

## AC Triac RF + Push Dimmer

- RF + Push AC phase-cut dimmer, 1 channel output.
- To dim and switch single color dimmable LED lamps, traditional incandescent and halogen lights.
- 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.
- Compatibility with RF 2.4G single zone or multiple zone dimming remote control.
- Connect with external push switch to achieve on/off and 0-100% dimming function.
- Easy to be placed in standard wall junction box behind a push switch.
- Over-heat / Over-load protection, recover automatically.



FC CE RoHS

### Technical Parameters

Input and Output		Dimming data		Safety and EMC	
Input voltage	AC100-240V	Input signal	RF 2.4GHz + Push Dim	EMC standard	EN IEC 55015/EN IEC 61547 ETSI EN 301 489-1/-3
Output voltage	AC100-240V	Control distance	30m(Barrier-free space)	Safety standard	EN 61347-1/-2
Output current	Max 1.5A	Dimming level	256 levels	Radio Equipment	ETSI EN 300 440
Output power	150-360W	Dimming range	0-100%	Certification	CE RoHs FCC
Warranty and Protection		Environment		Package	
Warranty	5 years	Operation temperature	Ta: -20°C ~ +55°C	Size	L60 x W60 x H40mm
Protection	Over-heat / Overload	Case temperature (Max.)	Tc: +85°C	Gross weight	0.061kg
		IP rating	IP20		

### Compatible Load Types

Load type	Maximum load	Remarks
Dimmable LED lamps	200W @ 220V 100W @ 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	200W @ 220V 100W @ 110V	Maximum permitted number of drivers is 200W divided by driver rated input power rating, and make sure the surge current is no more than 2 times 65A.
Incandescent lighting, HV halogen lamps	400W @ 220V 200W @ 110V	

### Recommended Number of Load Connection

Load type	Output power per load	Quantity
Dimmable downlight	5.5W @ 220V~240V	20
Triac dimmable LED driver	12W @ 200V~240V	15
Triac dimmable LED driver	36W @ 200V~240V	4
Triac dimmable LED driver	75W @ 200V~240V	2

Because different manufacturers triac dimmable LED driver rated input power is different, you can refer to the formula to calculate the max. number of LED driver. Formula:  $D_{max} = 200W/RP$ , at the same time need to meet the sum of the surge current ( $I_{surge}$ ) does not exceed 130A.  
For example: triac dimmable LED driver rated input power(RP) = 15.4W, surge current = 10A/230VAC, Then  $D_{max} = 200/15.4 = 13$ (pcs),  $I_{surge} = 13 * 10 = 130A$ , the max. number of triac dimmable LED driver is 13.

### Match Remote Control (two match ways)

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, immediately press on/off key (single zone remote) or zone key (multiple zone remote) of the remote.

Delete:

Press and hold Match key for 5s to delete all match,  
The light blinks 5 times means all matched remotes were deleted.

#### Use Power Restart

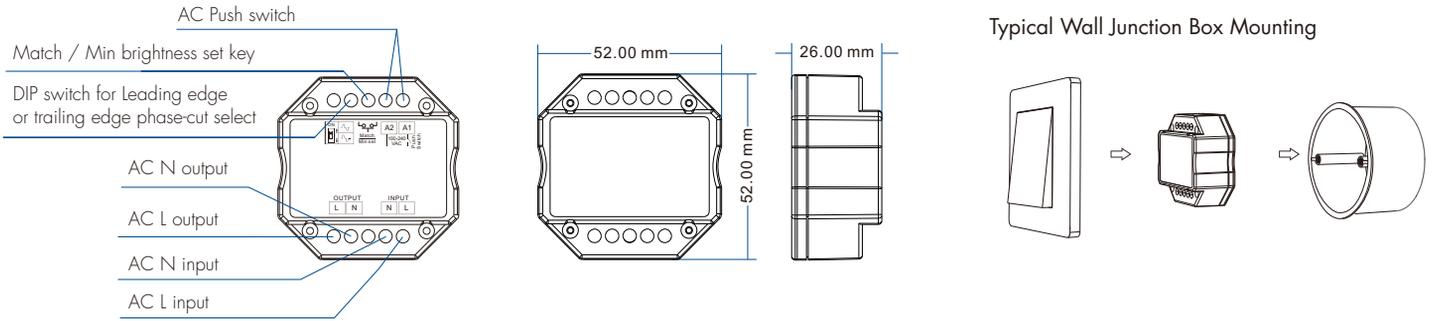
Match:

Switch off the power, 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, 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.

