

# ATX LED

100% DC low voltage

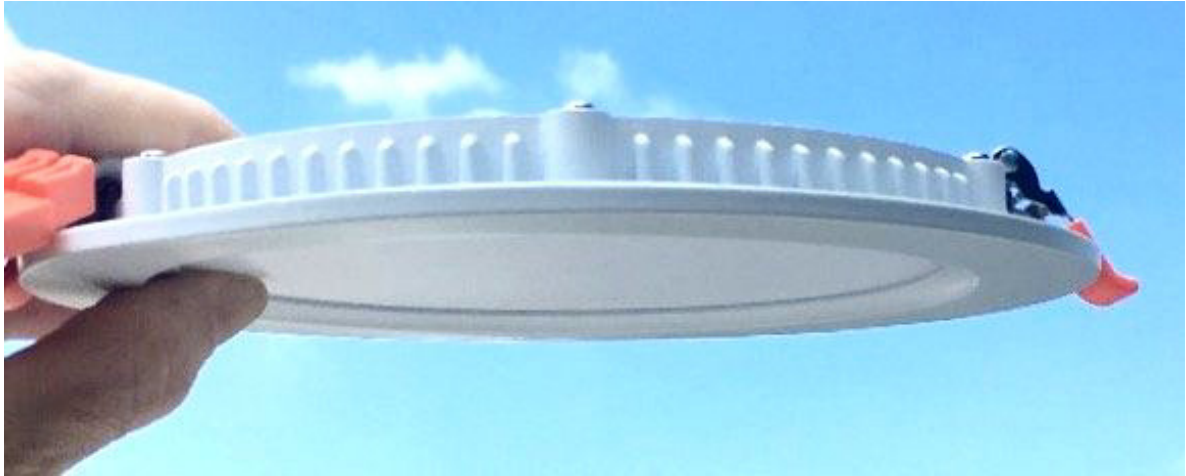
<http://atx-led.com>

P023R11 LED Fixtures  
Low Voltage 1440 mA, dimmable  
Direct Current Controlled

P023R11 series, CC

ETL 5005242 / UL 1598

Bright LEDs, Cool Operation



## [Product Description - low profile long life LED fixture](#)

The P023R series of LED fixtures are **ETL listed** and IC rated for direct contact with insulation – recognizing it's cool operating temperatures and distributed heat ( no hot spots). **Closest Rated** under NEC codes. **JA8 / Title 24** listed.

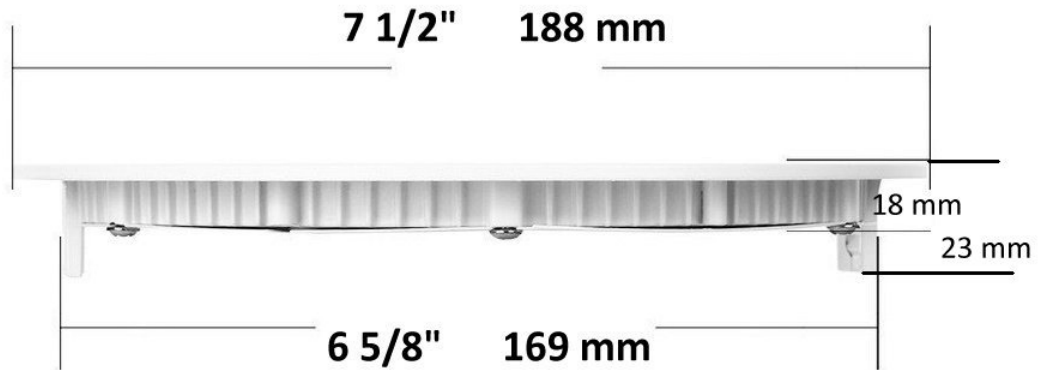
Application	Model	Data sheet
Constant Current Dimming	P023R11	This document
Constant Voltage Dimming	P023R11-48v12w	See P023R6-48v datasheet
Halo Rough in Compatible	P02106	See P02106 data sheet
Linear High Performance Constant Current Strip lights	P023S2	See P023S2 data sheet

