

# **DOTZ MATRIX**

User Instructions

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**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!

**DOCUMENT VERSION**



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

Please check [www.adj.com](http://www.adj.com) for the latest revision/update of this manual before beginning installation and/or programming.

Date	Document Version	Software Version	DMX Channel Mode	Notes
05/27/14	1	1.04	3/6/7/48/52	Initial Release
06/21/16	2	1.05	3/6/7/48/53	52 Ch. Mode updated to 53 Ch. Warranty Updated
12/27/19	2.5	1.06	N/C	White Balance Added
04/19/21	3.0	1.07	N/C	Update System Menu
06/03/21	3.5	1.08	N/C	Update System Menu and DMX Traits, add Operation.
01/05/22	4.0	N/C	N/C	Made corrections to DMX Setup.

# CONTENTS

General Information	4
Limited Warranty (USA Only)	5
Safety Guidelines	6
Maintenance Guidelines	8
Overview	9
DMX Setup	10
Installation Instructions	12
System Menu	13
Operation	18
DMX Traits: Channel Functions & Values	19
Dimmer Curve Chart	21
Multiple Unit Power Linking	23
Fuse Replacement / Cleaning / Troubleshooting	23
Specifications	24

# **GENERAL INFORMATION**

## **INTRODUCTION**

Please read and understand all instructions in this manual carefully and thoroughly before attempting to operate these products. These instructions contain important safety and use information.

## **UNPACKING**

The products in this kit have been thoroughly tested and have 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 each unit included for damage and be sure all accessories necessary to operate the units have arrived intact. In the event damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this kit to your dealer without first contacting customer support at the number listed below. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

## **WARRANTY RETURNS**

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. Items returned without a R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain a R.A. number by contacting customer support.

## LIMITED WARRANTY (USA ONLY)

- 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 its 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, or 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 service by anyone other than 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 maintenance, 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 identifying 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.
- 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 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.
- G. 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.

### 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** (excludes laser diodes which have 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**

# SAFETY GUIDELINES

To guarantee a smooth operation, it is important to follow all instructions and guidelines in this manual. ADJ PRODUCTS LLC is not responsible for injury and/or damages resulting from the misuse of these devices due to the disregard of the information printed in this manual. Only qualified and/or certified personnel should perform installation of these devices and only the original rigging parts included with these devices should be used for installation. Any modifications to these devices and/or the included mounting hardware will void the original manufactures warranty and increase the risk of damage and/or personal injury.



## **PROTECTION CLASS 1 – DEVICES MUST BE PROPERLY GROUNDED**



**THERE ARE NO USER SERVICEABLE PARTS INSIDE THESE DEVICES. DO NOT ATTEMPT ANY REPAIRS YOURSELF; DOING SO WILL VOID YOUR MANUFACTURES WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THESE DEVICES AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURES WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.**



**DO NOT PLUG THIS UNIT INTO A DIMMER PACK!  
DO NOT REMOVE THE COVER UNDER ANY CONDITIONS!  
NEVER OPERATE THIS UNIT WITH THE COVER REMOVED!  
UNPLUG POWER DURING LONG PERIODS OF NON-USE  
NEVER TOUCH LIGHT DURING OPERATION, AS IT MAY BE HOT!  
KEEP FLAMMABLE MATERIALS AWAY FROM THESE DEVICES!  
DO NOT EXCEED OPERATING TEMPERATURES OF 185°F (85°C)!**



**INDOOR / DRY LOCATIONS USE ONLY!  
DO NOT EXPOSE DEVICES TO RAIN AND/OR MOISTURE!**



**NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!  
RETINA INJURY RISK - MAY INDUCE BLINDNESS!  
SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!**

# SAFETY GUIDELINES

**DO NOT** position devices close to any **FLAMMABLE MATERIALS** while operating.

**DO NOT** attempt installation and/or operation of devices without knowledge how to do so.

**DO NOT** permit operation by persons who are not qualified to operate these types of devices.

**DO NOT** shake devices, avoid brute force when installing and/or operating.

**DO NOT** operate these devices if the main power cord has become frayed, crimped and/or damaged. Replace any damaged power cords with a similar power rating.

