

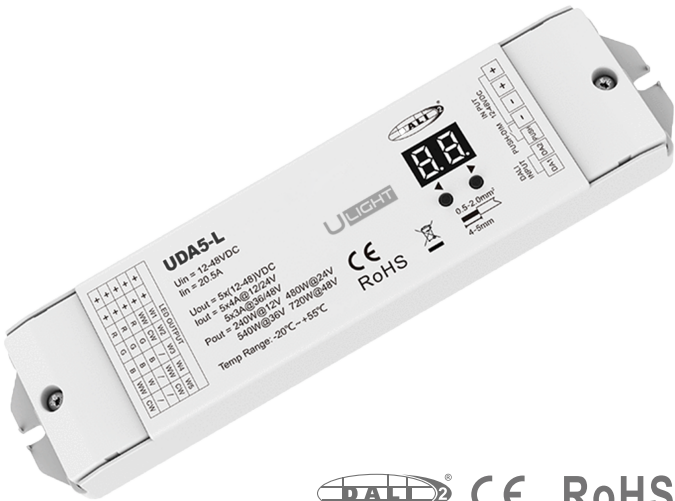
5 Channel Constant Voltage DALI LED Dimmer

UDA5-L

a010093



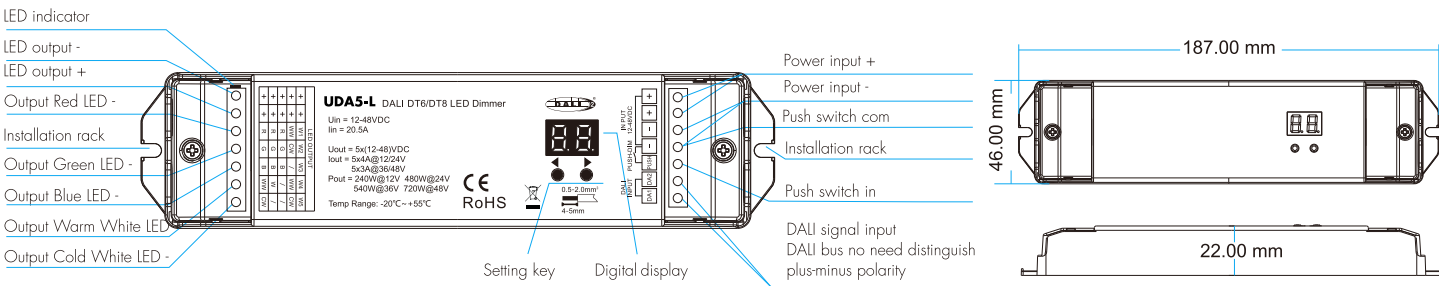
- 5 channel constant voltage DALI LED Dimmer with digital display.
- DT6 dimming / DT8-TC color temperature / DT8-RGB / DT8-RGBW / DT8-RGB+CCT light type selectable.
- For DT6 dimming, support 1 DALI address (5 channel synchronized dimming) or 5 DALI address (5 channel independent dimming).
- In accordance with DALI standard protocol IEC 62386-102, IEC 62386-207, IEC 62386-209 and in compliance with DALI products from other international incorporation.
- DALI address can be manually assigned and shown in digital display or automatically assigned by DALI master.
- Connect with external push switch to achieve on/off, brightness, color temperature and RGB color adjustment.
- PWM digital dimming, standard DALI logarithmic dimming curve.
- PWM frequency 1000/2000/4000/8000/16000Hz selectable.
- Over-load / Short circuit / Reverse protection, recover automatically.



