ZigBee & RF 5 in1 LED Controller

Model No.: WZ5

Tuya APP cloud control/Philips HUE control/Voice control/5 Channels/1-5 color/DC power socket input

Features

FC c CE RoHS emc LVD RED

- 5 in 1 function, used for control RGB, RGBW, RGB+CCT, color temperature or single color LED strip.
- DC power socket input and 5 channel constant voltage output.
- Tuya APP cloud control, support on/off, RGB color, color temperature and brightness adjust, delay turn on/off light, timer run, scene edit and music play function.
- Philips HUE APP control by connect with Philips HUE bridge.
- Voice control, support amazon ECHO and TmallGenie smart speaker.
- Match with RF 2.4G remote control optional.
- User need set light type by press key before Tuya APP network connection and match RF remote of the same light type.
- Each WZ5 controller can also work as ZigBee-RF converter, then use Tuya APP to control one or more RF LED controller or RF LED dimming driver synchronously.
- Light on/off fade time 3s selectable.

Technical Parameters

Input and Output

Input voltage	12-24VDC
Input current	15.5A
Output voltage	5 x (12-24)VDC
Output current	5CH,3A/CH
Output power	5 x (36-72)W
Output type	Constant voltage

Dimming data

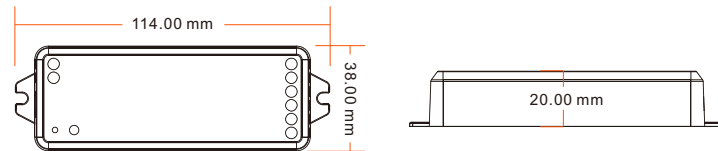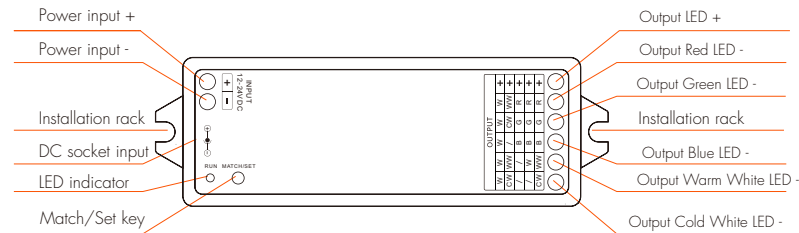| Input signal	Tuya APP + RF 2.4GHz
Control distance	30m(Barrier-free space)
Dimming gray scale	4096 (2^12) levels
Dimming range	0-100%
Dimming curve	Logarithmic
PWM Frequency	1000Hz (default)

Safety and EMC

EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4
Safety standard(LVD)	EN 62368-1:2020+A11:2020
Radio Equipment(RED)	ETSI EN 300 328 V2.2.2
Certification	CE,EMC,LVD,RED

Environment

Operation temperature	Ta:-30℃~+55℃
Case temperature (Max.)	Tc:+85℃
IP rating	IP20

Warranty and Protection

Warranty	5 years
Protection	Reverse polarity Over-heat

Mechanical Structures and Installations

- Power input +
- Power input -
- Installation rack
- DC socket input
- LED indicator
- Match/Set key
- Output LED +
- Output Red LED -
- Output Green LED -
- Installation rack
- Output Blue LED -
- Output Warm White LED -
- Output Cold White LED -

114.00 mm
38.00 mm
20.00 mm

System wiring

3G/4G/5G WiFi
Tuya Cloud
Mobile Phone
15m
WiFi Router
Tuya ZigBee Gateway
15m
Amazon ECHO
RF Remote(Optional)
Panel RF Remote(Optional)
30m
30m

WZ5 — DIM — 30m — RF DIM Controller — DIM ···
WZ5 — CCT — 30m — RF CCT Controller — CCT ···
WZ5 — RGB — 30m — RF RGB Controller — RGB ···
WZ5 — RGBW — 30m — RF RGBW Controller — RGBW ···
WZ5 — RGB+CCT — 30m — RF RGB+CCT Controller (Optional) — RGB+CCT ···
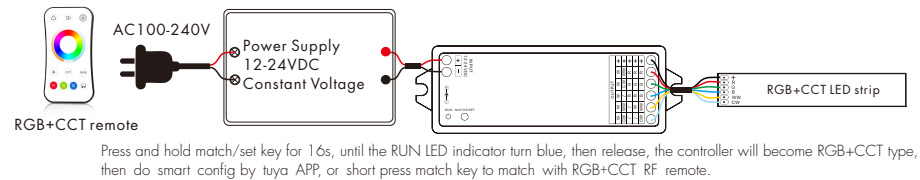
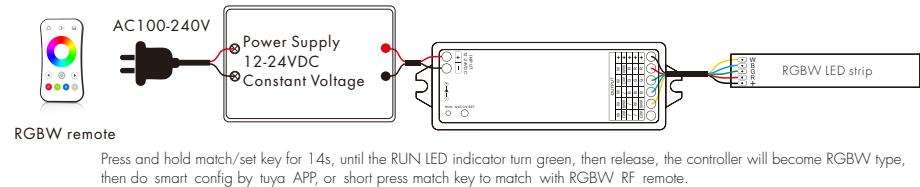———— Wired connection

