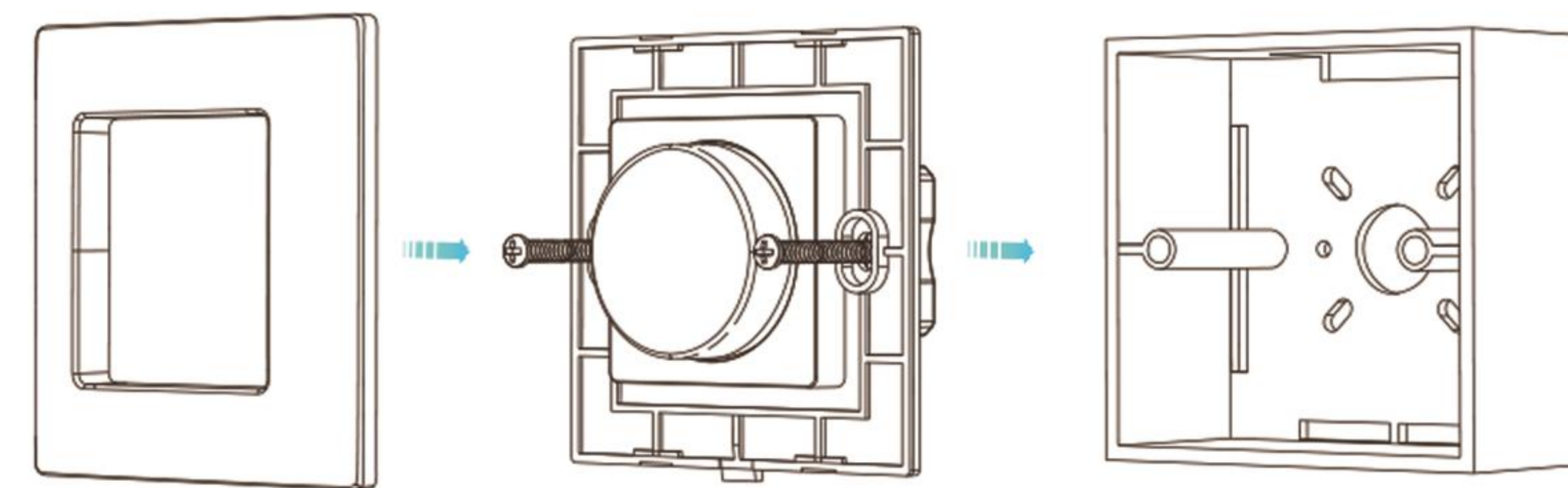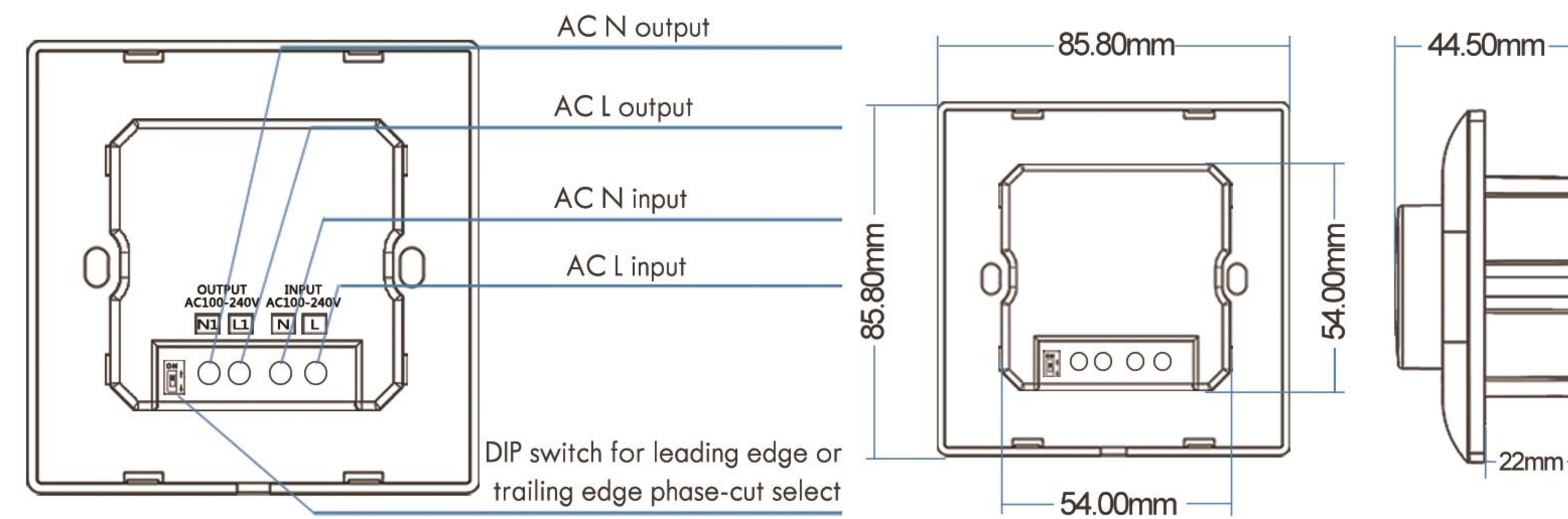# Triac Rotary Panel Dimmer

