



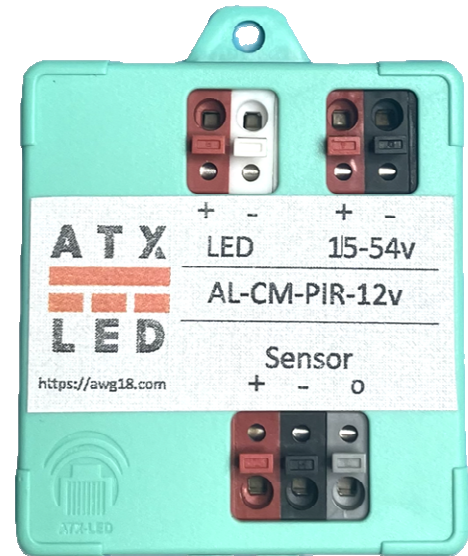
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AL-CM-PIR-12v

Power adapter for 12v
Stand alone Motion Sensors

Single or multiple



[Product Description - AL-CM-PIR-12V](#)

This device converts a 44 to 51v source to 12v to operate a low cost motion sensor. The device features 2 pins for DC input, 2 pins for the signal output, 3 pins for the PIR sensor.

A wide range of PIR sensors can be used. 0-10v, Open Drain, negative or positive drive.

The device can drive up to 50 watts of internally current limited CL type LED loads, or can be connected to the 3-Way input of a AL-WS-DR2. Do not use reactive CV type loads such as 12-48v AC/DC Bulbs

