

#### AT402-G

#### Aion LED Grazer Optic



### Narrow Profile Fixture With Narrow Angle 15° Collimation Optic

Proprietary, high-performance beam-shaping optic developed by Aion LED. Includes multi-layer design to maximize collimation and transmission while providing adequate diffusion.

#### Extend Reach and Highlight Textures

Maximum Transmission, Maximum Diffusion Acrylic will not yellow when exposed to prolonged sunlight.

#### Custom Lengths

Manufactured in 8 ft lengths and cut down as required per custom dimensional requirements.

Lengths up to  $\leq$  8 ft. (96 in)

Custom Leads, Plugs & Connectors

Tested as suitable for use within clothing closet spaces by ETL/Intertek

Must be installed in accordance with NEC 410.16 for use in clothing closet spaces







#### **Customization Options**

AT-Series A-Track fixtures are semi custom and made to order. If an additional option or feature is needed, please contact Aion LED to discuss.

Profile Lens Finish

Narrow Grazer Anodized Silver

Anodized Dark Bronze

**Custom Color** 

Mounting Feed Length

Mounting Clips End Custom pre-cut

Pivot Mounting Clips Rear HD Adhesive backing Side

Wiring
24" Leads
48" Leads
Custom length leads
M/F Disconnect Plugs
Color: White/ Black

AT Series A-Track orders include: A -Track housing, lens, end caps, end cap screws, wire grommets & mounting clips

Tested as suitable for use within clothing closet spaces by ETL/Intertek

Must be installed in accordance with NEC 410.16 for use in clothing closet spaces

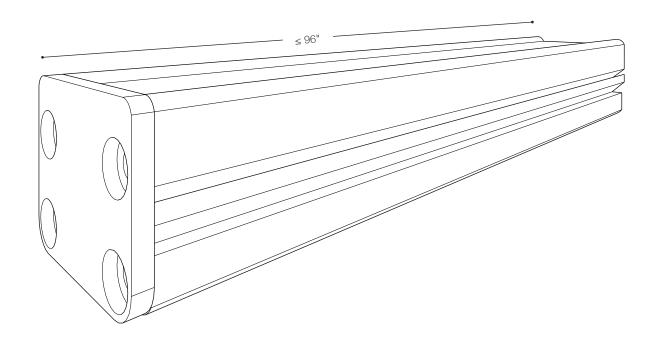






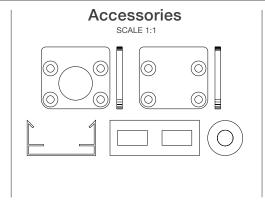
#### AT402

#### Narrow Profile



NOT TO SCALE

# Dimensions NOT TO SCALE 0.65" 0.80" 0.72"



## DIRECT VIEW INDIRECT VIEW 9524-FR 9524-FR 1524-LE 1524-LE 4924-LE 4924-LE 524-CT3023-LE 3924-LE

Compatibility

1524-LE 1524-LE 4924-LE 4924-LE 1524-CT3022-LE 3924-LE 1524-CT3022-LE 7000-RGB 5000-RGB

#### PRELIMINARY SPECIFICATION, SUBJECT TO CHANGE WITHOUT NOTICE

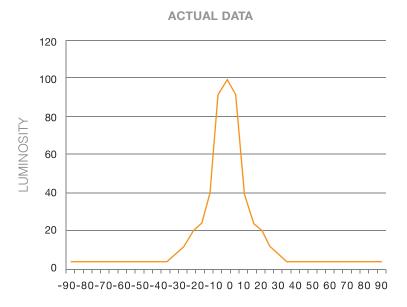
Component of a complete system including: Alon LED A-Track Light Engine, Alon LED A-Track housing with diffuser lens, & Alon LED driver (power supply). Dimmer not included. Approved dimmers, controls, power supplies, cable, & other components only. Contact Alon LED for questions regarding compatibility. 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 "Alon LED Warranty Terms" & additional instructional materials for more information. Authorized installers only. Systems tested prior to shipping.

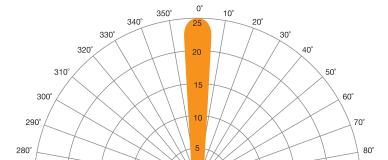




#### AT402-G

#### Aion LED Grazer Optic





BEAM ANGLE

POLAR GRAPH

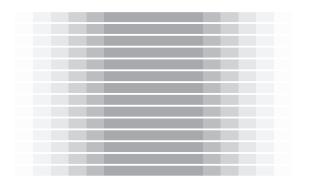
Proprietary, high-performance beam-shaping optic developed by Aion LED.

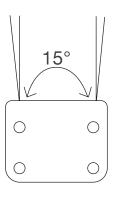
Includes multi-layer design to maximize collimation and transmission while providing adequate diffusion.

Manufactured in 8 ft lengths and cut down as required per custom dimensional requirements.

Acrylic will not yellow when exposed to prolonged sunlight.

Only available in AT402 profile.





#### PRELIMINARY SPECIFICATION, SUBJECT TO CHANGE WITHOUT NOTICE



#### Single Color Light Engines

95+ CRI White Single Bin

Only Available with 9524-FR

2150K

55

5500K

2350K

2550K\*

27

2650K

30

2950K

35

3450K

40

3950K













95+ CRI

UL Class 2

IP20 Dry Location

Custom Cut to Fit

50,000 Hour Min. Lifespan

#### Colors



Red



Amber



Blue



Green

Requires: Aion LED Driver, Approved Controller, Aion LED

Housing. Sold Separately, Not Included

\*2550 Only Available in 8000, 4000 & 3000 Series 80+ CRI Available via Special Order











Tested as suitable for use within clothing closet spaces by ETL/ Intertek

Must be installed in accordance with NEC 410.16 for use in clothing closet spaces











#### 9524-FR

#### Ultra High Output Luminaire with Rigid Board





10.7 W /ft.\* ≤ 1,100 Lumens /ft.\*

Rated lifetime: 50,000 hours min.

