

NERLITE DOAL SERIES ILLUMINATORS

CONFIGURATION GUIDE



| Part Number | Description | Continuous Current | | Strobe Current | | Fan Cooled | Continuous Operation | | | | | | | | | | Strobe Operation | | Connection Notes Reference Number (See the Connection Notes on back of page) |
|---------------|--------------------------------|--------------------|------|--------------------|--------------------|------------|---|--|-------------------|-------------------|--------------------|--------------------|--------------------|--|--|---|---|-----------------|--|
| | | Lighting | Fan | Lighting Channel 1 | Lighting Channel 2 | | No Controller Required (Can be Connected Directly to 24VDC) | Controller Required (Select Any One of the Indicated LCXXX (Legacy) or NL2XX Series Controllers) | LC50-350 (Legacy) | LC50-700 (Legacy) | LC50-1050 (Legacy) | LC50-1400 (Legacy) | LC50-2100 (Legacy) | LC100-350 (Legacy) (LC100 Used Only If Intensity Control is Desired) | LC100-700 (Legacy) (LC100 Used Only If Intensity Control is Desired) | LC100-1050 (Legacy) (LC100 Used Only If Intensity Control is Desired) | NL-2XX Optional (Used only if Intensity And/Or Ethernet Control is Desired) | NL-2XX Required | |
| NER-011201305 | DOAL-25 Red Continuous | 40mA | NA | NA | NA | | Figure A | | | | | | | | | | Figure B | 1 | |
| NER-011201314 | DOAL-25 Red Strobe | NA | NA | 0.80A pk. | NA | | | | | | | | | | | | Figure B | 1 | |
| NER-011201313 | DOAL-25 White Continuous | 64mA | NA | NA | NA | | Figure A | | | | | | | | | | Figure B | 1 | |
| NER-011200814 | DOAL-50 V2 Red Continuous | 200mA | NA | NA | NA | | Figure A | | | | | | | | | | Figure B | 1 | |
| NER-011200812 | DOAL-50 V2 Red Strobe | NA | NA | 4.00A pk. | NA | | | | | | | | | | | | Figure B | 1 | |
| NER-011200824 | DOAL-50 V2 White Continuous | 200mA | NA | NA | NA | | Figure A | | | | | | | | | | Figure B | 1 | |
| NER-011200822 | DOAL-50 V2 White Strobe | NA | NA | 4.00A pk. | NA | | | | | | | | | | | | Figure B | 1 | |
| NER-011200834 | DOAL-50 V2 Blue Continuous | 200mA | NA | NA | NA | | Figure A | | | | | | | | | | Figure B | 1 | |
| NER-011200832 | DOAL-50 V2 Blue Strobe | NA | NA | 4.00A pk. | NA | | | | | | | | | | | | Figure B | 1 | |
| NER-011200892 | DOAL-50 V2 Infrared Continuous | 100mA | NA | NA | NA | | Figure A | | | | | | | | | | Figure B | 1 | |
| NER-011200897 | DOAL-50 V2 Infrared Strobe | NA | NA | 2.10A pk. | NA | | | | | | | | | | | | Figure B | 1 | |
| NER-011200502 | DOAL-75 Red Continuous | 240mA | 62mA | NA | NA | X | Figure A | | | | | | | | | | Figure C | 2 | |
| NER-011200501 | DOAL-75 Red Strobe | NA | NA | 4.80A pk. | NA | | | | | | | | | | | | Figure B | 1 | |
| NER-011204902 | DOAL-75 White Continuous | 480mA | 62mA | NA | NA | X | Figure A | | | | | | | | | | Figure C | 2 | |
| NER-011204901 | DOAL-75 White Strobe | NA | NA | 9.41A pk. | NA | | | | | | | | | | | | Figure B | 1 | |
| NER-011205720 | DOAL-75 Blue Continuous | 480mA | 62mA | NA | NA | X | Figure A | | | | | | | | | | Figure C | 2 | |
| NER-011205721 | DOAL-75 Blue Strobe | NA | NA | 9.41A pk. | NA | | | | | | | | | | | | Figure B | 1 | |
| NER-011200506 | DOAL-75 Infrared Continuous | 240mA | 62mA | NA | NA | X | Figure A | | | | | | | | | | Figure C | 2 | |
| NER-011200507 | DOAL-75 Infrared Strobe | NA | NA | 5.04A pk. | NA | | | | | | | | | | | | Figure B | 1 | |
| NER-011200602 | DOAL-100 Red Continuous | 427mA | 62mA | NA | NA | X | Figure A | | | | | | | | | | Figure C | 2 | |
| NER-011200601 | DOAL-100 Red Strobe | NA | NA | 8.40A pk. | NA | | | | | | | | | | | | Figure B | 1 | |
| NER-011204601 | DOAL-100 White Continuous | 823mA | 62mA | NA | NA | X | Figure A | | | | | | | | | | Figure C | 2 | |
| NER-011204600 | DOAL-100 White Strobe | NA | NA | 8.62A pk. | 7.84A pk. | | | | | | | | | | | | Figure B | 3 | |
| NER-011204610 | DOAL-100 Blue Continuous | 823mA | 62mA | NA | NA | X | Figure A | | | | | | | | | | Figure C | 2 | |
| NER-011204611 | DOAL-100 Blue Strobe | NA | NA | 8.62A pk. | 7.84A pk. | | | | | | | | | | | | Figure B | 3 | |
| NER-011200603 | DOAL-100 Infrared Continuous | 418mA | 62mA | NA | NA | X | Figure A | | | | | | | | | | Figure C | 2 | |
| NER-011200605 | DOAL-100 Infrared Strobe | NA | NA | 8.82A pk. | NA | | | | | | | | | | | | Figure B | 1 | |