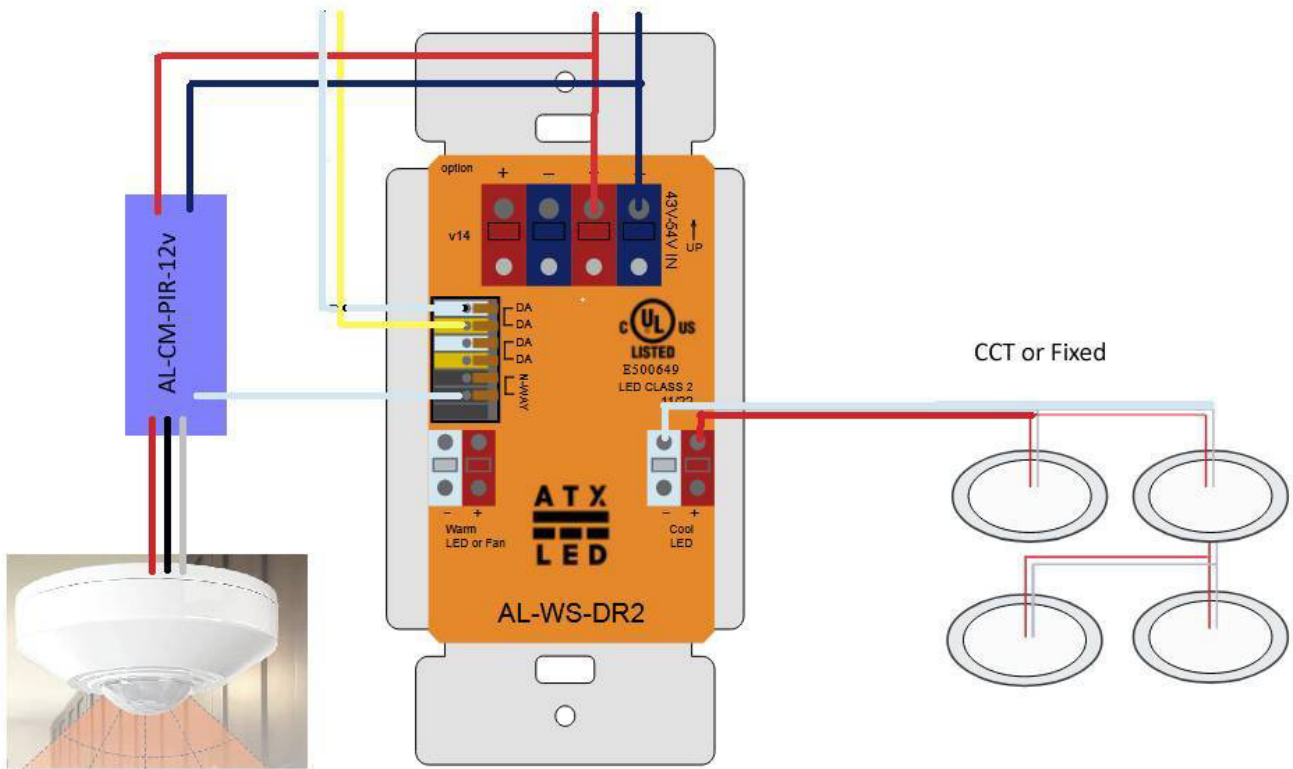
Specifications

Connectors	Spring loaded connectors, 2x 2 pin, 1x 3 pin
Input voltage range	44 to 54 volts Red/Black connector
PIR output voltage	12 volt (default) 24 volt (set Jumper inside)
Dimming range	None – output is On/Off
LED Driver	1 amp at 56v Open Drain driver – low is ON – connect LED to Red / White
DR2 N-way signal	Open Drain – connect White to DR2 N-Way
Protection	Reverse protection and static protection
Operating Temperature	0°C ~ 50°C
Size	55 mm x 50mm x 20 mm - fits in standard 1 gang box
Sensor input	Selectable – see chart
Sensor Power	12vdc 100 mA
Vacancy / Occupancy	Advanced presence management features are supported by the AL-WS-DR2

Dimmable, Motion with the AL-WS-DR2 occupancy or Vacancy – full featured

Full DR2 control, AL-CM-PIR-12v wired to N-Way input

1. Connect 51v to the 18-54v input
2. Connect CC leds to the AL-WS-DR2
3. Connect AL-CM-PIR-12v device to the Sensor with 18/3 wire
4. Set jumpers as shown below
5. Connect the AL-CM-PIR-12v white connect to the AL-WS-DR2 N-Way connector, red is unused
6. Optional – set the DR2 to N-Way mode Occupancy or Vacancy.
7. Full control via the ATX LED Hub



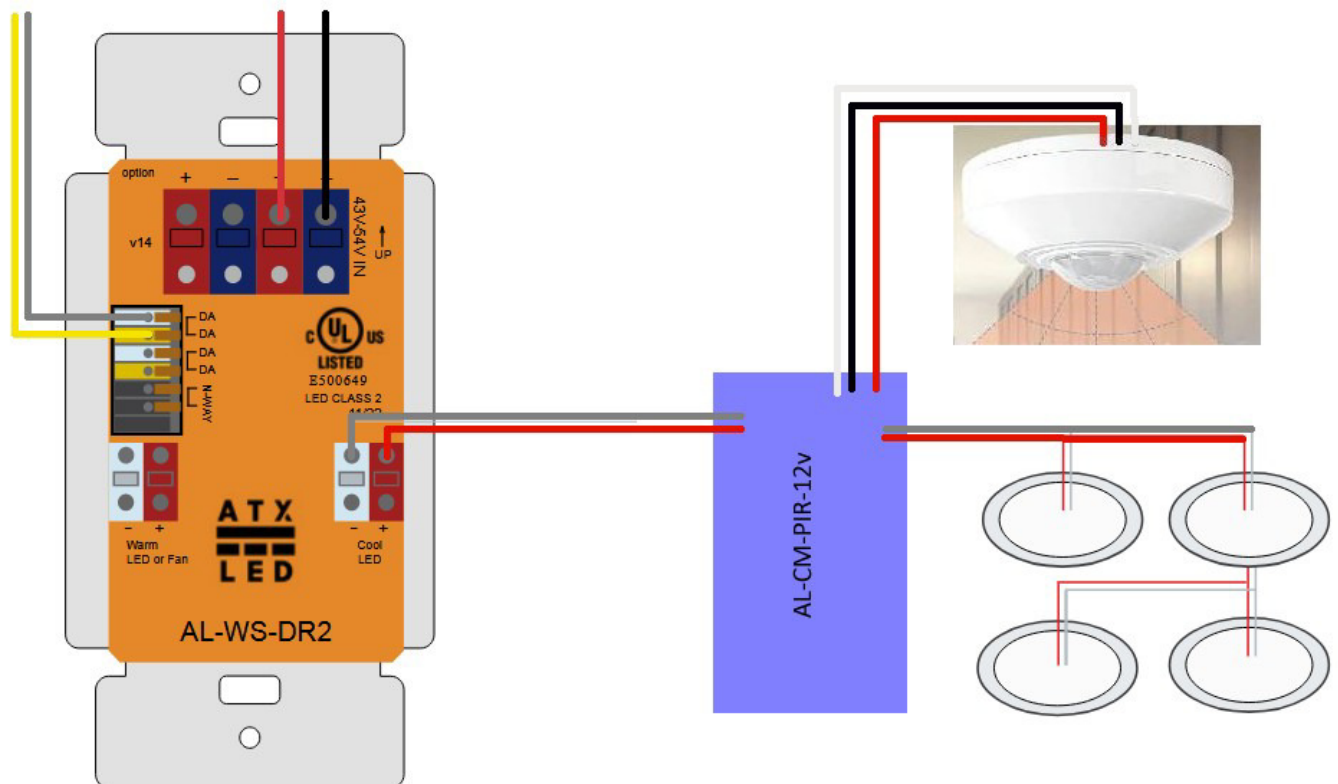
This is a special mode of the AL-WS-DR2. When enabled, the following operation is supported, V76 or later is required. N-Way modes are Vacancy and Occupancy. Do not select driver mode "PIR"

