



<http://atx-led.com>

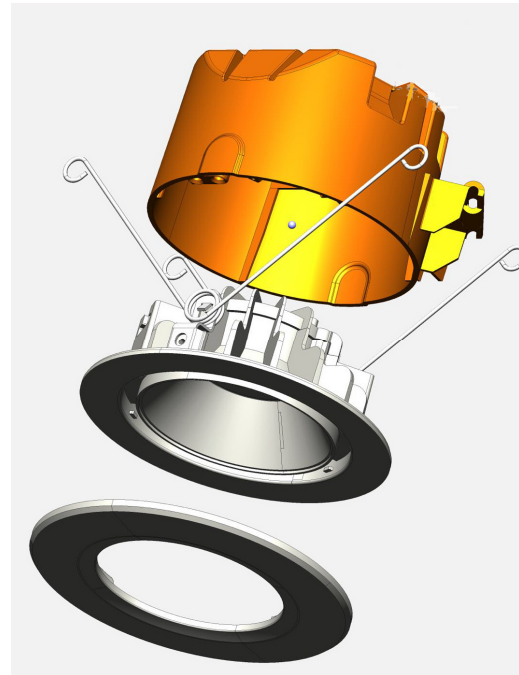
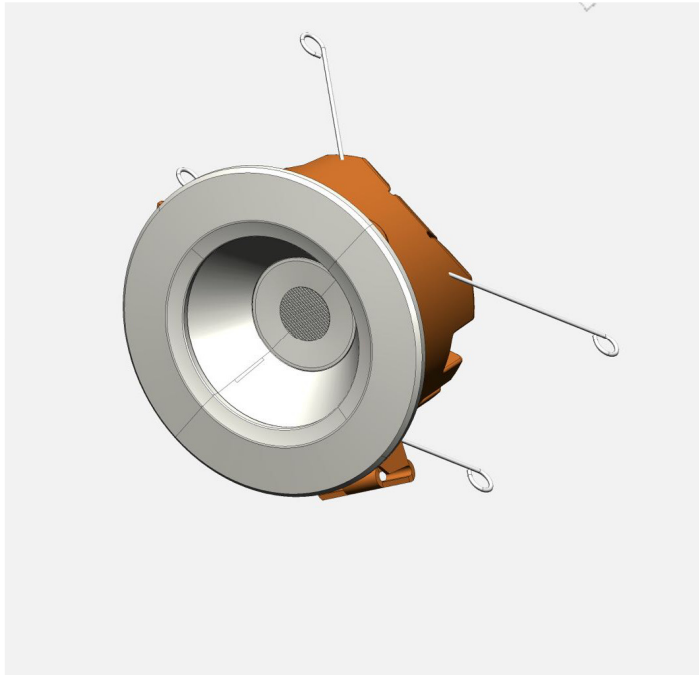
**Recessed LED – Low Voltage
660 mA, dimmable
Direct Current Controlled**

