



# eNODE 8 PRO™

user manual

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#### DOCUMENT VERSION

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

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

Date	Document Version	Software Version ≥	Notes	
02/12/18	2	2.1	Updated release. Supports Art-Net 4 and sACN protocols.	
03/12/18	3	2.2	Added different Sub-Net Mask options.	
07/11/18	4	2.3	Added adjustable MAC address setting.	

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# **GENERAL INFORMATION**

#### INTRODUCTION

This device has been designed to perform reliably for years when the guidelines in this booklet are followed. Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this unit. These instructions contain important information regarding safety during use and maintenance.

#### **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 appears to be damaged, carefully inspect your unit for damage and be sure all accessories necessary to operate the unit 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 unit 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.

#### **CUSTOMER SUPPORT**

Elation Professional provides a customer support line to provide set up help and answer any set up or operation questions. You may also visit us on the web at <a href="https://www.elationlighting.com">www.elationlighting.com</a> for any comments or suggestions. For service related issue please contact Elation Professional.

ELATION SERVICE USA - Monday - Friday 8:00am to 5:00pm PST

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#### **WARRANTY REGISTRATION / RETURNS**

Please register online: <a href="http://www.elationlighting.com/Login.aspx">http://www.elationlighting.com/Login.aspx</a> to validate your purchase. All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. 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. Elation Professional hereby warrants, to the original purchaser, Elation Professional products to be free of manufacturing defects in material and workmanship for a period of two years (730 days), and Elation Professional product rechargeable batteries to be free of manufacturing defects in material and workmanship for a period of six months (180 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 Elation Professional factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Elation Professional 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, Elation Professional 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 Elation Professional concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Elation Professional factory unless prior written authorization was issued to purchaser by Elation Professional; 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, Elation Professional 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 Elation Professional under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Elation Professional. All products covered by this warranty were manufactured after January 1, 1990, and bare identifying marks to that effect.
- E. Elation Professional 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 Elation Professional 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 Elation Professional 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 Elation Professional products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

## SAFETY GUIDELINES

This device is a sophisticated piece of electronic equipment. To guarantee a smooth operation, it is important to follow all instructions and guidelines in this manual. Elation Professional is not responsible for injury and/or damages resulting from the misuse of this device due to the disregard of the information printed in this manual. Only qualified and/or certified personnel should perform installation of this device and only the original rigging parts included with this device should be used for installation. Any modifications to the fixture 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 - DEVICE MUST BE PROPERLY GROUNDED ELECTRICAL CONNECTIONS BY QUALIFIED PERSONNEL ONLY!



THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT. DO NOT ATTEMPT ANY REPAIRS YOURSELF; DOING SO WILL VOID YOUR MANUFACTURES WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS DEVICE 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 DEVICE INTO A DIMMER PACK!

NEVER OPEN THIS DEVICE WHILE IN USE!

DO NOT EXPOSE DEVICE TO HEAT OR FIRE!

DO NOT EXPOSE DEVICE TO HIGH HUMIDITY!

AMBIENT TEMPERATURES: MAX 45°C/113°F | MIN 2°C/35°F

UNPLUG POWER BEFORE SERVICING DEVICE!

DO NOT EXPOSE DEVICE TO FLAMMABLE MATERIALS!

DO NOT EXPOSE DEVICE TO EXTREME VIBRATIONS!

KEEP FLAMMABLE MATERIALS AWAY FROM FIXTURE!



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

DO NOT EXPOSE DEVICE TO RAIN AND MOISTURE!

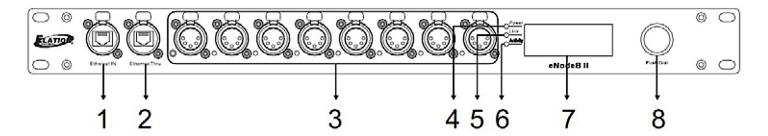
INDOOR / DRY LOCATIONS USE ONLY!

