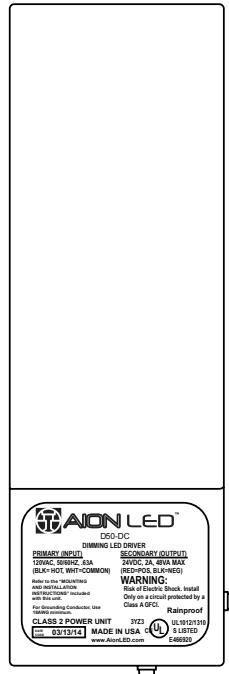


# D50-DC

## 48 WATT MLV DRIVER



Premium Class 2 Dimming LED Driver

Magnetic Low Voltage Transformer

Pure DC MOSFET Supply

Fully Regulated

0.1% DIMMING\*  
MADE IN USA

Multiple Inputs Available:  
120, 240, 277 VAC

UL LISTED 8750,  
CSA Approved

NEMA 3R Outdoor Case

Manual reset overload protection

5 Year Warranty

Electrician Installed - Strictly adhere to NEC & local code. Requires minimum 4" space in all directions. Requires adequate ventilation. Use dedicated circuit Isolated from other appliances. Load 40 - 90%

Requires Aion LED brand lighting fixture and approved dimmer or switch. Sold separately, not included

DO NOT USE PHASE ADAPTIVE CONTROLS FORWARD PHASE MLV CONTROLS ONLY

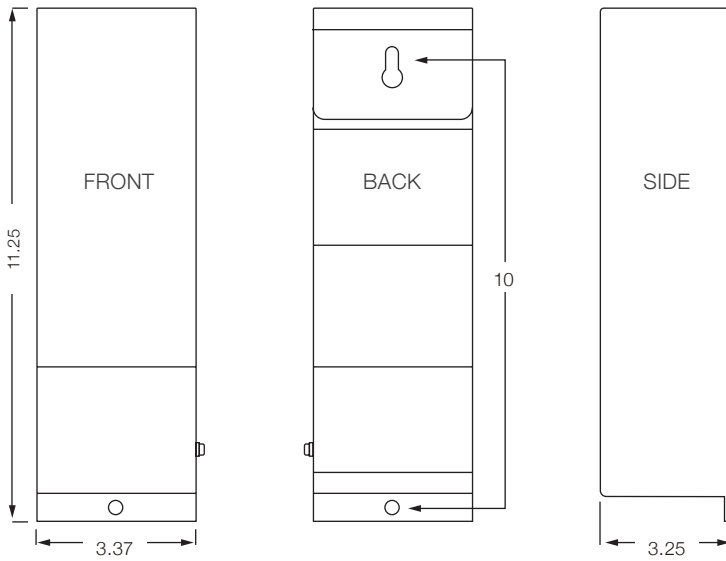
\*SEE APPROVED CONTROLS LIST



Component of a complete system including: Aion LED A-Track Light Engine, Aion LED A-Track housing with diffuser lens, & Aion LED driver (power supply). Dimmer not included. Approved dimmers, controls, power supplies, cable, & other components only. Contact Aion LED for questions regarding compatibility. Electrician installed. Strictly adhere to NEC & local building code. Limited 5-year warranty against manufacturing defects only; does not cover labor; voided by: inadequate ventilation, field modifications, installation by unqualified personnel, unapproved controls, drivers, cabling, other devices, not following installation guidelines & protocol, general negligence. Installer assumes all liability with regard to property & safety. This product is UL listed. See separate "Aion LED Warranty Terms" & additional instructional materials for more information. Authorized installers only. Systems tested prior to shipping.

