

# **ELATION Pixel Driver 4000 Controller for Pixel Bar User Manual**

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### **GENERAL INFORMATION**

#### INTRODUCTION

This fixture has been designed to perform reliably for years when the information in this manual is followed. Please read and understand all the instructions and guidelines carefully and thoroughly before operating this unit. This manual contains important information regarding safety, installation, use, and maintenance.

#### **UNPACKING**

Each fixture has been thoroughly tested and shipped in perfect operating condition. Carefully check the outer shipping carton for signs of any damage that may have occurred during shipping. If the outer carton appears to be damaged, carefully inspect the fixture for damage and be sure all included accessories have arrived intact. In the event that damage has been found and/or parts are missing, please contact our customer support team for further instructions. Please do NOT return this fixture to your dealer without first contacting customer support at the number listed below. Please do NOT discard the outer shipping carton in the trash. Please recycle whenever possible.

# **⚠** IMPORTANT NOTICE!

THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT. DO NOT ATTEMPT ANY REPAIRS YOURSELF, AS 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.

### **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. Elation Professional 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 THIS UNIT INTO A DIMMER PACK!
DO NOT REMOVE THE COVER FOR ANY REASON!
NEVER OPERATE THIS UNIT WITH THE CASING REMOVED!
UNPLUG FROM POWER DURING LONG PERIODS OF NON-USE.
KEEP FLAMMABLE MATERIALS AWAY FROM DEVICE!
DISCONNECT POWER BEFORE PERFORMING MAINTENANCE.

⚠THIS DEVICE IS INTENDED FOR INDOOR USE ONLY!

USE OF THE DEVICE OUTDOORS VOIDS ALL MANUFACTURER'S WARRANTIES! DO NOT EXPOSE THE DEVICE TO RAIN OR MOISTURE!

- DO NOT shake device, and avoid brute force when installing and operating.
- **DO NOT** operate device the power cord has been frayed, crimped, damaged, and/or if any of the power cord connectors are damaged and do not insert easily into the device.
- NEVER force a power cord connector into the device. If the power cord or any of its connectors are damaged,

it must immediately be replaced with a new cord or connector of the same power rating.

- DO NOT block any air ventilation slots.
- · All fan and air inlets must remain clean and never blocked.
- For proper cooling, allow approx. 6" (15cm) between the device and other devices or a wall.
- When installing the device in a suspended environment, always use mounting hardware that is at least M10x25mm, and always install the device with an appropriately rated safety cable.
- Always disconnect the device from its main power source before performing any type of service or cleaning procedure.
- Handle the cord only by the plug end. **NEVER** pull out the plug by tugging on the wire portion of the cord.
- Consistent operational breaks will ensure that the device functions properly for many years.
- Use ONLY the original packaging and materials to transport the device in the event that service or repair is required.

## **MAINTENANCE GUIDELINES**

# ⚠ DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!

#### **CLEANING**

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

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

#### **MAINTENANCE**

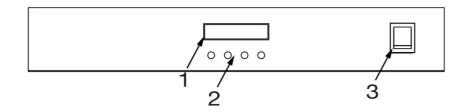
Regular inspections are recommended to ensure proper function and extended life. There are no user serviceable parts inside this device. Please refer all other service issues to an authorized Elation service technician. Should you need any spare parts, please order genuine parts from your local Elation dealer.

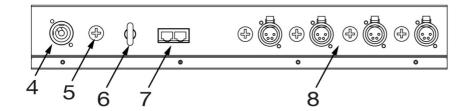
Please refer to the following points during routine inspections:

- A detailed electrical check by an approved electrical engineer every three months, in order to make sure the circuit contacts are in good condition and prevent overheating.
- Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation, resulting in damage or injury as larger parts could fall.
- Check for any deformations on the housing, rigging hardware, and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust to enter into the device. Damaged rigging points or unsecured rigging could cause the device to fall and seriously injure a person(s).
- Electrical power supply cables must not show any damage, material fatigue, or sediments.