## Technical specifications

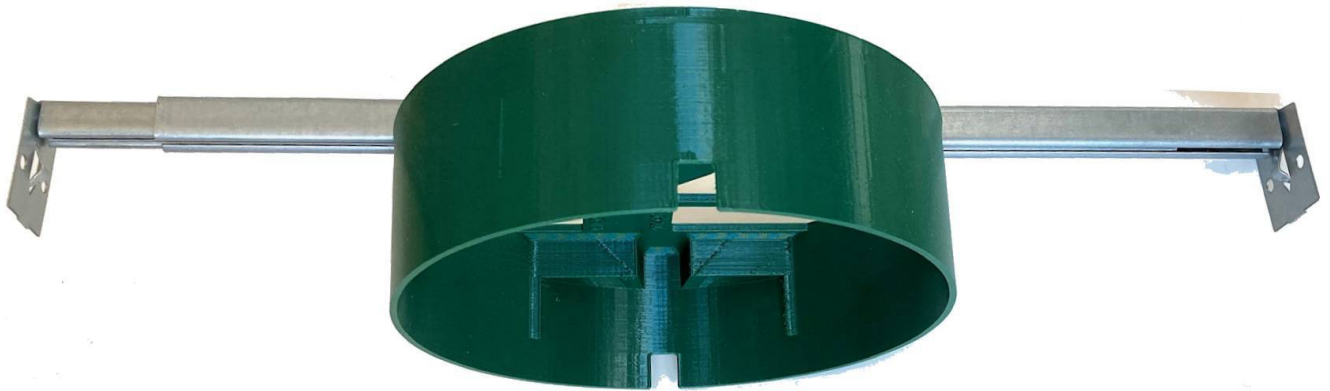
Wattage	13 watts operating
Operating current	0 to 1440 mA total of current in both channels, can mix for color control
Dimming Range	0 to 100%, flicker free, no artifacts
Lumens	1500
Color Temperature, CRI	3 fixed options available plus tunable white. CRI 80 and 90 options
Operating Voltage	7.5 to 9.0 volts
Recommended wiring	Series, 4 or 5 fixtures in series sharing one driver
Constant Voltage	Not Recommended
Operating Temperature	Ceiling mount, -20 to 50 Deg C non condensing
IP Rating	Suitable for Damp environments
IC Rated	Yes, see AL-CBOX6 Fire Rated Rough in box
LM-80 tested	10,000 hours
LED type	2835 long life
Closet Rated	Suitable for use within Closet storage spaces when installed per NEC requirements. See <a href="https://atxled.com/Closets">https://atxled.com/Closets</a> for more info

## 6 inch style

### Panel Style LED Wafers – Low Voltage Dimmable



### [AL-CBOX6 ceiling mount Options](#)



**AL-CBOX6** mounting hanger bar

16 to 24 inch joist spacing  
Supports up to 20 lbs  
Flat or vertical truss attachment  
See **AL-CBOX6.pdf**

## [Color Temperature options](#)

Available in 6 different color temperatures, these fixtures can be operated as a fixed color, or tunable white fixture. Any 1440 mA current source can be used. Up to 5 fixtures can be wired in series to share one driver. That driver can be located up to 150 ft from the LEDs – since constant current eliminates the concerns about voltage drop.

This 13 watt device can be installed as either tunable white or fixed color. Connecting both inputs in parallel will generate the 3850K color. .

Model	2700	3000	3500	3850	4000	5000
CCT	X			X		X
Fixed		*	*		*	

X= Stock, \* = on request

## Ordering part numbers

Model	Voltage	Current	CCT	CRI	Lumens	Note
	7.5-9	0-1440mA	2700K	90	1500	warm side of 27/50K
	7.5-9	0-1440mA	3850K	90	1500	27/50K combined
	7.5-9	0-1440mA	5000K	90	1500	cool side of 27/50K
<b>P023R11-1440mA-27/50K</b>	7.5-9	0-1440mA	Tunable 2700 to 5000	90	1500	Tunable White

## [720 mA operation](#)

This 13 watt LED can be installed for 720 mA operation for use with 660 or 720 mA drivers. The total power is 13 watts at 3850 CCT. The voltage increases from 9v to 18v in this method.

