AC Triac Rotary Glass Panel Dimmer

Model No.: ST1

Rotary dimming/Glass panel/Leading edge or trailing edge/Wireless remote control

CE RoHS emc LVD

Features

● Rotary glass panel AC phase-cut dimmer, 1 channel output.
● To dim and switch single color dimmable LED lamps, traditional incandescent and halogen lights.
● Rotate knob to change brightness, support push and long push operation.
● 256 levels 0-100% dimming smoothly without any flash.
● Leading edge dimming or trailing edge dimming set by dip switch.
● Compatibility with RF 2.4G single zone or multiple zone dimming remote control.
● Over-heat / Over-load protection, recover automatically.

Technical Parameters

Input and Output

Input and Output	
Input voltage	AC100-240V
Output voltage	AC100-240V
Output current	Max 1.5A
Output power	150-360W

Safety and EMC

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

Dimming data	
Input signal	Rotary knob + RF 2.4GHz
RF Control distance	30m
Dimming level	256 levels
Dimming range	0-100%

Environment

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

Warranty

Warranty	
Warranty	5 years

Compatible Load Types

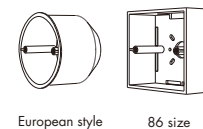| Load Type	Maximum Load	Remarks
Dimmable LED lamps	200W @ 220V 100W @ 110V	Due to variety of LED lamp designs, maximum number of LED lamps is further dependent on power factor result when connected to dimmer.
Triac Dimmable LED drivers	200W @ 220V 100W @ 110V	Maximum permitted number of drivers is 200W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

Mechanical Structures and Installations

AC N output
AC L output
AC L input
AC N input
DIP switch for Leading edge or trailing edge phase-cut select

86mm
86mm
45.5mm
59mm
52.00 mm
Ø62mm

Installation diagram:

Uninstall   Rotary panel   Baseplate   Base
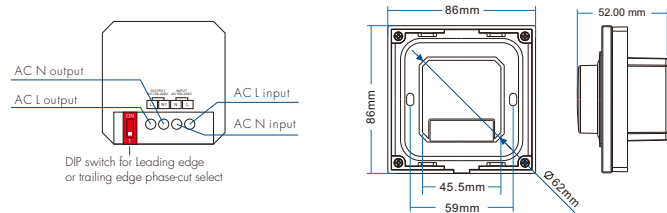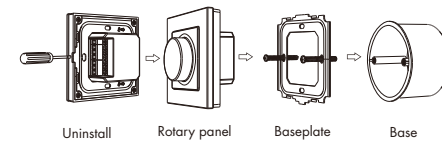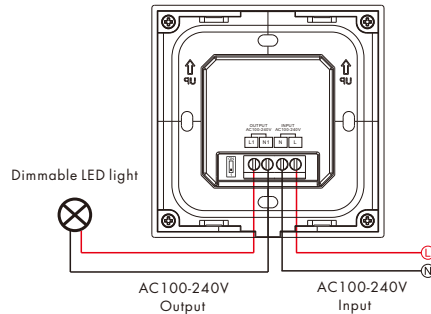
Typical base as below:

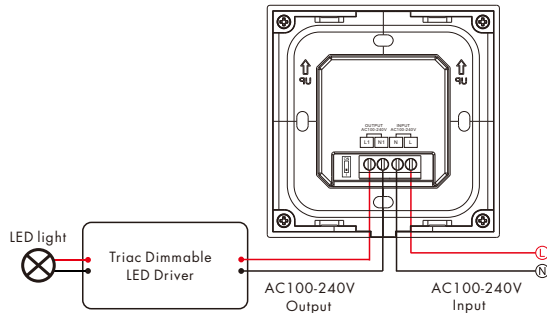European style   86 size

Wiring diagram

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

● Connect with dimmable LED light

Dimmable LED light

AC100-240V
Output

AC100-240V
Input

● Connect with Triac dimmable LED driver

LED light

Triac Dimmable
LED Driver

AC100-240V
Output

AC100-240V
Input

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.
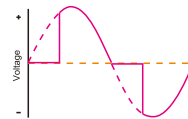
Knob function

● **Push:** Turn on or off light.
After turn on light:
● **Rotate:** Rotate knob to adjust brightness, 2.5 turns, 50 levels.
● **Long push(1-6s):** Continuous 256 levels brightness adjustment.

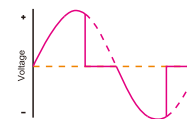## Leading edge or trailing edge dimming setting

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

Reverse-phase
Forward-phase
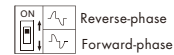
Forward-phase control dimmer(TRIAC)   Reverse-phase control dimmer

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

Match Remote Control (two match ways)

The AC Triac rotary panel dimmer can also match with the RF dimming remote (optional).
End user can choose the suitable match/delete ways. Two options are offered for selection:

Use Knob

Match:
Turn on light, turn off, immediately push the knob for 5s, then press on/off key (single zone remote) or zone key (multiple zone remote) of the RF remote within 5s.

Delete:
Turn on light, turn off, immediately push the knob for 10s, delete all matched RF 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.