V3-Q(D), V3-Q(U)

2-Button RGB Constant Voltage LED Controller
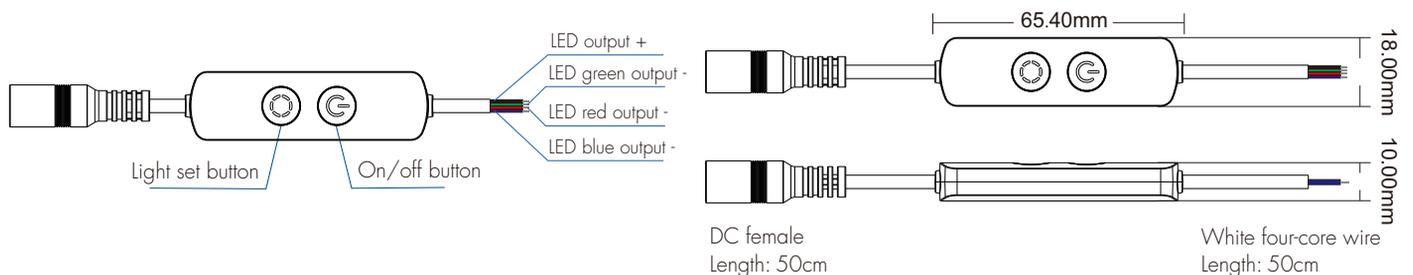

V3-Q(D)

V3-Q(U)

CE RoHS

- 2-button RGB LED controller with 3-channel constant voltage output.
- The buttons support on/off light, adjust brightness, color, dynamic mode and dynamic speed.
- 4096 levels dimming smoothly without any flash.
- Light on fade time 1s, light off fade time 2s.
- 2000Hz or 8000Hz PWM frequency can be set.
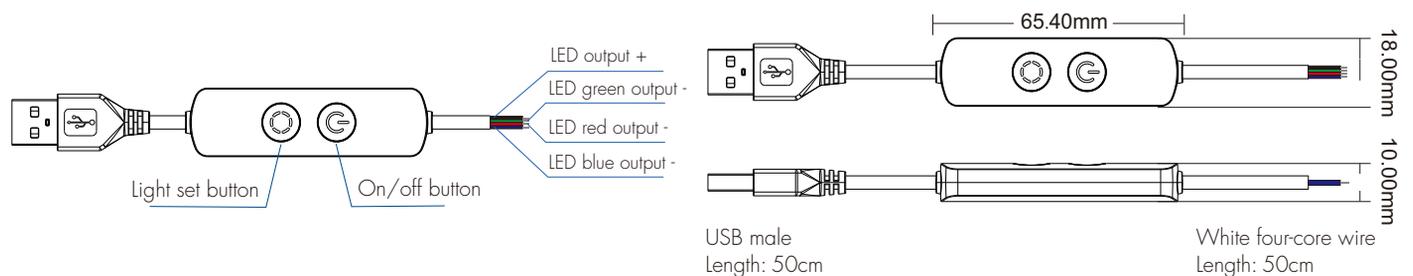- Apply to table lamps, wall lamps, bedside lamps and so on.

Technical Parameters

Input and Output

Input voltage	V3-Q(D): 5-24VDC V3-Q(U): 5VDC
Output voltage	V3-Q(D): 5-24VDC V3-Q(U): 5VDC
Output current	3CH, 1A/CH
Output power	V3-Q(D): 15-72W V3-Q(U): 15W
Output type	Constant Voltage

Warranty and Protection

Warranty	5 years
Protection	Reverse polarity

Dimming data

Dimming gray scale	4096 levels
Dimming curve	Linear
PWM Frequency	2000Hz/8000Hz

Environment

Operation temperature	Ta: -20°C ~ +55°C
Case temperature (Max.)	Tc: +85°C
IP rating	IP20

