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.

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### Controls Compatibility

- 2 Wire, forward-phase, magnetic transformer. Load driver between 50 to 80% of maximum rated wattage.
- Requires RPM-4A for +/-1% dimming.
- RPM-4U for +/-10% dimming
- Compatible with few wall box dimmers- Contact Aion LED representative for more information.

### Max LED run per circuit

- [4A (96W) per circuit] (NEC Article 725)
- 10% Headroom included
- Use electrical junction boxes to transition between building wire and Aion LED power feeds per local code.

### Sub Boxes

- Use larger gauge cord for sub feeds and longer runs. Junction building wire to fixture whips within electrical boxes per local code.

### Heat & EMI

- Magnetic DC transformers emit heat and electromagnetic energy. Adequate ventilation required (NEC Article 450)
- Requires 15 inches of space between each transformer.

### Model Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>D300-D3-24</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimensions (L-W-H)”</strong></td>
<td>7 x 7 x 3.2”</td>
</tr>
<tr>
<td><strong>Wattage</strong></td>
<td>288 (3 x 96)</td>
</tr>
<tr>
<td><strong>Rating</strong></td>
<td>ETL (UL 1310)</td>
</tr>
<tr>
<td><strong>NEMA 3R Case</strong></td>
<td>INDOOR</td>
</tr>
<tr>
<td><strong>Standard Input Voltage</strong></td>
<td>available in 240 &amp; 277</td>
</tr>
<tr>
<td><strong>Output Voltage Loaded</strong></td>
<td>23.5 VDC</td>
</tr>
<tr>
<td><strong>Voltage Open</strong></td>
<td>25.5 VDC</td>
</tr>
<tr>
<td><strong>Max Input Current</strong></td>
<td>3A</td>
</tr>
<tr>
<td><strong>Primary Breaker</strong></td>
<td>5A Thermal</td>
</tr>
<tr>
<td><strong>Secondary Breaker</strong></td>
<td>(3X) 4A Magnetic</td>
</tr>
<tr>
<td><strong>Leads Primary AWG, Temp</strong></td>
<td>#18 105 C</td>
</tr>
<tr>
<td><strong>Leads Secondary AWG, Temp</strong></td>
<td>#12 105 C</td>
</tr>
<tr>
<td><strong>Thermal Class</strong></td>
<td>(B) 130 C</td>
</tr>
<tr>
<td><strong>MAX Feet 3000 Series</strong></td>
<td>168’</td>
</tr>
<tr>
<td><strong>MAX Feet 4000 Series</strong></td>
<td>81’</td>
</tr>
<tr>
<td><strong>MAX Feet 8000 Series</strong></td>
<td>39’</td>
</tr>
</tbody>
</table>

### Diagram

![Diagram of D-24 SERIES and 24VDC](image)

**REFER TO DIMMER INSTRUCTIONS**
Caution:

Turn main power off at breaker prior to installation or service
Must be installed by licensed & bonded electrician strictly adhere to NEC & local code

D60-D-24 & D100-D-24 are suitable for exterior applications, others are intended for interior use only
Standard input voltage is 120VAC. 240 VAC & 277VAC applications require separate part number
Standard output voltage is 24V DC, 12V DC applications require separate part number

Installation:

Do not load more than 80% of max rated output
Consult with Aion LED to determine max lineal footage per fixture series

Minimum Load: 50%, Maximum Load: 80%

NEC Article 450: (transformer) requires adequate ventilation for convection cooling install in an open area,
Do not install in a sealed space
Ambient temperature max: 110°F.
Allow at least 15 inches of space between multiple units

Requires UL listed wire nuts, connectors, clamps, & cabling suitable for application mount unit vertically with knock-outs facing downward

Wiring:

Primary (AC input): black = line, white = neutral, green = ground
Secondary (DC output): red = DC+ (pos) , blue = DC- (neg) [polarity sensitive]
Unit must be grounded to earth

Dimming:

Use of unapproved dimmer or control voids standard 5-year warranty against defects & may cause Irreparable damage.
Use approved magnetic low-voltage, forward (or adaptive) phase controls only
Please contact Aion LED to ensure compatibility prior to ordering

Programming:

Control system programming must be implemented by authorized personnel only. Lutron electronics requires factory authorized programmer or warranty will be voided. Low & high trims should be set at 10 & 90% respectively, low trim may be dialed down as required

Lutron Grafik Eye QS and newer:
Load type must be pre-configured to ‘MLV’, DO NOT USE ‘incandescent’ setting
Although both types share the same terminals, ‘MLV’ load type setting is required for safe use

Lutron Homeworks, LCP, & similar that require Lutron remote panel modules:
#RPM-4A (adaptive phase module) dims 8% lower than #RPM-4U (forward phase module) per Lutron report card

Other resources:

Aion LED voltage drop chart
Aion LED D-series specifications

cETLus CLASS 2 CONFORMS TO UL1310 STANDARD, CERTIFIED TO CSA C22.2 # 223
CONTROL # 4005509
“CAUTION” AND “RISK OF ELECTRICAL SHOCK”
OUTDOOR TRANSFORMER ENCLOSURE TYPE NEMA 3R (60 & 100W MODELS ONLY)