

MAGNOMATIC

PRISMA DRIVER 8



User Manual

©2024 **MAGMATIC EFFECTS** all rights reserved. Information, specifications, diagrams, images, and instructions herein are subject to change without notice. **MAGMATIC EFFECTS** logo and identifying product names and numbers herein are trademarks of **MAGMATIC EFFECTS**. Copyright protection claimed includes all forms and matters of copyrightable materials and information now allowed by statutory or judicial law or hereinafter granted. Product names used in this document may be trademarks or registered trademarks of their respective companies and are hereby acknowledged. All non-MAGMATIC brands and product names are trademarks or registered trademarks of their respective companies.

MAGMATIC EFFECTS and all affiliated companies hereby disclaim any and all liabilities for property, equipment, building, and electrical damages, injuries to any persons, and direct or indirect economic loss associated with the use or reliance of any information contained within this document, and/or as a result of the improper, unsafe, insufficient and negligent assembly, installation, rigging, and operation of this product.

MAGMATIC EFFECTS | 6122 S. Eastern Ave. | Los Angeles, CA. 90040
323-582-3322 | 323-832-9142 fax | www.elationlighting.com | sales@magmaticeffects.com

Elation Professional B.V. | Junostraat 2 | 6468 EW Kerkrade, The Netherlands
+31 45 546 85 66 | +31 45 546 85 96 fax | www.elationlighting.eu | info@elationlighting.eu

Elation Professional Mexico | AC Santa Ana 30 | Parque Industrial Lerma, Lerma, Mexico 52000
+52 (728) 282-7070

DOCUMENT VERSION

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

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

Date	Document Version	Software Version ≥	DMX Channel Mode	Notes
06/17/20	1.0	1.01	8/9/12 Ch	Initial release
09/15/20	1.1	1.02	No Change	Updated primary/secondary
05/18/22	1.2	N/C	No Change	Added RDM, updated General Information
08/26/24	1.3	N/C	No Change	Updated Installation Guidelines, RDM, Safety Guidelines

CONTENTS

General Information	4
Limited Warranty (USA Only)	5
Warranty Returns (USA Only)	6
Safety Guidelines	7
Overview	9
Installation Instructions	10
Remote Device Management (RDM)	14
Control Panel	15
System Menu	16
DMX Traits	19
Maintenance Guidelines	22
Specifications	23
Dimensional Drawings	24

GENERAL INFORMATION

INTRODUCTION

This device is designed to control the following Magmatic units: **Prisma Mini Bar 20, Prisma Mini Par 20, and Prisma Mini Par 45**. Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this device. These instructions contain important safety and use information. **This product is intended to be used by professionally trained personnel only and is not suitable for private use.**

UNPACKING

Every device 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 is damaged, carefully inspect the device for damage, and be sure all accessories necessary to install and operate the device have arrived intact. In the event that damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this device to your dealer without first contacting customer support. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

BOX CONTENTS

Driver Unit (x1)

Twist Locking Power Cable (x1)

CUSTOMER SUPPORT

Contact **MAGMATIC** customer service for any product related service and support needs. Also visit forums.elationlighting.com with questions, comments, or suggestions.

ELATION SERVICE USA - Monday - Friday 8:00am to 4:30pm PST

323-582-3322 | Fax 323-832-9142 | sales@magmaticeffects.com

ELATION SERVICE EUROPE - Monday - Friday 08:30 to 17:00 CET

Voice: +31 45 546 85 63 | Fax: +31 45 546 85 96 | support@elationlighting.eu

REPLACEMENT PARTS: Please visit parts.elationlighting.com



IMPORTANT NOTICE!

THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT. DO NOT ATTEMPT ANY REPAIRS YOURSELF. DOING SO WILL VOID YOUR MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURER'S WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.

LIMITED WARRANTY (USA ONLY)

A. Magmatic Effects hereby warrants, to the original purchaser, Magmatic products to be free of manufacturing defects in material and workmanship for a period of two years (730 days) from the original date of purchase. This warranty excludes discharge lamps and all product accessories. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.

B. For warranty service, send the product only to the Magmatic Effects factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Magmatic Effects will pay return shipping charges only to a designated point within the United States. If any product is sent, it must be shipped in its original package and packaging material. No accessories should be shipped with the product. If any accessories are shipped with the product, Magmatic Effects shall have no liability what so ever for loss and/or or damage to any such accessories, nor for the safe return thereof.

C. This warranty is void if the product serial number and/or labels are altered or removed; if the product is modified in any manner which Magmatic Effects concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Magmatic Effects factory unless prior written authorization was issued to purchaser by Magmatic Effects; if the product is damaged because not properly maintained as set forth in the product instructions, guidelines and/or user manual.

D. This is not a service contract, and this warranty does not include any maintenance, cleaning or periodic check-up. During the periods as specified above, Magmatic Effects will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Magmatic Effects under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Magmatic Effects. All products covered by this warranty were manufactured after January 1, 1990, and bear identifying marks to that effect.

