

eNODE 4™

user manual 1.0

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GENERAL INFORMATION

INTRODUCTION

Congratulations, you have just purchased one of the most innovative and reliable ArtNet to DMX converter on the market today! The **eNODE 4™** 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

Thank you for purchasing the **eNODE 4™** by Elation Professional®. Every **eNODE 4™** 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.

BOX CONTENTS

- (1) Power Cable
- Manual & Warranty Card

MANUAL UPDATES

Please check www.elationlighting.com **for the latest revision/update of this manual.**

CUSTOMER SUPPORT

Elation Professional® provides a customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at www.elationlighting.com for any comments or suggestions. For service related issue please contact Elation Professional®. Service Hours are Monday through Friday 8:00 a.m. to 5:00 p.m. PST.

Voice: 323-582-3322 **Fax: 323-832-9142**

E-mail: support@elationlighting.com Forum: www.ElationLighting.com/forum

WARRANTY REGISTRATION

The **eNODE 4™** carries a two-year (730 days) limited warranty. Please fill out the enclosed warranty card to validate your purchase. All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. 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 at 323-582-3322.

IMPORTANT NOTICE!

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 fixture and/or the disregard of safety and general user instructions found in this user manual void the manufactures warranty and are not subject to any warranty claims and/or repairs.

2-YEAR LIMITED WARRANTY

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) from the date of purchase. 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 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, Elation Professional® shall have no liability what so ever 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 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 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, 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 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 Elation Professional® 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 Elation Professional® 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 Elation Professional® Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

SAFETY INSTRUCTIONS



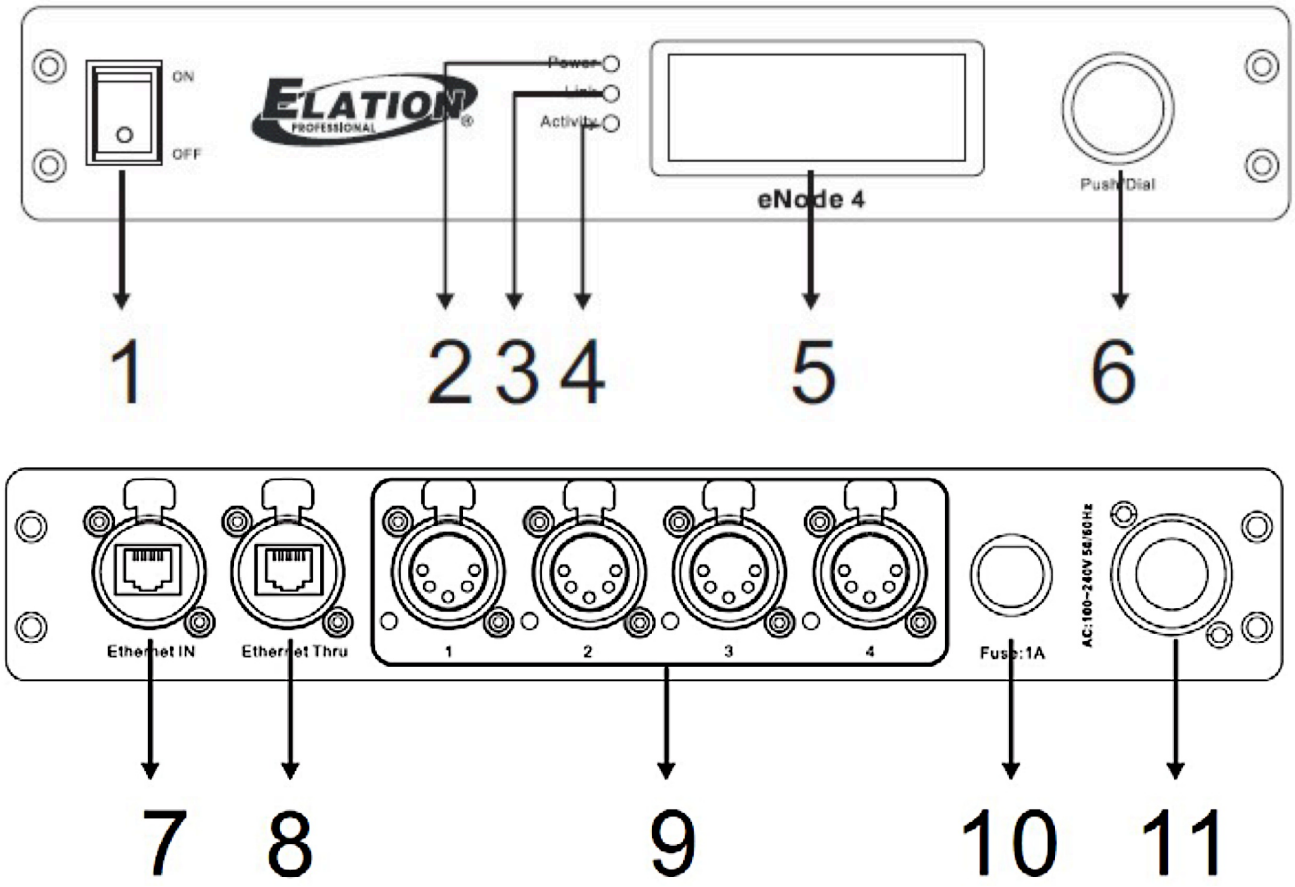
The **eNODE 4™** is an extremely sophisticated piece of electronic equipment. To guarantee a smooth operation, it is important to follow the guidelines in this manual. The manufacturer of this device will not accept responsibility for damages resulting from the misuse of this device due to the disregard of the information printed in this manual.



