

### EZ-LIGHT™ – General-Purpose Indicators

DC-Operated LED Indicators with Two or Three Colors

Installation Guide

Additional information on this product is immediately available online at www.bannerengineering.com/121899

For further assistance, contact a Banner Engineering Applications Engineer at (763) 544-3164 or (888) 373-6767.



#### Models

INIOUCIS								
			Construction	Connector*	LED Function – Lights Independently Selected			
Models		Lights Inc			lependently	Selected	Inputs	
					Color 1	Color 2	Color 3	
	•	T8LGRXPQP			0	Red	-	PNP (Sourcing)
		T8LGRXNQP	Polycarbonate/ABS alloy housing, thermoplastic diffuser.  IP67	150 mm (6")	Green			NPN (Sinking)
		T8LGXYPQP		PVC pigtail with	Green	-	Yellow	PNP (Sourcing)
		T8LGXYNQP		4-pin Euro QD connector				NPN (Sinking)
		T8LXRYPQP			-	Red	Yellow	PNP (Sourcing)
		T8LXRYNQP						NPN (Sinking)
		M18GRXPQ	Nickel-plated brass housing, thermoplastic diffuser.		_		-	PNP (Sourcing)
		M18GRXNQ			Green	Red		NPN (Sinking)
		M18GXYPQ			_			PNP (Sourcing)
	VC	M18GXYNQ	Fully encapsulated		Green	_	Yellow	NPN (Sinking)
		M18XRYPQ	IP67					PNP (Sourcing)
		M18XRYNQ	1 1507		-	Red	Yellow	NPN (Sinking)
		T18GRXPQ				Red		PNP (Sourcing)
		T18GRXNQ			Green		_	NPN (Sinking)
		T18GXYPQ						PNP (Sourcing)
		T18GXYNQ			Green	-	Yellow	NPN (Sinking)
		T18XRYPQ	Thermoplastic polyester				Yellow -	PNP (Sourcing)
		T18XRYNQ	housing, thermoplastic diffuser. Fully encapsulated IP67		-	Red		NPN (Sinking)
		T30GRXPQ						PNP (Sourcing)
		T30GRXNQ		4-pin Euro integral QD connector	Green	Red		NPN (Sinking)
		T30GXYPQ			Green	-	Yellow	PNP (Sourcing)
		T30GXYNQ						NPN (Sinking)
က်		T30XRYPQ			-		Yellow	PNP (Sourcing)
응		T30XRYNQ				Red		NPN (Sinking)
Two LED Colors		K30LGRXPQ	22 mm threaded polycarbonate base, translucent polycarbonate dome.      Fully encapsulated     IP67, IP69K		Green Red		_	PNP (Sourcing)
=		K30LGRXNQ				Red		NPN (Sinking)
ž		K30LGXYPQ			Green	-	Yellow	PNP (Sourcing)
		K30LGXYNQ						NPN (Sinking)
		K30LXRYPQ			- Red		Yellow	PNP (Sourcing)
		K30LXRYNQ				Red		NPN (Sinking)
		K50LGRXPQ	30 mm threaded polycarbonate base, translucent polycarbonate dome.  Fully encapsulated		0 5		-	PNP (Sourcing)
		K50LGRXNQ			Green	Red		NPN (Sinking)
		K50LGXYPQ						PNP (Sourcing)
		K50LGXYNQ			Green	-	Yellow	NPN (Sinking)
		K50LXRYPQ				Red	Yellow	PNP (Sourcing)
		K50LXRYNQ	IP67, IP69K		_			NPN (Sinking)
	Ç	K50FLGRXPQ	Polycarbonate base, translucent polycarbonate dome. Fully encapsulated IP67, IP69K		Green R	Б.		PNP (Sourcing)
		K50FLGRXNQ				Red	-	NPN (Sinking)
		K50FLGXYPQ			Green	-	Yellow	PNP (Sourcing)
		K50FLGXYNQ						NPN (Sinking)
		K50FLXRYPQ			-	D. J	Yellow	PNP (Sourcing)
		K50FLXRYNQ				Red		NPN (Sinking)
		K80LGRXPQ	ABS and polycarbonate base, translucent polycarbonate		Green	Red	_	PNP (Sourcing)
		K80LGRXNQ						NPN (Sinking)
		K80LGXYPQ			Green	-	Yellow	PNP (Sourcing)
		K80LGXYNQ	dome.					NPN (Sinking)
		K80LXRYPQ	Electronics fully encapsulated					PNP (Sourcing)
		K80LXRYNQ	IP67		-	Red	Yellow	NPN (Sinking)

Additional models shown on page 2.