Technical Parameters

Input and Output		Dimming data		Safety and EMC	
Input voltage	12-48VDC	Input signal	DALI , Push Dim	EMC standard	EN IEC 55015:2019+A11:2020 EN 61547:2009 EN IEC 61000-3-2:2019+A1:2021 EN 61000-3-3:2013+A1:2019
Output voltage	5 × (12-48)VDC	Dimming range	1 -100%	Safety standard	EN 61347-1:2015+A1:2021 EN 61347-2-13:2014+A1:2017
Output current	5×4A@12/24V 5×3A@36/48V	Dimming curve	Logarithmic	Certification	CE
Output power	240W@12V 480W@24V 540W@36V 720W@48V	PWM Frequency	1000/2000/4000/ 8000/16000Hz	Environment	
Output type	Constant voltage	Package		Operation temperature	Ta: -20℃ ~ +55℃
Warranty and Protection		Size	L190x W48 x H25mm	Case temperature (Max.)	Tc: +85℃
Warranty	5 years	Gross weight	0.152kg	IP rating	IP20
Protection	Overload, Short circuit, Reverse protection.				

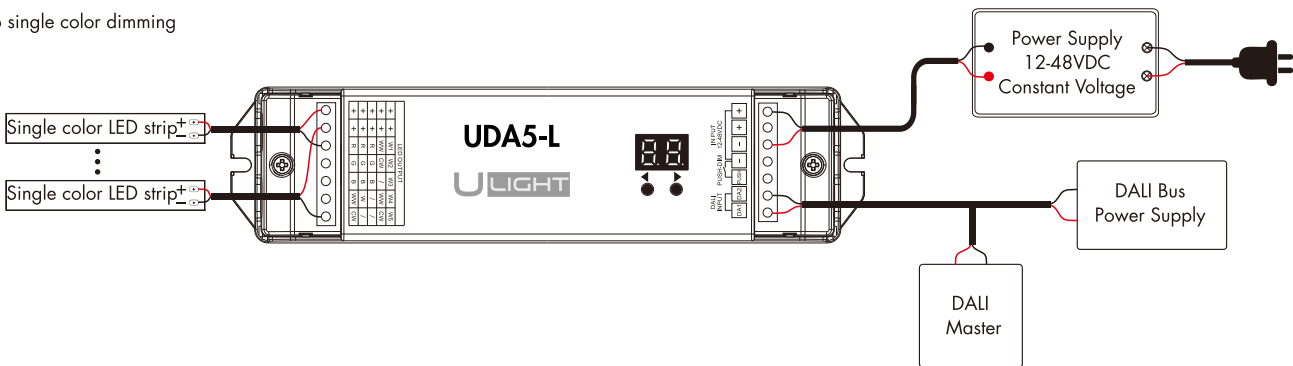
Mechanical Structures and Installations



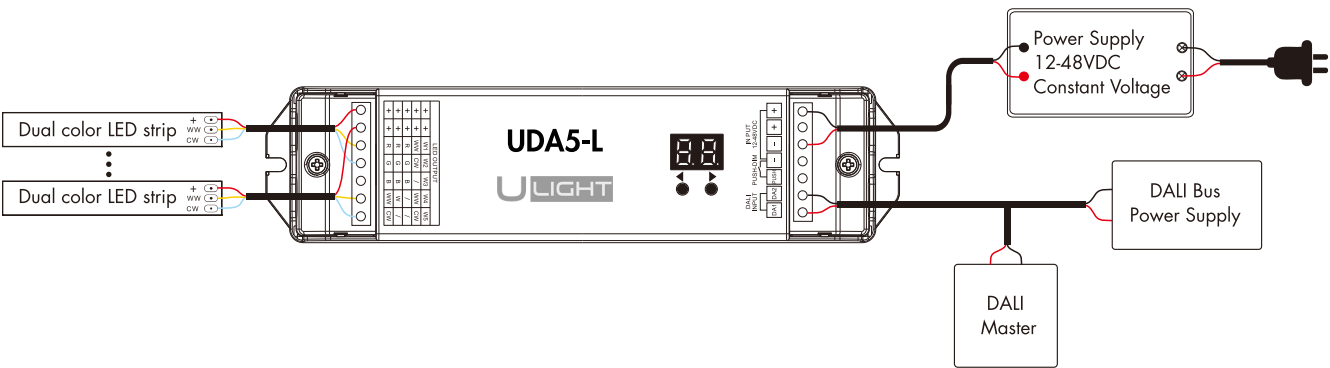
Wiring Diagram

1. UDA5-L connect with DALI master

