

LED Sign Illumination System

PRODUCT DESCRIPTION



Everbrite has an extensive and well tested line of existing illumination engines and control electronics for channel letters. These energy efficient products develop a bright and uniform illumination with industry standard lifetimes. The Everbrite Class 2 LED illumination and display products are registered with UL and listed in the Sign Accessory Manual (SAM). Our file numbers are E325903 & E131602.

PRODUCT FEATURES

BENEFITS

Energy Efficient

Constant current control allows the LEDs to be driven at full light output while attaining maximum lifetime. This saves up to 50% in energy over resistor-limited systems.

Low Maintenance

No need to change fluorescent bulbs. Our LED products are designed for outdoor environments.

Bright and Uniform

High brightness LEDs give the channel letter dynamic visibility

Wide viewing angle LEDs allow back-mounting for uniform light distribution

Industry Standard Lifetime

White 5000°K — 100,000 hours

Estimated Time to 70% Light Output

White 5000°K — 50,000 hours

Warranty

Limited Three Year — LED system only; Power Supplies carry the manufacturer's own warranty.

Contact

(800) 431-7383

Email: evertron@everbrite.com

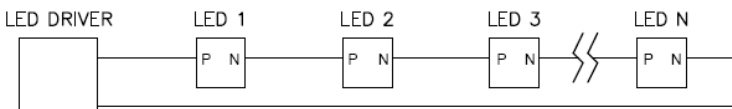
LED Sign Illumination System (con't)

SPECIFICATIONS

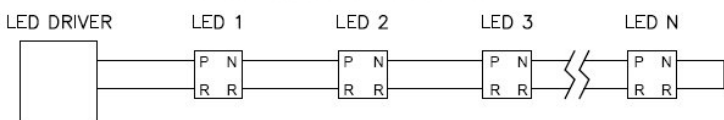
PARAMETER	VALUE
Voltage (bulk power supply)	24/30/48 VDC maximum
LED Current	300 mA constant current (each string)
LED Brightness each LED	85 lm at 300mA — 83 lm/watt
Color Temperature	5000°K, other white hues and some colors by special order
Ambient Operation	-40°C to +55° C
LED Emitter	Circuit board 1" square — 1W LED
Constant Current Regulator	Circuit board 1.6" with LED (indoor only) Potted Circuit board 1"x2.5" without LED
Number of LEDs in a string	6 Max. for 24VDC operation 7 Max. Outdoor (30VDC NEC Limit) 12 Max. Indoor (48VDC NEC Limit)
UL File / SAM Reference	E325903 & E131602

APPLICATIONS

The illumination of a single LED is roughly a 6" diameter circular pattern, when the depth of the can is 5". The wide viewing angle (120°) results in uniform illumination all the way down the side-wall. This results in considerable mixing of the light with virtually no hot spots. The LED power wiring can optionally be ordered in a chain configuration for routing in tight spots. Outdoor LED strings will come with the sealed regulator and conformal coat.

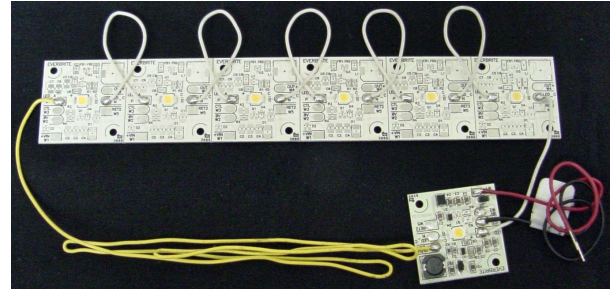


LED "STRING" WIRING

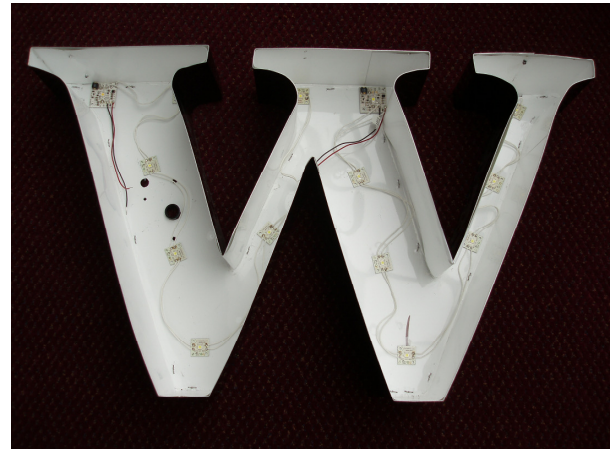


LED "CHAIN" WIRING

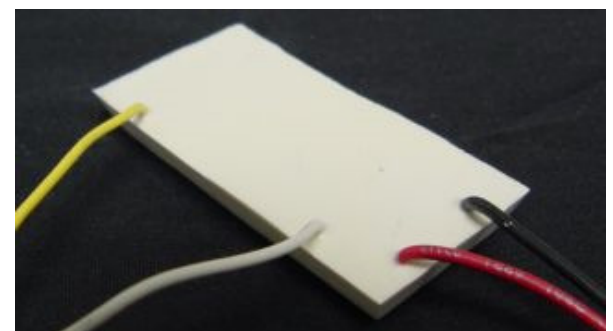
Typical indoor illumination system



Boards snap apart and stick in place with high strength VHB tape (optionally provided) or rivets.