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

#### **DEVICE OVERVIEW**





- 1. LCD System Menu Control Display
- 2. Menu Control Buttons (Mode, Setup, Up, Down)
- 3. Power Switch
- 4. Power Cable Input
- 5. 10A Fuse
- 6. Safety Cable Attachment Loop
- 7. RJ45 Ethernet In/Out Ports (Kling-Net, Art-Net/sACN)
- 8. Output Ports 1-4 (10A Fuse each)

#### **INCLUDED ITEMS**

- PIXEL DRIVER 4000
- 19" Rack Mount Kit
- 1.7m (5.6 ft) Power Cable
- 2.8m (9.25ft) 4pin 16AWG Power/Data Cable

### **INSTALLATION GUIDELINES**

**⚠**FLAMMABLE MATERIAL WARNING!

Keep drive a minimum of 5.0 feet (1.5m) away from flammable material and/or pyrotechnics.

▲ ELECTRICAL CONNECTIONS

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

 $\Delta$ FOR USE IN INDOOR OR DRY LOCATIONS ONLY! DO NOT EXPOSE TO RAIN OR MOISTURE!

⚠DO NOT INSTALL THE DEVICE IF YOU ARE NOT QUALIFIED TO DO SO!

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

Before rigging/mounting the device to any metal truss/structure or placing the device 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, clamps, cables, and accessories. Overhead device installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable that meets all local, national, and country codes and regulations.

Device ambient operating temperature range is 14° to 113°F (-10° to 45°C). Do not use the device when the ambient temperature falls outside of this range.

Device should be installed in areas outside walking paths, seating areas, or away from areas were unauthorized personnel might reach the fixture by hand.

**NEVER** stand directly below the device when rigging, removing, or servicing.

#### **RACK MOUNTING**

The device can be rack mounted in a standard 19-inch rack space. Attach the included rack ears to both sides of the device using the included screws. Tighten rack ear screws securely but do NOT over tighten. Use careful planning when rack mounting the device to allow ample space for the power/data cables.

#### TRUSS MOUNTING

The device can be attached to truss or a like structure using an appropriated truss clamp (not included) and an M10 screw (not included).



# **⚠** SAFETY CABLE

ALWAYS ATTACH A SAFETY CABLE TO THE SAFETY CABLE LOOP ON THE BACK OF THE DEVICE WHENEVER INSTALLING THIS DEVICE IN A SUSPENDED ENVIRONMENT TO ENSURE THE FIXTURE WILL NOT DROP IF THE CLAMP FAILS.

#### **RIGGING**

Overhead rigging requires extensive experience, including calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the device, among other requirements. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

# ⚠ INSTALLATION LOCATION PLANNING

Use careful planning to select the installation location of the PIXEL DRIVER 4000 unit(s). The maximum distance

from the driver to the first pixel bar should not exceed 50 feet (18m).

#### **CONNECTIONS AND CABLES**

#### **CONNECTIONS**

The device features RJ45 Ethernet in/out and 4pin power/data combination output connections. The wiring diagram below provides the pin details for the power/data outputs.



PIN #1 - (+) Power

PIN #2 - Data

PIN #3 - CLK (clock pin)

PIN #4 - (-) Power

### **CABLES**

ELATION P BAR IP 4pin 16AWG power/data cables are available in various lengths. See the Optional Accessories section of this manual for details.

# **⚠** MAXIMUM CABLE DISTANCES – 16AWG

The following maximum cable distances apply when using 16AWG cables.

PIXEL DRIVER 4000 to 1st PIXEL BAR IP = Maximum 50 feet (18 meters)

PIXEL BAR IP to PIXEL BAR IP = Maximum 32 feet (10 meters)

Total combined length of cables can NOT exceed = Maximum 98 feet (30 meters)

# **⚠** MAXIMUM CABLE DISTANCES – 12AWG

The following maximum cable distances apply when using 12AWG cables. PIXEL DRIVER 4000 to 1st PIXEL BAR IP = Maximum 50 feet (18 meters) PIXEL BAR IP to PIXEL BAR IP = Maximum 32 feet (10 meters) Total combined length of cables can NOT exceed = Maximum 213 feet (65 meters)

#### SYSTEM CONFIGURATION

#### **LINKING**

Maximum number pixels/bars each PIXEL DRIVER 4000 supports is listed in charts below. Multiple combinations of PIXEL BAR IP models can be linked (daisy-chained) together to a single driver port, as long as the maximum number of pixels/bars is NOT exceeded.