Available in 12" & 48" Connectible end to end

Minimum Increment: 4"

Requires Heat Sink

Also available: 9524-FRS Scored Rigid Board

_	0 24VDC+	22 24 27 30 35 40 45 50 55	24VDC+ 🗆 🕠 🗈
0.40"	D2 D3 PS SEA FR SERIES D4 D5 D6		D7 07
	←	4"	<b>&gt;</b>
0.16"			

	9524-22-FR	9524-24-FR	9524-27-FR	9524-30-FR	9524-35-FR	9524-40-FR	9524-55-FR
Total Lumens	840.13		1004.98	1047.29	1094.83	1117.04	
Input Power (W)	10.70		10.67	10.75	10.69	10.7	
Efficacy	79		94	97	102	105	
Color Rendering Index (CRI)	95		97	98	97	96	
R9	82.02		92.62	89.68	97.92	94.96	
Input Voltage (VDC)	24	24	24	24	24	24	24
Input Current (AMP)	0.45		0.44	0.45	0.45	0.44	
Correlated Color Temperature	2150K	2350K	2650K	2950K	3450K	3950K	5500K















#### 1524-LE Mid Output





95+ CRI

5.5 W /ft.

427 Lumens /ft.

1" Cut Increment

**UL CLASS 2** 

IP20 Dry Location

50,000 Hour Minimum Lifespan

30

24.00

·1"
22 24 27 30 35 40 55 +DC24V 1000 SERIES
E364348 6.7 WFT AON LED 31"
2

2650 2950 Correlated Color Temperature (K) Color Rendering Index (CRI) 98 98 Lumens /Ft. 398 427.82 Input Power (W) 5.76 5.71 74.97 **Efficacy** 69.19 R9 89.07 91.10

24.00

27





Input Voltage (VDC)









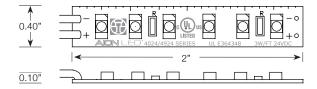


REQUIRES AION LED DRIVER, APPROVED CONTROLLER AND MT Series HOUSING -Sold Separately, Not Included



#### 4924-LE









90+CRI

2.8W /ft. ≤ 236 Lm/ft. RANGE BY CCT (X-Y)

Max. Increment: 30 ft.

Min. Increment: 2 in.

	4924-22-LE	4924-24-LE	4924-26-LE	4924-27-LE	4924-30-LE	4924-35-LE	4924-40-LE
TOTAL LUMENS	126.64	193.43	190.98	165.23	206.60	222.05	225.43
INPUT POWER (W)	2.26	2.82	2.83	2.19	2.61	2.65	2.81
EFFICACY	56.80	69	68	76	79	84	80
COLOR RENDERING INDEX (CRI)	94	91	97	92	92	92	
R9	71.30	52.71	83.61	66.04	68.06	69.25	
INPUT VOLTAGE (VDC)	24	24	24	24	24	24	24
INPUT CURRENT (AMP)	0.09	0.12	0.12	0.09	0.11	0.11	0.12
CORRELATED COLOR TEMPERATURE	2150K	2400K	2550K	2700K	2950K	3450K	3950K

















#### 3924-LE

#### Standard Output





90+CRI

1.4W /ft. ≤ 116 Lm/ft. RANGE BY CCT (X-Y)

Class 2 Circuit Limitation: 56'

Max. Increment: 32 ft.

Min. Increment:

4 in.

0.40" +	3024/3924 SERIES	CUL US LISTED UL E364348	- 0 + 0
<u> </u>		4"	<b>&gt;</b>
0.10"			

	3924-22-LE	3924-24-LE	3924-26-LE	3924-27-LE	3924-30-LE	3924-35-LE	3924-40-LE
TOTAL LUMENS	80.84	100.17	93.77	99.38	107.50	111.24	118
INPUT POWER (W)	1.40	1.44	1.37	1.33	1.35	1.32	1.43
EFFICACY	57.71	70	69	75	80	84	82
COLOR RENDERING INDEX (CRI)	94	91	96	92	92	91	
R9	71.10	53.18	83.25	66.10	69.20	67.88	
INPUT VOLTAGE (VDC)	24	24	24	24	24	24	24
INPUT CURRENT (AMP)	0.06	0.06	0.06	0.06	0.06	0.05	0.06
CORRELATED COLOR TEMPERATURE	2150K	2400K	2550K	2700K	2950K	3450K	3950K