This device falls under **PROTECTION CLASS 1**. It's essential this device is grounded properly, and only qualified personnel perform all electrical connections.

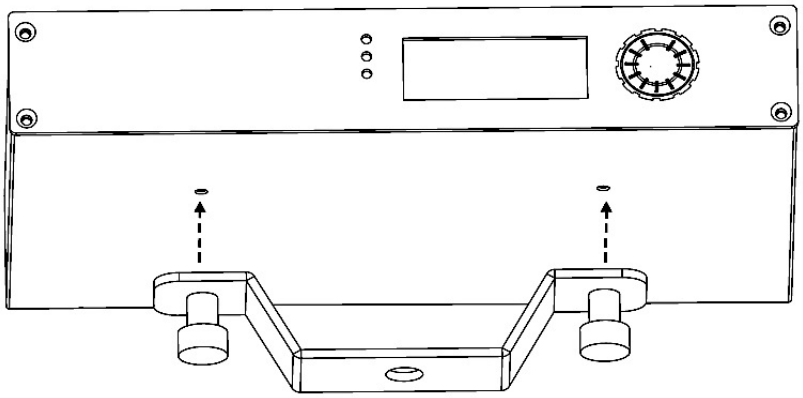
- For proper operation, only qualified and certified personnel should perform installation of this device. Do not attempt installation and/or operation without proper knowledge how to do so. Any modifications to this device will void the original manufactures warranty and increase the risk of damage and/or personal injury.
- Air inlets must remain clean and never blocked. Device must be installed in a location with adequate ventilation. Allow approx. 6" (15cm) between this device and other devices or a wall for proper cooling.
- Always disconnect 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 plug by tugging wire the cord.
- Do not operate device if the power cord has become frayed, crimped and/or damaged. If the power cord is damaged, replace it immediately with a new one of similar power rating.
- **NEVER OPEN DEVICE WHILE IN USE!**
- This device is designed for **INDOOR / DRY LOCATIONS ONLY**.
- **DO NOT** operate device in locations with temperatures **above 113°F (45°C) or below than 35.6° F (2° C)**.
- **DO NOT** operate device in locations with excessive dryness or humidity; ideal conditions are between **35% and 80% RH (Relative Humidity)**.
- **DO NOT** operate device in areas subject to extreme vibrations or bumps.
- Please make sure there are **NO FLAMMABLE MATERIALS** close to this device while operating, to prevent any fire hazard.
- Do not permit operation by persons who are not qualified for operating this type device. Most damages are the result of operations by nonprofessionals.
- Please use the original packaging and materials to transport this device in for service.