**DO NOT** remove or break-off the ground plug from the device power cords.

**DO NOT** remove disassemble devices, there are **NO** user serviceable parts inside.

**ALWAYS** disconnect devices from main power source before performing any cleaning.

**ALWAYS** disconnect light from main power before replacing lamp.

**ALWAYS** be sure to install these devices in an area that will allow proper ventilation.

**NEVER** remove the ground prong from the power cable.

Power cords should be safely routed and secured so they are not likely pinched.

Disconnect power cords during long periods of non-use.

Only use recommended rigging hardware as described in this guide.

Use the original packaging and materials to transport these devices in for service.

These devices should be serviced by qualified service personnel when:

- The power cords or plugs have become damaged.
- Objects have fallen on and/or liquid has spilled into the devices.
- The devices have been exposed to rain and/or moisture.
- The devices do not operate normally or exhibit a marked change in performance.

# MAINTENANCE GUIDELINES



**DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!**

## CLEANING

Frequent cleaning is recommended to insure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the device operates in: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the lens and/or light fixture optics. Clean the external housing of the fixture and the front lens of the light at least every 20 days with a soft cloth to avoid dirt/debris accumulation.

**NEVER** use alcohol, solvents, or ammonia-based cleaners.

## MAINTENANCE

Regular inspections are recommended to insure proper function and extended life.

There are no user serviceable parts inside these devices, please refer all other service issues to an authorized ADJ service technician. Should you need any spare parts, please order genuine parts from your local ADJ dealer.

Please refer to the following points during routine inspections:

A detailed review by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.

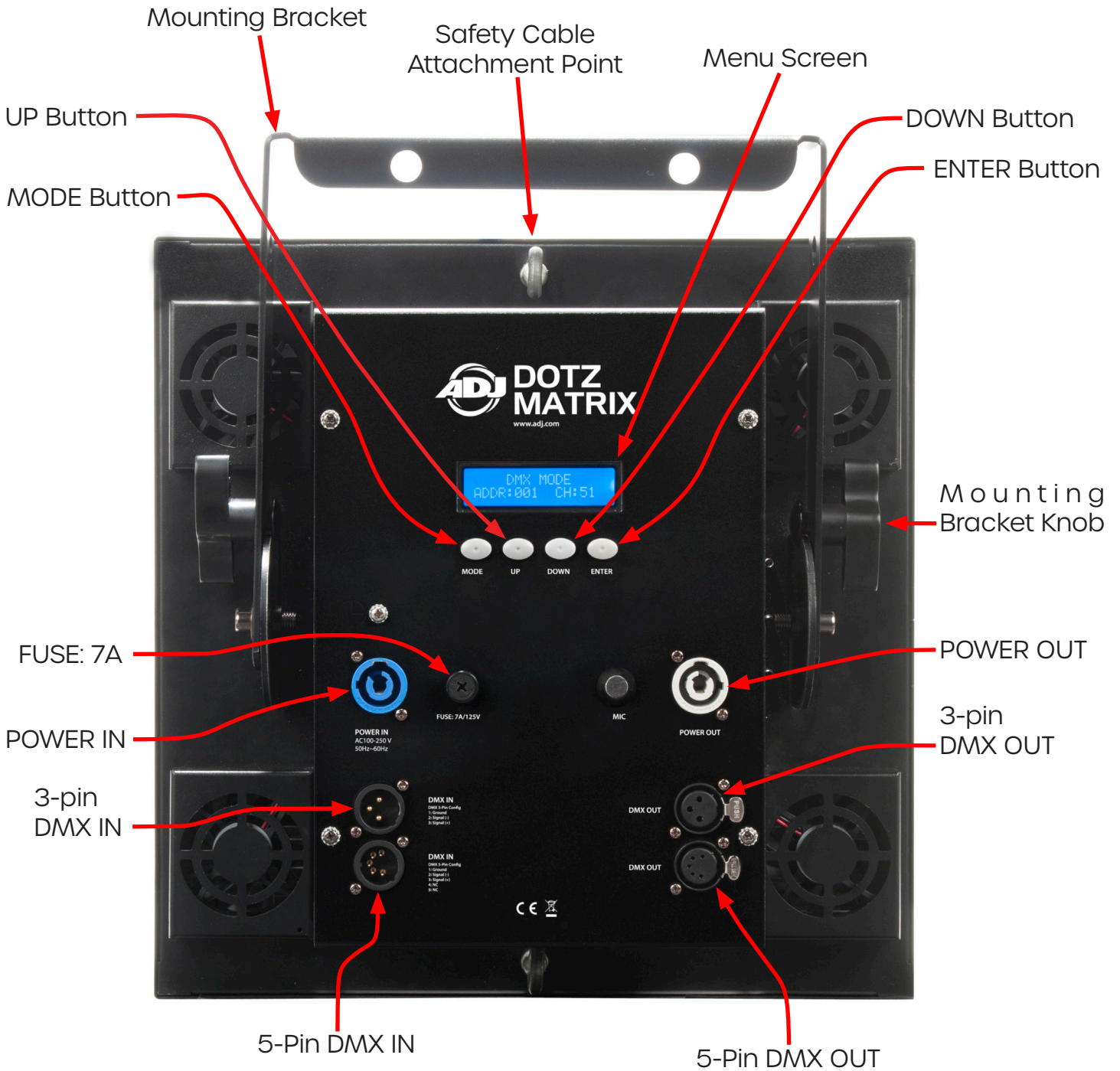
Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation resulting in damage or injury as larger parts could fall.