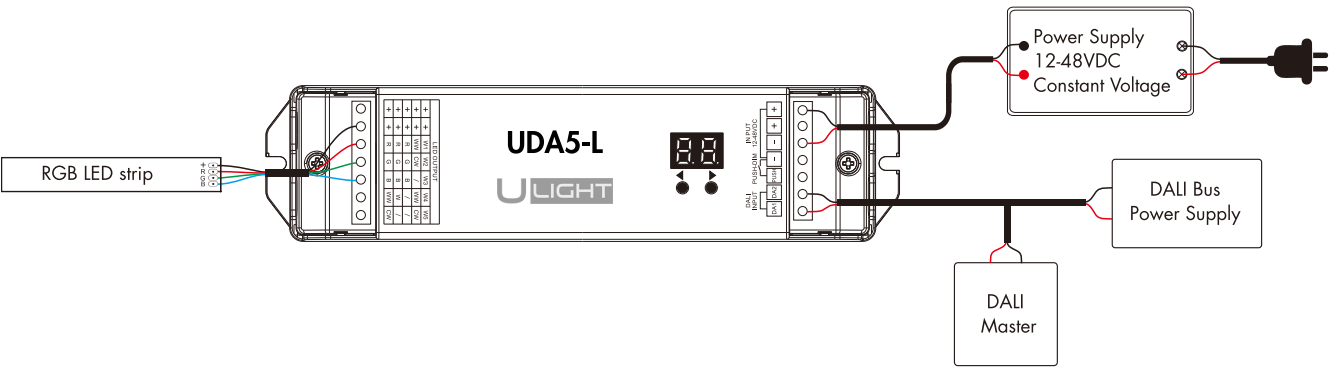
- Apply to single color dimming



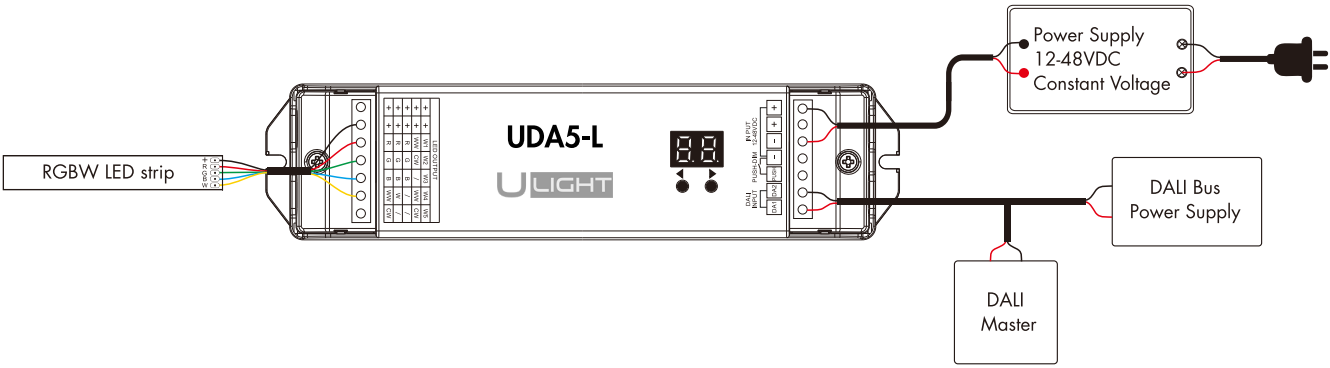
- Apply to color temperature dimming



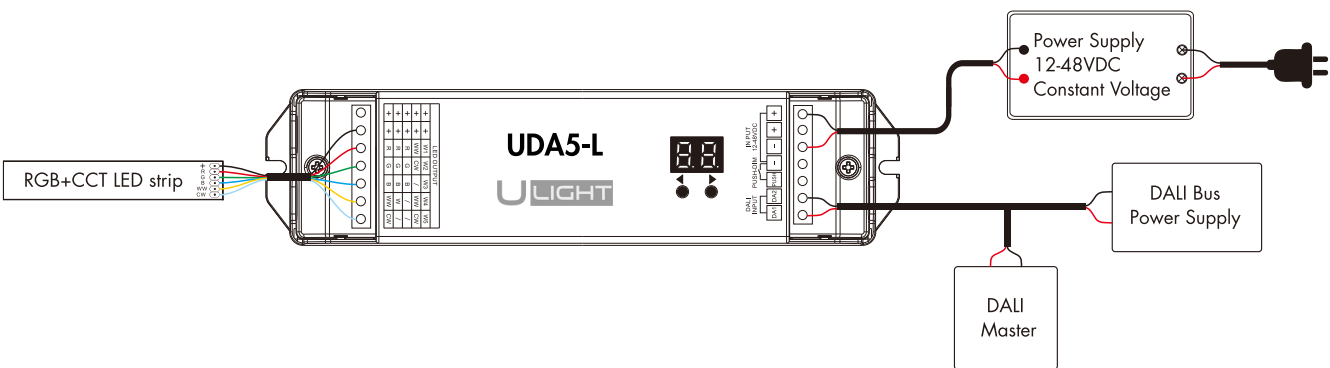
- Apply to RGB dimming



- Apply to RGBW dimming



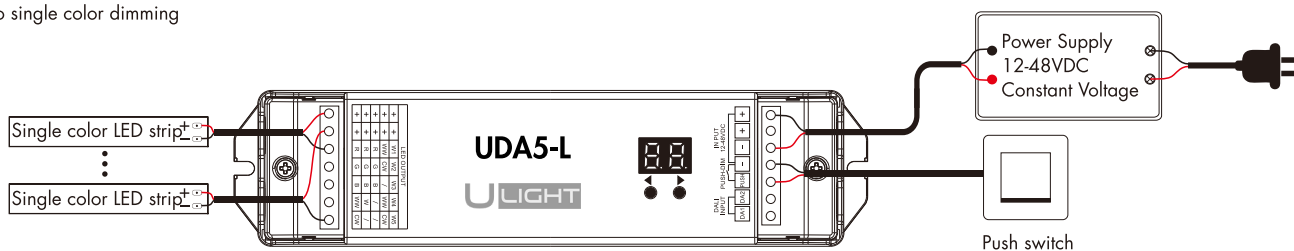
- Apply to RGB+CCT dimming



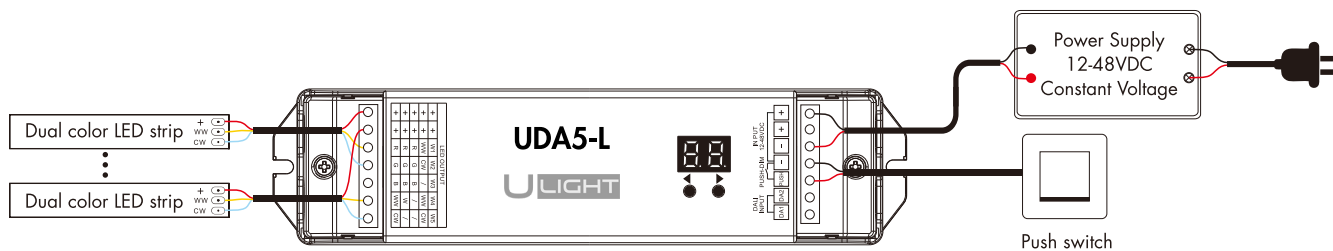
Note: It is not recommended to use both the DALI master and the self-resetting switch for dimming control.

