NDR ELECTRIC

USER GUIDE

TL-RGB-CTLR
PINNACLE SERIES
RGB + TUNABLE WHITE LED
CONTROLLER & REMOTE GUIDE

DESCRIPTION

The RGB + Tunable White five color LED controller is designed with ultra sensitive touch colour to adjust static RGB colour or any colour temperature ranging from 1800K-6500K fast and accurately. Independent dimming function of each R, G, B channel to achieve endless possibilities of colours. 10 built-in dynamic modes to create unique effects with the ability to save your favorite setting as a scene.

FEATURES

- Mini style controller with 5 channel constant voltage output (R/G/B/WW/CW).
- Smooth dimming and switch without any flickering.
- Built in 10 dynamic mode, include jump or gradual change style.
- Adopt 2.4GHz wireless technology, remote distance up to 30m.
- Auto-transmitting function, one receiver can transmit the signal from the remote to another receiver within 15m, so the remote control distance can be beyond 100m.
- Auto-synchronization function, different receivers can work synchronously when they are controlled by the same remote, under same dynamic mode and same speed.
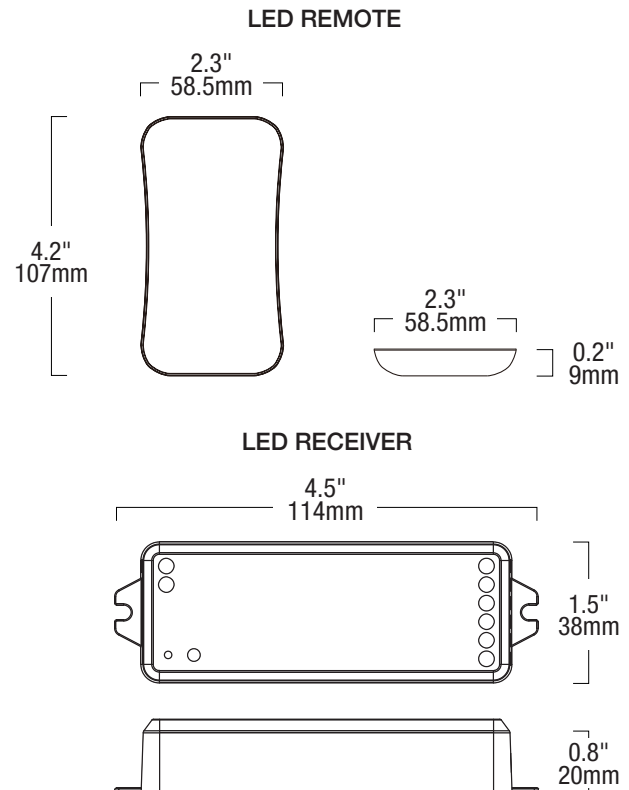
SPECIFICATIONS

LED Remote

Output signal: RF(2.4GHz)

Working voltage : 3VDC(CR2032)