KLING-NET = 1,020 Max Pixels per PIXEL DRIVER 4000 Port Art-NET/sACN = 170 Max Pixels per PIXEL DRIVER 4000 Port

MODEL	TOTAL	TOTAL CON	KLING-NET 1,020 Max Pixels per Driver Port 4,080 Max Pixels per Drive r Unit					
	PIXELS	NELS	MAX BARS p er DRIVER P ORT	MAX PIXELS per DRIVER PORT	MAX BARS p er DRIVER U NIT	MAX PIXELS per DRIVER UNIT		
Pixel Bar 30 IP	30	90	34	1020	136	4080		
Pixel Bar 60 IP	60	180	17	1020	68	4080		
Pixel Bar 120 IP	120	360	8	960	32	3840		

MODEL	TOTAL	TOTAL CON TROL CHAN	ARTNET/sACN 170 Max Pixels per Driver Port 680 Max Pixels per Driver U nit					
	PIXELS	NELS	MAX BARS p er DRIVER P ORT	MAX PIXELS per DRIVER PORT	MAX BARS p er DRIVER U NIT	MAX PIXELS per DRIVER UNIT		
Pixel Bar 30 IP	30	90	5	150	20	600		
Pixel Bar 60 IP	60	180	2	120	8	480		
Pixel Bar 120 IP	120	360	1	120	4	480		

PIXEL DRIVER 4000 supports Kling-NET, Art-NET, and sACN control protocols. It can be controlled by an Art-NET compatible controller/console and for advanced pixel programming, or it can be controlled via a computer with media software such as ArKaos Media Master. The driver also includes 16 internal programs for easy stand-alone demo proposes, which can be accessed manually from the 4-button LCD control menu display.

#### PC - DRIVER DIRECT CONNECTION

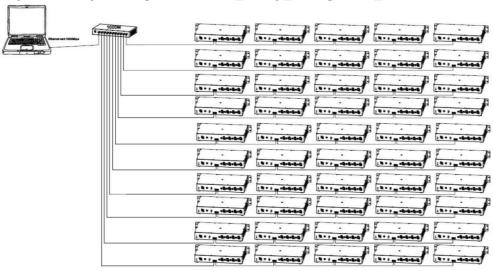
Up to 5 PIXEL DRIVER 4000 units can be linked (daisy-chained) from a computer. For systems requiring more than 5 drivers, see the next section for more information.



#### PC - NETWORK SWITCH CONNECTION

Up to 50 PIXEL DRIVER 4000 units can be linked (daisy-chained) from a computer and a Gigabit Ethernet Switch (not included) that supports IGMP (Internet Group Management Protocol). Using a Gigabit Ethernet Switch that does not support IGMP can cause erratic behavior of all connected devices to the switch. Up to 5 PIXEL DRIVER 4000 units can be connected per ethernet switch port and up to 10 total ethernet switch ports can be used in a system. Click link below for more information about IGMP.

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



#### **SYSTEM MENU**

MODE	SET UP	U P/ D O W N	DESCRIPTION
------	--------	-----------------------------	-------------

	Red Dim mer	M an ua I C on tro I R ed : x xx	Adjust the intensity of the red color.
	Green Di mmer	M an ua I C on tro I G re en : x xx	Adjust the intensity of the green color.
	Blue Dim mer	M an ua I C on tro I B lu e: xx x	Adjust the intensity of the blue color.
		M an ua I C on tro I O ut 1: En ab le/ Di sa bl e	Enable or disable output 1.

