NERLITE CDI SERIES ILLUMINATORS

CONFIGURATION GUIDE

		Continuous Current				Continuous Operation			Strobe Operation	
Part Number	*Description*	*On Axis Lighting*	*Off Axis Lighting*	*Fan*	*Fan Cooled*	*No Controller Required (Can be Connected Directly to 24VDC)*	*Controller Required (Select Any NL2XX Series Controllers)*	*NL-2XX Optional (Used only if Intensity And/Or Ethernet Control Is Desired)*	*NL-2XX Required)*	*Connection Notes Reference Number (See the Connection Notes on back of page)*
NER-011251500	CDI-150/25 Red Continuous	240mA	80mA	62mA	X		FIgure A	Figure A		5
NER-011251510	CDI-150/25 White Continuous	480mA	160mA	62mA	X		FIgure A	FIgure A		5
NER-011252000	CDI-200/75 Red Continuous	300mA	380mA	100mA	X		FIgure A	FIgure A		5
NER-011252010	CDI-200/75 White Continuous	600mA	760mA	100mA	X		FIgure A	FIgure A		5

⚠ If using this product in strobe mode with an NL-2XX Series Lighting Controller, refer to the warning on the back of this document.

Hardware Required

Item	*Description*	*Part Number*
1	CDI Series Illuminators	NER-01125XXXX
2	Power Supply DSP60 24VDC 2.5A DIN Mount	NER-011504100
3	NL-200 Series Lighting Controller	98-000152-0X

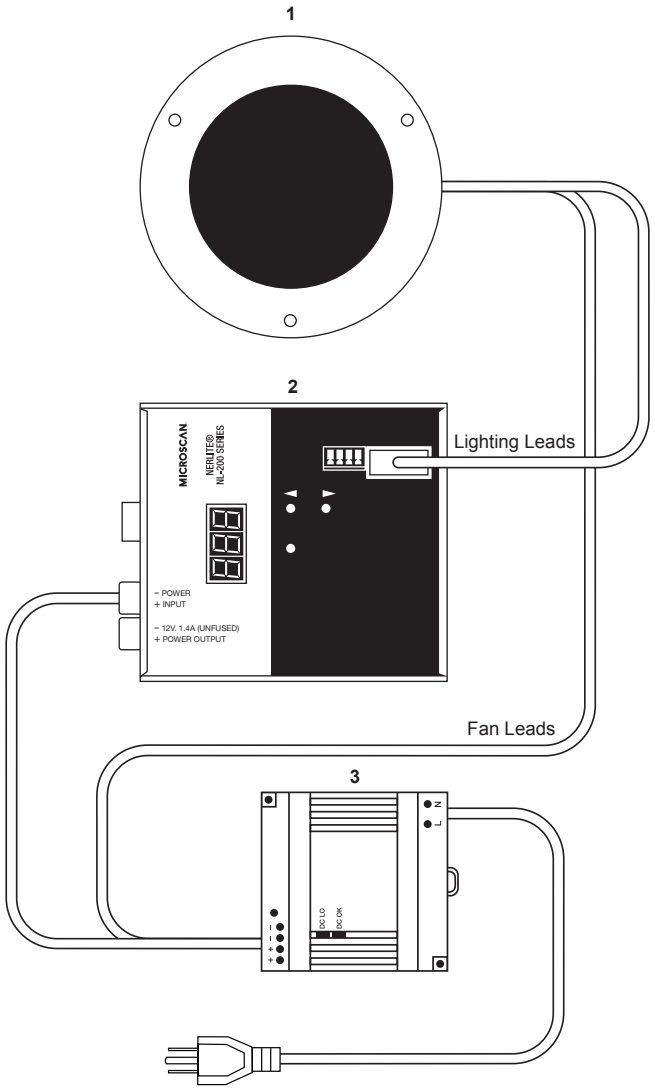

Figure A
CDI Series Illuminator
with NL-200 Controller, power supply
and fan circuit

CDI Calibration

1. After installation, set both the On Axis Lighting (DOAL) and Off Axis Lighting (Ring/Dome) channels to 100% of their rated currents.

