

# AC Triac RF + Push Dimmer



Model No.: TR1

RF dimming/Numeric display/Leading edge or trailing edge/Min brightness settable/Push Dim/Din rail

## Features

- RF + Push AC phase-cut dimmer, 1 channel output.
- To dim and switch single color dimmable LED lamps, traditional incandescent and halogen lights.
- Digital numeric display, set brightness by buttons.
- 0-100% dimming smoothly without any flash.
- Reverse-phase dimming or forward-phase dimming selectable.
- Minimum brightness set from 1% to 40%.
- Compatibility with all Skydance's 2.4G single zone or multiple zone dimming remote control.
- Connect with external push switch to achieve on/off and 0-100% dimming function.



CE RoHS EMC LVD

## Technical Parameters

Input and Output	
Input voltage	100-240VAC
Output voltage	100-240VAC
Output current	1CH, 2A
Output power	200-480W

Safety and EMC	
EMC standard (EMC)	EN 55015:2013 EN 61547:2009 EN 61000-3-2:2014 EN 61000-3-3:2013
Safety standard(LVD)	EN 61347-2-11:2002 EN 61347-1:2015 EN 62493:2015
Certification	CE,EMC,LVD

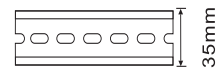
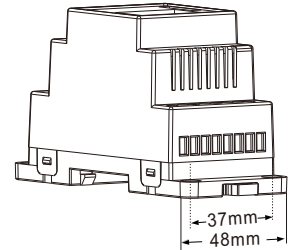
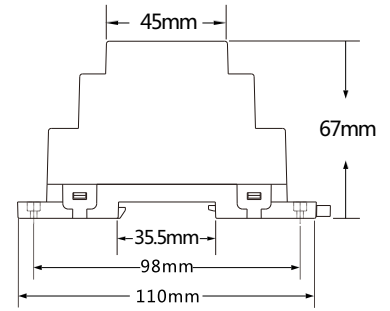
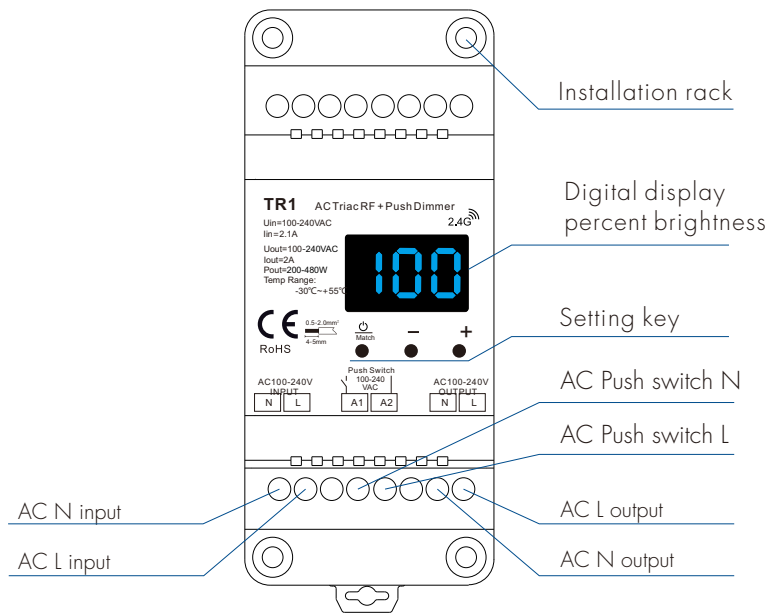
Dimming data	
Input signal	3 Buttons RF 2.4GHz AC Push
Dimming level	100 levels
Dimming range	0-100%

Environment	
Operation temperature	Ta: -30 °C ~ +55 °C
Case temperature (Max.)	Tc: +85 °C
IP rating	IP20

