LDT-RF-HV-DIM-1A5

High-Voltage Single-Colour LED Strip RF Dimmer

Control a compatible high-voltage single-colour LED strip using RF or a wired AC push switch. This compact single-channel dimmer is mains-powered and provides a high-voltage DC output; it is not a low-voltage LED-strip controller.

Model specifications

Product function	Single-channel high-voltage LED strip dimmer
Input voltage	100-240 VAC
Input current	1.7 A
Output voltage	100-240 VDC
Maximum output current	1.5 A
Output power	150-360 W
Control inputs	Compatible RF 2.4 GHz + AC Push-Dim
Dimming	0-100%; 4096 levels
PWM frequency	2 kHz
Paired remotes	Up to 10
RF distance	Up to 30 m in unobstructed space
Operating temperature	-30 to +55 °C
Maximum case temperature	+85 °C
Body dimensions (drawing)	56 x 49.5 x 28 mm
Mounting	Installation clip; keep clear of water and high heat

Dangerous high voltage is present at the input and LED output. Use only a compatible high-voltage single-colour LED strip. Do not connect 12/24 V strips or use this as a general-purpose lamp dimmer.

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.

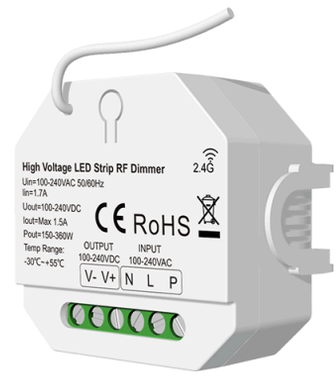
High voltage LED Strip RF dimmer

Model No.: LDT-RF-HV-DIM-1A5

1 Channel / Step-less Dimming / Push-Dim / Wireless Remote Control

Features

- High voltage LED Strip RF 2.4G dimmer, can control maximum about 25 meters of high voltage LED strip, different LED strip may have difference.
- Match with RF 2.4G single zone or multiple zone single color remote control.
- One RF controller accept up to 10 remote control.
- Auto-transmitting function: Controller automatically transmit signal to another controller with 30m control distance.
- Synchronize on multiple number of controllers.
- 4096 levels 0-100% dimming smoothly without any flash.
- Light on/off fade time 3s selectable.
- Connect with external AC push switch to achieve on/off and 0-100% dimming function.



FC CE RoHS emc LVD RED

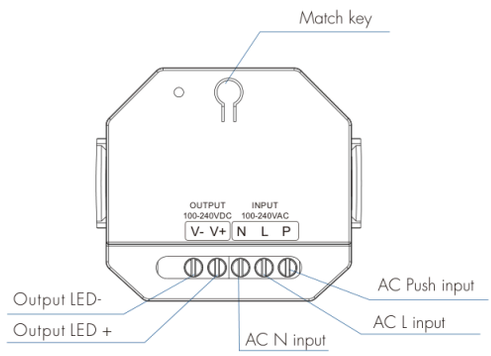
Technical Parameters

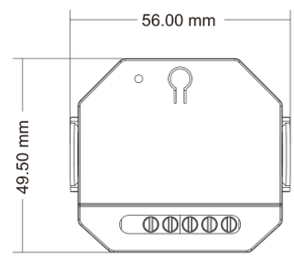
Input and Output	
Input voltage	100-240VAC
Input current	1.7A
Output voltage	100-240VDC
Output current	Max 1.5A
Output power	150-360W
Environment	
Operation temperature	Ta: -30°C ~ +55°C
Case temperature (Max.)	Tc: +85°C

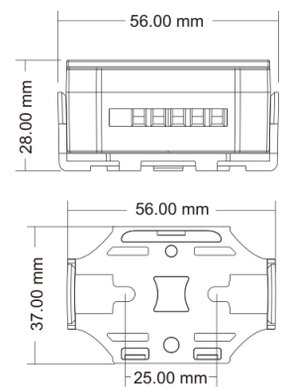
Dimming data	
Input signal	RF 2.4GHz + Push Dim
Dimming gray scale	4096 (2^12) levels
Dimming range	0-100%
PWM Frequency	2KHz
Package	
Size	L56xW56xH35mm
Gross weight	0.067kg

Safety and EMC	
EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4
Safety standard(LVD)	EN 62368-1:2020+A11:2020
Radio Equipment(RED)	ETSI EN 300 328 V2.2.2
Certification	CE,EMC,LVD,RED
Warranty	
Warranty	5 years

Mechanical Structures and Installations







Match remote control

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

Use the Match key

Match:
Short press match key,
immediately press on/off key (single zone remote) or zone key (multiple zone remote) on the remote.
The LED indicator fast flash a few times means match is successful.