- a) A main button press turns the LEDs on for the duration specified in Timer. Default is 10 minutes. This works in both Vacancy and Occupancy, but is likely not required in Occupancy.
- b) The AL-CM-PIR-12v white connector is connected to the N-Way input. In Occupancy Mode, a High to Low change in level on the N-Way input turns the LEDs on. In Vacancy mode – nothing happens.
- c) Each "Active" (Low) to "Inactive" (High) signal on the N-Way input restarts the 10 minute timer until lights go off. The Off is a slow fade to zero brightness, requiring 40 seconds.
- d) If on, a button press of the main switch will cause the LEDs to fade off slowly, a second press will turn them off immediately
- e) At the end of the ON time, assuming the room is vacant, the light will fade off.
- f) Dimming is controlled by the DR2

Dimmable, Motion with the AL-WS-DR2 occupancy only – aftermarket

Fixed CCT, CC fixtures, dimming enabled (AL-CM-PIR-12v wired between DR1 or DR2 and the LED),
typically after market add ons

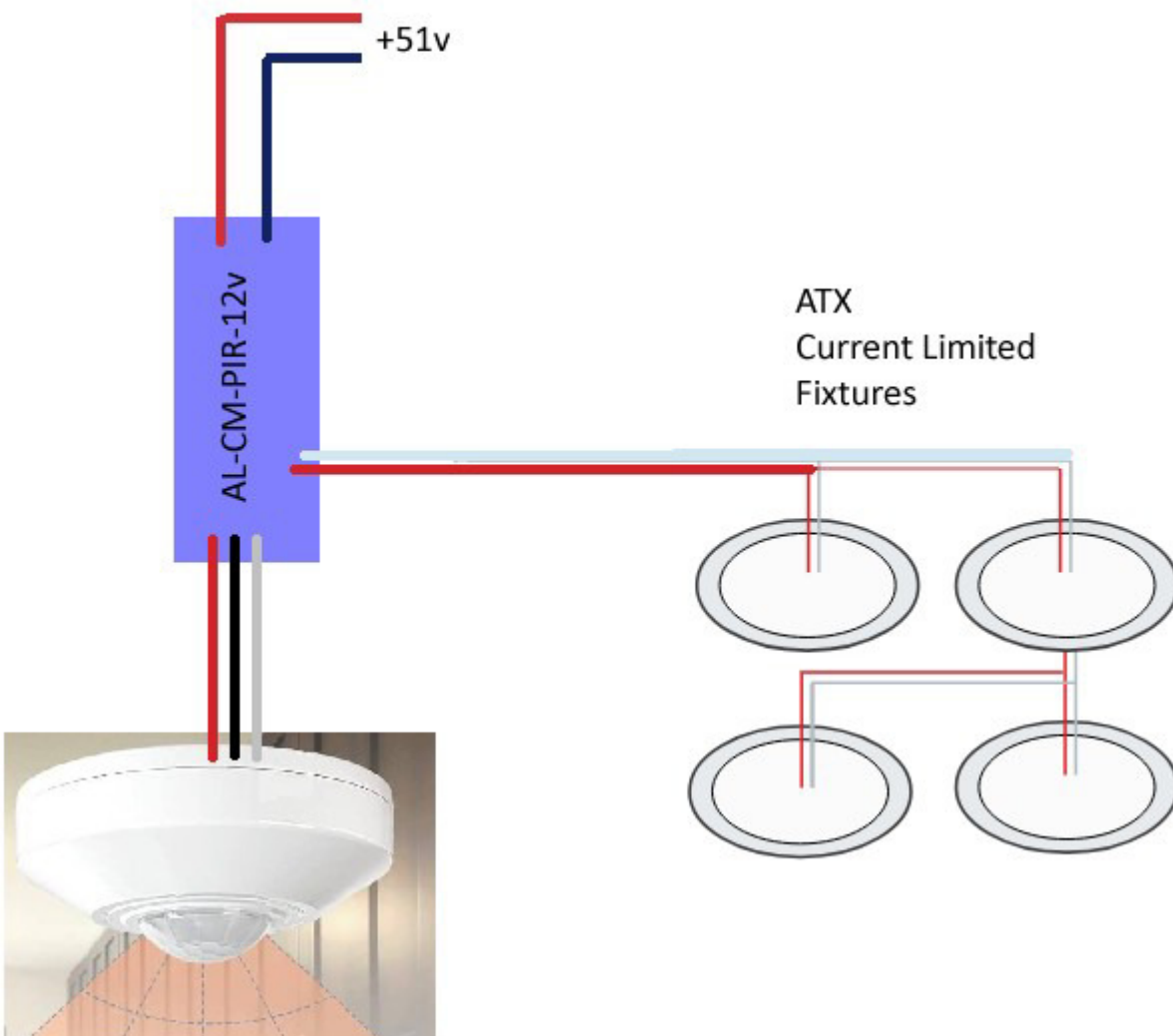
1. Connect AL-WS-DR2 Cool to the 18-54v input
2. Connect CC led to the LED output, (Vf = 9v to 43v)
3. Connect AL-CM-PIR-12v device to the Sensor with 18/3 wire
4. Multiple sensors can be wired in parallel
5. Set jumpers as shown below
6. In the Hub, set DR2 N-Way to PIR mode (not Occupancy or Vacancy)
7. Turn the DR2 or DR1 on, if DR2, then set it to be ON at power up using the Hub



