

DD-CCT SERIES

LED Tunable White Dimmer + Driver Combo

DD-24160-CCT is a LED driver and tunable white controller with dimming capability for LED lighting, offering flicker-free 20kHz PWM output and a wide 0.3%-100% dimming range. It features separate color temperature and dimming control. With a high efficiency (up to 92%), built-in active PFC, and multiple protections, it ensures reliable performance. Designed for dry and damp locations, it also operates silently via free air convection.

FEATURES

OUTPUT	Constant Voltage
INPUT RANGE	120VAC
PFC DESIGN	Built-in active PFC function
PROTECTIONS	Short circuit/ Over load/ Over temperature
HEAT DISSIPATION	Cooling by free air convection
WATERPROOF PERFORMANCE	For dry and damp locations (US)
DESIGN FEATURES	<ol style="list-style-type: none"> 1. Fine-tune output voltage can be adjusted slightly 2. Preset dimmer with on/off switch 3. 3-Way switches 4. Dimming and color temperature adjustment function. 5. Eliminated compatibility issues between drivers and switches
DIMMING RANGE	0.3%-100%
APPLICATION	Suitable for the application of LED lighting
WARRANTY	5 years warranty
OTHERS	16KHZ PWM output with dimming curve is a gamma 2.2 curve Flicker-free



