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.

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.

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

DC Blue Series
MLV

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

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.

**D50-DC**

50 WATT MLV DRIVER

---

**Model** | **Watts**
--- | ---
D50-DC | 48

- **Standard Input Voltage**: 120 VAC
- **Dimensions**: 11.25 X 3.37 X 3.25
- **Output Voltage Loaded**: 24 VDC
- **Current Limit**: 2.5/4.5 +/- 0.25
- **Load Regulation**: 2%
- **Efficiency**: 80%
- **MTBF**: 100,000

---

**Max Length**

- **3000 Series**: 30 ft.
- **4000 Series**: 15 ft.
- **8000 Series**: 7.5 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.

---

**Premium Class 2 Dimming LED Driver**

- Magnetic Low Voltage Transformer
- Pure DC MOSFET Supply
- Fully Regulated
- 0.1% DIMMING*

**UL LISTED 8750, CSA Approved**

**NEMA 3R Outdoor Case**

**Manual reset overload protection**

---

DO NOT USE PHASE-ADAPTIVE CONTROLS FORWARD PHASE MLV CONTROLS ONLY

*SEE APPROVED CONTROLS LIST
D100-DC
100 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
UL LISTED 8750,
CSA Approved
NEMA 3R Outdoor Case
Manual reset overload protection

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.

Model | D100-DC | Watts | 96
---|---|---|---
Standard Input Voltage | 120 VAC | Dimensions | 11.25 X 3.37 X 3.25
Output Voltage Loaded | 24 VDC | Input Current | 1.12A
Output Current | 4A, 96W | 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

<table>
<thead>
<tr>
<th>Series</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>3000</td>
<td>60 ft. (2 x 30)</td>
</tr>
<tr>
<td>4000</td>
<td>30 ft.</td>
</tr>
<tr>
<td>8000</td>
<td>15 ft.</td>
</tr>
</tbody>
</table>

Max Wire Distance

<table>
<thead>
<tr>
<th>AWG</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>27 ft.</td>
</tr>
<tr>
<td>16</td>
<td>44 ft.</td>
</tr>
<tr>
<td>14</td>
<td>70 ft.</td>
</tr>
<tr>
<td>12</td>
<td>112 ft.</td>
</tr>
<tr>
<td>10</td>
<td>180 ft.</td>
</tr>
<tr>
<td>8</td>
<td>286 ft.</td>
</tr>
</tbody>
</table>

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.

**WIRING DIAGRAM**

D50-DC & D100-DC

![Wiring Diagram](image)

**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) 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.
**D300-DC3**

3 x 96W 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**

**UL LISTED 8750, CSA Approved**

**NEMA 3R Outdoor Case**

**Manual reset overload protection**

**Max Lengths**

<table>
<thead>
<tr>
<th>Series</th>
<th>Max Lengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>3000 Series</td>
<td>180 ft. (6 x 30)</td>
</tr>
<tr>
<td>4000 Series</td>
<td>90 ft. (3 x 30)</td>
</tr>
<tr>
<td>8000 Series</td>
<td>45 ft. (3 x 15)</td>
</tr>
</tbody>
</table>

**Max Wire Distance**

<table>
<thead>
<tr>
<th>AWG</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>27 ft.</td>
</tr>
<tr>
<td>16</td>
<td>44 ft.</td>
</tr>
<tr>
<td>14</td>
<td>70 ft.</td>
</tr>
<tr>
<td>12</td>
<td>112 ft.</td>
</tr>
<tr>
<td>10</td>
<td>180 ft.</td>
</tr>
<tr>
<td>8</td>
<td>286 ft.</td>
</tr>
</tbody>
</table>

---

**Model**

- **D300-DC3**

**Watts**

- 3 x 96W

**Standard Input Voltage**

- 120 VAC

**Dimensions**

- 14.25 x 8.43 x 4.43

**Output Voltage Loaded**

- 24 VDC

**Input Current**

- 2.5A

**Output Current**

- 3 x 96W Class 2 Circuits

**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

---

**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.**

---

**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.

**WIRING DIAGRAM**

**D300-DC3**

**Building Power**

120/240/277 VAC

**Primary**

**D300-DC3 (3 X 96W)**

---

**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) 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.
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.

| Lutron | MÆSTRO:      | 0.1-1%* | (DO NOT RECOMMEND MALV-600) |
|        | MRF2-6ND     |         |                           |
|        | NOVA:        | 0.1-1%* | HE TRIM                   |
|        | NTLV-600     |         |                           |
|        | HOMWORKS QS: | 0.1-1%* | HE TRIM                   |
|        | RPM-4U       |         |                           |
|        | HQRD-10ND    |         |                           |
|        | HQRD-6ND     |         |                           |
|        | HQRD-6CL (H2)|         |                           |
|        | HQRA-6CL (H2)|         |                           |
|        | HOMWORKS:    | 0.1-1%* | HE TRIM                   |
|        | Hxh-6ND      |         |                           |
|        | HW/LP RPM - 4U-120 | |           |
|        | RADIO RA2:   | 0.1-1%* | (DO NOT RECOMMEND 6NA) HE TRIM |
|        | RRD-10ND     |         |                           |
|        | RRD-6CL(R3)  |         |                           |
|        | GRAFIK EYE QS: | 0.1-1%* | HE TRIM                   |
|        | QSGRJ-3P     |         |                           |
|        | QSGRJ-4P     |         |                           |
|        | QSGRJ-6P     |         |                           |
|        | GRAFIK EYE 3000: | 0.1-1%* | HE TRIM                   |
|        | HWI-WPM-6D-120 |       |                           |
|        | STANZA:      | 0.1-1%* | HE TRIM                   |
|        | SZ-6ND       |         |                           |
|        | PHPM-PA      | 0.1-1%* | HE TRIM USE WITH UP & RP |
|        | FORWARD-PHASE ONLY | |        |
|        | PhPm-PA-120-FF-WH-CPn6366 | |        |
|        | PhPm-PA-DV-FF-WH-CPn6366 | |        |
|        | PHPM-WBX     | 0.1-1%* | HE TRIM                   |
|        | PANEL MODULE:| 0.1-1%* | HE TRIM                   |
|        | GP (Harrier) Card |       |                           |
|        | CASETA WIRELESS: | 0.1-1%* | HE TRIM                   |
|        | PD-6WCL (SD11)|       |                           |
|        | ETC          | 0.1%    | SENSOR RACK               |
|        | D20AF        |         |                           |
|        | Forbes & Lomax | ROTARY DIMMER :   | 0.1%                      |
|        | FLRLV603-P   |         |                           |
| Vantage | STANDARD DIMMER MODULE | 0.1% | HE TRIM                   |
|        | SDM12-EM     |         |                           |
|        | WIRELINK SCENEPOINT DIMMER: | 0.1% | HE TRIM                   |
|        | DS15TE-AWYA  |         |                           |
|        | RADIOLINK SCENEPOINT DIMMER: | 0.1% | HE TRIM                   |
|        | RD15TE-AWYA  |         |                           |
| Crestron | GLX-DIM6     | 0.1%    | HE TRIM                   |
| Le Grand | ADORN:       | 0.1%    | HE TRIM                   |
|        | ADTP7/03TU(W4)|       |                           |
|        | ADORN WIRELESS: | 0.1% | HE TRIM                   |
|        | ADTG700MMTU(W2)|       |                           |

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.*