

# CUSTOM NEON<sup>®</sup>

TECHNICAL SPECIFICATIONS  
INDOOR LED NEON



## CUSTOM NEON® LED NEON OFFERS A MODERN, INTELLIGENT, HIGH-QUALITY LIGHTING SOLUTION.



### LOW ENERGY, REMARKABLE BRILLIANCE

Our durable and easy-to-install LED Neon signs provide a more environmentally friendly alternative to traditional glass neon signage.



### VERSATILE AND STYLISH

Custom Neon signs are suitable for a wide range of applications. Lightweight and portable, they can light up events, weddings and make any occasion special. The low energy consumption and coolness to touch makes them suitable for anywhere in the home, including children's rooms.



### EYE-CATCHING AND UNMISSABLE

Custom Neon signs make a great addition to any business, office or storefront. Made to your specific requirements and designs, our signs help you to stand out from the competition.



**IDEAL LIGHTING SOLUTION**

LED Neon uses diffused light emission along the entire strip to create a bright and even distribution of light.

**HIGH QUALITY MATERIAL**

Custom Neon's LED Neon offers a durable and robust linear lighting solution that avoids the downsides of glass neon tubes while improving on its visual appeal.

**ENERGY CONSUMPTION**

Due to the low voltage of LED Neon, it is a much more cost-efficient alternative to glass neon signs, saving up to 70% in energy cost in some situations.

**CUSTOM  
NEON**

**SAFETY**

LED Neon is a much safer alternative to glass neon tubing as it runs on 12V and remains cool to touch when illuminated. Glass neon signs run at a much higher voltage of between 3KV to 18KV and can become extremely hot. LED Neon is shatterproof, unlike glass neon signs, making it safer and easier to install or transport.

**LONG LASTING**

Using the latest LED technology, LED Neon signs have a long lifespan lasting up to 100,000 hours which equates to over 11 years even if left on for 24 hours a day.

**SIZE AND FLEXIBILITY**

Available in a range of sizes from 8mm to 10mm tubing, this material is very flexible, making it possible to bend it into almost any logo, lettering, curve, or shape to create the perfect illuminated sign.



# WIDE RANGE OF COLORS

AVAILABLE IN 18 COLORS SO YOU CAN CUSTOMIZE YOUR DESIGN.

Eight of these are white when the sign is turned off and colored when the sign is switched on. The remaining ten colors come with a colored tube, so the sign shows its color even when it's turned off.



8mm

The colored tube has a white rubber edging that's visible when the sign is turned off.



9mm & 10mm

The colored tubes are a single color throughout, so the color is consistent even when the sign is turned off.

OFF



ON



See next page for a color changing sign →





# COLOR CHANGING LED NEON SIGNS

OUR RGB COLOR-CHANGING SIGNS ALLOW YOU TO CHOOSE THE COLOR YOU'D LIKE YOUR SIGN TO BE AT ANY GIVEN MOMENT AND OFFER AUTO COLOR-CHANGING OPTIONS.

Each Custom Neon RGB sign comes with a remote. The color wheel function allows you to choose from a wide range of pre-set colors\*.

There is also an option that allows you to cycle through 7 separate colors on a static mode and an option to cycle through six different dynamic modes, which offer a range of flashing, flickering and gradual change at various speeds.

\* Note that the color wheel function does not offer 'white' or 'warm white' options however 'white' is an option in the static color mode.



Custom Neon's RGB signs allow you to change the brightness and select modes all at the touch of a button, via the RGB remote.

- Available with all accessories & backboard types.
- Compatible with DMX controllers.