DL-120

**IC Rated
UL Listed E522252**

Bright LEDs, Cool operation

Low Voltage mounting solution



**Product Description - recessed long life LED fixture
with exchangeable trim**

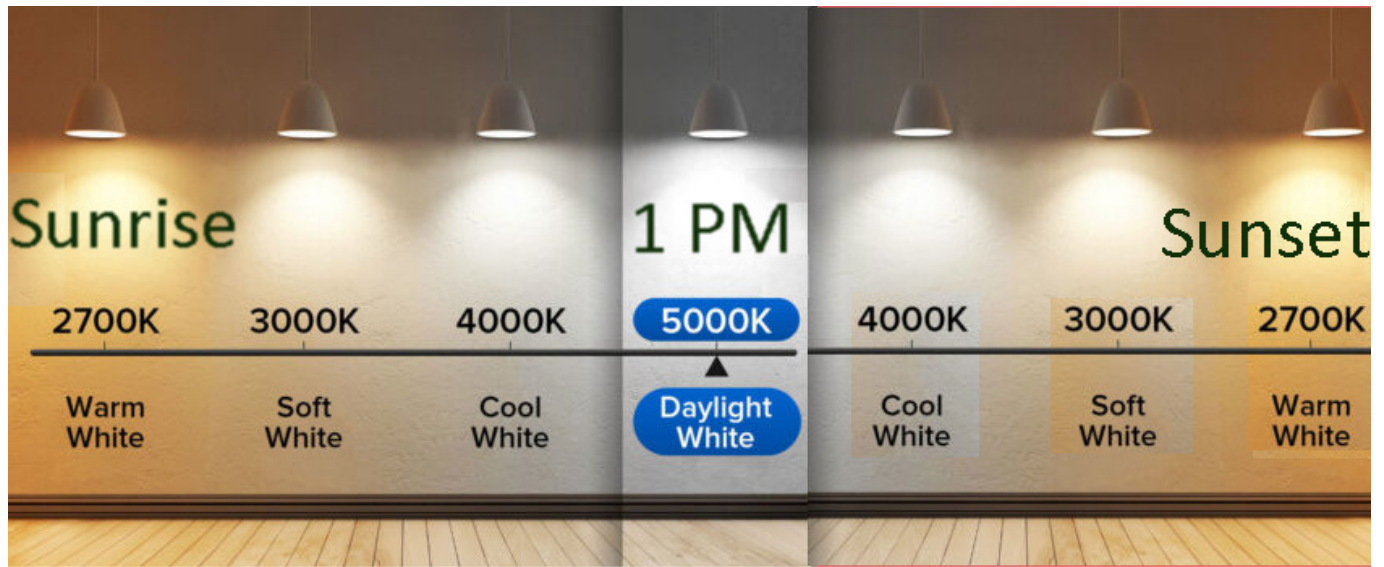
This LED fixture offers high lumen output, recessed point light source, and safe low voltage operation.

Operating at 6 watts, with over 780 lumens, this LED fixture and CBOX4 mounting solution allows code compliant LED installations in single family projects. Because all the power in goes to the LED (there is no driver or electronics involved) and because the COB LED source is not diffused – the Lumen output is comparable to 10 watt 120 VAC fixtures.

Technical specifications

Size	42mm from sheetrock face 90mm hole diameter (see DL-98B for 70mm) 120mm trim diameter / rectangle
CRI	90 and better
Dimming	0 to 100%, flicker free, no artifacts
Driver Type	Use 3 or 4 wire drivers
Operating Wattage	6 Watts
Operating current	0 to 720 mA total of current in both channels, can mix for color control
Maximum wattage	7 watts
Lumens	780
Color Temperature	6 options available
Operating Voltage	7.5 to 9.0 volts
Recommended wiring	Series, 4 or 5 fixtures in series sharing one driver
Constant Voltage	do not use Constant Voltage
Operating Temperature	Ceiling mount, -20 to 50 Deg C non condensing
IP Rating	IP65 Suitable for indirect water exposure
IC Rated	Yes, when used with CBOX4

