory and is not user selectable

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