Check for any deformations on the light, light-housings, lenses, rigging hardware, and rigging points (ceiling, suspension, trussing). Deformations could allow for dust to enter into the devices. Damaged rigging points or unsecured rigging could cause the devices to fall and seriously injure a person(s).

Electric power supply cables must not show any damage, material fatigue or sediments.



# OVERVIEW



# DMX SETUP

## POWER SUPPLY

The Dotz Matrix contains an automatic voltage switch, which will automatically sense the voltage when it is plugged into the power source. With this switch, there is no need to worry about the correct power voltage, and this unit can be plugged in anywhere.

## DMX-512

DMX is short for Digital Multiplex. This is a universal protocol used by most lighting and controller manufacturers 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 manufacturers 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, try to use the shortest cable path possible when linking several fixtures. 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

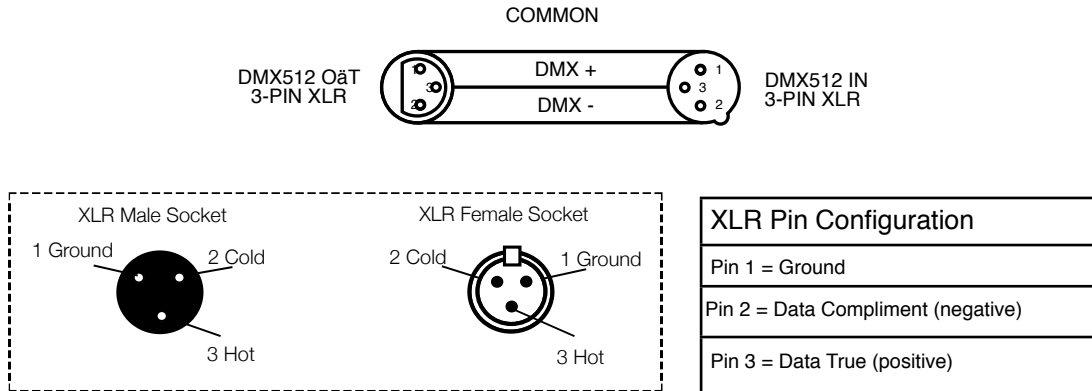
### (FOR DMX AND PRIMARY/SECONDARY OPERATION):

The Dotz Matrix can be controlled via DMX-512 protocol, and has three DMX channel modes: 1 channel mode, 2 channel mode, & 3 channel mode. The DMX address is set electronically using the controls on the rear panel of the unit. Your unit and your DMX controller require an approved DMX-512 110 Ohm Data cable for data input and data output (Figure 1). We recommend AccuCable DMX cables. If you are making your own cables, be sure to use standard 110-120 Ohm shielded cable (This cable be purchased at almost all professional sound and lighting stores). Your cables should be made with a male XLR connector at one end, and a female XLR connector at the other. Also remember that DMX cable must be daisy chained and cannot be split.



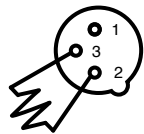
# DMX SETUP

**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.



## 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

3-Pin XLR to 5-Pin XLR Conversion		
Conductor	3-Pin XLR Female (Out)	5-Pin XLR Male (In)
Ground/Sheld	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

**5-Pin XLR DMX Connectors.** Some manufacturers 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 by using a 3-pin cable adapter. These adapters are readily available at most electronics stores. The chart above details a proper cable conversion.