The driver is inside



Class 2 TYPE HL SELV RoHS



ICES-005

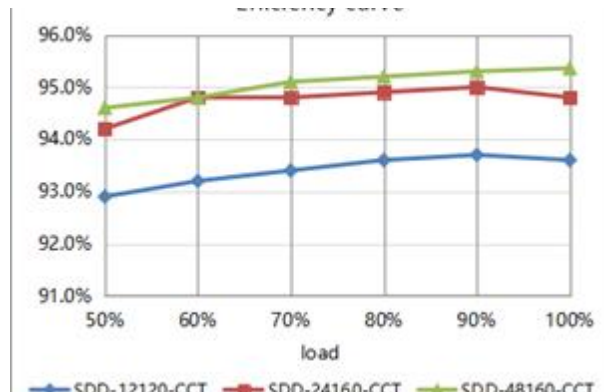


Class P

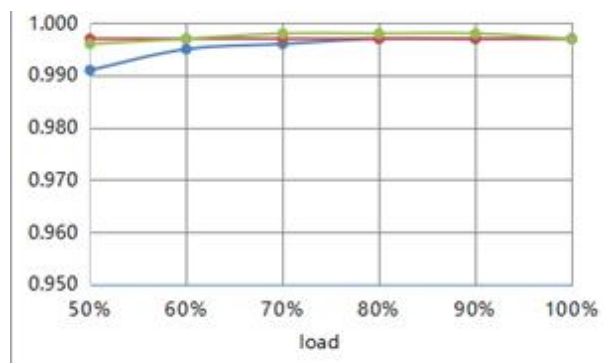
SPECIFICATIONS

Model		DD-12160-CCT	DD-24160-CCT	DD-48160-CCT
Certificates		UL / cUL / FCC / Class P / SELV / RoHS / Reach		
Output	DC Voltage	12V (12V-13.5V adjust by knob)	24V (24V-26V adjust by knob)	48V (48V-50V adjust by knob)
	Rated Current	10A	6.67A	3.33A
	Rated Power	120W	160W	160W
	Voltage Tolerance	±0.5V		
	Load Regulation	≤2%	≤1%	≤1%
	Line Regulation	≤0.5%		
	Voltage Ripple	3%	2%	1%
Input	Frequency Range	60Hz		
	Voltage Range	120V		
	Power Factor (Typ.) @ full load	0.99		
	THD (Typ.) @ full load	≤10%		
	Efficiency (Typ.) @ full load	93.3%	94.5%	95%
	AC Current (Max.)	1.1A	1.5A	1.5A
	Inrush Current (Typ.)	54A, 290us@50%I _{peak}		
	Leakage current	<0.5mA		
Protection	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.		
	Over Load	≥110% Constant current mode, recovers automatically after fault condition is removed		
	Over temperature	Shell surface temperature 100°C±10°C shut down o/p voltage, automatically recover after cooling		
Environment	Working TEMP.	-40~+60°C (see below derating curve)		
	Working Humidity	20~95%RH, non-condensing		
	Storage TEMP. Humidity	-40 - +80°C, 10 - 95% RH non-condensing		
	TEMP. coefficient	±0.03%/°C (0~50°C)		
	Vibration	10~500Hz, 2G 12min./1 cycle, period for 72 min. each along X,Y,Z axes		
Safety & EMC	Safety standards	UL8750 CAN/CSA-C22.2 No.250.13 (US)		
	Withstand voltage	I/P-O/P:1.8KVAC I/P-F/G:1.8KVAC O/P-F/G:0.5KVAC (US)		
	Isolation resistance	I/P-O/P:100MΩ / 500VDC / 25°C / 70% RH		
	EMC EMISSION	FCC/ICES do not request this test (US)		
Others	Net. Weight	0.27KG		
	Dimension	105*54*51mm / 4.134"x2.126"x1.996" (Inch)		
	packing			
Notes	1. All parameters if NOT specially mentioned are measured at 120VAC input , rated load and 25°C of ambient temperature. 2. To extend the driver's using life ,please reduce the loading at lower input voltage.			

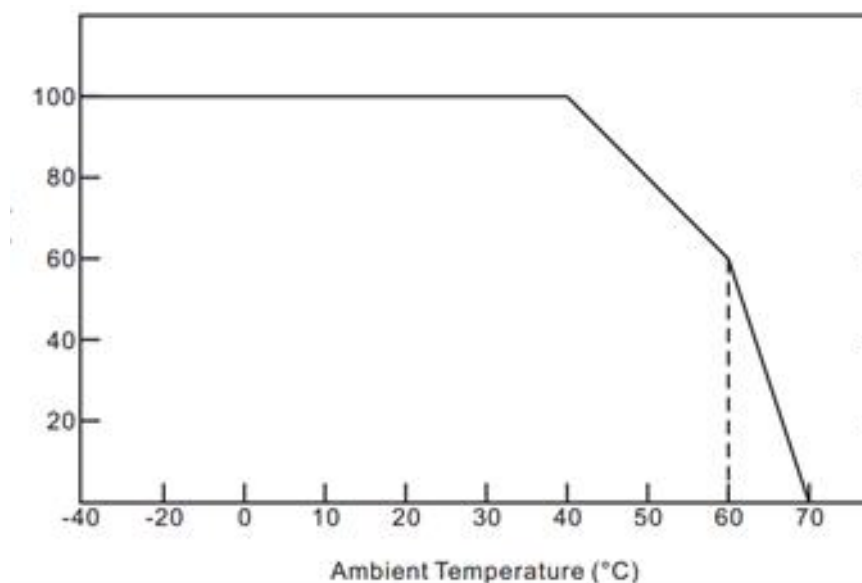
EFFICIENCY CURVE (EFFICIENCY VS OUTPUT LOAD)