Fully potted and totally water sealed constant current regulator for outdoor use.



CONTACT

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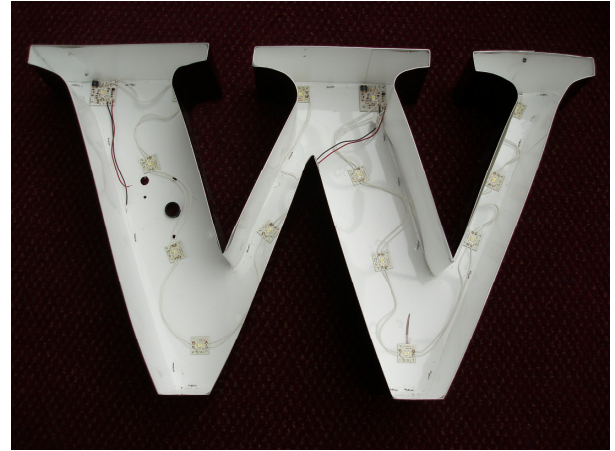
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ORDER OPTIONS — Each LED String

PART	COST
Indoor 24VDC — Combo regulator + 5 LEDs	\$25.85
Indoor 30VDC — Combo regulator + 6 LEDs	\$27.50
Indoor 48VDC — Combo regulator + 11 LEDs	\$38.50
Outdoor 24VDC — Sealed regulator + 6 LEDs	\$27.50
Outdoor 30VDC — Sealed regulator + 7 LEDs	\$29.15
LED chain wiring option, any string — ADD	\$2.00
NOTE	
LED to LED distance is 6.5"	
Power wires to regulator are 8"	
Outdoor LED boards are conformally coated	

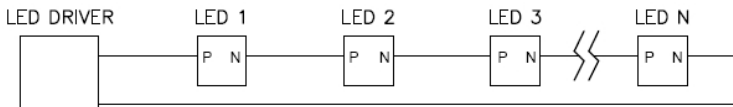
Boards snap apart and stick in place with high strength VHB tape (provided) or rivets.



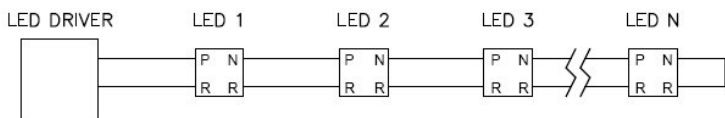
When placing any of the boards, **do not** push on the top of the LEDs. Also when using a Combo board (indoor regulator), **do not** push on the square black coil in the corner either.

APPLICATIONS

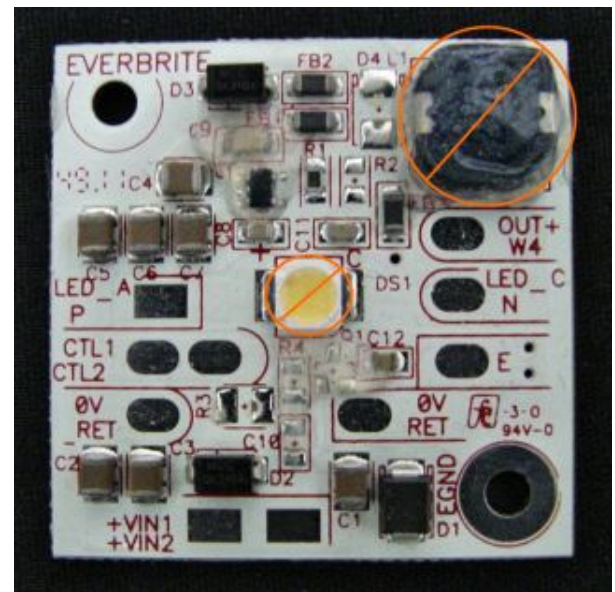
The LED and regulator circuit boards come with peel & stick high tack VHB tape on the back. If it is ever necessary to remove a circuit board, it must be twisted off. The VHB tape is rated for use with metal and powder coated surfaces, but the surfaces should be wiped clean with rubbing alcohol before application of the LED boards. Hold the board by the outside edges and press in place with a slight wiggle. The bond will continue to strengthen with age and heat.



LED "STRING" WIRING



LED "CHAIN" WIRING



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