



## 6 GOOD REASONS FOR NEON TO LED CONVERSIONS

### Retrofitting to New Technology to Save Money and Go Green

Brand image is the overall impression in a consumer's mind formed from all sources, including electric signs. The purpose of any branding sign is to draw attention to the brand in a positive way, but many times due to inconsistent sign lighting, a positive branding statement is compromised. Many channel letter signs, for instance, were put in service when neon lighting was the only option, or the least expensive choice until recently. Unfortunately, because of high maintenance requirements and cold-weather reliability, neon has a lower performance level than LED, leaving a brand vulnerable to projecting a negative impact to its market.

Improvements in technology have brought down the price of LED's while increasing their quality, and now the majority of today's channel letters are made using LED's. LED's require much less maintenance and use almost 1/20th the electricity of neon. LED is also a low voltage system as opposed to high voltage neon, which means that LED installations are less invasive, preserving building aesthetics and integrity, because of the way large holes are required to accommodate components of neon systems.

Because neon is more bulky than LED, neon signs tend to be a little wider and taller than its LED counterparts. That is usually not a big issue for most window and wall applications. The biggest difference is depth. An LED sign or illuminated set of channel letters can be as little as 1" thick whereas a neon sign or letter must be at least 3.5" deep since the glass tubing must extend away from its backing.

Existing neon channel letters can be upgraded to LED for longer life and reduced energy consumption. The result is a sign that is not only "green" and eco-friendly, but also budget-friendly, brighter, and maintenance free.

### 6 Reasons for LED

- Reduced energy cost up to 94%
- Long Life- 50,000 hours (conservative estimate equal to 11 years of night-time use)
- Less service/ reduced maintenance costs
- Less insurance risk (reduced fire and shock hazards)
- Improved performance in cold weather
- Fewer required primary electrical circuits

*"I worked with Holiday Signs on replacing and repairing channel letters at the dealership. They followed through on all promises made and delivered a well done final product. The new LED lit letters look great."*

**Ray Parrish**  
Ford Dealer

For perspective, in our chart at below that uses 80 linear feet of neon/LED as an example, the neon sign draws as much power as twenty 42" flat screen TV's. The LED sign pulls the power equivalent to that of one TV. That's a huge difference! From an environmental standpoint, neon signs are much less environmentally friendly. They use loads of power and also contain mercury. The "green" qualities of LED can be a helpful factor in the permitting process.

Holiday Signs offers free estimates for custom neon-LED conversion projects. Depending on the amount of neon needing replacement, the savings in energy and maintenance costs alone will pay for the conversion in a short time and allow for improved performance in promoting your brand.

### NEON vs. L.E.D. – Power savings

	NEON	L.E.D.
Power Usage per foot	20 watts	1.2 watts
# of feet for sample	80	80
x Power Consumption	20 watts	1.2 watts
= Total	1,600 watts	96 watts
x 12 hours per day	19,200 watts	1,152 watts
x 365 Days per year	7,008,000	420,480
/ 1000 = annual kilowatt hour	7,008	420.48
x Cost per kilowatt hour (Dominion Power, Richmond)	\$ .11	\$ .11
Total annual energy cost	\$ 770.88	\$ 46.25
Savings over neon (\$)		\$ 724.63
Savings over neon (%)		94%



*Neon failures take out the entire letter. On cold days, neon letters may not light up as brightly as LED.*

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