

# **User Instructions**



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#### FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### FCC RADIO FREQUENCY INTERFERENCE WARNINGS & INSTRUCTIONS

This product has been tested and found to comply with the limits as per Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device uses and can radiate radio frequency energy and, if not installed and used in accordance with the included instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following methods:

- Reorient or relocate the device.
- Increase the separation between the device and the receiver.
- Connect the device to an electrical outlet on a circuit different from which the radio receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

# **DOCUMENT VERSION**

Due to additional product features and/or enhancements, an updated version of this document may be available online.

Please check <u>www.adj.com</u> for the latest revision/update of this manual before beginning installation and/or programming.

Date	Document Version	Software Version≥	DMX Channel Mode	Notes
01/19/18	1	1.00	6/7/8/11/12	Initial Release
03/20/19	1.2	1.01	No Change	IR Remote Functions Updated

Europe Energy Saving Notice

Energy Saving Matters (EuP 2009/125/EC)

Saving electric energy is a key to help protecting the environment. Please turn off all electrical products when they are not in use. To avoid power consumption in idle mode, disconnect all electrical equipment from power when not in use. Thank you!

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## Introduction

**Unpacking:** Thank you for purchasing the MOD HEX100 by ADJ Products, LLC. Every MOD HEX100 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 has arrived intact. In the case damage has been found or parts are missing, please contact our toll free customer support number for further instructions. Do not return this unit to your dealer without first contacting customer support.

*Introduction:* The ADJ MOD HEX100 is a DMX intelligent, high powered LED par fixture. This fixture can be used in a stand alone set up or connected in a Master/Slave set up. The MOD HEX100 has seven operating modes: Sound Active mode, Auto Run mode, Color Change mode, Color Fade mode, RGBWA+UV Dimmer mode, Static Color mode, and DMX controlled. 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.

*Customer Support:* Contact ADJ Service for any product related service and support needs. Also visit forums.adj.com with questions, comments or suggestions.

Parts: To purchase parts online visit http://parts.americandj.com

ADJ SERVICE USA - Monday - Friday 8:00am to 4:30pm PST Voice: 800-322-6337 | Fax: 323-582-2941 | support@adj.com

ADJ SERVICE EUROPE - Monday - Friday 08:30 to 17:00 CET Voice: +31 45 546 85 60 | Fax: +31 45 546 85 96 | support@adj.eu

#### ADJ PRODUCTS LLC USA

6122 S. Eastern Ave. Los Angeles, CA. 90040 323-582-2650 | Fax 323-532-2941 | www.adj.com | info@adj.com

#### ADJ SUPPLY Europe B.V

Junostraat 2 6468 EW Kerkrade, The Netherlands +31 (0)45 546 85 00 | Fax +31 45 546 85 99 www.adj.eu | info@adj.eu

#### **ADJ PRODUCTS GROUP Mexico**

AV Santa Ana 30 Parque Industrial Lerma, Lerma, Mexico 52000 +52 (728) 282-7070

**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 ADJ Products, LLC.

#### PLEASE recycle the shipping carton when ever possible.

- Multi-Colors
- Seven Operating Modes
- Electronic Dimming 0-100%
- Built in Microphone
- DMX-512 protocol
- Locking 3-Pin & 5-Pin XLR Connections In/Out
- Five DMX Modes: 6 Channel Mode, 7 Channel Mode, 8 Channel Mode, 11 Channel Mode, and 12 Channel Mode.
- · ADJ UC IR compatible and Airstream IR compatible
- Multiple Unit Power Linking (See page 29)

INCLUED:

1 x Scissor Yoke

1 x Locking Power Cable

3 x Frost Filters (20/40/60 Degrees)

OPTIONAL ACCESSORIES: MOD Kit Pearl White Housing Case (Order Code: MOD510)

# MOD HEX100

# Warranty Registration

The MOD HEX100 carries a 2 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 prepaid 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 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 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.

# MOD HEX100

# Installation

The unit should be mounted using a mounting clamp (not provided), affixing it to the mounting bracket that is provided with the unit. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. Always ensure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times the unit's weight. Also, always use a safety cable that can hold 12 times the weight of the unit when installing the fixture.

The equipment must be installed by a professional, and it must be installed in a place where it is out of the reach of people's grasp.

- 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 operate this unit when it's cover is removed.
- 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-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 the point they exit from the unit.
- Cleaning -The fixture should be cleaned only as recommended by the manufacturer. See page 29 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 fixture.
  - C. The fixture has been exposed to rain or water.
  - D. The fixture does not appear to operate normally or exhibits a marked change in performance.
  - E. The fixture has fallen and/or subjected to extreme handling.

# ACAUTION

HIGH INTENSITY ULTRAVIOLET LIGHT

AVOID DIRECT EYE & SKIN EXPOSURE. WEAR PROPER EYE & SKIN PROTECTION. SEE MANUAL FOR SAFETY INSTRUCTIONS.

**RISK GROUP 3 - RISK OF EXPOSURE TO ULTRAVIOLET (UV) RADIATION!** 

FIXTURE EMITS HIGH INTENSITY ULTRAVIOLET (UV) LIGHT AT A WAVELENGTH OF 399NM - 435NM.

WEAR PROPER EYE AND SKIN PROTECTION.

AVOID PROLONGED PERIODS OF EXPOSURE.