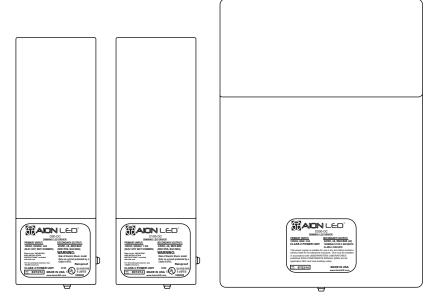






#### **DC Blue Series**

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

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





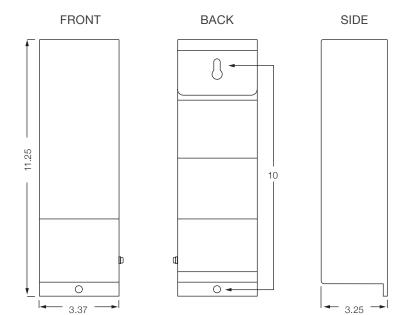






#### D50-DC

#### 50 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

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 Length

18 AWG

3000 Series	30 ft.
4000 Series	15 ft.
8000 Series	7.5 ft.

#### Max Wire Distance

16 AWG	88 ft.
14 AWG	140 ft.
12 AWG	224 ft.
10 AWG	360 ft.
8 AWG	574 ft.







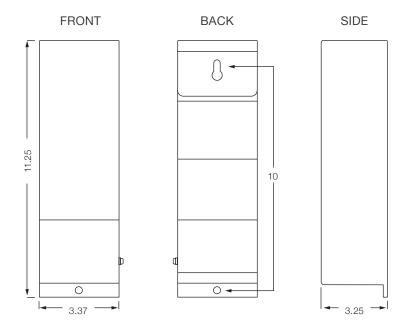
DO NOT USE PHASE-ADAPTIVE CONTROLS FORWARD PHASE MLV CONTROLS ONLY \*SEE APPROVED CONTROLS LIST

55 ft.



#### **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

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

3000 Series	60 ft. (2 x 30)
4000 Series	30 ft.
8000 Series	15 ft.

#### Max Wire Distance

18 AWG

8 AWG

1071110	27 16.
16 AWG	44 ft.
14 AWG	70 ft.
12 AWG	112 ft.
10 AWG	180 ft.





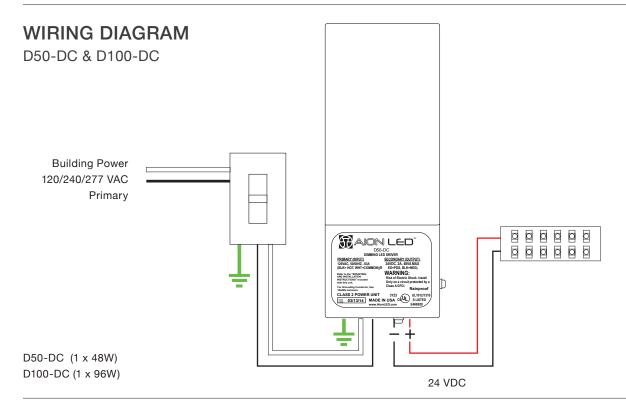


DO NOT USE PHASE-ADAPTIVE CONTROLS FORWARD PHASE MLV CONTROLS ONLY \*SEE APPROVED CONTROLS LIST

286 ft.

27 ft.





#### 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.

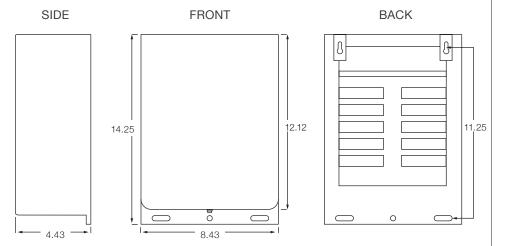
PLEASE SEE APPROVED DIMMERS PAGE FOR COMPATIBLE CONTROLS. DO NOT ATTEMPT CONNECTING UNAPPROVED DIMMERS OR CONTROLS. DAMAGE TO THE DIMMER, FIXTURE AND/OR THE POWER UNIT WILL RESULT; THE POWER UNIT WARRANTY WILL BE VOIDED.

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

Model	D300-DC3	Watts	3x 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		

#### Max Lengths

3000 Series	180 ft. (6 x 30)
4000 Series	90 ft. (3 x 30)
8000 Series	45 ft. (3 x 15)

#### Max Wire Distance

18 AWG	27 ft.
16 AWG	44 ft.
14 AWG	70 ft.
12 AWG	112 ft.
10 AWG	180 ft.
8 AWG	286 ft.

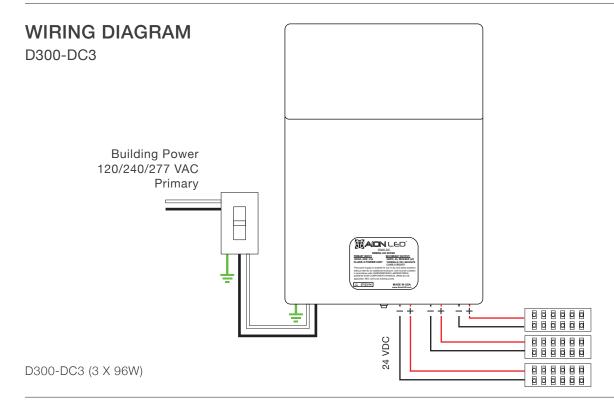






DO NOT USE PHASE-ADAPTIVE CONTROLS FORWARD PHASE MLV CONTROLS ONLY \*SEE APPROVED CONTROLS LIST





#### 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.
- 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.



Lutron	MAESTRO: MRF2-6ND	0.1-1%*	(DO NOT RECOMMEND MALV-600)
	NOVA: NTLV-600	0.1-1%*	HE TRIM
	HOMEWORKS 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)
	HOMEWORKS: HxD-6ND HW/LP RPM -4U-120 <sup>†</sup>	0.1-1%*	HE TRIM  † (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%	SENSOR RACK
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.

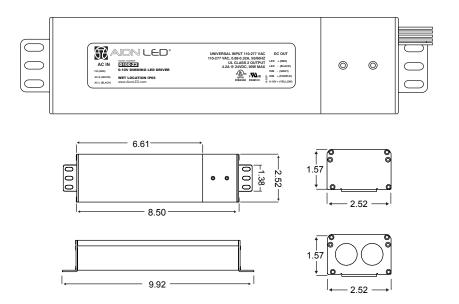
Use high-end trim (HE Trim) to eliminate dead travel, set low trim to lowest level dimmer will allow.