Warranty	
Warranty	5 years

**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, otherwise, the product will be overloaded and damaged.

## Mechanical Structures and Installations

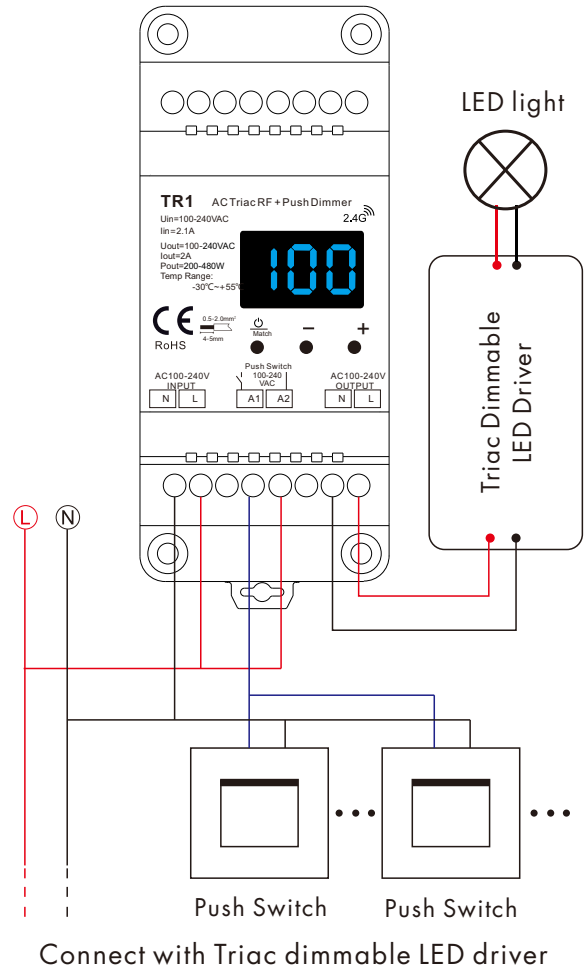
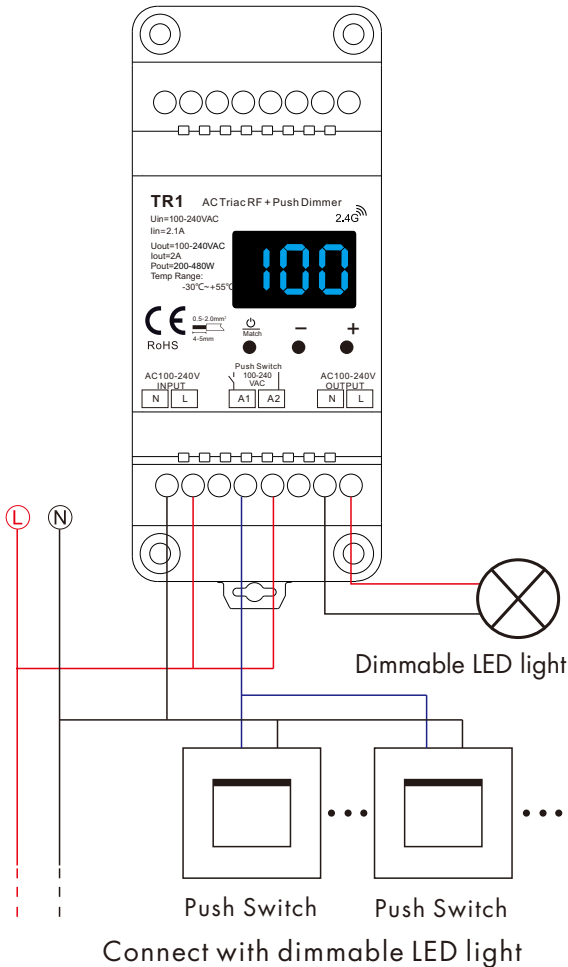


DIN Rail Mounting Size:  
TS-35/7.5 or TS-35/15



## Wiring Diagram



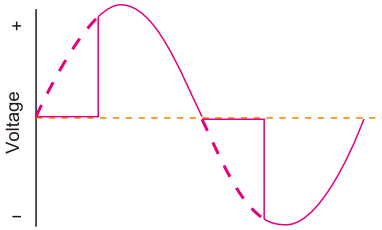
**Caution:** Please carefully ensure all wire connections and polarities are correct and secure before applying power, otherwise this controller will be damaged.



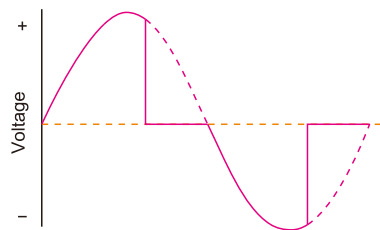
## System parameter setting

- Long press  and - key for 2s, prepare for setup system parameter: control method, minimum brightness curve, automatic blank screen. short press  key to switch three item.
- Control method: short press - or + key to switch forward-phase("C-F") or reverse-phase("C-R").

Forward-phase control dimmer



Reverse-phase control dimmer




- Minimum brightness: short press - or + key to set minimum brightness, from 1% to 40%("b01" to "b40"). You need set suitable minimum brightness to avoid flick.
- Automatic blank screen: short press - or + key to switch enable("bon") or disable("boF") automatic blank screen.
- Long press M key for 2s or timeout 10s, quit system parameter setting.

## Restore factory default parameter

- Long press - and + key for 2s, restore factory default parameter, display "RES".
- Factory default parameter: 100% brightness, reverse-phase control, 5% minimum brightness, disable automatic blank screen.

## Dimming by 3 buttons

- Short press  key, turn on or turn off light.  
When display percent brightness value (001~100), the light is on.  
When display "bon", the light is off.
- When light is on, Press - or + key to change brightness, long press for continuous adjustment.

## Dimming by Push switch

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, even at power failure.
- **Synchronization:**  
If more than one 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 dimmers connected to a push switch does not exceed 25 pieces,  
The maximum length of the wires from push to dimmer should be no more than 20 meters.

## Dimming by RF remote

### Match Remote Control (two match ways)

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

#### Use the Match key

Match:

Long press Match key for 2s, display "RLS", within 5s, press on/off key (single zone remote) or zone key (multiple zone remote) of the remote, display "RLO", match is successful.

Delete:

Long press Match key for 5s, until display "RLE", delete all matched remote.

#### Use Power Restart

Match:

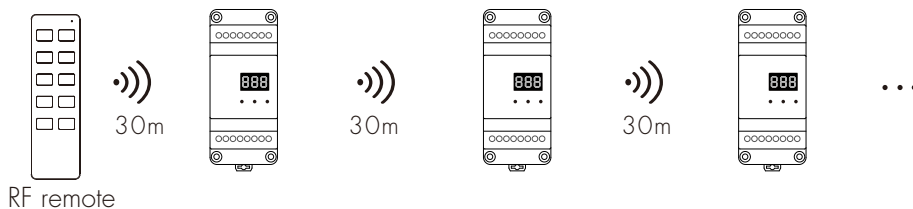
Switch off the power, then switch on power again, immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 3 times on the remote. The light blinks 3 times means match is successful.

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.

### RF remote application notes

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



RF remote

**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.

