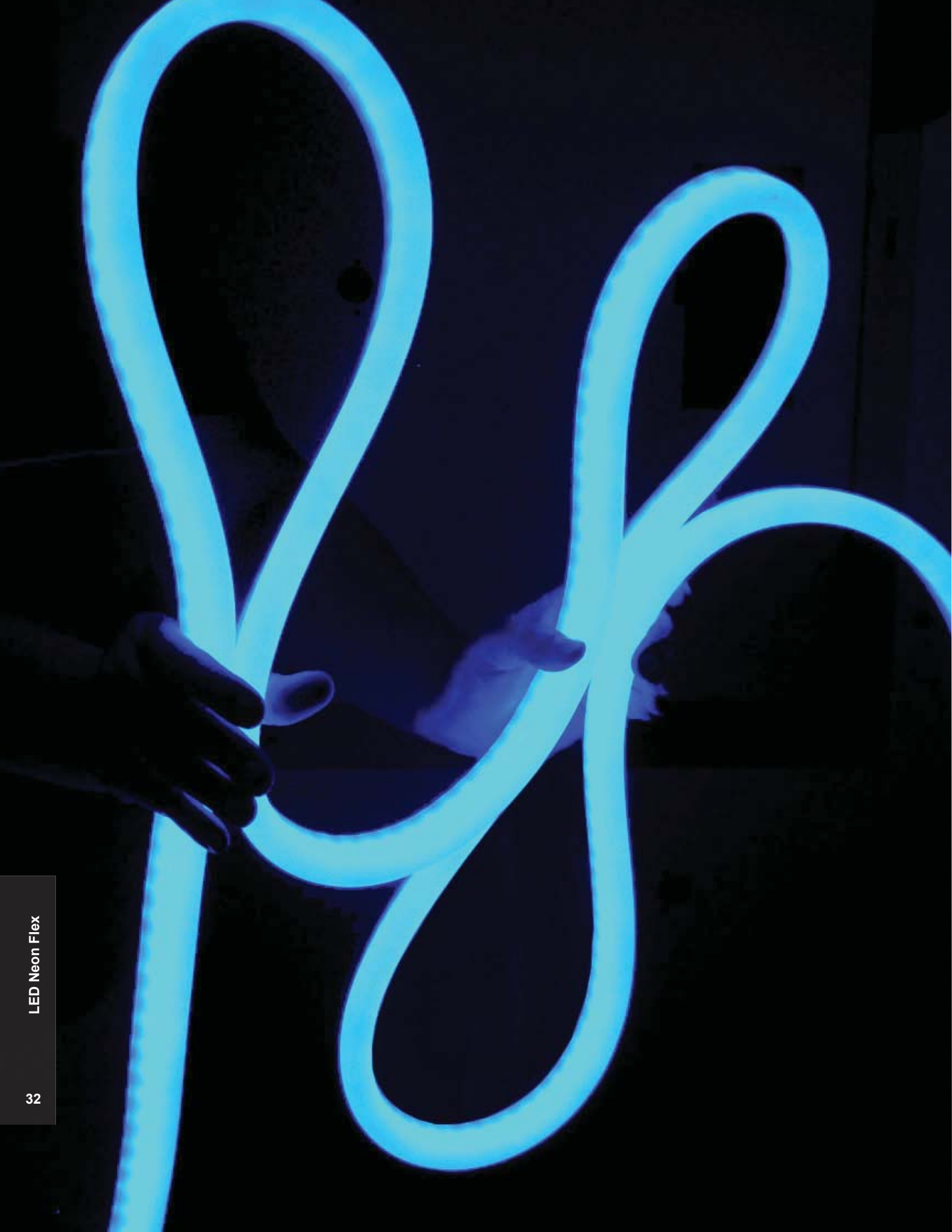


# Efficient-Tec International LLC.

Marker Lights   Rope Lighting   LED Flood Strips   Flexstrips   LED Light Bars   LED Neon Flex   Step and Aisle Lighting   Wall Washers   LED Street Lights

Professional LED-Lighting





# LED NEON FLEX

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# LED NEON FLEX

Traditional glass neon has long been the mainstream of outdoor linear lighting. Glass neon never overcame unresolved weaknesses. Glass neon has complicated installation, glass is fragile in nature, there is a potential shock hazard from high voltage, high maintenance costs and high power consumption. LED **Linear Lighting** manufacturers have made a firm claim to resolve the traditional glass neon problems. We are proud to announce a perfect substitute for exposed neon. Most cannot observe any difference to the glass neon unless they hold the LED NEON-FLEX in their hand. Also called "Bendable Neon," one can hand bend LED NEON-FLEX tube in whatever angle is desired. It installs within minutes and most important, gives no hot spots in appearance.