# Wiring examples

## Fixed Color Temperature Wiring

One connector per LED – OJ 606 model, AWG 18 or 20

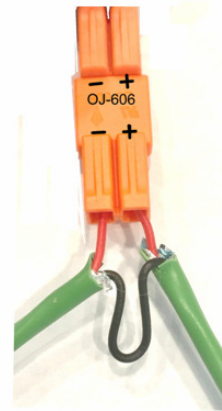
Note the series wiring method

### LED series Wiring

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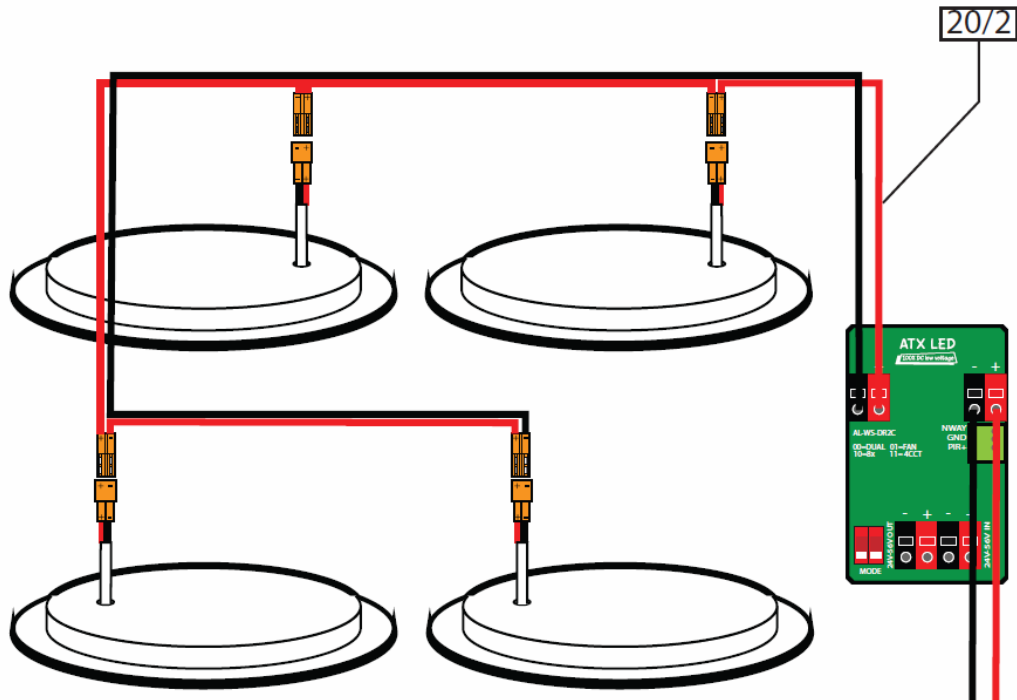