**DO NOT** operate device if the power cord has become frayed, crimped, damaged and/or if any of the power cord connectors are damaged and do not insert into the device securely with ease. **NEVER** force a power cord connector into the device. 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 never blocked. Always disconnect device from main power source before performing any type of service and/or cleaning procedure. Only handle the power cord by the plug end, never pull out the plug by tugging the wire portion of the cord.

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

# OVERVIEW





- 1. Ethernet Input
- 2. Ethernet Thru Output
- 3. 5pin DMX Assignable Input or Output Ports 1-8 (with LED indicators)
- 4. Power ON LED Indicator
- 5. Network Link LED Indicator
- 6. Network Activity LED Indicator
- 7. LCD Control Menu Display
- 8. Encoder Wheel
- 9. Power Switch (On/Off)
- 10. Fuse
- 11. powerCON Cable Input

#### **INCLUDED ITEMS**

**Power Cable** 

# INSTALLATION



# FLAMMABLE MATERIAL WARNING

Keep device at least 5.0 feet (1.5m) away from any flammable materials, decorations, pyrotechnics, etc.



# ELECTRICAL CONNECTIONS

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

# DO NOT INSTALL THE DEVICE IF YOU ARE NOT QUALIFIED TO DO SO! DO NOT CONNECT DEVICE TO A CIRCULAR NETWORK! DOING SO WILL ADVERSELY IMPACT THE PERFORMANCE OF THE ENTIRE NETWORK SYSTEM!

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

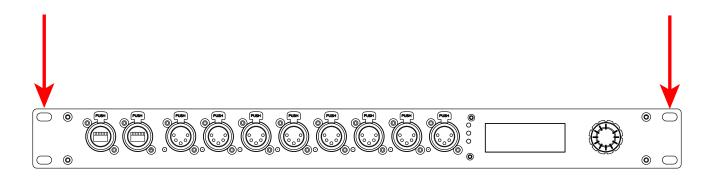
Ambient operating temperature range for this device is 35° to 113°F. (2° to 45°C)

**DO NOT** use the device under or above this temperature range.

**DO NOT** install the device in areas were unauthorized personnel might reach the device.

#### SINGLE 19-INCH RACK SPACE INSTALLATION

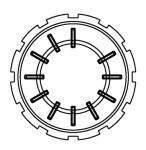
The unit can be installed in a standard single space 19-inch rack space, using the set of (2) mounting holes located on each side. (Rack screws not included)



## SYSTEM MENU

The LCD control panel display located on the front of the device provides access to the main system menus where all necessary system adjustments are made to the device. Pressing the ENCODER WHEEL once will access the main system menus. Rotate the ENCODER WHEEL clockwise or counterclockwise to scroll through the different system menus then push the ENCODER WHEEL to select a desired menu. Rotate the ENCODER WHEEL clockwise or counterclockwise to navigate the available setting options for each sub-menu. Setting changes are made using a combination of rotating and pushing the ENCODER WHEEL.

Device Name eNode 8 Pro



#### **STARTUP VIEWS**

There are four status screens which will display when the device is connected to a power source. Rotate the **ENCODER WHEEL** to scroll through the screens.

#### **Device Name**

This displays the current name (16 characters max)

# **Device Name**

eNode 8 Pro

#### **MAC Address (ONLY VISIBLE WITH Version 2.3)**

This displays the current MAC Address

Press and hold **ENCODER WHEEL** for 3 seconds to change MAC Address.

