INSTALLATION INSTRUCTIONS
PHOTOSWITCH® MINIATURE SIDE VIEW
TRANSMITTED BEAM CONTROL, BULLETIN 40CA4/47CN4–4000

IMPORTANT: SAVE THESE INSTRUCTIONS FOR FUTURE USE. FOR ADDITIONAL INFORMATION REFER TO PUBLICATION PG-9000

BULLETIN NUMBER	TYPE	RESPONSE TIME	OPERATING DISTANCE		
			22DJ3-4000	22DJ4-4000 22DJ9-4000 22DJ9-4001	22DJ4-5000 22DJ9-5000
40CA4-4000 + 47CN4-4002	Light Source	Refer to 22 Series 4000 or 22 Series 5000	15′ (4.57m)	40′ (12.2m)	26′ (7.92m)
	Receiver		With 60-1711 Extended Lens		
			25′ (7.62m)	75′ (22.8m)	49′ (14.93m)
40CA4-4000 + 47CN4-4003	Light Source		40′ (12.2m)	110′ (33.5m)	72′ (21.94m)
	Receiver		With 60-1711 Extend Lens		
			75′ (22.8m)	200′ (70m)	130′ (39.62m)
40CA4-4000 + 47CN4-4004	Light Source		75′ (22.8m)	Not Recommended	Not Recommended
	Receiver		With 60-1711 Extended Lens		
			140′ (42.68m)	Not Recommended	Not Recommended
40CA4-4000 + 47CN4-4003	Diffuse		1.5′ (.45m)	5′ (1.52m)	

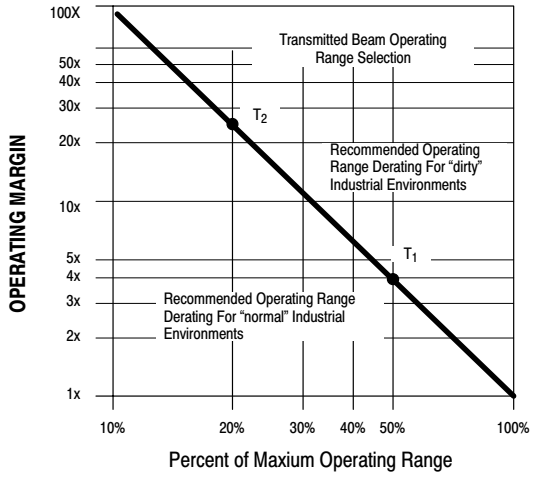
SPECIFICATIONS

Field of View . . . . . 5°
with 60–1711 . . . . . 4.5°
Transmitting LED . . . . . Infrared, 880nm
Ambient Temperature Range . . –40°F to 185°F (–40°C to 85°C)
Approvals . . . . . UL Listed and CSA Certified
Operating Environment . . NEMA 3, 4, 12, 13 and IP66 (IEC529)
Housing . . . . . High impact chemically resistant Housing
Cable
Light Source . . . . . 2 conductor vinyl jacketed cable 10′ (3m)
Receiver . . . . . 2 conductor vinyl jacketed cable 10′ (3m)

OPERATING DISTANCE SELECTION

The maximum operating distance is based on installing the control in a relatively clean environment. Normal industrial environment actually ranges from moderately *dusty* to extremely *dirty.* Greater operating margin (excess gain) may be required, which can be obtained by reducing the operating distance of the control. (optics should be cleaned regularly.)