RED

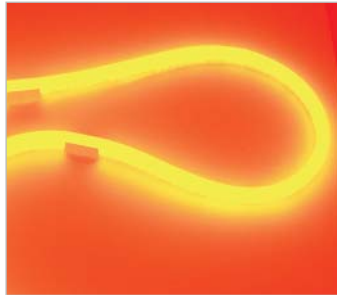


YELLOW



ORANGE

LED Neon Flex 120V - 90 ft. max  
(red, yellow & orange)



W 0.5" x H 1.1"

120~			max length 90ft	Red Yellow Orange	LN-FX-2W-R-120V LN-FX-2W-Y-120V LN-FX-2W-O-120V
			.5" LED spacing		
cutting unit 30"	1.44W per ft.	216W total			Note:
60 LEDs per unit	2160 total LEDs	(R,Y,O) 1.44W/ft.	lamp < 50K hrs	maximum loading length 96ft (with 1.6A converter) 240ft (with 4.0A converter)	



GREEN

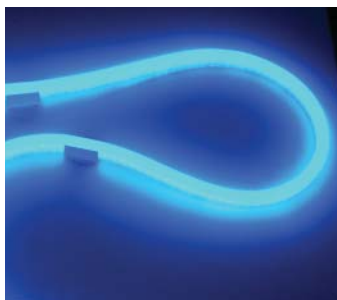


BLUE



WHITE

LED Neon Flex 120V - 90 ft. max  
(green, blue & white)



W 0.5" x H 1.1"

120~			max length 90ft	Green Blue White	LN-FX-2W-G-120V LN-FX-2W-B-120V LN-FX-2W-W-120V
			.5" LED spacing		
cutting unit 18"	2.0W per ft.	300W total			Note:
36 LEDs per unit	2160 total LEDs	(G,B,W) 2.4W/ft.	lamp < 50K hrs	maximum loading length 96ft (with 1.6A converter) 240ft (with 4.0A converter)	



RED



YELLOW



ORANGE

LED Neon Flex 24V - 50 ft. max  
(red, yellow & orange)



W 0.5" x H 1.1"

24~			max length 50ft	Red Yellow Orange	LN-FX-2W-R-24V LN-FX-2W-Y-24V LN-FX-2W-O-24V
cutting unit 4"	2.16W per ft.	64.8W total			
8 LEDs per unit	1200 total LEDs	(R,Y,O) 1.44W/ft.	lamp < 50K hrs	Note:	maximum loading length 16ft (with 1.6A converter)

24~ Neon Flex transformer on page 106



GREEN

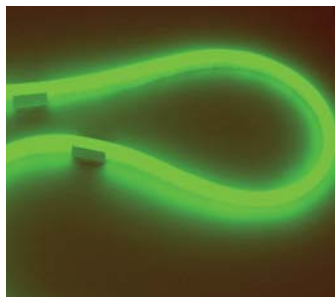


BLUE



WHITE

LED Neon Flex 24V - 30 ft. max  
(green, blue & white)



W 0.5" x H 1.1"

24~			max length 30ft	Green Blue White	LN-FX-2W-G-24V LN-FX-2W-B-24V LN-FX-2W-W-24V
cutting unit 3"	2.4W per ft.	72W total			
6 LEDs per unit	720 total LEDs	(G,B,W) 2.4W/ft.	lamp < 50K hrs	Note:	maximum loading length 40ft (with 4.0A converter)

24~ Neon Flex transformer on page 106

# Installation

The LED NEON FLEX is a versatile and user-friendly lighting device. It can be cut, bent, formed in the field and easily installed on any flat surface. NEON FLEX easily connects to a 120V or 24V power supply.

1. It is recommended to mark centerlines or draw the outline of your pattern on the surface of your desired positions.
2. Secure mounting clips on the centerlines at appropriate intervals with screws. If there are curves, secure a mounting clip to the ends of the curve.
3. Insert the LED housing into the mounting clips with the lighting parts upward.
4. Connect each part together.

## 1. cutting marks



LN-FX must be cut only on the indicated marks.

