

Date:	 Quantity:	
Company:		
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16PXL Board RGB

16PXL Board RGB features 16 individually controllable ultra bright SMT LEDs on a 4 x 4 matrix with a 62.5mm pitch. A low profile and open beam angle ensure optimal integration behind a wide range of diffuser materials, creating low resolution screens for graphic animation and video replay.







Product Specifications

Light Source	16 High intensity Nichia SMT RGB LEDs (individually controllable)
Color Range	16.7 Million additive RGB colors
Color Resolution	3 x 14-bit (Gamma correction)
Beam Angle	120°
Luminous Flux	132.3 lm
Efficacy	17.8 lm/W
Dimensions (L x W x H)	230 x 230 x 11.5mm 9.06" x 9.06" x 0.45"
Weight	200g / 0.4lbs
Regulatory Listing & Safety Approval	CE, FCC, ETL
Operating Temperature	0°C to 40°C / 32°F to 104°F
Storage Temperature	-20°C to +70°C / -4°F to +158°F
Environment	Indoor
Humidity	0 to 90% non-condensing

Electrical Specifications

Input Voltage	24V DC
Power Consumption	9W

System Specifications

Power / Data Interface	TX CONNECT Smart Indoor
Control	DMX512; e:pix/DVI
Power Supply	LED Engine Smart 100W Indoor; LED Engine Smart 300W Indoor (see Ordering page for details)
Addressing Options	DMX Auto-Addressing

LED CHARACTERISTICS Because LEDs are semiconductor devices, their performances are subject to inherent variability commonly found in semiconductor industry. To improve consistency in performance across the same product, LED manufacturers "sort" LEDs into bins according to different preset parameters, such as forward driving voltage, illumination, etc. Whereas binning is a sorting function, it is not a correction process, inherent variability in the manufacturing process results always in different binning distributions according to different production lots. Traxon uses automatically binned LEDs on its products, thereby minimizing output variations within the model range.

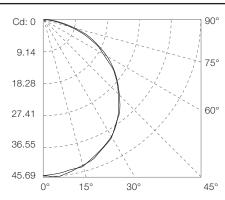
As with all electronic devices, LED output degrades over time – a term called lumen depreciation. This also explains why it is nearly impossible to expect photometric performances of two LED products with different service life spans to be the same. The rate of LED degrade is a complicate function of many factors such as operating efficiency, duration of continuous operation, and more significantly, environmental conditions (ambient temperature range are example). If allowed working under original operating temperature range and with good verification, LED devices enjoy long service lives over conventional light sources. When using/installing LED devices, care should be taken to ensure that the devices will operate within the operating conditions specified in respective product literature.

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Photometrics

Candela Distribution



Light Output

Color	Luminous Flux (lm)	Power (Watts)	Efficacy (lm/W)
White	132.3	7.44	17.78
Red	37.65	3.84	9.80
Green	80.36	4.8	16.74
Blue	9.1	3.12	2.92

• Luminance: 710 cd/m² (nits)

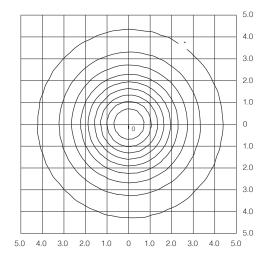
- Measured on: White
 Beam angle (50% lmax): 114°

Illuminance

Distance	10cm/3.9"	25cm/9.8"	50cm/19.7"	72cm/29.5"	100cm/39.4"
Lux	4520	723	181	80	45
50% Imax (diameter)	31cm/ 12.20"	77cm/ 30.31"	154cm/ 60.62"	231cm/ 90.94"	308cm/ 121.25"

• Measured on: White

Illuminance at a Distance



ISO-Illuminance Unit: [lx] 5.07 (100%Emax) 4.57 (90%Emax) 4.06 (80%Emax) 3.55 (70%Emax) 3.05 (60%Emax) 2.54 (50%Emax) 2.03 (40%Emax) 1.52 (30%Emax)

1.02 (20%Emax)

*0.51 (10%Emax)

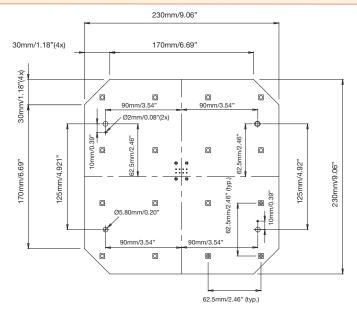
Coordinate Scale: d/h Height: 3 m Max. Illuminance: 5.08 lx

- Photometric measurements are carried out by an independent laboratory.
- \bullet IES and LDT files are available for download from the Traxon website.