## TECHNICAL SPECIFICATIONS

**Material:**  
Silicone and Acrylic

**Usage:**  
Indoor

**Sizes of LED Neon:**  
8mm

**LED type:**  
SMD5050RGB

**IP rating:**  
IP44

**Power consumption of LED Neon:**  
14W/m

**Power:**  
12Vdc adapter which plugs into a power socket or can be hardwired by a professional electrician.

**Standard exit cord length:**  
6ft 6in or 2m

**Standard adapter length:**  
4ft 11in-6ft 7in or 1.5-2m, giving overall 9ft 10in or 3m+ of cordage.

**Max LED Neon metreage per exit cord:**  
1 exit cord per 13ft 2in-19ft 8in or 4-6m

### Remote functions:

- Dynamic Modes: cycle through 7 static colors & 6 dynamic modes to flash, flicker & allow gradual change.
- Static Mode: Choose from 7 static colors.
- Static Colors: Red, green, blue, yellow, pink, dark blue & white.
- Dimmer: Use the remote to dim and brighten the sign.
- Power: Use the remote to turn the sign on/off.

**Amplifier:**  
If a sign has more than 49ft 2in or 15m of LED neon, an amplifier will be supplied. The amplifier replaces our standard LED controller, providing the same remote control functions.

**Thickness of acrylic:**  
3-8mm (Standard thickness 5mm)

**Maximum size of a single piece of acrylic:**  
7ft 10in x 3ft 11in or 240cm x 120cm

**CRI:**  
80Ra

**Warranty:**  
2 years

**Certifications:**  
CE and ROHS

**Wavelength:**  
R(Red): 610 - 660 nm  
G(Green): 490 - 560 nm  
B(Blue): 430 - 460 nm

# BACKBOARDS



- High quality acrylic backboards are used to ensure the LED neon tubing retains its shape.
- The standard thickness of our acrylic backboards is 0.19in (5mm), with sizes between 0.11in (3mm) and 0.31in (8mm) available.
- We can create backboards that are rectangular, cut around the letters, cut close to letters or cut to designs that suit your specific requirements.
- The backboard adds a margin of approximately 0.8in (2cm) around the text, or approximately 1.6in (4cm) to the overall length and height of the sign.
- A single acrylic backboard can be up to 7ft 8in (240cm) by 3ft 11in (120cm). Signs larger than this will be made on two or more backboards that can be easily arranged together.



# NAKED NEON™

**THE NAKED NEON™ BACKBOARDS** are created from polycarbonate (PC) which is a strong yet flexible material that can withstand impact forces and generally does not shatter.

What makes the material remarkable is the combination of flexibility and strength.

This allows us to create signs with a barely visible, transparent backboard that extends a minimal distance around the outline of the LED flex but still provides a resilient way to mount the sign.

- Not available on IP67 outdoor signage.
- Only available on clear backboard - The backboards for this product are cut so close to the sign that the backboard is hardly visible.
- Can be wall-mounted using our wall mounting kit or our standard screws. Depending on the size of your sign, you can also mount it using adhesive strips.
- Hanging wires can not be used to hang a Naked Neon™.
- Due to its flexible nature, additional care should be taken when unboxing and installing Naked Neon™ signs.
- Depending on the size of your sign, individual words or design elements may be supplied on their own Naked Neon™ backing to be placed/installed together.





Backboard options include clear, black, white, colored, mirrored, glitter and more.



BLACK



WHITE



SILVER MIRROR



GOLD MIRROR



## UV PRINT

UV printing is an effective way to add a sharp, vibrant colored image or text on the backboard of a Custom Neon sign. UV printing is available on any acrylic and can be printed in any color. If you use a specific color just provide us with your Pantone code or CMYK breakdown and we can match it! It's excellent for capturing finer details like gradients or elements of your design that may be too small for LED Neon. There's no limit to how many colors can be printed within your design.



## BOXES AND STANDS

- We offer both free standing and wall mounted open boxes.
- Our acrylic stands have a slit where the sign slides in, making it free-standing.
- The maximum-sized sign our acrylic stands can accommodate is 3ft 3in wide x 1ft 4in high or 100cm wide x 40cm high.



