



ATX LED Consultants Inc
1108 Lavaca Ste 110 #489
Austin Tx, 78701
512 377 6052
<http://atx-led.com>

Step Lights

AL-Step35 series

3 x 5 inch standard size

Bright LEDs, Cool Operation
Tunable White or
Fixed



Product Details

These LED step lights offer different wattage, orientation and color options. The step lights offer very high lumen output at low current and low heat, ideal for outdoor applications. There are two driver models, the tunable white, CC, 4 wire Signature model, and the fixed CCT, CV, 2 wire Value model with built in current limiting.

The CC (constant current) models are recommended for up to 360 mA (240mA), at that current, the voltage will be about 2.8v. Up to 15 devices can be operated on an AL-WS-DR2 with series wiring.

The (CV) Constant Voltage models are recommended for use at 48-51v and are internally current limited at 125 mA, or less as temperature increases via built in thermal protection – the current will be reduced to protect the LED chips from overheating in sunny locations, especially after sunset. These devices have no active components, and no inrush current - operation with PWM is allowed, analog dimming is supported over the 38v to 46v range. They also have active line termination to reduce ringing on long lines.

Technical specifications

Material – Aluminum
 White and Black case color
 Fits standard single gang wall boxes – Tinned 6 inch wires

Style	Watts	Dimming	Max Voltage	Current Limiter	Temperature Limiter	Orientation	Color / Lumen	CRI
AL-Step35-48v6w	6	40-45v	52	120 mA	Yes**	Horizontal	3000K 1200 lm	CRI80
AL-Step35V-48v4w	4	40-45v	52	80 mA	Yes**	Vertical	3000K 800 lm	CRI80
AL-Step35-2W-CCT	1.2	0-390mA	3v @ 390mA	None*	No	Horizontal	2700K to 5000K 200 lm	CRI95+
AL-Step35V-Q1A-27/5000K	800mW	0-260mA	3v @ 260mA	None*	No	Vertical	2700K to 5000K 150 lm	CRI95+

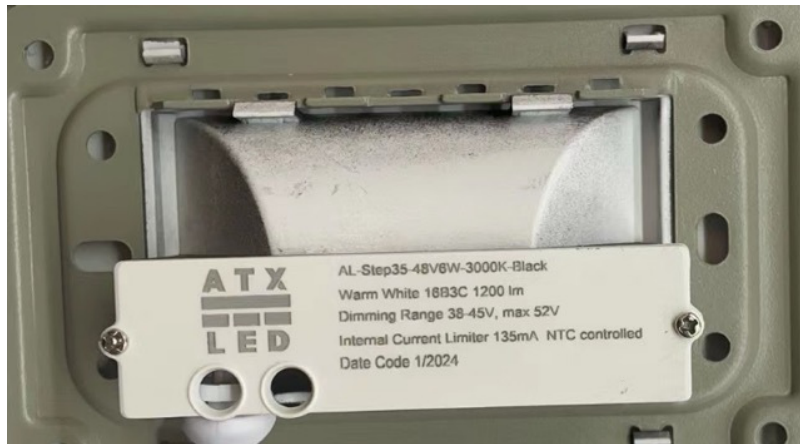
* driver must be current limited ** current will be limited as internal temperature increases

Ordering part numbers

Model	Alignment	Case Color	Driver
AL-Step35-2W-CCT	Horizontal	White	CC
AL-Step35-2W-CCT-black	Horizontal	Black	CC
AL-Step35V-Q1A-27/5000k	Vertical	White	CC
AL-Step35V-Q1A-27/5000k-black	Vertical	Black	CC
AL-Step35-48v6w-3000K	Horizontal	White	CV / CL
AL-Step35--48v6w-3000K-black	Horizontal	Black	CV / CL
AL-Step35V--48v4w-3000K	Vertical	White	CV / CL
AL-Step35V--48v4w-3000K-black	Vertical	Black	CV / CL

Value Line CL Wiring Methods

The 48v fixtures can use a simple on/off switch, or a 48-51v dimming driver. The 48v models will dim at the range of 40v to 44v, and be current limited above 44v. Use any voltage controlled or current limited dimmer / driver or fixed supply @ 45v or greater. These are wired in Parallel. Because of the high lumen (1200) dimming is strongly recommended. Voltages above 46v are allowed, but will reduce the lumens / watt efficiency as more heat is created.



Solid 18/2 wire is recommended – all fixtures are wired in parallel.