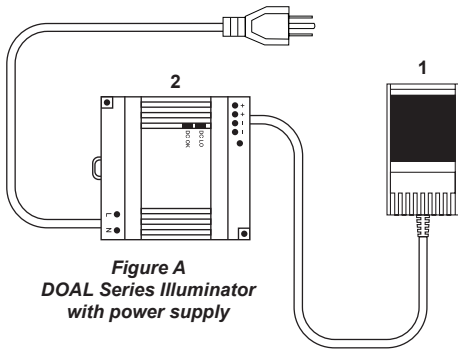


Figure A
DOAL Series Illuminator
with power supply

Hardware Required

| Item | Description | Part Number |
|------|---|---------------|
| 1 | DOAL Series Illuminators | NER-01120XXXX |
| 2 | Power Supply DSP60 24VDC 2.5A DIN Mount | NER-011504100 |
| 3 | NL-200 Series Lighting Controller | 98-000152-0X |

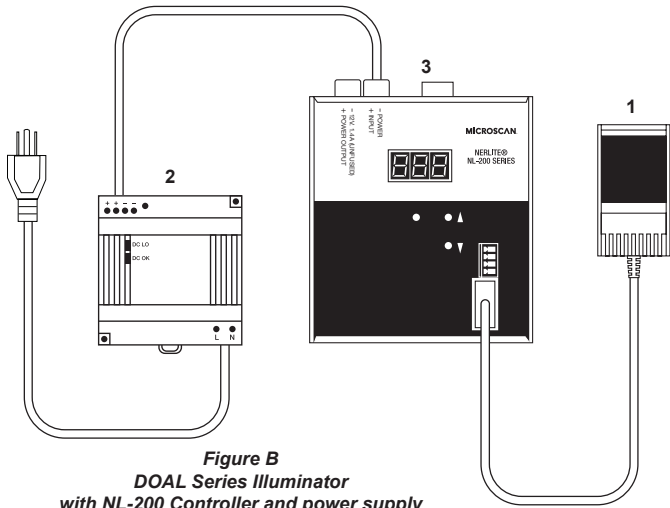


Figure B
DOAL Series Illuminator
with NL-200 Controller and power supply

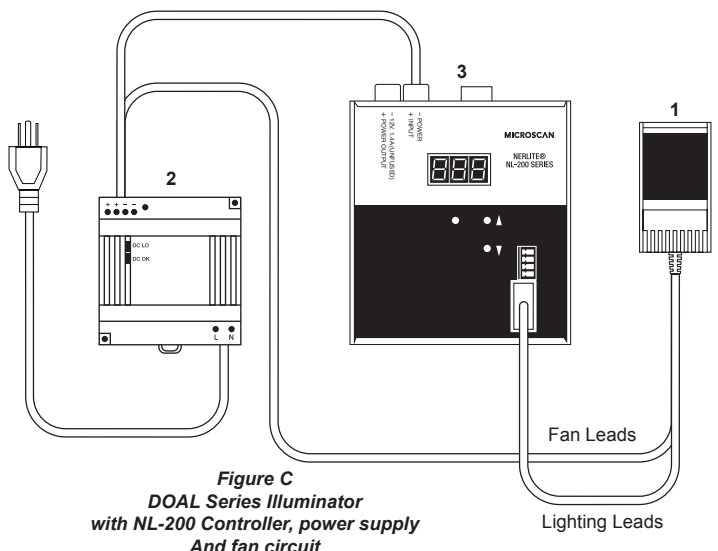


Figure C
DOAL Series Illuminator
with NL-200 Controller, power supply
And fan circuit

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 |

General Notes:

1. Those lights that do not require a controller require 24VDC +/- 1%.
2. The LC50 and LC100 series controllers require 24 to 40VDC.
3. The NL-2XX series controllers require 24 to 48VDC.
4. 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.
5. 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.
6. All models with separate fan circuits must have 24VDC connected to the fan circuit at all times when the light is operating.
7. 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.
8. ATTENTION! When programing an NL-2XX series controller for use in strobe mode, you must set the current rating to 10% of the current printed on the configuration label on the light. The NL-2XX Series Controller allows the operator to set the output to 1000% of the rated current in strobe mode. By programming the initial current rating at 10% of the light's rated current, full intensity is achieved and the controller is prevented from exceeding the light's rated current. Setting the current rating at a value greater than 10% of the current printed on the configuration label on the light may result in damage to the light.

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 two leads labeled "V+1" & "V+2" to the same positive(+) output terminal of the power supply or controller. Connect the two leads labeled "GND1" & "GND2" to the same negative(-) output terminal of the power supply or 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.