

# DA4-WPS



## Waterproof 4 Channel Constant Voltage DALI LED Dimmer

- 4 channel constant voltage DALI LED Dimmer with digital display, 5A per channel.
- DT6 dimming or DT8-TC color temperature or DT8-RGB or DT8-RGBW light type selectable.
- For DT6 dimming, support 1-4 DALI address, 4 channel work separately.
- 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.
- PWM digital dimming, standard DALI logarithmic dimming curve.
- PWM frequency 1000/2000/4000/8000/16000Hz selectable.
- With fast self-testing function.
- Over-heat / Short circuit protection, recover automatically.

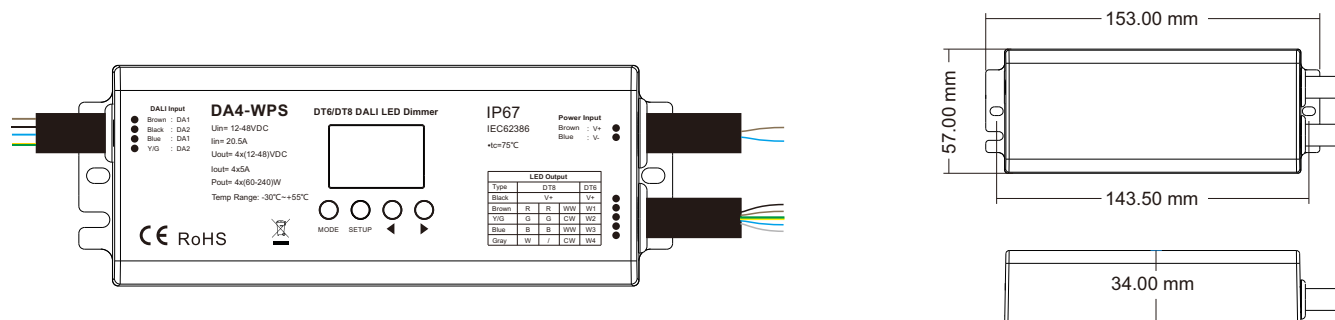


CE RoHS

### Technical Parameters

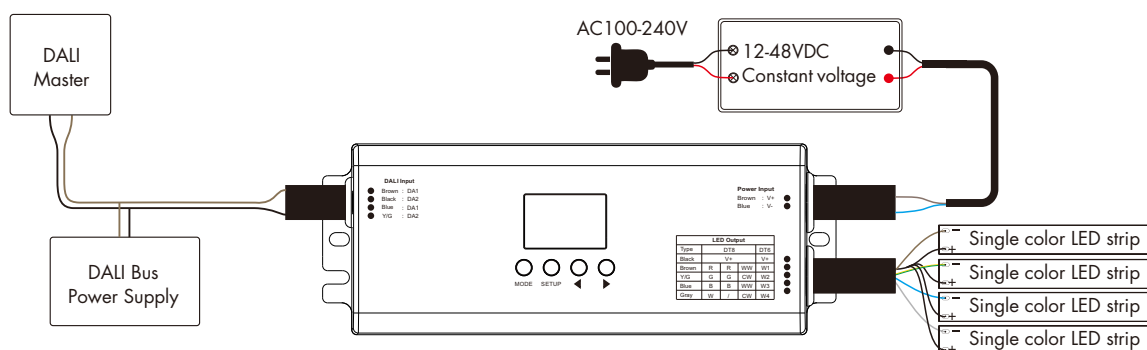
Input and Output		Dimming data		Safety and EMC	
Input voltage	12-48VDC	Input signal	DALI	EMC standard	EN IEC 55015:2019+A11:2020
Input current	20.5A	Dimming range	0 -100%		EN 61547:2009
Output voltage	4x (12-48)VDC	Dimming curve	Logarithmic		EN IEC 61000-3-2:2019+A1:2021
Output current	4x5A@12/24V 4x3A@36/48V	PWM Frequency	1000/2000/4000/8000/16000Hz	EN 61000-3-3:2013+A1:2019	
Output power	4x60W@12V 4x120W@24V 4x108W@36V 4x144W@48V	Warranty and Protection		Safety standard	EN 61347-1:2015+A1:2021
Output type	Constant current	Warranty	5 years		EN 61347-2-13:2014+A1:2017
Package		Protection	Over-heat Short circuit	Environment	
Size	L165 x W98 x H72mm			Operation temperature	Ta: -30°C ~ +55°C
Gross weight	0.492kg			Case temperature (Max.)	Tc: +75°C
				IP rating	IP67

