



# PIXEL NET 4<sup>TM</sup>

user manual



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## DOCUMENT VERSION



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

Date	Document Version	Notes	
10/29/15	1	Updated manual format.	
12/22/16	2	Added notice regarding maximum CAT5e cable length (98.4 ft / 30m MAX). Updated system configuration diagram.	



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## GENERAL INFORMATION

#### INTRODUCTION

Congratulations, you have just purchased one of the most innovative and reliable devices on the market today! The 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 device. 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.

#### **BOX CONTENTS**

- (1) powerCON Cable
- Manual & Warranty Card



#### **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 <a href="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

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

E-mail: support@elationlighting.com

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

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#### WARRANTY REGISTRATION

Please complete and mail in the enclosed warranty card or 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.

## 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.



### 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), 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 INSTRUCTIONS



This device 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 be grounded properly. Only qualified personnel should perform all electrical connections.



INDOORS USE ONLY!
DONOTEXPOSE DEVICE RAIN AND MOISTURE!



UNPLUG POWER BEFORE SERVICING FIXTURE!

DO NOT PLUG DEVICE INTO A DIMMER PACK!

NEVER TOUCH FIXTURE DURING OPERATION, AS IT MAY BE HOT!

- For proper operation, follow the **Installation** guidelines described in this manual.
   Only qualified and certified personnel should perform installation of this device and only the original rigging parts (brackets) included with this device should be used for installation. Any modifications will void the original manufactures warranty and increase the risk of damage and/or personal injury.
- Always disconnect from main power source before performing any type of service and/or cleaning procedure.

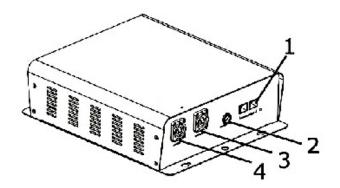


### GENERAL GUIDELINES

- NEVER OPEN THIS DEVICE WHILE IN USE!
- DO NOT CONNECT THIS DEVICE TO A DIMMER PACK!
- This device is a professional lighting controller designed for INDOOR / DRY LOCATIONS ONLY on stage, in nightclubs, theatres, etc.
- Please make sure there are NO FLAMMABLE MATERIALS close to the device while operating, to prevent any fire hazard.
- Device must be installed in a location with adequate ventilation.
- Smoke fluid residue, dust and any excessive particle residue will degrade product performance, cause overheating and damage fixture. Damages caused by inadequate cleaning or maintenance are not covered by product warranty.
- DO NOT attempt installation and/or operation without knowledge how to do so.
- DO NOT permit operation by persons who are not qualified to operate this type
  of device. Most damages are the result of operations by nonprofessionals.
- Consistent operational breaks may ensure the device will function properly for many years to come.
- **DO NOT** shake fixture, avoid brute force when installing and/or operating device.
- Always install the device with an appropriate safety cable. When installing the
  device in a suspended environment, always use mounting hardware that is no
  less than M10 x 25 mm.
- Use the original packaging and materials to transport the device in for service.
- DO NOT TOUCH the housing bare-hand during its operation. Turn OFF the power and allow approximately 15 minutes for the device to cool down before replacing or serving.



## DEVICE OVERVIEW



- 5678
- 1. Art-Net Input / Output
- 2. Fuse
- 3. AC Out
- 4. AC IN

- 5. Output 1
- 6. Output 2
- 7. Output 3
- 8. Output 4



### DEVICE INSTALLATION



## FLAMMABLE MATERIAL WARNING

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

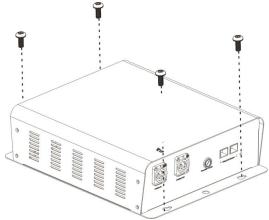


## ELECTRICAL CONNECTIONS

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

## R CAUTIONS

- For added protection, mount the device in areas outside walking paths, seating areas, or in areas were unauthorized personnel might reach the fixture.
- Ambient operating temperature range for this fixture is 32° to 104°F (0° to 40°C).
   Do not use the fixture below or above this temperature.
- Before mounting the device to any surface, make sure the installation area can hold a minimum point load of 10 times the weight of the device.
- Device installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.
- Never stand directly below the device when mounting, removing or servicing.