E. Magmatic Effects reserves the right to make changes in design and/or performance 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 the products described above. Except to the extent prohibited by applicable law, all implied warranties made by Magmatic Effects in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty periods set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said periods have 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 Magmatic Effects be liable for any loss and/or damage, direct and/or consequential, arising out of the use of, and/or the inability to use, this product.

G. This warranty is the only written warranty applicable to Magmatic Effects products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

WARRANTY RETURNS (USA ONLY)

To obtain warranty service, a Return Material Authorization (RMA) number must first be obtained from MAGMATIC. It is the Customer's responsibility to provide product proof of purchase and serial number by acceptable evidence such as an invoice copy or an approved MAGMATIC Extended Warranty Certificate ("EWC") and any relevant maintenance records at the time warranty service is sought. Failure to provide acceptable evidence of product proof of purchase or EWC and any relevant maintenance records may be cause for denial of warranty service.

Products returned for warranty service must be sent without any accessories (i.e., power, data, and safety cables, brackets, clamps, rigging hardware, frost filters, gel frames, barn doors, lenses, hoses, nozzles, rack mounting hardware, etc.), must be boxed using the original and/or suitable packaging materials (double-box and foam) that provides ample product protection for ground and/or air freight transit, and must be shipped freight pre-paid and insured to MAGMATIC in Los Angeles, CA or a MAGMATIC Authorized Service Center. The RMA number must be clearly written on the outside of the return box, and a brief description of the problem and the RMA number must be documented and included in the box.

Products returned for warranty service without an RMA number clearly marked on the outside of the package will be refused and returned to the shipper at the Customer's expense. Products returned for warranty service, which are received damaged due to inadequate and/or improper packaging and/or due to damage caused by the shipping carrier, may incur additional repair charges before warranty service begins and/or may void this warranty. If any product accessories (included and/or optional) are shipped with the product, MAGMATIC and/or the MAGMATIC Authorized Service Center shall have no liability what so ever for the loss and/or damage to any such accessories, nor the safe return thereof. If the requested warranty repairs or service (including parts replacement) are within the terms of this warranty, MAGMATIC will pay return ground transportation shipping charges to a single designated point within the United States.

SAFETY GUIDELINES

This fixture is a sophisticated piece of electronic equipment. To guarantee smooth operation, it is important to follow all instructions and guidelines in this manual. Magmatic Effects is not responsible for injury and/or damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual. Only qualified and/or certified personnel should perform installation of this fixture and only the original rigging parts included with this fixture should be used for installation. Any modifications to the fixture and/or the included mounting hardware will void the original manufacturer's warranty and increase the risk of damage and/or personal injury.



PROTECTION CLASS 1 - FIXTURE MUST BE PROPERLY GROUNDED.



THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT. DO NOT ATTEMPT ANY REPAIRS YOURSELF. DOING SO WILL VOID YOUR MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS DEVICE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURER'S WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.



**DO NOT PLUG DRIVER INTO A DIMMER PACK!
NEVER OPEN THIS DRIVER WHILE IN USE!
NEVER TOUCH FIXTURE DURING OPERATION, AS IT MAY BE HOT!
KEEP FLAMMABLE MATERIALS AWAY FROM FIXTURE!**



**FOR USE IN INDOOR / DRY LOCATIONS ONLY
DO NOT EXPOSE DEVICE TO RAIN AND/OR MOISTURE
PLACE UNIT IN A WELL VENTILATED AREA
ALLOW 40" (100CM) ABOVE AND AROUND THE UNIT FOR PROPER VENTILATION.**

IP20

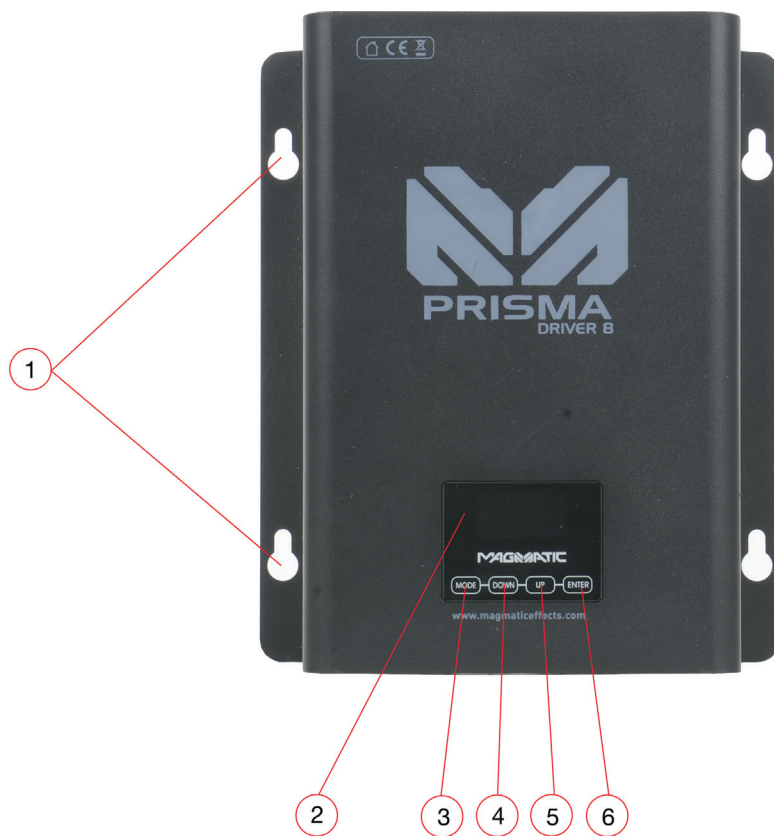
**PROTECTED AGAINST INTRUSION OF SOLID THE SIZE OF A HUMAN FINGER OR LARGER.
NOT PROTECTED AGAINST LIQUID EXPOSURE OF ANY KIND!**