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



#### **Z2 BLUE**

0-10V



0-10V Wall Box Dimmer

Universal Input: 110VAC- 277VAC 50-60 Hz

Lutron DIVA DV TV Compatible

Dimming range: Dims to 1% Varies by dimmer model

IP66 enclosure for wet location applications

MODEL	D100-Z2
INPUT FREQUENCY	50-60 Hz
INRUSH CURRENT	220 VAC: 40A
MAX OUTPUT CURRENT	4.2 A
INPUT VOLTAGE	110 - 277 VAC 0.88-0.32
DIMMER TYPE	0-10V
MAX OUTPUT POWER	100W
LOAD REGULATION	± 5%
SHORT CIRCUIT PROTECTION	YES
RATED LIFETIME	65,000 Hours
CASE	IP66 WET LOCATION

Max Lengths

3000 Series	60 (2x30)
4000 Series	30
8000 Series	15

#### **Approved Dimmers**

Lutron DVSTV

**Lutron NTSTV** 

Forbes & Lomax RPS

All other 0-10V sinking and sourcing dimmers.







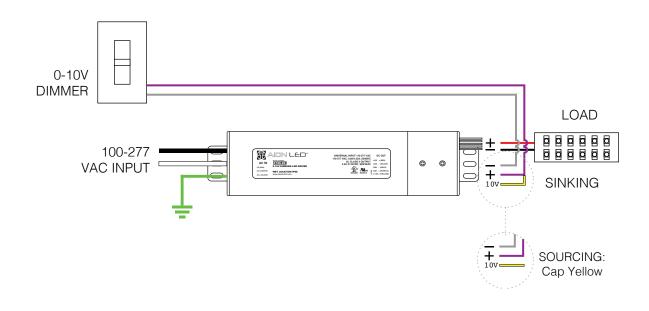






#### WIRING DIAGRAM

Z2 BLUE



#### Installation Instructions

- Install per NEC and Local code by qualified personnel
- Shut off power at the breaker
- 3. AC Input (Primary) Requires 100-277 VAC Power and ground
- Connect AC within wiring compartment
- This unit requires 4" space in all directions
- Refer to the product labeling for detailed line and load wiring procedure

- Purple/ Gray/ Yellow connect to 0-10V Dimmer Maximum Current Output: 6mA
- Red/ Black connect to class 2 fixture
- Load 90% MAX







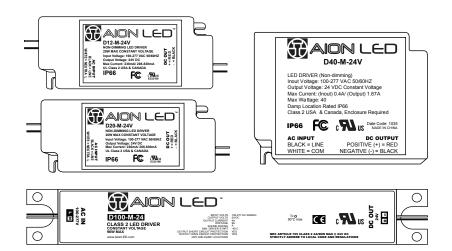






#### **M SERIES**

#### **NON DIMMING**



Non-Dimming LED Driver

Universal 100-277VAC Input on all

96W max per NEC Article 725

Requires adequate ventilation per NEC Article 450

AC input termination requires electrical junction box

Electrician Installed

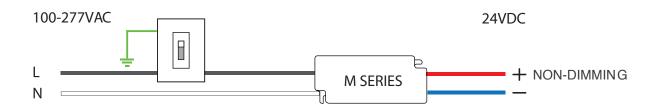
MODEL	D12-M	D20-M	D40-M	D100-M
DIMENSIONS (L-W-H)"	3.74 x 1.61 x 0.98	3.74 x 1.61 x 0.98	3.75 x 2.75 x 1.25	10.3 X 1.5 X 2"
WATTAGE	12	20	40	96
CASE	IP66	IP66	IP66	IP66
INPUT VOLTAGE	120-277 VAC	100-277VAC	100-277-VAC	100 -277V=10% 50/60 Hz
OUTPUT VOLTAGE	24 VDC	24 VDC	24 VDC	24 VDC
VOLTAGE OPEN	25.5 VDC	25.5 VDC	25.5 VDC	25.5 VDC
MAX INPUT CURRENT	0.3 Amps max at 115 VAC	0.25 Amps at 120 VAC	0.6 Amps 100 VAC/ 0.3 Amps 220 VAC	
MAX FEET 3000 SERIES	6.5 ft.	11 ft.	22 ft.	60 ft.
MAX FEET 4000 SERIES	3 ft.	5.5 ft.	11 ft.	30 ft.
MAX FEET 8000 SERIES	1.5 ft.	2 ft.	5.5 ft.	15 ft.





#### **WIRING DIAGRAM**

**M SERIES** 



#### Installation Instructions

- Install per NEC and Local code by qualified personnel
- Requires UL Listed electrical enclosure with adequate ventilation
- 3. Shut off power at the breaker
- AC Input (Primary) Requires 100-277 VAC Power and ground
- Stain-relief wiring to enclosure to prevent wires from pulling out
- 6. Wire AC power with 18AWG power wire





#### **A SERIES**

UL Recognized Model - Requires Enclosure



DIMENSIONS	
DIMENSIONS 4 x 1.5 x 4 INPUT VOLTAGE 120V	
WATTAGE 40 W CLASS 2 (UL YES STANDARD)	
SECONDARY BREAKER  2A  CASE  DAMP LOCATION Enclosure Req	



#### D40-A-24

Lutron LTEA4U1UKN-CV240 Hi-Lume 1% 2-Wire LED Driver

#### D40-A-24-L3D

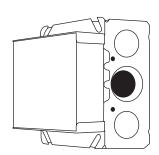
Lutron L3DA4U1UKN-CV240 Hi-Lume 1% Ecosystem/ 3-Wire LED Driver