Dimmer options:

- None – on/off switch up to 96 watts
- PWM – KCR-CV wireless dimmer up to 96 watts
- CC - AL-WS-DR2 DALI dimmer with 54v supply, self limiting to 33 watts

Wattage per fixture will be the lesser of the fixture rating or 33/# watts

- CC - KCR-CC wireless dimmer self limiting to 16 or 33 watt

Wattage per fixture will be the lesser of the fixture rating or 33/# watts

- CC – AL-WS-DR1 wired dimmer self limiting to 33 watt

Wattage per fixture will be the lesser of the fixture rating or 33/# watts

[Signature Line CC Dimming operation](#)

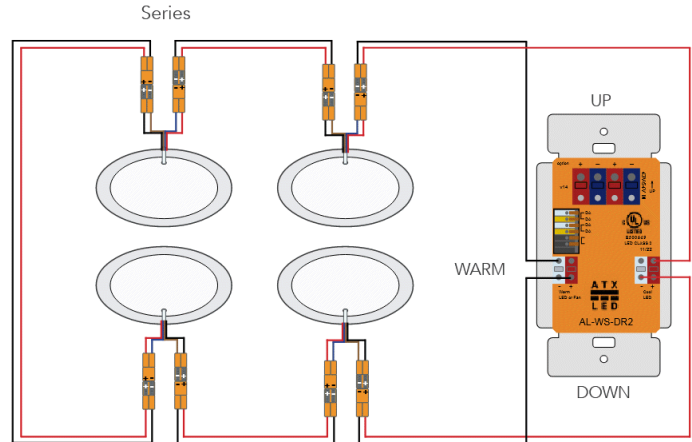
Use a Constant Current dimmer with adjustable max current to implement perfect dimming and color tuning via filtered DC. We offer wireless, wired and App controls can be used to change the color temperature by time of day. **ATX: 2Wire** allows up to 16 to on a CC channel with perfect 3000:1 dimming and color control. Important Note- a minimum of 3 step lights are required.

Using the ZWD control in the ATX LED Hub, we strongly recommend reducing the max level in the DR2 to from 254 (default 660mA) to 232 (360 mA), or 217 (240mA). Operation above 360mA (240mA) is too bright and hot for most applications.

Solid 18/2 wire is recommended.

Dimmer options:

- CC - AL-WS-DR2 DALI dimmer, set the max level to 232 (360 ma)
- CC - KCR-CC wireless dimmer: set the internal jumper to 330 mA
- CC – AL-SML-DR2-70CC DALI dimmer, set the Max current to 330 mA (¼ of normal)
- CC – AL-WS-DR1 wired dimmer – do not use.



[Powering details](#)

Style	Minimum qty	AL-WS-DR2 Max Limit	Max Qty per switch	Dimmable Qty per AL-SML-DR2-1500 or KCR-CC	Wire Leads
AL-Step35-2W CCT	3	232	15 / DR2	18 x 5 = 90watts	OJ-606
AL-Step35V-Q1A-27/5000K	3	217	15 / DR2	18 x 6 = 108watts	OJ-606

[Signature Line Fixed CCT operation](#)

A tunable white fixture can be wired for 2700K, 3850K, 5000K by selective wiring. Use the usual wiring loop.

- a) 2700K – only wire the warm side – leave cool open
- b) 3850K – wire the 2700K and 5000K in parallel at the switch, full 660mA is recommended
- c) 5000K – only wire the warm side – leave warm open

Do not wire the warm and cool in series – unless you can reduce the current to 150 mA, otherwise overheating will result.

Kinetic Dimming operation with KCR

Simplify installations by using Wireless kinetic switches. The KCR family of Kinetic transmitters and receivers allow the step lights to be controlled from different locations easily without wires.

The ATX Kinetic wireless remotes send radio signals using the energy of your fingers to create the RF signal, the ATX receiver is paired with one or more remotes, and remotes are paired with one or more receivers, for easy operation in 3-Way situations with 100 ft of range, with a unique ID for each device.

Use the 48v models for parallel operation with 48v to 51v power supplies.

Use the CC models for perfect dimming and color tuning with **ATX: 2Wire** series wiring.

The KCR models offer optional nightlight control – there is an output that can power any CC or CV fixture or fixtures with up to 51v and 16 watts, independently controlled.

Solid 18/2 wire is recommended.

Dimmer options:

- PWM (fixed) – KCR-CV wireless dimmer up to 96 watts
max 16/24 fixtures wired in parallel, dimming with PWM
- CC (fixed) - KCR-CC wireless dimmer self limiting to 33 watt total
unlimited fixture count, parallel wiring
wattage per fixture will be the lesser of 4w / 6w or 33 number of fixtures
example: 20 fixtures will be 1.6 watts max each – very bright with DC dimming
- CC (tunable) - KCR-CC wireless dimmer with up to 16 fixtures wired in series
set internal jumpers to 330 mA
example: 10 fixtures will be 12 watt total ideal max brightness with DC dimming

