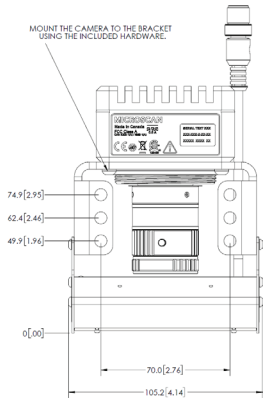
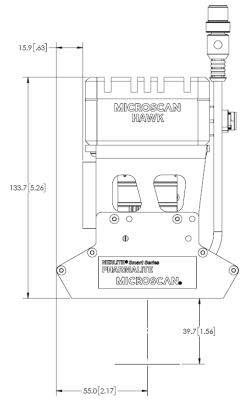
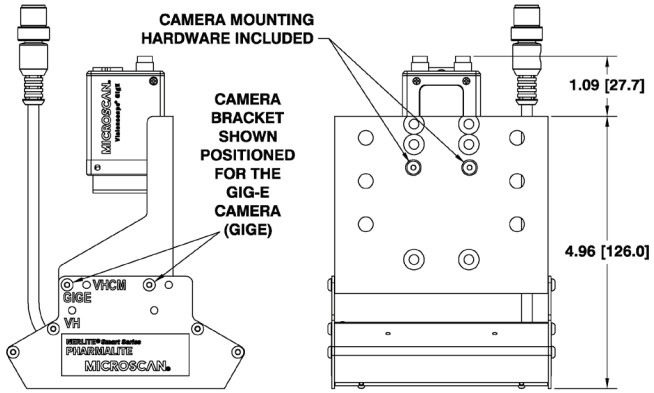
NERLITE Smart Series Pharmalite Illuminators

Configuration Guide







Part Number	Description	Continuous Current	Strobe Current	Continuous Mode	Continuous Mode with Dimming Or On-Off Control	High Output Strobe Mode
				No Controller Required (Can be connected directly to 24VDC)	No Controller Required (Can be connected directly to 24VDC)	No Controller Required (Can be connected directly to 24VDC)
98-000228-01	Smart Series Pharmalite	160 mA	850 mA	Figure A or D	Figure B (or D for On-Off Control only)	Figure C
98-9000137-01	Smart Series Pharmalite for HAWK MV-4000	160 mA	850 mA	Figure A or D	Figure B (or D for On-Off Control only)	Figure C

Hardware Required

Item	Description	Part Number
1	Smart Series Pharmalite	98-000228-01
1	Smart Series Pharmalite for HAWK MV-4000	98-9000137-01
2	Power Supply DSP60 24VDC 2.5A DIN Mount	NER-011504100
2	Power Supply DSP100 24VDC 4.2A DIN Mount	97-000006-01
3	Cable 5-Pin M12 Female-to-Flying Leads, 3 M	61-000186-01
3	Cable 5-Pin M12 Female-to-Flying Leads, 5 M	61-000187-01
4	Cable, Power Smart Series to QX-1 Continuous	61-000204-01
4	Cable, Power Smart Series to QX-1 On/Off	61-000207-01

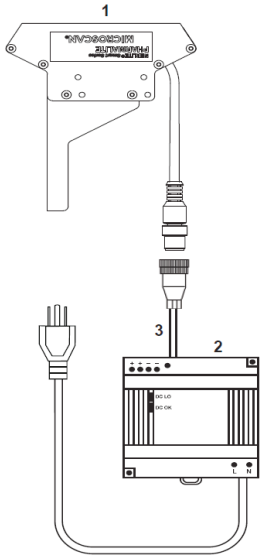


Figure A
Pharmalite Illuminator with power supply

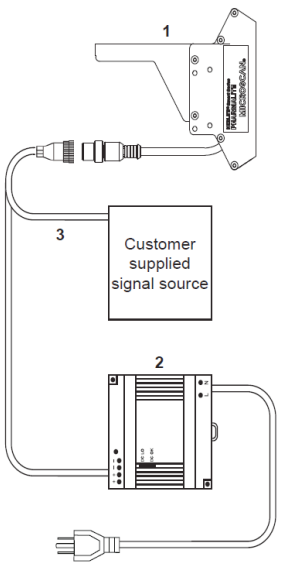


Figure B
Pharmalite Illuminator with customer supplied dimming or on-off signal source

