American DJ®

ELECTRA LED DMX

User Instructions

Introduction: Congratulations and thank you for purchasing the Electra LED DMX™ by American DJ®, one of the finest pieces of its kind on the market today! The Electra LED DMX™ is a great inexpensive, light weight, intelligent fixture. Due to it's physical specifications, it's a great piece for mobile DJ's, roller rinks, small clubs, bars, and bowling centers. When used in multiples of two or more, these units create an effect that rivals that of units that can cost up to three times the price. The Electra LED DMX™ was designed to run in a Master/Slave mode but can be used with any universal DMX-512 controller.

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.

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.

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.

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.

Electra LED DMX™   **Features**

• Includes Built-In Hanging Yoke
• Sound-Active
• Light Weight
• LED Output Similar to 250W Lamp
• Voltage is User Selectable
• UC3 Controller (Not Included)
• 2 Operating Modes: Sound Active and DMX-512 Control

Electra LED DMX™   **Warranty Registration**

The Electra 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.

Electra 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 manufactures 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.

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® X-Move LED.™ The American DJ® Electra LED DMX™ has a user selectable voltage switch 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 X-Move LED™ can be controlled via DMX-512 protocol. The Electra LED DMX™ is be a three channel DMX unit. The DMX address is set using the dipswitches on the bottolm of the unit. Your unit and your DMX controller require a approved DMX-512 110 Ohm Data cable for data input and data output (Figure 1). We recommend Accu-Cable DMX cables. If you are making your own cables, be sure to use standard 110-120 Ohm shielded cable (This

Figure 1

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.

COMMON
DMX512 OUT
3-PIN XLR
DMX +
DMX -
DMX512 IN
3-PIN XLR

Figure 2

XLR Male Socket
1 Ground
2 Cold
3 Hot

XLR Female Socket
2 Cold
1 Ground
3 Hot

Figure 3

XLR Pin Configuration
Pin 1 = Ground
Pin 2 = Data Compliment (negative)
Pin 3 = Data True (positive)
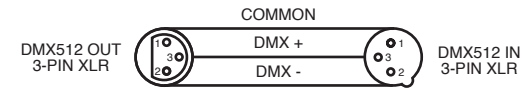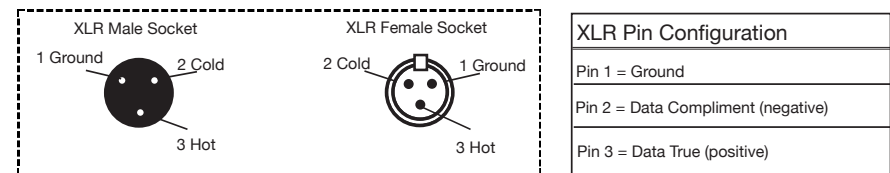
Special Note: Line Termination. When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behavior. A terminator is a 110-120 ohm 1/4 watt resistor which is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). This unit is inserted in 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

Operating Modes:

The Electra LED DMX™ can run as a stand alone fixture or in a master/slave configuration. It has two operating modes:

• ***Sound Active mode -*** The unit will react to sound, chasing through the several built in programs. You can also use the optional UC3 Remote Control to blackout the fixture or control different functions.

• ***DMX control mode -*** This function will allow you to control each individual fixtures traits with a standard DMX 512 controller such as the American DJ Show Designer.™

For best results use fog or special effects smoke to enhance the beams projections.

Sound Active Mode:
1. To operate the fixture in sound active mode, put dipswitch #1 in the "On" position.
2. The Electra LED DMX™ will now react to the bass sound of music via the internal microphone.
4. The optional *UC3 Controller* (not included) may be used to control different functions including blackout.

DMX Mode:
Operating through a DMX controller give the user the freedom to create their own programs tailored to their own individual needs. Follow the the set-up directions that come with your DMX controller.
1. This function will allow you to control each individual fixture's traits with a standard Elation® DMX 512 controller.
2. The Electra LED DMX™ uses three DMX channels to operate; Channel 1 is Pan, channel 2 is Pattterns & Chases, and channel 3 is Strobe.
3. To run your fixture in DMX mode, plug in the fixture via the XLR connections to any standard DMX controller. Set your desired DMX address using the dipswitches on the bottom of the fixture. To set your address you can use the address chart on page 11.
4. Plug in the fixture via the XLR connections to any standard DMX controller.

