



# EZ-LIGHT™ K80L Quad Indicator

Segmented Four-Color Point-of-Use Indicator



## Features

- Individual color quadrants can be lighted separately or in combination
- For error-proofing and "Andon"\* applications
- Provides operator guidance, even for those with limited color recognition ability
- PNP (sourcing) or NPN (sinking) input type, depending on model

\* **Andon** lights on machines or production lines indicate operation status. They are often located overhead for workers or a supervisor to view them.



Contact Factory for more information.

## Models

Model	LED Colors	Input Type	Connector
K80L4GRYB1P	Color 1 Green Color 2 Red Color 3 Yellow Color 4 Blue	PNP	Terminal-wired
K80L4GRYB1PQ			5-Pin Euro-style integral QD connector
K80L4GRYB1PQP			150 mm (6") PVC pigtail with 5-Pin Euro-style connector
K80L4GRYB1N		NPN	Terminal-wired
K80L4GRYB1NQ			5-Pin Euro-style integral QD connector
K80L4GRYB1NQP			150 mm (6") PVC pigtail with 5-Pin Euro-style connector



### WARNING . . . Not To Be Used for Personnel Protection

Never use these products as sensing devices for personnel protection. Doing so could lead to serious injury or death.

These sensors do NOT include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A sensor failure or malfunction can cause either an energized or de-energized sensor output condition. Consult your current Banner Safety Products catalog for safety products which meet OSHA, ANSI and IEC standards for personnel protection.



# EZ-LIGHT™ K80L Quad Indicator

## Overview

The K80L Quad is a 4-color point-of-use indicator which can be used to send nonlingual messages to an operator or to monitor multiple locations.

The four independently selected colors provide the ability to communicate up to four messages, or more if they are used in combination. For example, a green sector could be lit to communicate “all systems OK,” and blue could represent “service needed soon” or a “shoplifter is on the floor.” Green plus red ON together could mean something different from either color ON individually. See hookups for color selection information.

Indicator colors are fixed in a standardized location, which is helpful for people who have limited color recognition capability (see Figure 1).

The K80L Quad mounts easily on a flat surface, but can also be placed on various types of pipe for elevated use. In addition to customer-supplied pipe and conduit, Banner offers stainless steel pipe and other mounting accessories.

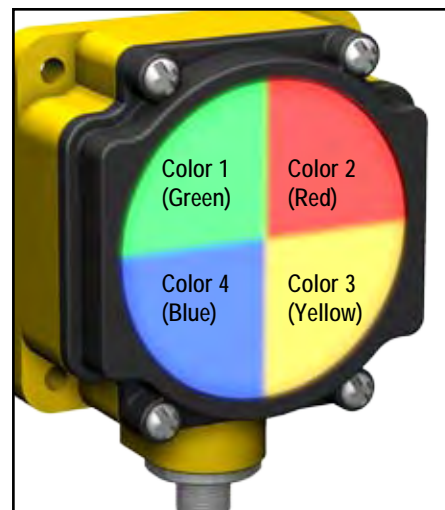
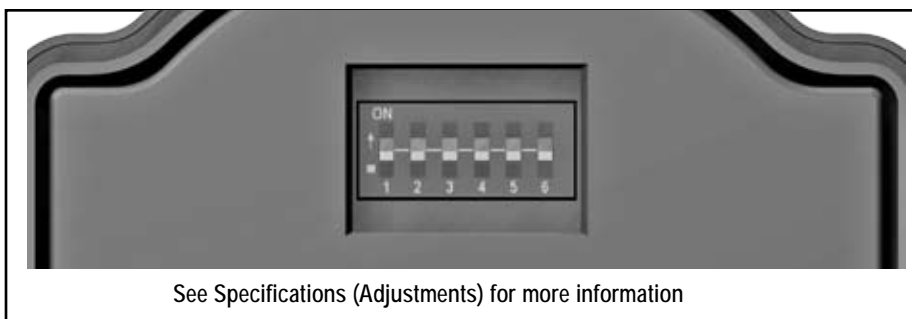


Figure 1. Features

## Specifications

Supply Voltage and Current	18 to 30V dc, 35 mA per LED color; 90 mA maximum with all LEDs ON Protected against reverse polarity and transient voltages
Input Response	<b>Indicator ON:</b> Initial light—250 millisecond maximum Additional lights—10 millisecond maximum <b>Indicator OFF:</b> 10 millisecond maximum
Adjustments	The K80L Quad features a 6-position Program DIP switch on the back of the indicator cover. For normal operation, no adjustment should be necessary; these switches should remain all in the down position, as shown in Figure 2.  <b>For Demo mode,</b> remove the four screws to remove the cover; change the switch 1 position to ON. The individual sectors will light depending on the input power as follows. <b>Black wire input:</b> Colors 1 and 2 alternate (Green/Red) <b>Brown wire input:</b> Colors 1–4 light simultaneously (Green-Red-Yellow-Blue) <b>White wire input:</b> Colors 1–4 light in rotation (Green/Red/Yellow/Blue)
Construction	<b>Base:</b> ABS/polycarbonate <b>Translucent face:</b> acrylic
Connections	5-pin Euro-style integral QD connector, 150 mm (6") PVC pigtail with 5-pin Euro-style QD connector, or terminal-wired, depending on model
Operating Conditions	<b>Temperature:</b> -20° to +50° C (-4° to +122° F) <b>Max. Relative Humidity:</b> 90% @ 55° C (non-condensing)
Environmental Rating	IEC IP67 (NEMA 6)
Vibration and Mechanical Shock	All models meet Mil. Std. 202F requirements method 201A (vibration: 10 to 60 Hz max., double amplitude 0.06", maximum acceleration 10G). Also meets IEC 947-5-2; 30G 11 ms duration, half sine wave.