### Mechanical Structures and Installations

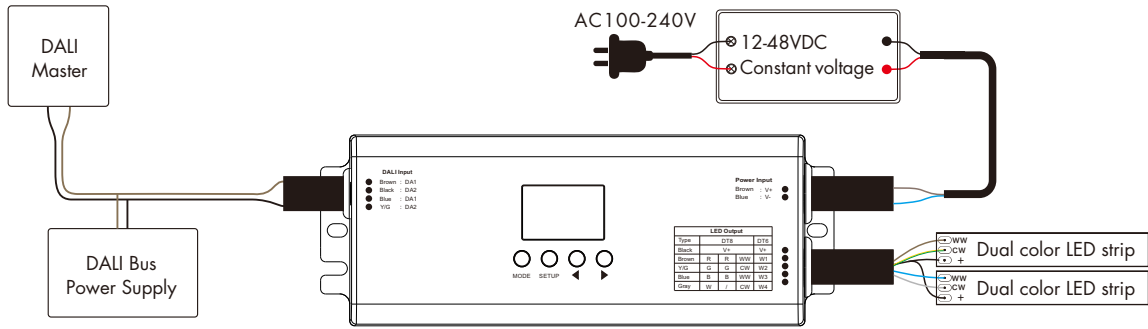


### Wiring Diagram

- DA4-WPS for single color dimming ("1CH/2CH/3CH/4CH")

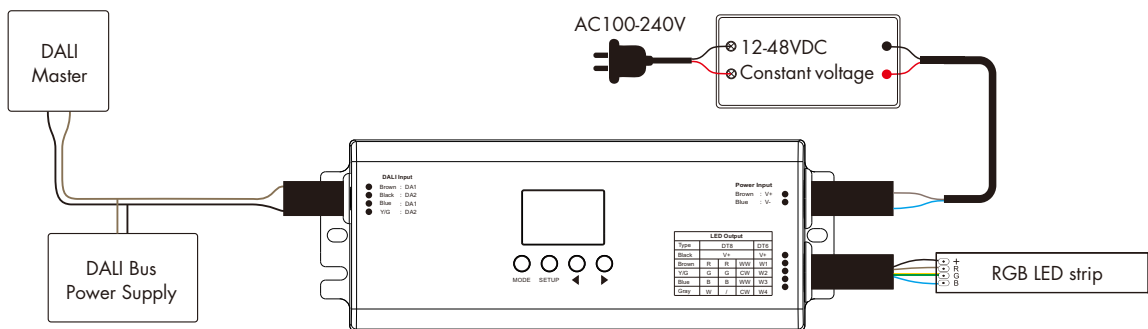


- DA4-WPS for dual color dimming("C-2")



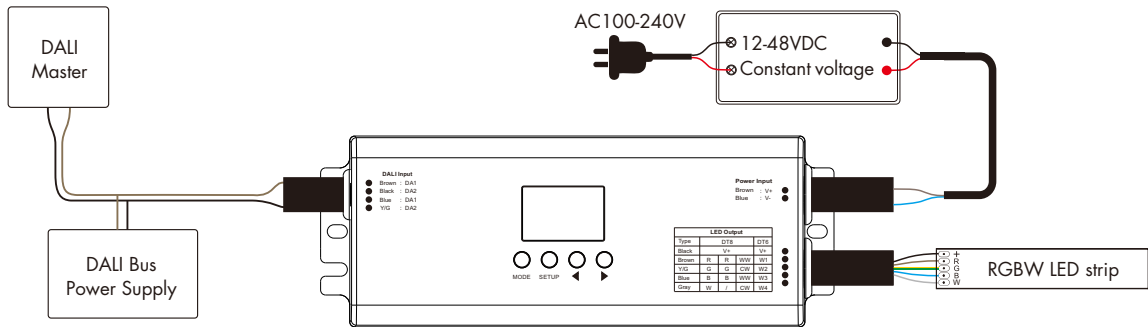
Note: The 3/4 LED channel output is same as 1/2 LED channel.

- DA4-WPS for RGB dimming("C-3")



Note: The 4th LED channel no output.

