**Manuals+** — User Manuals Simplified.



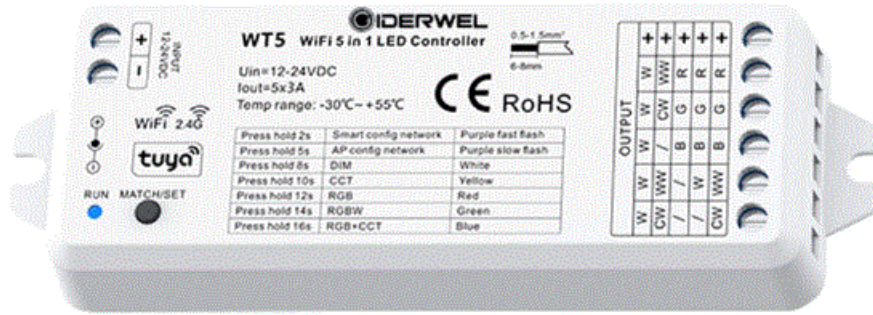# iled CUIL-X007 Wifi and RF 5 In 1 LED Controller Instruction Manual

**Contents**

**iled CUIL-X007 Wifi and RF 5 In 1 LED Controller**

**Product Information:**

- Product Name: RGB+CCT LED Strip
- Power Input: 12-24VDC
- Color Modes: WW (Warm White), CW (Cool White), BGR (Blue-Green-Red), WB (White-Blue), GR (Green-Red)
- Control Modes: RUN, MATCH/SET
- Scenes: SCENE1, SCENE2, SCENE3, SCENE4
- Power Mode: Controls the power of the LED strip
- BRT/SPEED: Adjusts the brightness or speed of the LED strip
- LVD RED: Low Voltage Disconnect indicator

## Product Usage Instructions

1. Connect the RGB+CCT LED strip to a power source with a voltage range of 12-24VDC.
2. Use the RUN button to turn on or off the LED strip.
3. Press the MATCH/SET button to enter the matching or setting mode.
4. To select a specific scene, press the SCENE button followed by the corresponding scene number (SCENE1, SCENE2, SCENE3, SCENE4).
5. Adjust the power mode to control the overall power of the LED strip.
6. Use the BRT/SPEED button to adjust the brightness or speed of the LED strip according to your preference.
7. The LVD RED indicator will light up if the LED strip's voltage drops below the safe operating range.
8. Experiment with different color modes (WW, CW, BGR, WB, GR) to achieve the desired lighting effect.
9. For further customization, utilize the RUN and MATCH/SET buttons to create your own color combinations.

WiFi & RF 5 in 1 LED Controller

Model No.: CUIL.X007
Tuya APP cloud control/Voice control/5 Channels/l-5 color/DC power socket input/Wireless remote control