## $\pmb{EZ\text{-}LIGHT}^{\mathsf{TM}} - \textbf{General-Purpose Indicators with Two or Three Colors}$

Models			Construction Connector*		LED Function – Lights Independently Selected			Inputs
				Color 1	Color 2	Color 3		
	S)	M18GRYPQ	Nickel-plated brass housing, thermoplastic diffuser.		Green Red		Yellow	PNP (Sourcing)
		M18GRYNQ	Fully encapsulated IP67	4-pin Euro integral QD connector				NPN (Sinking)
		T18GRYPQ	Thermoplastic polyester housing, thermoplastic diffuser. Fully encapsulated IP67					PNP (Sourcing)
		T18GRYNQ						NPN (Sinking)
	<b>©</b>	T30GRYPQ						PNP (Sourcing)
		T30GRYNQ						NPN (Sinking)
		K30LGRYPQ	22 mm threaded polycarbonate base, translucent polycarbonate dome.					PNP (Sourcing)
Colors		K30LGRYNQ	Fully encapsulated IP67, IP69K			Red		NPN (Sinking)
Three LED Colors		K50LGRYPQ	30 mm threaded polycarbonate base, translucent polycarbonate dome.					PNP (Sourcing)
		K50LGRYNQ	Fully encapsulated IP67, IP69K					NPN (Sinking)
	Ç	K50FLGRYPQ	Polycarbonate base, translucent polycarbonate dome.					PNP (Sourcing)
		K50FLGRYNQ	Fully encapsulated IP67, IP69K					NPN (Sinking)
		K80LGRYPQ	ABS and polycarbonate base, translucent polycarbonate dome.					PNP (Sourcing)
		K80LGRYNQ	Electronics fully encapsulated IP67				P" / - ~ "TOLC	NPN (Sinking)

<sup>\*</sup> T8L Models: Standard pigtail QD models are listed (mating cable required; see page 3). For integral 4-wire 2 m (6.5') cable model, omit suffix "QP" (e.g., "T8LGRXP").

K80L Models: Standard 4-pin Euro integral QD connector models are listed (mating cable required; see page 3). For terminal-wired model, omit suffix "Q" (e.g., "K80LGRXP").

Other Models: Standard 4-pin Euro integral QD connector models are listed (mating cable required; see page 3). For 2 m (6.5') integral 4-wire cable model, omit suffix "Q" (e.g., "M18GRXP"). For 150 mm (6") PVC pigtail with 4-pin Euro connector, replace suffix "Q" with "QP" (e.g., "M18GRXPQP").

#### **Specifications**

#### **Supply Voltage and Current**

T8 Models: 10 to 30V dc @ 20 mA max. per LED color

K30L, T18 and M18 Models: 10 to 30V dc @ 25 mA max. per LED color

T30 Models: 10 to 30V dc @ 40 mA max. per LED color

K50L, K50FL and K80L Models: 18 to 30V dc @ 40 mA max. per LED color

#### Indicators

Entire translucent diffuser or dome provides indication.

LEDs are independently selected: Green, Red, Yellow; 1, 2, or 3 colors, depending on model. For other colors/combinations, contact Factory for availability.

#### **Environmental Rating**

IEC IP67

T8L not encapsulated; K80L has encapsulated electronics only; other models fully encapsulated.

**K50, K50L, and K50FL QD Models** meet IP69K per DIN 40050-9. Cabled models also meet IP69K if the cable and cable entrance are protected from high-pressure spray.

#### Connections

**K80L Models:** 4-pin Euro-style integral QD (Q) standard. Terminal-wired models available for use with bulk cable; compression fitting optional. Contact Factory for cable information.

**T8L Models:** 4-pin Euro-style, 6" pigtail QD (QP), or 4-wire, 2 m (6.5') integral cable, depending on model

Other Models:  $\stackrel{.}{4}$ -pin Euro-style integral QD (Q), 6" pigtail QD (QP), or 4-wire, 2 m (6.5') integral cable, depending on model

#### **Operating Conditions**

**Temperature:**  $-40^{\circ}$  to  $+50^{\circ}$  C ( $-40^{\circ}$  to  $+122^{\circ}$  F)

<sup>\*\*</sup> Contact Factory for other colors/color combinations, including: blue, white, orange.