# INSTALLATION INSTRUCTIONS

## INSTALLATION

This 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 the weight of ten (10) times the unit's weight and any mounting accessories. A safety cable (optional) is recommended when installing the fixture. It is also recommended that a professional installs the equipment and it must be installed in a place where it is out of the reach of people's grasp.

The Dotz Matrix is fully operational in two different mounting positions, hanging upside-down from a ceiling or set on a flat level surface. To avoid internal damage to the unit, never mount the unit on its side as illustrated above. Be sure this fixture is kept at least 0.5m away from any flammable materials (decoration etc.). Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails. Never use the carrying handles for secondary attachment.

## SYSTEM MENU

The fixture includes an easy to navigate system menu where fixture settings can be adjusted via the LCD control panel located on the back of the fixture. During normal operation, pressing the **MODE** button once will access the main menu. Navigate through the various sub-menus by pressing the **UP** and **DOWN** buttons, press the **ENTER** button to select a specific sub-menu, press the **UP** and **DOWN** buttons to adjust the selected sub-menu settings, and press the **ENTER** button again to confirm the sub-menu setting selection. Exit the main system menu at any time without making any adjustments by pressing the **MODE** button.

To access the system menu press and hold the **MODE** button for 3 seconds. The LCD Menu Control Display will shut **OFF** automatically about 1 minute from the last button press.



# SYSTEM MENU

## Built-In-Programs

01. STATIC CL:RGBFlash00-99	Blackout, Red-Green-Blue-Yellow-Cyan-Purple-White Flash speed adjustable.
02. DREAM Speed00-99 — Flash00-99	Seven color dreaming Speed & Flash adjustable
03. METEOR Speed00-99 — Flash00-99	Seven color flow Speed & Flash adjustable
04. FADE Speed00-99 — Flash00-99	Seven color flow Speed & Flash adjustable
05. CHANGE Speed00-99 — Flash00-99	Seven color flow Speed & Flash adjustable
06. FLOW 1 Speed00-99 — Flash00-99	Seven color flow Speed & Flash adjustable
07. FLOW 2 Speed00-99 — Flash00-99	Seven color flow Speed & Flash adjustable
08. FLOW 3 Speed00-99 — Flash00-99	Seven color flow Speed & Flash adjustable
09. FLOW 4 Speed00-99 — Flash00-99	Seven color flow Speed & Flash adjustable
10. FLOW 5 Speed00-99 — Flash00-99	Seven color flow Speed & Flash adjustable
11. FLOW 6 Speed00-99 — Flash00-99	Seven color flow Speed & Flash adjustable
12. FLOW 7 Speed00-99 — Flash00-99	Seven color flow Speed & Flash adjustable
13. FLOW 8 Speed00-99 — Flash00-99	Seven color flow Speed & Flash adjustable
14. FLOW 9 Speed00-99 — Flash00-99	Seven color flow Speed & Flash adjustable
15. FLOW 10 Speed00-99 — Flash00-99	Seven color flow Speed & Flash adjustable



# SYSTEM MENU

## **DMX Mode - Set the DMX Address and DMX Channel Mode -**

1. Press the MENU button until “DMX Mode” is displayed, with “ADDR: XXX CH: XX” displayed beneath. Press ENTER.
2. “XXX” will now begin to flash. Use the UP and DOWN buttons to find your desired DMX address, then press ENTER. Available values range from 001 - 512.
3. “XX” will now begin to flash. Use the UP and DOWN buttons to find your desired DMX Channel mode, then press ENTER. Available values are: 03, 06, 07, 48, and 53.

## **Secondary Mode - This will let you set your unit as a secondary in a Primary/Secondary configuration.**

1. Press the MENU button until “Secondary Mode” is displayed. Your unit will now follow the Primary.

## **Sound Mode - In this mode the unit will run in sound active mode.**

1. Press the MENU button until “Sound Mode” is displayed.
2. Press ENTER to adjust your sound sensitivity. When you press ENTER the number next to “Sens” will begin to flash. Use the UP and DOWN buttons to adjust the sound sensitivity. Once you have found your desired sensitivity press ENTER to confirm.
3. When you press ENTER the number next to “FQN” will begin to flash. Use the UP and DOWN buttons to adjust the amount of times you would like the program to cycle before changing to the next program. Press ENTER to confirm.