Master-Slave Operation:
This function will allows you to link units together to run in a Master-Slave mode. In Master-Slave operation one unit will act as the con-

trolling unit and the others will react to the controlling units programs. Any unit can act as a Master or as a Slave.

1. Daisy chain your units via the XLR connector on the rear of the unit. Use approved DMX-512 data cables to link your units together. Remember that 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.

2. 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.

3. Turn dipswitch #1 to the "On" position on the master unit.

4. For the slave units any dipswitch can be set to the "On" position except dipswitch #1.

5. When running fixtures in Master/Slave configuration you can make the mirror pan of the 1st and 2nd fixtures contrast the mirror pan of the 3rd and 4th fixtures.

Example: Four fixtures are linked together. On fixtures 1 and 3 set the fixture 1 as a master and set fixture 3 as a slave. For fixtures 2 & 4 set them as slaves as well, but also put dipswitch #10 in the "On" position. The mirror pan of fixtures 1 & 2 will run the same and the mirror pan of fixtures 2 & 4 will run in contrast to fixtures 1 & 2. This makes a great light show.

6. You can also use the optional UC3 Remote Control. If you want to use the optional remote control, connect the UC3 controller to the first fixture in the line (master).

Note: The remote control only operates in Stand-Alone and Master/Slave modes. If the remote is connected in DMX mode it will not function. If the units do not receive an active DMX signal, the units will automatically react to sound in the Master/Slave mode.

Electra LED DMX™   **Fuse Replacement**

First unplug the power. The fuse holder is located above the power cord. Using a flat-head screw driver unscrew the fuse holder. Remove the bad fuse and replace with a new one.

Ch1	Ch2	Ch3
Value	Pattern/Chase	Strobe/Speed
255 Fast	250-255 Chase10	255 Fast
	240-249 Chase09	
	230-239 Chase08	
	220-229 Chase07	
230 Slow	210-219 Chase06	
229 Fast	200-209 Chase05	
	190-199 Chase04	
	180-189 Chase03	
	170-179 Chase02	
200 Slow	160-169 Chase01	
199 Fast	150-159 Pattern15	
	140-149 Pattern14	
	130-139 Pattern13	
	120-129 Pattern12	
170 Slow	110-019 Pattern11	
169 Fast	100-109 Pattern10	
	090-099 Pattern09	
	080-089 Pattern08	
	070-079 Pattern07	
	060-069 Pattern06	
140 Slow	050-059 Pattern05	
139 136°	040-049 Pattern04	
	030-039 Pattern03	
	020-029 Pattern02	010 Slow
	010-019 Pattern01	
000 0°	000-009 Blackout	000-009 No Strobe

Stand by	Blackout the unit		
Function	1. Sync. Strobe 2.Asynchronism.Strobe 3. Sound Strobe	1. Sync. Strobe 2.Asynchronism..Strobe 3. Sound Strobe	4. Move chase
Mode	Sound (pan fast) (LED OFF)	Sound (pan slow) (LED ON)	Auto (LEDSlow Strobe)

This chart list the DMX dip switch setting for DMX address 1 through 511. Follow the instructions below to configure fixture dip switches with your desired DMX address.

DMX Address Quick Reference Chart

DIP SWITCHES

DMX DIP Switch Settings
X = OFF
O = ON

Dip Switch Position

#9				X	X	X	X	X	X	X	X	X	O	O	O	O	O	O	O	O
#8				X	X	X	X	O	O	O	O	X	X	X	X	O	O	O	O
#7				X	X	O	O	X	X	O	O	X	X	O	O	X	X	O	O
#6				X	O	X	O	X	O	X	O	X	O	X	O	X	O	X	O

