EZ-LIGHT™ Traffic Light

Indicators for signaling applications

Features



- Preassembled indicators for signaling and traffic control
- Intense levels of light output for outdoor applications
- Sun shield included
- Controlled field of view for signage and narrow lane use
- Rugged, cost-effective and easy-to-install
- Compact devices are completely self-contained — no controller needed
- One, two or three indicators
- Immune to EMI and RFI interference
- Choose NPN or PNP input, depending on model
- Choose 15 to 30V dc or 85-130V ac operation

Models

Models*	Indicators	LED Function**	Inputs	Construction	Connection
SP150GPQ	1	1 Color: Green	PNP/ NPN selectable	Flat or DIN-mount polycarbonate	4-pin Euro Integral QD
SP150RPQ		1 Color: Red			
SP150GRYPQ		3 Color: Green, Red, Yellow	PNP		
SP150GRYNQ			NPN		
SP150GA120		1 Color: Green	85 to 130V ac		Field-wired
SP150RA120		1 Color: Red			
SP250GRPQ	2	Top indicator: Red Bottom indicator: Green	PNP	Flat mount polycarbonate	4-pin Euro Integral QD
SP250GRNQ			NPN		
SP250GRA120			85 to 130V ac		Field-wired
SP350GYRPQ	3	Top indicator: Red Middle indicator: Yellow Bottom indicator: Green	PNP		4-pin Euro Integral QD
SP350GYRNQ			NPN		
SP350GYRA120			85 to 130V ac		Field-wired

* For DC models, standard 4-pin Euro integral QD models are listed. AC models are field-wired only.

• For field-wired model, omit suffix **Q** from model number (example, "**SP150GP**")
• A model with a QD requires a mating cable (see *Quick-Disconnect (QD) Cordsets* on page 7)

** **1-color models:** 18 LEDs per color

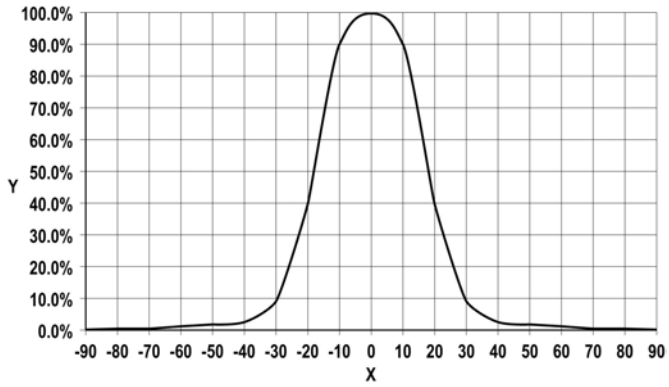
3-color models: 6 LEDs per color

Contact factory for other colors and color combinations.

Specifications

Feature	Description	
Supply Voltage and Current	**DC models**: 15 to 30V dc **1-Color:** @ 120 mA max. per LED color **3-Color:** @ 40 mA max. per LED color	**AC models**: 85 to 130V ac or 75 to 120V dc @ 16 mA per LED color
Indicators	LED colors are independently selected, depending on model	
Input Response Time	**Indicator ON/OFF:** 10 ms (max.)	
Environmental Rating (See note 1)	Fully encapsulated; **Electronics** : IEC IP67 **Enclosure** : • **SP150**: IEC IP67 • **SP250**: IEC IP65 • **SP350**: IEC IP65	
Connections	Integral 4-pin Euro-style QD or field-wired model available for use with bulk cable (wire nuts included); ½-14 NPSM cord grip is optional for SP150 and SP250 models. Cord grip handles cable diameters from 4.3 to 11.4 mm (see model BWA-CG.5-1).	
Operating Conditions	−40° to +50° C (−40° to +122° F)	
Application Notes	1. Field-wired models must have cover screws tightened and use water tight compression fitting to meet environmental ratings.	