## **Auto Run**

1. Press the MENU button until “Auto Run” is displayed, and “FQN:XX” will be displayed underneath. “XX” represents the currently selected option.
2. Press ENTER and the number will begin to flash. Use the UP and DOWN buttons to adjust the amount of times you would like the program to cycle before changing to the next program. Press ENTER to confirm.

## **Built-In Programs - See the chart on the preceding page for available options.**

1. Press the MENU button until one of the Programs in the chart on the preceding page is displayed. The currently selected options will be displayed.
2. Press ENTER to move through the various adjustments of each program, and use the UP and DOWN button to make adjustments.

## **Pixel Flip - In this setting, you can adjust the unit so that in DMX Mode, the LEDs will illuminate at your desired starting point.**

***Example: If the unit is set to Flip 1, in 48 Channel mode, the first pixel will light up starting on the top right. If set to Flip 2, in 48 Channel mode, the first pixel will light up starting on the bottom right.***

1. Press the MENU button until “Pixel Flip” is displayed, press ENTER.
2. Either “Standard” or “Flip X”, “X” representing a number between 1-4. Use the UP or DOWN buttons to find your desired setting.

## SYSTEM MENU

**Dim Curve - This setting will let you select your desired dimming curve.**

1. Press the MENU button until “Dim Curve” is displayed, then press ENTER.
2. 1 of 5 dimming curve settings will be displayed: Standard, Stage, TV, Architectural, or Theatre. Use the UP and DOWN buttons to select your desired dimming curve and press ENTER to confirm.

**White Balance -**

**(WHITE BALANCE ADDED 12/27/19 WITH SOFTWARE V2.5)**

**With this setting, you are able to the adjust the RGB colors to reach your desired “color temperature”. *Note: When adjusting the white balance, be aware of the current PIXEL FLIP setting you are in. Adjusting the white balance will affect the other PIXEL FLIP modes. See the pixel flip diagram settings.***

1. Press the MENU button until “WHITEBALANCE” is displayed.
2. Press ENTER to select the first adjustment. Use the UP and DOWN buttons to scroll through RGB, press the ENTER button to select the color and advance to the next setting.
3. The next setting will let you scroll through the 16 different light output LEDs. Use the UP and DOWN buttons to find the LED you would like to adjust and press ENTER to make your selection and advance to the next setting.
4. In the next setting you are able to adjust the output brightness for the color and LED you previously selected. Use the UP and DOWN buttons to adjust the output intensity and press the ENTER button when you are finished.
5. Repeat steps 2-4 to continue to adjust the RGB colors to your desired output. Press the MENU button to exit without making any adjustments.

**Fan Mode - This setting allows the user to adjust the operating speed of the fan.**

1. Press the MENU button until “Fan Mode” is displayed. The current fan mode selection will be displayed below.
2. Press ENTER to select the Fan Mode setting. Use the UP and DOWN buttons to toggle between the “Silent” and “High” settings.
3. Press ENTER to confirm your selection.



# SYSTEM MENU

## STANDARD

1	2	3	4
8	7	6	5
9	10	11	12
16	15	14	13

## Flip 1

4	3	2	1
5	6	7	8
12	11	10	9
13	14	14	16

## Flip 2

13	14	15	16
12	11	10	9
5	6	7	8
4	3	2	1

## Flip 3

16	15	14	13
9	10	11	12
8	7	6	5
1	2	3	4

## Flip 4

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

## OPERATION

**Universal DMX Control:** This function allows you to use a Elation® universal DMX-512 controller to control the chases and patterns, dimmer and strobe. A DMX controller allows you to create unique programs tailored to your individual needs. The Dotz Matrix has 5 DMX channel modes; a 3 Channel Mode, 6 Channel Mode, 7 Channel Mode, 48 Channel Mode, & (52 Channel Mode ), 53 Channel Mode (Added (6/21/18)).

1. This function will allow you to control each individual fixture's traits with a standard DMX 512 controller such as the Elation® Show Designer™ or the Elation® DMX Operator.™
2. To run your fixture in DMX mode, follow directions on page 8 to set your DMX address and DMX Channel mode.
3. Plug in the fixture via the XLR connections to any standard DMX controller.
4. For longer cable runs (more than a 100 feet) use a terminator on the last fixture.

**Primary-Secondary Operation:** This function will allow you to link up to 16 units together and operate without a controller. The units will be sound activated. In Primary-Secondary 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 Primary or as a Secondary.