Delete:
Press and hold match key for 5s,
The LED indicator fast flash a few times means all matched remotes were deleted.

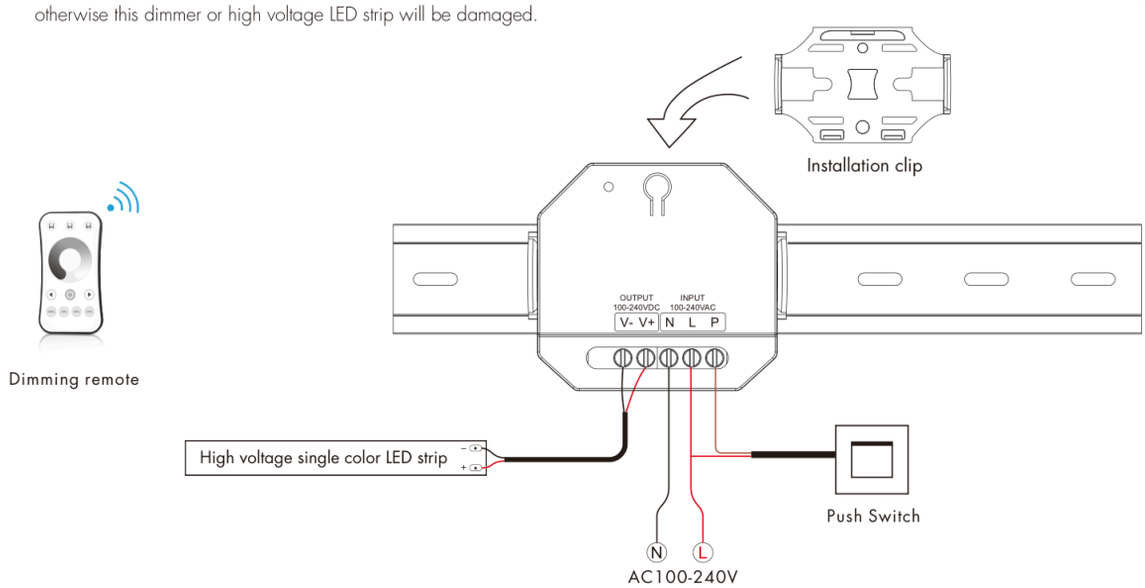
Use Power Restart

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

⚠ **Caution:** This controller apply for high voltage LED strip, please carefully ensure all wire connections and polarities are correct and secure before applying power, otherwise this dimmer or high voltage LED strip will be damaged.



Note:

1.The installation must be installed or removed by a professional electrician.

2.Please keep the device out of the reach of children.

3.Please keep away from water, humid or hot environment.

4.The device should be kept away from strong signal sources (such as microwave ovens) to avoid signal interruption and cause the device not to work properly.

5.Avoid placing the device close to or near high-density materials (such as metal, concrete walls, etc.), which will reduce or block the wireless signal.

Fade in and Fade out Setting

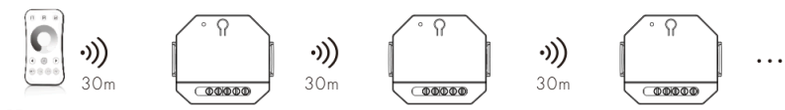
Long press match key 5s, then short press match key 3 times,
The lighting effect will be set to the fade in and fade out in 3s, the indicator light of LED controller blinks 3 times.
Long press match key 10s, restore factory default parameter, the light on/off time restores to 0.5s.

AC Push Dim Function

Short press: Turn on or off light.
Long press (1-6s): Press and hold to step-less dimming, With every other long press, the light level goes to the opposite direction.
Dimming memory: Light returns to the previous dimming level when switched off and on again, even at power failure.

Application notes

1. All the receivers in the same zone.



Auto-transmitting: One receiver can transmit the signals from the remote to another receiver within 30m,
as long as there is a receiver within 30m, the remote control distance can be extended.
Auto-synchronization: Multiple receivers within 30m distance can work synchronously when they are controlled by the same remote.
Receiver placement may offer up to 30m communication distance. Metals and other metal materials will reduce the range.
Strong signal sources such as WiFi routers and microwave ovens will affect the range.
We recommend for indoor applications that receiver placements should be no further apart than15m.

2. Each receiver(one or more) in a different zone, like zone 1, 2, 3 or 4.

