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Step Lights

3 x 5 inch standard size

AL-Step35 series

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.

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-Step35-660mA- 27/5000K	2	0-360mA	3v @ 660mA	None*	No	Horizontal	2200K to 5000K 200 lm	CRI95+
AL-Step35V- 440mA-27/5000K	2	0-240mA	3v @ 440mA	None*	No	Vertical	2200K to 5000K 200 lm	CRI95+

^{*} driver must be current limited ** current will be limited as internal temperature increases

Value Line Dimming specifications

Use a simple on/off switch, or use a dimmer like the AL-WS-DR1 for dimming of the 51v type fixtures with fixed color temperature. The AL-WS-DR2 can also be used as an upgrade for DALI control with fixed color, with twice the total fixtures. For highest efficiency, limit the voltage to 46v

The LEDs 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.



Signature Line Dimming specifications

Use an AL-WS-DR2 with its 2 channels to implement perfect dimming and color tuning via filtered DC, to constant current fixtures. The wall switch or a DALI master can be used to change the color temperature by time of day. Use series wiring, 15 can be connected to a DR2 channel with perfect 3000:1 dimming and color control.

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 for most applications.

Wiring requirements

Style	Minimum qty / DR2	Max Qty per switch	Suggested Wire	Wire Leads
AL-Step35-660mA2w-27/5000k	3	16 / DR2	18/2 loop	OJ-606
AL-Step35V-660mA2w-27/5000k	3	15 / DR2	18/2 loop	OJ-606
AL-Step35-48v6w-3000K	1	16 / On-Off	18/2	Tinned AWG20
AL-Step35V-48v4w-3000K	1	24 / On-Off	18/2	Tinned AWG20

Ordering part numbers

Model	Alignment	Case Color	Category
AL-Step35-660mA2w-27/5000k	Horizontal	White	Signature
AL-Step35-660mA2w-27/5000k-black	Horizontal	Black	Signature
AL-Step35V-440mA2w-27/5000k	Vertical	White	Signature
AL-Step35V-440mA2w-27/5000k-black	Vertical	Black	Signature
AL-Step35-48v6w-3000K	Horizontal	White	value
AL-Step3548v6w-3000K-black	Horizontal	Black	Value
AL-Step35V48v4w-3000K	Vertical	White	Value
AL-Step35V48v4w-3000K-black	Vertical	Black	value