Model No.: BQ-TTLDIM

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

Features

● Rotary 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.
● Leading edge dimming or trailing edge dimming set by dip switch. Compatibility with Boqi's 2.4G dimming remote control. Over-heat / Over-load protection, recover automatically.
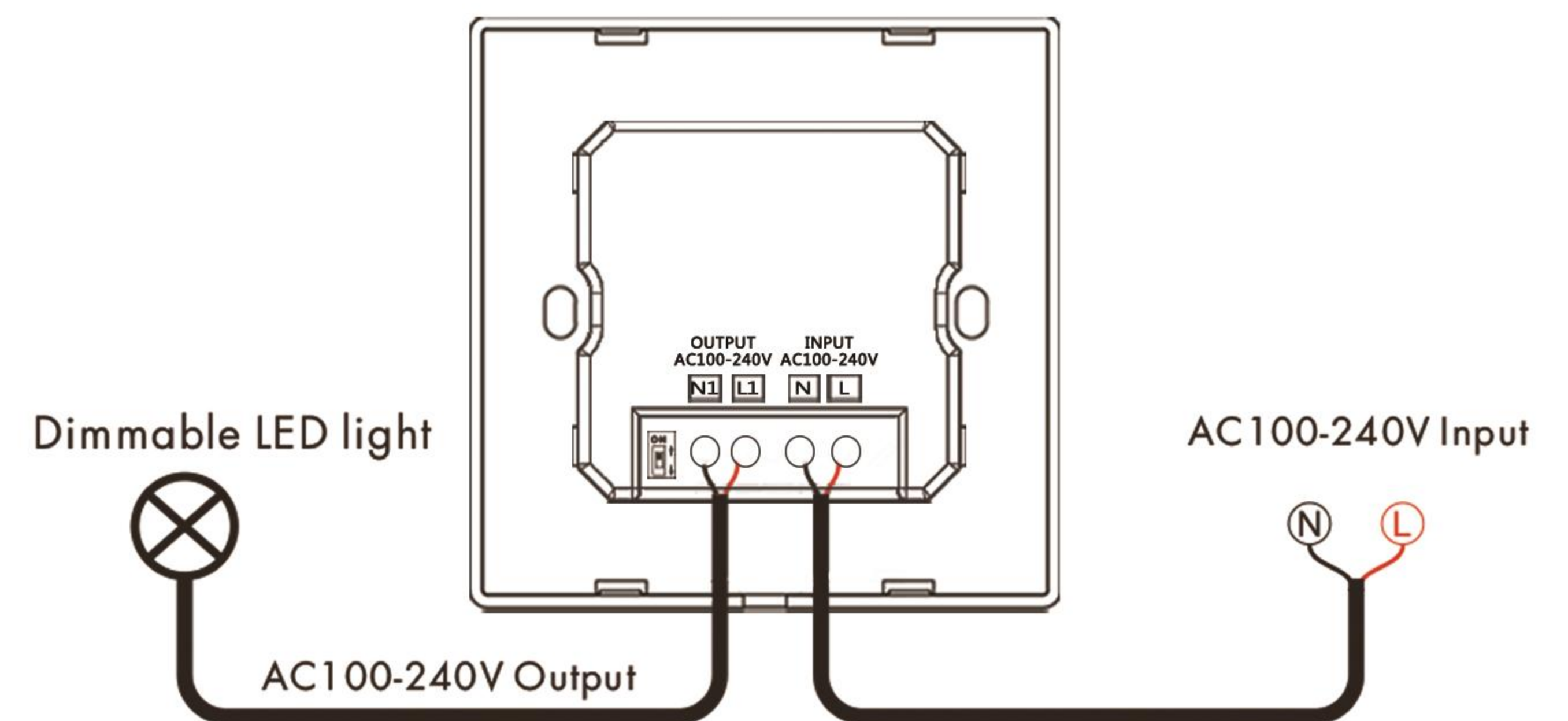
CE RoHS emc LVD