2. Reduce the current to the On Axis Lighting (DOAL) until the desired image is displayed on your vision system.

Accessories

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

WARNING! When connecting a strobe light to an NL-2XX Series Lighting Controller, you must set the current rating to 10% of the current specified for the light in this document.

The NL-2XX Series Controller allows the operator to set the brightness (current) to 1000% in strobe mode. By setting the initial current rating to 10% of the light's specified current, a brightness setting of 1000% results in the light receiving 100% of its rated current. This will provide maximum light output without damaging the light.

Note: Certain lights require both channels of the NL-2XX Series Lighting Controller. Channel 1 and Channel 2 may have different current specifications on some models. Be sure each channel is set correctly as specified in this document.

General Notes:

1. Those lights that do not require a controller require 24VDC +/- 1%.
2. The NL-2XX series controllers require 24 to 48VDC.
3. The cable on all flying lead models is terminated with three, five, or seven leads. Each lead is labeled. See "Connection Notes" for connection instructions.
4. For all models with M12 connectors, the connector is a 4 pin, male, M12 connector. See "Connection Notes" or connector pin out and connection instructions.
5. All models with separate fan circuits must have 24VDC connected to the fan circuit at all times when the light is operating.
6. When operating in strobe mode at the maximum rated current, the maximum pulse width = 1mS and the maximum duty cycle = 6%. See the NL-2XX series controllers' manual for pulse width and duty cycle limitations under various conditions.

Connection Notes:

1. Connect the lead labeled "V+" to the positive(+) output terminal of the power supply or controller. Connect the lead labeled "GND" to the negative(-) output terminal of the power supply or controller. Connect the lead labeled "Shield" or "SHLD" to chassis ground.
2. Connect the lead labeled "V+" to the positive(+) output terminal of the power supply or controller. Connect the lead labeled "GND" to the negative(-) output terminal of the power supply or controller. Connect the lead labeled "Fan V+" to the positive(+) output terminal of a 24VDC power supply. Connect the lead labeled "Fan GND" to the negative(-) output terminal of a 24VDC power supply. Connect the lead labeled "Shield" to chassis ground.
3. Connect the lead labeled "V+1" to the positive(+) output terminal of channel 1 on an NL-2XX series controller. Connect the lead labeled "GND1" to the negative(-) output terminal of channel 1 on the NL-2XX series controller. Connect the lead labeled "V+2" to the positive(+) outpt terminal of channel 2 on the NL-2XX series controller. Connect the lead labeled "GND2" to the negative(-) output terminal of channel 2 on the NL-2XX series controller. Connect the lead labeled "Shield" to chassis ground
4. Connect the lead labeled "+" to the positive(+) output terminal of the power supply or controller. Connect the lead labeled "-" to the negative(-) output terminal of the power supply or controller. Connect the cable's braided shield to chassis ground.
5. Connect the lead labeled "DOAL V+" to the positive(+) output terminal of channel 1 on an NL-2XX series controller. Connect the lead labeled "DOAL GND" to the negative(-) output terminal of channel 1 on the NL-2XX series controller. Connect the lead labeled "Ring V+" to the positive(+) output terminal of channel 2 on the NL-2XX series controller. Connect the lead labeled "Ring GND" to the negative(-) output terminal of channel 2 on the NL-2XX series controller. Connect the lead labeled "Fan V+" to the positive(+) output terminal of a 24VDC power supply. Connect the lead labeled "Fan GND" to the negative(-) output terminal of a 24VDC power supply. Connect the lead labeled "Shield" to chassis ground.
6. Connect the two leads labeled "RING 1, 2 V+" & "RING 3 V+" to the same positive(+) output terminal of the power supply or controller. Connect the two leads labeled "RING 1, 2 -" & "RING 3 -" to the same negative(-) output terminal of the power supply or controller. Connect the lead labeled "Shield" to chassis ground.
7. Connect Pin 1 of the M12-M connector to the positive(+) output terminal of the power supply or controller. Connect Pin 3 of the M12-M connector to the negative(-) output terminal of the power supply or controller. Connect the shell of the M12-M connector to chassis ground. Pins 2 and 4 are not used.