## Mechanical Structures and Installations

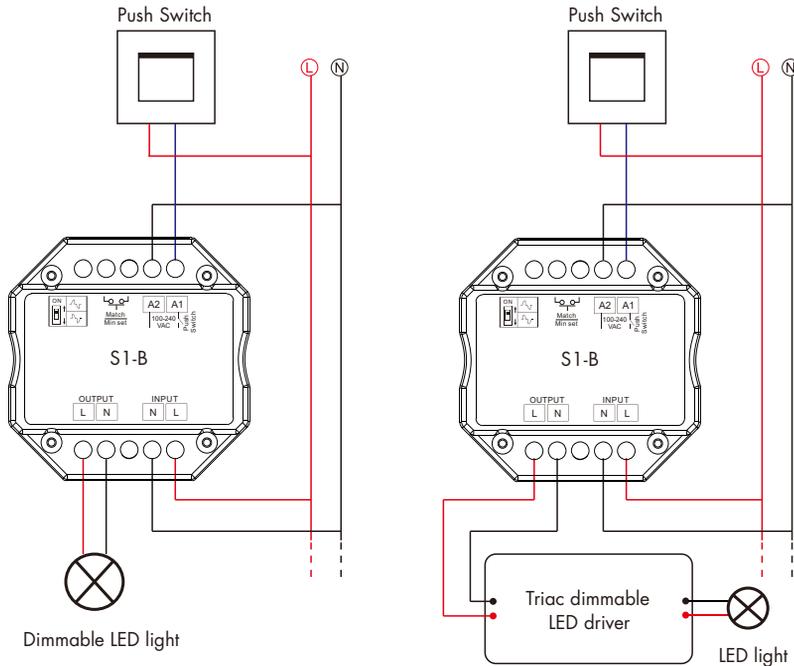


## Wiring Diagram

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

Connect with dimmable LED light:

Connect with Triac dimmable LED driver:



### Min brightness setting

Long press Min set key for 2s, 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, the light will output 100% brightness automatically.

### Light on/off fade time

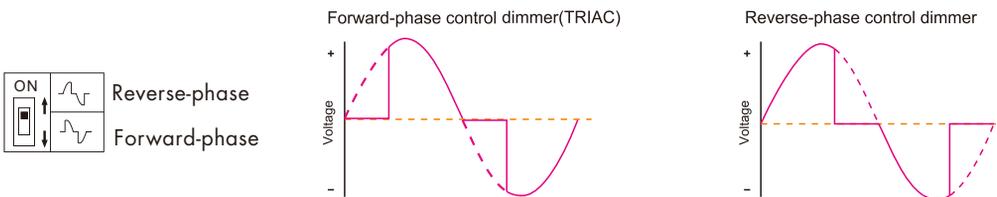
Long press Match key 5s, then short press Match key 3 times, the light on/off time will be set to 3s, the indicator light blink 3 times.

### Factory default (long press Match key 10s):

Min light brightness is 5%, on/off fade time is 0.5s.

## 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.



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

## Push-Dim

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

- **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.
- **Dimming memory:** Light returns to the previous dimming level when switched off and on again, even at power failure.

Note: When using a push switch to synchronize control of multiple S1-B, please long press the push switch for 15s to synchronize all dimmers to the highest brightness before controlling.

## Installation Precautions

1. The products shall not be stacked, the distance should be  $\geq 20\text{cm}$ , 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  $\geq 20\text{cm}$  to avoid radiation interference of the switching power supply.
3. The installation height shall be  $\geq 1\text{m}$  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  $\geq 20\text{cm}$  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  $\geq 20\text{cm}$  to avoid signal interference.

### FCC Statement:

This device complies with Part 15 of the FCC Rules. operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

**IC Statement:** This Class B digital apparatus complies with Canadian ICES-003.

(Cet appareil numérique de la Classe B conforme à la norme NMB-003 du Canada).