Technical Parameters

Input and Output

Input voltage	AC100-240V
Output voltage	AC100-240V
Output current	Max 1.25A
Output power	5-300W

Environment

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

Weight

Net weight	0.090kg
Gross weight	0.103kg

Dimming data

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

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

Warranty

Warranty	5 years

Compatible Load Types

Load Type	Maximum Load	Remarks
Dimmable LED lamps	250W @ 220V 125W @ 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	250W @ 220V 125W @ 110V	Maximum permitted number of drivers is 250W 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 N input
AC L input
OUTPUT AC100-240V   INPUT AC100-240V
N1 L1   N L
DIP switch for leading edge or trailing edge phase-cut select

85.80mm
44.50mm
85.80mm
54.00mm
54.00mm
22mm

Wiring diagram

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

● BQ-TTLDIM connect with dimmable LED light

Dimmable LED light
OUTPUT AC100-240V   INPUT AC100-240V
N1 L1   N L
AC100-240V Input
N   L
AC100-240V Output

● BQ-TTLDIM connect with dimmable LED driver

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.
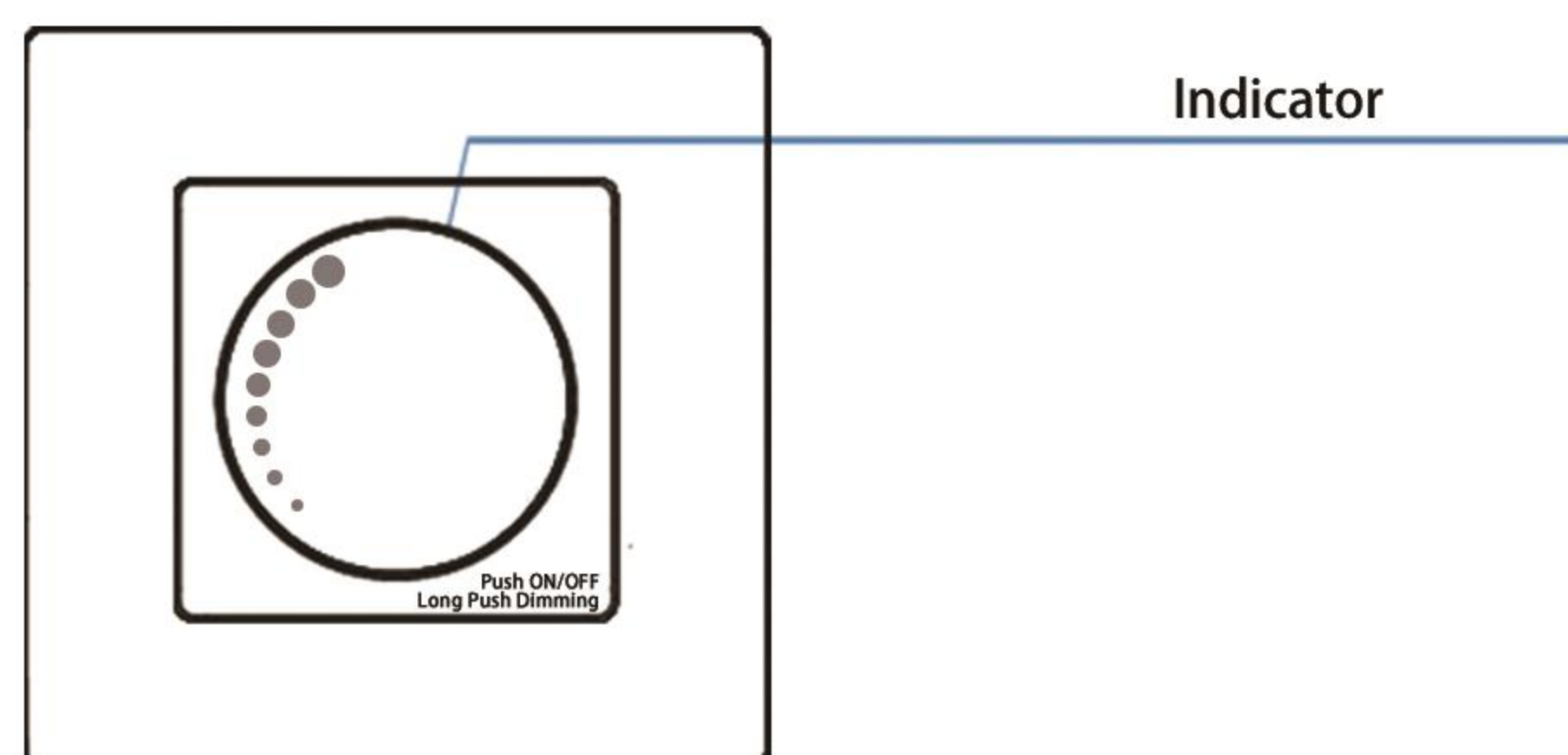
Knob and Indicator function