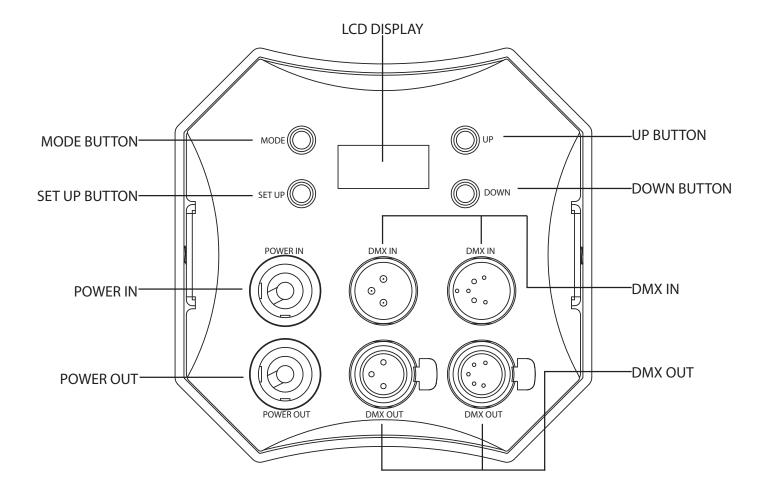
AVOID WEARING WHITE COLOR CLOTHING AND/OR USING (UV) PAINTS ON SKIN.

AVOID DIRECT EYE AND/OR SKIN EXPOSURE AT DISTANCES SHORTER THAN 11 feet (3.3m).

DO NOT OPERATE FIXTURE WITH DAMAGED OR MISSING EXTERNAL COVER PROTECTIVE LENS.

DO NOT LOOK DIRECTLY INTO THE (UV) LIGHT AND/OR VIEW (UV) LIGHT DIRECTLY WITH OPTICAL INSTRUMENTS THAT MAY CONCENTRATE THE LIGHT/RADIATION OUTPUT.

INDIVIDUALS SUFFERING FROM A RANGE OF EYE CONDITIONS, SUNLIGHT EXPOSURE DISORDERS, OR INDIVIDUALS USING PHOTOSENSITIVE MEDICATION, MAY RECEIVE DISCOMFORT IF EXPOSED TO THE ULTRAVIOLET (UV) LIGHT EMITTED FROM THIS FIXTURE.



**DMX-512:** DMX is short for Digital Multiplex. This is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture via the DATA "IN" and DATA "OUT" XLR terminals located on all DMX fixtures (most controllers only have a DATA "OUT" terminal).

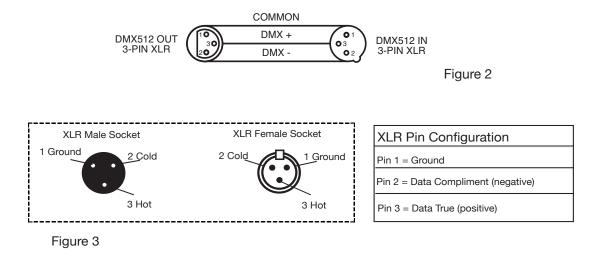
**DMX Linking:** DMX is a language allowing all makes and models of different manufactures to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. To ensure proper DMX data transmission, when using several DMX fixtures try to use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

**Data Cable (DMX Cable) Requirements (For DMX Operation):** The MOD HEX100 can be controlled via DMX-512 protocol. The MOD HEX100 has 5 DMX channel modes. The DMX address is set on the rear panel of the MOD HEX100. Your unit and your DMX controller require a standard 3-pin XLR connector 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 cable may be purchased at almost all pro 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.



Figure 1

**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.



# DMX Set Up

*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		Do Not Use	
Not Used		Do Not Use	

## **DMX Addressing**

# MOD HEX100

#### DMX ADDRESSING

All fixtures should be given a DMX starting address when using a DMX controller, so the correct fixture responds to the correct control signal. This digital starting address is the channel number from which the fixture starts to "listen" to the digital control signal sent out from the DMX controller. The assignment of this starting DMX address is achieved by setting the correct DMX address on the digital control display on the fixture.

You can set the same starting address for all fixtures or a group of fixtures, or set different addresses for each individual fixture. Setting all fixtures to the same DMX address will cause all fixtures to react in the same way, in other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set each fixture to a different DMX address, each unit will start to "listen" to the channel number you have set, based on the quantity of DMX channels of each fixture. That means changing the settings of one channel will only affect the selected fixture.

In the case of the MOD HEX100, when in 12 Channel you should set the starting DMX address of the first unit to 1, the second unit to 13 (12 + 1), the third unit to 25 (13 + 12), and so on. (See chart below for more details.)

Channelmode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
6 channels	1	7	13	20
7 channels	1	8	15	22
8 channels	1	9	17	25
11 channels	1	12	23	34
12 channels	1	13	25	37

MOD HEX10	0		6 Channel Mode
Channel	Value	Function	
1		RED	
	0 - 255	0% - 100%	
2		GREEN	
	0 - 255	0% - 100%	
3		BLUE	
	0 - 255	0% - 100%	
4		WHITE	
	0 - 255	0% - 100%	
5		AMBER	
	0 - 255	0% - 100%	
6		UV	
	0 - 255	0% - 100%	

MOD HEX10	0	7 Channel Mode
Channel	Value	Function
1		RED
	0 - 255	0% - 100%
2		GREEN
	0 - 255	0% - 100%
3		BLUE
	0 - 255	0% - 100%
4		WHITE
	0 - 255	0% - 100%
5		AMBER
	0 - 255	0% - 100%
6		UV
	0 - 255	0% - 100%
7		MASTER DIMMER
	0 - 255	0% - 100%

MOD HEX10	0	8 Channel Mode
Channel	Value	Function
1		RED
	0 - 255	0% - 100%
2		GREEN
	0 - 255	0% - 100%
3		BLUE
	0 - 255	0% - 100%
4		WHITE
	0 - 255	0% - 100%
5		AMBER
	0 - 255	0% - 100%
6		UV
	0 - 255	0% - 100%
7		STROBING
	0 - 31	LED OFF
	32 - 63	LED ON
	64 - 95	STROBING SLOW - FAST
	96 - 127	LED ON
	128 - 159	PULSE STROBING SLOW - FAST
	160 - 191	LED ON
	192 - 223	RANDOM STROBING SLOW - FAST
	224 - 255	LED ON
8		MASTER DIMMER
	0 - 255	0% - 100%

