



# EOS-100-24V-010-TUN

Intelligent Tunable White  
Constant Voltage LED Driver  
**WITH ENCLOSURE**

## Driver Attributes

- Soft-on and fade-in dimming function enhances your visual comfort
- High frequency exemption level
- Dimming from 0~100%, down to 0.1%
- 2-CH SELV output channel with common anode automatically recognize 0-10V and 1-10V input signals
- Innovative thermal management technology
- Overheat, over-voltage, overload, short circuit protection and automatic recovery
- Suitable for indoor light applications of I/II/III type
- Up to 50,000-hour life
- 5-year manufacturer's warranty

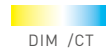


**Coming  
Q4 2024!**



Use only within an enclosure.

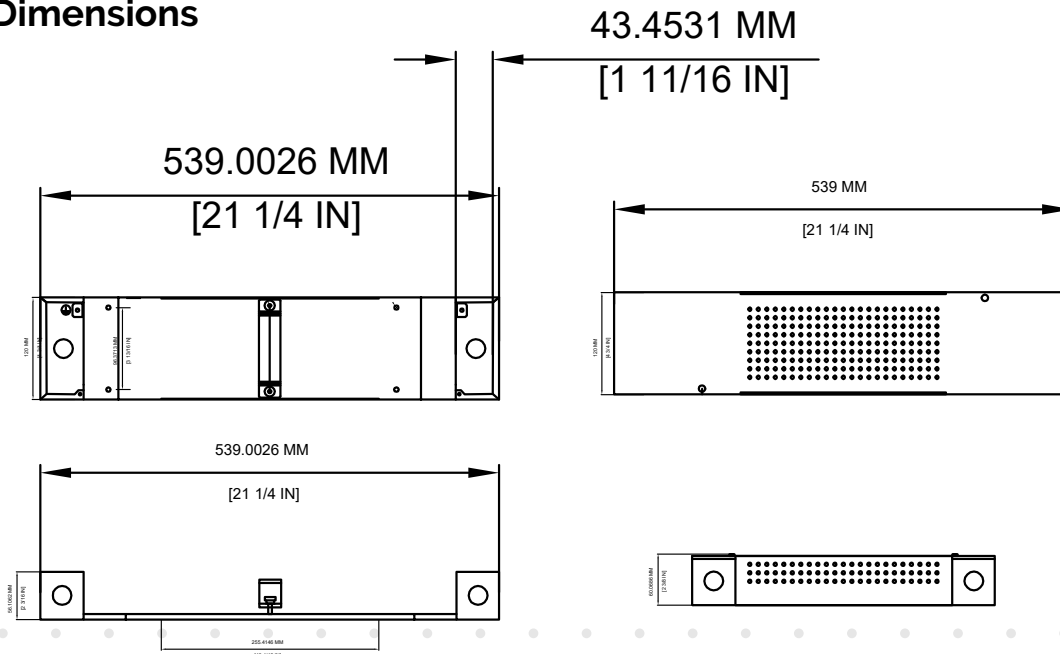
Dimmable:  
0.1%~100%



Flicker-free  
IEEE 1789



## Enclosure Dimensions





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## Driver Specifications

Model		LM-100-24-U2A2		
OUTPUT	Output Voltage	24Vdc		
	Output Voltage Range	24Vdc±0.5Vdc		
	Output Current	Max. 4.17A		
	Output Power	Max. 100W		
	Output Power Range	0-100W		
	Strobe Level	High frequency exemption level		
	PWM Frequency	3600Hz		
	Dimming Range	0-100%, down to 0.1%		
	Overload Power Limitation	≥102%		
	Ripple & Noise	Switch ripple≤150mV, noise≤500mV		
INPUT	Dimming Interface	0-10V(1-10V/10V PWM/RX), Push DIM/CCT		
	Input Voltage	120-277Vac		
	Frequency	50/60Hz		
	Input Current	Max. 1A/120Vac, 0.55A/230Vac, 0.45A/277Vac		
	Power Factor	PF>0.99/120Vac, PF>0.95/230Vac, PF>0.9/277Vac [at full load]		
	THD	120Vac@THD < 5%, 230Vac@THD < 8%, 277Vac@THD < 11% [at full load]		
	Efficiency (typ.)	93%		
	Standby Power Loss	<0.5W		
	Inrush Current	Cold start 45A/230Vac (Test twidth = 840us under 50% Ipeak)		
	Anti Surge	L-N: 2KV		
	Leakage Current	Max. 0.5mA		