## ADAPTER

- For signs that are split across more than one piece of acrylic, there is an option to connect up to 6 signs to one adapter which is then plugged into a single electrical outlet.
- Signs can be hardwired by electricians.
- If a sign is hardwired, the dimmer and remote will not work unless the receiver is visible to the remote.
- The exit cord will typically be in the lower right-hand corner of the sign unless the customer has requested otherwise or there is a better position for that particular sign.
- Battery operated signs are available if they are small or desk-based signs.
- Depending on size some signs may require more than 1 exit cord.



## STANDARD INCLUSIONS

- Dimmer and remote included with all signs. (AAA batteries not included).
- Pre-drilled 0.16in (4.3mm) holes in backboard and standard screws and wall plugs.
- Standard pre-drilled holes are NOT compatible with wall mounting kits. The mounting kits must be purchased at the same time as the sign so that the sign can be made with the correct hole dimensions.
- Exit cord – clear unless black or white is requested. The standard length is 4ft 9in (1.5m).
- Adapter.



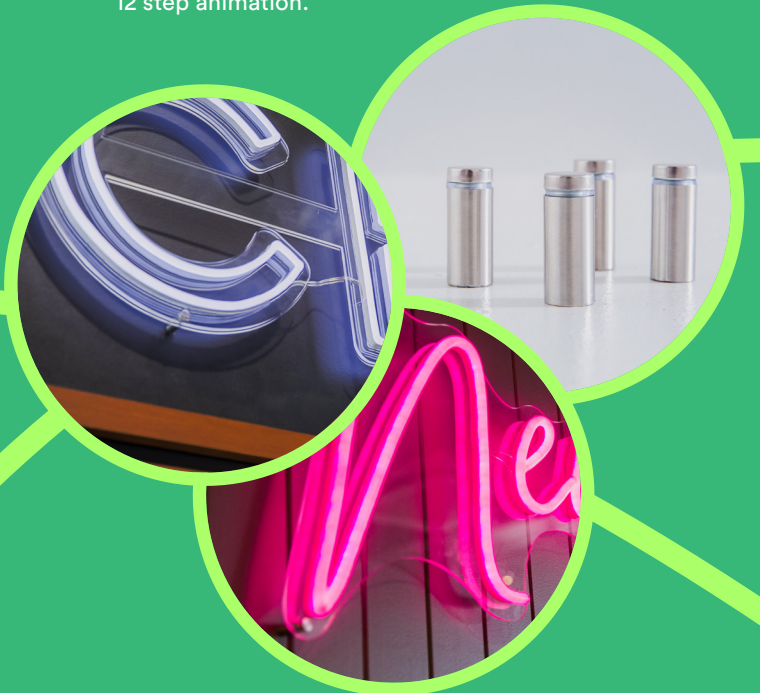
## ADDITIONAL EXTRAS

### Mounting kits and hanging wires

- Standard mounting kits allow the sign to sit 1in or 2.5cm off the wall.
- Mounting kits are also available in silver, black and gold.
- Extended mounting kit available for a 2.4in or 6cm offset.
- Hanging wire kits are primarily used to hang signs from the ceiling.
- Standard hanging wires are 6ft 5in or 2m. Longer wires are available upon request.
- Longer exit cord available upon request.

### Animation

- Flashing can be programmed for 12 step animation.