## Features

- 5 in l 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.
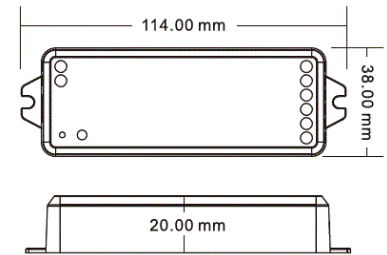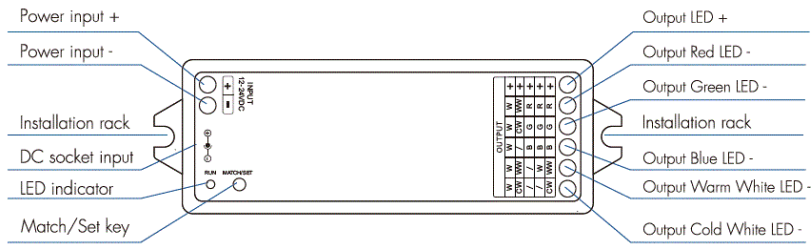
- Voice control, support amazon ECHO and T mallGenie smart speaker.
- Match with RF 2.4G remote control optional.
- User need set light type by press key before Tuya APP network connection and match RF remote of the same light type.
- Each CUIL.X007 controller can also work as WiFi-RF converter, then use Tuya APP to control one or more RF LED controller or RF LED dimming driver synchronously.
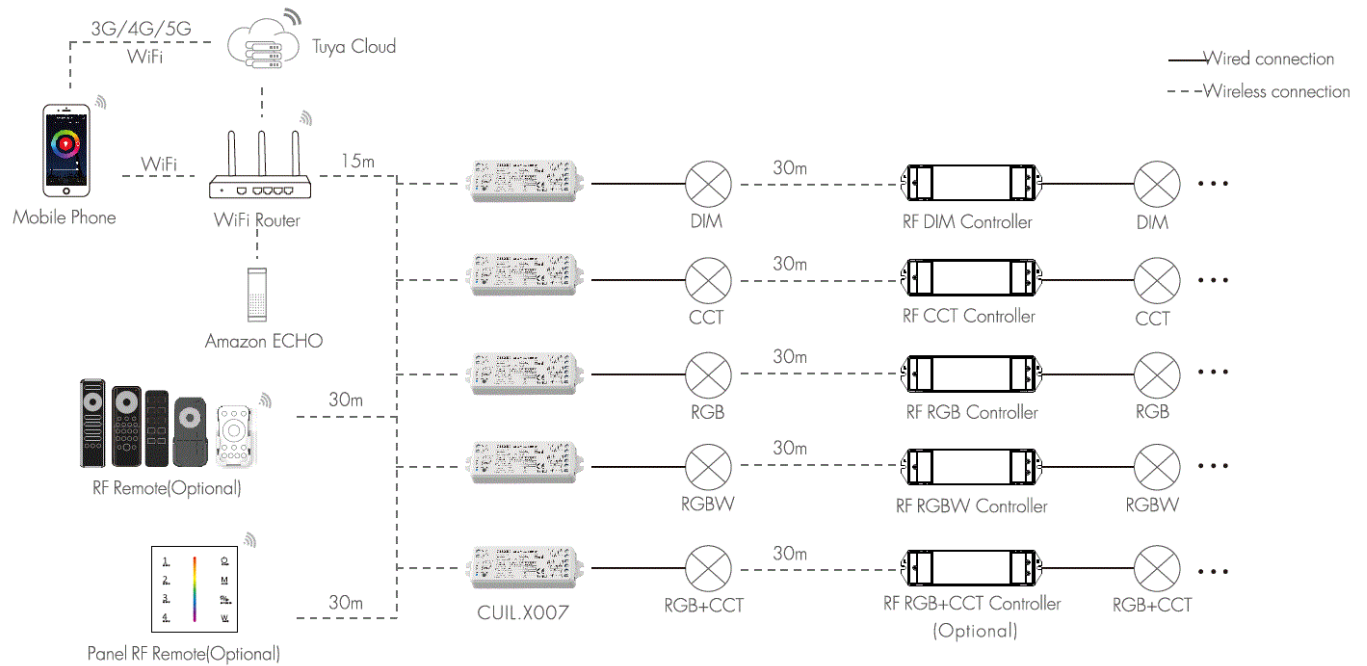- Light on/ off fade time 3s selectable.

## Technical Parameters

| Input and Output | |
|---|---|
| Input voltage | l 2-24VDC |
| **Input current** | 15 . 5 A |
| Output voltage | 5 x ( l 2-24)VDC |
| Output curre nt | 5CH,3A/CH |
| Output p o w er | 5 x (36-72lW |
| Output type | Constant voltage |
| **Package** | |
| Size | L120 x W43 x H35mm |
| Gross weight | 0.055kg |

| Dimming data | |
|---|---|
| Input signal | Tuyo APP+ RF 2 .4GHz |
| Contro l d ista nce | 30m(Barrier-free spacel |
| Dimming gray scale | 4096 (2A l 2) levels |
| Dimming range | 0-100% |
| **Dimming curve** | Logarithmic |
| PWM frequency | l 000Hz (defa ult) |
| Environment | |
| Operation temperature | To ·30c C ~ +55c C |
| Cose temperature (Mox.l | T c:+8c5 C |

