US1-L(WT)



- WiFi+ 0/1-10V Push AC phase-cut dimmer, 1 channel output.
- To dim and switch single color dimmable LED lamps, traditional incandescent and halogen lights.
- Tuya smart APP cloud control, support on/off, brightness adjust, delay turn on/off light, timer run, scene edit function.

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- Voice control, support for Amazon Alexa, Google Assistant, Tmall Genie and Xiaodu voice assistant.
- Compatibility with RF 2.4G single zone or multiple zone dimming remote control.
- Compatible with active or passive 0/1-10V dimmer.
- Connect with external push switch to achieve on/off and 0-100% dimming function.
- 256 levels 0-100% dimming smoothly without any flash.
- Leading edge dimming or trailing edge dimming set by dip switch.
- Min brightness can be set by key.
- Light on/off fade time 3s selectable
- Each US1-L(WT) controller can also work as WiFi-RF converter, then use Tuya smart APP to control one or more RF LED controller or RF LED dimming driver synchronously.
- Over-heat protection, recover automatically.



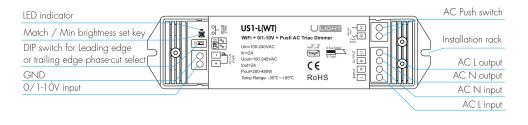
# C∈ RoHS

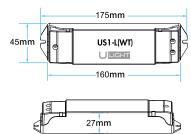
### Technical Parameters

Input and Output		Dimming data	
Input voltage	AC100-240V	Input signal	WiFi + RF + 0/1-10V + AC Push
Input current	2A	Remote distance	30m(Barrier-free space)
Output voltage	AC100-240V	Dimming level	256 levels
Output current	2A	Dimming range	0-100%
Output power	200-480W	Environment	
Warranty and Protection		Operation temperature	Ta: -30°C ~ +55°C
Warranty	5 years	Case temperature (Max.)	Tc: +85°C
Protection	Over-heat	IP rating	IP20

Safety and EMC				
Safety standard	EN 60669-1/-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			
Package				
Size	L178 x W50 x H38mm			
Gross weight	0.65kg			

### Mechanical Structures and Installations



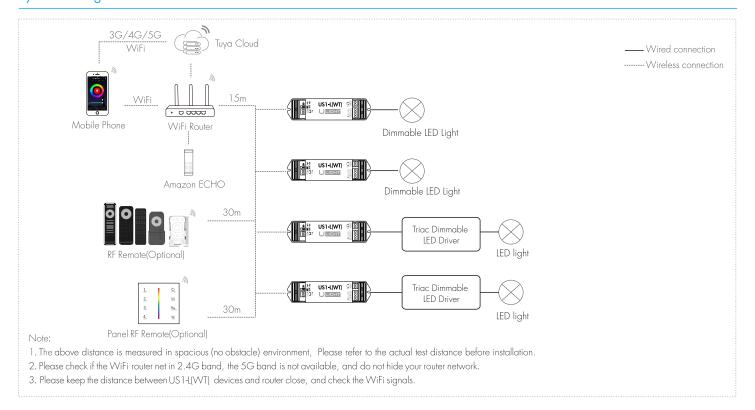


# Compatible Load Types

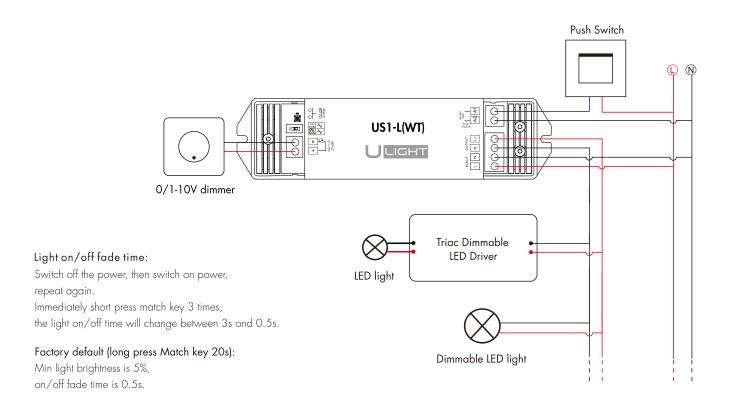
Load Type	Maximum Load	Remarks
Dimmable LED lamps	300W @ 220V 150W @ 110V	Due to variety of LED lamp designs, maximum number of LED lamps is further dependent on power factor result when connected to dimmer.
Triac Dimmable LED drivers	300W @ 220V 150W @ 110V	Maximum permitted number of drivers is 300W divided by driver nameplate power rating, and make sure the surge current is no more than 2 times 65A.
Incandescent lighting, HV Halogen lamps	500W @ 220V 250W @ 110V	