MOD HEX10	0	11 Channel Mode
Channel	Value	Function
1		RED
	0 - 255	0% - 100%
2		GREEN
	0 - 255	0% - 100%
3		BLUE
	0 - 255	0% - 100%
4		WHITE
	0 - 255	0% - 100%
5		AMBER
	0 - 255	0% - 100%
6		UV
	0 - 255	0% - 100%
7		STROBING
	0 - 31	LED OFF
	32 - 63	LED ON
	64 - 95	STROBING SLOW - FAST
	96 - 127	LED ON
	128 - 159	PULSE STROBING SLOW - FAST
	160 - 191	LED ON
	192 - 223	RANDOM STROBING SLOW - FAST
	224 - 255	LED ON
8		MASTER DIMMER
	0 - 255	0% - 100%
9		PROGRAM SELECTION MODE
	0 - 51	
	52 - 102	
	103 - 153	COLOR CHANGE MODE
	154 - 204	
	205 - 255	SOUND ACTIVE MODE

**11 CHANNEL MODE CONTINUED ON THE NEXT PAGE** 

MOD HEX100		11 Channel Mode
Channel	Value	Function
10		COLOR MACROS/PROGRAMS
	0 - 255	COLOR MACRO MODE
		SEE THE COLOR MACRO CHART ON PAGE 19
		COLOR CHANGE PROGRAMS
	0 - 15	COLOR CHANGE 1
	16 - 31	COLOR CHANGE 2
	32 - 47	COLOR CHANGE 3
	48 - 63	COLOR CHANGE 4
	64 - 79	COLOR CHANGE 5
	80 - 95	COLOR CHANGE 6
	96 - 111 112 - 127	COLOR CHANGE 7 COLOR CHANGE 8
	128 - 143	COLOR CHANGE 9
	144 - 159	COLOR CHANGE 10
	160 - 175	COLOR CHANGE 11
	176 - 191	COLOR CHANGE 12
	192 - 207	COLOR CHANGE 13
	208 - 223	COLOR CHANGE 14
	224 - 239	COLOR CHANGE 15
	240 - 255	COLOR CHANGE 16
		COLOR FADE PROGRAMS
	0 - 15	COLOR FADE 1
	16 - 31	COLOR FADE 2
	32 - 47	COLOR FADE 3
	48 - 63	COLOR FADE 4 COLOR FADE 5
	64 - 79 80 - 95	COLOR FADE 5 COLOR FADE 6
	96 - 111	COLOR FADE 7
	112 - 127	COLOR FADE 8
	128 - 143	COLOR FADE 9
	144 - 159	COLOR FADE 10
	160 - 175	COLOR FADE 11
	176 - 191	COLOR FADE 12
	192 - 207	COLOR FADE 13
	208 - 223	COLOR FADE 14
	224 - 239	COLOR FADE 15
	240 - 255	COLOR FADE 16

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MOD HEX10	0	11 Channel Mode
Channel	Value	Function
10		COLOR MACROS/PROGRAMS
	0 - 15 16 - 31 32 - 47 48 - 63 64 - 79 80 - 95 96 - 111 112 - 127 128 - 143 144 - 159 160 - 175	SOUND ACTIVE PROGRAMS SOUND ACTIVE MODE 1 SOUND ACTIVE MODE 2 SOUND ACTIVE MODE 3 SOUND ACTIVE MODE 4 SOUND ACTIVE MODE 5 SOUND ACTIVE MODE 6 SOUND ACTIVE MODE 7 SOUND ACTIVE MODE 8 SOUND ACTIVE MODE 9 SOUND ACTIVE MODE 10 SOUND ACTIVE MODE 11
	176 - 191 192 - 207 208 - 223 224 - 239 240 - 255	SOUND ACTIVE MODE 12 SOUND ACTIVE MODE 13 SOUND ACTIVE MODE 14 SOUND ACTIVE MODE 15 SOUND ACTIVE MODE 16
11	0 - 255 0 - 255	PROGRAM SPEED/SOUND SENSITIVITY PROGRAM SPEED SLOW - FAST SOUND SENSITIVITY LEAST - MOST SENSITIVE

When Channel 9 is between the values of 0-51, Channels 1-6 are used, and Channel 7 will control strobing.

When Channel 9 is between the values of 52-102, Channel 10 is in Color Macros Mode, and Channel 7 will control strobing.

When Channel 9 is between the values of 103-153, Channel 10 is in Color Change Mode, and Channel 11 will control the color change speed.

When Channel 9 is between the values of 154-204, Channel 10 is in Color Fade Mode, and Channel 11 will control the color fade speed.

When Channel 9 is between the values of 205-255, Channel 10 is in Sound Active Mode, and Channel 11 will control the sound sensitivity.