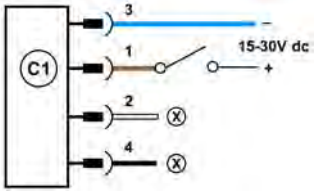
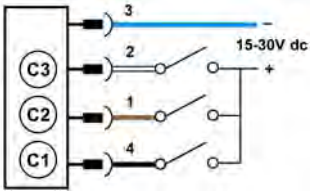
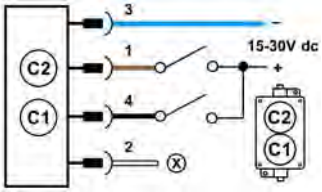
Percent of Maximum Intensity vs Viewing Angle



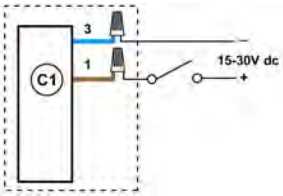
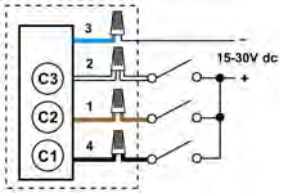
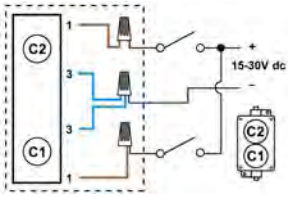
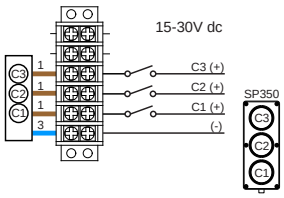
X: Viewing Angle (Deg)

Y: Intensity (Percent)

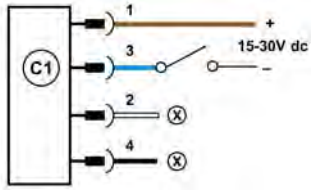
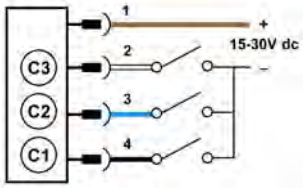
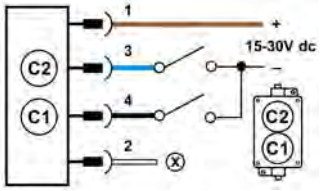
PNP Hookups - QD Models

SP150XPQ (1-Color Models)	SP150XXXPQ and SP350XXXPQ (3-Color Models)
	
SP250XXPQ (2-Color Models)	**Wiring Key:**
	1 = Brown 2 = White 3 = Blue 4 = Black ⓧ indicates Not Used C1 = Color 1 C2 = Color 2 C3 = Color 3

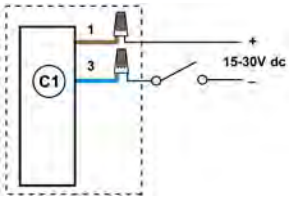
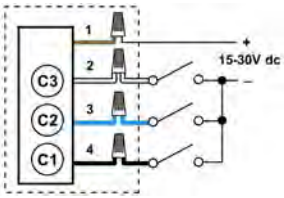
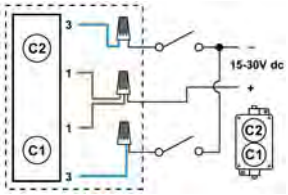
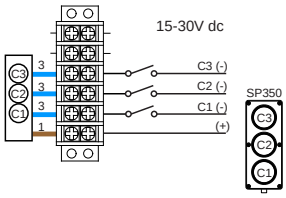
PNP Hookups - Field-Wired Models

SP150XP (1-Color Models)	SP150XXXP (3-Color Models)	Wiring Key:
		1 = Brown 2 = White 3 = Blue 4 = Black C1 = Color 1 C2 = Color 2 C3 = Color 3
SP250XXP (2-Color Models)	**SP350XXXP (3-Color Models)**	
		

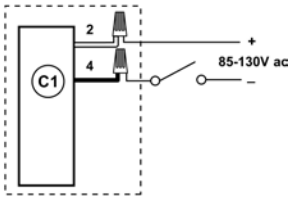
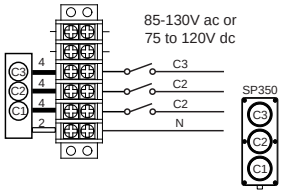
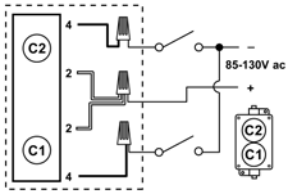
NPN Hookups - QD Models

SP150XPQ (1-Color Models)*	SP150XXXNQ and SP350XXXNQ (3-Color Models)
	
