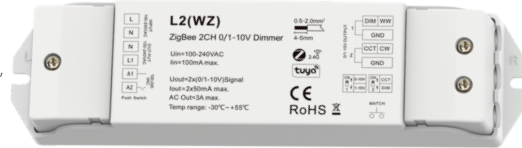# L2(WZ)

0/1-10V ZigBee + RF + Push Dimmer

Features

- ZigBee + RF + AC push 0/1-10V dimmer, output 2 channel 0/1-10V signal.
- High voltage AC input, High voltage AC relay output.
- Dimming or dual color control selectable by DIP switch.
- For dual color control, the two channel output can be set as warm white and cool white respectively, or one for brightness adjust and the other for color temperature adjust.
- 0-10V or 1-10V output selectable by DIP switch.
- Tuya smart APP cloud control, support on/off, 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 for Amazon Alexa, Google Assistant, Tmall Genie and Xiaodu voice assistant.
- 256 levels 0-100% dimming smoothly without any flash.
- Compatibility with RF 2.4G single zone or multiple zone remote control.
- Each L2(WZ) controller can also work as ZigBee-RF converter, then use Tuya smart APP to control one or more RF dimming LED controller or driver synchronously.
- Connect with external push switch to achieve on/off and 0-100% dimming function.
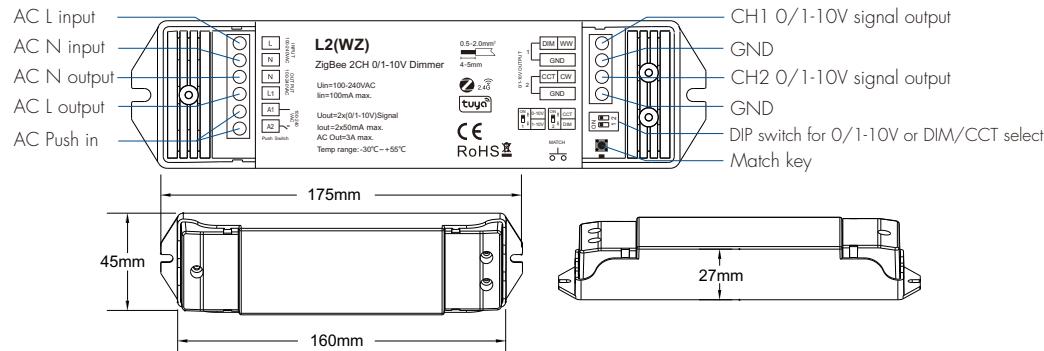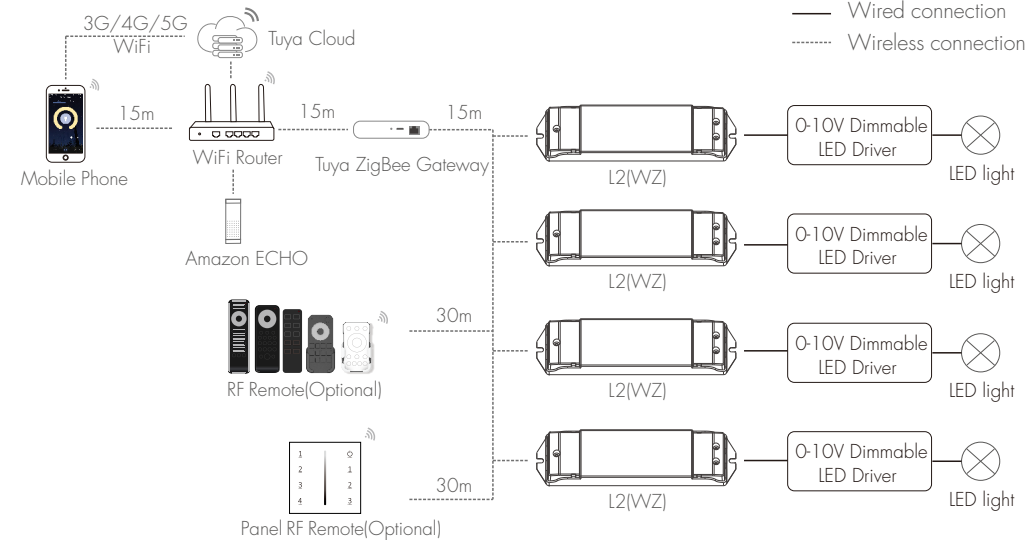- Light on/off fade time 3s selectable.