DEVICE OVERVIEW



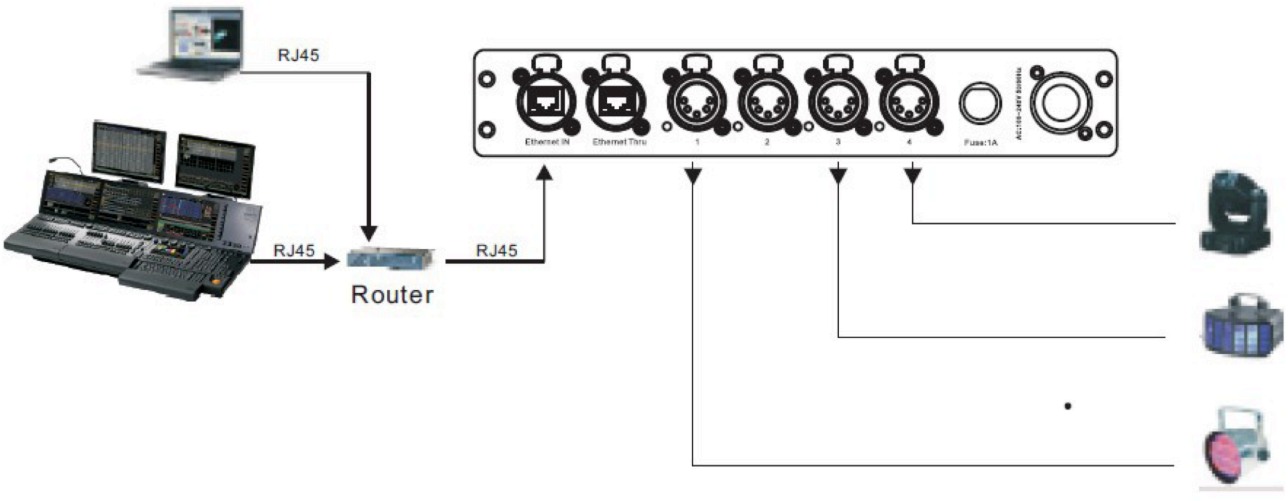
1. **Power Switch -** Power ON/OFF
2. **Power LED -** Indicates Power is ON
3. **LINK LED -** Indicates Network Connection Status
4. **ACTIVITY LED -** Indicates Network Activity Status (flash when data is transmitting)
5. **LCD Menu / Function Display -** Displays Menus And Functions
6. **MENU Button / Rotary Dial -** Used To Enter Main Menu And Select Functions
7. **RJ45 Ethernet Connector -** Network Connection
8. **RJ45 Ethernet Connector -** Network Connection
9. **5pin DMX PORTS 1-4 (with LED Indicators) -** DMX Input Or DMX Output Ports
10. **Fuse -** Fuse Holder
11. **PowerCON IN -** Power Connection To Power Source

MOUNTING BRACKET INSTALLATION

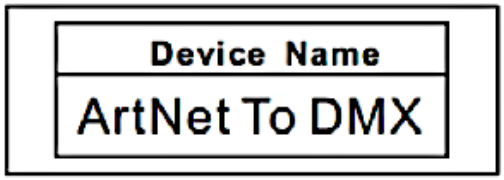


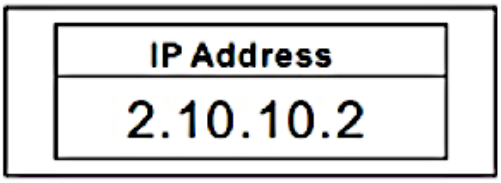
OPERATION GUIDE

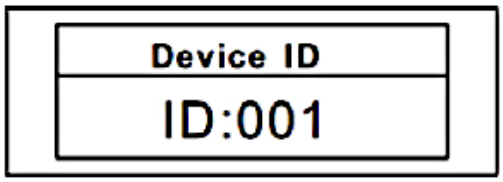
In today's demanding lighting control designs, DMX channel requirements can number into the thousands. And with the increased use of LED fixtures and video mapping, it is now necessary to have extremely fast DMX response and well-balanced network load management. The **ENODE 4™** not only provides instant DMX Channel response but also lowers your network load. It allows you to effectively increase the number of DMX universes and easily place them remotely on any TCP/IP Ethernet network. In addition, the **ENODE 4™** can be used as a DMX Merger, DMX Splitter, and Backup Device.

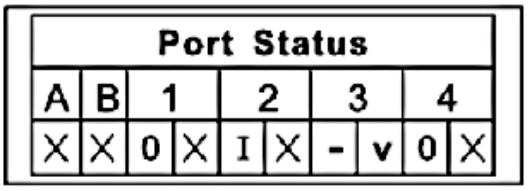


The **ENODE 4™** has an easy to navigate system menu, which is detailed in the next section.









START UP VIEWS

There are (4) different menu views (as illustrated above) to select when the device is initially powered on. You can scroll through the (4) menu views by turning the rotary wheel. All of the options can be changed in the main menu.

PORT STATUS

A/B = Network Port

1-4 = DMX ports 1-4

X = NO Network Connected / Inactive Port

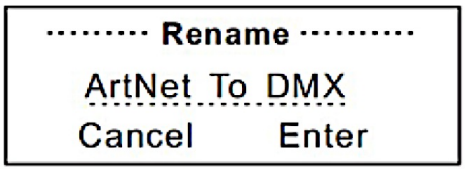
√ = Network Connected / Active Port

O = DMX Output

I = DMX Input

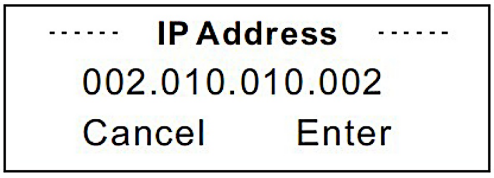
RENAME DEVICE

Enter into the main menu by pressing the rotary wheel, and then turn the rotary wheel to select the **Rename Device** option and then press the rotary wheel to confirm your selection. Now you can rename the device by pressing and turning the rotary wheel. Confirm your selection and move to next option by pressing the rotary wheel.