POWER FACTOR CURVE



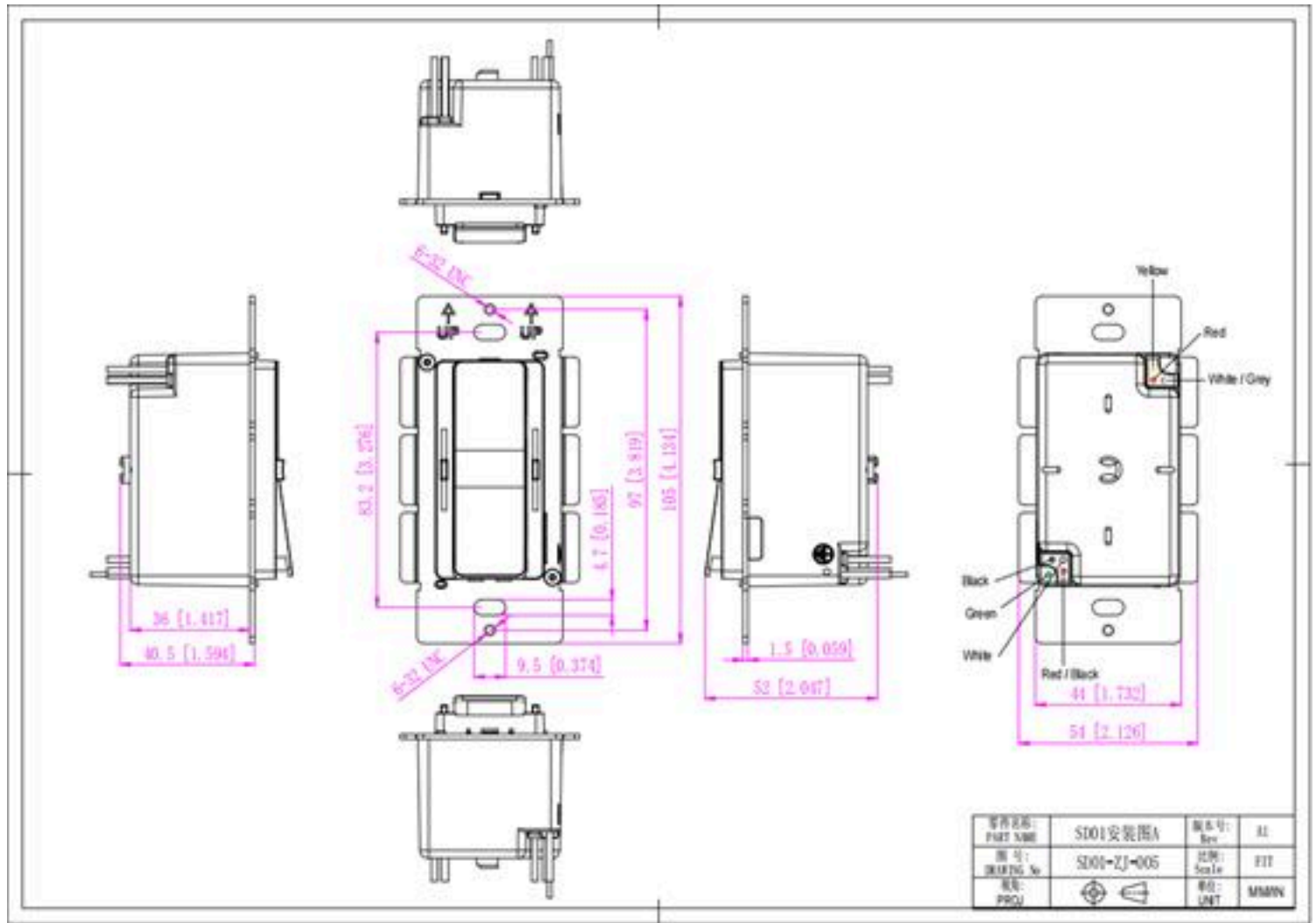
DERATING CURVE (OUTPUT LOAD VS TEMP.)



1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
2. The output current of the LED driver should be selected according to the rated current of the lamp and the ambient temperature.

Normally, we recommend the power supply to reserve a certain amount of load to extend LED driver's life .

