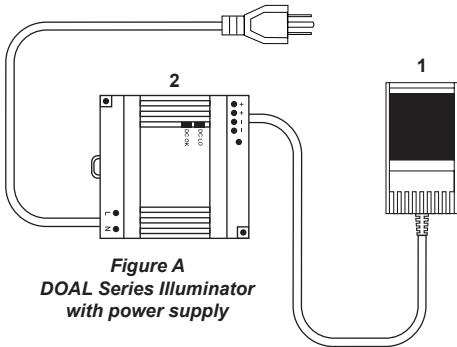


# NERLITE DOAL SERIES ILLUMINATORS

## CONFIGURATION GUIDE

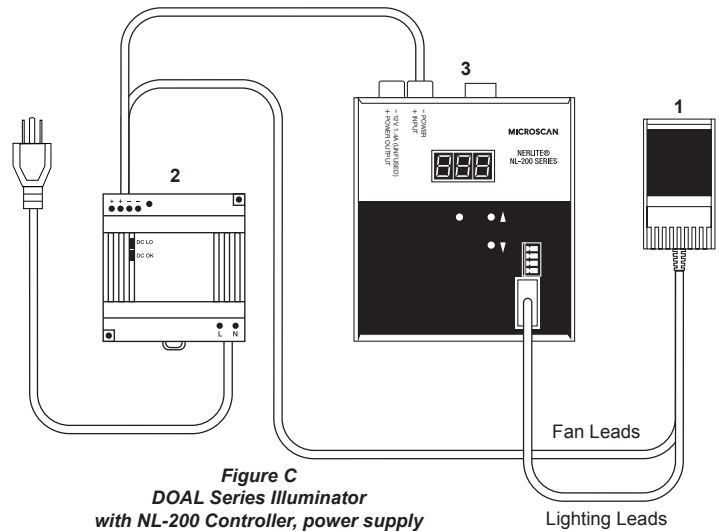
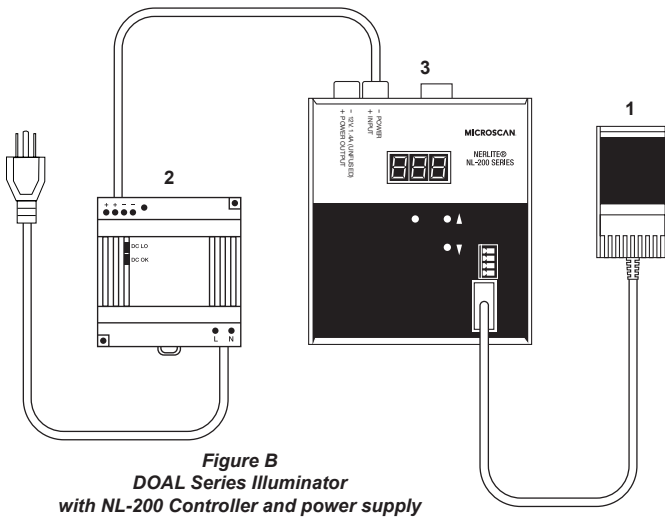


Part Number	Description	Continuous Current		Strobe Current		Continuous Operation			Strobe Operation	Connection Notes Reference Number (See the Connection Notes on back of page)
		Lighting	Fan	Lighting Channel 1	Lighting Channel 2	Fan Cooled	No Controller Required (Can be Connected Directly to 24VDC)	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



### 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



## 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 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.
7. ATTENTION! When programming an NL-2XX series controller for use in strobe mode, you must set the current rating to 10% of the current specified in this configuration guide. In the few cases where an individual light that requires both channels of the NL-200, be sure to set the current for each channel as specified in this configuration guide. Note: The currents for channel 1 and channel 2 are not always the same. 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 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.