2. UDA5-L connect with push switch

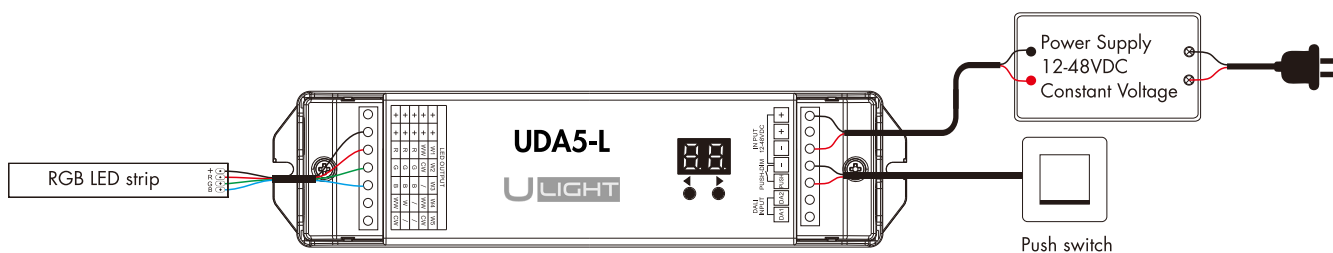
- Apply to single color dimming



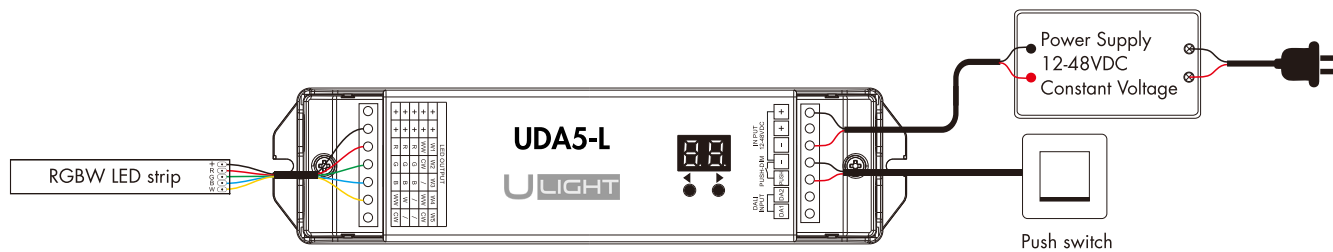
- Apply to color temperature dimming



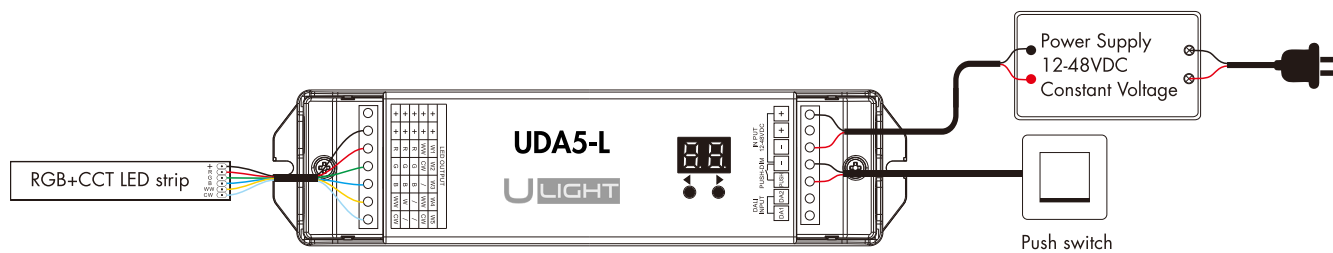
- Apply to RGB dimming



- Apply to RGBW dimming



- Apply to RGB+CCT dimming



Light Type and PWM Frequency Setting

1. Setting the light type

- Please set the light type according to the connected LED strip type.
- Long press ◀ and ▶ buttons at the same time for 2s, ready to set the lighting type, the digital display flashes.
- Short press ◀ or ▶ button to switch 6 light types in sequence: Single color (C1, the dimmer occupy 1 DALI address), Color Temperature (C2), RGB (C3), RGBW (C4), RGB+CCT (C5), 5 channel single color (5C, the dimmer occupy 5 DALI address).
- 10s without operation, automatically exit the light type setting state, the digital display stops flashing.