## 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

Wired connection
Wireless connection

Mobile Phone
WiFi
WiFi Router
15m

Amazon ECHO

RF Remote(Optional)
30m

Panel RF Remote(Optional)
30m

CUIL.X007

DIM
30m
RF DIM Controller
DIM

CCT
30m
RF CCT Controller
CCT

RGB
30m
RF RGB Controller
RGB

RGBW
30m
RF RGBW Controller
RGBW

RGB+CCT
30m
RF RGB+CCT Controller
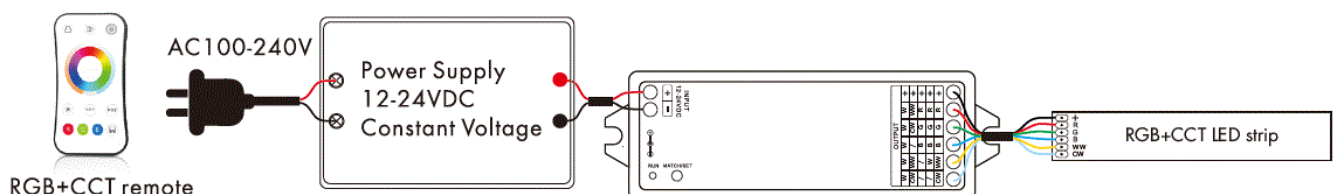(Optional)
RGB+CCT

## Note:

1. The above distance is measured in spacious (no obstacle) environment, Please refer to the actual test distance before installation.
2. Please check ii the WiFi router net in 2.4G band, the 5G band is not available, and do not hide your router network.
3. Please keep the distance between CUIL.X007 devices and router close, and check the WiFi signals.
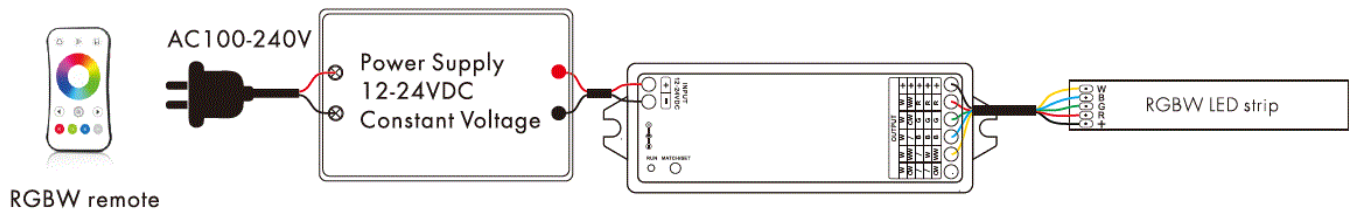
## Wiring Diagram

### 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
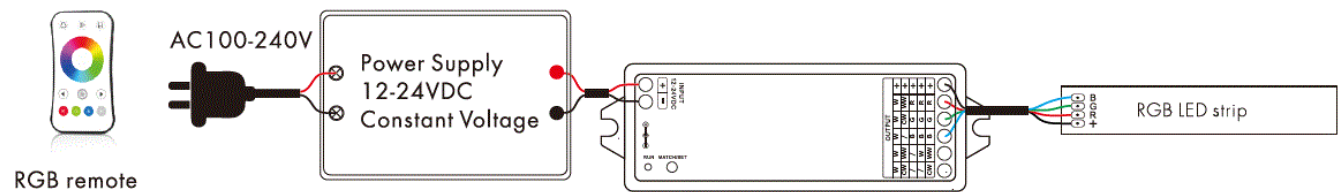
become RGB+CCT type,then do smart config by tuya APP, or short press match key to match with RGB+CCT RF remote.
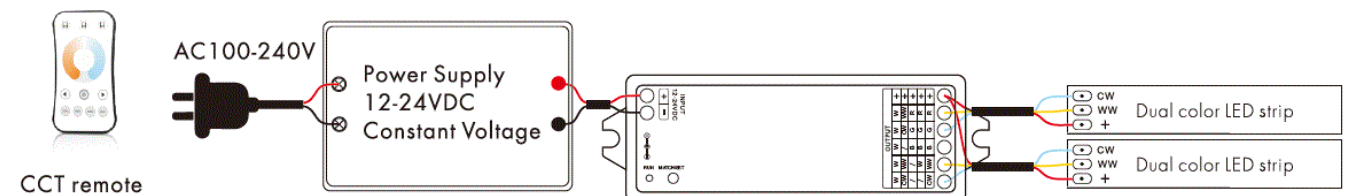
**For RGBW**



