

## RF + O/1-10V + Push AC Triac Dimmer

Model No.: S1-L

RF dimming/O-10V dimming/AC push dimming/Leading edge or trailing edge/Min brightness settable

### Features

- RF + O/1-10V Push AC phase-cut dimmer, 1 channel output.
- To dim and switch single color dimmable LED lamps, traditional incandescent and halogen lights.
- Compatibility with RF 2.4G single zone or multiple zone dimming remote control.
- Compatible with active or passive O-10V, 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.
- Over-heat protection, recover automatically.

### Technical Parameters

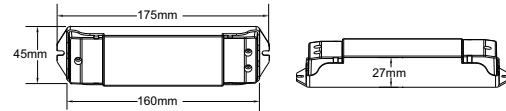
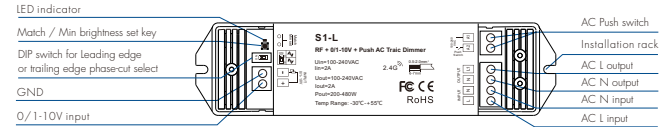
CE RoHS  LVD

Input and Output		Dimming data	
Input voltage	AC100-240V	Input signal	RF + O/1-10V + AC Push
Output voltage	AC100-240V	RF Control distance	30m
Output current	Max 2A	Dimming level	256 levels
Output power	200-480W	Dimming range	0-100%
Safety and EMC		Environment	
EMC standard (EMC)	EN 55015:2013	Operation temperature	Ta: -30°C ~ +55°C
	EN 61547:2009	Case temperature (Max.)	Tc: +85°C
	EN 61000-3-2:2014	IP rating	IP20
	EN 61000-3-3:2013		
Safety standard(LVD)	EN 61347-2-11:2002		
	EN 61347-1:2015		
	EN 62493:2015		
Certification	CE,EMC,LVD	Warranty	
		Warranty	5 years

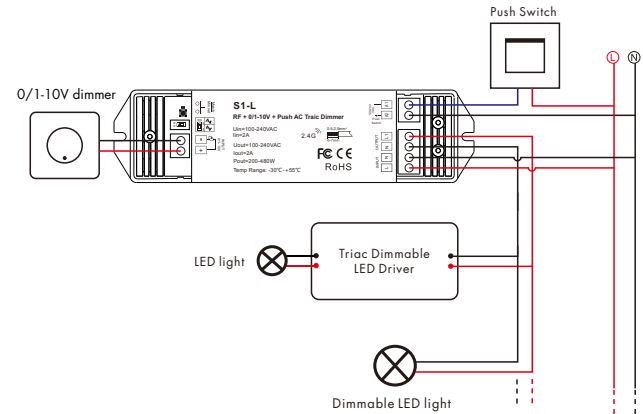
### Compatible Load Types

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	

### Mechanical Structures and Installations



### Wiring diagram



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

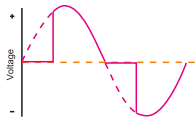
**Note:** When calculating the maximum number of load lamps or drivers, the input power or input current parameters of a single lamp or driver must be used, the output power parameters can not be used. In addition, the maximum surge current of the dimmer is 65A, the sum of surge current of multiple dimmable LED drivers should not exceed 2 times. otherwise, the product will be overloaded and damaged.

## Leading edge or trailing edge dimming setting

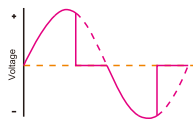
Select leading edge(forward-phase) dimmer or trailing edge(reverse-phase) dimmer according to dimmable LED light or driver.



Forward-phase control dimmer(TRIAC)



Reverse-phase control dimmer



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

## 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.

## 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 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 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.

## O/1-10V dimming

- The O/1-10V input is operable via commercially available simple rotary wall switches designed for O/1-10V dimming equipment or from dedicated system central dimming controllers.
- Compliant with 0-10V, 1-10V, 10V PWM, RX(4 in 1).
- We recommend the number of AC triac dimmers connected to O/1-10V dimmer does not exceed 5 pieces, The maximum length of the wires from dimmer to AC triac dimmer should be no more than 1.5 meters.
- If the AC triac dimmer be used with the RF remote or Push-Dim interface prior to using the O/1-10V interface, the O/1-10 V signal should change over 10% to return O/1-10 V control.

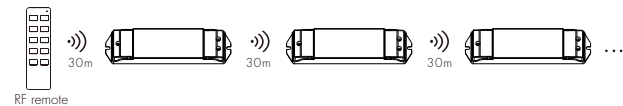
## AC Push Dim

The provided AC Push-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall 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.
- **Synchronization:**  
If more than one AC triac dimmer are connected to the same push switch, do a long press for more than 10s, then the system is synchronized and all lights in the group dim up to 100%.  
This means there is no need for any additional synchrony wire in larger installations.  
We recommend the number of AC triac dimmers connected to a push switch does not exceed 25 pieces,  
The maximum length of the wires from push to AC triac dimmer should be no more than 20 meters.

## RF Application notes

### 1. All the receivers in the same zone.



**Auto-transmitting:** One receiver can transmit the signals from the remote to another receiver within 30m, as long as there is a receiver within 30m, the remote control distance can be limitless.

**Auto-synchronization:** Multiple receivers within 30m distance can work synchronously when they are controlled by the same remote.

Receiver placement may offer up to 30m communication distance. Metals and other metal materials will reduce the range. Strong signal sources such as WiFi routers and microwave ovens will affect the range.

We recommend for indoor applications that receiver placements should be no further apart than 1.5m.

### 2. Each receiver(one or more) in a different zone, like zone 1, 2, 3 or 4.