········ Wireless connection

Note:
1. The above distance is measured in spacious (no obstacle) environment,
   Please refer to the actual test distance before installation.
2. Users must use the Tuya ZigBee gateway to realize remote control and voice control.
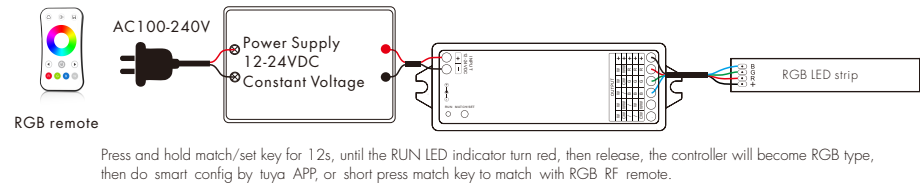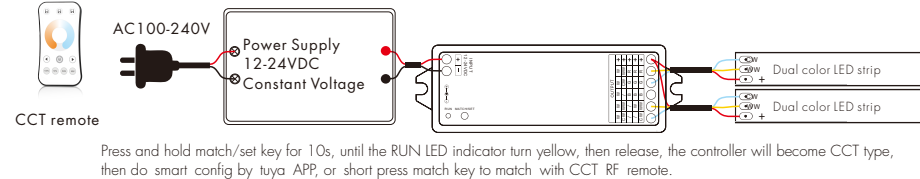
Wiring Diagram

● For RGB+CCT

RGB+CCT remote
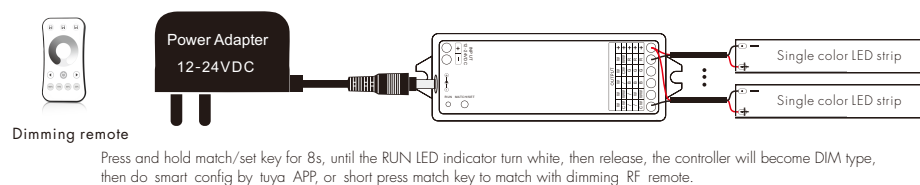AC100-240V
Power Supply 12-24VDC Constant Voltage
RGB+CCT LED strip

Press and hold match/set key for 16s, until the RUN LED indicator turn blue, then release, the controller will become RGB+CCT type, then do smart config by tuya APP, or short press match key to match with RGB+CCT RF remote.

● For RGBW

RGBW remote
AC100-240V
Power Supply 12-24VDC Constant Voltage
RGBW LED strip

Press and hold match/set key for 14s, until the RUN LED indicator turn green, then release, the controller will become RGBW type, then do smart config by tuya APP, or short press match key to match with RGBW RF remote.

● For RGB

RGB remote
AC100-240V
Power Supply 12-24VDC Constant Voltage
RGB LED strip

Press and hold match/set key for 12s, until the RUN LED indicator turn red, then release, the controller will become RGB type, then do smart config by tuya APP, or short press match key to match with RGB RF remote.

● For dual color CCT

CCT remote
AC100-240V
Power Supply 12-24VDC Constant Voltage
Dual color LED strip
Dual color LED strip

Press and hold match/set key for 10s, until the RUN LED indicator turn yellow, then release, the controller will become CCT type, then do smart config by tuya APP, or short press match key to match with CCT RF remote.

● For single color

Dimming remote
Power Adapter 12-24VDC
Single color LED strip
Single color LED strip

Press and hold match/set key for 8s, until the RUN LED indicator turn white, then release, the controller will become DIM type, then do smart config by tuya APP, or short press match key to match with dimming RF remote.

Note: 1. User can connect constant voltage power supply or power adapter as power input.
2. Press and hold Match/Set key for 2s, switch 5 kinds light type in sequence.
3. For RGB+CCT or CCT light type, continuous power on and off will change 3 levels color temperature (WW, NW and CW) in sequence.
4. Switch off the power, then switch on power, repeat again.
   Immediately short press match key 3 times, the light on/off time will change between 3s and 0.5s.

Tuya APP network connection

Press and hold Match/Set key for 2s:
Switch 5 kinds light type in sequence, notice this operation does not automatically clear previous network connection.

Press and hold Match/Set key for 5s, or push twice Match/Set key fastly,
or when press and hold Match/Set key for 8-16s to set 5 kinds light type:
Clear previous network connection, enter config mode, the purple LED indicator fast flash,
the output LED will flash 10 times.

Repeat power on and off for 5 consecutive times, also clear previous network connection, enter config mode,
the output LED will flash 10 times.

