LDT-PNL-CV-DIM-K3

Three-Channel Rotary Dimming Panel

A rotary wall panel for single-colour dimming with three PWM load outputs. It can also operate as a single-zone RF control interface for compatible dimming receivers.

Model specifications

Product function	Local PWM LED controller and single-zone RF control interface
Lighting type	Single colour; three dimming outputs
Input / output voltage	12-48 VDC
LED output channels	3
Maximum output current	4 A/channel
Control	Push/rotary knob + RF 2.4 GHz
Dimming	0-100%; 256 levels
PWM frequency	2 / 8 kHz
Operating temperature	-30 to +55 °C
Maximum case temperature	+85 °C
Panel dimensions	86 x 86 x 48 mm
Finish options	White or black glass; confirm selected finish

The following technical-reference pages retain the complete diagrams, dimensions, settings and installation instructions. Select the lighting variant stated on this cover; family diagrams may also illustrate other variants.

RF | DIM / DUO / RGB / RGBW

Wall Mounted Rotary Panel



CE RoHS

Features

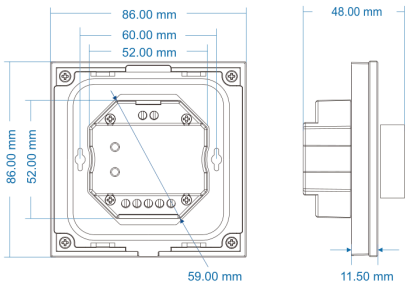
- Rotary panel single color, dual color or RGB PWM constant voltage controller, can also be used as one zone RF remote.
- When work as controller, compatibility with RF 2.4G single zone or multiple zone remote control.
- When used as RF remote, can remote control multiple RF 2.4G LED controllers.
- Rotate knob to change RGB color, color temperature or brightness.
- 256 levels 0-100% dimming smoothly without any flash.
- PWM frequency 2KHz or 8KHz selectable.
- Push/Rotate with LED indicator.
- Over-heat / Over-load / Short circuit protection, recover automatically.
- White & Black glass panel available.

Technical Parameters

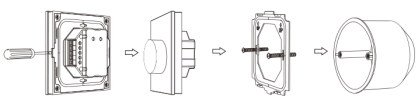
Input and Output			
Model No.	DIM	DUO	RGB
Input voltage	12-48VDC	12-48VDC	12-48VDC
Input current	12.5A	10.5A	12.5A
Output voltage	3 x (12-48)VDC	2 x (12-48)VDC	3 x (12-48)VDC
Output current	3CH, 4A/CH	2CH, 5A/CH	3CH, 4A/CH
Output power	3 x (48-196)W	2 x (60-240)W	3 x (48-196)W
Output type	Constant voltage	Constant voltage	Constant voltage
PWM frequency	2K/8KHz	2K/8KHz	2K/8KHz
Light type	Single color	Dual color	RGB

Safety and EMC	
EMC standard	EN IEC 55015/ EN IEC 61547 ETSI EN 301 489-1/-3
Safety standard	EN 61347-1/-2
Radio equipment	ETSI EN 300 440
Environment	
Operation temperature	Ta: -30˚C ~ +55˚C
Case temperature (Max.)	Tc: +85˚C
Package	
Size	L112 x W112 x H60mm
Gross weight	0.220kg

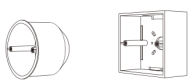
Mechanical Structures and Installations



Installation diagram:



Typical base as below:



Knob Function

DIM panel

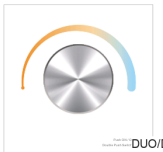


- **Push:** Turn on or off light.

After turn on light:

- **Rotate:** Rotate knob to adjust brightness (2.5 turns, 50 levels).
- **Long push(1-6s):** Continuous 256 levels brightness adjustment.

DUO panel



- **Push:** Turn on or off light.

After turn on light:

- **Rotate:** Rotate knob to change color temperature or brightness (2.5 turns, 50 levels).
- **Push twice:** Switch between color temperature or brightness adjustment.
- **Long push(1-6s):** Continuous 256 levels brightness adjustment.

RGB panel



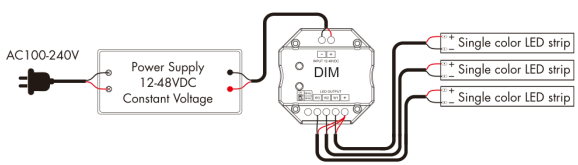
- Push: Turn on or off light.

After turn on light:

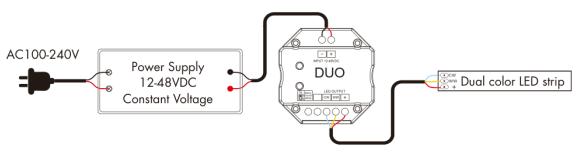
- Rotate: Rotate knob to change RGB color (3 turns, 60 colors) or brightness (2.5 turns, 50 levels).
- Push twice: Switch between RGB color or brightness adjustment.
- Long push(1-6s): Continuous 256 levels saturation or brightness adjustment.

Wiring Diagram

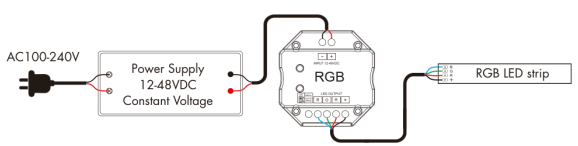
- DIM



- DUO



- RGB



Match Remote Control (two match ways)

The rotary panel controller can also match with the RF remote (optional).
End user can choose the suitable match/delete ways. Two options are offered for selection:

Use Knob

Match:
Turn on light, turn off,
immediately push the knob for 5s,
then press on/off key (single zone remote)
or zone key (multiple zone remote) of the RF remote with in 5s.
The LED indicator fast flash 3 times means match is successful.

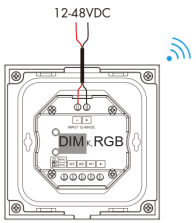
Delete:
Turn on light, turn off, immediately push the knob for 10s,
delete all matched RF remote.
The LED indicator fast flash 6 times means all matched remotes were deleted.

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.
The light blinks 3 times 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.
The light blinks 5 times means all matched remotes were deleted.

Wiring Diagram for Rotary Panel Work as RF Remote



When the rotary panel controller work as RF remote, it need match with other RF 2.4G LED controllers.
End user can choose the suitable match/delete ways. Two options are offered for selection:

Use the controller's Match key

Match:
Short press match key,
immediately short press the knob of the rotary panel.
The LED indicator fast flash a few times means match is successful.

Delete:
Press and hold match key for 5s to delete match,
The LED indicator fast flash a few times means match was deleted.

Use Power Restart

Match:
Switch off the power of the receiver, then switch on power, repeat again.
immediately short press the knob 3 times on the rotary panel.
The light blinks 3 times means match is successful.

Delete:
Switch off the power of the receiver, then switch on power, repeat again.
immediately short press the knob 5 times on the rotary panel.
The light blinks 5 times means match was deleted.

PWM Frequency Setting



We can select 2KHz or 8KHz PWM frequency by one DIP switch.
Higher PWM frequency, will cause lower output current, higher power noise,
but more suitable for camera(No flickers for video).