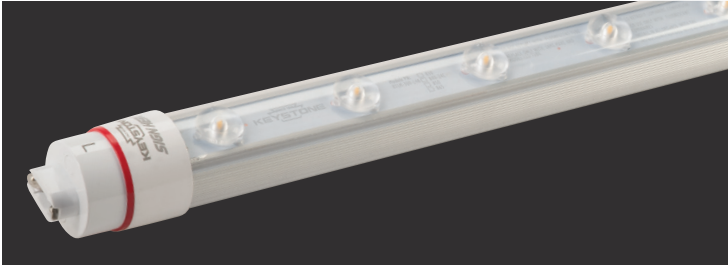




KT-LED21T8-96P1S-8XX-D

DESCRIPTION: Replacement for conventional T12HO and T8HO fluorescent lamps for sign applications

APPLICATION: Outdoor signage



PRODUCT FEATURES

- Patent pending
- Ideal for single-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 180° beam spread
- Rotatable end caps
- 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: -20°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
KT-LED21T8-96P1S-840-D	96"	>80	21W	4000K	R17d	121 lm/W	2,550
KT-LED21T8-96P1S-865-D	96"	>80	21W	6500K	R17d	126 lm/W	2,650

PHYSICAL SPECIFICATIONS

LAMP DIMENSIONS

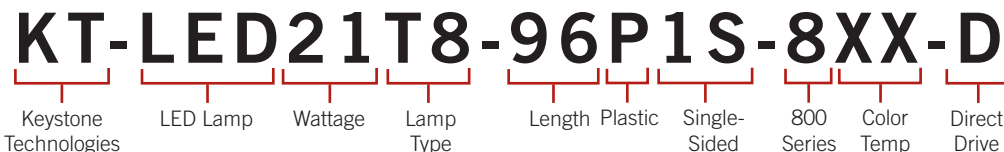
	Overall Length (A)			Diameter (B)
	Nominal Length	Min.	Max.	
	96"	93.72"	93.91"	1.10"

BASE TYPE: Rotatable

ACCESSORIES (SOLD SEPARATELY)

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

CATALOG NUMBER BREAKDOWN



KT-LED21T8-96P1S-8XX-D

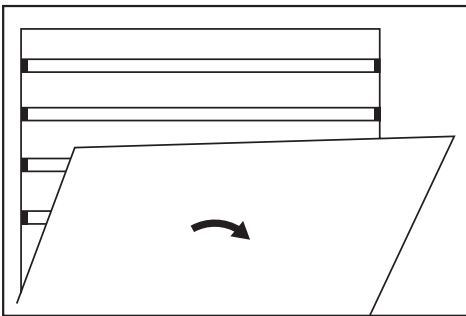
WIRING AND INSTALLATION

For New Sign Construction:

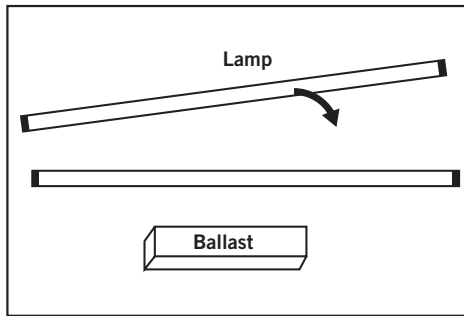
1. Run black wire (L) to all sockets on one side of sign and white wire (N) to all sockets on other end of sign.
2. Install LED lamps into sockets. Ensure the ends marked L and N correspond with the wiring of the sockets.
3. Rotate lamps to desired direction for application.
4. Ensure all black wires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

For Field Retrofit:

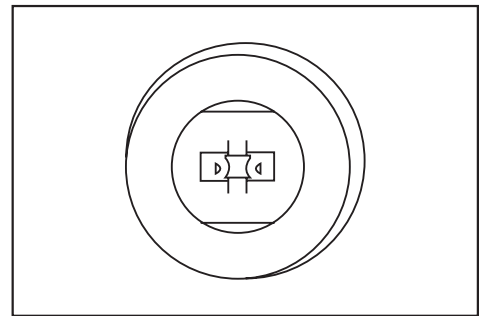
1. Ensure power is disconnected and open the sign.



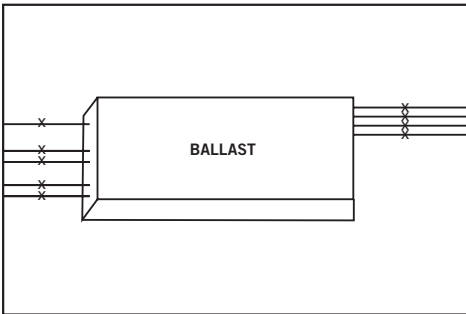
2. Remove fluorescent lamps from sign.



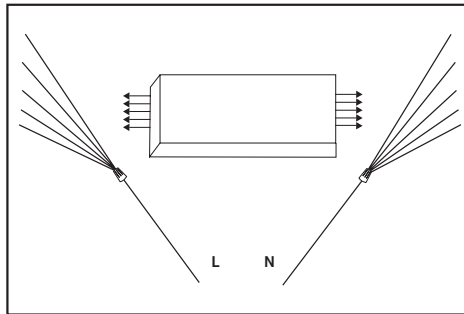
3. Inspect existing sockets to ensure they are in good shape, replace if needed.



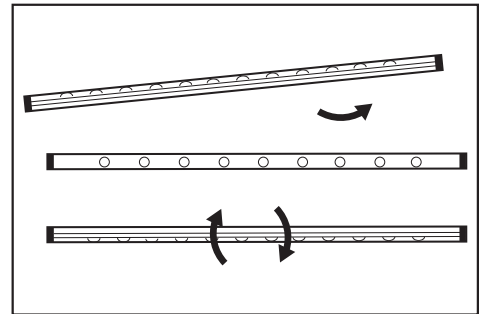
4. Access sign raceway/wiring box, and cut all ballast input and output wires as shown. Do not remove ballast if removal leaves an opening in the raceway.



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.