# MAC Address

96:78:31:37:32:33

#### **IP Address**

This displays the current IP Address

# **IP Address**

002.010.010.002

#### **Device ID**

This displays the current Device ID

# **Device ID**

001

#### **Port Status**

This displays the status of each port (A/B = Network Ports | 1-8 DMX Ports)

	Port Status								
Α	В	1	2	3	4	5	6	7	8
Х	х	х	х	х	х	х	х	х	х

O = DMX Output

I = DMX Input

√ = Network Active

 $\times$  = Network Inactive

H = Hold

B = Blackout

- = Null

		ELATION eNode	e 8 PRO SYSTEM MEN	NO .		
	Fe	atures subject to chan	ge without any prior writ	tten notice.		
		Supports So	ftware Version: ≥ V1.7			
MAIN MENU	SUB MENU	OPTIONS / VALUES	(Default Settings in <b>BOLD</b> )	DESCRIPTION		
1.Rename Device	Rename	eNode 8 Pro		Select 1-16 Characters to Rename Device		
2.Set IP Address	IP Address	002.010.010.002		Set Device IP Address  Each IP Address MUST be unique		
	Netmask	A. 255.000.000.000				
3.Set Netmask		B. 255.255.000.000		Select Netmask Address		
		C. 255.255.255.000				
	1.DMX Port1	1.Port Status	Output, Input, Disabled	Select DMX Port Status		
	2.DMX Port2	2.Port Mode	Single, HTP, LTP, Backup, RDM, zero	Select DMX Port Mode RDM not supported in this software release		
	3.DMX Port3 4.DMX Port4	3.Framertf/fs	<b>040</b> , 010, 015, 020, 025, 030, 035	Select DMX Frame Rate Only available for PORT STATUS = OUTPUT		
	5.DMX Port5	4.Net	<b>001</b> - 128	Set Sub Net		
4.Set DMX Port		5.Principal	<b>001</b> -256	Set Principal Universe		
	6.DMX Port6	6.Secondary	<b>009,</b> 001-256	Set Secondary Universe		
	7.DMX Port7	7.Resend	<b>Disabled</b> , 001-256	Enable Resend		
	8.DMX Port8	8.DMX State	Hold, Null, Blackout	Set How Connected Devices React to a Loss of DMX Signal		
	9.Exit	9.Display Mode	<b>Dec/256</b> , Hex/F.F	Select Binary or Hex Display Mode		
		10.Exit		Exit Set DMX Port Menu		
5.Set ID NO.	Device ID	<b>001</b> , 000-255		Select Device ID		
C Cat I CD Daaldight	LCD Backlight	1.ON		Backlight Stays ON Always		
6.Set LCD Backlight		2.OFF		Backlight Auto Turns OFF After 30 Seconds		
	User Preset	1.8 X Input		8 Ports DMX IN		
		2.DMX Split 1-7		1 Port=DMX IN and 7 Ports=DMX OUT		
		3.DMX Split 1-3		2 Sets: 1 Port=DMX IN and 2 Ports-DMX OUT		
		4.ArtNet Clone		Art-Net IN Ports 1-4, Clone Art-Net OUT Ports 5-8		
		5.Isolated mode		NO DMX Input Signals Passed to Any Outputs		
7.User Preset		6.Output HTP		Highest Takes Precedence		
		7.Output LTP		Lowest Takes Precedence		
		8.Output Backup		Backup Mode		
		9.Factory Settings		Reset All Settings to Factory Default NOTE: ALL SETTINGS RESET TO DEFAULT!		
		10.Exit		Exit User Preset Menu		
8.Version	Version	V1.x		Software Versions		
9.Exit			Exit Main Menu			