If Tuya APP network connection succeed, the RUN LED indicator will stop flash purple, and turn corresponding
light type color (White: DIM, Yellow: CCT, Red: RGB, Green: RGBW, Blue: RGB+CCT).
and in Tuya APP, you can find ZB-RGB+CCT device (or other DIM, CCT, RGB or RGBW).
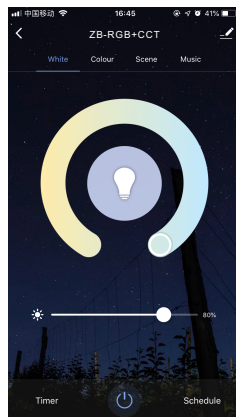
Tuya APP interface
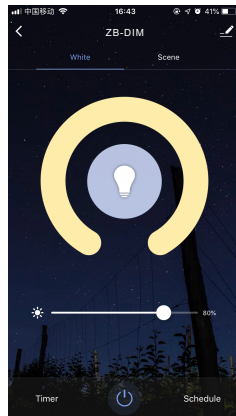
White interface

For DIM type:
Touch brightness slide to adjust brightness.

For RGB type:
Touch brightness slide, get RGB mixed white firstly, then to adjust white brightness.

For RGBW type:
Touch brightness slide, adjust white channel brightness.

Color temperature interface

For CCT type:
Touch color wheel to adjust color temperature.
Touch brightness slide to adjust brightness.

For RGB+CCT type:
Touch color wheel to adjust color temperature, RGB will turn off automatically.
Touch brightness slide to adjust white brightness.
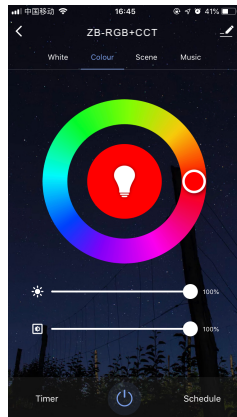
Colour interface

For RGB or RGBW type:
Touch color wheel to adjust static RGB color.
Touch brightness slide to adjust color brightness.
Touch saturation slide to adjust color saturation,
namely gradient from the current color to white(RGB mixed).

For RGB+CCT type:
Touch color wheel to adjust static RGB color, WW/CW will turn off automatically.
Touch brightness slide to adjust color brightness.
Touch saturation slide to adjust color saturation,
namely gradient from the current color to white (RGB mixed).
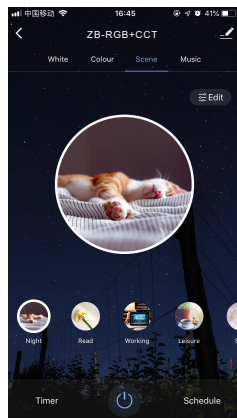
Scene interface

The 1-4 scene is static color for all light type.
the inner color of these scene can be editable.

The 5-8 scene is dynamic mode for RGB, RGBW, RGB+CCT type,
such as green fade in and fade out, RGB jump, 6 color jump, 6 color smooth.

Music, Timer, Schedule

The music play can use smart phone music player or micro-phone as music signal input.

The Timer key can turn on or turn off light in the next 24 hours.

The Schedule key can add multiple timers to turn on or turn off light according to different
time periods.
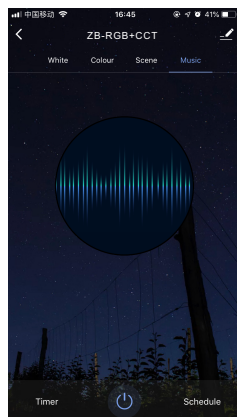
WZ5 match remote control (Optional)

End user can choose the suitable match/delete ways. Two options are offered for selection:

Use the WZ5's Match key

Match:
Short press match key of WZ5,
immediately press on/off key (single zone remote)
or zone key (multiple zone remote) on the remote.
The LED indicator fast flash a few times
means match is successful.

Delete:
Press and hold match key of WZ5 for 20s,
The LED indicator fast flash a few times
means all matched remotes were deleted.

Use Power Restart

Match:
Switch off the power of WZ5, then switch on power, repeat again.
Immediately short press on/off key (single zone remote)
or zone key (multiple zone remote) 3 times on the remote.
The light blinks 3 times means match is successful.

Delete:
Switch off the power of WZ5, then switch on power, repeat again.
Immediately short press on/off key (single zone remote)
or zone key (multiple zone remote) 5 times on the remote.
The light blinks 5 times means all matched remotes were deleted.

WZ5 work as ZigBee-RF converter to match RF LED controller or dimming driver

End user can choose the suitable match/delete ways. Two options are offered for selection:

Use the controller's Match key

Match:
Short press match key of the controller,
immediately press on/off key on the Tuya APP.
The LED indicator fast flash a few times
means match is successful.

Delete:
Press and hold match key of the controller for 5s,
The LED indicator fast flash a few times
means match was deleted.

Use Power Restart

Match:
Switch off the power of the controller, then switch on power,
repeat again.
Immediately short press on/off key 3 times on the Tuya APP.
The light blinks 3 times means match is successful.

Delete:
Switch off the power of the controller, then switch on power,
repeat again.
Immediately short press on/off key 5 times on the Tuya APP.
The light blinks 5 times means match was deleted.

RGB dynamic mode list

For RGB/RGBW:

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

For RGB+CCT:

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	Color temperature smooth	10	White fade in and out