Dimming LED Driver CLASS 2 24 VDC Constant Voltage

Engineered by OEM Partner Lutron Electronics™ to Aion LED Fixture Specifications

#### **A SERIES**

UL Listed Model - Pre-Mounted on J-Box by Lutron



DIMENSIONS (L-W-H)"	4.9 x 3 x 1	INPUT VOLTAGE	UNIVERSAL INPUT, 120V-277V
WATTAGE	40 W	CLASS 2 (UL STANDARD)	YES
SECONDARY BREAKER	2A	CASE	DAMP LOCATION, K Case Enclosure



#### D40-A-24-R

Lutron LTEA4U1UKL-CV240 Hi-Lume 1% 2-Wire LED Driver

#### D40-A-24-L3D-R

Lutron L3DA4U1UKL-CV240 Hi-Lume 1% Ecosystem/ 3-Wire LED Driver

Dimming LED Driver CLASS 2 24 VDC Constant Voltage

Engineered by OEM Partner Lutron Electronics™ to Aion LED Fixture Specifications



#### APPROVED DIMMERS

#### A SERIES

#### **Recommended 2-Wire Controls**

D40-A-24 & D40-A-24-R

NOVA	NLV-600
NOVA Ta	NTLV-600-CPN0199
MAESTRO WIRELESS	MRF2-6ND-120
RADIORA2 WIRELESS	RRD-6ND, 10ND, 6NA
RADIORA WIRELESS	RA-6ND, 10ND
HOMEWORKS QS	HQRD-RND, 10ND, 6NA
HOMEWORKS QS WPM	HQRJ-WPM-6D-120
HOMEWORKS	HRD-6ND, 10ND, HWD-10ND
HOMEWORKS WPM	HWI-WPM-6D-120
GRAFIK EYE QS	HW-RPM-4U-120,LP-RPM-4U-120
RPM-4U	HW-RPM-4A-120,LP-RPM-4A-120
RPM-4A	VARIOUS (CALL)
GC PANELS	SZ-6ND

#### Max Lengths

3000 Series	22 ft.
4000 Series	11 ft.
8000 Series	5.5 ft.

#### Max Wire Distance

18 AWG	15 ft.
16 AWG	25 ft.
14 AWG	40 ft.
12 AWG	60 ft.

Ecosystem Digital Controls D40-A-24-L3D & D40-A-24-L3D-R	PART NUMBER	
PowPak® dimming module with EcoSystem®	RMJ-ECO32-DV-B	32 per EcoSystem® link
	FCJ-ECO	3 per EcoSystem® link²
Energi Savr Node™ with EcoSystem®	QSN-1ECO-S, QSN-2ECO-S	64 per EcoSystem® link
GRAFIK Eye® QS with EcoSystem®	QSGRJE, QSGRE	64 per EcoSystem® link³
Quantum <sup>®</sup>	VARIOUS	64 per EcoSystem® link

<sup>&</sup>lt;sup>1</sup> For use with 3-wire controls or Commercial Systems, RadioRAR 2 Systems or Home Systems applications.

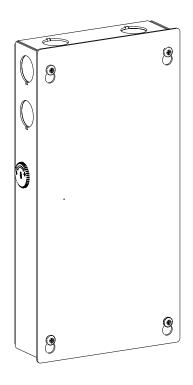
<sup>&</sup>lt;sup>2</sup> Up to 3 drivers controlled as a single zone (broadcast EcoSystem®).

<sup>&</sup>lt;sup>3</sup> Not available for 277V



#### **A SERIES**

Hi-Lume Premier 0.1%



#### Dimming LED Driver

Soft-On, Fade-to-Black operation: fades smoothly between 0% and 0.1%\* when turned on and off for an incandescent like experience

#### CLASS 2 24V

Engineered by OEM Partner Lutron Electronics™ to Aion LED Fixture Specifications

\*Soft-On, Fade-to-Black feature only available when used with ecosystem digital control inputs

Not available with 3-Wire phase control dimmers

MODEL	D100-A Lutron L3D0-96W24-U		
DIMENSIONS (L-W-H)"	5.5 x 2 x 10.5	CASE	DAMP & DRY LOCATION
OUTPUT	24V 96W	RATING	UL Listed
DIMMING RANGE	100% - 0.1%*	OPERATING VOLTAGE	120V - 277V at 50/60Hz
CLASS 2 (UL STANDARD)	YES	INRUSH CURRENT	< 2 A



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#### **A SERIES**

Hi-Lume Premier 0.1%

#### **Recommended 3-Wire Controls**

NOVA T         NTF10-, NTF103P-         NTF10-277, NTF103P-277           NOVA         NF10-, NF103P-         NF10-277, NF103P-277           SKYLARK         SF-10P-, SF-103P-         SF-10P-277, SF-103P-277           DIVA         DVF-103P, DVSCF-103P         DVF-103P-277, DVSCF-103P-277	
SKYLARK SF-10P-, SF-103P- SF-10P-277, SF-103P-277  DIVA DVF-103P DVSCF-103P DVF-103P-277, DVSCF-	/A T
DVF-103P DVSCF-103P DVF-103P-277, DVSCF-	/A
DIVA DIVE-TUSE DVSCE-TUSE	/LARK
103P-277	A
ARIADNI AYF-103P- AYF-103P-277	ADNI
VAREO VF-10- —	REO
VIERTI VTF-6A-	RTI
MAF-6AM-, MSCF-6AM-  MAF-6AM-277, MSCF-6AM-277	ESTRO
MAESTRO WIRELESS MRF2-F6AN-DV-	ESTRO WIRELESS
RADIO RA 2 RRD-F6AN-DV-	DIO RA 2
HOMEWORKS HQRD-F6AN-DV-	MEWORKS
INTERFACES PHPM-3F-120, PHPM-3F- PHPM-3F-DV, BCI-0-10	ERFACES
GP DIMMING PANELS VARIOUS	DIMMING PANELS