1. Using approved DMX data cables, daisy chain your units together via the XLR connector on the rear of the units. Remember the Male XLR connector is the input and the Female XLR connector is the output. The first unit in the chain (primary) 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. On the Primary unit set your desired operating mode.
3. On the secondary units press the MODE button until "Secondary Mode" is displayed.
4. The secondary units will now follow the Primary unit.

# DMX TRAITS: CHANNEL FUNCTIONS & VALUES

DMX CHANNELS / VALUES / FUNCTIONS (5 DMX Channels)						
SUPPORTS SOFTWARE VERSION ≥ 1.07						
MODE / CHANNEL					VALUE	FUNCTION
CH 3	CH 6	CH7	CH 48	CH 53		
1	1	1	1	1	0-255	<b>RED 1</b> 0-100%
2	2	2	2	2	0-255	<b>GREEN 1</b> 0-100%
3	3	3	3	3	0-255	<b>BLUE 1</b> 0-100%
			4	4	0-255	<b>RED 2</b> 0-100%
			5	5	0-255	<b>GREEN 2</b> 0-100%
			6	6	0-255	<b>BLUE 2</b> 0-100%
			7	7	0-255	<b>RED 3</b> 0-100%
			8	8	0-255	<b>GREEN 3</b> 0-100%
			9	9	0-255	<b>BLUE 3</b> 0-100%
			10	10	0-255	<b>RED 4</b> 0-100%
			11	11	0-255	<b>GREEN 4</b> 0-100%
			12	12	0-255	<b>BLUE 4</b> 0-100%
			13	13	0-255	<b>RED 5</b> 0-100%
			14	14	0-255	<b>GREEN 5</b> 0-100%
			15	15	0-255	<b>BLUE 5</b> 0-100%
			16	16	0-255	<b>RED 6</b> 0-100%
			17	17	0-255	<b>GREEN 6</b> 0-100%
			18	18	0-255	<b>BLUE 6</b> 0-100%
			19	19	0-255	<b>RED 7</b> 0-100%
			20	20	0-255	<b>GREEN 7</b> 0-100%
			21	21	0-255	<b>BLUE 7</b> 0-100%
			22	22	0-255	<b>RED 8</b> 0-100%
			23	23	0-255	<b>GREEN 8</b> 0-100%
			24	24	0-255	<b>BLUE 8</b> 0-100%

**DMX CHANNELS / VALUES / FUNCTIONS (11 DMX Channels)**

**SUPPORTS SOFTWARE VERSION ≥ 1.07**

MODE / CHANNEL					VALUE	FUNCTION
CH 3	CH 6	CH7	CH 48	CH 53		
			25	25	0-255	<b>RED 9</b> 0-100%
			26	26	0-255	<b>GREEN 9</b> 0-100%
			27	27	0-255	<b>BLUE 9</b> 0-100%
			28	28	0-255	<b>RED 10</b> 0-100%
			29	29	0-255	<b>GREEN 10</b> 0-100%
			30	30	0-255	<b>BLUE 10</b> 0-100%
			31	31	0-255	<b>RED 11</b> 0-100%
			32	32	0-255	<b>GREEN 11</b> 0-100%
			33	33	0-255	<b>BLUE 11</b> 0-100%
			34	34	0-255	<b>RED 12</b> 0-100%
			35	35	0-255	<b>GREEN 12</b> 0-100%
			36	36	0-255	<b>BLUE 12</b> 0-100%
			37	37	0-255	<b>RED 13</b> 0-100%
			38	38	0-255	<b>GREEN 13</b> 0-100%
			39	39	0-255	<b>BLUE 13</b> 0-100%
			40	40	0-255	<b>RED 14</b> 0-100%
			41	41	0-255	<b>GREEN 14</b> 0-100%
			42	42	0-255	<b>BLUE 14</b> 0-100%
			43	43	0-255	<b>RED 15</b> 0-100%
			44	44	0-255	<b>GREEN 15</b> 0-100%
			45	45	0-255	<b>BLUE 15</b> 0-100%
			46	46	0-255	<b>RED 16</b> 0-100%
			47	47	0-255	<b>GREEN 16</b> 0-100%
			48	48	0-255	<b>BLUE 16</b> 0-100%