## 2. linear installation



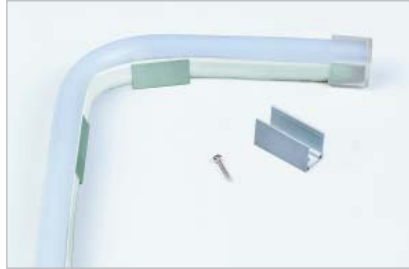
aluminum channel in 2' sections LN-FX-CH.

## 3. curve installation



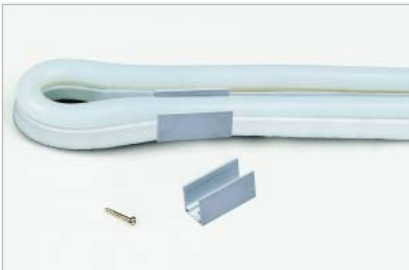
aluminum mini-channel LN-FX-5 with screws included

## 4. 90° installation



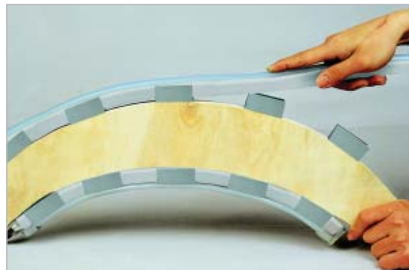
aluminum mini-channel LN-FX-5 with screws included

## 5. 180° installation



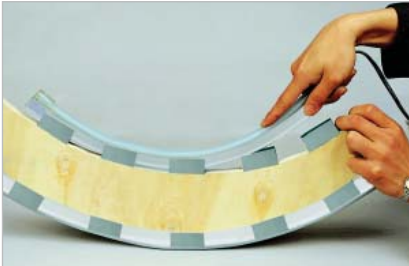
aluminum mini-channel LN-FX-5 with screws

## 6. convex Installation



aluminum mini-channel LN-FX-5 with screws included

## 7. concave installation



aluminum mini-channel LN-FX-5 with screws included

## 8. slot Installation



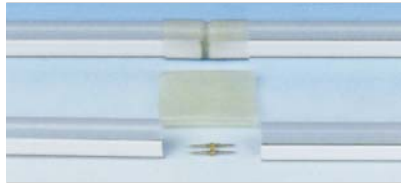
press LN-FX into 1/2" groove

# Connecting LED Neon Flex

## 1. Connections & end caps



Front Connector includes:  
1. Female Power Connector LN-FX-CA-1  
2. Male Connecting pin LN-FX-CA-2  
3. Heat Shrink Tube



Spliceable Connector includes:  
1. Male Connecting pin LN-FX-CA-3  
2. Heat Shrink Tube



Attachable End Cap LN-FX-CA-4

## 2. Molded Connector- Factory Applied



Front Connector includes:  
1. Molded Power connector LN-FX-M-1



Molded End Cap: LN-FX-M-2

# Connecting LED Neon Flex

## 3. 120VAC Plug-in Power Supply



- Includes:
1. Power Plug
  2. AC/DC in-line converter

## 4. 24V Power Supply w/ cable



- Includes:
1. Power Plug
  2. Transformer
  3. AC/DC in-line converter

## 5. Middle Connector with Cable



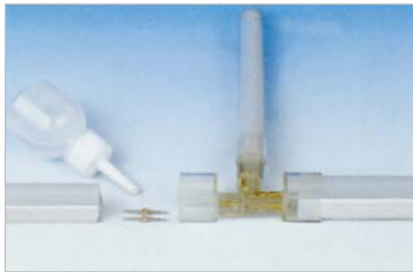
- Includes:
1. Female Power connector LN-FX-CA-1
  2. Male Connector pin LN-FX-CA-2
  3. Heat Shrink Tube

## 6. 4-Way Connector



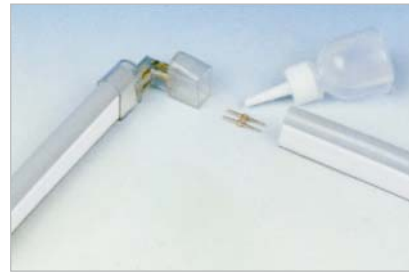
- Includes:
1. 4-Way "X" Connector LN-FX-X
  2. Male Connector Pin LN-FX-CA-2
  3. Heat Shrink Tube

## 7. T-Connector



- Includes:
1. T-Connector LN-FX-T
  2. Male Connector Pin LN-FX-CA-2
  3. Heat Shrink Tube