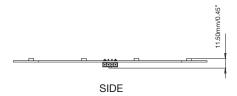
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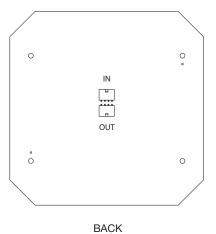
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Dimensions



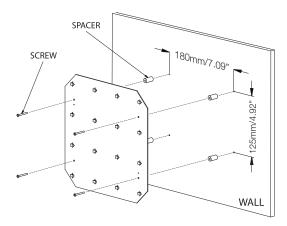
FRONT



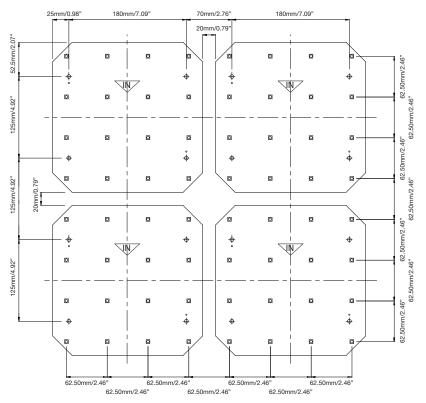


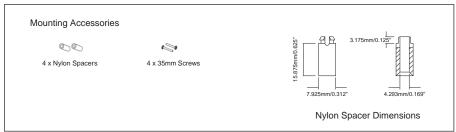
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Mounting



Multiple Board Mounting





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16PXL Board RGB

System Diagram

POWER SUPPLY to last FIXTURE in chain

System Diagram - Butler S2

10x 16PXL BOARD RGB CAN BE DAISY CHAINED PER LED ENGINE SMART 100W INDOOR.

10x 16PXL BOARD RGB CAN BE DAISY CHAINED PER BUTLER S2 OUTPUT (512 DMX CHANNELS).

CABLING LENGTHS
A to B: 100 meters

CONTROLLER to first FIXTURE.

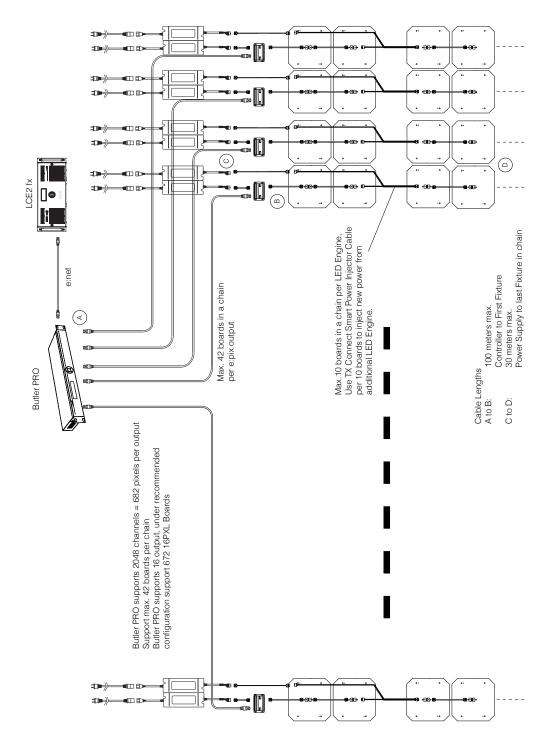
<u>≅</u> 5 ≥ 5 ≥ 5 16PXL Board RGB Max. 10 boards in a chain per LED Engine Smart 100W Indoor N P (m) z ∫ ≥ 5 **€8** • □ □ • TX Connect Smart Interconnection Cable 512 DMX Cha AC Power Cord TX Connect Smart Power/Data Injector Box POWER SUPPLY erolle Mars