MOD HEX10	0	12 Channel Mode
Channel	Value	Function
1		RED
	0 - 255	0% - 100%
2		GREEN
	0 - 255	0% - 100%
3		BLUE
	0 - 255	0% - 100%
4		WHITE
	0 - 255	0% - 100%
5		AMBER
	0 - 255	0% - 100%
6		UV
	0 - 255	0% - 100%
7		STROBING
	0 - 31	LED OFF
	32 - 63	LED ON
	64 - 95	STROBING SLOW - FAST
	96 - 127	LED ON
	128 - 159	PULSE STROBING SLOW - FAST
	160 - 191	LED ON
	192 - 223	RANDOM STROBING SLOW - FAST
	224 - 255	LED ON
8		MASTER DIMMER
	0 - 255	0% - 100%
9		PROGRAM SELECTION MODE
	0 - 51	DIMMING MODE
	52 - 102	COLOR MACRO MODE
	103 - 153	COLOR CHANGE MODE
	154 - 204	COLOR FADE MODE
	205 - 255	SOUND ACTIVE MODE

# **12 CHANNEL MODE CONTINUED ON THE NEXT PAGE**

MOD HEX100		12 Channel Mode
Channel	Value	Function
10		COLOR MACROS/PROGRAMS
	0 - 255	COLOR MACRO MODE
		SEE THE COLOR MACRO CHART ON PAGE 19
		COLOR CHANGE PROGRAMS
	0 - 15	COLOR CHANGE 1
	16 - 31	COLOR CHANGE 2
	32 - 47	COLOR CHANGE 3
	48 - 63	COLOR CHANGE 4
	64 - 79 80 - 95	COLOR CHANGE 5 COLOR CHANGE 6
	96 - 111	COLOR CHANGE 7
	112 - 127	COLOR CHANGE 8
	128 - 143	COLOR CHANGE 9
	144 - 159	COLOR CHANGE 10
	160 - 175	COLOR CHANGE 11
	176 - 191	COLOR CHANGE 12
	192 - 207	COLOR CHANGE 13
	208 - 223	COLOR CHANGE 14
	224 - 239 240 - 255	COLOR CHANGE 15 COLOR CHANGE 16
	240 - 233	
	0 - 15	COLOR FADE PROGRAMS COLOR FADE 1
	16 - 31	COLOR FADE 1 COLOR FADE 2
	32 - 47	COLOR FADE 3
	48 - 63	COLOR FADE 4
	64 - 79	COLOR FADE 5
	80 - 95	COLOR FADE 6
	96 - 111	COLOR FADE 7
	112 - 127	COLOR FADE 8
	128 - 143	COLOR FADE 9
	144 - 159 160 - 175	COLOR FADE 10 COLOR FADE 11
	176 - 191	COLOR FADE 11 COLOR FADE 12
	192 - 207	COLOR FADE 13
	208 - 223	COLOR FADE 14
	224 - 239	COLOR FADE 15
	240 - 255	COLOR FADE 16

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MOD HEX100		12 Channel Mode
Channel	Value	Function
10		COLOR MACROS/PROGRAMS
		SOUND ACTIVE PROGRAMS
	0 - 15	SOUND ACTIVE MODE 1
	16 - 31	SOUND ACTIVE MODE 2
	32 - 47	SOUND ACTIVE MODE 3
	48 - 63	SOUND ACTIVE MODE 4
	64 - 79	SOUND ACTIVE MODE 5
	80 - 95	SOUND ACTIVE MODE 6
	96 - 111	SOUND ACTIVE MODE 7
	112 - 127	SOUND ACTIVE MODE 8
	128 - 143	SOUND ACTIVE MODE 9
	144 - 159	SOUND ACTIVE MODE 10
	160 - 175	SOUND ACTIVE MODE 11
	176 - 191	SOUND ACTIVE MODE 12
	192 - 207	SOUND ACTIVE MODE 13
	208 - 223	SOUND ACTIVE MODE 14
	224 - 239	SOUND ACTIVE MODE 15
	240 - 255	SOUND ACTIVE MODE 16
11		PROGRAM SPEED/SOUND SENSITIVITY
	0 - 255	PROGRAM SPEED SLOW - FAST
	0 - 255	SOUND SENSITIVITY LEAST - MOST SENSITIVE
12		DIMMER CURVES
	0 - 20	STANDARD
	21 - 40	STAGE
	41 - 60	
	61 - 80	ARCHITECTURAL
	81 - 100	
	101 - 255	DEFAULT TO UNIT SETTING

When Channel 9 is between the values of 0-51, Channels 1-6 are used, and Channel 7 will control strobing.

When Channel 9 is between the values of 52-102, Channel 10 is in Color Macros Mode, and Channel 7 will control strobing.

When Channel 9 is between the values of 103-153, Channel 10 is in Color Change Mode, and Channel 11 will control the color change speed.

When Channel 9 is between the values of 154-204, Channel 10 is in Color Fade Mode, and Channel 11 will control the color fade speed.

When Channel 9 is between the values of 205-255, Channel 10 is in Sound Active Mode, and Channel 11 will control the sound sensitivity.

# Color Macro Chart

0-3=Off	128-131=G+B+W	
4-7=Red	132-135=G+B+A	
8-11=Green	136-139=G+B+UV	
12-15=Blue	140-143=G+W+A	
16-19=White	144-147=G+W+UV	
20-23=Amber	148-151=G+A+UV	
24-27=UV	152-155=B+W+A	
28-31=R+G	156-159=B+W+UV	
32-35=R+B	160-163=B+A+UV	
36-39=R+W	164-167=W+A+UV	
40-43=R+A	168-171=R+G+B+W	
44-47=R+UV	172-175=R+G+B+A	
48-51=G+B	176-179=R+G+B+UV	
52-55=G+W	180-183=R+G+W+A	
56-59=G+A	184-187=R+G+W+UV	
60-63=G+UV	188-191=R+G+A+UV	
64-67=B+W	192-195=R+B+W+A	
68-71=B+A	196-199=R+B+W+UV	
72-75=B+UV	200-203=R+B+A+UV	
76-79=W+A	204-207=R+W+A+UV	
80-83=W+UV	208-211=G+B+W+A	
84-87=A+UV	212-215=G+B+W+UV	
88-91=R+G+B	216-219=G+B+A+UV	
92-95=R+G+W	220-223=G+W+A+UV	
96-99=R+G+A	224-227=B+W+A+UV	
100-103=R+G+UV	228-231=R+G+B+W+A	
104-107=R+B+W	232-235=R+G+B+W+UV	
108-111=R+B+A	236-239=R+G+B+A+UV	
112-115=R+B+UV	240-243=R+G+W+A+UV	
116-119=R+W+A	244-247=R+B+W+A=UV	
120-123=R+W+UV	248-251=G+B+W+A+UV	
124-127=R+A+UV	252-255=R+G+B+W+A+U	