# System Wiring



## Wiring Diagram



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Caution: Please carefully ensure all wire connections and polarities are correct and secure before applying power, otherwise this dimmer will be damaged.

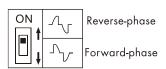
### Note:

When calculating the maximum number of load lamps or drivers, the input power or input current parameters of a single lamp or driver must be used, the output power parameters can not be used.

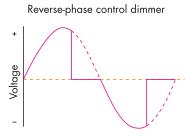
In addition, the maximum surge current of the dimmer is 65A, the sum of surge current of multiple dimmable LED drivers should not exceed 2 times. otherwise, the product will be overloaded and damaged.

# Leading Edge or Trailing Edge Dimming Setting

Select leading edge(forward-phase) dimmer or trailing edge(reverse-phase) dimmer according to dimmable LED light or driver.



# Forward-phase control dimmer(TRIAC) + \*\*Body - \*\*Triangle \*\*Tri



Caution: before power on, you must confirm the selection of dip switch.

# Min Brightness Setting

Long press Min set key for 10s, the light blink 2 times, ready for min brightness set, then short press Min set key 1-6 times, to get 6 min brightness: 5%, 10%, 15%, 20%, 25% or 30%, the light will output the current min brightness immediately, long press Min set key for 2s, or wait 8s, quit min brightness set automatically, the light will return output 100% brightness.

## 0/1-10V Dimming

- The 0/1-10V input is operable via commercially available simple rotary wall switchs designed for 0/1-10V dimming equipment or from decicated system central dimming controllers.
- Compliant with 0-10V, 1-10V, 10V PVVM, RX(4 in 1).
- We recommend the number of triac dimmers connected to 0/1-10V dimmer does not exceed 50 pieces, the maximum length of the wires from 0/1-10V dimmer to triac dimmer should be no more than 50 meters.
- If you have previously dimmed the light using the self-resetting switch method, the 0/1-10 V signal should change over 10% to return 0/1-10 V control.

### AC Push Dim

The provided AC Push-Dim interface allows for a simple dimming method using commercially available non-latching(momentary) wall switchs.

### • Short press:

Turn on or off light. With every other long press, the light level goes to the opposite direction.

### • Dimming memory:

Light returns to the previous dimming level when switched off and on again.

### • Synchronization:

If multiple dimmers are connected to the same AC push switch, press it for 10 seconds to synchronize all lights to 100% brightness. It is recommended that the number of controllers connected to the same AC push switch does not exceed 25, and that the cable length of the auto-reset switch does not exceed 20m.

# Tuya Smart APP Network Connection and Operation

Please download the corresponding Tuya smart/Smart life APP according to your region. Press and hold Match/Set key for 5s, or push twice Match/Set key fastly,

Clear previous network connection, enter WiFi config mode, the blue LED indicator flash fastly.

If Tuya smart APP network connection succeed, the blue LED indicator will stop flash, and in Tuya smart APP, you can find Triac dimmer device.

When controlling the light with Tuya Smart/Smart Life APP, if the network connection is poor, you can control the light with Bluetooth connection within the Bluetooth control range. Note: The light can not be directly controlled by Bluetooth without WiFi configuration.

Tuya smart APP interface operation: Touch brightness slide to adjust brightness.



# US1-L(WT) Match Remote Control (Optional)

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

### Use the US1-L(WT)'s Match key

### Match:

Short press match key of US1-L(WT), 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 US1-L(VVT) for 15,

The light blinks 5 times means all matched remotes were deleted.

### Use Power Restart

### Match:

Switch off the power of US1-L(WT), 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 US1-L(WT), 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.

### US1-L(WT) 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 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.