*NPN functionality using 1-Color PNP model	
SP250XXNQ (2-Color Models)	**Wiring Key:**
	1 = Brown 2 = White 3 = Blue 4 = Black X indicates Not Used C1 = Color 1 C2 = Color 2 C3 = Color 3

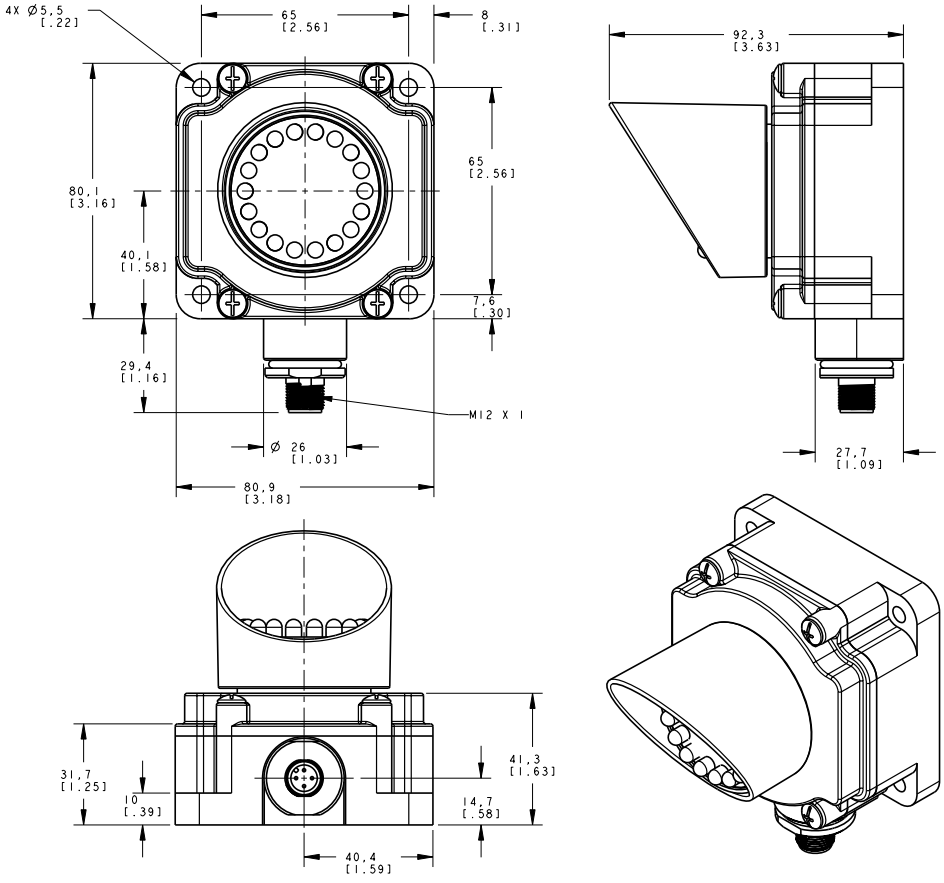
NPN Hookups - Field-Wired Models

SP150XP (1-Color Models)*	SP150XXXN (3-Color Models)	Wiring Key:
		1 = Brown 2 = White 3 = Blue 4 = Black C1 = Color 1 C2 = Color 2 C3= Color 3
*NPN functionality using 1-Color PNP model		
SP250XXN (2-Color Models)	**SP350XXXN (3-Color Models)**	
		