## D50-DC

### 50 WATT MLV DRIVER



Premium Class 2 Dimming  
LED Driver

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UL LISTED 8750,  
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NEMA 3R Outdoor Case

Manual reset overload protection

 Available through the Aion LED  
*Preferred* Preferred Program

Model	D50-DC	Watts	48
Standard Input Voltage	120 VAC	Dimensions "	11.25 X 3.37 X 3.25
Output Voltage Loaded	24 VDC	Input Current	.63A
Output Current	2A, 48W	Input Frequency (Hz)	50-60
Current Limit	2.5/4.5 +/- 0.25	Efficiency	80%
Load Regulation	2%	MTBF	100,000
Line Regulation	5%	Operating Environment	-30 to +60
Function Surface Temp	-40 to +80		

## Max Lengths

3000 Series 30 ft.

4000 Series 15 ft.

## Max Wire Distance

18 AWG 55 ft.

16 AWG 88 ft.

14 AWG 140 ft.

12 AWG 224 ft.

10 AWG 360 ft.

8 AWG 574 ft.



**DO NOT USE PHASE-ADAPTIVE CONTROLS**  
**FORWARD PHASE MLV CONTROLS ONLY**  
\*SEE APPROVED CONTROLS LIST

Components of a complete system include: Aion LED A-Track Light Engine, Aion LED A-Track housing with diffuser lens, & Aion LED driver (power supply). Dimmer not included. Approved dimmers, controls, power supplies, cable, & other components only. Contact Aion LED for questions regarding compatibility. Electrician installed. Strictly adhere to NEC & local building code. Limited 5-year warranty against manufacturing defects only, does not cover labor; voided by: inadequate ventilation, field modifications, installation by unqualified personnel, unapproved controls, drivers, cabling, other devices, not following installation guidelines & protocol, general negligence. Installer assumes all liability with regard to property & safety. This product is UL listed. See separate "Aion LED Warranty Terms" & additional instructional materials for more information. Authorized installers only. Systems tested prior to shipping.



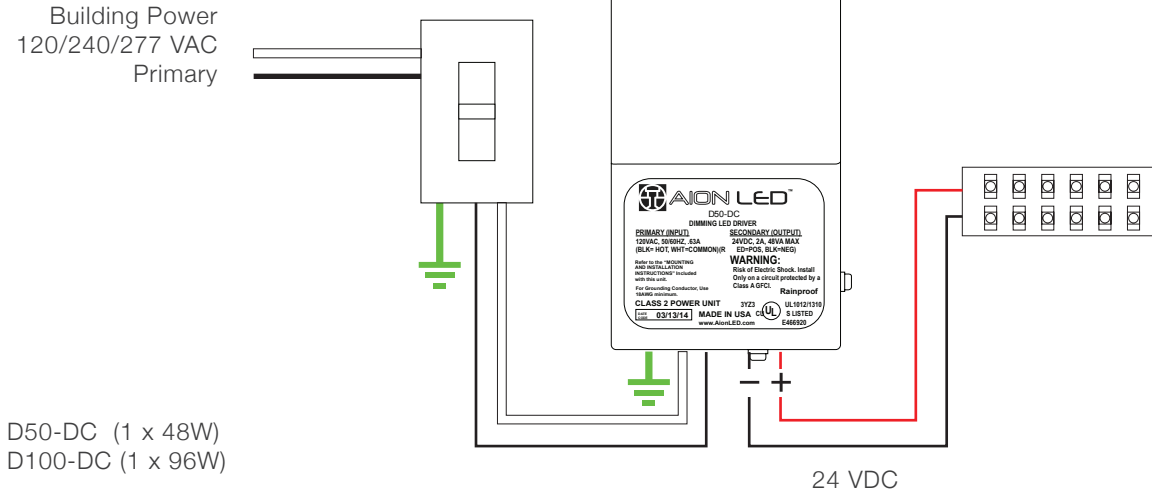
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Modified: January 17, 2018

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## WIRING DIAGRAM

D50-DC



## Installation Instructions

1. This unit must be located 1 foot or greater above the deck or ground level. 4" space required between units.
  2. Mount this unit on a suitable vertical surface with conduit openings down.
  3. Using a ruler, measure the vertical mounting point distance for the brackets provided on the back of the enclosure.
  4. Mark the mounting surface and drill a minimum of 2 holes to match the bracket hole centers. Size the drill to accommodate #10 mounting hardware.
  5. If keyhole mounting brackets are provided, insert the hardware at the mounting point to allow for 3/16" spacing between the screw head and the mounting surface to accommodate the bracket thickness.
  6. Refer to the product labeling for detailed line and load wiring procedure.
- Input connection: use No. 12-18 AWG wires insulated for a minimum of 90C, rated for 600V.  
Output Connection: use No. 12-18 AWG class 2/3 low voltage wires.
  - Use wire connectors suitable for the number and size conductors being connected and applied in accordance with the manufacturer's instructions.
  - Minimum 20 amp supply side branch circuit.
  - A disconnect device shall be located in the field wiring.

