LDT-BTN-RF-1CV-4A

Inline One-Button RF LED Dimmer

An inline dimmer for single-colour constant-voltage LED strips with direct one-button operation. It can receive a compatible RF DIM remote and can also act as an RF control interface for compatible receivers.

Model specifications

Input / output voltage	5-24 VDC
Output type	1-channel constant-voltage PWM
Maximum output current	4 A
Maximum output power	20-96 W
Controls	Local button + RF 2.4 GHz
Additional function	RF transmitter for compatible receivers
Dimming range	1-100%
Dimming resolution	4096 levels
PWM frequency	2 kHz
Dimming curve	Logarithmic
RF distance	Up to 30 m in unobstructed space
Operating temperature	-25 to +55 °C
Maximum case temperature	+85 °C
IP rating	IP20
Body cross-section	34.5 x 15 mm
DC connector	5.5 mm outside / 2.1 mm inside diameter
Protection	Reverse polarity, short circuit and overheat

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

One-Button RF LED Dimmer

Feature

- Use to control monochrome constant voltage LED strips.
- One button for on/off, and brightness adjustment.
- 4096 levels dimming smoothly without any flash.
- Operate with LED indicator light.
- Match with RF 2.4G single zone or multiple dimming remote control.
- Used as RF remote control to output RF 2.4G signal, remote control of other RF LED controllers or RF dimming LED drivers.



CE RoHS

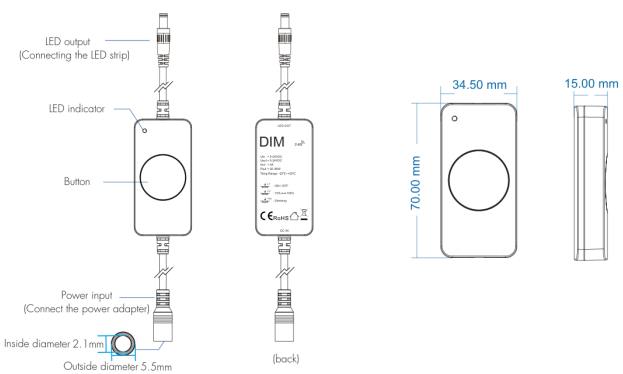
Technical Parameters

Input and Output	
Input voltage	5-24VDC
Output voltage	5-24VDC
Output current	4A
Output power	20-96W
PWM Frequency	2000Hz
Dimming curve	Logarithmic
Warranty and Protection	
Warranty	5 years
Protection	Reverse polarity, Short circuit, Over heat

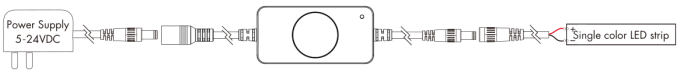
Dimming data	
Input signal	One-button + RF 2.4GHz
Control distance	30m(Barrier-free space)
Dimming gray scale	4096 levels
Dimming range	1 - 100%
Environment	
peration temperature	Ta: -25 °C ~ +55 °C
Case temperature (Max.)	Tc: +85 °C
IP rating	IP20

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
Certification	CE RoHS
Package	
Size	110x57x28mm(LxWxH)
Gross weight	0.048kg

Mechanical Structures and Installations



Wiring Diagram



Button Function

Short press: Turn on or off light.
Double click: Switch 10% or 100% brightness.
Long press (1-6s): Continuous brightness adjustment, dimming range 1-100%.

DIM Match RF Remote Controller (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.

DIM Used as RF Remote Controller

The DIM can be matched with one or more RF LED controllers/RF dimming drivers to remotely control other fixtures with one-button operation.
For example, two DIM controllers are matched with each other for synchronized control.
End user can choose the suitable match/delete ways.

Use the controller's Match key

Match:
Short press the controller/power supply's match key, immediately press the button.
The LED indicator fast flash a few times means match is successful.

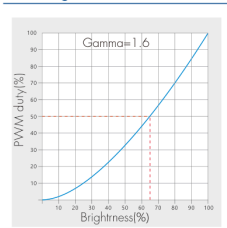
Delete:
Press and hold the controller/power supply's match key 5s,
The LED indicator fast flash a few times means all matched remotes were deleted.

Use Power Restart

Match:
Switch off the power of the controller, then switch on power, repeat again.
Immediately short press the button 3 times.
The light blinks 3 times means match is successful.

Delete:
Switch off the power of the controller, then switch on power, repeat again.
Immediately short press the button 5 times.
The light blinks 5 times means all matched remotes were deleted.

Dimming Curve



Packing List



LED Dimmer
1 pcs



1 pcs



DC Extension Cable
1 pcs