8PXB60-RGBW-12V-B – Datasheet

12V RGBW Pixel Strip with 60 LEDs per metre, featuring a black PCB and 20 controllable pixels.





ENTTEC 8PXB60-RGBW-12V-B is a 12V 60 LEDs per metre addressable RGBW LED Pixel Strip allowing individual colour control over clusters of 3 RGBW LEDs (20 pixels per metre), designed for professional architectural and entertainment purposes, used to display smooth animated graphics achieving soft pastels and saturated colours on a large scale.

Cut and join into any conceivable shape.

Its black PCB makes it perfectly suited for direct view applications where the black PCB will be lost in the darkness when all pixels are off.

It's 800 Kbps transmission rate and 8-bit colour depth means graphics and animations are played back smoothly and consistently.

At ENTTEC, manufacturing quality and attention to detail is paramount. We always use thicker PCB to offer more durability, better heat dissipation and reduced voltage drop when compared to other LED strips available on the market. This in combination with the 12v operating voltage allows up to a 10m run with a single power injection.

Features

- RGBW, 4 in 1 full colour LED pixel strip.
- Premium flexible white 3oz copper PCB.
- Suitable for stage, entertainment and architectural applications.
- 12V DC input supply voltage.
- 60 LEDs per metre density.
- **■** 20 Pixels per metre density.
- Control protocol SM16704PK compatible with UCS2904.
- **4.29 billion possible shades per LED.**
- **■** 120-degree illumination.
- 3M adhesive double side tape on the rear.
- Built-in data signal reshaping circuit.
- High LED density.
- Can be cut or joined at each copper tab.
- IP20 Indoor use only.
- Designed for use with ENTTEC pixel products.
- Maximum 17.64 Watts/Metre.

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Specification

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Connectors	2* 3Pin JST SM			
ID Dating	connectors (3A Max)			
IP Rating	IP20			
Input Voltage	12V			
	RGB: 14 W			
Watts/Metre (Max)	W: 6.12 W			
	Total: 17.64 W			
	RGB: 422.40			
Lumens/Metre (Max)	W: 269			
	Total: 655.6			
Efficacy (Lm/Watt)	37.17			
DMX Channels/Pixel	4			
Beam Angle	120 °			
Control Protocol	SM16704PK (compatible with UCS2904)			
PWM Frequency	1.2KHZ			
Data Transmission Rate	800 Kbps			
Backup Data Line	No			
Pixel Mapping Order	RGBW			
White Temperature	4000K			
PCB Colour	Black			
PCB Width	10mm / 0.40"			
Bend Radius (Min)	30mm / 1.2"			
Spacing Between Cuttable Sections	50mm / 1.98"			
Environmental	0°C to 50°C			
Operating Temperature	32°F to 122°F			
Environmental Operating Humidity	5- 95% (non-condensing)			
Weight (5m Roll)	0.18Kg / 0.40lbs			
Shipping Dimensions	240 * 215 * 16mm			
(Single Roll)	9.45 * 8.47 * 0.63"			
Shipping Weight (Carton of 5 Rolls)	0.80Kg / 1.76lbs			
Shipping Dimensions	260 * 225 * 93mm			
(Carton of 5 Rolls)	10.24 * 10.04 * 3.66"			
Warranty	1 year return to base manufacturer warranty			

Box Contents

- 1*5m 8PXB60-RGBW-12V-B reel
- 1* 3Pin JST SM connector (3A max)

Connections

3PIN JST SM Connector:

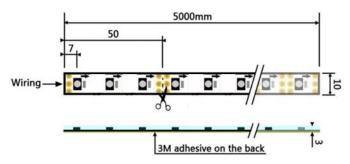
- **12V**
- DI/DO: Data Out/Data In
- GND: Ground

Visit the ENTTEC knowledgebase for wiring guides.

Certification CELEFC

Physical Dimension

60 Pixels/meter



Maximum Run Length

Colour and lumen output will be affected if maximum length is exceeded. Test conducted at maximum brightness using 12volt driver.

		MAXIMUM LENGTH		
POWER INJECTION	LED PER METRE	WHITE	RED, GREEN, BLUE	ALL ON
SINGLE	60	7m	10 m	5m
DUAL	60	15m	15m	10m

Note: Maximum length of pixel strip run is limited by maximum universes of data from the driver.

Safety

- Ensure all cabling is rated to handle the current of each pixel strip section. ENTTEC recommend separate wiring soldered directly to the strip, to substitute the original JST SM connector for sections exceeding 3A current consumption.
- Make all connections and ensure your installation is appropriately fused before powering it.
- Handle with care and adhere to the LED Pixel Strip instruction sheet.
- Pixel strips produce heat; ensure proper thermal management by attaching to a thermally conductive surface and providing 150mm / 6" for convection.
- This product is intended for indoor use only. Do not expose to moisture, doing so will void the warranty.
- Never plug this product into a dimmer.

Document Updated: May 2024

Ordering Information

For further support and to browse ENTTEC's range of products visit the ENTTEC website.

Item	SKU
RGBW PIXEL STRIP 60 LEDs/	8PXB60-RGBW-
METRE 12V – 5-METRE ROLL	12V-B
BLACK	

enttec.com

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