● Push: Turn on or off light,
   when the indicator lights up, the dimmer is off work, when the indicator lights off, the dimmer is on work.
   Notice: Indicator is with blue light.

   After turn on light:
● Rotate: Rotate knob to adjust brightness, 2.5 turns, 50 levels.
● When brightness Max., rotate knob clockwise, the indicator lights up,
● When brightness Min., rotate knob counterclockwise, the indicator lights up,
● Long push: brightness changes to Max. Or Min..
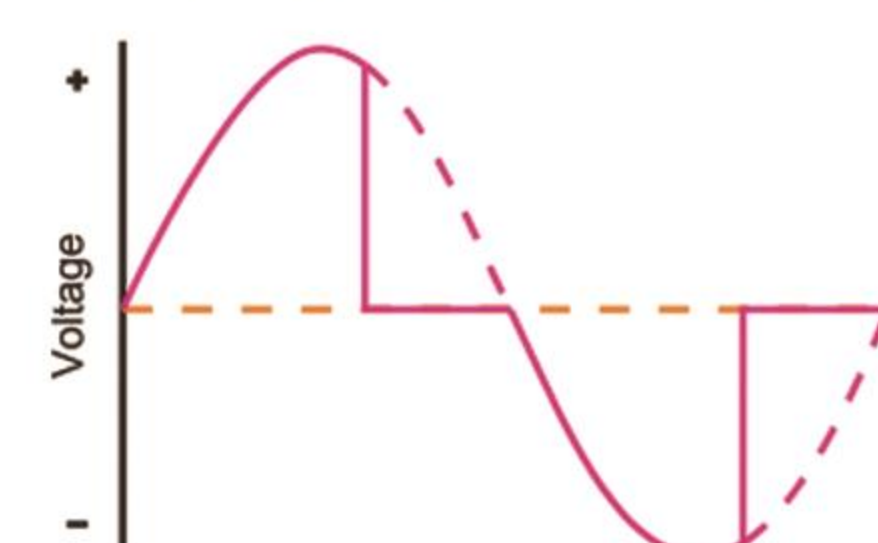
Leading edge or trailing edge dimming setting

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.

Match Remote Control

The AC triac rotary panel dimmer can also match with the RF dimming remote (optional).
End user can choose the suitable match/delete ways.

Use Knob

Match:
Short push knob, turn on light, turn off, immediately push knob continuously
until indicator flashes slowly 3 times, immediately press the on/off key of the remote.

Delete:
Short push knob, turn on light, turn off, immediately push knob continuously
until the indicator flashes slowly 6 times, and then flashes quickly, delete all matched remotes.

Malfunctions analysis & troubleshooting

Malfunctions	Causes	Troubleshooting
No light	1. No power. 2. Wrong connection or insecure.	1. Check the power. 2. Check the connection.
No response from the remote	1. The battery has no power. 2. Beyond controllable distance. 3. The controller did not match the remote.	1. Replace battery. 2. Reduce remote distance. 3. Re-match the remote.