DIMMER MODE		N 4	
	Output en able or di sable	M an ua I C on tro I O ut 2: En ab le/ Di sa bl e	Enable or disable output 2.
		M an ua I C on tro I O ut 3: En ab le/ Di sa bl e	Enable or disable output 3.
		M an ua I C on tro I O ut 4: En ab le/ Di sa bl e	Enable or disable output 4.

		Select the pixel bar model that will be con  • x = output port #  • xxx = pixel bar model	ected to each output.
		Select the number of pixel bar units that woutput.  • x = output port #  • xx = number of units  • xxx = pixel bar model	Il be connected to each
KLINGNET MOE	Pixel Bar Setup	Set RGB Channel mode, see <i>Pixel Mode</i> ails.	section of this manual for det

	IP Addres s Set	IP Ad dr es s O ut xx xx: xx xx: xx xx: xx	Set IP address of each output.
	DMX Universe Set	Un ive rs e O ut x U: xx xx xx	Set DMX universe of each output.
ARTNET MODE		Ar tn et O ut x Pi xel Ba r x xX	Select the pixel bar model that will be connected to each output.  • x = output port #  • xxx = pixel bar model
	Pixel Bar Setup	Ar tn et O ut x x xx IP Nu m be r x x	Select the number of pixel bar units that will be connected to each output.  • x = output port #  • xx = number of units  • xxx = pixel bar model

			Set RGB Channel mode, see <i>Pixel Modes</i> section of this manual for det ills.
CONTINUED ON NI	EXT PAGE		
	DMX Univ erse Set	sAC N Ou t x u: xxxxx	Set DMX universe of each output.
	Pixel Bar x l Setup Nu be x SA N C t x X X X X X X X X X X X X X X X X X X	sAC N Ou t x Pi xel B ar xx x IP	Select the pixel bar model that will be connected to each output.  • x = output port #  • xxx = pixel bar model
sacn mode		sAC N Ou t x xx x IP Num ber x x	Select the number of pixel bar units that will be connected to each out put.  • x = output port #  • xx = number of units  • xxx = pixel bar model
		sAC N Ou t x xx X xx RGB Pixel s	Set RGB Channel mode, see <i>Pixel Modes</i> section of this manual for details.
	Klingnet e nable or d isable set	Kling net & Artne t Klin gnet: Enab le/Di sable	Enable or disable the klingnet con- trol.
		<u> </u>	1

KLINGNET & ART NET CONTROL M ODE	Klingnet Pixel Bar Setup	Kling net Out x Pixel Bar x xx IP Kling net Out x xxx I P Nu mber xx	Select the pixel bar model that will be connected to each output.  • x = output port #  • xxx = pixel bar model  Select the number of pixel bar units that will be connected to each out put.  • x = output port #  • xx = number of units  • xxx = pixel bar model
	Artnet IP Address Set	IP A ddre ss O ut x x xx:xxx x:xxx	Set the IP address of each output.
	Artnet Uni verse Set	Univ erse Out x U:xx xxx	Set the DMX universe of each out- put.
		Prog rams Prog ram xx	Select the built in program.
BUILT IN PROGR	Drogram	Prog rams Spee d xx	Set the program speed.
AM MODE	Program Play Set	Prog rams Fade xx	Set the fade time speed.
		Prog rams Phas e Ti me x	Set the phase time.
CONTINUED ON NI	EXT PAGE		

BUILT IN PROGR AM MODE	Pixel Bar Setup	Prog ram Out x Pixel Bar x xx IP Prog ram Out x xxx I P Nu mber xx	Select the pixel bar model that will be connected to each output.  • x = output port #  • xxx = pixel bar model  Select the number of pixel bar units that will be connected to each out put.  • x = output port #  • xx = number of units  • xxx = pixel bar model
	LCD Back light On/O ff	Setu p Op tions BLG T: O n Setu p Op tions BLG	LED backlight always on.  LED backlight off after 20 seconds.
SETUP OPTIONS	LCD Back light Brigh t- ness	T: Of f  Setu p Op tions BRC O: xx x	Adjust the brightness of the LCD backlight
	System R eset*	Setu p Op tions SysR eset	Reset the unit to factory settings.
		Soft ware Versi on P ort1 Vx.x	Display software version of port 1.
		Soft ware Versi on P ort2 Vx.x	Display software version of port 2.
SOFTWARE VER SION	Software Version D isplay		

Soft ware Versi on P ort3 Vx.x	Display software version of port 3.
Soft ware Versi on P ort4 Vx.x	Display software version of port 4.