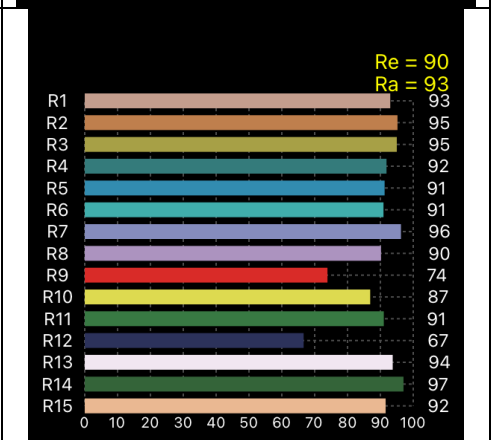
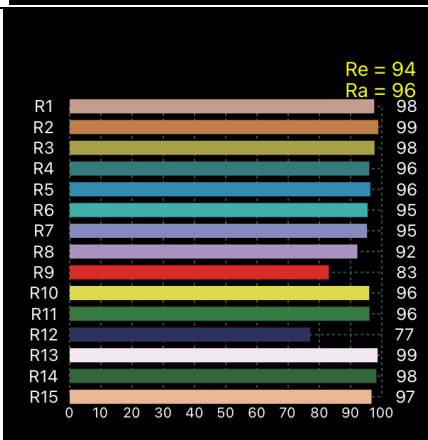
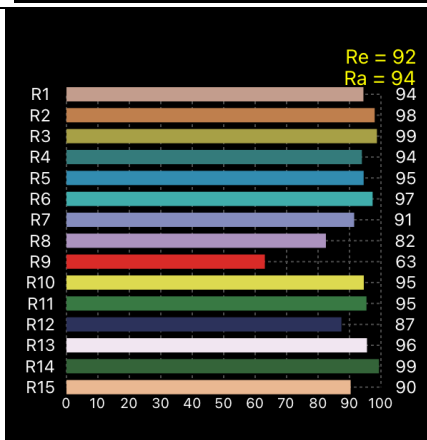
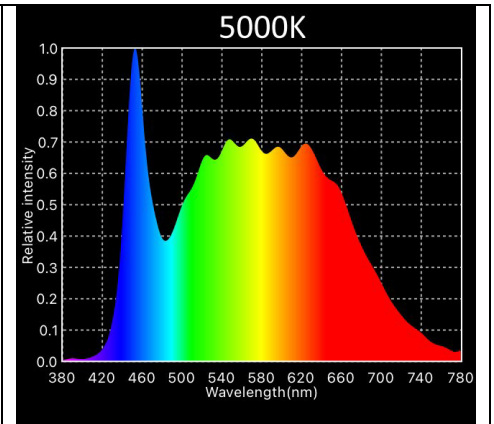
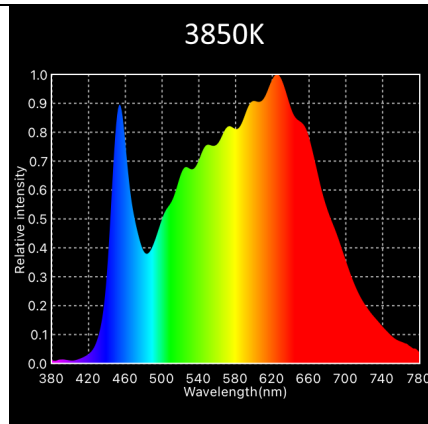
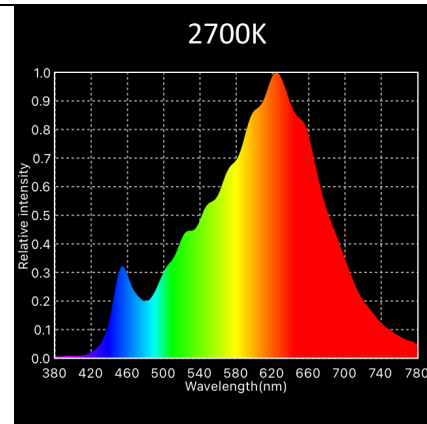
Color Temperature options



Optional Time of Day lighting rhythm

Available in 6 different color temperatures, this fixture can be operated as a fixed color, or tunable white fixture. Any 660 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. Connecting both inputs in parallel will generate the color CCT marked #. .

Model	2700	3000	3500	3850	4000	5000
DL-120	•			#		•
DL-120C		•	#		•	
DL-120-3500			•			



CCT	2689 K
CRI(Ra)	94
CQS	93
TLCI(Qa)	92.2
GAI	48.6
Illuminance	8824 lux
Foot Candle	819.7 fc
λ_p	624 nm
Flicker Percentage	0.1 %

CCT	3684 K
CRI(Ra)	96
CQS	93
TLCI(Qa)	95.9
GAI	76.9
Illuminance	10317 lux
Foot Candle	958.5 fc
λ_p	625 nm
Flicker Percentage	0.1 %
Flicker Index	0.00

CCT	4818 K
CRI(Ra)	93
CQS	91
TLCI(Qa)	94.6
GAI	86.7
Illuminance	11708 lux
Foot Candle	1087.7 fc
λ_p	453 nm
Flicker Percentage	0.1 %

Ordering part numbers

Model	Voltage	Current	CCT	CRI	Lumens	Note
DL-120	7.5-8.8	0-660mA	2700K 5000K tunable	90	780	4 Inch
DL-120 CoB	7.5-8.6	0-660mA	2700K 5000K tunable	90	780	4 inch
DL-120C	7.5-8.8	0-660mA	3000K 4000K tunable	90	780	4 inch
DL-120-3500K	7.5-8.8	0-660mA	3500K	90	780	
DL-125	7.5-8.8	0-660mA	2700K 5000K tunable	90	780	4 Inch Gimbal
DL-98B	7.5-9	0-660mA	2700K 4000K tunable	90	540	2 ¾ inch Gimbal

360 mA operation

This 6 watt LED can be installed for 360 mA operation for use with 360 or 300 mA drivers. The total power is 6 watts at 3850 CCT for the DL-120 and DL-100 and 3500 CCT for the DL-120C. The voltage increases from 9v to 18v in this method.

