

CCT LED Dimmer

Model No.: V2-B

Rotary dimming / Numeric display / Wireless Remote Control / Seven PWM frequency / Multiple protection

Features

- Dual knob constant voltage CCT LED dimmer with digital display.
- Rotate knob to change brightness and color temperature.
- Match with RF 2.4G single zone or multiple zone dimming remote control optional.
- 0-100% dimming smoothly without any flash.
- PWM frequency 250Hz, 500Hz, 1KHz, 2KHz, 4KHz, 8kHz or 16kHz selectable.
- Over-heat /Short circuit protection, recover automatically.

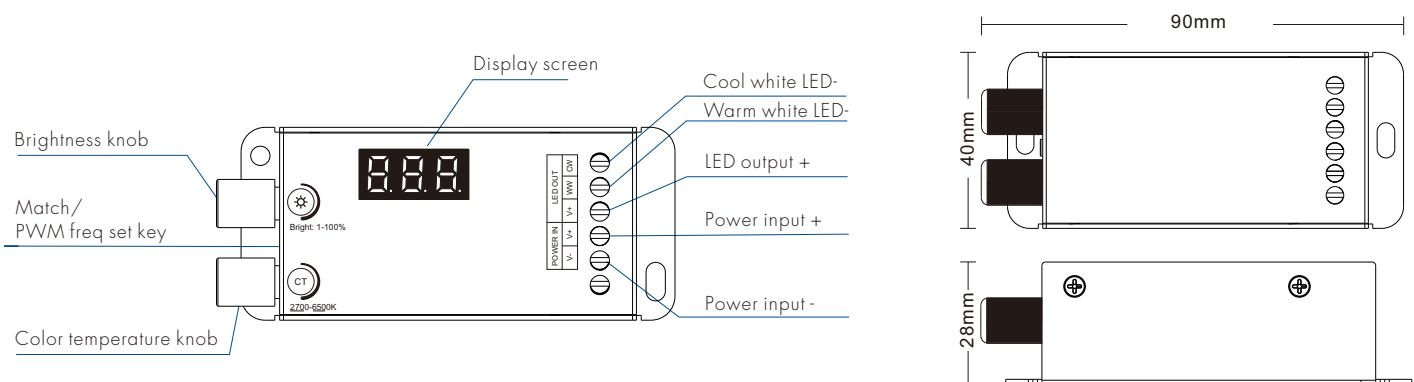


CE RoHS RED

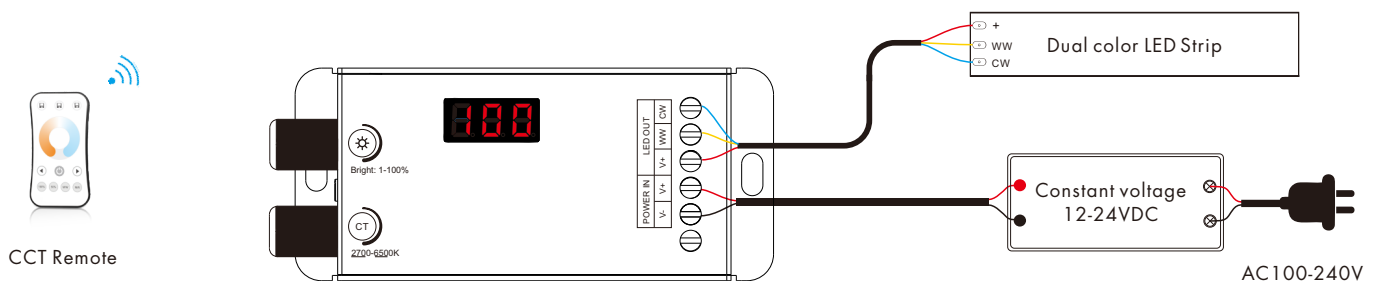
Technical Parameters

Input and Output		Dimming data		Safety and EMC	
Input voltage	12-24VDC	Input signal	Knob + RF 2.4GHz	EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4
Input current	20.5A	Control distance	30m(Barrier-free space)	Safety standard	EN 62368-1:2020+A11:2020
Output voltage	2x(12-24)VDC	Dimming gray scale	4096 (2 ¹²) level	Radio Equipment(RED)	ETSI EN 300 328 V2.2.2
Output current	2x10A@250/500/2KHz 2x7A@4K/8KHz 2x5A@16KHz	Dimming range	0-100%	Certification	CE,EMC,RED
Output power	240-480W@250/500/2KHz 168-336W@4K/8KHz 120-240W@16KHz	PWM Frequency	2KHz (default)	Package	
Environment		Warranty&Protection		Size	L100 x W46 x H38mm
Operation temperature	Ta: -30°C ~ +50°C	Warranty	5 years	Gross weight	0.092kg
Case temperature (Max.)	Tc: +85°C	Protection	Reverse polarity Over-heat Short circuit		

