



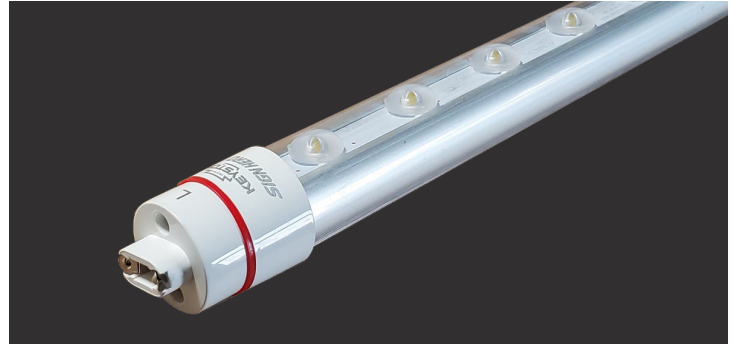
# KT-LED21T8-48P2S-8XX-D /G2

## DESCRIPTION

Replacement for conventional T12HO and T8HO fluorescent lamps for sign applications

## APPLICATION

Single- or double-sided outdoor signage



## PRODUCT FEATURES

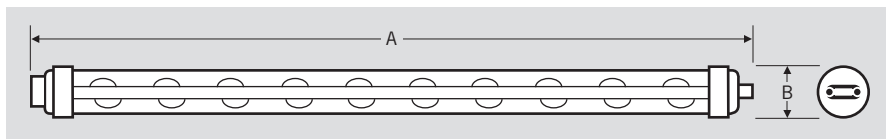
- Covered by one or more Patents: list available at <https://keystonetech.com/signhero-patent/>
- Ideal for both single-sided and double-sided signs
- 50,000+ hour lifetime
- Installs using existing sockets in the sign; all necessary wiring can be done within ballast raceway
- 120–277V input
- Optical lens over individual LEDs for optimal light spread within the sign
- Listed in the UL SAM Manual
- Effective 360° beam spread
- Rotatable end caps
- Double-sided design provides even lighting in signs with no hot-spotting
- Over 50% more energy efficiency than HO fluorescent lamps
- UL Classified: LED sign retrofit, evaluated to UL 48/UL 879A Standards
- No external driver or power supply needed
- Operating temperature: –30°C/–22°F to 55°C/131°F
- Optimized spacing 6" from the face and 12" on center

## PERFORMANCE SPECIFICATIONS

Catalog Number	Length	CRI	Wattage	Color Temperature	Socket Type	Efficacy	Total Lumens	Lumens		Rated Life L70
								Per Side	Per Foot	
KT-LED21T8-48P2S-840-D /G2	4'	>80	21W	4000K	R17d	119 lm/W	2,500	1,250	312	50,000 hrs
KT-LED21T8-48P2S-865-D /G2	4'	>80	21W	6500K	R17d	124 lm/W	2,600	1,300	325	50,000 hrs

## PHYSICAL SPECIFICATIONS

### LAMP DIMENSIONS



Nominal Length	Overall Length (A)		Diameter (B)
	Min.	Max.	
48"	45.72"	45.91"	1.10"

Base Type: Rotatable



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**ACCESSORIES (SOLD SEPARATELY)**

Catalog Number	Description
KTSP-10KV	External surge protector; Input voltage 120–277V; Max. peak current: 10KV; IP65 Rated

**ORDERING INFORMATION**

Catalog Number	Pack Qty.	Easy Code	UPC
KT-LED21T8-48P2S-840-D /G2	9	FIU-15	843654132136
KT-LED21T8-48P2S-865-D /G2	9	IRW-75	843654132143

**CATALOG NUMBER BREAKDOWN**

## KT-LED21T8-48P2S-8XX-D /G2

1
2
3
4
5
6
7
8
9
10

- 1 Keystone Technologies
- 2 LED Lamp
- 3 Wattage
- 4 Lamp Type
- 5 Length
- 6 Plastic
- 7 Double-Sided
- 8 800 Series
- 9 Color Temperature
- 10 Direct-Drive
- 11 2nd Generation