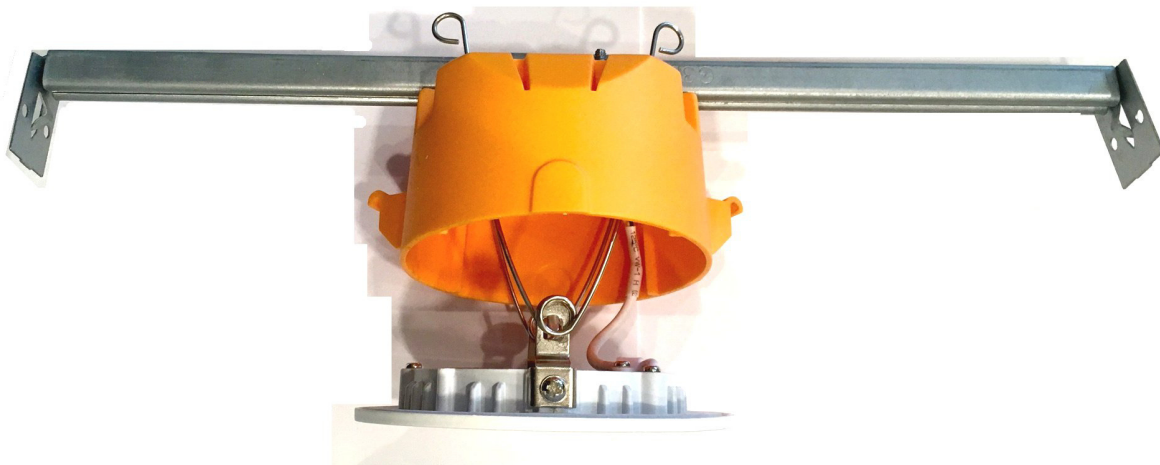
Mixing CCT to create Fixed

2700K Fixed	warm side used
3850K Fixed	2700+5000 combined
5000K Fixed	cool side used

Ceiling mount Options

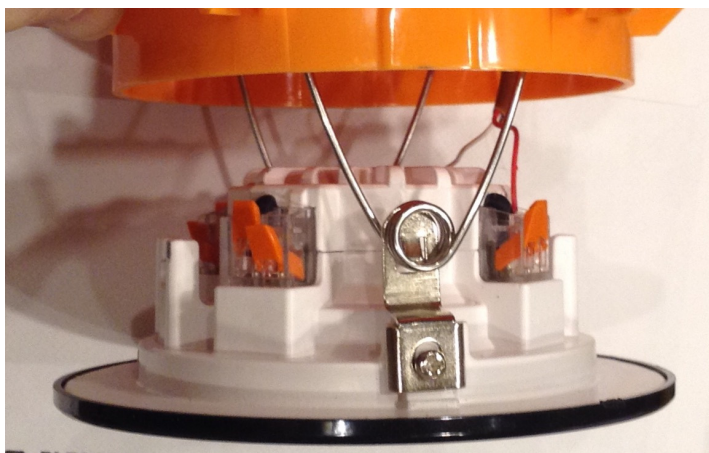
You can use our Rough In box, or you can mount directly to sheetrock.