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.
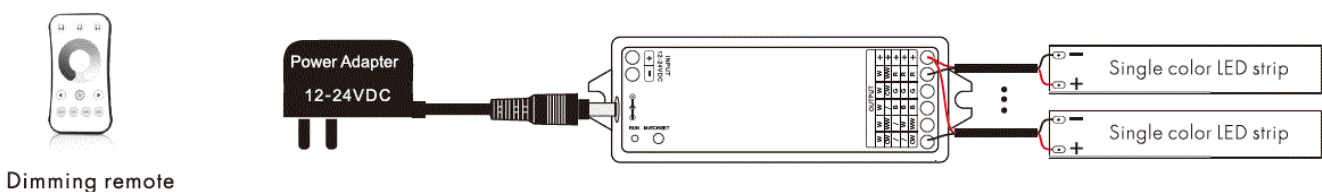
**For RGB**



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**



Press and hold match/set key for 1 Os, 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**



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.
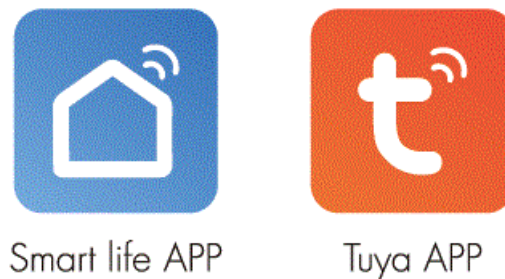
**Note:**

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

Please download the corresponding tuya/ smart life opp according to your region.

Push twice Match/Set key lastly, or when press and hold Match/Set key for 8- l 6s to set 5 kinds light type:

Clear previous network connection, enter Smart config mode, the purple LED indicator flash lastly,the output LED will flash l O times.



Smart life APP          Tuya APP

**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.
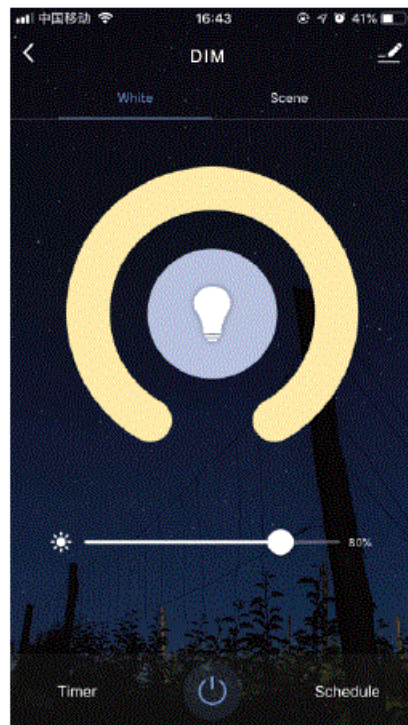
**Press and hold Match/Set key for 5s:**
Clear previous network connection, enter AP config mode, the purple LED indicator flash slowly.
If smart config failed, please try AP config.

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

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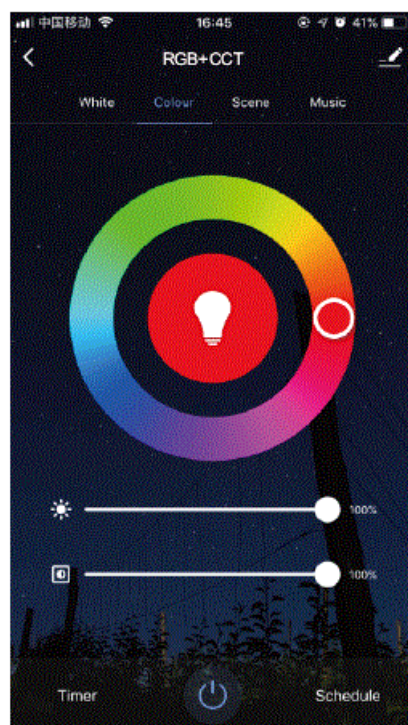
## Tuya APP interface