# **⚠** \*SYSTEM RESET

ONLY QUALIFIED TECHNICIANS SHOULD PERFORM THIS FUNCTION. PLEASE NOTE THAT ALL SAVED SETTINGS ARE ERASED AFTER A SYSTEM RESET IS PERFORMED.

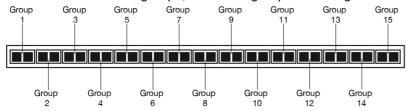
#### **PIXEL GROUPING**

Each pixel requires three channels (red, green, and blue) to operate, and therefore the number of pixels (and consequently, the number of devices) that the driver can control is limited by the total number of control channels available on the driver.

However, this driver also gives the user the ability to adjust the pixel grouping configuration. In the standard configuration, individual pixels are controlled independently for finer control over the resolution of the lighting display. Alternately, multiple individual pixels may be grouped together under a common set of control channels in order to reduce the number of required control channels. This also reduces the effective pixel count for each fixture. The downside to this is the reduced resolution of the lighting display.

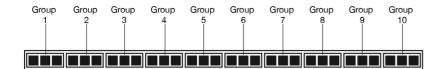
In each pixel control mode, the first number denotes the number of individual pixels that make up each control group, while the second number denotes the number of control groups. Each control group will always occupy 3 DMX channels (for red, green, and blue control). This means that within each control group, all pixels will be controlled by the same set of 3 DMX channels.

For example, let us examine a 30-pixel strip, as shown below. Selecting 2×15 mode means that the pixels will be divided into 15 control groups, with each group containing 2 LEDs.



In this mode, a total of 45 DMX channels are used: 3 DMX channels (for Red, Green, Blue) per group multiplied by 15 groups.

If we want to reduce the number of control groups required, one possible solution is to select a different pixel grouping mode. For instance, selecting 3×10 mode will result in the LED display being divided into 10 control groups each containing 3 pixels. Therefore, the number of DMX channels required drops to 30: 10 control groups multiplied by 3 DMX channels (for Red, Green, and Blue) per group.



Available pixel grouping modes are shown in the tables on the following pages.

# **PIXEL MODES**

Pixel Count	Pixel Group Options
1	1×1
2	1×2, 2×1
3	1×3, 3×1
4	1×4, 2×2, 4×1
5	1×5, 5×1
6	1×6, 2×3, 3×2, 6×1
7	1×7
8	1×8, 2×4, 4×2, 8×1
9	1×9, 3×3, 9×1
10	1×10, 2×5, 5×2, 10×1

11	1×11
12	1×12, 2×6, 3×4, 4×3, 6×2, 21×1
13	1×13
14	1×14, 2×7, 7×2, 14×1
15	1×15, 3×5, 5×3, 15×1
16	1×16, 2×8, 4×4, 8×2, 16×1
17	1×17
18	1×18, 2×9, 3×6, 6×3, 9×2, 18×1
19	1×19
20	1×20, 2×10, 4×5, 5×4, 10×2, 20×1
21	1×21, 3×7, 7×3, 21×1
22	1×22, 2×11, 11×2, 22×1
23	1×23
24	1×24, 2×12, 3×8, 4×6, 6×4, 8×3, 12×2, 24×1

25	1×25, 5×5, 25×1
26	1×26, 2×13, 13×2, 26×1
27	1×27, 3×9, 9×3, 27×1
28	1×28, 2×14, 4×7, 7×4, 14×2, 28×1
29	1×29
30	1×30, 2×15, 3×10, 5×6, 6×5, 10×3, 15×2, 30×1
31	1×31
32	1×32, 2×16, 4×8, 8×4, 16×2, 32×1
33	1×33, 3×11, 11×3, 33×1
34	1×34, 2×17, 17×2, 34×1
35	1×35, 5×7, 7×5, 35×1
36	1×36, 2×18, 3×12, 4×9, 6×6, 9×4, 12×3, 18×2, 36×1
37	1×37
38	1×38, 2×19, 19×2, 38×1