#### ELATION eNode 8 PRO SYSTEM MENU Features subject to change without any prior written notice. **Supports Software Version:** ≥ **V2.2 SUB MENU OPTIONS / VALUES** (Default Settings in **BOLD**) **MAIN MENU DESCRIPTION** 1.Rename Device eNode 8 Pro Select 1-16 Characters to Rename Device Rename Set Device IP Address 2.Set IP Address IP Address 002.010.010.002 Each IP Address MUST be unique 255.000.000.000 255.128.000.000 255.192.000.000 255.224.000.000 Select Class A Netmask Address Class A 255.240.000.000 255.248.000.000 255.252.000.000 255.254.000.000 255.255.000.000 255.255.000.000 255.255.128.000 255.255.192.000 3.Set Netmask Netmask 255.255.224.000 Class B 255.255.240.000 Select Class B Netmask Address 255.255.248.000 255.255.252.000 255.255.254.000 255.255.255.000 255.255.255.000 255.255.255.128 255.255.255.192 Class C 255.255.255.224 Select Class C Netmask Address 255.255.255.240 255.255.255.248 255.255.255.252 Output, Input, 1.Port Status Select DMX Port Status Disabled Single, HTP, LTP, 2.Port Mode 1.DMX Port1 Backup, RDM, zero Port Status=Output 2.Port Mode 2.DMX Port2 Normal, Backup Port Status=Input Select DMX Port Mode 3.DMX Port3 Single, HTP, LTP, 2.Port Mode Backup, RDM, normal, Port Status=Disabled 4.DMX Port4 Select DMX Frame Rate **040**, 010, 015, 020, 4.Set DMX Port 5.DMX Port5 3. Framertf/fs 025, 030, 035 Only available for PORT STATUS = OUTPUT 6.DMX Port6 4.Net **001** - 128 Set Sub Net 5.Principal 001-256 Set Principal Universe 7.DMX Port7 009, 001-256 6.Secondary Set Secondary Universe 7.Resend **Disabled**, 001-256 **Enable Resend** 8.DMX Port8 Set How Connected Devices React to a Loss 8.DMX State Hold, Null, Blackout 9.Exit of DMX Signal 9.Display Mode Dec/256, Hex/F.F Select Binary or Hex Display Mode 10.Exit Exit Set DMX Port Menu

ELATION eNode 8 PRO SYSTEM MENU							
Features subject to change without any prior written notice.							
Supports Software Version: ≥ V2.2							
MAIN MENU	SUB MENU	OPTIONS / VALUES (Default Settings in BOLD)	DESCRIPTION				
5.Set ID NO.	Device ID	<b>001</b> , 000-255	Select Device ID				
6.Set LCD Backlight	LCD Backlight	1.ON	Backlight Stays ON Always				
0.3et LOD Backlight		2.OFF	Backlight Auto Turns OFF After 30 Seconds				
	User Preset	1.8 X Input	8 Ports DMX IN				
		2.DMX Split 1-7	1 Port=DMX IN and 7 Ports=DMX OUT				
		3.DMX Split 1-3	2 Sets: 1 Port=DMX IN and 2 Ports-DMX OUT				
		4.ArtNet Clone	Art-Net IN Ports 1-4, Clone Art-Net OUT Ports 5-8				
7.1. 5		5.Isolated mode	NO DMX Input Signals Passed to Any Outputs				
7.User Preset		6.Output HTP	Highest Takes Precedence				
		7.Output LTP	Lowest Takes Precedence				
		8.Output Backup	Backup Mode				
		9.Factory Settings	Reset All Settings to Factory Default NOTE: ALL SETTINGS RESET TO DEFAULT!				
		10.Exit	Exit User Preset Menu				
8.Version	Version	V2.x	Software Versions				
9.Exit			Exit Main Menu				

# SETTING DMX PORTS

#### **PORT STATUS**

**INPUT -** Any of the (8) ports can be set as INPUT. When a port is set as INPUT, only the principle universe is available, and the PORT MODE can set to NORMAL or BACKUP.

OUTPUT - Any of the (8) ports can be set as OUTPUT. The PORT MODE can be set to

**DISABLED -** Disables selected Port and will not send or receive any data.

►All Port Mode options can be selected for a Disabled Port; however, none will function.

#### **PORT MODES**

#### NORMAL [ONLY available when Port Status = INPUT]

Selected DMX Port will send any valid DMX data to the network (and internal use) using the selected Art-Net Universe.