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MENU	DESCRIPTION
DMX MODE ADDR:001~512	Sets the DMX starting address
DMX MODE	Set the unit DMX channels
CHAN:006/007/008/011/012	
DMX MODE NO:BLACK	When DMX signal is lost or interrupted, the unit will default to BLACKOUT option. It will
	switch all LED's off
DMX MODE NO:HOLD	When DMX signal is lost or interrupted, the unit will default to HOLD option. It will hold the
	last state before signal was lost.
DMX MODE NO:AUTO	When DMX signal is lost or interrupted, the unit will default to AUTO option. It will run the
	internal programs.
DMX MODE NO:MANUA	When DMX signal is lost or interrupted, the unit will default to the manual color setting
DMX MODE DELAY:0~4	Select the unit delay mode
SLAVE MODE	Set the unit into slave mode
SOUND PRO:01~16	Select the 16 sound active modes
SOUND SENS:00~08	Adjust the sound active sensitivity level,00 is sound active off,01 is the lowest level,8 is
	highest level.
MANUAL RED:000~255	Adjust the intensity of the red color
MANUAL GREN:000~255	Adjust the intensity of the green color
MANUAL BLUE:000~255	Adjust the intensity of the blue color
MANUAL WHIT:000~255	Adjust the intensity of the white color
MANUAL AMBE:000~255	Adjust the intensity of the amber color
MANUAL UV:000~255	Adjust the intensity of the UV color
MANUAL STROB:00~15	Adjust the flash speed,00 is flash off,01 is slowest,15 is fastest
JUMP RUN SNAP:01~16	Select the 16 color change mode
JUMP RUN SPEED:01~16	Adjust the speed of the color change mode
FADE RUN SNAP:01~16	Select the 16 color dreaming mode
FADE RUN SPEED:01~16	Adjust the speed of the color dreaming mode
AUTO RUN FAD+SNAP	Select the auto run mode
AUTO RUN SPEED:01~16	Adjust the speed of the auto run mode
CLR MACS COLOR:00~63	Select the 63 static colors
CLR MACS STROB:00~15	Adjust the strobe speed,00 is strobe off,01 is slowest,15 is fastest
OPTION BLGT:ON	LCD backlight always on
OPTION BLGT:OFF	LCD backlight will be off after 20 seconds
OPTION IR:ON	IR remote function on
OPTION IR:OFF	IR remote function off
OPTION SYSRESET	Initialize the unit at the extra factory setting

The control panel will lock up after 5 seconds of inactivity. Press the MODE button for at least 5 seconds to unlock the contron panel.

#### LCD Backlight On/Off:

To set the LCD backlight to turn off after 20 seconds, press the MODE button until "OPTION BLGT: XX" is displayed. "XX" represents the current state. Press the UP or DOWN buttons to set the backlight to turn "OFF" after 20 seconds or "ON" to stay on at all times.

#### **Operating Modes:**

The MOD HEX100 has six operating modes:

- RGBWA + UV Dimmer Mode Choose one of the six colors to remain static or adjust the intensity of each color to make your desired color.
- Color Change mode There are 16 color change modes to choose from. In color change mode the unit will change through the various colors depending on the color change mode that is chosen. The color change speed is adjustable.
- Color Fade mode There are 16 color fade modes to choose from. In color fade mode the unit will
  fade through the various colors depending on the color fade mode that is chosen. The fade speed is
  adjustable.
- Auto Run Mode In auto run mode, the fixture will run a combination of color change and color fade. The running speed is adjustable.
- Sound Active mode The unit will react to sound, chasing through the built in programs. There are 16 sound active modes.
- Static Color Mode There are 63 colors to choose from.
- DMX control mode This function will allow you to control each individual fixtures traits with a standard DMX 512 controller.

#### DMX Mode:

Operating through a DMX controller gives the user the freedom to create their own programs tailored to their own individual needs. The MOD HEX100 has 5 DMX modes: 6 channel mode, 7 channel mode, 8 channel mode, 11 channel mode, and 12 channel mode. See pages 11-18 for each modes DMX traits.

- 1. This function will allow the user to control each individual fixture's traits with a standard DMX 512 controller.
- To run the fixture in DMX mode, press the MODE button until "DMX MODE ADDR:XXX" is displayed. "XXX" represents the current displayed DMX address. Use the UP or DOWN buttons to select a desired DMX address, then press the SETUP button to select your DMX channel mode.
- 3. Use the UP or DOWN buttons to scroll through the DMX channel modes. The channel modes are listed below:
  - "CHAN: 06" is 6 Channel DMX Mode.
  - "CHAN: 07" is 7 Channel DMX Mode.
  - "CHAN: 08" is 8 Channel DMX Mode.
  - "CHAN: 11" is 11 Channel DMX Mode.
  - "CHAN: 12" is 12 Channel DMX Mode.
- 4. Please see pages 11-18 for DMX values and traits.
- 5. After choosing a desired DMX Channel mode plug in the fixture via the XLR connections to any standard DMX controller.