SAFETY GUIDELINES

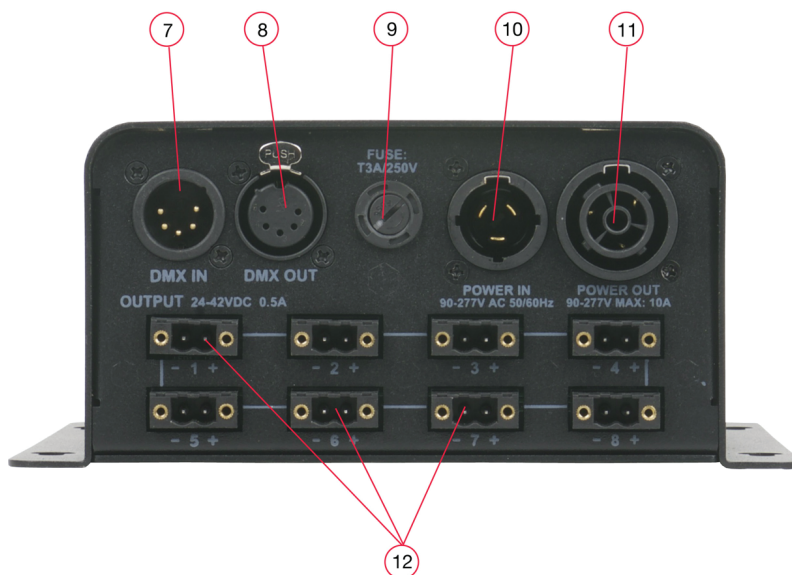
IMPORTANT SAFETY INSTRUCTIONS. READ THESE INSTRUCTIONS THOROUGHLY BEFORE USE, AND SAVE THEM FOR FUTURE REFERENCE.

- Turn OFF the power and allow approximately 15 minutes before handling the fixture.
- DO NOT shake driver and avoid brute force when installing and/or operating.
- DO NOT operate driver if the power cord is frayed, crimped, damaged and/or if any of the power cord connectors are damaged and do not insert into their sockets securely and with ease. NEVER force a power cord connector into a socket. If the power cord or any of its connectors are damaged, replace it immediately with a new one of similar power rating.
- DO NOT block any air ventilation slots.
- All fan and air inlets must remain clean and free of dust and debris.
- Allow approx. 6" (15cm) between fixture and other devices or a wall for proper cooling.
- Always disconnect driver from main power source before performing any type of service and/or cleaning procedure. Only handle the power cord by the plug end, and NEVER pull out the plug by tugging the wire portion of the cord.
- Consistent operational breaks will ensure driver will function properly for many years.
- ONLY use the original packaging and materials to transport the driver for service.

OVERVIEW



1. Mounting Points
2. Display Screen
3. Mode Button
4. Down Button
5. Up Button
6. Enter Button



7. 5-pin DMX In
8. 5-pin DMX Out
9. Fuse T3A / 250V
10. Power In
11. Power Out
12. Signal Out Ports

INSTALLATION INSTRUCTIONS



FLAMMABLE MATERIAL WARNING

Keep driver minimum 5.0 feet (1.5m) away from flammable materials and/or pyrotechnics.



ELECTRICAL CONNECTIONS

A qualified electrician should be used for all electrical connections and/or installations.



DO NOT INSTALL THE DRIVER IF YOU ARE NOT QUALIFIED TO DO SO!

Driver **MUST** be installed following all local, national, and country commercial electrical and construction codes and regulations.

Before rigging/mounting a single device or multiple interconnected devices for custom matrix designs to any metal truss/structure or placing the device(s) on any surface, a professional equipment installer **MUST** be consulted to determine if the metal truss/structure or surface is properly certified to safely hold the combined weight of the device(s), clamps, cables, and accessories.

Ambient operating temperature range is from **-4°F (-20°C) to 122°F (50°C)**. Do not operate this device when ambient temperature falls outside this range.