AL-CBOX4



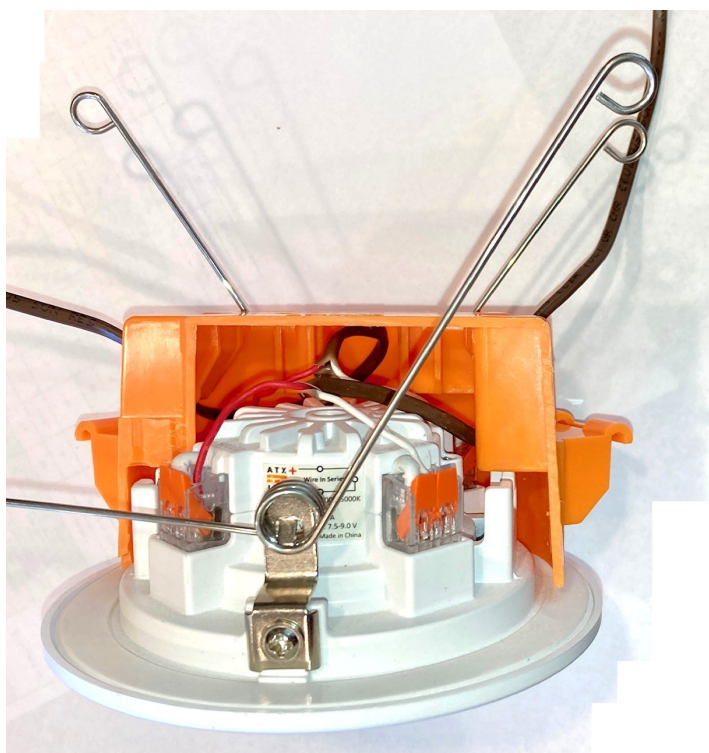
CBOX4 mounting hanger bar

16 to 24 inch joist spacing
Supports up to 20 lbs



Detail of insertion

Cutaway Side View



Trim Options – customize the shape and color

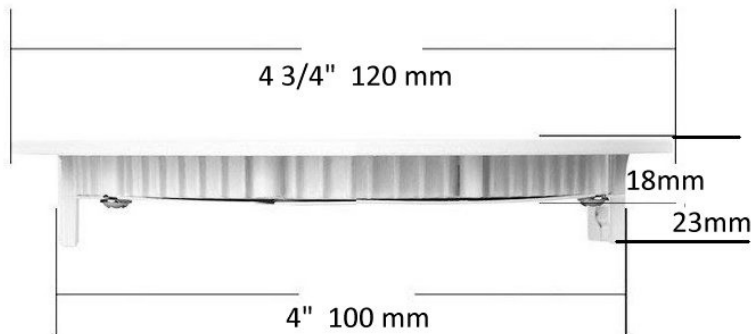


Shape	White	Silver	Black
Round	X	X	X
Square	X	X	X

Direct to Sheetrock

DL-120 120 mm trim and 100 mm hole

Hole sizes are the same as the P023R6 type Fixture
Body Height is 45 mm from trim plate, Extended spring is 65 mm