**DMX CHANNELS / VALUES / FUNCTIONS (11 DMX Channels)**

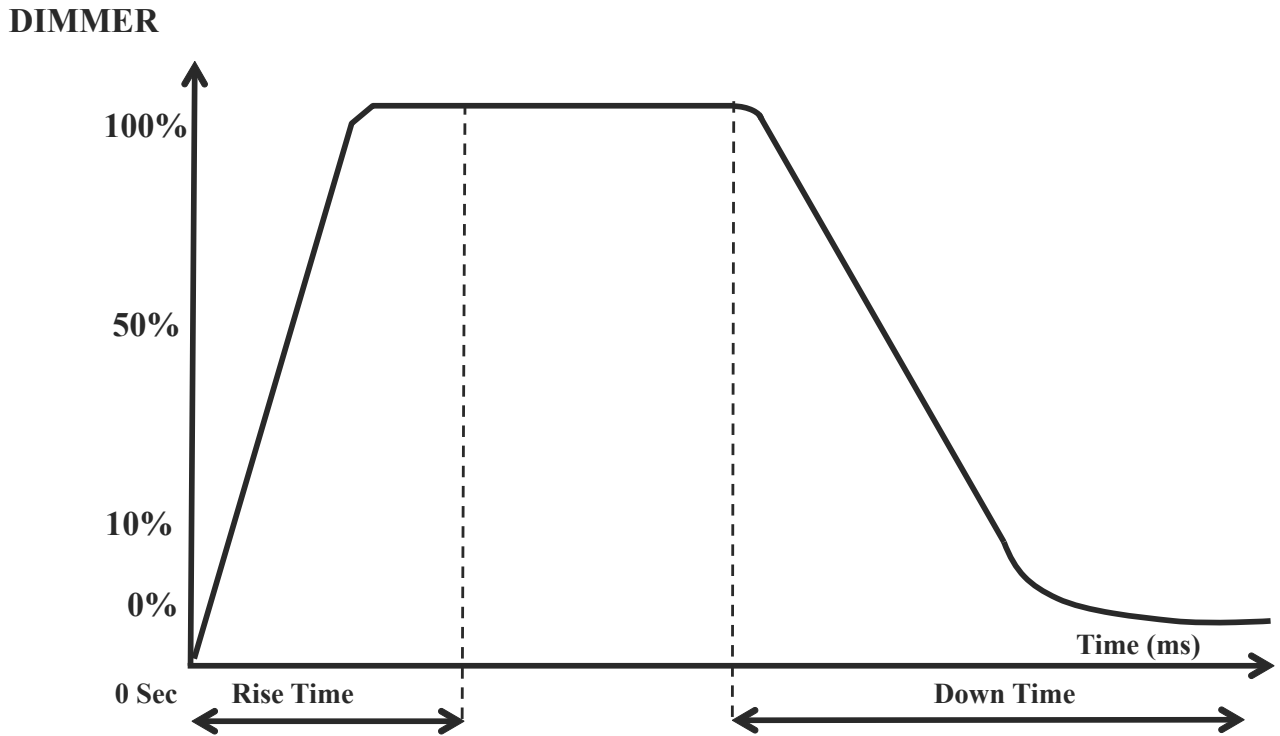
**SUPPORTS SOFTWARE VERSION ≥ 1.07**

MODE / CHANNEL					VALUE	FUNCTION
CH 3	CH 6	CH 7	CH 48	CH 53		
		4		49	COLOR 0 - 15 NO FUNCTION 16 - 23 RED 24 - 31 GREEN 32 - 39 BLUE 40 - 47 RED & GREEN 48 - 55 GREEN & BLUE 56 - 63 RED & BLUE 64 - 71 RED, GREEN, & BLUE 72 - 79 COLOR 1 80 - 87 COLOR 2 88 - 95 COLOR 3 96 - 103 COLOR 4 104 - 111 COLOR 5 112 - 119 COLOR 6 120 - 127 COLOR 7 128 - 135 COLOR 8 136 - 143 PROGRAM 2 144 - 151 PROGRAM 3 152 - 159 PROGRAM 4 160 - 167 PROGRAM 5 168 - 175 PROGRAM 6 176 - 183 PROGRAM 7 184 - 191 PROGRAM 8 192 - 199 PROGRAM 9 200 - 207 PROGRAM 10 208 - 215 PROGRAM 11 216 - 223 PROGRAM 12 224 - 231 PROGRAM 13 232 - 239 PROGRAM 14 240 - 247 PROGRAM 15 248 - 255 SOUND CONTROL	MACROS & PROGRAMS
	4	5		50	0 - 255	MASTER DIMMER/PROGRAM SPEED MASTER DIMMER 0% - 100%
	5	6		51	0 - 255	STROBING SLOW - FAST
	6	7		52	0 - 41 STANDARD 42 - 84 STAGE 85 - 127 TV 128 - 170 ARCHITECTURAL 171 - 213 THEATER 214 - 255 DEFAULT TO UNIT CURVE SETTING	DIMMER CURVES
				53	0 - 255	PROGRAM DIMMING DIMMING 0% - 100%