AC Hookups

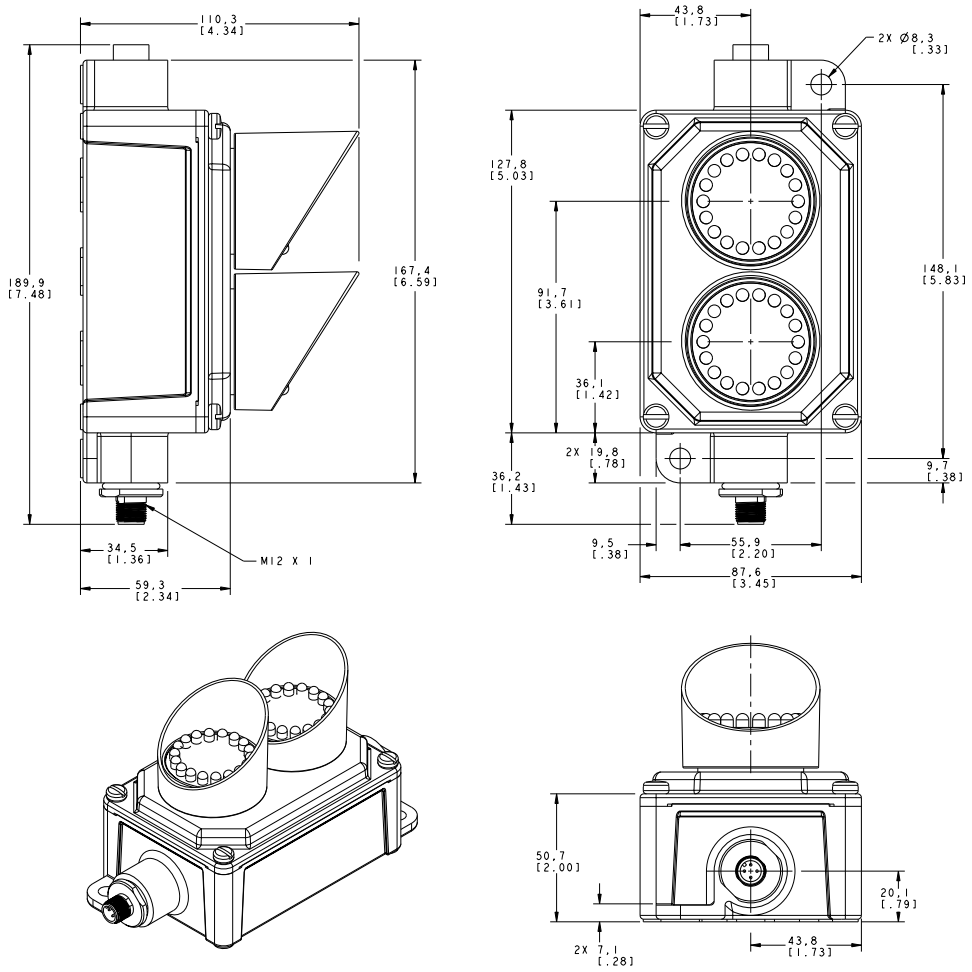
SP150XA120 (1-Color Models)	SP350XXXA120 (3-Color Models)
	
SP250XXA120 (2-Color Models)	**Wiring Key:**
	2 = White 4 = Black C1 = Color 1 C2 = Color 2 C3 = Color 3 N = Neutral