#### Max Lengths

3000 Series	60 ft. (30x2)
4000 Series	30 ft.
8000 Series	15 ft.

#### Max Wire Distance

20 AWG	15 ft.
18 AWG	25 ft.
16 AWG	40 ft.
14 AWG	60 ft.
12 AWG	100 ft.
10 AWG	150 ft.

## Ecosystem Digital Controls 120 V 277 V Recommended System Version PowPak® Dimming Module with EcoSystem™ RMJ-ECO32-DV-B, URMJ-ECO32-DVB 5.9 or later

PowPak® Wireless Fixture Control with EcoSystem<sup>TM1</sup> FCJ-ECO<sup>2</sup> Later than 1.25

QSN-1ECO-S, QSN-2ECO-Energi Savr NodeTM unit with EcoSystem™ QSN-1ECO-S, QSN-2ECO-S, QSN-2ECO-S PS120, 9.027 or later UQSN-1ECO-S, UQSN-2ECO-S

GRAFIKEye® QS unit with EcoSystem™ QSGRJ- E, QSGR- E — 9.009 or later

Quantum® Light Management Hub QP2-\_P\_C - 3.2 or later<sup>3</sup>

HomeWorks® QS with EcoSystem™ LQSE-2ECO-D, QSGRJ-\_E, QSGR-\_E 10 or later

<sup>1</sup> For use with 3-wire controls or Commercial Systems, RadioRAR 2 Systems or Home Systems applications.

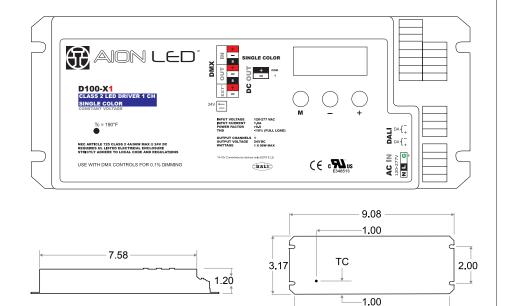
<sup>2</sup> Up to 3 drivers controlled as a single zone (broadcast EcoSystem®).

<sup>3</sup> Not available for 277V



#### **X1**

#### DMX, 1 CHANNEL





1 Channel DMX Driver

Factory Programmed for RGBW+

Factory Wire Harness for Ease of Installation

Integrated Class 2 Supply

LCD interface

Universal 100-277VAC Input

UL, CE, & CSA APPROVED

Default Address 1

Requires UL Listed Enclosure

MODEL	D100-X1	DIMENSIONS (L-W-H)"	9.06 x 3.15 x 1.18"
CASE	DRY & DAMP	PRIMARY BREAKER	AUTO-RESET
WATTAGE	96W @ 24 VDC	DIMMING	0.1%
INPUT VOLTAGE (Hz)	100-277 VAC, 60HZ	CONTROL TYPE	Aion LED AX5-1 Controller, DTM or 3rd Party Interface
INRUSH CURRENT	120 VAC: 35A 240µs 277 VAC: 75A 240µs	3RD PARTY DMX COMPATIBILITY	Lutron, Vantage, Crestron, ETC AMX (ANY DMX)
INPUT CURRENT	120 VAC: 1.05A 277 VAC: 0.45A	THERMAL CLASS	(B) 130 C
POWER FACTOR	>0.94	MAX FEET 3000 SERIES	60 ft.
VOLTAGE LOADED	23.5 VDC	MAX FEET 4000 SERIES	30 ft.
VOLTAGE OPEN	24.2 VDC	MAX FEET 8000 SERIES	15 ft.