ENVIRONMENT	Working Temperature	ta: -20-50°C tc: 85°C		
	Working Humidity	20-95%RH, non-condensing		
	Storage Temperature, Humidity	-40-80°C, 10-95%RH		
	Temperature Coefficient	±0.03%/°C[-20-50°C]		
	Vibration	10-500Hz, 2G 12min/1cycle, 72 min for X, Y and Z axes respectively		
PROTECTION	Overheat Protection	Intelligently adjust or turn off the output current if the PCB temperature ≥110°C, and recover automatically		
	Overvoltage Protection	Shut down the output when non-load voltage ≥28V, and recover automatically		
	Overload Protection	Shut down the output when current load ≥102%, and recover automatically		
	Short Circuit Protection	Enter hiccup mode if short circuit occurs, and recover automatically		
SAFETY & EMC	Withstand Voltage	I/P-O/P: 3750Vac		
	Isolation Resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH		
	Safety Standards	UL	America	UL2108
		CUL	Canada	CSA C22.2 NO. 250. 13
		CE	European Union	EN61347-1, EN61347-2-13, EN62384
	EMC Emission	UL	America	FCC part 15
		CE	European Union	EN55015, EN61000-3-2, EN61000-3-3, EN61547
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11, EN61547		
Strobe Test Standard	IEEE 1789			

\* The driver is suitable for connecting resistor current-limiting LED fixture (e.g. LED strip). The inrush current will be dozens of times increased if connecting built-in constant current IC current-limiting LED fixtures, the driver will activate the overloaded protection (hiccups flickering). When you order, please remark controlling the constant current LED fixture (e.g. MR16 lamp, underground light, LED wall washer, constant current LED strip, etc.), so that we can prepare them with special procedures.



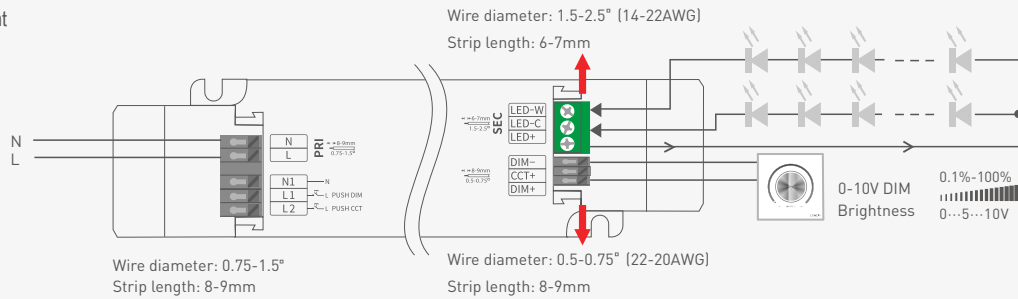
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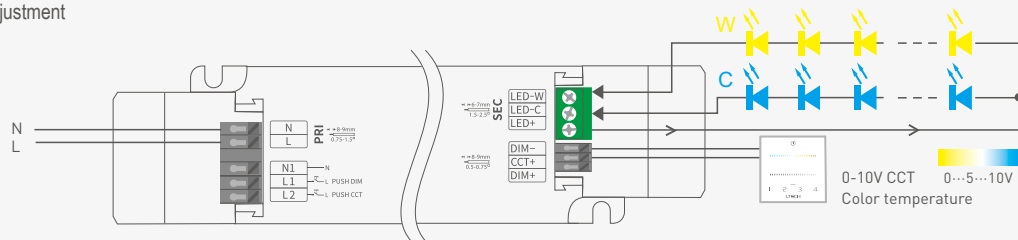
## Wiring Diagrams