SET IP ADDRESS

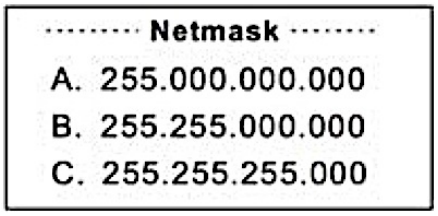
Enter into the main menu by pressing the rotary wheel, and then turn the rotary wheel to select the **Set IP Address** option and then press the rotary wheel to confirm your selection. Now you can set the IP address by pressing and turning rotary wheel. Confirm your selection and move to next option by pressing the rotary wheel.



Please Note: Each IP address must be unique.

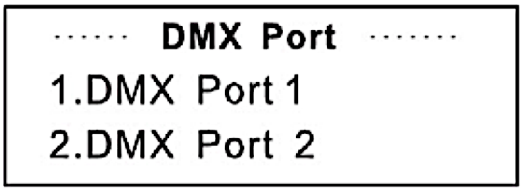
SET NETMASK

Enter into the main menu by pressing the rotary wheel, and then turn the rotary wheel to select the **Netmask** option and then press the rotary wheel to confirm your selection. Now you can set the Netmask by pressing and turning rotary wheel. Confirm your selection and move to next option by pressing the rotary wheel.

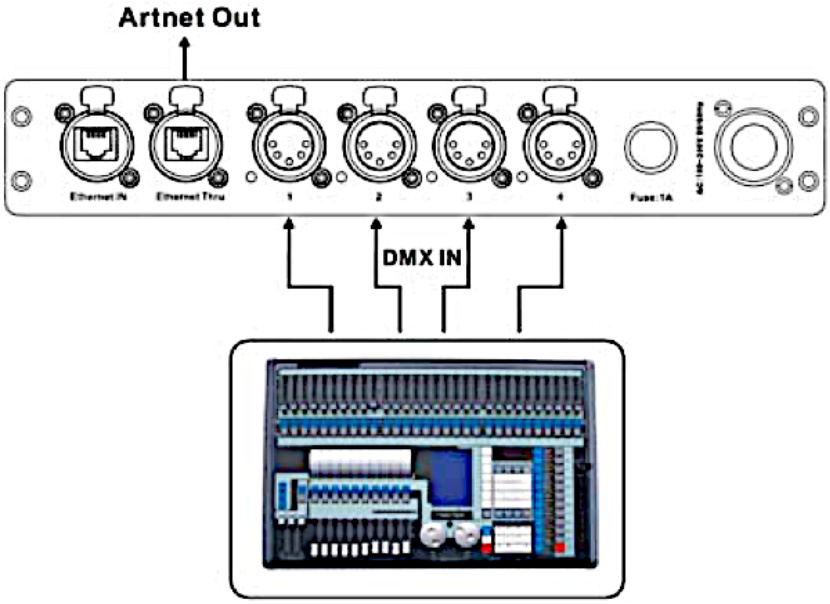


SET DMX PORT

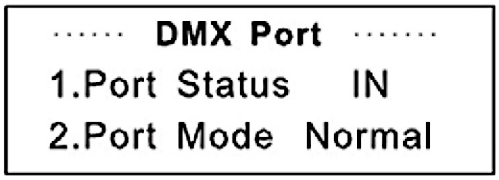
Enter into the main menu by pressing the rotary wheel, and then turn the rotary wheel to select the **DMX Port** option and then press the rotary wheel to confirm your selection. Now you can set the parameter of the each DMX port by pressing and turning the rotary wheel.



1-4 DMX PORT INPUT



You can set the **Port Status** of any the **DMX Ports 1-4** as **Input (IN)**. Then only the principle universal is available. It can be set within the range **0.0 - F.F**. When the **DMX Port** is set as **IN**, the **Port Mode** can only be set as **Normal** or **Backup**.



Port Mode = Normal

Device will send data received from **DMX IN** port to the universal of network regardless if there is any data in the universal of the network.

Port Mode = Backup

Device will NOT send any data to the universal of network. Only when the universal of network is no any data, will the device receive the data from DMX IN port and send it to the universal of network simultaneously.

