# Triac

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

## 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	400VV @ 220V 200VV @ 110V	

## Recommended Number of Load Connection

Load type	Output power per load	Quantity
Dimmable downlight	5.5W @ 220V~240V	20
Triac dimmable LED driver	12VV @ 200V~240V	15
Triac dimmable LED driver	36VV @ 200V~240V	4
Triac dimmable LED driver	75VV @ 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 13.4

## 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

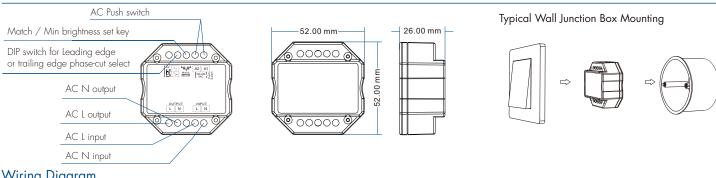
Match:

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.

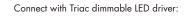
## Mechanical Structures and Installations

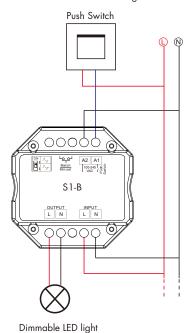


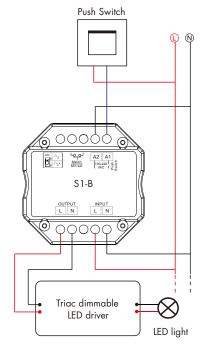
## Wiring Diagram

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:







#### 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

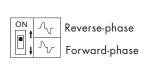
Long press Match key 5s, then short press Match key 3 times, the light on/off time will be set to 3s, the indicator light blink 3 times.

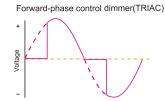
## Factory default (long press Match key 10s):

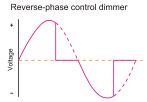
Min light brightness is 5%, on/off fade time is 0.5s.

## 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 switchs.

- 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 ≥ 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 ≥ 1 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 ≥ 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.

#### 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).