Safety and EMC

EMC standard	EN IEC 55015 EN IEC 61547
Safety standard	EN 61347-1/-2 EN 62493
Certification	CE RoHs

Package

Size	L114 x W38 x H26mm
Gross weight	0.044kg

Mechanical Structures and Installations

V3-Q(D):

LED output +
LED green output -
LED red output -
LED blue output -

Light set button

On/off button

65.40mm

18.00mm

10.00mm

DC female
Length: 50cm

White four-core wire
Length: 50cm

V3-Q(U):

LED output +
LED green output -
LED red output -
LED blue output -

Light set button

On/off button

65.40mm

18.00mm

10.00mm

USB male
Length: 50cm

White four-core wire
Length: 50cm
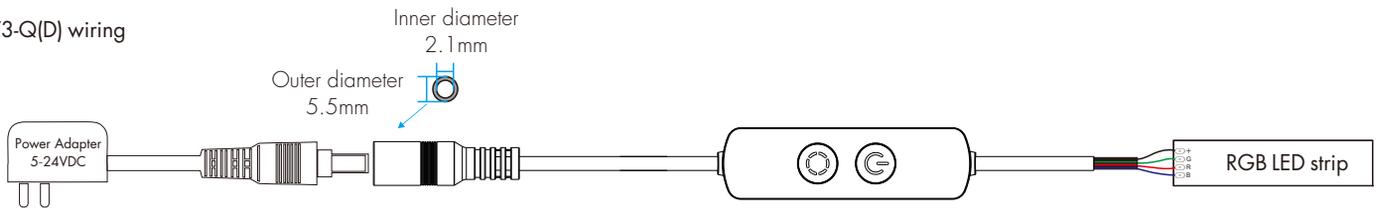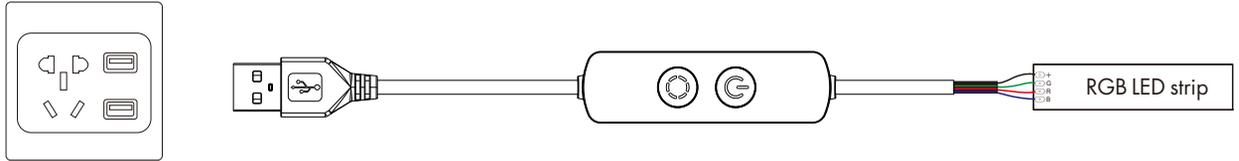
Wiring Diagram

● V3-Q(D) wiring

● V3-Q(U) Wiring(Output connected to 5V LED strip)

Note:
1. The LED strip connected to the V3-Q(D) output must match the power adapter output voltage.
2. V3-Q(U) supports USB socket, mobile phone adapter, computer USB port power supply.

Button Function

Short press: Turn on/off the light.
Long press (1-6s): Continuous brightness adjustment, dimming range 5-100%.

Short press: Enter static mode, and switch 8 static colors (red - orange - yellow - green - cyan - blue - purple - white).
Double click: Enter dynamic mode and switch 2 dynamic modes (6 color jump, 6 color fade).
   The 6 color are in the order of red - yellow - green - cyan - blue - purple.
Long press: In static mode, long press for 1-6s, adjust the color saturation continuously, i.e., the current static color to white gradient transition.
   In dynamic mode, long press for 2s to sequentially switch 5 levels of dynamic change speed.
   The 6 color fade speed is switched in the order of 1s, 2s, 5s, 10s, 30s;
   the 6 color jump speed is switched in the order of 0.3s, 0.5s, 1s, 2s, 5s.
   Every time you enter dynamic mode, the default fade/jump speed starts from 1s.

Set PWM frequency (factory default 2000Hz):

Press and hold (⏻) key and (⊙) key at the same time for 2s to set the PWM frequency to 2000Hz and the output LED blinks 1 time.

Press and hold (⏻) key and (⊙) key at the same time for 5s to set the PWM frequency to 8000Hz and the output LED blinks 2 times.