#### RGBWA + UV Dimmer Mode:

- 1. Plug the fixture in and press the MODE button until "MANUAL" is displayed. Press the SET UP button to cycle through the RGBWA+UV colors.
- 2. When "RED" is displayed, the unit is in Red dimming mode. Use the UP and DOWN buttons to adjust intensity.
- 3. When "GREN" is displayed, the unit is in Green dimming mode. Use the UP and DOWN buttons to adjust intensity.
- 4. When "BLUE" is displayed, the unit is in Blue dimming mode. Use the UP and DOWN buttons to adjust intensity.
- 5. When "WHIT" is displayed, the unit is in White dimming mode. Use the UP and DOWN buttons to adjust intensity.
- 6. When "AMBE" is displayed, the unit is in Amber dimming mode. Use the UP and DOWN buttons to adjust intensity.
- 7. When "UV" is displayed, the unit is in UV dimming mode. Use the UP and DOWN buttons to adjust intensity.
- 8. After the colors have been adjusted to make the desired output color, strobing can be acitvated by pressing the SET UP button.
- 9. "STROB" will be displayed, this is strobing mode. The strobing can be adjusted between "00" (strobing off) to "15" (fastest strobing).

#### Color Change Mode:

- 1. Plug the fixture in and press the MODE button until "JUMP RUN SNAP: XX" is displayed. "XX" represents a number between 01-16.
- 2. Use the UP and DOWN buttons to find your desired color change mode.
- Press the SET UP button and "SPEED: XX" will be displayed. Use the UP and DOWN buttons to adjust the speed of the color change. The speed can be adjusted between "01" (slowest) to "16" (fastest).

#### Color Fade Mode:

- 1. Plug the fixture in and press the MODE button until "FADE RUN SNAP: XX" is displayed. "XX" represents a number between 01-16.
- 2. Use the UP and DOWN buttons to find your desired color fade mode.
- Press the SET UP button and "SPEED: XX" will be displayed. Use the UP and DOWN buttons to adjust the speed of the color fade. The speed can be adjusted between "01" (slowest) to "16" (fastest).

#### Auto Run Mode:

- 1. Plug the fixture in and press the MODE button until "AUTO RUN FAD+SNAP" is displayed.
- Press the SET UP button and "SPEED: XX" will be displayed. Use the UP and DOWN buttons to adjust the speed of the Auto Run. The speed can be adjusted between "01" (slowest) to "16" (fastest).

# **Operating Instructions**

# MOD HEX100

#### Static Color Mode:

- 1. Plug the fixture in and press the MODE button until "CLR MACS COLOR: XX" is displayed. "XX" represents a number between 00-63.
- 2. Use the UP and DOWN buttons to scroll through the 63 colors to find a desired color. After finding a desired color, strobing can be activated by pressing the SET UP button.
- "STROB: XX" will now be displayed, this is strobe mode. Press the UP of DOWN buttons to fine a desired strobing speed. The strobing can be adjusted between "00" (strobe off) to "15" (fastest strobe).

#### System Reset:

This will return the fixture to its factory settings.

- 1. Plug the fixture in and press the MODE button until "OPTION" is displayed.
- 2. Press the SET UP button until "SYSRESET" is displayed.
- 3. Press the UP or DOWN buttons simultaneously to reset or press the MODE button to exit.

#### Dimmer Curve:

This is used to set the dimming curve used with DMX mode. See page 26 for the different dimming curves.

- 1. Plug the fixture in and press the MODE button until "DMX MODE ADDR: XXX" is displayed.
- 2. Press the SET UP button until "DELAY:X" is displayed. "X" represents the displayed dimmer curve (0-4).
  - 0 Standard
  - 1 Stage
  - 2 TV
  - 3 Architectural
- 4 Theatre
- 3. Press the UP or DOWN buttons to scroll through and select your desired dimming curve.

#### DMX State:

This mode can be used as a precaution mode, that in case the DMX signal is lost, the operating mode chosen in this setup is the running mode the fixture will go into. This setting is also the operating mode the unit will return to when power is applied.

- 1. Plug the fixture in and press the MODE button until "DMX MODE ADDR: XXX" is displayed.
- 2. Press the SET UP button until "DMX MODE NO" is displayed. The current DMX state will be displayed.
- "BLACK" (Blackout) If the DMX signal is lost or interrupted, the unit will automatically go into stand by mode.
- "HOLD" (Last State) If the DMX signal is lost or interrupted, the fixture will stay in the last DMX set up.
- "AUTO" (Auto Run) If the DMX signal is lost or interrupted, the unit will automatically go into auto run mode.
- "MANUA" (Manual) if the DMX signal is lost or interrupted, the unit will automatically go into the last color set up in manual dimmer mode.
- 3. Press the UP or DOWN buttons to scroll through and select a desired DMX state.

#### ADJ UC IR & Airstream:

This function is used to activate and deactivate the infared sensor. When this function is activated the unit can be controlled using the ADJ UC IR or Airstream IR app. Please see page 25 for remote controls and functions.

- 1. Plug the fixture in and press the MODE button until "OPTION" is displayed.
- 2. Press the SET UP button until "IR: XX" is displayed.
- 3. Press the UP or DOWN buttons to either activate the remote function (On) or deactivate it (Off).

# MOD HEX100

# Master-Slave Configuration

#### Master-Slave Configuration:

This function will allows the user to link units together to run in a Master-Slave set-up. In a Master-Slave set up. one unit will act as the controlling unit and the others will react to the controlling units running mode. Any unit can act as a Master or as a Slave, however, only one unit can be programmed to act as the "Master."

#### Master-Slave Connections and Settings:

- Daisy chain the units via the XLR connectors on the bottom of the unit. Use standard XLR data cables to link the units together. Remember that the Male XLR connector is the input and the Female XLR connector is the ouput. 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. Connect the first "Slave" unit to the "Master."
- 3. Set the "Master" unit to a desired mode of operation. On the "Slave" unit's press the MODE button until "SLAVE MODE" is displayed. The "Slave" unit(s) will now follow the "Master".