Device(s) should be installed in areas outside walking paths, seating areas, or area where unauthorized personnel might reach the device(s) by hand.

INSTALLATION INSTRUCTIONS

PHOENIX CONNECTORS

This driver is compatible for use with the following Magmatic lighting fixtures: Prisma Mini BAR 20, Prisma Mini PAR 45, and Prisma Mini PAR 20. A set of Phoenix connectors is included with this driver, and may be used to connect these fixtures to the driver.



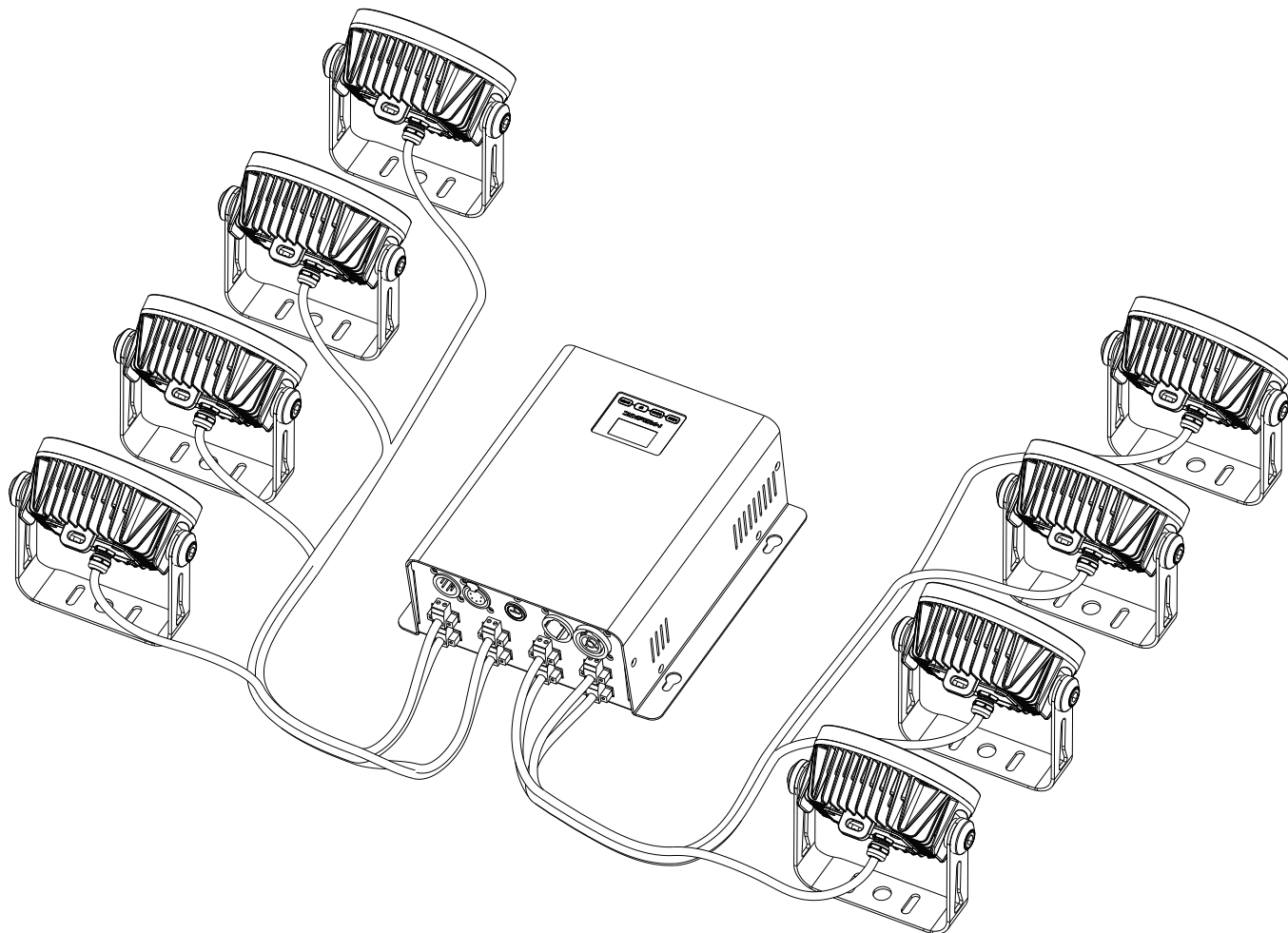
Begin by inserting the male end of the Phoenix connector into the desired signal output port on the driver, making sure that the latch on the Phoenix connector engages with the signal output port. Tighten the two screws located to each side of the wire terminals, as highlighted in the image to the above right.



Now insert the wire leads from the fixture into the wire terminals of the Phoenix connector, making sure that the bare wire lead ends have been fitted with wire end sheaths. Tighten the two screws above the wire terminals, as shown in the image at above right, to secure the wire leads in the Phoenix connector.