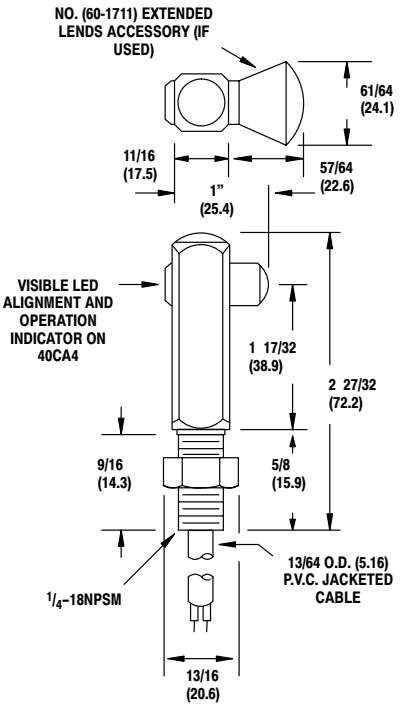
TYPICAL RESPONSE CURVE



INSTALLATION

The control must be securely mounted on a firm, stable surface or support. A mounting which is subject to excessive vibration or shifting may cause intermittent operation.

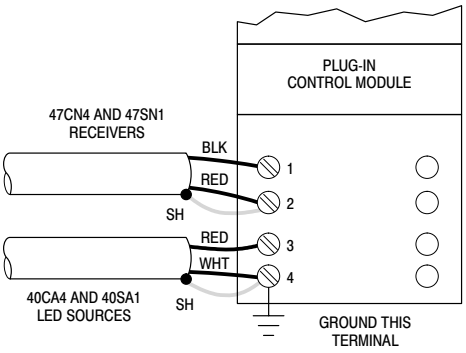
DIMENSIONS



WIRING

All external wiring should conform to the National Electric Code and applicable local codes. See wiring diagrams for external connections. For maximum electric shielding, rigid conduit is recommended for extensions of scanner wiring. DO NOT RUN PHOTODETECTOR WIRES AND LINE VOLTAGES IN THE SAME CONDUIT.

WIRING DIAGRAMS

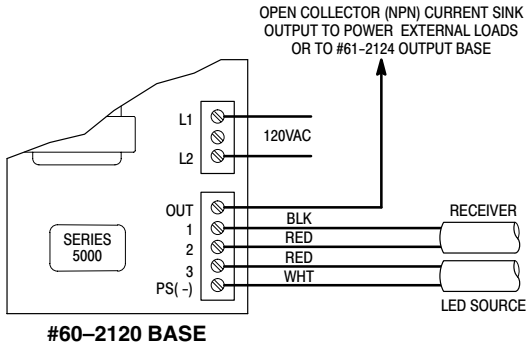


22 SERIES 4000 CONTROL BASE

Notes:
1. Ground receiver housing (machine ground O.K.)
2. Ground terminal 4.

WIRING DIAGRAMS

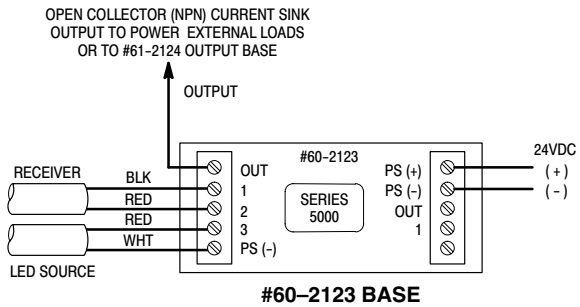
WITH UNIVERSAL FUNCTION BASE #60–2120



#60–2120 BASE

CONNECT ALL SHIELDS TO TERMINAL PS (-)

WITH MULT–MODULE FUNCTION BASE #60–2123



#60–2123 BASE

CONNECT ALL SHIELDS TO TERMINAL PS (-)

ALIGNMENT

Set the amplifier to the light operate mode. Adjust the sensitivity to the maximum setting, turning the sensitivity potentiometer clockwise. Aim the light source at the receiver until the alignment indicator on the amplifier turns on.

To be certain that the beam is centered, sweep the receiver at the light source in the horizontal plane and determine the position where the alignment indicator turns on and then off. Do the same in the vertical plane. Set the beam halfway between both positions.

It may be necessary to reduce the sensitivity to a lower setting for transparent or translucent materials or to detect objects smaller that the effective beam.

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