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System Diagram

System Diagram - Butler PRO (with LCE2 fx)

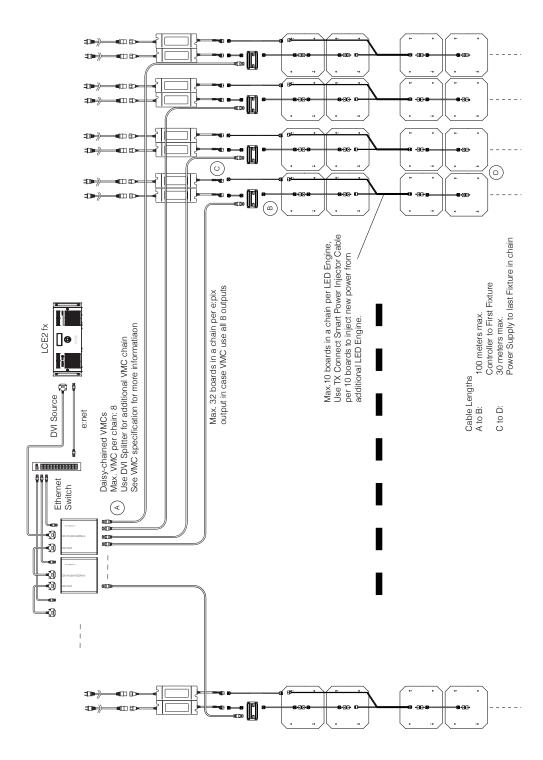


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System Diagram

System Diagram - VMC with LCE2 fx



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Ordering

Fixtures

Model No.	Description	Item Code
MB.BO.7110001	16PXL Board RGB	AA436740055

Standard Accessories (included in delivery)

Model No.	Description	Item Code
TI.IC.0030000	TX CONNECT Smart Indoor Interconnection Cable, 30cm/11.82"	A63420F0055
N/A	1x Board Mounting Kit (4x Nylon Spacers, 4x Mounting Screws)	N/A

Add-On Strip and Board

Model No.	Description	Item Code
MB.ST.5311000	4PXL Add-On Strip (62.5)	AA436770055
MB.BO.5315000	4PXL Add-On Board (62.5)	AA436760055

TX Control

Model No.	Description	Item Code
EN.BU.0000001	Butler S2	AB436200031
EN.BP.0000200	Butler PRO e:pix	AA628610035
160185	Video Micro Converter (DMX/e:pix)	AA438940235
160194	Video Micro Converter Garage (Optional)	AA623920031
EN.LC.9400000	LCE2 fx	AA629460035

TX Connect

Model No.	Description	Item Code
TI.ZI.0000100	TX CONNECT Smart Power/Data Injector Box	A704836003J
TI.DO.0000100	TX CONNECT Smart Data Extractor Box	A704842003J
TI.EC.0050000	TX CONNECT Smart Indoor Extension Cable, 0.5m/1.64ft	AA556350055
TI.EC.0100000	TX CONNECT Smart Indoor Extension Cable, 1m/3.28ft	A6342330055
TI.EC.0300000	TX CONNECT Smart Indoor Extension Cable, 3m/9.84ft	A6342410055
TI.EC.0500000	TX CONNECT Smart Indoor Extension Cable, 5m/16.4ft	AA580410055
TI.EC.1000000	TX CONNECT Smart Indoor Extension Cable, 10m/32.8ft	A6342680055
DI.IC.0100000	TX CONNECT Data Cable, 1m/3.28ft	AA556130055

TX Power

Model No.	Description	Item Code
PS.IA.0010000	LED Engine Smart 100W Indoor	AA624090055
PS.IB.7030000	LED Engine Smart 300W 24V Indoor	AA5571201HA
PS.AC.0000100	AC Power Cord, 2m/6.6ft (EU)	AA553860055
PS.AC.0000200	AC Power Cord, 2m/6.6ft (US)	AA556290055
PS.AC.0000300	AC Power Cord, 2m/6.6ft (UK)	AA556300155
PS.AC.0000400	AC Power Cord, 2m/6.6ft (AU)	AA556310055