INSTALLATION INSTRUCTIONS

Each signal output port on the driver can be connected to a single Prisma Mini BAR 20, Prisma Mini PAR 20, or Prisma Mini PAR 45 fixture. Therefore, this driver is able to accommodate up to 8 fixtures, as shown in the illustration below.



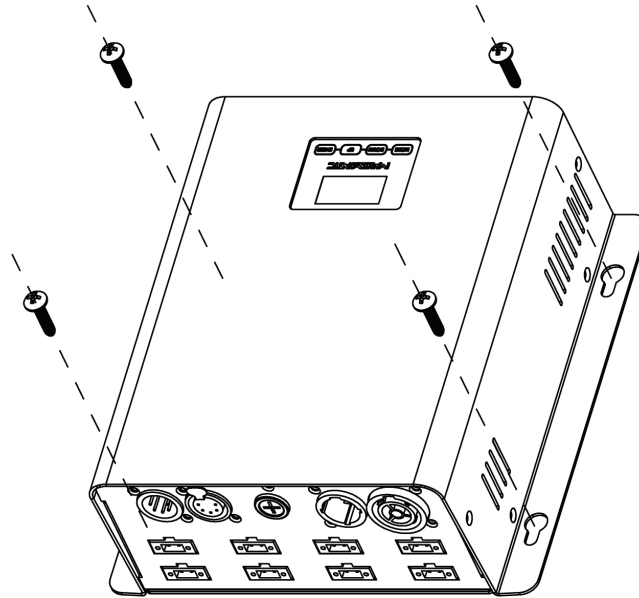
Please note the following limitations in regards to the wiring used to connect the driver to the fixtures:

- **Minimum Wire Gauge: 22 AWG**
- **Maximum Distance from Driver to Fixture: 40 feet (12m)**

INSTALLATION INSTRUCTIONS

MOUNTING

The driver may be secured to a surface or mounting rail by using the four (4) mounting points located on the mounting brackets on either side of the driver.



REMOTE DEVICE MANAGEMENT (RDM)

NOTE: In order for RDM to work properly, RDM enabled equipment must be used throughout the entire system, including DMX data splitters and wireless systems.

Remote Device Management (RDM) is a protocol that sits on top of the DMX512 data standard for lighting, allowing the DMX systems of the fixtures to be modified and monitored remotely. This protocol is ideal for instances in which a unit is installed in a location that is not easily accessible.

With RDM, the DMX512 system becomes bi-directional, allowing a compatible RDM enabled controller to send out a signal to devices on the wire, as well as allowing the fixture to respond (known as a GET command). The controller can then use its SET command to modify settings that would typically have to be changed or viewed directly via the unit's display screen, including the DMX Address, DMX Channel Mode, and Temperature Sensors.

FIXTURE RDM INFORMATION:

RDM Code	Device ID	Device Model ID	Personality ID
0x22A6	0000-FFFF	4455	8Ch (001) 9Ch (002) 12Ch (003)

Please be aware that not all RDM devices support all RDM features, and therefore it is important to check beforehand to ensure that the equipment that you are considering includes all of the features that you require.

The following parameters are accessible in RDM on this device:

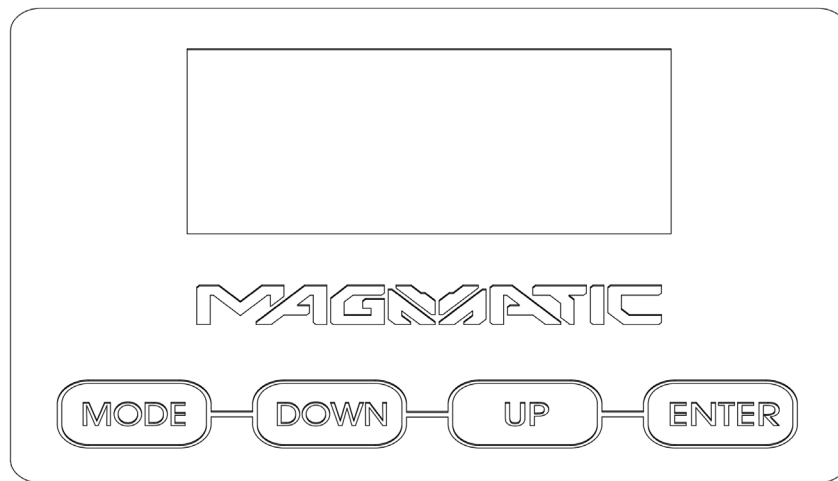
[0x0200] Sensor Definition
[0x0201] Sensor Value
[0x0080] Device Model Description
[0x0081] Manufacturer Label
[0x0082] Device Label
[0x00E0] DMX Personality
[0x00E1] DMX Personality Description
[0x0400] Device Hours
[0x0500] Display Invert

Please note that RDM parameters are controlled on the driver and not in the individual lighting fixtures themselves.