1-4 DMX PORT OUPUT

DMX Port	
1.Port Status	OUT
2.Port Mode	HTP

DMX Port	
1,Port Status	OUT
2,Port Mode	LTP

DMX Port	
1.Port Status	OUT
2.Port Mode	Zero

DMX Port	
1.Port Status	OUT
2.Port Mode	Single

You can set the **Port Status** of any the **DMX Ports 1-4** as **Output (OUT)**. When the **Port Status** is set to **(OUT)**, the **Port Mode** can be set to one of the following (4) modes:

Zero = the port sends out a DMX test signal with all channels at 0%

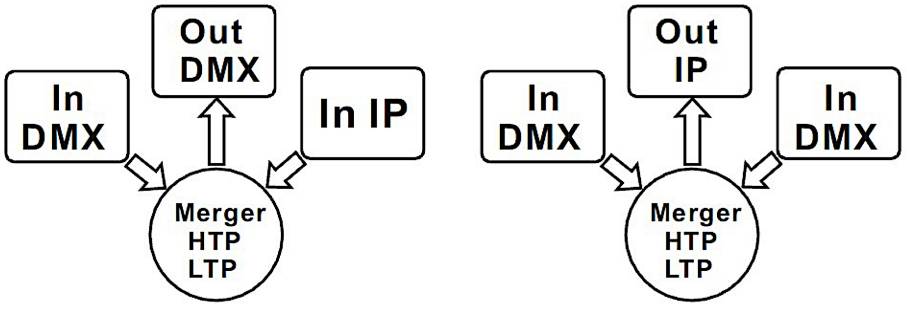
Single = the port sends out the DMX values of the selected (principal) ArtNet universe. The DMX output is enabled the first time it detects the DMX universe on the network (or internal DMX inputs).

LTP = Latest Takes Precedence… Port will output the latest channel activity on channel by channel basis. The unit will compare the principal and secondary universes and send the latest one to the network.

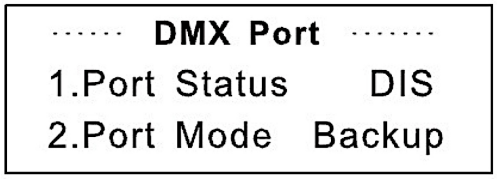
Please note that in the LTP mode, you should ensure the RESEND option is not DISABLED or it will NOT RESEND the data to the network.

HTP = Highest Takes Precedence… Like **Single**, but will merge two DMX universes (principal and secondary) and will output the one with higher value. The unit will compare the two universes and resend the higher values to the network. They can be set within the range of 0.0-F.F.

Please note that in the HTP mode, you should ensure the RESEND option is not DISABLED or it will NOT RESEND the data to the network.



1-4 DMX PORT DISABLED

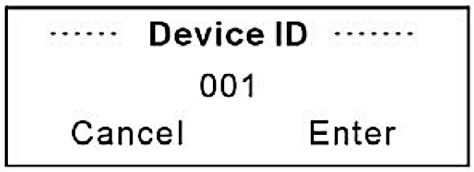


You can set the **Port Status** of any the **DMX Ports 1-4** as **Disabled (DIS).** When the **Port Status** is set as **DIS**, the DMX port will be disabled and will not send or receive any data.

Please note that the Framerte/fs is only available for Output status; The Secondary and Resend options are only available for the HTP/LTP mode under the status of Output.

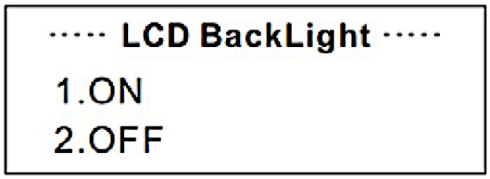
SET ID NO.

Enter into the main menu by pressing the rotary wheel. Turn the rotary wheel to **Set ID NO.** option and then press the rotary wheel to enter into its menu window. Press the rotary wheel to change the ID NO. Turn the rotary wheel clockwise or counter-clockwise to set a new ID, press the rotary wheel to confirm. Available ID's are 001 to 255. Turn rotary wheel clockwise to **Enter** and save ID NO.



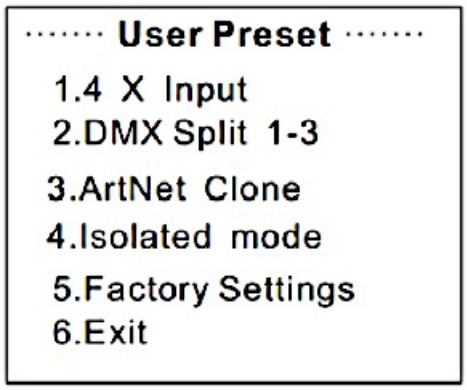
Set LCD Backlight

Enter into the main menu by pressing rotary wheel, and then turn the rotary wheel to select the **LCD Backlight** option and then press the rotary wheel to confirm your selection. You can select between **ON** (backlight remains ON) or **OFF** (backlight turns OFF automatically after 30 seconds of idle time), by turning the rotary wheel. Confirm your selection and move to next option by pressing the rotary wheel.