**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.
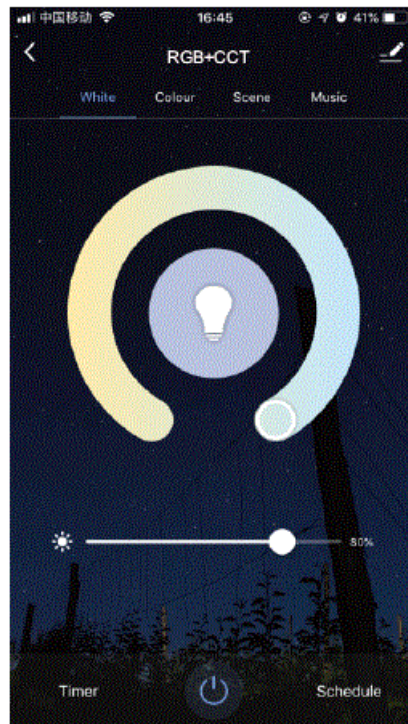
**Colour interface**



- **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).
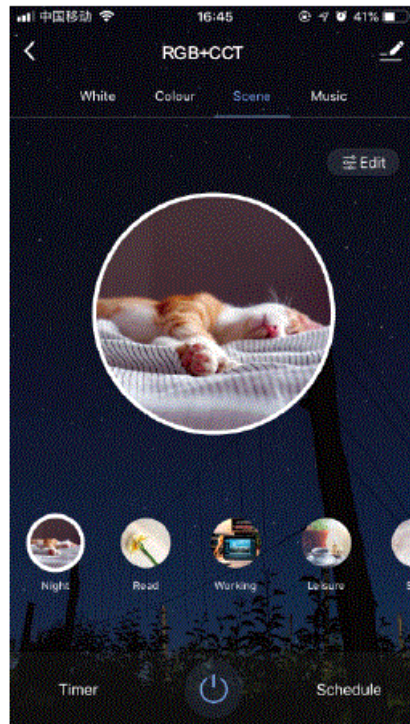
**Color temperature interface**



**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.
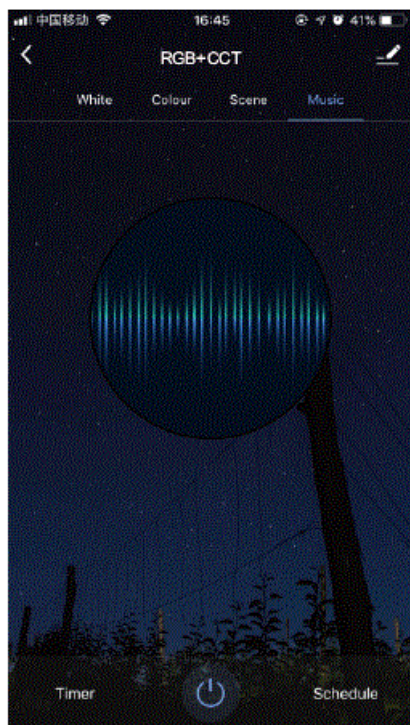- Touch brightness slide to adjust white brightness.

**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.

**CUIL.X007 match remote control (Optional)**

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

**Use the CUIL.X007's Match key**

- **Match:**
  Short press match key of CUIL.X007,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 CUIL.X007 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 CUIL.X007, 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 CUIL.X007, 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.

**CUIL.X007 work as WiFi-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.
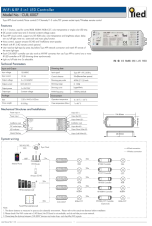
## Dynamic mode list

**For RGB/RGBW:**

| No. | Nome | No. | Nome |
|-----|------|-----|------|
| I | RGB jump | 6 | RGB fade in 011d o ut |
| 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:**

| N o. | Nome | No. | Name |
|------|------|-----|------|
| I | 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 o ut |
| 4 | 6 color smooth | 9 | Blue fade in and out |
| 5 | Color temperature smooth | 10 | White fade in and out |

## Documents / Resources



**iled CUIL-X007 Wifi and RF 5 In 1 LED Controller** [pdf] Instruction Manual
CUIL-X007, CUIL-X007 Wifi and RF 5 In 1 LED Controller, Wifi and RF 5 In 1 LED Controller, R F 5 In 1 LED Controller, 5 In 1 LED Controller, LED Controller, Controller