P023R6 / DL-120 are the same diameter

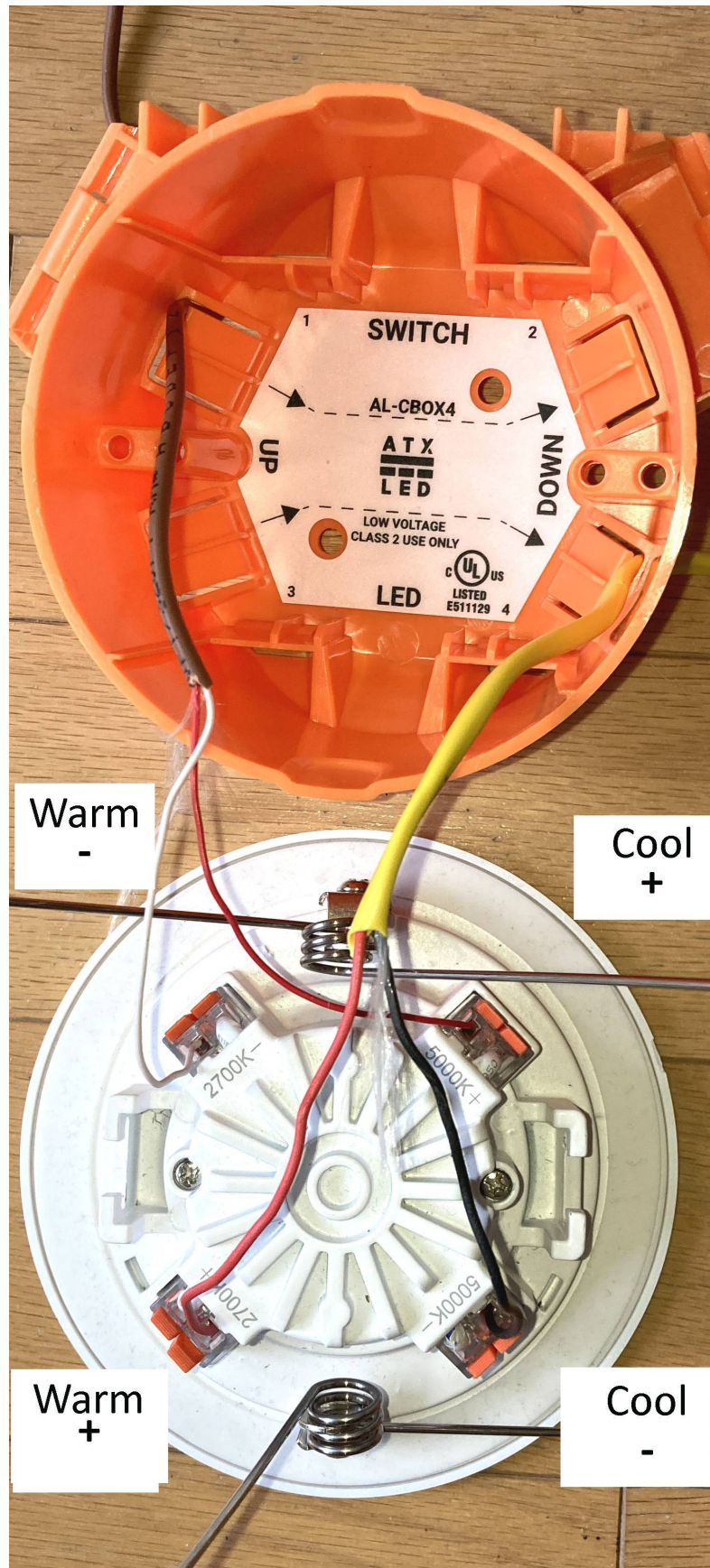


DL-98B – 90 mm trim, 70 mm hole

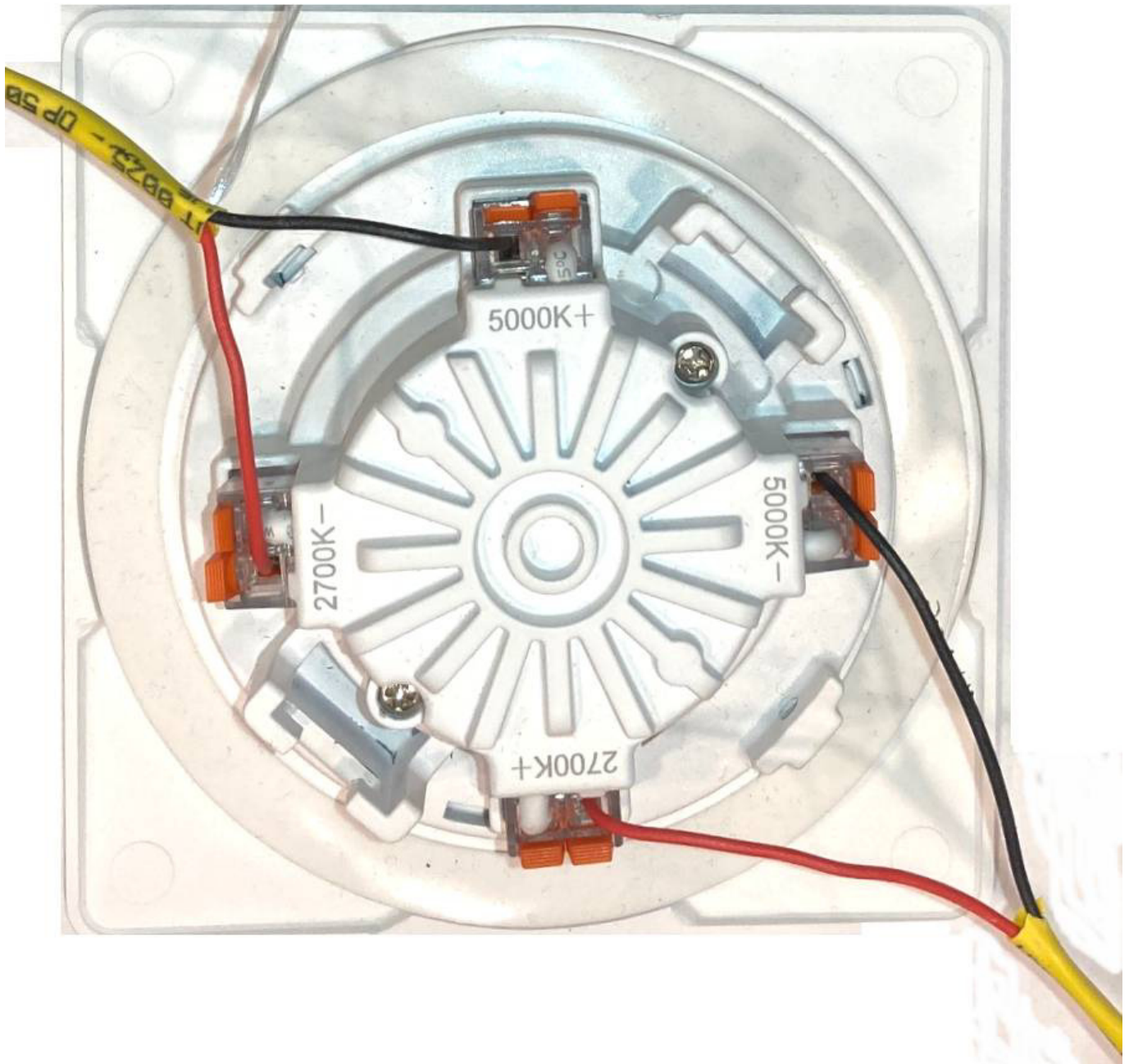
Body Height is 65 mm from trim plate, Extended spring is 80 mm