OJ-606 Connector

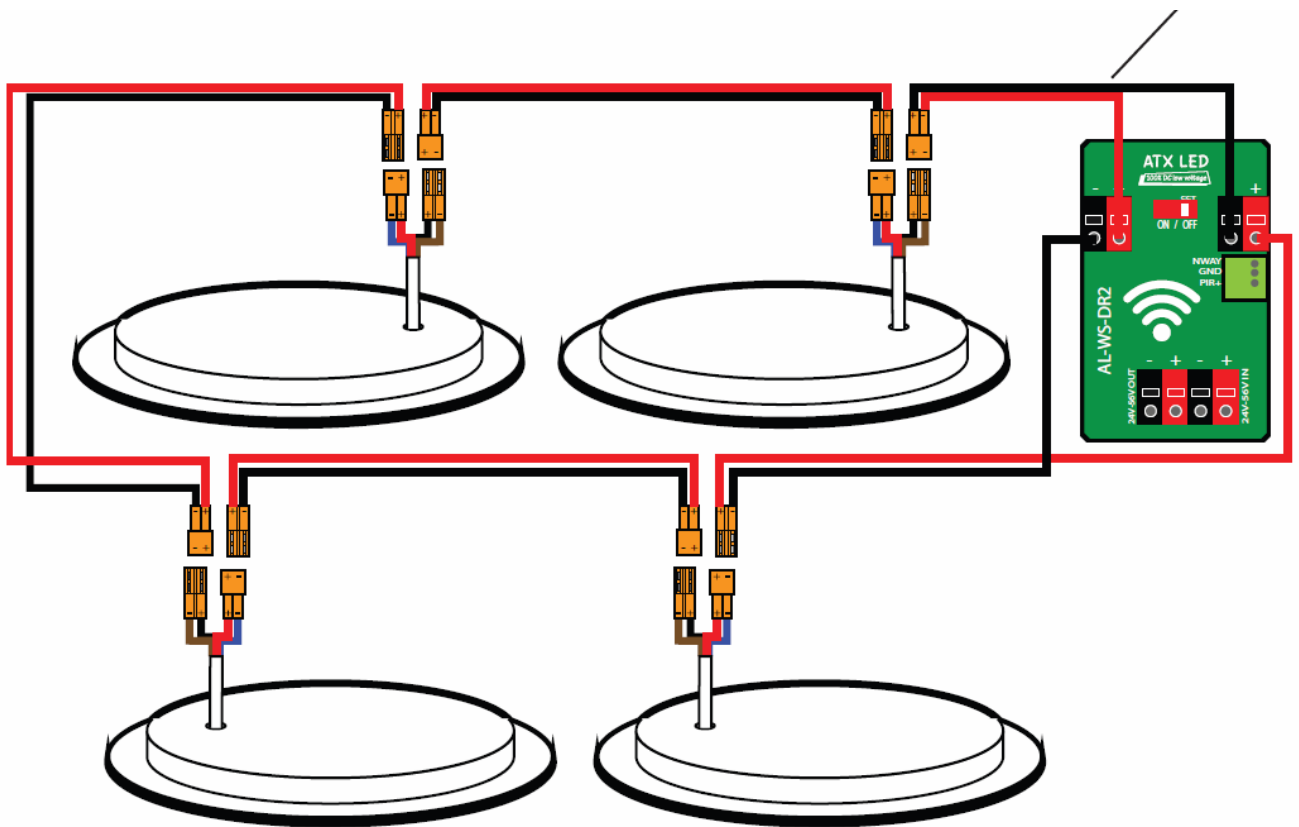
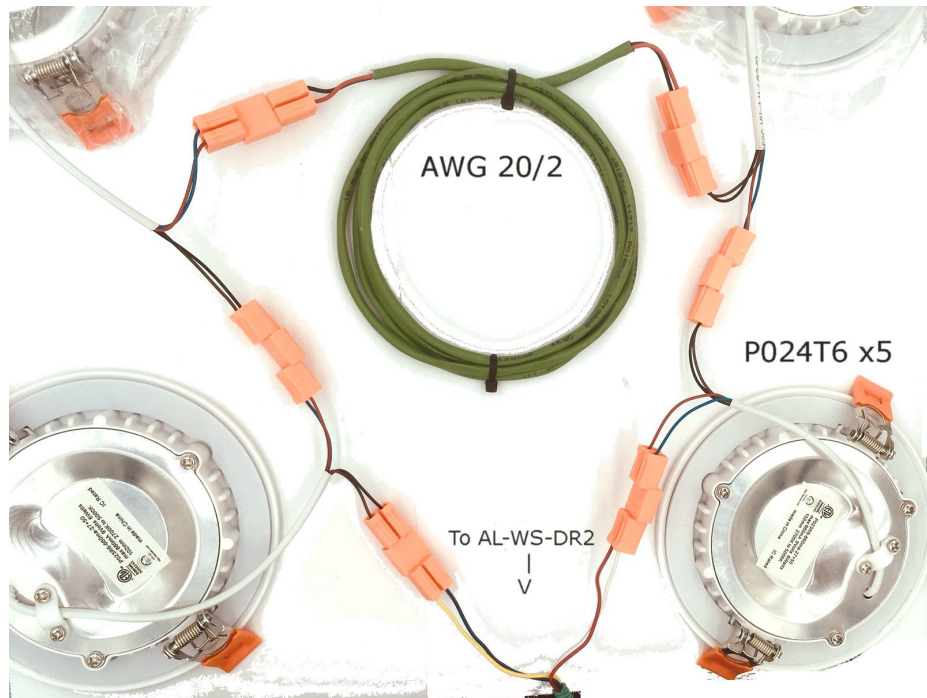