2. Setting PWM Frequency

- After completing the light type setting, long press ◀ and ▶ buttons at the same time for 2s again, ready to set PWM frequency, the digital display flashes.
- Short press ◀ or ▶ button to switch 5 kinds of PWM frequency in sequence: 1000Hz(F1), 2000Hz(F2), 4000Hz(F4), 8000Hz(F8), 16000Hz(FA).
- 10s without operation, automatically exit the PWM frequency setting state, the digital display stops flashing.

DALI Address Setting

Set DALI Address via buttons

- Long press ◀ or ▶ button for 2s, prepare for set the start DALI address, the digital display flashes.
- Short press ◀ or ▶ button to set DALI address, long press ◀ or ▶ button for continuous address change.
- The DALI address can be manually assigned from 00-63-FF.
- by factory defaults, no DALI address is assigned for the dimmer, and digital displays "FF".
- 10s without operation, automatically exit the DALI address setting state, the digital display stops flashing.

DALI address assigned by DALI masters

DALI address can also be assigned by DALI Master controller automatically.

Please refer to user manuals of compatible DALI Masters for specific operations.

The digital display will show "AU" When the DALI master is assigning address.

After address is assigned, the digital display will show the start DALI address "xx", xx is from 00 to 63.

Push Switch Function

1. Single color dimming type(1 channel or 5 channel):

- **Short press:** Turn on/off the light.
- **Long press (1-6s):** Step-less dimming, with every other long press, the light level goes to the opposite direction, dimming range 1%-100%.
- **Double click:** Switch between 10% and 100% brightness.

Note: The push switch synchronizes the dimming control of the 5 channels.

2. Color temperature dimming type:

- **Short press:** Turn on/off the light.
- **Long press (1-6s):** Default brightness adjustment, with every other long press, the light level goes to the opposite direction, dimming range 1%-100%.
- **Double click:** Switch between three levels color temperature (warm white, neutral white, cool white) in sequence.
at the same time, enter the state of long-press (1-6s) to adjust color temperature.
After 5s of no operation, it will automatically exit color temperature adjustment state.

3. RGB dimming type:

- **Short press:** Turn on/off the light.
- **Long press (1-6s):** Default brightness adjustment, with every other long press, the light level goes to the opposite direction, dimming range 1%-100%.
- **Double click:** Switch between color light (RGB) and mixed white light (current color light + 50% saturation).
at the same time, enter the state of long press (1-6s) to adjust color light or saturation.
After 5s of no operation, it will automatically exit color light or saturation adjustment state.

4. RGBW dimming type:

- **Short press:** Turn on/off the light.
- **Long press (1-6s):** Default brightness adjustment, with every other long press, the light level goes to the opposite direction, dimming range 1%-100%.
- **Double click:** Switch between color light (RGB) and white light (W).
at the same time, enter the state of long press (1-6s) to adjust color light or white light brightness.
After 5s of no operation, it will automatically exit color light or white light brightness adjustment state.

5. RGB+CCT dimming type:

- **Short press:** Turn on/off the light.
- **Long press (1-6s):** Default brightness adjustment, with every other long press, the light level goes to the opposite direction, dimming range 1%-100%.
- **Double click:** Switch between color light (RGB) and color temperature.
at the same time, enter the long press (1-6s) to adjust color light or color temperature state.
After 5s of no operation, it will automatically exit color light or color temperature adjustment state.

Safety & Warnings

- DO NOT install with power applied to device.
- DO NOT expose the device to moisture.