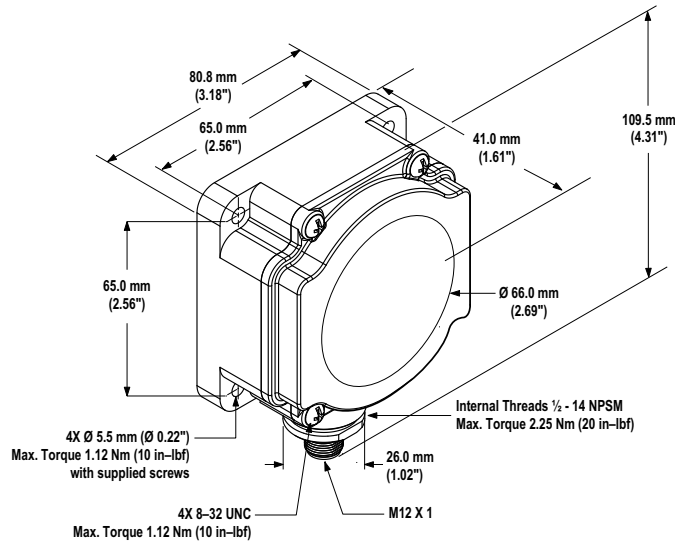


See Specifications (Adjustments) for more information

Figure 2. Program DIP switch located on the inside of the K80L cover

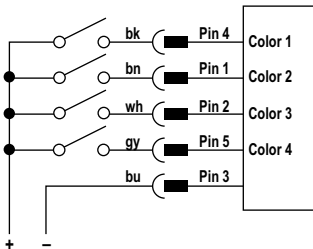
# EZ-LIGHT™ K80L Quad Indicator

## Dimensions

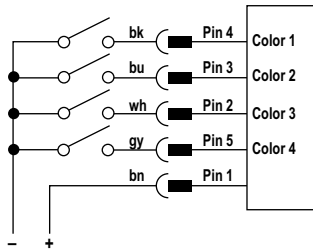


## Hookups

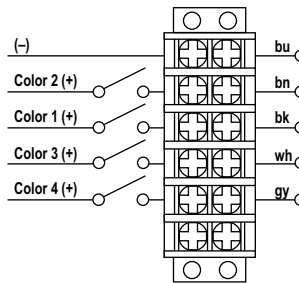
PNP Cable, QD, and Pigtail Models



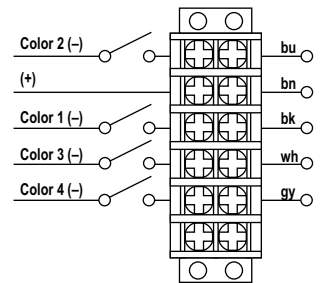
NPN Cable, QD, and Pigtail Models



PNP Internal Terminal Blocks



NPN Internal Terminal Blocks






## Accessories

### Quick-Disconnect (QD) Cordsets

Style	Model	Length	Dimensions	Pinout
5-Pin Euro Straight	MQDC1-506 MQDC1-515 MQDC1-530	2 m (6.5') 5 m (15') 9 m (30')		
5-Pin Euro Right-Angle	MQDC1-506RA MQDC1-515RA MQDC1-530RA	2 m (6.5') 5 m (15') 9 m (30')		

# EZ-LIGHT™ K80L Quad Indicator

## Mounting Brackets

Model	Description	Length	
SMBDX80D	<ul style="list-style-type: none"> <li>DIN-mount bracket for K80L models</li> <li>Hardware included to mount to K80L housing</li> <li>ABS</li> </ul>	N/A	
SOP-E12-150SS	<ul style="list-style-type: none"> <li>Stainless steel elevated-use stand-off pipe (1/2" NPSM/DN15)</li> <li>Polished 304 stainless steel surface</li> <li>1/2 NPT thread at both ends</li> <li>Compatible with most industrial environments</li> </ul>	150 mm (6")	
SOP-E12-300SS		300 mm (12")	
SA-E12M30	<ul style="list-style-type: none"> <li>Streamlined acetal mounting base adapter/cover</li> <li>Connects between 1/2" NPSM/DN15 pipe and 30 mm (1-3/16") drilled hole</li> <li>Mounting hardware included</li> </ul>	N/A	

## Accessory Quadrant Labels

Transparent self-adhesive cover labels for printing in a standard laser printer; print your own labels to easily identify each quadrant. Clear protective labels provide additional protection for laser print work in many industrial environments. Six labels per sheet; 5 sheets per package. For printing template and more models

Model	Description	Size
SALK-K80L4	Standard 4-quadrant transparent laser label	8.5" x 11"
SALK-K80L4A4		A4
SALK-K80L4-0C	Clear protective label	8.5" x 11"



**WARRANTY:** Banner Engineering Corp. warrants its products to be free from defects for one year. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture found to be defective at the time it is returned to the factory during the warranty period. This warranty does not cover damage or liability for the improper application of Banner products. This warranty is in lieu of any other warranty either expressed or implied.