User Preset

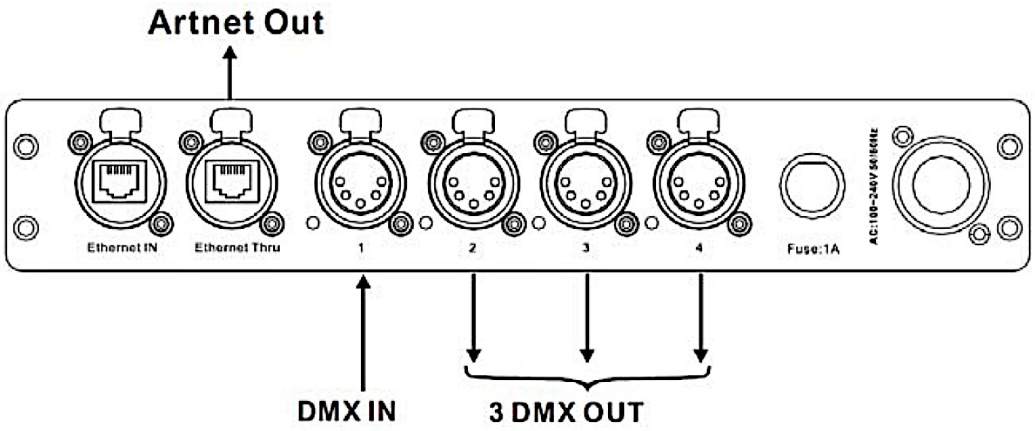
Enter into the main menu by pressing the rotary wheel, and then turn the rotary wheel to select the **User Preset** option and then press the rotary wheel to confirm your selection. These settings help you to easily use the device and avoid complicated setup procedures. You can simply choose your desired presets by turning the rotary wheel and then pressing the rotary wheel to confirm your selection.



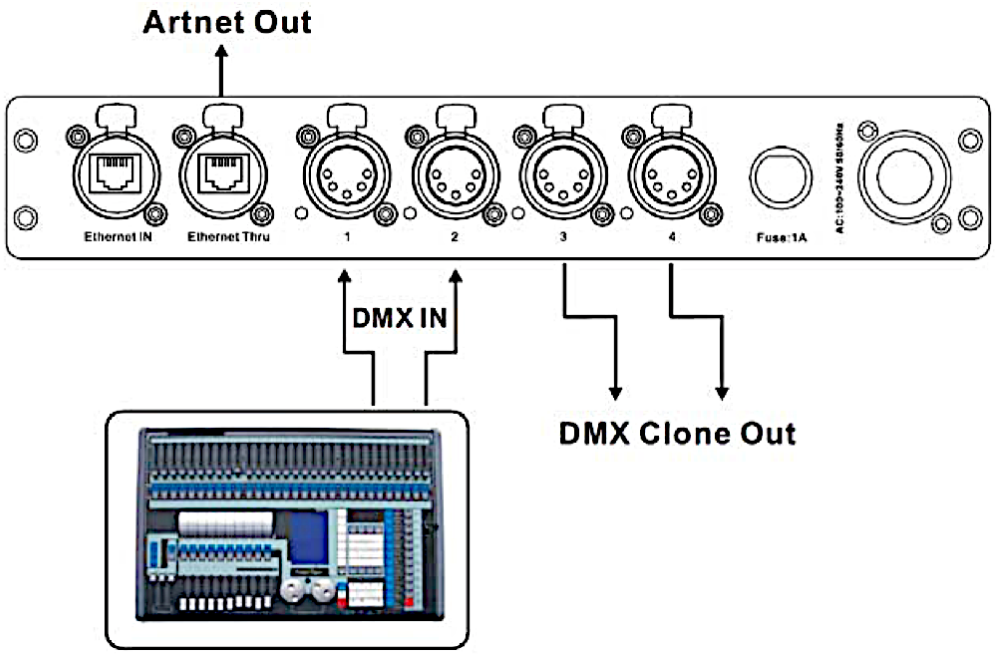
There are (5) User Preset setting options, which are described below:

1. 4 X Input: Set each of the 4 DMX ports as **Inputs**.

2. DMX Split 1-3: Device functions as a 1-3 splitter. **(1 DMX Input / 3 DMX Outputs)** Please note that the LED indicator of the DMX Output port will light up **GREEN**.



3.ArtNet Clone: Direct through mode, the preset is used to replicate a standard ArtNet signal from **2 (1-2) Input Ports** to **2 (3-4) Output Ports**.

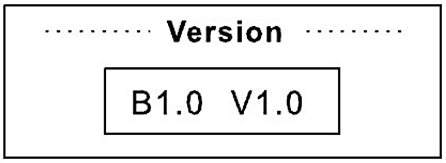


4. Isolated Mode: Isolates the **DMX Input** and **Output** ports. NO signals from the **Input** ports are passed to the **Output** ports; the Output ports receive DMX signals directly from the network individually.