#1	#2	#3	#4	#5																
X	X	X	X	X		32	64	96	128	160	192	224	256	288	320	352	384	416	448	480
O	X	X	X	X	1	33	65	97	129	161	193	225	257	289	321	353	385	417	449	481
X	O	X	X	X	2	34	66	98	130	162	194	226	258	290	322	354	386	418	450	482
O	O	X	X	X	3	35	67	99	131	163	195	227	259	291	323	355	387	419	451	483
X	X	O	X	X	4	36	68	100	132	164	196	228	260	292	324	356	388	420	452	484
O	X	O	X	X	5	37	69	101	133	165	197	229	261	293	325	357	389	421	453	485
X	O	O	X	X	6	38	70	102	134	166	198	230	262	294	326	358	390	422	454	486
O	O	O	X	X	7	39	71	103	135	167	199	231	263	295	327	359	391	423	455	487
X	X	X	O	X	8	40	72	104	136	168	200	232	264	296	328	360	392	424	456	488
O	X	X	O	X	9	41	73	105	137	169	201	233	265	297	329	361	393	425	457	489
X	O	X	O	X	10	42	74	106	138	170	202	234	266	298	330	362	394	426	458	490
O	O	X	O	X	11	43	75	107	139	171	203	235	267	299	331	363	395	427	459	491
X	X	O	O	X	12	44	76	108	140	172	204	236	268	300	332	364	396	428	460	492
O	X	O	O	X	13	45	77	109	141	173	205	237	269	301	333	365	397	429	461	493
X	O	O	O	X	14	46	78	110	142	174	206	238	270	302	334	366	398	430	462	494
O	O	O	O	X	15	47	79	111	143	175	207	239	271	303	335	367	399	431	463	495
X	X	X	X	O	16	48	80	112	144	176	208	240	272	304	336	368	400	432	464	496
O	X	X	X	O	17	49	81	113	145	177	209	241	273	305	337	369	401	433	465	497
X	O	X	X	O	18	50	82	114	146	178	210	242	274	306	338	370	402	434	466	498
O	O	X	X	O	19	51	83	115	147	179	211	243	275	307	339	371	403	435	467	499
X	X	O	X	O	20	52	84	116	148	180	212	244	276	308	340	372	404	436	468	500
O	X	O	X	O	21	53	85	117	149	181	213	245	277	309	341	373	405	437	469	501
X	O	O	X	O	22	54	86	118	150	182	214	246	278	310	342	374	406	438	470	502
O	O	O	X	O	23	55	87	119	151	183	215	247	279	311	343	375	407	439	471	503
X	X	X	O	O	24	56	88	120	152	184	216	248	280	312	344	376	408	440	472	504
O	X	X	O	O	25	57	89	121	153	185	217	249	281	313	345	377	409	441	473	505
X	O	X	O	O	26	58	90	122	154	186	218	250	282	314	346	378	410	442	474	506
O	O	X	O	O	27	59	91	123	155	187	219	251	283	315	347	379	411	443	475	507
X	X	O	O	O	28	60	92	124	156	188	220	252	284	316	348	380	412	444	476	508
O	X	O	O	O	29	61	93	125	157	189	221	253	285	317	349	381	413	445	477	509
X	O	O	O	O	30	62	94	126	158	190	222	254	286	318	350	382	414	446	478	510
O	O	O	O	O	31	63	95	127	159	191	223	255	287	319	351	383	415	447	479	511

Dip Switch Position

DMX Address

DMX Address

The center numbers of this chart (1-511) represent a DMX address. The "X"'s and "O"'s along the top and side of the chart represent dip switch poistion ("X" for off and "O" for on). Find your desired DMX address from the center chart. Identify the position for dip switches 1-5 from the chart on the left and dip switches 6-9 from the chart on the top. Adjust the dip switches on your fixture to match the position settings of the chart. For fixtures with 10 dip switches; dip switch 10 is reserved for special functions.

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 very. 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).

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

No light output from the unit;
1. Be sure the voltage of your fixture matches the voltage of the 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.

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 it's 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)

MODEL:	Electra LED DMX™
Voltage:	120v~60 Hz, 230v~50Hz
LEDS:	52 LEDS (16 Red, 12 Green, 12 Blue, & 12 White)
Power Draw:	14W
Beam Angle:	15 Degrees
Fuse:	1 Amp / 250mAmp
Weight:	5 Lbs. / 2.6 Kgs
Dimensions:	17" (L) x 8" (W) x 9" (H)
Colors:	RGB + White
Duty Cycle:	None
Working Position:	Any Safe Position

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