Device Wiring



<- Up to the previous LED



Down to the next LED ->

Unlike the P023 series, the DL-120 has the lever nuts built in.

Recommended DC Drivers with Dimming

N=# of LEDs

DC drivers *	Fixed Color	Tunable White	WiFi	DALI
AL-WS-DR1	4			
AL-WS-DR2	8	4		X
AL-WS-DR2C	8	4		
AL-WS-DR2W	8	4	X	
LDD-600H	5			
LDD-600HDA	5			X

*51 volt DC input (with 54v supply, one additional is allowed – 5 instead of 4)

** no dimming

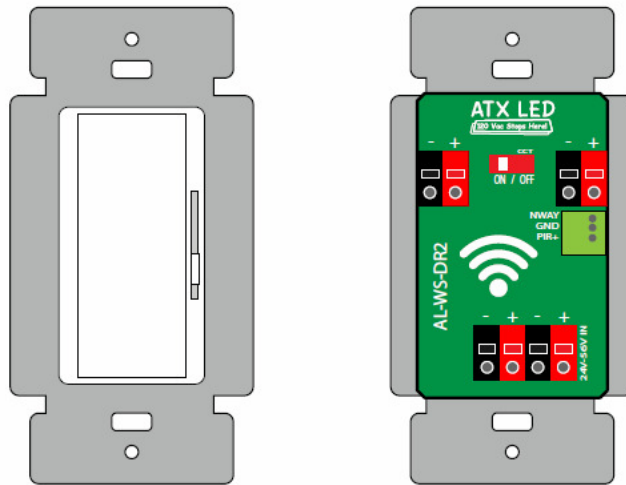
Examples of AC Drivers with Dimming

N=# of LEDs

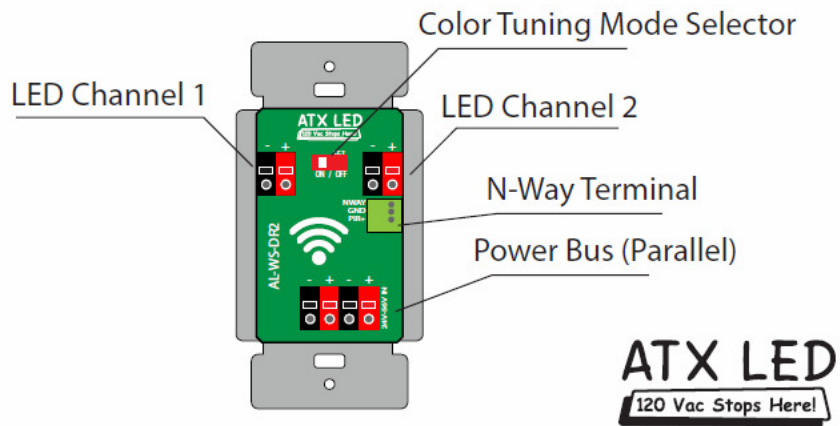
AC drivers from 120 / 240 vac to DC current	Watts	Fixed Color	Tunable White	0-10v	DALI	DMX
AL-SML-DR2-70CCT	70 / 48v	10	5		X	
SMT-086-0700CM	35 / 48v	9			X	
SR-2309-75CCT	75 / 48v		5		X	
WP-80-40A-2AM	75 / 36v	8	4	X		
DMX-50-500-1750	50 / 48v	6				X

Meet the DR2

The DR2 is the heart of the entire system. From the front it looks like a typical style wall switch with a slide dimmer. This is where the driver for the LEDs is located. The DR2 uses current control technology to provide perfect dimming to each of its corresponding LEDs. There are several different types of DR2 available, depending on application.



Front



E26 bulbs also available



ATX-E26



RL-E26



RL-E12