# MOD HEX100

## **Snoot Effect**

The body of the MOD HEX100 can easily be adjusted to create a Snoot Effect to eliminate side glare. Loosen the bracket knobs and slide the innards up and down using the bracket. Find your optimal setting and tighten the bracket knobs to lock the body in place.

# ADJ UC IR/ Airstream IR Control

The **UC IR** infrared remote gives you control of various functions (See below). To control the fixture you must aim the remote at the front of the fixture and be no more than 30 feet away. To use the ADJ UC IR you must first activate the fixtures infrared sensor, to activate the sensor please see the instructions on page 24.

The **Airstream IR** remote transmitter plugs into the headphone jack of your iOS phone or tablet. To control your IR fixture you must raise the volume to the maximum on your iOS phone or tablet and aim the transmitter at the fixture sensor and be no more than 15 feet away. The app is a free download from the app store for your iOS phone or tablet. The app comes with 3 pages of control depending on the fixture you are using. Please see below for IR functions including the corresponding app page.

			STAND BY
		Stand by	(FULL ON) (FADE/GOBO) (DIMMER+)
Full ON	Fade/Gobo		
Strobe	Color		
1	2	3	
4	5	6	7 8 9
7	8	9	SOUND ON SHOW 0 SOUND OFF
SoundOn	Show 0	SoundOff	www.adj.com

#### Works with App page 1

**STAND BY -** Pressing this button will blackout the fixture. Press the button again to return to the initial state.

FULL ON - Press this button down to fully light up the unit. Press any button to exit this mode..

**FADE/GOBO -** Press this button to switch between Color Change Mode, Color Fade Mode, and Auto Run Mode. Use buttons 1-9 to select your desired show. Press this button twice for show 10. Press button "1" twice for show 11.

**UPDATE WITH SOFTWARE VERSION 1.01:** This button can activate color change mode, color fade mode, or combination color change and fade mode (Auto Run). Each press of the button will switch through the 3 different modes. Use the numeral buttons 1-9 to select the program number within your desired mode. Use the dimmer buttons to adjust the output intensity. **Note:** Running speed is not adjustable using the IR control functions.

*Example:* In color change mode (Jump Run), press the numeral buttons "1+3" to run color change program "13". In color fade mode (Fade Run), press the numeral button "7" to run color fade program "7".

Note: Color change and fade combination (Auto Run) mode has only one program.

"DIMMER +" and "DIMMER -" - Use these buttons to adjust the output intensity when either color macro mode, color change mode, color fade mode is active.

**STROBE -** Press this button to activate strobing. Use buttons 1-4 to adjust the strobe speed. "1" being the slowest, "4" being the fastest. Press this button again to stop strobing.

**COLOR -** Press this button to activate color macro mode. Use the numeral buttons 1-9 to select your desired color. Use the dimmer buttons to adjust the output intensity.

*Example:* Press the numeral buttons "1+3" to activate color macro "13".

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# ADJ UC IR/ Airstream IR Control

**Numeral Buttons 1-9 -** Use buttons 1-9 to select your desired color in static color mode, or your desired program in color fade mode and color change mode.

Use buttons 1-4 to select a desired strobe rate when strobing is active.

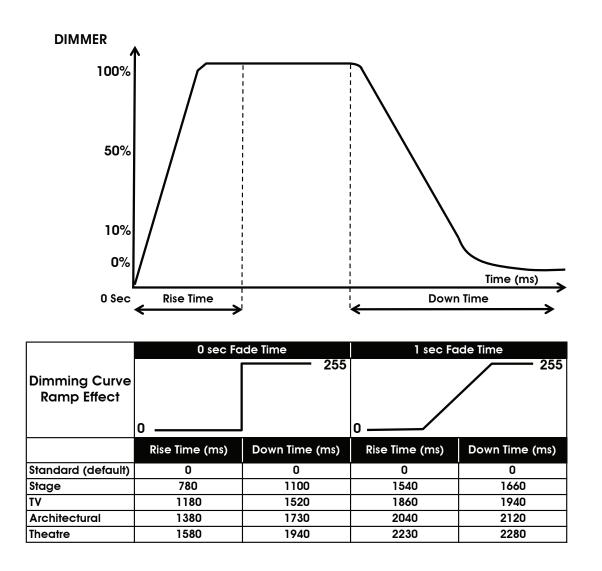
**SOUND ON & OFF -** Use the buttons to activate and deactivate sound active mode. When activated sound sensitivity is at the highest. When SOUND OFF is pressed sensitivity is at its lowest.

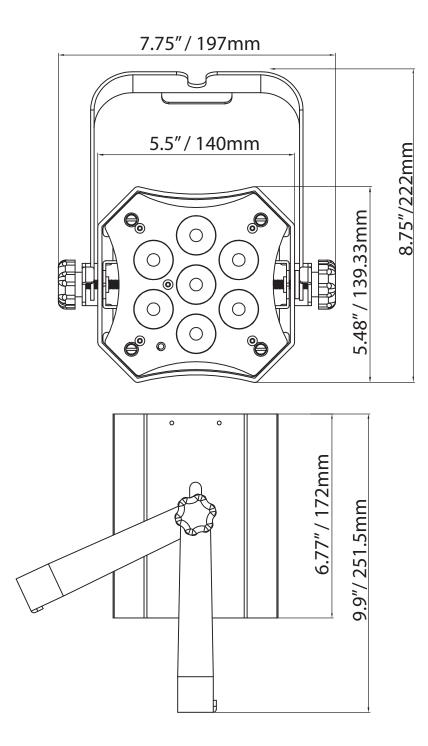
SHOW 0 - Press this button to activate color fade mode. Use buttons 1-9 to select your desired show. Press this button twice for show "10". Press button "1" twice for show "11".