## SAFETY CABLE

ALWAYS USE A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THE FIXTURE WILL NOT DROP IF THE CLAMP FAILS.



## DEVICE SETUP

#### **POWER LINKING**

Multiple units can be power linked together.



MAX 6 units @120V

#### **RJ45 ETHERNET CONNECTIONS - DATA INPUT / OUTPUT**

The dvice has (2) CAT5 RJ45 ports, (INPUT / OUTPUT), which can be used to data link multiple devices together.



#### **DEVICE ID**

Each device has been pre-assigned with a unique **Device ID**, which is labeled on the unit below the powerCON connectors. Please make sure your computer system is setup to operate within the range of the IP address listed. (For example: 2.0.14.xx)



#### **RJ45 ETHERNET CONNECTIONS - DATA OUTPUT FOR PIXEL BARS**

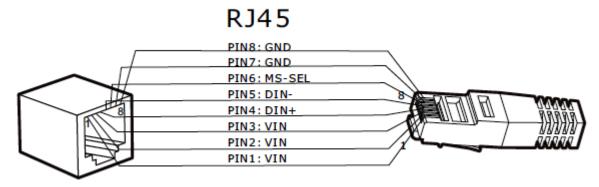
The device has (4) CAT5e RJ45 OUTPUT ports to supply power/data to the PIXEL BARs.



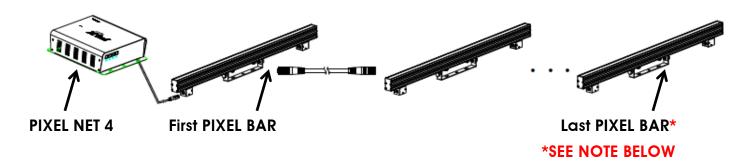


#### POWER AND DATA CONNECTIONS

Power and data are supplied to the **PIXEL BARS** via the input and output RJ45 connectors and CAT5e Ethernet cable using a daisy chaining method. The following diagram indicates the pin assignment of the RJ45 connector.



Connect the output of the **PIXEL NET 4**<sup>TM</sup> device directly to the input of the first **PIXEL BAR**<sup>TM</sup> Connect the output of the first fixture in the chain to the input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected. The following diagram provides an example of power and data connections.



## POWER LINKING

Maximum number of bars that can be linked to a single **PIXEL NET 4** $^{\mathsf{TM}}$  device:

PIXEL BAR12<sup>™</sup> - Max 52 bars (13 per each output port)

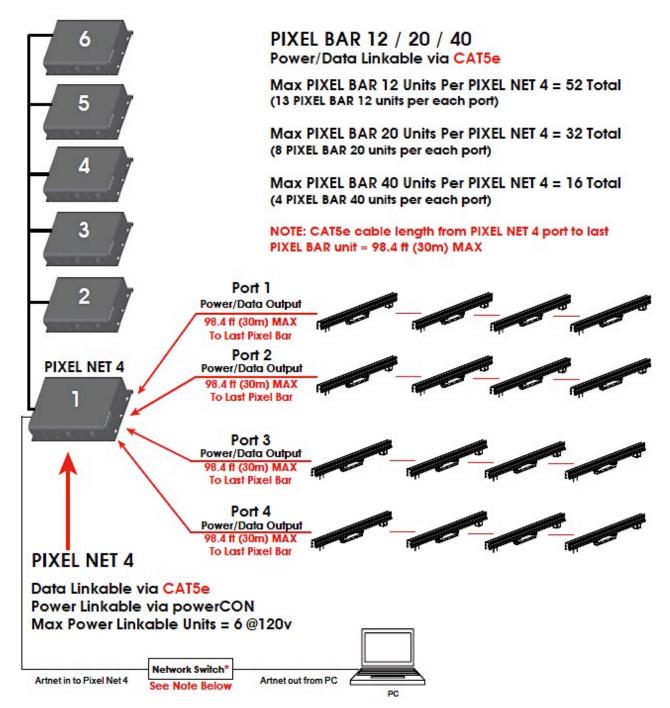
PIXEL BAR20™ - Max 32 bars (8 per each output port)