MECHANICAL SPECIFICATION



American Wire Gauge SD01

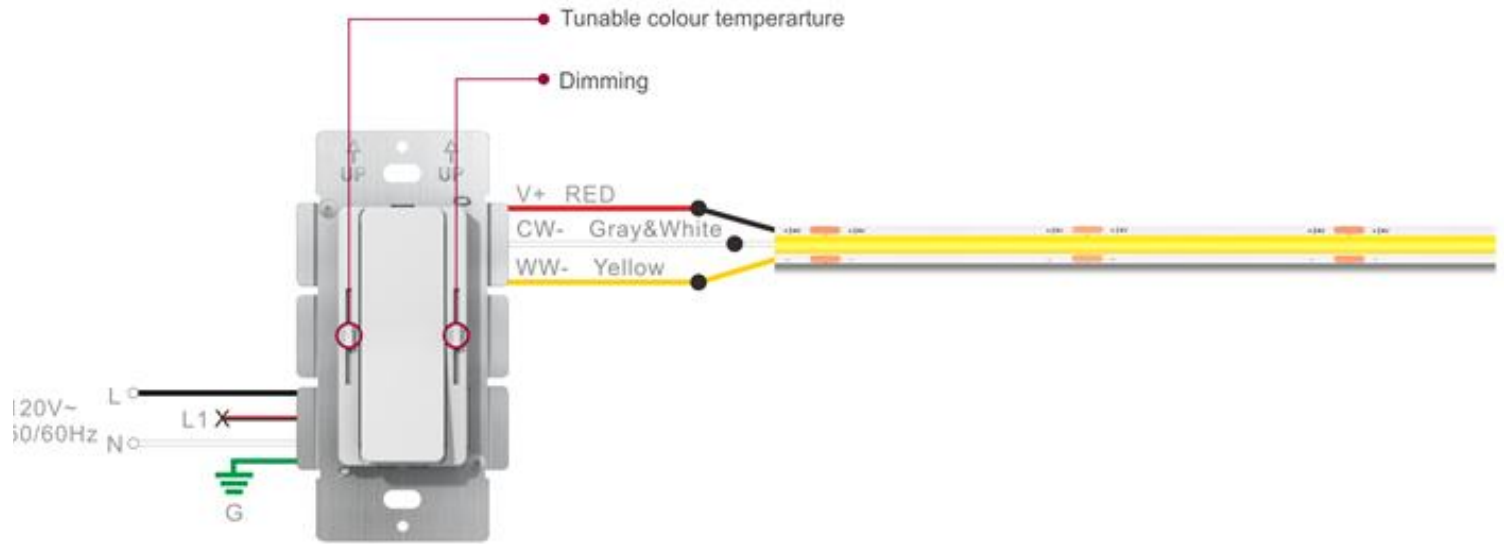
Input Wires	Black cable (L), Red black cable (L) , White cable (N) and Green cable (FG) (4*18AWG)
Output Wires	Red cable (V+) ,White/Gray cable(CW-),Yellow cable(WW-) (3*18AWG)

Warm tips:

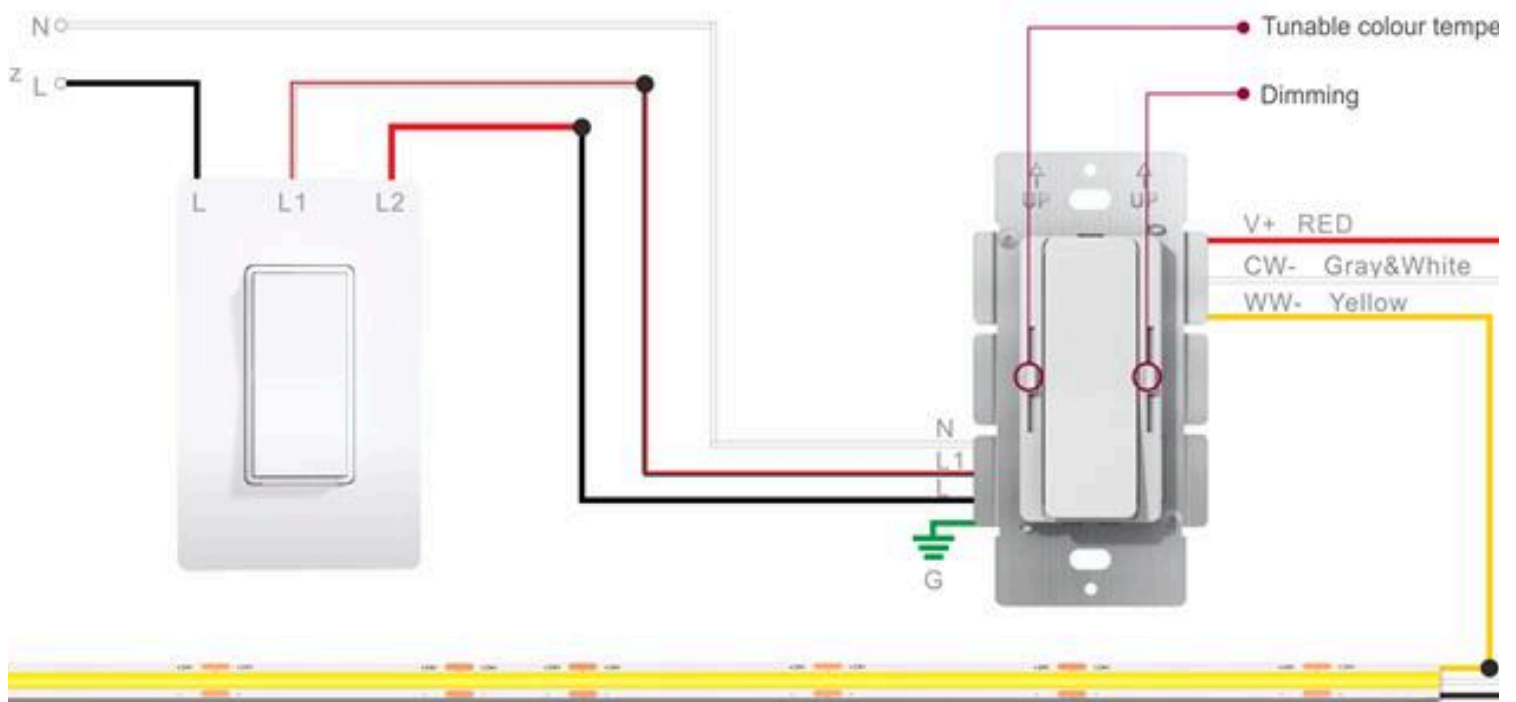
1. Any other requests, we can customize.
2. Please ensure that the connection is correct.

CONNECTING DIAGRAM

1. DD-CCT model for standard dimming system



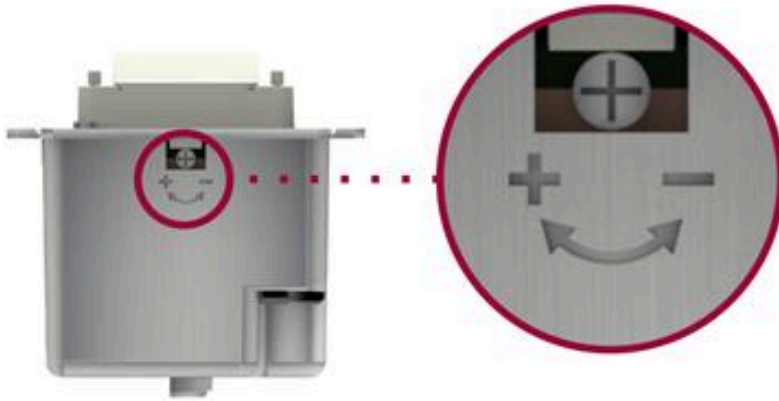
2. DD-CCT model for 3-way dimming system



Note: Dimmer's panel is not replaceable.

KNOB TO ADJUST THE VOLTAGE

Clockwise rotation of the high voltage



Output Volt. Adjustment

12V output volt. : 12-13. 5V

24V output volt. : 24-26V

48V output volt. : 48-50V

Instruction:

1. This driver+dimmer 2 in 1 should be installed by qualified and professional person.
2. Please make sure the driver+dimmer 2 in 1 is installed with adequate ventilation around it to allow for heat dissipation.
3. Ensure that connection is correct to avoid LED light or driver+dimmer 2 in 1 be damaged.
4. If the driver+dimmer 2 in 1 cannot work normally, don't maintain privately.

Have any questions, please contact with SUCCAR LED

Please visit our website or contact us for more information! www.succarled.com