**UPDATE WITH SOFTWARE VERSION 1.01:** This button is invalid for this fixture.

# MOD HEX100

**Dimmer Curve Chart** 

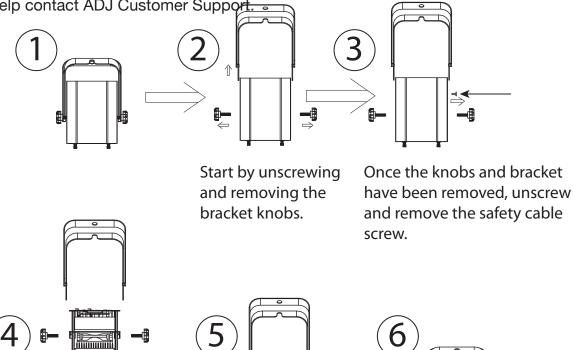


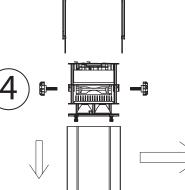


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# **Housing Change**

The MOD units housing is interchangeable. You can purchase the white housing kit through ADJ. Changing the housing is very simple process. Follow the instructions below to change the housing. For more help contact ADJ Customer Support.





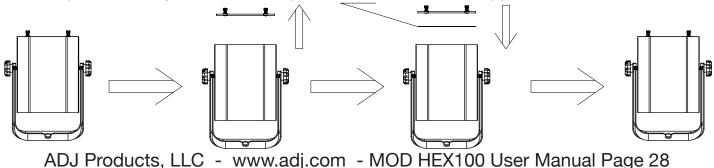
When the screw has been removed the and safety cable is disconnected you are able to remove the innards through the top of the unit.

You are now able to switch shells by carefully lowering the innards into the new case and reassemble. Reconnect the safety cable and attache the bracket and knobs.

# **MOD HEX100**

# **Frost Filter**

The MOD HEX100 comes with 3 interchangeable frost filters. To install the frost filter unscrew the four thumb screws holding lens in place. Remove the lens and install the filter inside the unit. Line up the thumb screw holes on the edges of filter with screw holes of the unit. Screw the thumb screws back into place securing the lens. For help contact ADJ Customer Support.



# With this feature you can connect the fixtures to one another using the power input and output sockets. The maximum that can be connected is 5 fixtures @ 120V and 9 fixtures @ 240V. After the maximum connected fixtures you will need to use a new power outlet.

NOTE: USE CAUTION WHEN POWER LINKING OTHER FIXTURES TO THE MOD HEX100 AS THE POWER CONSUMPTION OF OTHER LIGHTING FIXTURES WILL VARY!

# MOD HEX100

Listed below are a few common problems the user may encounter, with solutions.

#### Unit not responding to DMX:

1. Check that the DMX cables are connected properly and are wired correctly (pin 3 is "hot"; on some other DMX devices pin 2 may be 'hot'). Also, check that all cables are connected to the right connectors; it does matter which way the inputs and outputs are connected.

#### Unit does not respond to sound:

- 1. Quiet or high pitched sounds will not activate the unit.
- 2. Make sure that Sound Active mode is activated.

# MOD HEX100

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. Clean the external optics with glass cleaner and a soft cloth every 20 days.
- 3. Always be sure to dry all parts completely before plugging the unit back in.

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

Multiple Unit Power Linking

**Trouble Shooting** 

# Cleaning

#### MANUFACTURER'S LIMITED WARRANTY

- A. ADJ Products, LLC hereby warrants, to the original purchaser, ADJ Products, LLC 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-please contact ADJ Products, LLC Service Department at 800-322-6337. Send the product only to the ADJ Products, LLC factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, ADJ Products, LLC 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, ADJ Products, LLC 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 ADJ Products, LLC concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the ADJ Products, LLC factory unless prior written authorization was issued to purchaser by ADJ Products, LLC; 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 maintance, cleaning or periodic check up. During the period specified above, ADJ Products, LLC 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 ADJ Products, LLC under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of ADJ Products, LLC. All products covered by this warranty were manufactured after August 15, 2012, and bear indentifying marks to that effect.
- E. ADJ Products, LLC 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 ADJ Products, LLC 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 ADJ Products, LLC 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 ADJ Products, LLC Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

#### MANUFACTURER'S LIMITED WARRANTY PERIODS:

- Non L.E.D. Lighting Products = 1-year (365 days) 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 LED and lamps)
- Laser Products = 1 Year (365 Days) Limited Warranty (excluding laser diodes which have a 6 month limited warranty)
- L.E.D. Products = 2-year (730 days) Limited Warranty (excluding batteries which have a 180 day limited warranty). Note: 2 Year Warranty only applies to purchases within the United States.
- StarTec Series = 1 Year Limited Warranty (excluding batteries which have a 180 day limited warranty).
- ADJ DMX Controllers = 2 Year (730 Days) Limited Warranty

# Model: MOD HEX100

Voltage: LEDs: UV Range: Working Position: Power Draw: Power Linking:	100V ~ 240V/50~60Hz 7 x 15W 6-in-1 HEX LED's 392-400nm Any safe working position 105W 5 Fixtures Max. @ 120V
· ·	9 Fixtures Max. @ 240V
Weight:	6 lbs./ 2.6 Kgs.
Dimensions:	10.25" (L) x 10.25" (W) x 4.25" (H)
	263.4 x 196 x 222mm
Colors:	RGBWA+UV Color Mixing
DMX Channels:	5 DMX Modes: 6/7/8/11/12
Warranty:	2 Year (730 days)

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