Aion LED DC Blue Series drivers have been factory tested for use with specific 120 VAC dimmers designed for magnetic (MLV) for forward-phase loads.

PLEASE SEE APPROVED DIMMERS PAGE FOR COMPATIBLE CONTROLS. DO NOT ATTEMPT CONNECTING UNAPPROVED DIMMERS OR CONTROLS. DAMAGE TO THE DIMMER, FIXTURE AND/OR THE POWER UNIT WILL RESULT; THE POWER UNIT WARRANTY WILL BE VOIDED.

Please load 40–90% MAX. Please see specifications page for fixture-specific max load/ run length information.



Lutron	MAESTRO: MRF2-6ND	0.1-1%*	(DO NOT RECOMMEND MALV-600)
	NOVA: NTLV-600	0.1-1%*	HE TRIM
	HOMWORKS QS: RPM-4U HQRD-10ND HQRD-6ND HQRD-6CL (H2) HQRA-6CL (H2)	0.1-1%*	(DO NOT RECOMMEND RPM-4A) DO NOT SHARE WITH OTHER LOADS HE TRIM (DO NOT RECOMMEND 6NA)
	HOMWORKS: HxD-6ND HW/LP RPM -4U-120 <sup>†</sup>	0.1-1%*	HE TRIM <sup>†</sup> (DO NOT RECOMMEND RPM-4A) DO NOT SHARE WITH OTHER LOADS
	RADIO RA2: RRD-10ND RRD-6CL(R3)	0.1-1%*	(DO NOT RECOMMEND 6NA) HE TRIM
	GRAFIK EYE QS: QSGRJ-3P QSGRJ-4P QSGRJ-6P	0.1-1%*	HE TRIM
	GRAFIK EYE 3000: HWI-WPM-6D-120	0.1-1%*	HE TRIM
	STANZA: SZ-6ND	0.1-1%*	HE TRIM
	PHPM-PA FORWARD-PHASE ONLY PHPM-PA-120-FP-WH-CPN6366 PHPM-PA-DV-FP-WH-CPN6366	0.1-1%*	HE TRIM USE WITH UP & RP
	PHPM-WBX	0.1-1%*	HE TRIM
	PANEL MODULE: GP (Harrier) Card	0.1-1%*	HE TRIM
	CASETA WIRELESS: PD-6WCL (SD11)	0.1-1%*	HE TRIM
	ETC	D20AF	0.1%
Forbes & Lomax	ROTARY DIMMER : FLRLV603-P	0.1%	
Vantage	STANDARD DIMMER MODULE SDM12-EM	0.1%	HE TRIM
	WIRELINK SCENEPOINT DIMMER: DS15TE-AWYA	0.1%	HE TRIM
	RADIOLINK SCENEPOINT DIMMER: RD15TE-AWYA	0.1%	HE TRIM
Crestron	GLX-DIM6	0.1%	HE TRIM
Le Grand	ADORN: ADTP703TU(W4)	0.1%	HE TRIM
	ADORN WIRELESS: ADTG700MMTU(W2)	0.1%	HE TRIM

Testing completed by Aion LED and various controls manufacturers to ensure compatibility.

MLV FORWARD PHASE ONLY.  
DO NOT USE ADAPTIVE PHASE CONTROLS

Low-end dimming minimum threshold varies by control and can be set when programming trim levels.

Use high-end trim (HE Trim) to eliminate dead travel, set low trim to lowest level dimmer will allow.

\*Lowest dim levels achieved with little or no LE Trim. Dimmer manufacturers may recommend setting LE Trim higher to increase start time when necessary.