

# NERLITE SMART SERIES MAX ILLUMINATORS

## CONFIGURATION GUIDE



PART NUMBER	DESCRIPTION	Current Draw @ 24VDC (typ.)	Continuous Mode	Continuous Mode With Dimming Or On-Off Control	High Output Strobe Mode	Daisy Chain, All Modes
			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)	No Controller Required (Can Be Connected Directly To 24VDC)
NER-011660100G	MAX 45 Red 10 Degree	75mA	Figures A or E	Figure B	Figure C	Not Applicable
NER-011660101G	MAX 45 Red 50 Degree	75mA	Figures A or E	Figure B	Figure C	Not Applicable
NER-011660110G	MAX 45 White 10 Degree	75mA	Figures A or E	Figure B	Figure C	Not Applicable
NER-011660111G	MAX 45 White 50 Degree	75mA	Figures A or E	Figure B	Figure C	Not Applicable
NER-011660200G	MAX 100 Red 10 Degree	275mA	Figures A or E	Figure B	Figure C	Not Applicable
NER-011660201G	MAX 100 Red 50 Degree	275mA	Figures A or E	Figure B	Figure C	Not Applicable
NER-011660210G	MAX 100 White 10 Degree	275mA	Figures A or E	Figure B	Figure C	Not Applicable
NER-011660211G	MAX 100 White 50 Degree	275mA	Figures A or E	Figure B	Figure C	Not Applicable
NER-011660300G	MAX 300 Red 10 Degree	750mA	Figures A or E	Figure B	Figure C	Figure D
NER-011660301G	MAX 300 Red 50 Degree	750mA	Figures A or E	Figure B	Figure C	Figure D
NER-011660310G	MAX 300 White 10 Degree	750mA	Figures A or E	Figure B	Figure C	Figure D
NER-011660311G	MAX 300 White 50 Degree	750mA	Figures A or E	Figure B	Figure C	Figure D

### Hardware Required

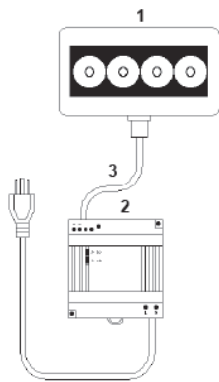


Figure A  
MAX Series Illuminator with power supply

Item	Description	Part Number
1	MAX Series Lights	NER-011660XXXG
2	Power Supply DSP100 24VDC 4.2A DIN Mount	97-000006-01
2	Power Supply DSP60 24VDC 2.5A DIN Mount	NER-011504100
3	Cable, 5P M12 Female To Flying Leads, 3M	61-000186-01
3	Cable, 5P M12 Female To Flying Leads, 5M	61-000187-01
4	Cable, 5P M12 Male To 5P M12 Female, 1M	61-000184-01
4	Cable, 5P M12 Male To 5P M12 Female, 3M	61-000185-01
5	Cable, Power Smart Series to QX-1	61-000204-01

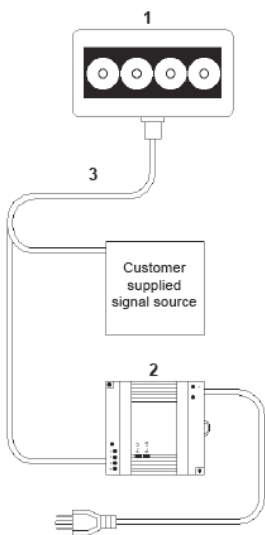


Figure B  
MAX Series Illuminator with customer supplied dimming or on-off signal source

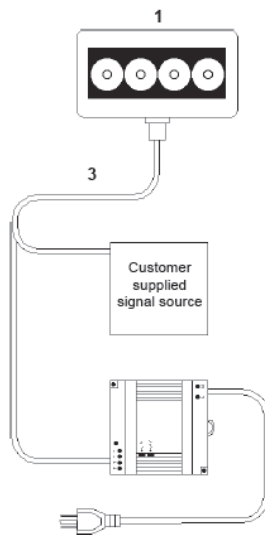


Figure C  
MAX Series Illuminator with customer supplied strobe trigger signal source

