

AC Triac RF + Push Dimmer Kit

Model No.: S1-B+R11

RF dimming/Leading edge or trailing edge/Min brightness settable/Push Dim/Wall junction box mounting

Features

- RF + Push AC phase-cut dimmer, 1 channel output.
- To dim and switch single color dimmable LED lamps, traditional incandescent and halogen lights.
- 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.
- Connect with external push switch to achieve on/off and dimming function.
- Easy to be inserted into standard 86*86mm wall box.



CE RoHS EMC LVD

Technical Parameters

Triac Dimmer's Input and Output		LED Remote's Input and Output		Safety and EMC	
Input voltage	AC100-240V	Output signal	RF(2.4GHz)	EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4
Output voltage	AC100-240V	Working voltage	3VDC(CR2032)	Safety standard(LVD)	EN 62368-1:2020+A11:2020
Output current	Max 1.5A	Working current	<5mA	Radio Equipment(RED)	ETSI EN 300 328 V2.2.2
Output power	150-360W	Standby current	<10µA	Certification	CE,EMC,LVD,RED
Dimming signal	RF 2.4GHz + Push Dim	Standby time	<1 years	Environment	
Dimming level	256 levels	RF Control distance	30m(Barrier-free space)	Operation temperature	Ta: -20 °C ~ +55 °C
Dimming range	0-100%				

Compatible Load Types

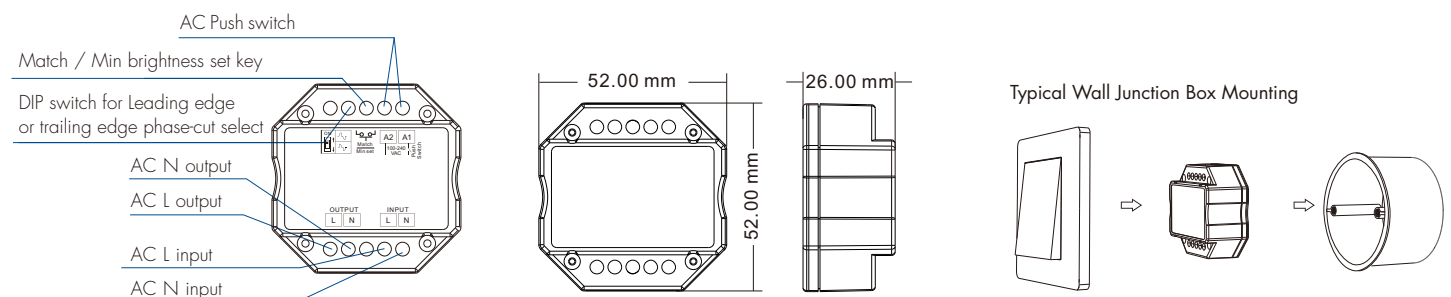
Load type	Maximum load	Remarks
Dimmable LED lamps	200W @ 220V 100W @ 110V	Due to variety of LED lamp designs, maximum number of LED lamps is further dependent on power factor result when connected to dimmer.
Triac dimmable LED drivers	200W @ 220V 100W @ 110V	Maximum permitted number of drivers is 200W divided by driver nameplate 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

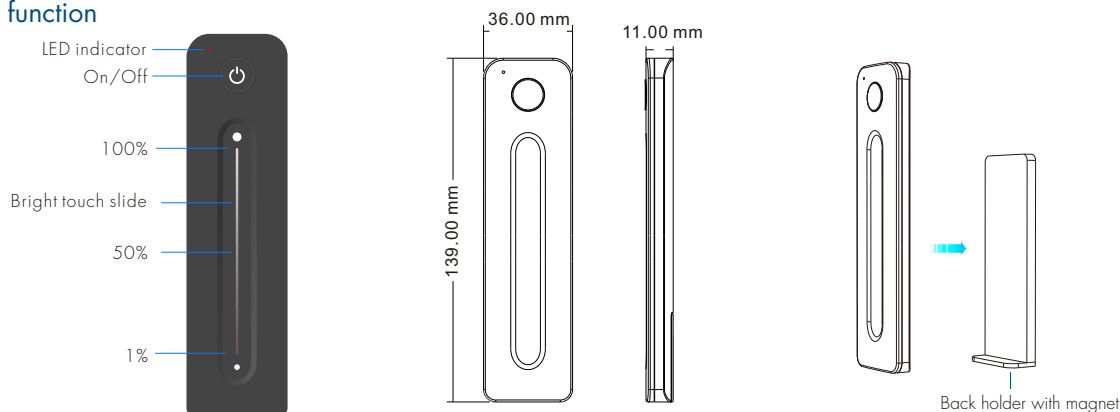
Load type	Output power per load	Quantity
Dimmable downlight	5.5W @ 220V~240V	20
Triac dimmable LED driver	12W @ 200V~240V	15
Triac dimmable LED driver	36W @ 200V~240V	4
Triac dimmable LED driver	75W @ 200V~240V	2

Because different manufacturers triac dimmable LED driver nameplate power rating 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 nameplate power rating(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.

Mechanical Structures and Installations



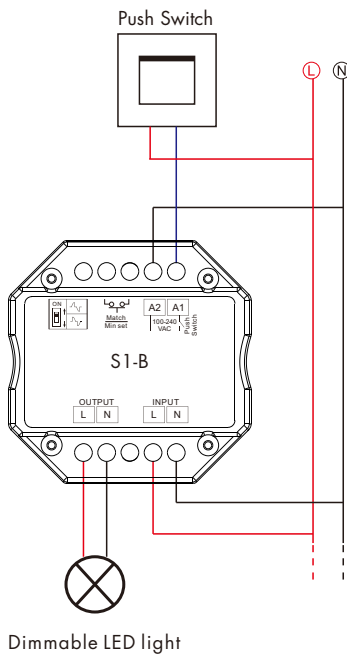
Remote function



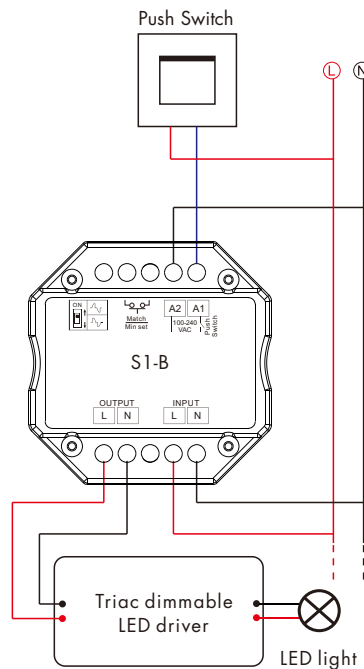
Wiring diagram

⚠ 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):

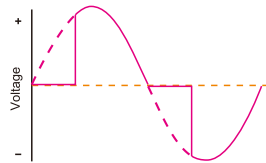
Min light brightness is 5%, on/off fade time is 0.5s.

Leading edge or trailing edge dimming setting

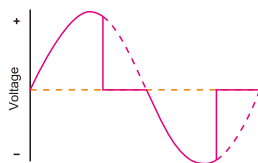
Select leading edge(forward-phase) dimmer or trailing edge(reverse-phase) dimmer according to dimmable LED light or driver.



Forward-phase control dimmer(TRIAC)



Reverse-phase control dimmer



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.

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