Right to DR2 switch  
Left to next LED

### Series Wiring



# Tunable White LED wiring with just one pair of awg20



## Recommended DC Drivers with dimming\*

**N = # of LEDs**

DC drivers *	# of bulbs Fixed color	# of Bulbs Tunable White	WiFi	DALI
AL-WS-DR1-1440	<b>5</b>			
AL-WS-DR2	<b>5**</b>			<b>X</b>
AL-WS-DR2W	<b>5**</b>		<b>X</b>	
AL-WS-DR2-1440	<b>10</b>	<b>5</b>		<b>X</b>
LDD-1500H	<b>5</b>			
LDD-1500HDA	<b>5</b>			<b>X</b>

\*51 volt DC input

## Examples of AC Drivers with Dimming

**N = # of LEDs**

AC drivers from 120 / 240 vac to DC currents	Fixed Color	Tunable White	0-10v	DALI	DMX
SMT-086-0700CM	<b>9</b>			<b>X</b>	
AL-SML-DR2-70CCT		<b>5</b>		<b>X</b>	
WP-80-40A-2AM	<b>8</b>	<b>4</b>	<b>X</b>		
DMX-50-500-1750	<b>6</b>				<b>X</b>

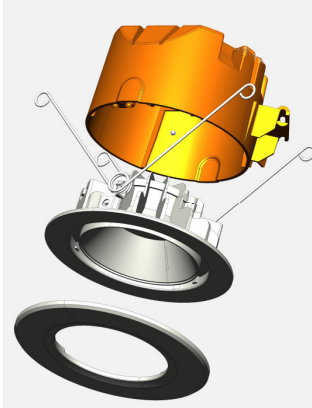
Hundreds of models of AC to DC constant current drivers exist.

## Other LED Products from ATX LED

Model	Hole in Ceiling mm	Drill Size Inch	Finished Outside Diameter mm	Watts	Volts	Lm/W	mA	Wiring*
P023R6-660	102	4"	120	6	9	90	660	S
P023R6-48v6w	102	4"	120	6	48	90	120	P
P023R11-1440	169	6 5/8"	188	12	9	100	1440	S
P023R11-48v12W	169	6 5/8"	120	12	48	90	240	P
DL-98B	70	2 3/4"	88	6	9	130	600	S
DL-120	102	4	120	6	9	130	660	S
MS31008	70	2 3/4"	90	6	9	130	660	S
E26-A60	Bulb	-	-	6	9	80	660	S
E26-A60-48v6w	Bulb	-	-	6	48	80	120	P
E12-C35	Bulb	-	-	6	9	80	660	S
E12-C35-48v6w	Bulb	-	-	6	48	80	120	P
P023S2	Strip	3/4	15 ft max	2/ft	45	120	660	S
P023S4	Strip	3/4	7.5 ft max	4/ft	45	120	660	S
P023S8	Strip	3/4	7.5ft max	8/ft	45	120	1440	S

\*S is serial

\*P is parallel



**DL-120**



**RL-E26**



**RL-E12**