CONTROL PANEL

The fixture includes an easy to navigate system menu. The control panel (see image below) located on the fixture provides access to the main system menu, where all necessary system adjustments can be made. During normal operation, pressing MODE button once will access the fixture's main menu. Once in the main menu you can navigate through the different functions and access the sub-menus with the UP and DOWN buttons. Once you reach a field that requires adjusting, press the ENTER button to activate that field and use the UP and DOWN buttons to adjust the field. Pressing the ENTER button once more will confirm your setting. You may exit the main menu at any time without making any adjustments by pressing the MODE button.

The display screen will automatically time out after an extended period of inactivity. To unlock the display screen, simply press and hold the MODE until the display screen unlocks.



SYSTEM MENU

Magmatic Prisma Driver 8 System Menu					
Default Settings shown in Bold					
ADDRESS	Address XXX	001 - 504			
USER MODE	Basic (8Ch)				
	Standard (9Ch)				
	Extended (12Ch)				
FUNCTION	Status	Lost DMX	Black / Hold		
	LCD Set	Display	On / Off	30-second screen timeout	
		Key Lock	On / Off	Lock screen keys	
		Flash	On / Off	Display screen will flash when DMX connection is absent	
		Invert	Off / On	Flip screen display	
	Dim Mode	Standard			
		Stage			
		TV			
		Architec			
		Theatre			
		Stage 2			
		0.0s			
		0.1s			
		0.2s			
		0.3s			
		0.4s			
		0.5s			
		0.6s			
		0.7s			
		0.8s			
		0.9s			
		1.0s			
		1.5s			
		2.0s			
	3.0s				

SYSTEM MENU

Magmatic Prisma Driver 8 System Menu			
Default Settings shown in Bold			
FUNCTION (continued)	Dim Mode (continued)	4.0s	
		5.0s	
		6.0s	
		7.0s	
		8.0s	
		9.0s	
		10.0s	
	Disp Set	ADDR	
		Disp Ch	
		Secondary	Secondary Mode
	Dim Curve	Linear	
		Square	
		Inv. Squa	
		S Curve	
	Frequen	900 Hz	
		1000 Hz	
		1100 Hz	
		1200 Hz	
		1300 Hz	
		1400 Hz	
		1500 Hz	
		2500 Hz	
		4000 Hz	
		5000 Hz	
		10000 Hz	
		15000 Hz	
		20000 Hz	
		25000 Hz	
	Primary Sw	On / Off	Set device as primary unit
	DFSE	On / Off	Restore factory default settings

SYSTEM MENU

Magmatic Prisma Driver 8 System Menu				
Default Settings shown in Bold				
INFO	Time Info	Current		Current fixture run time (hours)
		Total		Total fixture run time (hours)
		Last		Clear current fixture run time
		Password		"050" or "060"
		Clear	On / Off	
	Model Inf	DRIVER 8		
	Software	Vx.xx		
TEST	Man Ctrl	LED1	000 - 255	
		LED2	000 - 255	
		LED3	000 - 255	
		LED4	000 - 255	
		LED5	000 - 255	
		LED6	000 - 255	
		LED7	000 - 255	
		LED8	000 - 255	
		Dimmer	000 - 255	
		Strobe	000 - 255	
	Calibrat	LED1	050 - 255	
		LED2	050 - 255	
		LED3	050 - 255	
		LED4	050 - 255	
		LED5	050 - 255	
		LED6	050 - 255	
		LED7	050 - 255	
		LED8	050 - 255	