39	1×39, 3×13, 13×3, 39×1
40	1×40, 2×20, 4×10, 5×8, 8×5, 10×4, 20×2, 40×1
41	1×41
42	1×42, 2×21, 3×14, 6×7, 7×6, 14×3, 21×2, 42×1
43	1×43
44	1×44, 2×22, 4×11, 11×4, 22×2, 44×1
45	1×45, 3×15, 5×9, 9×5, 15×3, 45×1
46	1×46, 2×23,32×2, 46×1
47	1×47
48	1×48, 2×24, 3×16, 4×12, 6×8, 8×6, 12×4, 16×3, 24×2, 48×1
49	1×49, 7×7, 49×1
50	1×50, 2×25, 5×10, 10×5, 25×2, 50×1
51	1×51, 3×17, 17×3, 51×1
52	1×52, 2×26, 4×13, 13×4, 26×2, 52×1

53	1×53
54	1×54, 2×27, 3×18, 6×9, 9×6, 18×3, 27×2, 54×1
55	1×55, 5×11, 11×5, 55×1
56	1×56, 2×28, 4×14,7×8, 8×7, 14×4, 28×2, 56×1
57	1×57, 3×19, 19×3, 57×1
58	1×58, 2×29, 29×2, 58×1
59	1×59
60	1×60, 2×30, 3×20, 4×15, 5×12, 6×10, 10×6, 12×5, 15×4, 20×3, 30×2, 60×1
61	1×61
62	1×62, 2×31, 31×2, 62×1
63	1×63, 3×21, 7×9, 9×7, 21×3, 63×1
64	1×64, 2×32, 4×16, 8×8, 16×4, 32×2, 64×1
65	1×65, 5×13, 13×5, 65×1
66	1×66, 2×33, 3×22, 6×11, 11×6, 22×3, 33×2, 66×1

67	1×67
68	1×68, 2×34, 4×17, 17×4, 34×2, 68×1
69	1×69, 3×23, 23×3, 69×1
70	1×70, 2×35, 5×14, 7×10, 10×7, 14×5, 35×2, 70×1
71	1×71
72	1×72, 2×36, 3×24, 4×18, 6×12, 8×9, 9×8, 12×6, 18×4, 24×3, 36×2, 72×1
73	1×73
74	1×74, 2×37, 37×2, 74×1
75	1×75, 3×25, 5×15, 15×5, 25×3, 75×1
76	1×76, 2×38, 4×19, 19×4, 38×2, 76×1
77	1×77, 7×11, 11×7, 77×1
78	1×78, 2×39, 3×26, 6×13, 13×6, 26×3, 39×2, 78×1
79	1×79
80	1×80, 2×40, 4×20, 5×16, 8×10, 10×8, 16×5, 20×4, 40×2, 80×1

81	1×81, 3×27, 9×9, 27×3, 81×1
82	1×82, 2×41, 41×2, 82×1
83	1×83
84	1×84, 2×42, 3×28, 4×21, 6×14, 7×12, 12×7, 14×6, 21×4, 28×3, 42×2, 84×1
85	1×85, 5×17, 17×5, 85×1
86	1×86, 2×43, 43×2, 86×1
87	1×87, 3×29, 29×3, 87×1
88	1×88, 2×44, 4×22, 8×11, 11×8, 22×4, 44×2, 88×1
89	1×89
90	1×90, 2×45, 3×30, 5×18, 6×15, 9×10, 10×9, 15×6, 18×5, 30×3, 45×2, 90×1
91	1×91, 7×13, 13×7, 91×1
92	1×92, 2×46, 4×23, 23×4, 46×2, 92×1
93	1×93, 3×31, 31×3, 93×1
94	1×94, 2×47, 47×2, 94×1

