

# Q4-X

## 3-Key RGBW LED Controller

### Features

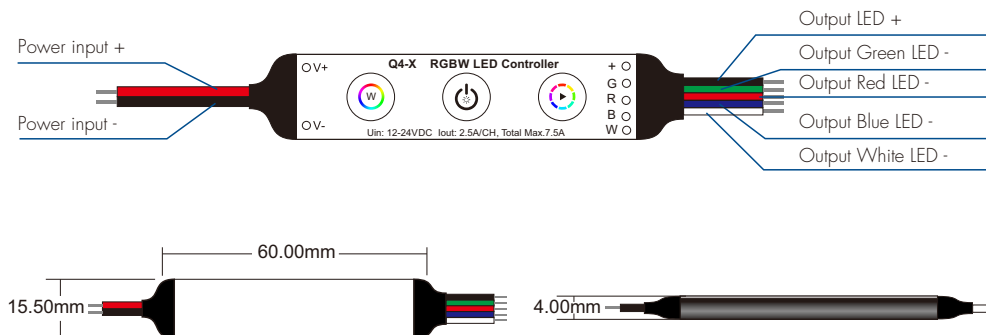
- 4 channel constant voltage RGBW LED mini controller.
- 2.5A per channel, output connect with 5 meters RGBW LED strip.
- 3 Keys operation with on/off, dimming and color adjustment.
- Smooth dimming, no flicker.
- Reverse polarity/Overheat protection.

CE RoHS

### Technical Parameters

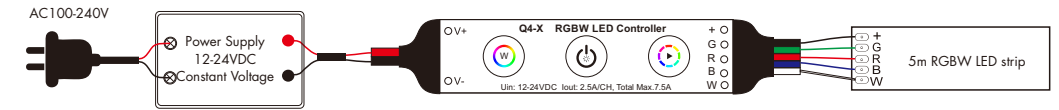
| Input and Output        |                                  | Dimming data       |               | Safety and EMC             |                                                 |
|-------------------------|----------------------------------|--------------------|---------------|----------------------------|-------------------------------------------------|
| Input voltage           | 12-24VDC                         | Dimming gray scale | 256 levels    | EMC standard               | EN IEC 55015<br>EN IEC 61547                    |
| Output voltage          | 12-24VDC                         | Dimming range      | 0%-100%       | Safety standard            | EN 61347-1/2<br>EN 62493                        |
| Output current          | 4CH, 2.5A/CH,<br>Total Max. 7.5A | Dimming curve      | Linear        | Certification              | CE RoHS                                         |
| PWM Frequency           | 2000Hz                           |                    |               |                            |                                                 |
| Output type             | Constant voltage                 |                    |               |                            |                                                 |
| Warranty and Protection |                                  | Package            |               | Environment                |                                                 |
| Warranty                | 5 years                          | Size               | 90x130mm(LxH) | Operation temperature      | Ta: -20°C ~ +55°C                               |
| Protection              | Reverse polarity<br>Overheat     | Gross weight       | 0.018kg       | Case temperature<br>(Max.) | Tc: +73°C<br>(Tested with output current of 5A) |
|                         |                                  |                    |               | IP rating                  | IP20                                            |

### Mechanical Structures and Installations



RGBW

### Wiring Diagram



### Key Function

- : Short press to turn on or off light, long press for 1-6s to adjust brightness continuously.
- : Short press to switch RGB color light or white light.  
In RGB color light state, long press to switch 24 static RGB colors.  
In white light state, long press 1-6 seconds to adjust white light brightness continuously.
- : Short press to change 10 dynamic mode, long press 2s to adjust speed, 10 levels.

Press and hold and for 2s, the output LED flashes 3 times to switch between 0.5s and 3s on/off fade times.

### RGB static color table:

| No. | R   | G   | B   | W | Color name       | Color card | No. | R   | G   | B   | W | Color name  | Color card |
|-----|-----|-----|-----|---|------------------|------------|-----|-----|-----|-----|---|-------------|------------|
| 1   | 255 | 0   | 0   | 0 | Red              |            | 13  | 0   | 255 | 255 | 0 | Cyan        |            |
| 2   | 255 | 64  | 0   | 0 | Orange red       |            | 14  | 0   | 192 | 255 | 0 | Blue green  |            |
| 3   | 255 | 128 | 0   | 0 | Dark orange      |            | 15  | 0   | 128 | 255 | 0 | Light blue  |            |
| 4   | 255 | 192 | 0   | 0 | Orange           |            | 16  | 0   | 64  | 255 | 0 | Dark blue   |            |
| 5   | 255 | 255 | 0   | 0 | Yellow           |            | 17  | 0   | 0   | 255 | 0 | Blue        |            |
| 6   | 192 | 255 | 0   | 0 | Wine green       |            | 18  | 64  | 0   | 255 | 0 | Purple blue |            |
| 7   | 128 | 255 | 0   | 0 | Yellow green     |            | 19  | 128 | 0   | 255 | 0 | Purple      |            |
| 8   | 64  | 255 | 0   | 0 | Grass green      |            | 20  | 192 | 0   | 255 | 0 | Neon purple |            |
| 9   | 0   | 255 | 0   | 0 | Green            |            | 21  | 255 | 0   | 255 | 0 | Magenta     |            |
| 10  | 0   | 255 | 64  | 0 | Spring green     |            | 22  | 255 | 0   | 192 | 0 | Deep pink   |            |
| 11  | 0   | 255 | 128 | 0 | Med spring green |            | 23  | 255 | 0   | 128 | 0 | Purple red  |            |
| 12  | 0   | 255 | 192 | 0 | Cyan green       |            | 24  | 255 | 0   | 64  | 0 | Bright red  |            |

### Dynamic mode list:

| No. | Name                      | No. | Name                  |
|-----|---------------------------|-----|-----------------------|
| 1   | RGB jump                  | 6   | RGB fade in and out   |
| 2   | RGB smooth                | 7   | Red fade in and out   |
| 3   | 6 color jump              | 8   | Green fade in and out |
| 4   | 6 color smooth            | 9   | Blue fade in and out  |
| 5   | Yellow cyan purple smooth | 10  | White fade in and out |