8.76

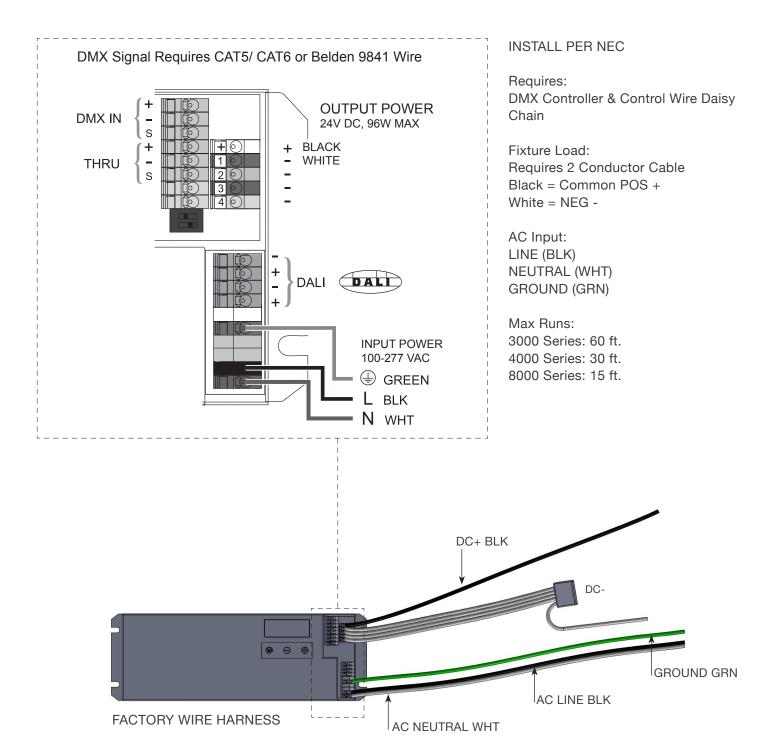










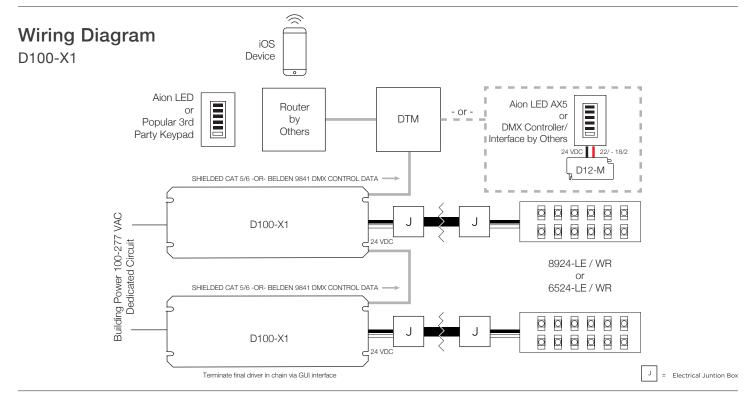












#### Installation Instructions

- 1. Install per NEC and Local code by qualified personnel
- Requires UL Listed enclosure with adequate ventilation
- Strain-relief wiring to enclosure to prevent wires from pulling out
- 4. Wire AC power with 18AWG power wire
- 5. Ensure that jacket goes all the way into connector
- Connect DMX controller to 'DMX in' on first unit with Belden 9841 DMX wire (plus, minus, shield),-orshielded CAT5
- Daisy chain additional units from 'DMX out' to 'DMX' of following unit with Belden 9841 cable -or- shielded CAT5

- 8. Terminate only the final unit in DMX chain via programming interface
- 9. Wire fixture to wire harness with wire nuts [White, DC+ (Black)]
- 10. Drivers are pre-programmed and tested at Aion LED for specific Aion LED fixtures. Each of the four D100-X series models (X1,X2, X3, X4) ship with a separate and unique Aion LED factory wiring harness for plug and play functionality and to eliminate mistakes in the field. Aside from changing the default DMX address (1) via supplied GUI interface, or activating "Termination" on the final unit in a control chain, only certified integrators and qualified personnel should attempt changing other settings. Default programming settings are for reference only.









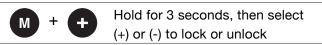


#### **Programming Guide**

D100-X1

USER MENU	Highlighted Yellow = User Defined
M	DMX Address = 1 Default
M	Network Resolution = 8 bit
M	Term = No terminate final driver in chain
M	Network Set = Manual
M	Interpolation = White

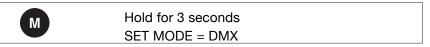
#### TO LOCK/ UNLOCK MODE MENU

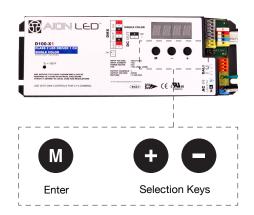


#### TO ACCESS OUTPUT MENU

M + +	Hold for 0.5 seconds LED = 1 - 4 L
M	External Input = OFF
M	Dim Curve = Log

#### TO ACCESS MODE MENU





Ensure all wiring is correct and properly terminated

Default DMX address is 1 and can be changed via GUI interface.

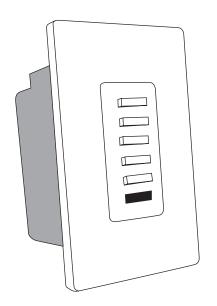
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Aside from changing the default DMX address (1) via supplied GUI interface, or activating "Termination" on the final unit in a control chain, only certified integrators and qualified personnel should attempt changing other settings. Default programming settings are for reference only.



#### **AX5-1**

#### Compact DMX Controller





AX5 ships pre-programmed to factory default settings per application

Standard Decora™ Mounting

Optional programming software, USB interface & remote control available

Requires Approved DMX Signal Cable, Including Belden 9841 -Sold Separately

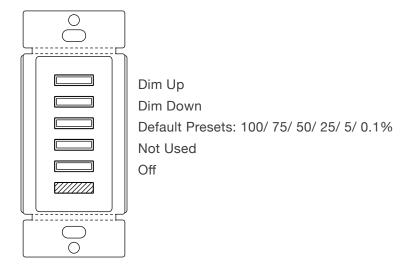
Requires D12-M-24 Power Supply

MODEL	AX5-1
DIMENSIONS (L-W-H)"	1.8 x 1.8 x 4.1"
WEIGHT	2.9 oz
POWER	2- POSITION SPRING CLIP TERMINAL
DMX PORT	3- POSITION REMOVABLE TERMINAL BLOCK
INPUT	24 VDC



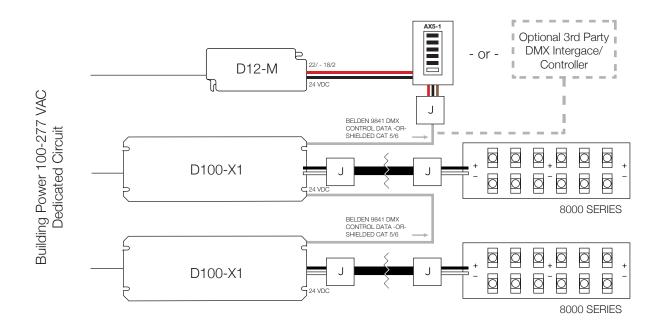
#### **Default Programming**

AX5-1



#### Wiring Diagram

AX5-1



J = Electrical Juntion Box





#### Lead & Plugs

Single Color/ Static White

Low-Voltage Class 2/3 Power Cable by Aion LED

UV Rated · Indoor/ Outdoor

#### **Fixture Power Lead**

Fixture Power Lead	White Jacket	Black Jacket	
12" Power Lead	AC-A12	ACB-A12	
24" Power Lead	AC-A24	ACB-A24	
48" Power Lead	AC-A48	ACB-A48	=