95	1×95, 5×19, 19×5, 95×1
96	1×96, 2×48, 3×32, 4×24, 6×16, 8×12, 12×8, 16×6, 24×4, 32×4, 48×2, 96×1
97	1×97
98	1×98, 2×49, 7×14, 14×7, 49×2, 98×1
99	1×99, 3×33, 9×11, 11×9, 33×3, 99×1
100	1×100, 2×50, 4×25, 5×20, 10×10, 20×5, 25×4, 50×2, 100×1
101	1×101
102	1×102, 2×51, 3×34, 6×17, 17×6, 34×3, 51×2, 102×1
103	1×103
104	1×104, 2×52, 4×26, 8×13, 13×8, 26×4, 52×2, 104×1
105	1×105, 3×35, 5×21, 7×15, 15×7, 21×5, 35×3, 105×1
106	1×106, 2×53, 53×2, 106×1
107	1×107
108	1×108, 2×54, 3×36, 4×27, 6×18, 9×12, 12×9, 18×6, 27×4, 36×3, 54×2, 108×1

109	1×109
110	1×110, 2×55, 5×22, 10×11, 11×10, 22×5, 55×2, 110×1
111	1×111, 3×37, 37×3, 111×1
112	1×112, 2×56, 4×28, 7×16, 8×14, 14×8, 16×7, 28×4, 56×2, 112×1
113	1×113
114	1×114, 2×57, 3×38, 6×19, 19×6, 38×3, 57×2, 114×1
115	1×115, 5×23, 23×5, 115×1
116	1×116, 2×58, 4×29, 29×4, 58×2, 116×1
117	1×117, 3×39, 9×13, 13×9, 39×3, 117×1
118	1×118, 2×59, 59×2, 118×1
119	1×119, 7×17, 17×7, 119×1
120	1×120, 2×60, 3×40, 4×30, 5×24, 6×20, 8×15, 10×12, 12×10, 15×8, 20×6, 24×5, 30×4, 4 0×3,60×2, 120×1
121	1×121, 11×11, 121×1

122	1×122, 2×61, 61×2, 122×1
123	1×123, 3×41, 41×3, 123×1
124	1×124, 2×62, 4×31, 31×4, 62×2, 124×1
125	1×125, 5×25, 25×5, 125×1
126	1×126, 2×63, 3×42, 6×21, 7×18, 9×14, 14×9, 18×7, 21×6, 42×3, 63×2, 126×1
127	1×127
128	1×128, 2×64, 4×32, 8×16, 16×8, 32×4, 64×2, 128×1
129	1×129, 3×43, 43×3, 129×1
130	1×130, 2×65, 5×26, 10×13, 13×10, 26×5, 65×2, 130×1
131	1×131
132	1×132, 2×66, 3×44, 4×33, 6×22, 11×12, 12×11, 22×6, 33×4, 44×3, 66×2, 132×1
133	1×133, 7×19, 19×7, 133×1
134	1×134, 2×67, 67×2, 134×1
135	1×135, 3×45, 5×27, 9×15, 15×9, 27×5, 45×3, 135×1

136	1×136, 2×68, 4×34, 8×17, 17×8, 34×4, 68×2, 136×1
137	1×137
138	1×138, 2×69, 3×46, 6×23, 23×6, 46×3, 69×2, 138×1
139	1×139
140	1×140, 2×70, 4×35, 5×28, 7×20, 10×14, 14×10, 20×7, 28×5, 35×4, 70×2, 140×1
141	1×141, 3×47, 47×3, 141×1
142	1×142, 2×71, 71×2, 142×1
143	1×143, 11×13, 13×11, 143×1
144	1×144, 2×72, 3×48, 6×36, 8×24, 9×18, 12×16, 16×12, 18×9, 24×8, 36×6, 48×3, 72×2, 1 44×1
145	1×145, 5×29, 29×5, 145×1
146	1×146, 2×73, 73×2, 146×1
147	1×147, 3×49, 7×21, 21×7, 49×3, 147×1
148	1×148, 2×74, 4×37, 37×4, 74×2, 148×1