- DA4-WPS for RGBW dimming("C-4")



## Operation

### System parameter setting

- Short press the MODE key, enter system parameters setting state: DALI address, light type, PWM frequency.
- Short press the MODE key, switch three setting items.
- The setting is completed or timeout for 10 seconds, exit system parameter setting state.

### Setting the light type

- When using it for the first time, please set the light type according to the application.
- When short press MODE key to enter the light type setting, then short press SETUP key to set the light type, the digital display flashes.
- Short press the ◀ or ▶ key to switch the single color ("1CH/2CH/3CH/4CH"), dual color ("C-2"), RGB ("C-3") or RGBW ("C-4") light type.
- Short press the MODE key or timeout for 10 seconds to exit the light type setting.

### Light type setting instructions:

- When set "1CH" type, DT6 dimming, the dimmer occupy 1 DALI address, CH1,CH2,CH3,CH4 will be the same DALI address, 4-channel output is the same.
- When set "2CH" type, DT6 dimming, the dimmer occupy 2 DALI address, CH1, CH3 will be same DALI address A, CH2,CH4 will be same DALI address A+1.
- When set "3CH" type, DT6 dimming, the dimmer occupy 3 DALI address, CH1 will be DALI address A, CH2 will be DALI address A+1, CH3 will be DALI address A+2, CH4 no DALI address and no output.
- When set "4CH" type, DT6 dimming, the dimmer occupy 4 DALI address, CH1 will be DALI address A, CH2 will be DALI address A+1, CH3 will be DALI address A+2, CH4 will be DALI address A+3.
- When set "C-2" type, DT8-TC dimming, the dimmer occupy 1 DALI address, CH1 and CH3 synchronized output VW (warm white), CH2 and CH4 synchronized output CW (cool white).
- When set "C-3" type, DT8-RGB dimming, the dimmer occupy 1 DALI address, the 4th channel does not output.
- When set "C-4" type, DT8-RGBW dimming, the dimmer occupy 1 DALI address, 4 channels are output independently.



DT6, 1CH



DT6, 2CH



DT6, 3CH



DT6, 4CH



DT8-TC



DT8-RGB



DT8-RGBW

For example, the start DALI address is 32:

When set "1CH" type, the dimmer occupy 1 DALI address and address is 32.

When set "2CH" type, the dimmer occupy 2 DALI addresses and address is 32,33.

When set "3CH" type, the dimmer occupy 3 DALI addresses and address is 32,33,34.

When set "4CH" type, the dimmer occupy 4 DALI addresses and address is 32,33,34,35.

When set "C-2" type, the dimmer occupy 1 DALI address and address is 32.

When set "C-3" type, the dimmer occupy 1 DALI address and address is 32.

When set "C-4" type, the dimmer occupy 1 DALI address and address is 32.

### Set DALI Address via buttons

- When short press MODE key to enter DALI address setting("A00-AFF"), then short press ◀ or ▶ key, prepare for set the start DALI address, the digital display flashes, then press ◀ or ▶ key to set the start DALI address.
- Short press MODE key or timeout 10s, quit start DALI address setting.
- The start DALI address can be manually assigned from 00-63-FF.
- By factory defaults, no DALI address is assigned for the dimmer, and digital display shows "AFF".

### 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 "AAU" When the DALI master is assigning address.
- After address is assigned, the digital display will show the DALI address "Axx", xx is from 00 to 63.
- For the DT6 2/3/4 channel dimming type, the dimmer occupies 2/3/4 DALI addresses, use the DALI master assigning address may result in discontinuous addresses, then the digital display will show the DALI start address "Uxx".

### Set PWM frequency

- When short press MODE key to enter PWM frequency setting("Fxx"), then short press the SETUP key to set the PWM frequency, the digital display flashes.
- Short press ◀ or ▶ key to switch between 1000Hz("F10"), 2000Hz("F20"), 4000Hz("F40") or 8000Hz("F80"). Higher PWM frequency, will cause lower output current, higher power noise, but more suitable for camera (No flickers for video).
- Short press MODE key or timeout 10s, quit PWM frequency setting.

### Restore factory default parameter

- Long press ◀ and ▶ key for 2s, restore factory default parameter, display "RES".
- Factory default parameter: no DALI address is assigned, DT6 four channel dimming, PWM frequency is 2000Hz.
- Long press MODE & ▶ key for 2s, enter fast self-testing, the four output channels will be on orderly then all on.

## Safety & Warnings

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