

# NERLITE SCDI LIGHT SERIES ILLUMINATORS

## CONFIGURATION GUIDE

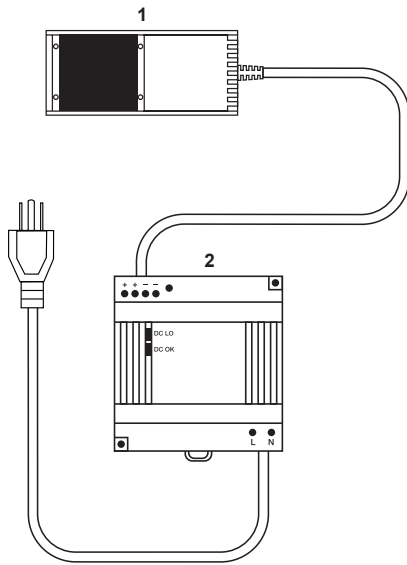


| Part Number   | Description              | Continuous Current |      |                |            | Continuous Operation  |  |  | Strobe Operation  | Connection Notes<br>Reference Number<br>(See the Connection<br>Notes on back of page) |
|---------------|--------------------------|--------------------|------|----------------|------------|---|--|--|-------------------|---|
|               |                          | Lighting           | Fan  | Strobe Current | Fan Cooled | No Controller Required<br>(Can be Connected<br>Directly to 24VDC) | Controller Required<br>(Select NL2XX<br>Series Controller) | NL-2XX Optional<br>(Used only if Intensity<br>And/Or Ethernet<br>Control Is Desired) | NL-2XX (Required) |   |
| NER-011301300 | SCDI-25 Red Continuous   | 105mA              | 80mA | NA             | X          | Figure A  |  | Figure C   |                   | 1   |
| NER-011301301 | SCDI-25 Red Strobe       | NA                 | NA   | 1.80A          |            |   |  |  | Figure B          | 1   |
| NER-011301302 | SCDI-25 White Continuous | 180mA              | 80mA | NA             | X          | Figure A  |  | Figure C   |                   | 1   |
| NER-011304004 | SCDI-50 Red Continuous   | 200mA              | NA   | NA             |            | Figure A  |  | Figure B   |                   | 1   |
| NER-011304002 | SCDI-50 Red Strobe       | NA                 | NA   | 4.00A          |            |   |  |  | Figure B          | 1   |
| NER-011304014 | SCDI-50 White Continuous | 200mA              | NA   | NA             |            | Figure A  |  | Figure B   |                   | 1   |
| NER-011304012 | SCDI-50 White Strobe     | NA                 | NA   | 4.00A          |            |   |  |  | Figure B          | 1   |
| NER-011302005 | SCDI-75 Red Continuous   | 240mA              | 62mA | NA             | X          | Figure A  |  | Figure C   |                   | 2   |
| NER-011302001 | SCDI-75 Red Strobe       | NA                 | NA   | 4.80A          |            |   |  |  | Figure B          | 1   |
| NER-011302012 | SCDI-75 White Continuous | 480mA              | 62mA | NA             | X          | Figure A  |  | Figure C   |                   | 2   |

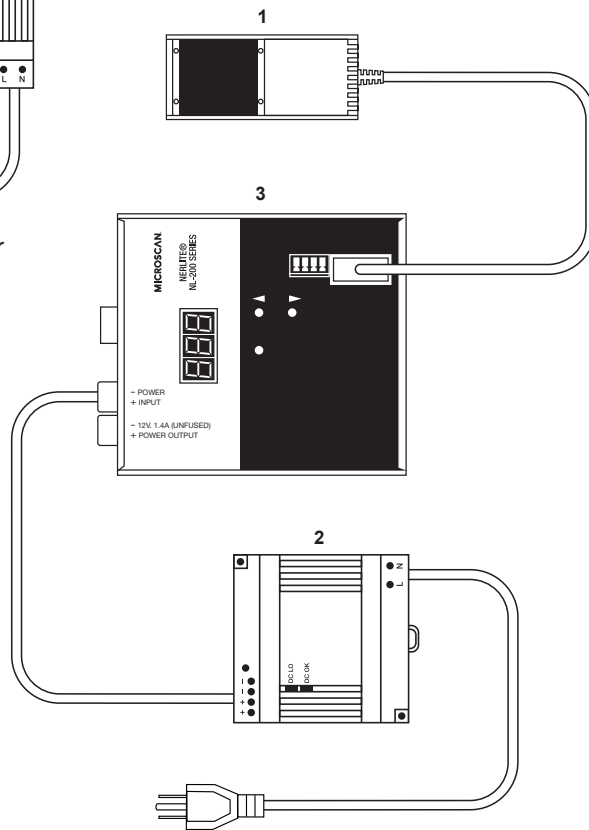
⚠ If using this product in strobe mode with an NL-2XX Series Lighting Controller, refer to the warning on the back of this document.

### Hardware Required

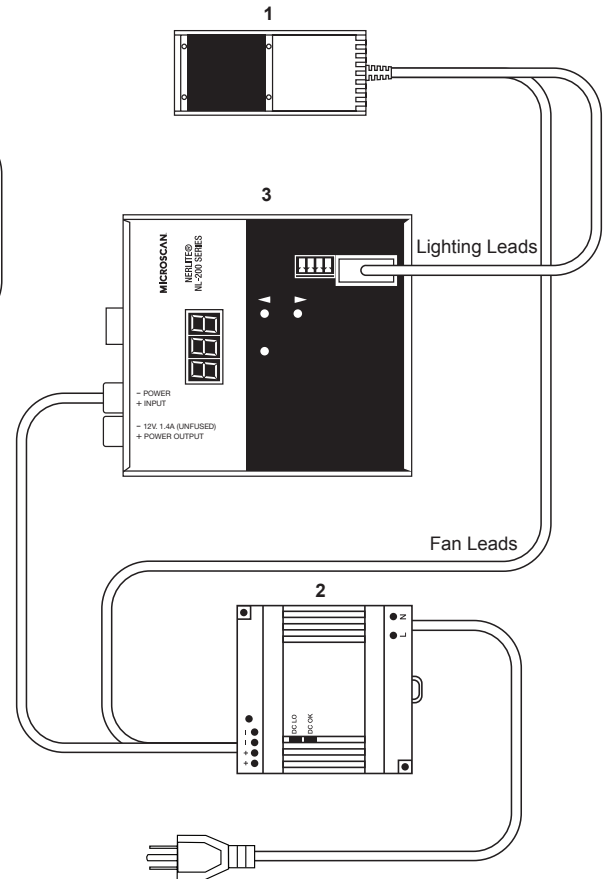
| Item | Description                             | Part Number   |
|------|---|---------------|
| 1    | SCDI Series Illuminators                | NER-01130XXXX |
| 2    | Power Supply DSP60 24VDC 2.5A DIN Mount | NER-011504100 |
| 3    | NL-200 Series Lighting Controller       | 98-000152-0X  |



**Figure A**  
SCDI Series Illuminator  
with power supply



**Figure B**  
SCDI Series Illuminator  
with NL-200 Controller and power supply



**Figure C**  
SCDI Series Illuminator  
with NL-200 Controller, power supply  
and fan circuit

## 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(+) output 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.