## $\pmb{EZ\text{-}LIGHT}^{\mathsf{TM}} - \textbf{General-Purpose Indicators with } \pmb{Two} \text{ or Three Colors}$

#### **Dimensions** T18 Models T30 Models **T8 Models −**−15. 8 mm (0.62") Ø 40.0 mm 8.8 mm (0.35") 63.7 mm (2.51") M30 x 1.5 Thread 19.1 mm (0.75") 33.0 mm 45.0 mm ø16.3 mm (1.77") (0.64") Ø 15 mm . 150 mm (6") Euro-style PVC Pigtail M18 Models **K30L Models K50L Models** 50.0 mm (1.97") 30.0 mm (1.18") 36.8 mm (1.45")\* 58.0 mm (2.28") M30x1 (mounting nut included) 20.0 mm (0.79") (1.22") max, torque 4.5 Nm (40 lbf in) 11.0 mm (0.43") max. torque 2.25 Nm (20 lbf in) M12 X 1 -16.0 mm (0.63") M12 X 1 1/2 -14 NPSM internal threads **K80L Models K50FL Models** 44.6 [1.76"] 109.5 mm (4.31") Ø50 [1.97"] [2.36"] 35.0 65.0 mm (2.56") [1.38"] 2x 5.0 [0.20"] Internal Threads ½ - 14 NPSM Max. Torque 2.25 Nm (20 in-lbf) 16.0 [0.63"] — 2x 5.5 [0.21"] 4X Ø 5.5 mm (Ø 0.22") orque 1.12 Nm (10 in–lbf) with supplied screws 17.0 [0.67"] 26.0 mm (1.02") 2x 5.0 [0.20"] 4X 8-32 UNC Max. Torque 1.12 Nm (10 in-lbf) Hookups **NPN Models PNP Models**

# NPN Models PNP Models Pin 4 Pin 4 Pin 4 Pin 2 Wh Pin 2 Wh Pin 2 Wh Pin 2 Wh Pin 3 Pin 1 Pin 3 Pin 3

## **EZ-LIGHT**<sup>™</sup> – General-Purpose Indicators with Two or Three Colors

#### Quick-Disconnect (QD) Cordsets

Style	Model	Length	Dimensions	Pinout
4-pin Euro-style straight	MQDC-406 MQDC-415 MQDC-430	2 m (6.5') 5 m (15') 9 m (30')	44 mm max. (1.7")	White (wh) Wire
4-pin Euro-style right-angle	MQDC-406RA MQDC-415RA MQDC-430RA	2 m (6.5') 5 m (15') 9 m (30')	38 mm max. (1.5") 38 mm max. (1.5") M12 x 1 ø 15 mm (0.6")	(1) Black (bk) Wire (3)

Bulk cable for terminal-wired K80L models: Contact Factory.

#### **Accessory Mounting Brackets\***

SMB18A	For use with M18 and T18 models or base-mount T30 models     12-gauge, stainless steel, right-angle bracket, curved mounting slot for adjustable orientation     Clearance for M4 (#8) hardware
Other available 18 mm dia. brackets:	SMB1815SF SMB18Q SMB18SF SMB312PD SMBAMS18RA SMBAMS18P
SMB22A	For use with base-mount K30L models 12-gauge, stainless steel, right-angle bracket, curved mounting slot for adjustable orientation Clearance for M4 (#8) hardware

SMB30A	For use with T30 models or base-mount K50L models     30 mm 12-gauge, 304 stainless steel, right-angle mounting bracket, curved mounting slot for adjustable orientation     Clearance for M5 (#10) hardware	
Other available 30 mm dia. brackets:	SMBAMS30RA SMBAMS30P SMB30SC SMB30SC SMB30MM SMB3018SC	
SMB8MM	<ul><li>For use with T8L models</li><li>Right-angle bracket</li><li>300 series stainless steel</li></ul>	
SMBDX80D	DIN-mount bracket for K80L models     Hardware included to mount to K80L housing     ABS	IX.

<sup>\*</sup> K50FL models include a 48 mm (1.9") circular velcro mounting kit for easy mounting with no additional hardware

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**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.

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