### 0-10V Connection

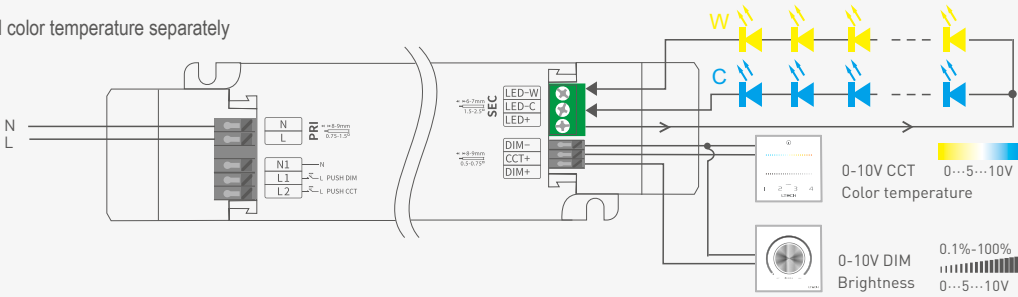
#### 1. Brightness adjustment



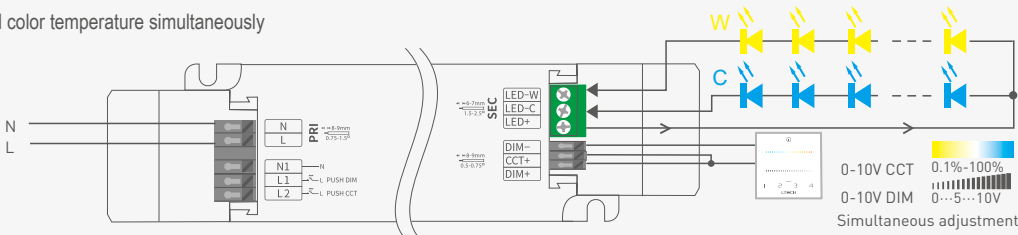
#### 2. Color temperature adjustment



#### 3. Adjust brightness and color temperature separately



#### 4. Adjust brightness and color temperature simultaneously





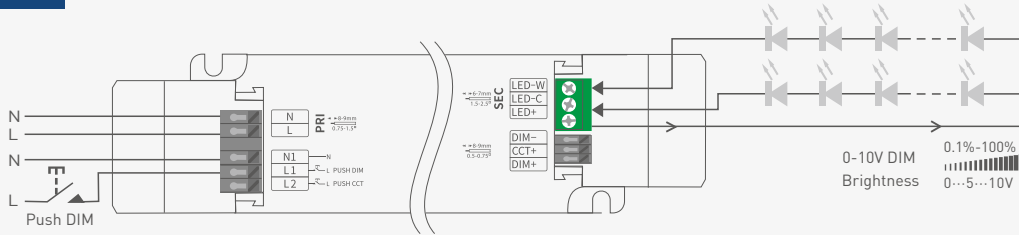
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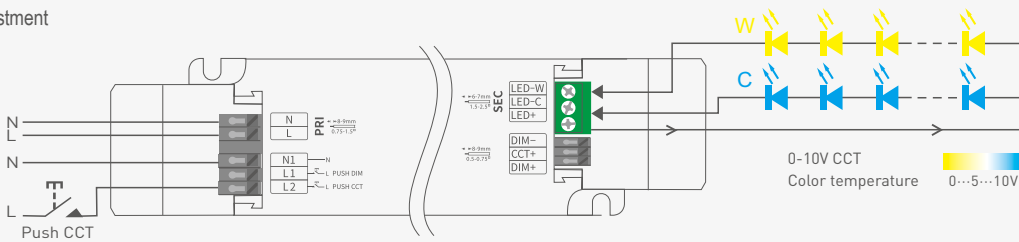
## Wiring Diagrams