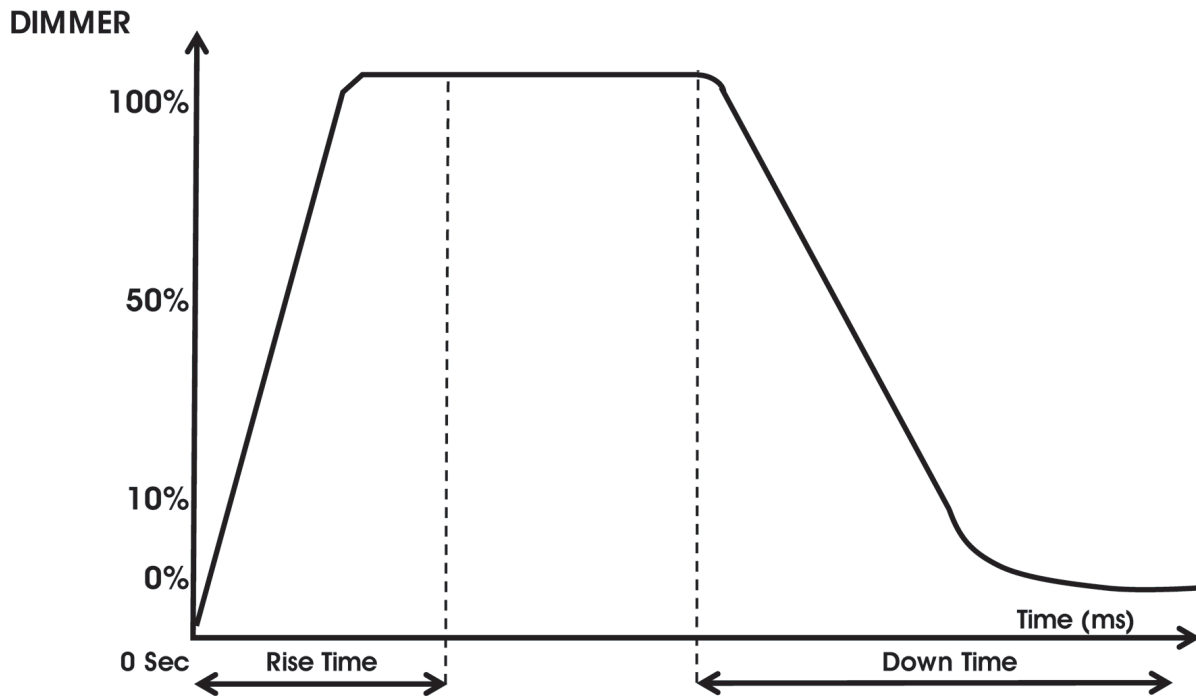
DMX TRAITS

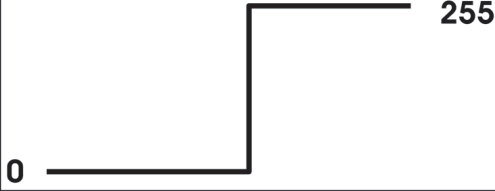
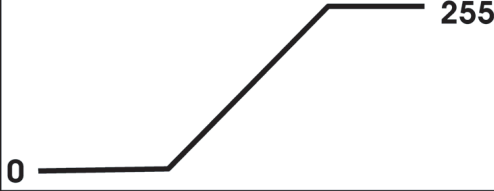
CHANNEL			DMX VALUES	FUNCTION
8CH	9CH	12CH		
1	1	1	000 - 255	LED Signal Output 1
2	2	2	000 - 255	LED Signal Output 2
3	3	3	000 - 255	LED Signal Output 3
4	4	4	000 - 255	LED Signal Output 4
5	5	5	000 - 255	LED Signal Output 5
6	6	6	000 - 255	LED Signal Output 6
7	7	7	000 - 255	LED Signal Output 7
8	8	8	000 - 255	LED Signal Output 8
		9	000 - 255	Master Dimmer
		10	000 - 255	Dimmer Fine
		11		Strobe
			000 - 031	Closed
			032 - 063	Open
			064 - 095	Strobe, slow to fast
			096 - 127	Open
			128 - 159	Pulse, slow to fast
			160 - 191	Open
			192 - 223	Random Strobe, slow to fast
			224 - 255	Open
	9	12		Dim Mode
			000 - 020	Standard
			021 - 040	Stage
			041 - 060	TV
			061 - 080	Architectural
			081 - 100	Theatre
			101 - 120	Stage 2

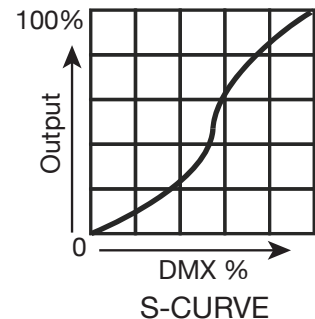
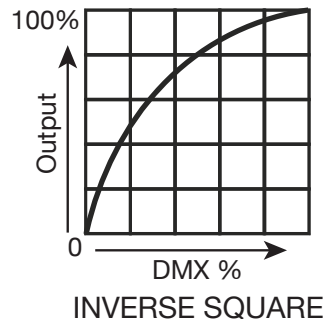
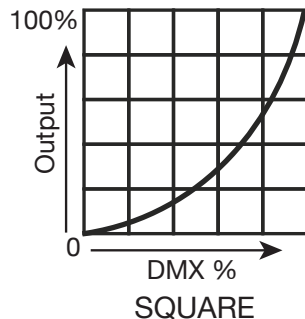
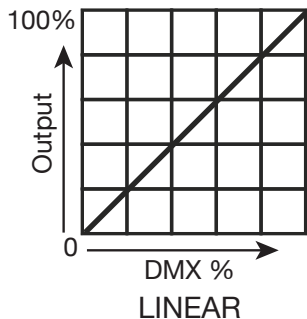
DMX TRAITS

CHANNEL			DMX VALUES	FUNCTION
8CH	9CH	12CH		
	9	12		Dimmer Delay Time
			121	0.0s
			122	0.1s
			123	0.2s
			124	0.3s
			125	0.4s
			126	0.5s
			127	0.6s
			128	0.7s
			129	0.8s
			130	0.9s
			131	1.0s
			132	1.5s
			133	2.0s
			134	3.0s
			135	4.0s
			136	5.0s
			137	6.0s
			138	7.0s
			139	8.0s
			140	9.0s
			141	10.0s
			142 - 255	Default (0.1s)

DIMMER MODES AND CURVES



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
Stage 2	0	1100	0	1660



MAINTENANCE GUIDELINES



DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!