#### **BACKUP [ONLY available when Port Status = INPUT]**

Selected DMX Port will not send any data if the selected Art-Net Universe is present on the network. If the selected universe becomes unavailable for several seconds and there is valid DMX input data present, the device will send the DMX data until data from the selected Art-Net Universe begins sending data again.

#### SINGLE [ONLY available when Port Status = OUTPUT]

Sets selected Port to send the DMX values of the selected Principle Art-NET Universe. DMX output is enabled the first time it detects the DMX universe on the network or DMX data input.

# HTP (Highest Takes Precedence) [ONLY when Port Status = OUTPUT]

Selected Port merges data from the Principle and Secondary Universes and outputs the one with the higher value.

- ► Can only be selected for DMX Ports with a Port Status = OUTPUT
- ► Make sure RESEND option in System Menu is NOT set to Disabled or data will not be sent to the network.

# LTP (Latest Takes Precedence) [ONLY when Port Status = OUTPUT]

Selected Port outputs the latest channel activity from the Principle and Secondary Universes on a channel-by-channel basis.

- ▶Can only be selected for DMX Ports with a Port Status = OUTPUT
- ► Make sure RESEND option in System Menu is NOT set to Disabled or data will not be sent to the network.

## RDM (Remote Device Management) [ONLY when Port Status = OUTPUT]

# **ZERO [ONLY when Port Status = OUTPUT]**

Selected DMX Port sends a DMX test signal with all channels at 0%.

# TECHNICAL SPECIFICATIONS

#### **CONTROL / CONNECTIONS**

8-Universes

Art-Net, sACN, and RDM Compatible DMX Control Systems

DMX Bilateral Conversion

sACN Auto-Detection

Auto MDI/MDIX

DMX Splitter Function (1 Input / 3 Outputs)

Broadcast Mode (One Device Transmits Same Signal to Other Connected Devices)

Backup Mode

Push Button Configuration Encoder Wheel

LCD Control Menu Display & LED Indicators

- (2) RJ45 etherCON TCP/IP 10/100M Inputs
- (8) Universal 5pin DMX Ports (can be set as Input or Output)

powerCON Power In

#### SIZE / WEIGHT

Length: 19.0" (482mm) Width: 6.3" (160mm)

Vertical Height: 1.7" (44mm) Weight: 4.6 lbs. (2.1kg)

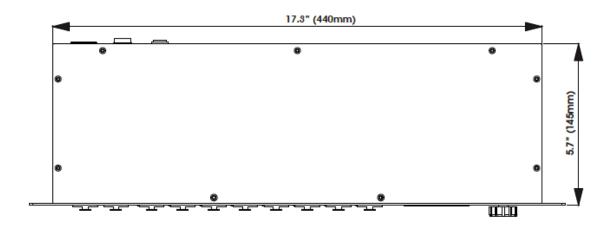
#### **ELECTRICAL / THERMAL**

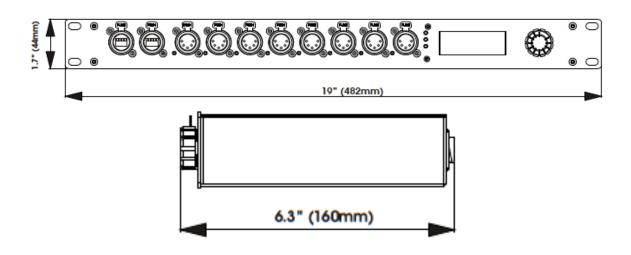
AC 100-240V - 50/60Hz 7W Max Power Consumption 35.6°F (2°C) to 113°F (45°C)

#### **APPROVALS / RATINGS**



#### **DIMENSIONAL DRAWINGS**





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

# OPTIONAL ACCESSORIES

ORDER CODE	ITEM	
CAT005	5 ft. (1.5m) CAT6 EtherCON PRO Cable	
AC5PDMX5PRO	5 ft. (1.5m) 5pin PRO DMX Cable	
	Additional Cable Lengths Available	