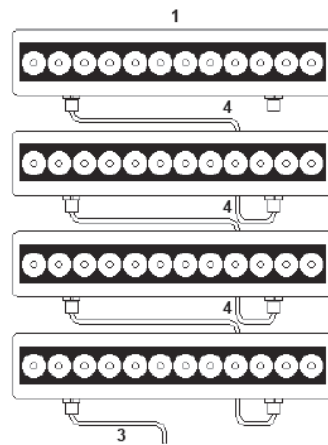


Figure D  
MAX Series Illuminators in a daisy chain configuration. See figures A, B, or C for the correct power supply and signal connections for your application.

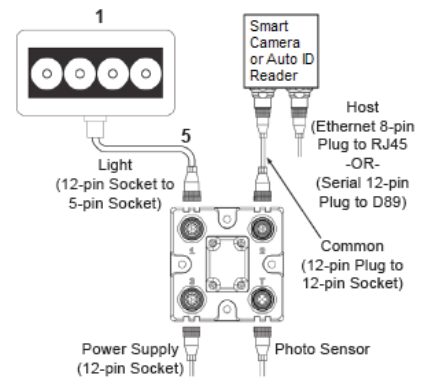


Figure E  
MAX Series Illuminators with QX-1 Interface Device.

Note: Figure E is not Compatible with daisy chaining. Powering more than one MAX via the QX-1 will exceed the QX-1's current capacity.

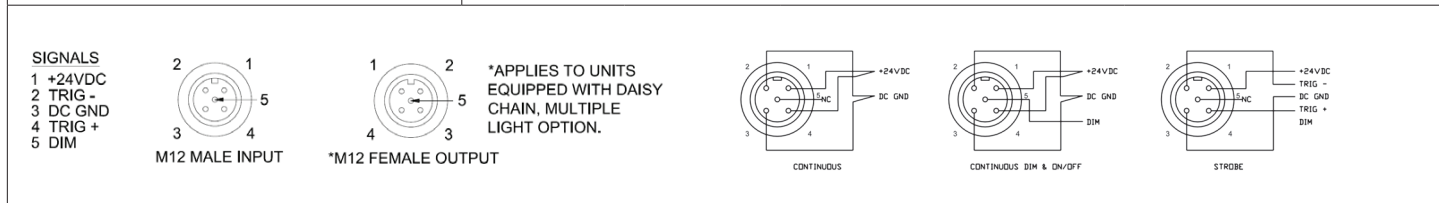
## Accessories

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
<b>Continuous Mode (Figures A &amp; E):</b>	+20.2-28.8VDC	DC GND	DC GND	+20.2-28.8VDC	No Connection	Shield
<b>Continuous Mode With Dimming (Figure B):</b>	+20.2-28.8VDC	DC GND	DC GND & DIM (-)	+20.2-28.8VDC	Dim (+)	Shield
<b>Continuous Mode With On-Off Control (Figure B):</b>	+20.2-28.8VDC	DC GND	DC GND & DIM (-)	+20.2-28.8VDC	Dim (+)	Shield
<b>High Output Strobe Mode (Figure C):</b>	+20.2-28.8VDC	TRIG (-)	DC GND	TRIG (+)	No Connection	Shield

**Daisy Chain, All Modes, MAX 300 Only (Figure D):** Note: The Output (Daisy Chain) Connector (M12 Female, 5 Circuit, A-Code) has an identical pin out to the Input Connector. The Output (Daisy Chain) Connector passes through any signal applied to the Input Connector. **Do not attempt to connect more than a total of four lights in a daisy chain configuration.** The 24VDC power supply's maximum current rating must be greater than or equal to the combined total current draw of all lights connected in the daisy chain.



## 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 1ms respectively. Light output pulse will follow Trigger pulse width from 20 μs to 1ms.

## 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.