## Aion LED D-24 Series

**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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### Model Specifications

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</tr>
</thead>
<tbody>
<tr>
<td>D____-D-24</td>
<td></td>
<td>5 x 2.1 x 2&quot;</td>
<td>20</td>
<td>ETL (UL 8750)</td>
<td>INDOOR</td>
<td>120V 60Hz</td>
<td>23.5 VDC</td>
<td>25.5 VDC</td>
<td>206mA</td>
<td>Thermal</td>
<td>2A</td>
<td>#16 105 C</td>
<td>(B) 130 C</td>
<td>11'</td>
<td>5.5'</td>
<td>2'</td>
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<td>D20-D-24</td>
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<td>5 x 2.1 x 2&quot;</td>
<td>40</td>
<td>ETL (UL 8750)</td>
<td>INDOOR</td>
<td>120V 60Hz</td>
<td>23.5 VDC</td>
<td>25.5 VDC</td>
<td>360mA</td>
<td>Thermal</td>
<td>4A</td>
<td>#16 105 C</td>
<td>(B) 130 C</td>
<td>22'</td>
<td>5.5'</td>
<td>5.5'</td>
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<td>D40-D-24</td>
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<td>8.5 x 3 x 2.9&quot;</td>
<td>60</td>
<td>ETL (UL 1310)</td>
<td>IN &amp; OUTDOOR</td>
<td>120V 60Hz</td>
<td>23.5 VDC</td>
<td>25.5 VDC</td>
<td>0.6A</td>
<td>1A</td>
<td>5A</td>
<td>#18 105 C</td>
<td>(B) 130 C</td>
<td>33'</td>
<td>8'</td>
<td>8'</td>
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<td>D60-D-24</td>
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<td>9 x 4.2 x 3.25&quot;</td>
<td>96</td>
<td>ETL (UL 1310)</td>
<td>IN &amp; OUTDOOR</td>
<td>23.5 VDC</td>
<td>25.5 VDC</td>
<td>1A</td>
<td>1A</td>
<td>2A</td>
<td>#12 105 C</td>
<td>(B) 130 C</td>
<td>16'</td>
<td>16'</td>
<td>13'</td>
<td></td>
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<tr>
<td>D100-D-24</td>
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<td>7 x 7 x 3.2&quot;</td>
<td>288</td>
<td>ETL (UL 1310)</td>
<td>INDOOR</td>
<td>23.5 VDC</td>
<td>25.5 VDC</td>
<td>3A</td>
<td>3A</td>
<td>5A</td>
<td>#3 105 C</td>
<td>(B) 130 C</td>
<td>56'</td>
<td>27'</td>
<td>39'</td>
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<td>D300-D3-24</td>
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<td>7 x 7 x 3.2&quot;</td>
<td>288</td>
<td>ETL (UL 1310)</td>
<td>INDOOR</td>
<td>23.5 VDC</td>
<td>25.5 VDC</td>
<td>3A</td>
<td>3A</td>
<td>5A</td>
<td>#3 105 C</td>
<td>(B) 130 C</td>
<td>168'</td>
<td>81'</td>
<td>39'</td>
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### Project Specification

<table>
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<tr>
<th>SKU</th>
<th>Model</th>
<th>Input Voltage</th>
<th>Zone</th>
<th>Note</th>
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<tbody>
<tr>
<td>D____-D-24</td>
<td></td>
<td>120VDC</td>
<td>Standard</td>
<td>(Special Order: Additional Lead Time)</td>
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<tr>
<td>D20-D-24</td>
<td></td>
<td>240VDC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D40-D-24</td>
<td></td>
<td>277VDC</td>
<td></td>
<td></td>
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</table>
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.

REVIEW DIMMER INSTRUCTIONS

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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Sub Boxes
- Use larger gauge cord for sub feeds and longer runs.

Heat & EMI
- Magnetic DC transformers emit heat and electromagnetic energy. Adequate ventilation required (NEC Article 450)
- Requires 15 inches of space between each transformer.
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 120V AC, 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)

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