CE RoHS

Technical Parameters

Input and Output

Input voltage	AC100-240V
Output signal	2 x 0/1-10V
Output current	0/1-10V: 50mA/CH AC: Max 3A

Environment

Operation temperature	Ta: -30℃ ~ +55℃
Case temperature (Max.)	Tc: +65℃
IP rating	IP20

Dimming data

Input signal	ZigBee + RF + Push Dim
RF Control distance	30m(Barrier-free space)
Dimming level	256 levels
Dimming range	0-100%

Package

Size	L178 x W50 x H38mm
Gross weight	0.162kg

Safety and EMC

Safety standard	EN 61347-1/-2
EMC standard	EN IEC 55015/ EN IEC 61547 ETSI EN 301 489-1/-3/-17
Radio Equipment	ETSI EN 300 440 ETSI EN 300 328
Certification	CE RoHs

Warranty

Warranty	5 years

Mechanical Structures and Installations

- AC L input
- AC N input
- AC N output
- AC L output
- AC Push in
- CH1 0/1-10V signal output
- GND
- CH2 0/1-10V signal output
- GND
- DIP switch for 0/1-10V or DIM/CCT select
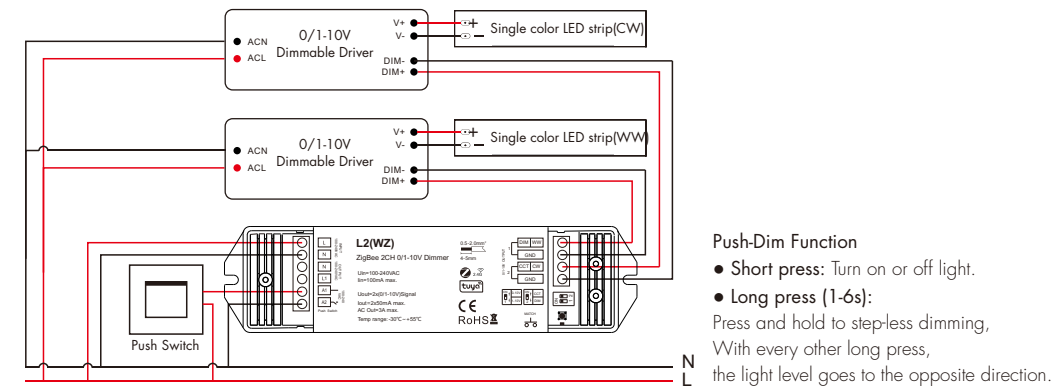- Match key

175mm
45mm
160mm
27mm

System Wiring

Note:
1. The above distance is measured in spacious (no obstacle) environment, please refer to the actual test distance before installation.
2. Please check if the ZigBee 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 L2(WZ) devices and router close, and check the WiFi signals.

Wiring Diagram

Push-Dim Function

- Short press: Turn on or off light.
- Long press (1-6s):
Press and hold to step-less dimming,
With every other long press,
the light level goes to the opposite direction.

Note:
1. In order to ensure dimming consistency, we recommend the number of LED drivers connected to 0/1-10V dimmer does not exceed 100 pcs, The maximum length of the wires from dimmer to LED driver should be no more than 50 meters(use copper wire with a cross-sectional area of 0.75 mm² for wiring).
2. 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.
3. If total power of the 0/1-10V dimming driver is less than 600W, we can use AC OUT port to cut off power input of the driver.
4. When use AC OUT port, an additional AC relay or contactor is needed when total input current of the load is higher than 3A or inrush current is greater than 30A.

Tuya Smart APP Network Connection and Operation

Press and hold Match/Set key for 2s, reset ZigBee network.

Press and hold Match/Set key for 5s,
or push twice Match/Set key fastly,
Clear previous network connection, enter config mode.
the blue LED indicator fast flash.