### Push DIM/CCT Connection

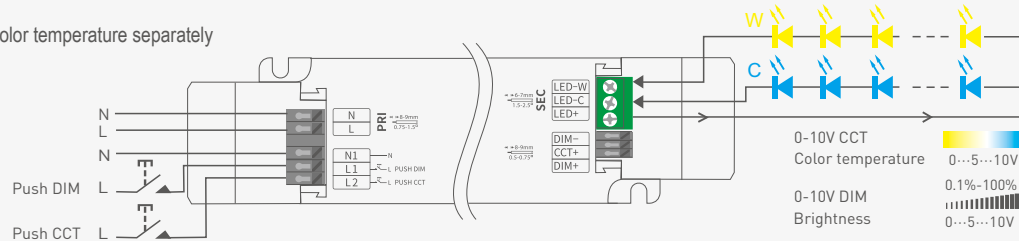
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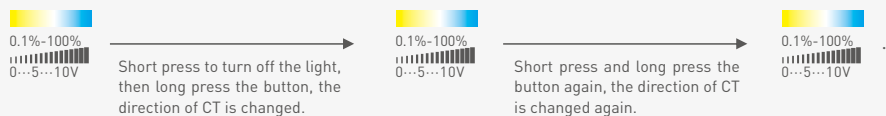
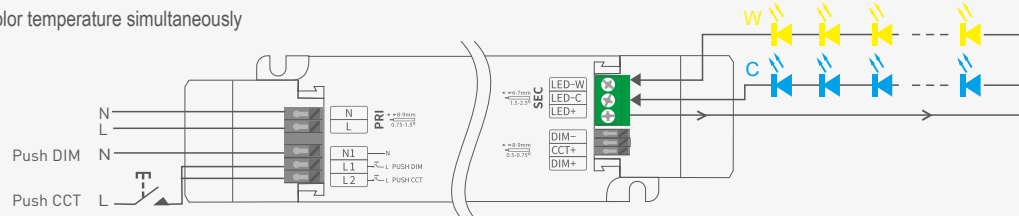
#### 2. Color temperature adjustment



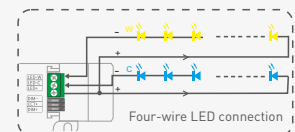
#### 3. Adjust brightness and color temperature separately



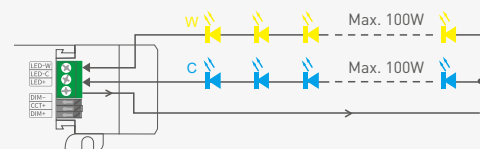
#### 4. Adjust brightness and color temperature simultaneously



\* Dimming interface priority: 0-10V first, Push DIM/CCT next.



\* Adopt constant power program design and it keeps the same brightness in color temperature adjustment. Twice the rated power load can be connected to the driver. A 100W driver can connect to 100W X 2CH load and the total power of the 2 channels will be kept within 100W.





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## COLOR TUNING LightPanel System Color Coded Wiring Legend

### COLOR CODED WIRING



W 6000K  
G 2400K  
+HOT

**COLOR TUNING  
LED STRIP**

## Push DIM/CCT



Reset switch

### DIM

- On/off control: Short press.
- Stepless dimming: Long press.
- With every other long press, the brightness level goes to the opposite direction.
- Dimming memory: Go to the brightness level adjusted previously when lights are turned on.

\* Applicable to brightness adjustment, color temperature adjustment and separate brightness/CT adjustment in Push DIM/CCT connection.

### CCT

- Color temperature adjustment: Long press.
- With every other long press, color temperature go to the opposite direction.
- Color temperature memory: Color temperature will be the same as previously adjusted when lights are turned on.



Reset switch

### DIM/CCT

- On/off control: Short press.
- Stepless dimming and color adjustment: long press.
- With every other long press, color temperature go to the opposite direction.
- Dimming memory: Go to the brightness level adjusted previously when lights are turned on.

\* Applicable to simultaneous brightness and CT adjustment in Push DIM/CCT connection.

## Driver Warnings / Please Note:

- Products shall be installed by qualified professionals.
  - Products are non-waterproof [special models excepted]. Please avoid the sun and rain. When installed outdoors, please ensure it is mounted in a water proof enclosure.
  - Good heat dissipation will extend the working life of products. Please ensure good ventilation.
  - Please check if the working voltage used complies with the parameter requirements of products.
  - The diameter of wire used must be able to load the light fixtures you connect and ensure the firm wiring.
  - Before you power on products, please make sure all the wiring is correct in case of incorrect connection that causes damage to light fixtures.
  - If a fault occurs, please do not attempt to fix products by yourself. If you have any question, please contact your suppliers.
- \* This manual is subject to changes without further notice. Product functions depend on the goods. Please feel free to contact our official distributors if you have any question.