PIXEL BAR40™ - Max 16 bars (4 per each output port)

\*CAT5e cable length from PIXEL NET 4 port to last PIXEL BAR unit = 98.4 ft (30m) MAX



### SYSTEM CONFIGURATION GUIDE



\*When connecting PIXEL NET 4 devices to a Network Switch that is also controlling multiple other lighting devices, a Gigabit Ethernet Switch that supports IGMP (Internet Group Management Protocol) is strongly suggested. Using a Gigabit Ethernet Switch that does not support IGMP can cause erratic behavior of all connected devices to the switch. Click link below for more information about IGMP.

https://en.wikipedia.org/wiki/Internet\_Group\_Management\_Protocol



## CLEANING AND MAINTENANCE



CAUTION

Disconnect power before cleaning or 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 fixture operates: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the fixture's optics.

- Clean the external lens surface 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 this fixture, please refer all other service issues to an authorized Elation service technician. Should you need any spare parts, please order genuine parts from your local Elation dealer.

Please refer to the following points during routine inspections:

- A detailed electric check 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. Lose screws may fall
  out during normal operation resulting in damage or injury as larger parts could fall.
- Check for any deformations on the housing, color lenses, rigging hardware and
  rigging points (ceiling, suspension, trussing). Deformations in the housing could
  allow for dust to enter into the fixture. Damaged rigging points or unsecured
  rigging could cause the fixture 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.



## TECHNICAL SPECIFICATIONS

#### **FEATURES**

ArtNet Protocol Support
(1) ArtNet Input / (4) DMX Universes

#### **CONTROL / CONNECTIONS**

(1) RJ45 CAT5 ArtNet Input + (1) RJ45 CAT5 ArtNet Output

(4) RJ45 CAT5e Outputs

powerCON In/Out

Multiple Unit Power Linkable: 6 units @120V

#### **SIZE / WEIGHT**

Length: 12.2" (310mm) Width: 10.0" (255mm)

Vertical Height: 3.4" (86.2mm)

Weight: 8.0 lbs. (3.6kg)

#### **ELECTRICAL / THERMAL**

AC 90-120V - 60Hz 350W Max Power Consumption 32°F to 104°F (0°C to 40°C)

#### **APPROVALS / RATINGS**

CE | cETLus

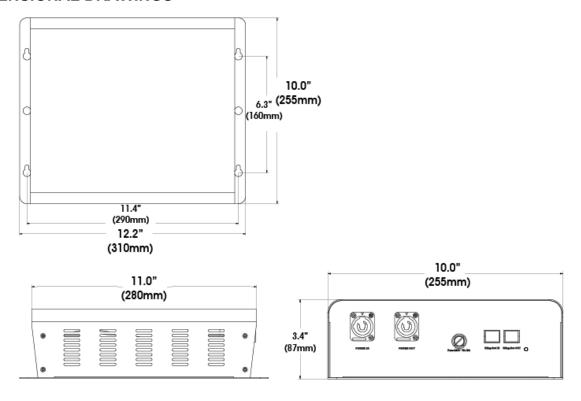
RECOGNIZED COMPONENT



5001034



#### **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
PLC3	3 ft (1m) powerCON Link Cable
PLC6	6 ft (2m) powerCON Link Cable
PLC10	10 ft (3m) powerCON Link Cable
PLC15	15 ft (5m) powerCON Link Cable