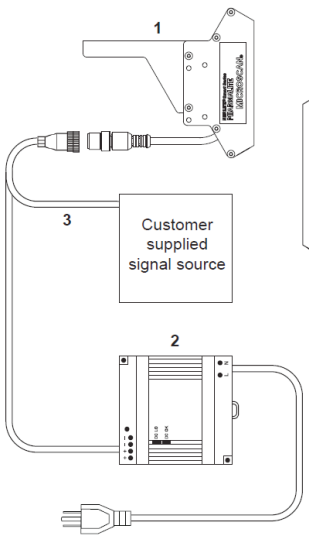


Figure C
Pharmalite Illuminator with customer supplied strobe trigger signal source

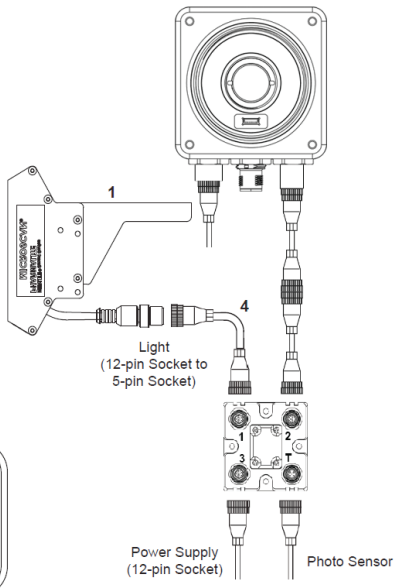


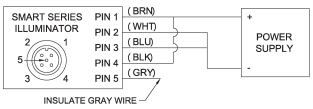
Figure D
Pharmalite Illuminator with QX-1 Interface Device

Accessories

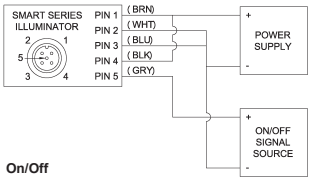
Description	Part Number	Application
AC Power Cord US	NER-030028300	Power Cord For Power Supply
AC Power Cord EU	NER-030028400	Power Cord For Power Supply
AC Power Cord UK	NER-030028500	Power Cord For Power Supply

Connections:

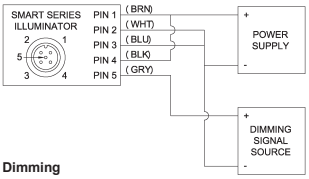
Input Connector (M12 Male, 5 Circuit, A-Code)	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Backshell
Continuous Mode (Figures A & D):	+20.2-28.8VDC	DC GND	DC GND	+20.2-28.8VDC	No Connection	Shield
Continuous Mode With Dimming (Figure B):	+20.2-28.8VDC	DC GND	DC GND & DIM (-)	+20.2-28.8VDC	Dim (+)	Shield
Continuous Mode With On-Off Control (Figure B):	+20.2-28.8VDC	DC GND	DC GND & DIM (-)	+20.2-28.8VDC	Dim (+)	Shield
High Output Strobe Mode (Figure C):	+20.2-28.8VDC	TRIG (-)	DC GND	TRIG (+)	No Connection	Shield



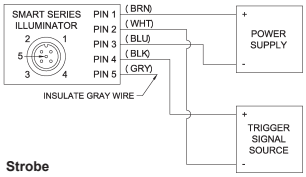
Continuous



On/Off



Dimming



Strobe

Control Signals

DIM (Continuous Mode with PWM Dimming):
0VDC (LEDs off) to 3.1-3.5VDC (LEDs on) pulse width modulated (PWM) signal , <1mA, Modulation Frequency 2KHz +/- 100Hz

Note: When using Continuous Mode with Dimming, the LED duty cycle will equal the duty cycle of the dimming signal.

DIM (Continuous Mode with On/Off Control): 0VDC (LEDs off), 3.1-3.5VDC (LEDs on), (<1mA)

TRIG (High Output Strobe Mode):
Optoisolated, 0VDC (LEDs off) to 3.1-28.8VDC (LEDs on), 10mA max, 20 µs min Trigger pulse width. Note: High Output Strobe internally limits LED frequency and pulse width to a maximum of 90Hz and 1 ms respectively. Light output pulse will follow Trigger pulse width from 20 µs to 1 ms.

Note: When using Continuous Mode with Dimming, the LED duty cycle will equal the duty cycle of the dimming signal.

Cable Specifications:

Wire colors for flying lead cables:
Pin 1 = Brown
Pin 2 = White
Pin 3 = Blue
Pin 4 = Black
Pin 5 = Gray
Connector Nut = Shield

Note: Non-Omron Microscan cables may use different wire colors. It is the customer's responsibility to make sure the light is connected correctly per the pin numbers in the table above.