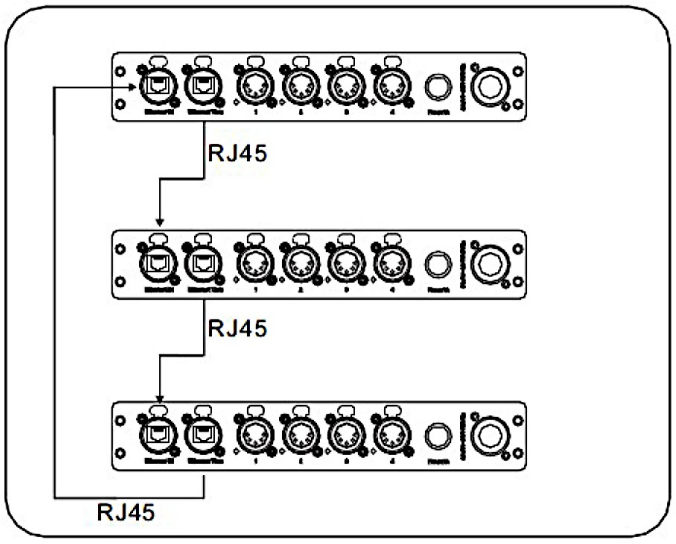
5. Factory Setting: All settings, including the **Device Name, Device ID**, and **Device IP** will be restored to the original factory settings.

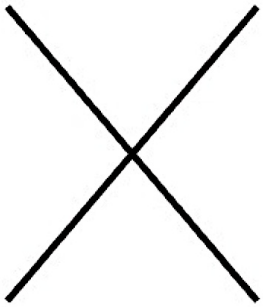
Version

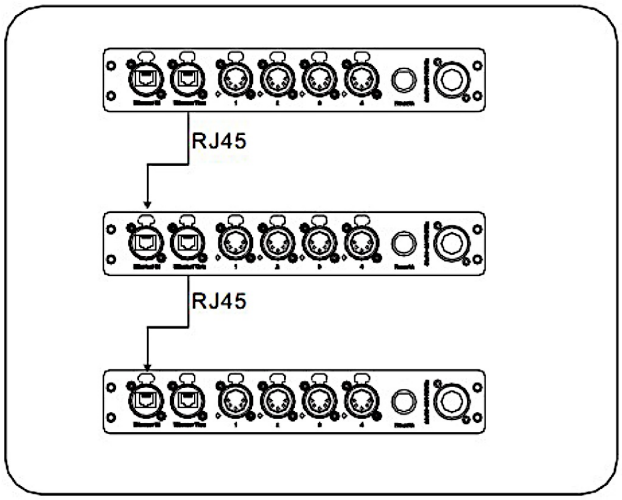
You can check the units' firmware version from this option.

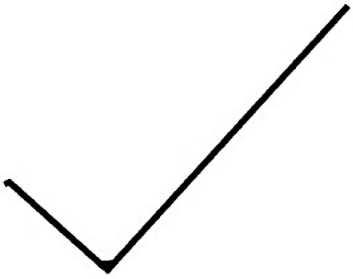


Please Note: Devices may not be connected in a "Looping" fashion.









TECHNICAL SPECIFICATIONS

FEATURES
(4) Universal DMX Ports (can be set as Input or Output)
(2) RJ45 TCP/IP 10/100M Ethernet Connections
Rotary Menu Wheel / Function Selection Button
LCD Menu / Function Display
PowerCON Power In
Auto MDI/MDIX, DMX-512, and ArtNet Support
ArtNet ←→ DMX Bilateral Signal Conversion
DMX Splitter Function (1Input / 3 Outputs)
LCD Display & LED Indicators
Broadcast Mode (One Device Transmits Same Signal to Other Connected Devices)
Backup Mode

CONTROL / CONNECTIONS
(4) 5pin DMX Ports
(2) RJ45 TCP/IP 10/100M Ethernet Connections
Rotary Menu Wheel / Function Selection Button
LCD Menu / Function Display
PowerCON Power In