**When Channel 49 is being used between the values of 136-247, Channel 53 can control program dimming.**

**When Channel 49 is being used between the values of 136-247, Channel 50 will control the speed of the programs.**

# DIMMER CURVE CHART



Dimming Curve Ramp Effect	0 sec Fade Time		1 sec Fade Time	
	Rise Time (ms)	Down Time (ms)	Rise Time (ms)	Down Time (ms)
Standard (default)	0	0	0	0
Stage	780	1100	1540	1660
TV	1180	1520	1860	1940
Architectural	1380	1730	2040	2120
Theatre	1580	1940	2230	2280

## **MULTIPLE UNIT POWER LINKING**

With this feature you can connect the fixtures to one another using the power cable input and output sockets.

**NOTE: USE CAUTION WHEN POWER LINKING OTHER FIXTURES AS THE POWER CONSUMPTION OF OTHER MODEL FIXTURES MAY EXCEED THE MAX POWER OUTPUT ON THIS FIXTURE! CHECK SILKSCREEN FOR MAX AMPS.**

## **FUSE REPLACEMENT**

Locate and remove the unit's power cord. Once the cord has been removed located the fuse holder located inside the power socket. Insert a flat-head screw driver into the power socket and gently pry out the fuse holder. Remove the bad fuse and replace with a new one. The fuse holder has a built-in socket for a spare fuse be sure not to confuse the spare fuse with active fuse.

## **CLEANING**

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

1. Use normal glass cleaner and a soft cloth to wipe down the outside casing.
2. 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).

## **TROUBLESHOOTING**

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.

If problems are not resolved, contact ADJ Products, LLC for service: 1-800-322-6337

## SPECIFICATIONS

- 4 x 4 COB LED high output Wash/Blinder Matrix panel
- COB Technology (Chip On Board) produces powerful, smooth RGB color mixing with rich palettes of color
- Use as Wash/Blinder or Pixel Mapped matrix for a stunning visual effect
- Great for Stage Lighting, Bands or Night Clubs
- 5 DMX channel modes: 3, 6, 7, 48 & 53 channel
- Individual Pixel controllable in 48 & 53 channel DMX modes
- 4x Pixel Flip options changes pixel orientation
- 4x Operational modes: Auto, Sound Active, Manual RGB Dimmer, Static Color, and DMX-512
- RDM Compliant (Remote Device Management)
- Built-In preset colors and programs
- Flicker Free operation (No flickering on camera)
- LED pulse and strobe effect
- Electronic Dimming: 0 - 100%
- 5 selectable Dim Curves (Standard, Stage, TV, Architectural & Theatre)
- 60-degree beam angle
- 3 & 5-pin XLR chassis mount connectors for DMX linking
- With Wired Digital Communication Network
- PowerCon AC IN/OUT to daisy chain power (up to 5 Dotz Matrix's @ 120V and 9 Dotz Matrix's @ 230V on one 20 amp circuit )
- Power Draw: 430W total (All LED's @ Full)
- 4-button DMX LCD display
- Single yoke allows fixture to be mounted
- Fan Cooled
- Light Source: 16x 30-Watt COB TRI LEDs (RGB: 3 in 1)
- 2630 LUX @2M; 730 LUX @4M (60-degree beam)
- Refresh Rate: 3.6KHz
- Auto sensing power supply: AC 100V/60Hz - 240V/50Hz
- Dimensions (LxWxH): 13.75" x 6.75" x 14.75"/ 345 x 170 x 370mm
- Weight: 18 lbs. / 7.8 kgs.
- ETL Approved



**Intertek**

4 0 1 0 7 6 5



## **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.

## **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