CLEANING

Frequent cleaning is recommended to ensure proper function and an extended life. The frequency of cleaning depends on the environment in which the driver operates: damp, smoky, or particularly dirty environments can cause greater accumulation of dirt on the driver. Clean the external surface periodically with a soft cloth to avoid dirt/debris accumulation.

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

MAINTENANCE

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

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

Please refer to the following points during routine inspections:

- A detailed electrical check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition in order to 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 housing, rigging hardware, and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust or liquids to enter into the driver. Damaged rigging points or unsecured rigging could cause the driver to fall and seriously injure a person(s).
- Electric power supply cables must not show any damage, material fatigue, or sediments.

NEVER remove the ground prong from the power cable.

SPECIFICATIONS

CONSTRUCTION

Rugged Aluminum Housing
Easy Keyhole Slots for Wall/Surface Mounting

CONTROL

Multiple DMX Channel Modes
Onboard 4 Button Touch Control Panel
DMX-512 and RDM Protocol Support

CONNECTIONS

8x 2pin Bare Wire Block Terminals (8 PRISMA MINI fixtures max)
Locking 5pin XLR Connector In/Out
IP65 Locking Power Connector In/Out
With Wired Digital Communication Network

SIZE / WEIGHT

Length: 8.9 in. (225mm)
Width: 8.4 in. (212mm)
Vertical Height: 3.5 in. (88mm)
Weight: 5.7 lbs. (2.6 kg)

ELECTRICAL

AC100-240V 50-60Hz
48VDC 8.3A
167W Max Power Consumption

THERMAL

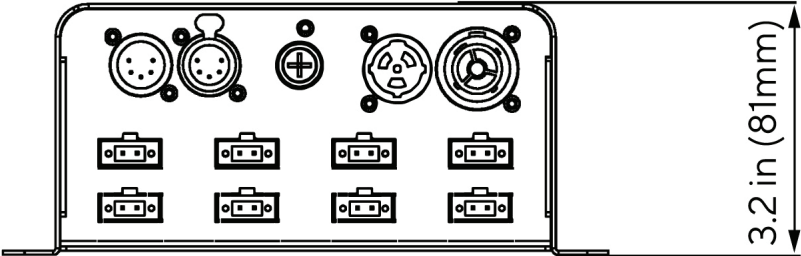
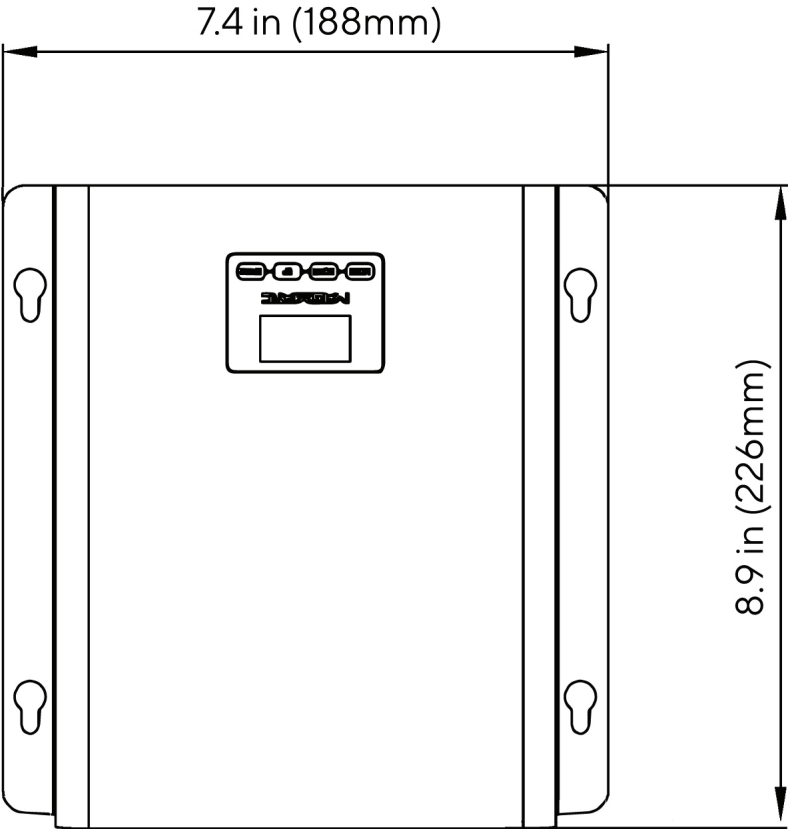
Maximum Temperature (Ambient): 113° F (45° C)
Minimum Temperature (Ambient): 14° F (-10° C)

APPROVALS / RATINGS

CE | cETLus | IP20



DIMENSIONAL DRAWINGS



This page intentionally left blank.