Dimensions - SP150...Models*



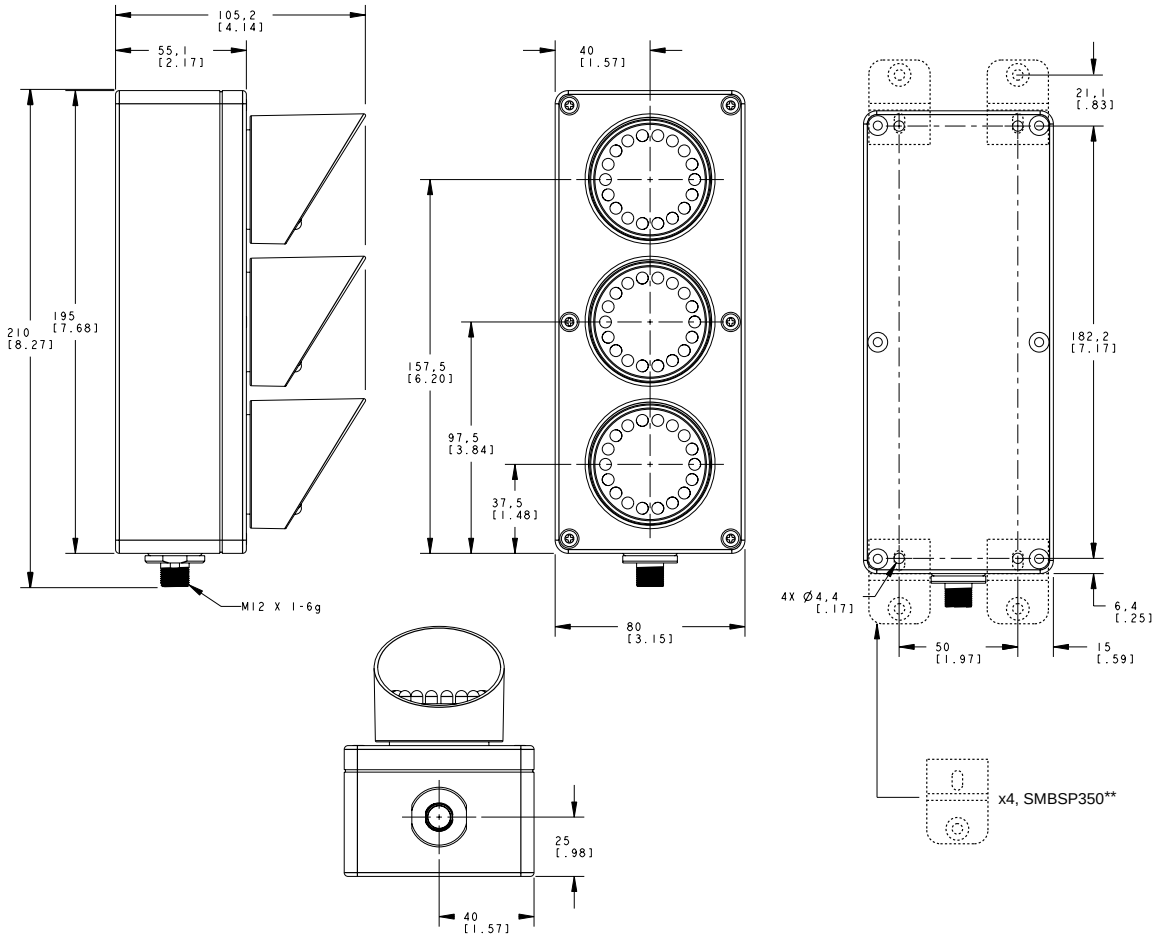
* Field-wired models have ½" NPT port in place of M12 connector

Dimensions - SP250...Models*



* Field-wired models have ½" NPT port in place of M12 connector

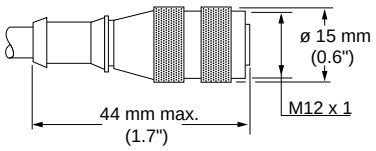
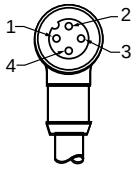
Dimensions - SP350...Models*

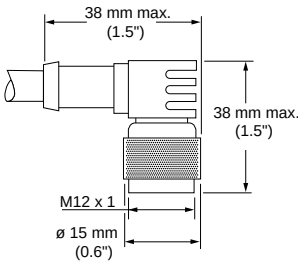


* Field-wired models have access hole for ½" conduit fitting in place of M12 connector

** Mounting kit SMBSP350 included

Quick-Disconnect (QD) Cordsets

4-Pin Euro-Style Cables – Single-Ended				
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')		

4-Pin Euro-Style Cables – Single-Ended				
Style	**Model**	**Length**	**Dimensions**	**Pinout**
4-pin Euro-style Right-angle	**MQDC-406RA** **MQDC-415RA** **MQDC-430RA**	2 m (6.5') 5 m (15') 9 m (30')		1 = Brown 2 = White 3 = Blue 4 = Black

Mounting Brackets

Model		Features	Mounting System	
Stainless Steel	**Aluminum**	• Elevated-use stand-off pipe (½" NPSM/DN15) • Polished 304 stainless steel or anodized aluminum surface • ½ NPT thread at both ends • Compatible with most industrial environments		
SOP-E12-150SS Length: 150 mm (6")	**SOP-E12-150A** Length: 150 mm (6")			
SOP-E12-300SS Length: 300 mm (12")	**SOP-E12-300A** Length: 300 mm (12")			
SA-E12M30		• Streamlined acetal mounting base adapter/cover • Connects between ½" NPSM/DN15 pipe and 30 mm (1-3/16") drilled hole • Mounting hardware included		

WARNING . . . Not To Be Used for Personnel Protection

Never use this product as a sensing device for personnel protection. Doing so could lead to serious injury or death

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

BANNER®
more sensors, more solutions

Warranty: 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.