Mechanical Structures and Installations



Wiring Diagram



Rotary Function



Bright: 1-100%

Brightness knob:
rotate knob to adjust 1-100% brightness.
When turn off light, display OFF.



Brightness 100%



2700-6500K

Color temperature knob:
rotate knob to adjust temperature value,
from warm white to cold white (2700-6500K), display 270-650.



Warm white, 2700K

Note: When display OLA, overload alarm. When display OHA, overheat alarm.

PWM Frequency Setting

- Push twice Match key fastly, enter PWM frequency setting state,
then rotary color temperature knob to select seven PWM frequency: 250Hz(F02), 500Hz(F05), 1KHz(F10), 2KHz(F20), 4KHz(F40), 8KHz(F80) or 16KHz(F16).
Rotary brightness knob or timeout 10 seconds, automatically exit PWM frequency setting state.
- Higher PWM frequency, will cause lower output current, higher power noise, but more suitable for camera(No flickers for video).
- Default PWM frequency: 2KHz.

Color temperature output mode

Two color temperature output mode selectable: $NW=50\%WW+50\%CW$ or $NW=100\%WW+100\%CW$.
Long press match key for 10s, restore factory settings, set $NW=50\%WW+50\%CW$, display RES.
Long press match key for 15s, set $NW=100\%WW+100\%CW$, display C10.

Match Remote Control (Optional)

End user can choose the suitable match/delete ways. Two options are offered for selection:

Use Match key

Match:
Short press match key, display "RLS",
immediately press on/off key (single zone remote)
or zone key (multiple zone remote) on the remote.
Display "RLO" means match is successful.

Delete:
Long press match key for 5s to delete all match.
Display "RLE" means all matched remotes were deleted.

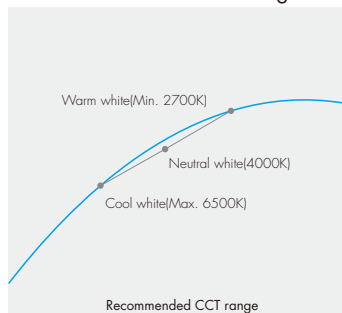
Use Power Restart

Match:
Switch off the power, then switch on power, repeat again.
Immediately short press on/off key (single zone remote)
or zone key (multiple zone remote) 3 times on the remote.
Display "RLO" means match is successful.

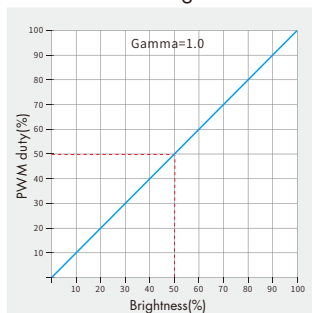
Delete:
Switch off the power, then switch on power, repeat again.
Immediately short press on/off key (single zone remote)
or zone key (multiple zone remote) 5 times on the remote.
Display "RLE" means all matched remotes were deleted.

Dimming curve

Linear dual color tuning



Dimming curve



Installation Precautions

1. The products shall not be stacked, the distance should be $\geq 20\text{cm}$, so as not to affect lifespan of the products due to poor heat dissipation.
2. The product shall not be installed close to the switching power supply with an interval of $\geq 20\text{cm}$ to avoid the radiation interference of the switching power supply.
3. The installation height shall be $\geq 1\text{m}$ from the floor to avoid shortening the remote control distance due to too weak reception signal.
4. The products are not allowed to be close to or covered by metal objects, with an interval of $\geq 20\text{cm}$ to avoid signal attenuation and shorten the remote control distance.
5. Avoid installation at the corner of the wall or the corner of the beam, with an interval of $\geq 20\text{cm}$ to avoid signal interference.