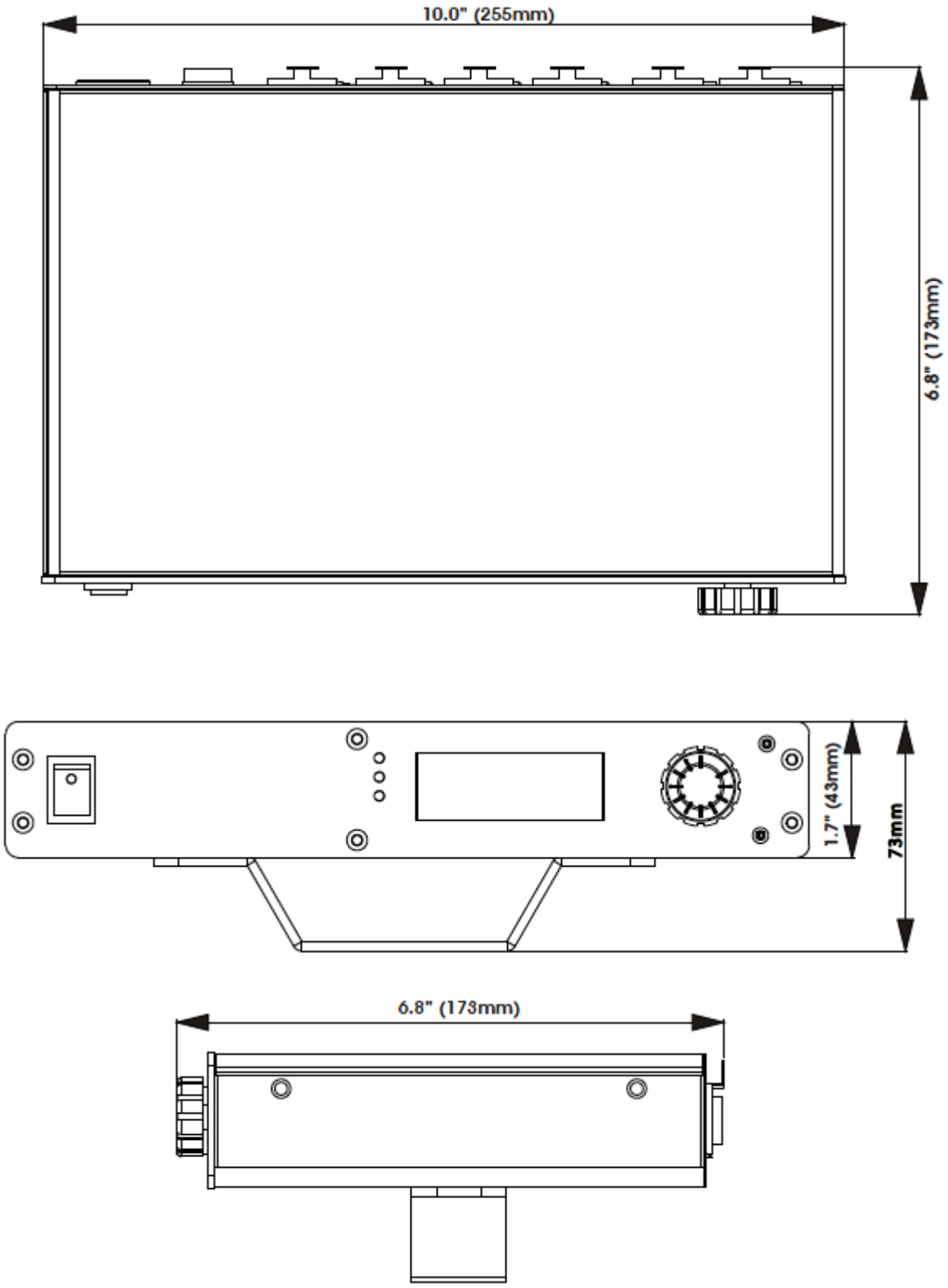
SIZE / WEIGHT
Length: 10.0” (255mm)
Width: 6.8” (173mm)
Vertical Height: 1.7” (43mm)
Weight: 3.5 lbs. (1.6kg)

ELECTRICAL / THERMAL
AC 100-240V - 50/60Hz
5W Max Power Consumption
35.6°F (2°C) to 113°F (45°C)

APPROVALS / RATINGS
CE Pending
cETLus Pending

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

DIMENSIONAL DRAWINGS



Please Note: 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 DESCRIPTION
CAT005	5-foot (1.5m) CAT6 EtherCON Cable
CAT010	10-foot (3m) CAT6 EtherCON Cable
CAT015	15-foot (4.5m) CAT6 EtherCON Cable
CAT025	25-foot (7.5m) CAT6 EtherCON Cable
CAT050	50-foot (15m) CAT6 EtherCON Cable
CAT0100	100-foot (30m) CAT6 EtherCON Cable
CAT0150	150-foot (45.7m) CAT6 EtherCON Cable
CAT0200	200-foot (61m) CAT6 EtherCON Cable
CAT0300	300-foot (91.4m) CAT6 EtherCON Cable
AC5PDMX5PRO	5-foot (1.5m) 5-pin PRO DMX Cable
AC5PDMX10PRO	10-foot (3m) 5-pin PRO DMX Cable
AC5PDMX15PRO	15-foot (4.5m) 5-pin PRO DMX Cable
AC5PDMX25PRO	25-foot (7.5m) 5-pin PRO DMX Cable
AC5PDMX50PRO	50-foot (15m) 5-pin PRO DMX Cable
AC5PDMX100PRO	100-foot (30m) 5-pin PRO DMX Cable