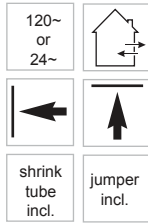
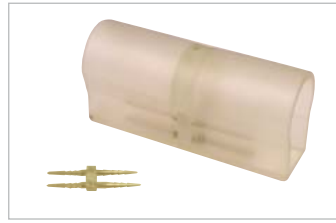
## 8. 90 deg. L-Connector



- Includes:
1. L-Connector LN-FX-L
  2. Male Connector Pin LN-FX-CA-2
  3. Heat Shrink Tube

# LED Neon Flex Accessories

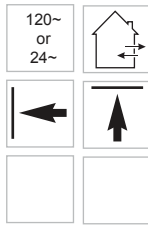
## Splice Kit



Splice Kit

LN-FX-2W-R-24V

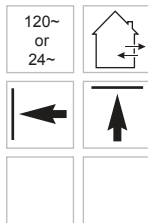
## LNFX Connectors



L-Connector  
T-Connector  
X-Connector

LN-FX-L  
LN-FX-T  
LN-FX-X

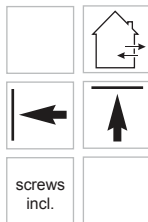
## End Cap



End Cap

LN-FX-CA-4

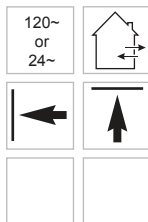
## Channel



linear channel  
mini channel

LN-FX-CH  
LN-FX-5

## Jumper Connector



Jumper Connector

LN-FX-CA-1

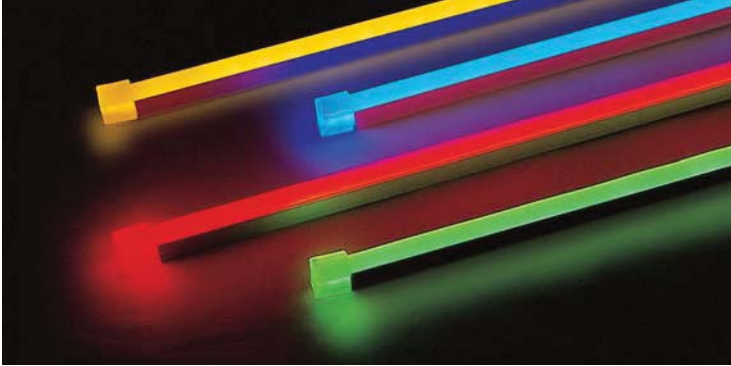


## Low voltage, low energy consumption

LEDs perform well on a low voltage of 24V and consume only 2.88W per foot.

## High and even brightness

The light source is a string of light emitting diodes (LEDs) spaced to permit the light to emit into the oval shaped jacket. LED NEON-FLEX provides light with a uniform neon-like brightness, long life and durability. LED NEON FLEX applies LED technology in a complete new structure. It is extremely durable under all conditions and has a lifetime of up to 100,000 hours. Compared to glass neon, it is durable, impact resistant and energy saving.



## Energy saving

LED NEON-FLEX can save you up to 70% or more on energy.  
 Traditional glass neon: 8.75 watts per linear foot  
 LED NEON-FLEX: 2.88 watts per linear foot

## Flexibility

LED NEON-FLEX, worthy of its name, is highly flexible. It can be bent in the field to a minimum of 1.5", and can be cut at any incremental cutting mark. Thus it is very easy to shape letters, patterns, motifs and other applications.



## Safety

Unlike neon lights that have to run on a very high voltage of up to 15,000V, LED NEON-FLEX only operates on 120V or 24V. Its shock proof, very little heat is emitted and it is extremely safe to use.

## Transportable and easy to install

Because of the fragile nature and heavy weight of traditional neon (primarily due to its support structure) traditional neon tubes are expensive to package and ship. LED NEON-FLEX, with its minimal size and weight, provides the handling benefit so that it is easy to transport. LED NEON FLEX is easy to install and can save you hours of labor. Energy cost comparison between traditional glass neon and LED NEON FLEX are based on a 300 ft length of red.



REGION	GLASS NEON	LED NEON FLEX	ANNUAL SAVINGS	CUMULATIVE SAVINGS
USA Midwest (0.08\$ / Kwh)	\$1,839.60	\$605.40	\$1,234.20	\$12,342.00 (over 10 year period)

Energy saving are based on local costs per kilowatt hour, 24 hours per day, 365 days per year. Energy usage – traditional glass neon: 8.75W/ft. LED NEON-FLEX: 2.88W/ft.



150ft. 50ft. or 30ft. rolls on plastic reels



Neon Flex demo case