# KT-LED21T8-48P2S-8XX-D /G2

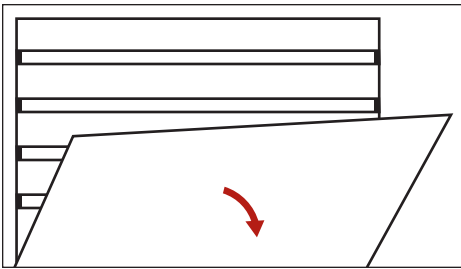
## WIRING AND INSTALLATION

### FOR NEW SIGN CONSTRUCTION

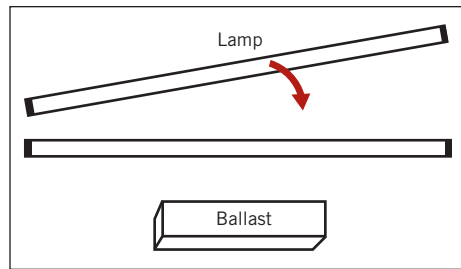
1. Run black wire (L) to all sockets on one side of sign and white wire (N) to all sockets on other end of sign.
2. Install LED lamps into sockets. Ensure the ends marked L and N correspond with the wiring of the sockets.
3. Rotate lamps to desired direction for application.
4. Ensure all black wires are joined together. Ensure all white wires are joined together. Check accessibility in raceway for easy field installation.

### FOR FIELD RETROFIT

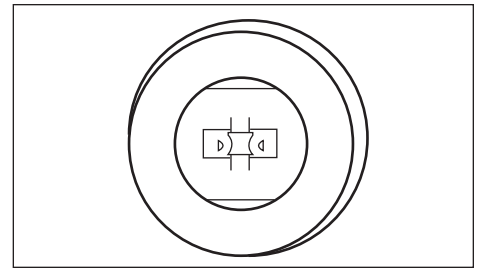
1. Ensure power is disconnected and open the sign.



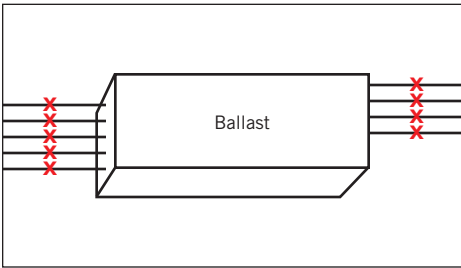
2. Remove fluorescent lamps from sign.



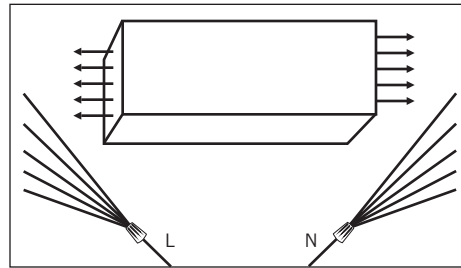
3. Inspect existing sockets to ensure they are in good shape, replace if needed.



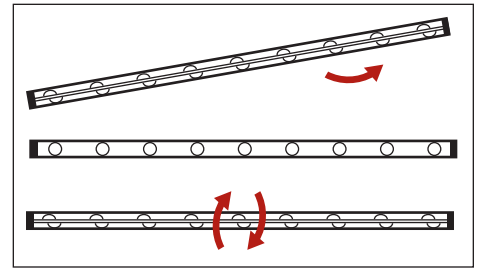
4. Access sign raceway/wiring box, and cut all ballast input and output wires as shown. Do not remove ballast if removal leaves an opening in the raceway.



5. From mains, connect input (L) line to all wires coming from sockets on one side of sign and (N) neutral to all wires coming from the sockets on opposite end of the sign.



6. Insert Keystone Sign Hero LED tubes and rotate to desired position for optimal illumination. Ensure side marked "L" is connected to corresponding line socket and "N" is connected to corresponding neutral socket.



7. Place retrofit warning label on existing ballast (if applicable) or somewhere in sign. Ensure it is visible for all future maintenance. Close sign and apply power.