149	1×149
150	1×150, 2×75, 3×50, 5×30, 6×25, 10×15, 15×10, 25×6, 30×5, 50×3, 75×2, 150×1
151	1×151
152	1×152, 2×76, 4×38, 8×19, 19×8, 38×4, 76×2, 152×1
153	1×153, 3×51, 9×17, 17×9, 51×3, 153×1
154	1×154, 2×77, 7×22, 11×14, 14×11, 22×7, 77×2, 154×1
155	1×155, 5×31, 31×5, 155×1
156	1×156, 2×78, 3×52, 4×39, 6×26, 12×13, 13×12, 26×6, 39×4, 52×3, 78×2, 156×1
157	1×157
158	1×158, 2×79, 79×2, 158×1
159	1×159, 3×53, 53×3, 159×1
160	1×160, 2×80, 4×40, 5×32, 8×20, 10×16, 16×10, 20×8, 32×5, 40×4, 80×2, 160×1
161	1×161, 7×23, 23×7, 161×1

162	1×162, 2×81, 3×54, 6×27, 9×18, 18×9, 27×6, 54×3, 81×2, 162×1
163	1×163
164	1×164, 2×82, 4×41, 41×4, 82×2, 164×1
165	1×165, 3×55, 5×33, 11×15, 15×11, 33×5, 55×3, 165×1
166	1×166, 2×83, 83×2, 166×1
167	1×167
168	1×168, 2×84, 3×56, 4×42, 6×28, 7×24, 8×21, 12×14, 14×12, 21×8, 24×7, 28×6, 42×4, 5 6×3, 84×2, 168×1
169	1×169, 13×13, 169×1
170	1×170, 2×85, 5×34, 10×17, 17×10, 34×5, 85×2, 170×1

### **TECHNICAL SPECIFICATIONS**

# **CONTROL / CONNECTIONS**

Manual RGB Mode Internal Programs Art-NET | sACN | Kling-NET (2) RJ45 Ethernet Ports (4) 4pin Power/Data Outputs

# SIZE / WEIGHT

Length: 16.7" (425mm) Width: 11.9" (301mm) Vertical Height: 2.9" (74mm) Weight: 9.5 lbs. (4.3 kg)

#### **ELECTRICAL / THERMAL**

AC 100-240V – 50/60Hz 800W Max Power Consumption -4° to 113°F. (-20° to 45°C)

#### **APPROVALS / RATINGS**

CE | cETLus



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

#### **FCC STATEMENT**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### FCC RADIO FREQUENCY INTERFERENCE WARNINGS & INSTRUCTIONS

This product has been tested and found to comply with the limits as per Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device uses and can radiate radio frequency energy and, if not installed and used in accordance with the included instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following methods:

- Reorient or relocate the device.
- Increase the separation between the device and the receiver.
- Connect the device to an electrical outlet on a circuit different from which the radio receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



### LIMITED WARRANTY (USA ONLY)

1. 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.

- 2. 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.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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.

#### **WARRANTY RETURNS**

All returned service items whether under warranty or not, must be freight pre paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without a R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain a R.A. number by contacting customer support.

#### **Customer Support**

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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 scan the QR Code with your mobile device or visit <a href="www.elationlighting.com">www.elationlighting.com</a> for the latest revision/update of this manual, before installation and/or programming.

Date	Document Version	Software V ersion	DMX Channel Mode	Notes
05/24/18	1.0	1.0	Not Applicable	Initial Release.
11/28/18	1.2	N/C	Not Applicable	Updated release.
11/08/19	1.4	N/C	Not Applicable	Updated specs on included power cable.
08/02/21	1.6	1.2	Not Applicable	Updated System Menu.

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

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REPLACEMENT PARTS please visit parts.elationlighting.com

**Documents / Resources** 



**ELATION Pixel Driver 4000 Controller for Pixel Bar** [pdf] User Manual Pixel Driver 4000 Controller for Pixel Bar, Pixel Driver, Pixel Driver 4000

### References

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