Standby time: 1 year

Remote distance: 30m

Size: 4.2"/107mm x 2.3"/58.5mm x 0.2"/9mm

LED Receiver

Input voltage: 12-24VDC

Output type: PWM constant voltage

Output current: 5CH, 3A/CH, Total max 15A

Output power: 180-360W

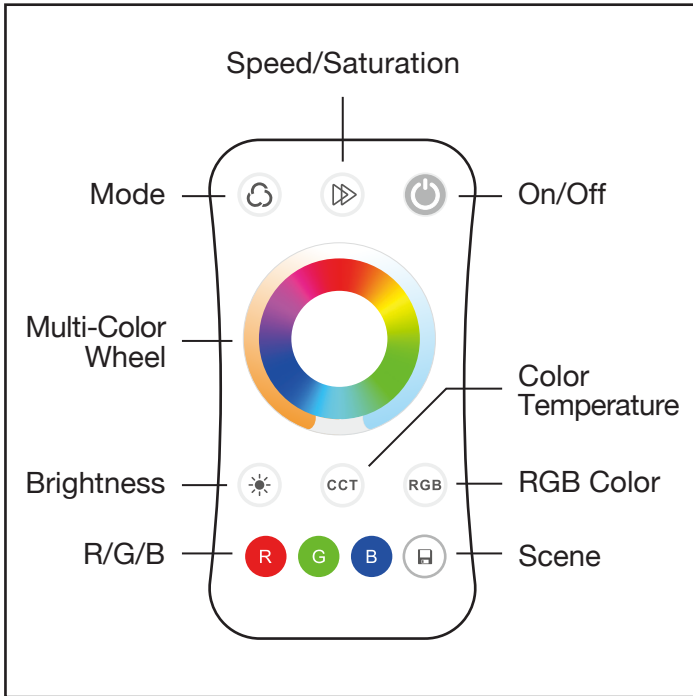Size: 4.5"/114mm x 1.5"/38mm x 0.8"/20mm

DIMENSIONS

LED REMOTE

2.3"
58.5mm

4.2"
107mm

2.3"
58.5mm

0.2"
9mm

LED RECEIVER

4.5"
114mm

1.5"
38mm

0.8"
20mm

www.ndrelectric.com

t. 1.514.695.8228 I 1.855.739.8228

1 of 3

REMOTE FUNCTIONS

On/Off
Short press turn on/off light.

Mode
Switch dynamic mode, short press run the next mode, long press 2s run mode cycle.

Speed/Saturation
For dynamic RGB mode, adjust mode speed, short press 10 levels, long press 2s get the default speed.

For static RGB color, adjust saturation, namely change current static color to mixed white slowly, short press 11 levels, long press 1-5s for continuous 256 levels adjustment.
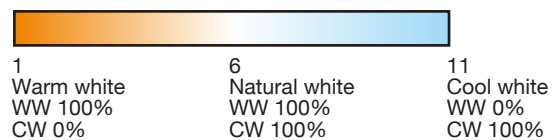
Brightness
To adjust brightness, short press 11 levels, long press 2s to get max or min brightness. At the same time, multi-color wheel becomes brightness wheel.
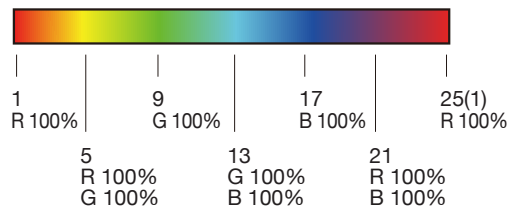
Color Temperature
To adjust color temperature, short press 11 levels, long press to adjust WW+CW brightness. At the same time, multi-color wheel becomes color temperature wheel.

Adjust color temperature by WW/CW channel.

1 Warm white WW 100% CW 0% | 6 Natural white WW 100% CW 100% | 11 Cool white WW 0% CW 100%

RGB Color
To adjust static RGB color, short press to get 24 kinds of static color. At the same time, multi-color wheel becomes RGB color wheel.

1 R 100% | 9 G 100% | 17 B 100% | 25(1) R 100%
5 R 100% G 100% | 13 G 100% B 100% | 21 R 100% B 100%

R/G/B
Short press to get red, green or blue color directly.

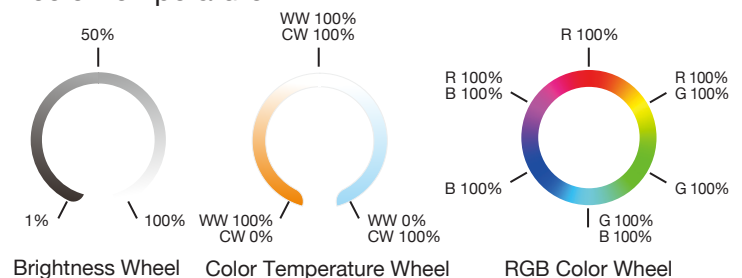Long press 1-5s to adjust R/G/B brightness continuously.

Scene
Short press recall the scene, long press 2s save current color into the scene.