# TECHNICAL INFORMATION



LED Color	White	Light Red	Golden Yellow	Lemon Yellow	Green	Ice Blue	Electric Blue	Purple*	Pink	Warm White	Red	Orange	Mint	Deep Green	Tropical Blue	Deep Blue	Cotton Candy	Deep Pink
Panel Color	White	White	Golden Yellow	Lemon Yellow	White	White	White	Purple	White	Warm White	Red	Orange	Mint	Deep Green	Tropical Blue	Deep Blue	Cotton Candy	Deep Pink
Bottom Color	White	White	Golden Yellow	Lemon Yellow	White	White	White	Purple	White	Warm White	Red	Orange	Mint	Deep Green	Tropical Blue	Deep Blue	Cotton Candy	Deep Pink
Stroke Width	12mm																	
Thickness	8-10mm																	
Voltage	12V DC																	
Wattage	8-9mm 13W/m & 10mm 8W/m																	
CCT/nm (Color Temp)	6500k	619nm	590nm	575nm	520nm	495nm	469nm	405nm	430nm	3000k	619nm	606nm	570nm	520nm	495nm	469nm	610nm	430nm
Lumens	24-26Lm/ft	24-26Lm/ft	24-26Lm/ft	24-26Lm/ft	24-26Lm/ft	24-26Lm/ft	24-26Lm/ft	24-26Lm/ft	24-26Lm/ft	24-26Lm/ft	24-26Lm/ft	24-26Lm/ft	24-26Lm/ft	24-26Lm/ft	24-26Lm/ft	24-26Lm/ft	24-26Lm/ft	24-26Lm/ft
CRI	80Ra	80Ra	80Ra	80Ra	80Ra	80Ra	80Ra	80Ra	80Ra	80Ra	80Ra	80Ra	80Ra	80Ra	80Ra	80Ra	80Ra	80Ra
Dimming	10-100% with most incandescent, low-voltage magnetic, and low-voltage electronic dimmers*																	
Operating Temp	-13°F (-25°C) to 113°F (45°C)																	
Storage Temp	14°F (-10°C) to 86°F (30°C)*																	
LED Type	2835 SMD LEDs (spaced every 1/3")																	
Rating	Indoor IP44																	
Rated Life	Up to 100,000 hours																	

● Purple not available in 10mm for indoor ● Do not install in locations exposed to inclement weather or extreme temperature conditions (i.e. -13°F (-25°C) and below) ● Minimum loads may apply

## TECHNICAL SPECIFICATIONS

### Material:

PVC and Acrylic

### Sizes of LED Neon:

8/9/10mm

### IP rating:

IP44

### Power consumption of LED Neon:

12W/m

### Power:

12Vdc adapter which plugs into a power socket or can be hardwired by a professional electrician.

### Standard exit cord length:

4ft 9in or 1.5m.

### Standard adapter length:

4ft 11in-6ft 7in or 1.5-2m, giving overall 9ft 10in or 3m+ of cordage.

### Max LED Neon meterage

#### per exit cord:

8mm = 19ft 8in or 6m

9mm = 19ft 8in or 6m

10mm = 24ft 7in or 7.5m

### Remote functions:

- Remote can be programmed to flash, flicker and pulse.
- Dimmer allows sign to be dimmed in 10% increments.
- Timer allows you to program when the sign turns off.

### Thickness of acrylic:

3-8mm (Standard thickness 5mm)

### Maximum size of a single

#### piece of acrylic:

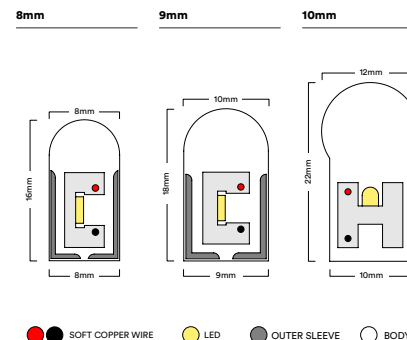
7ft 10in x 3ft 11in or 240cm x 120cm

### Lifespan:

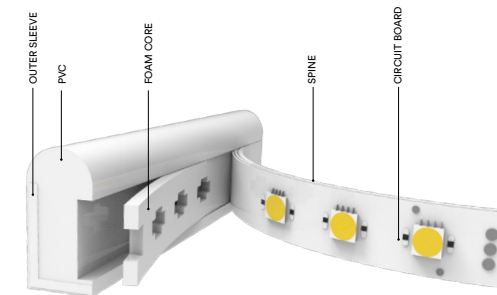
Up to 100,000 operational hours

### Warranty:

2 years



● SOFT COPPER WIRE ● LED ● OUTER SLEEVE ○ BODY





# LIGHT, YOUR WAY.



**IF YOU HAVE ANY  
QUESTIONS PLEASE  
GET IN TOUCH  
WITH US.**



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