If Tuya smart APP network connection succeed,
the blue LED indicator will stop flash,
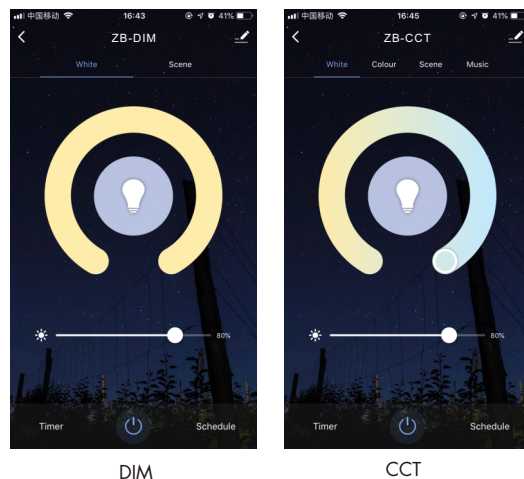and in Tuya smart APP, you can find ZB-DIM or ZB-CCT device.

Repeat power on and off for 5 consecutive times,
also clear previous network connection, enter config mode.

Tuya Smart APP interface operation:
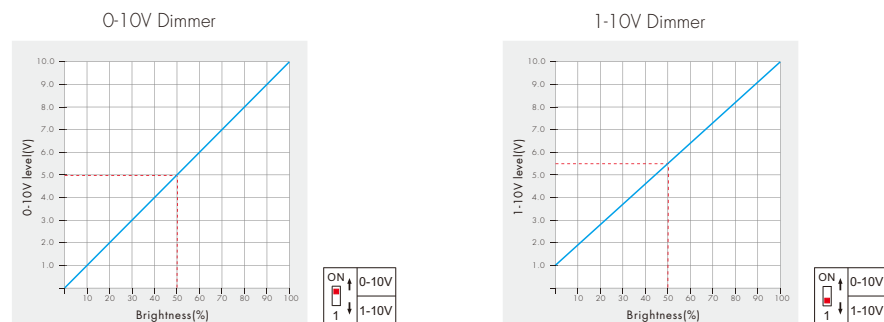DIM: Touch brightness slide to adjust brightness.

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

DIM   CCT

0-10V or 1-10V Dimming Setting

Select 0-10V dimmer or 1-10V dimmer according to dimmable LED driver.

0-10V Dimmer   1-10V Dimmer

CCT Dimming Setting

Select the DIP Switch 2 ON to set as CCT light type firstly.
(When select the DIP Switch 2 OFF to set as DIM light type, Ch1 and Ch2 output is same.)

When power is off, select the DIP switch 1 ON, then press hold the Match key,
and power up the dimmer in the same time, the RUN LED indicator will flash two times,
set as Ch1 for for brightness adjust and Ch2 for color temperature adjust.

When power is off, select the DIP switch 1 OFF, then press hold the Match key,
and power up the dimmer in the same time, the RUN LED indicator will flash two times,
set as Ch1 for warm white dimming and Ch2 for cool white dimming respectively (factory setting).

L2(WZ) Match RF Remote Control (Optional)

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

Use the L2(WZ)'s Match key

Match:
Short press match key of L2(WZ),
immediately short press on/off key (single zone remote)
or zone key (multiple zone remote) on the remote.

Delete:
Press and hold match key of L2(WZ)
for 10s to delete all match,
The light blinks 5 times means all matched remotes
were deleted.

Use Power Restart

Match:
Switch off the power of L2(WZ), 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 L2(WZ), 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.

L2(WZ) Work as ZigBee-RF Converter to Match Other RF Dimming LED Controller or 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 smart 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 smart 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 smart APP.
The light blinks 5 times means match was deleted.

Installation Precautions

1. The products shall not be stacked, the distance should be ≥ 20cm,
   so as not to affect lifespan of the products due to poor heat dissipation.
2. The product shall not be installed close to the switching power supply
   with an interval of ≥ 20cm to avoid radiation interference of the switching power supply.
3. The installation height shall be ≥ 1m from the floor to avoid shortening the remote control distance due to too weak reception signal.
4. The products are not allowed to be close to or covered by metal objects,
   with an interval of ≥ 20cm to avoid signal attenuation and shorten the remote distance.
5. Avoid installation at the corner of the wall or the corner of the beam, with an interval of ≥ 20cm to avoid signal interference.