Multi-Color Wheel
When it is **brightness wheel**, touch to change brightness.

When it is **RGB color wheel**, touch to change RGB color.

When it is **color temperature wheel**, touch to change color temperature

Brightness Wheel　　Color Temperature Wheel　　RGB Color Wheel

TL-RGB-CTLR
PINNACLE SERIES
RGB + TUNABLE WHITE LED
CONTROLLER & REMOTE GUIDE
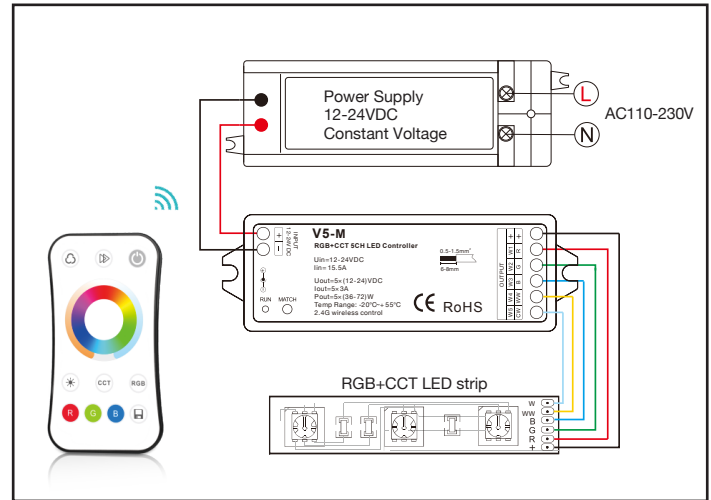
REMOTE TO RECEIVER PAIRING

Use Match key

1. Match: Short press match key of the receiver, within 5s, press on/off key of the remote 3 times.

2. Delete: Long press match key of the receiver for 5s, delete all matched remote.

Use Power-up

1. Match: Switch off the power, then switch on power again, short press on/off key 3 times on the remote quickly within 5s after power on, the link is done once the light blinks 3 times.

2. Delete: Switch off the power, then switch on power again, short press on/off key 5 times on the remote quickly within 5s after power on, the unlink is done once the light blinks 5 times.

WIRING DIAGRAM

TROUBLESHOOTING

Malfunctions	Causes	Troubleshooting
No light	1. No power	1. Check the power
	2. Wrong connection or insecure	2. Check the connection
Wrong color	1. Wrong connection of R/G/B/WW/CW wires	1. Reconnect R/G/B/WW/CW wires
Uneven intensity between front and rear, with voltage drop	1. Output cable is too long	1. Reduce cable or loop supply
	2. Wire diameter is too small	2. Use thicker gauge wire
	3. Overload beyond power supply capability	3. Increase power supply
	4. Overload beyond controller capability	4. Add power repeater
No response from the remote	1. The battery has no power	1. Replace battery
	2. Beyond controllable distance	2. Reduce remote distance
	3. The remote did not properly pair with the controller	3. Re-pair the remote

DYNAMIC MODE LIST

No	Name
1	RGB jump
2	RGB smooth
3	6 color jump
4	6 color smooth
5	Color temperature smooth
6	RGB fade in and out
7	Red fade in and out
8	Green fade in and out
9	Blue fade in and out
10	White fade in and out

SAFETY INFORMATION

1. The product shall be installed and serviced by a qualified person.

2. This product is damp location rated (not waterproof). Avoid direct exposure with the sun and water.

3. Good heat dissipation will prolong the working life of the controller, ensure proper ventilation where the controller will be installed.

4. Check to make sure the output voltage of the power supply used complies with the working voltage of the product. Recommended power supply: NDR LED Class 2 Driver (TLD24V-30W, TLD24V-60W or TLD24V-96W).

5. Ensure all wire connections and polarities are correct and secured before turning on the power to avoid any damages to the LEDs.

6. If a fault occurs, please contact NDR Electric at 1-855-739-8228 or online at ndrelectric.com.