#### Hard Wire Jumper- Recommended with WR Type & LE Applications Only

Hard Wire Jumper	White Jacket	Black Jacket	<b>=</b>
4" Hard Wire Jumper	AC-C4	ACB-C4	
12" Hard Wire Jumper	AC-C12	ACB-C12	=
24" Hard Wire Jumper	AC-C24	ACB-C24	

#### Bi Pin Plugs- Recommended with all AT Series Housings & Fixtures

Bi-Pin Jumper w/ Disconnect	White Jacket	Black Jacket
4" Jumper with Disconnect	AC-BP4	ACB-BP4
12" Jumper with Disconnect	AC-BP12	ACB-BP12
24" Jumper with Disconnect	AC-BP24	ACB-BP24
48" Jumper with Disconnect	AC-BP48	ACB-BP48

#### Patch Cord- Optional, to Extend Length

	*	•	
Patch Cord	White Jacket	Black Jacket	
24" M to F Extension Cord	BP-2FM24	BPB-2FM24	
48" M to F Extension Cord	BP-2FM48	BPB-2FM48	
96" M to F Extension Cord	BP-2FM96	BPB-2FM96	



Black standard for dark bronze housings
White standard for silver housings





Unless Otherwise Noted, Leads are 24" and Plugs are 4". Other Lengths Available \_\_\_\_\_ **CONFIGURATION 1** Power Lead to Fixture Default, Unless Otherwise Noted **CONFIGURATION 2** Power Lead to Fixture with End Lead **CONFIGURATION 3** Power Lead to Fixture with End Plug **CONFIGURATION 4** Power Plug to Fixture with End Plug 0000000000000000000000000 **CONFIGURATION 5** Power Plug to Fixture **CONFIGURATION 6** NOT COMPATIBLE WITH TRACK Power Lead to Fixture with Jumper to Next Fixture **CONFIGURATION 7** NOT COMPATIBLE WITH TRACK 0000000 Jumper to Fixture with Jumper to **Next Fixture CONFIGURATION 8** NOT COMPATIBLE WITH TRACK 0000000 Jumper to Fixture **A-Track Fixtures** Pre-assembled: ≤ 8 ft (96 in) Assembly Required: > 8 ft (96 in)



NAME			LOCATION		SPECIFIER				
HOUSING	AT402 - G		FINISH  Silver (Standard- leave blank)  BRZ Dark Bronze	Required Fixture Lengths Please input fixture lengths/ quantity & configuration types  Standard Lengths Light Engines are cut to minimum increments Track measurements are rounded down and cut to the inch. 1" tolerance  Precision Lengths Light Engines are cut to minimum increments					
MOUNTING	Standard Mounting Clips (Standard)					Track is cut to a fraction of an inch. 1/8" tolerance			
	Pivot Mounting Clips (Sold Separately, Not Included)  AT40-MC-P1  AT40-MC-P3  400 Series A-Track, 1"  AT40-MC-P3  400 Series A-Track, 3"					LENGTH	QUANTITY	CONFIGURATION TYPE	
LIGHT ENGINE	LIGHT	LIGHT ENGINE COLOR CODE		MODEL TYPE					
	9 5 9524	4 9 4924 3 9 3924	2 2 2150K A Amber 2 4 2350K B Blue 2 6 2550K R Red 2 7 2650K G Green 3 0 2950K 2550K ONLY 3 5 3450K 4000 & 8000 \$ERIES LE 5 5500K†  A Amber 2 7 2650K B Bue 2 8 6 2550K	LE Light Engine FR Frangible Rigid 9524 ONLY					
LEADS	LEADS DISC		JUMPER W/ DISCONNECT PLUGS	HARD WIRED JUMPERS					
	A C B A 2 4 Black 24" A C -A Custom A		A C B P 4 White  A C B P 4 Black  A C B P Custom  ENCE LEADS & PLUGS CONFIGURATION TYPE	A C -C 4 White A C B -C 4 Black A C -C C Custom	Notes			- feel liebt	
DRIVER	<b>DC Z</b> MLV 0-10V			X DMX, 1 CHANNEL		Refer to Light Engine Data Sheets for Light Engine Increments.			
	D50-DC	120 VAC	D100-Z2	D100-X1	Allow tolerance for wiring/ plugs Fixtures up to Class 2 max. length				
	D100-DC	240 VAC		DMX CONTROLLER	Fully assembled up to ≤ 8 ft. (96 in).				
	D300-DC3	277 VAC		AX5-1 DTM					
	<b>M</b> NON DIMMING	<b>DM</b> 0-10V DIMMING MODULE	LUT						
	D12-M	DM-Z1	D40-A, Hi-lume 1% 2-wire, Constant	D40-A-L3D, Hi-lume 1% EcoSystem/3-Wire, Constant					
	□ D20-M □ D40-M		Voltage, UL- Recognized, 40W  D40-A-R, Hi-lume 1% 2-wire, Constant	Voltage, UL-Recognized, 40W  D40-A-L3D-R, Hi-lume 1% EcoSystem/3-Wire, Constant Voltage, UL-Listed, 40W	SIGNATURE  Final Order Lengths (Requires Signature)			Signature)	
	D100-M	D100-M Voltage, UL-Listed, 40W		<b>D100-A</b> , Hi-lume Premier 0.1%, Constant Voltage, UL-Listed, 96W	Budgetary only, requires field verification				

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.