Non-Dimmable, Motion direct to LED use ATX Current Limited Fixtures

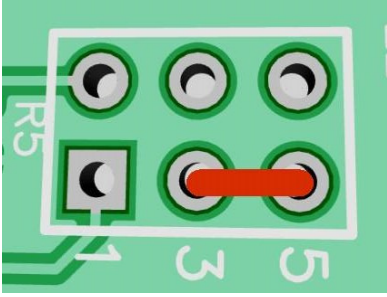
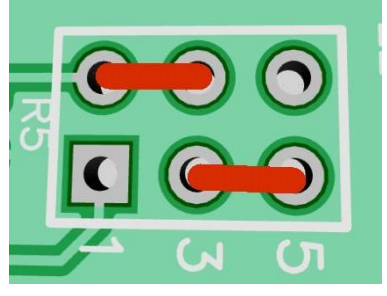
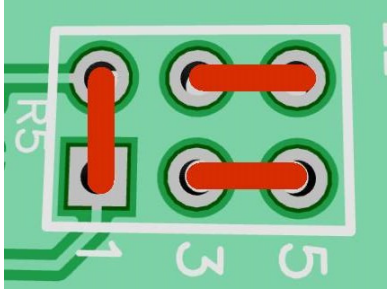
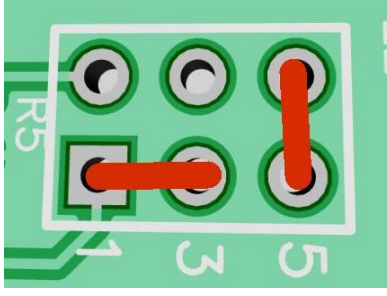
Fixed CCT, CL fixtures, no dimming no DR1 or DR2 driver, no wall box needed

1. Connect 51v to the 18-54v input Red/Black connectors
2. Connect CL LEDs to the LED output: up to 96 watts Red/White connectors
3. Connect AL-CM-PIR-12v device to the Sensor with 18/3 wire
4. Set jumpers as shown below
5. No wall box needed



Jumper Selections for external PIR

Version 3 hardware

Style	Jumpers	No Motion	Active Motion
PP	 <p>example: ANC-04 (single unit only)</p>	PIR pulls down (0-10v)	PIR pulls up
PU	 <p>example: Rayzeek</p>	Open	PIR pulls up
DI	 <p>Fault Tolerant</p>	PIR pulls down	Open
OD	 <p>Open Drain</p>	Open	PIR pulls low

Jumper Selections for external PIR

Version 2 hardware

Style	Jumpers	No Motion	Active Motion
PP	J7 only	PIR pulls down	PIR pulls up
OD	J1 only	Open	PIR pulls low

Jumper Selections for external PIR

Version 1 hardware

J7 for 0-10v with ANC-04

Do not use with AL-WS-DR2 – N-way

Tested Compatible Sensors

Vendor	Style / Comment	Link
ATX ANC-04	PP small, recessed IR or Bluetooth remote	See ATX LED
Rayzeek	PU large surface mount	Amazon B0C9D6K8CP
Yosoo	PU large surface mount	Amazon B08W2H7QH7
AITIAO	OD rectangular surface mount	Amazon B09KPQ4HH
HiLetGo	OD very small, recessed	Amazon B082F8L7V9