

IN-LINE Multi-way Dimming Switch

Universal LED dimmer

ATE-WBX-RD-RSW



INSTALLATION INSTRUCTION

IMPORTANT !

It is illegal for persons other than an appropriately licensed electrical contractors or other persons authorised by legislation to work on the fixed wiring of any electrical installation.

“This dimmer shall be protected by a 6A or up to a 16A maximum miniature circuit breaker, which is special use with this dimmer.”

WARNING : ELECTRIC SHOCK HAZARD

Hazardous voltage maybe present at the output of the dimmer despite setting the dimmer to zero brightness level. Look out and tag the input circuit before accessing the wiring connections. Failure to follow this warning can result in death or serious injury.

NOTE :

Operation at elevated temperatures or voltages may cause the thermal protection circuit to operate. If this happen, decrease the connected load to prevent re-occurrence.

FEATURES :

- Suitable for 1-way or multi-way dimming and ON/OFF switching.
- Minimum load down to 2W of capacitive or resistive load, such as Dimmable LED Lighting, Incandescent Lighting, MV Halogen / LV Halogen Lighting with electronic transformers.
- Lamps soft-start operation, to extend longer lifetime for the lamp.
- User setting for the minimum dim Level.
- Build-in short circuit protect, designed to ensure the dimmer can survive in case of wiring fault or catastrophic failure of the load.
- Build-in re-settable thermal cut-off to protect the dimmer over normal operation temperature caused by overloads.
- Complies with IEC EN60669 and International safety standards.

ELECTRICAL SPECIFICATIONS

Parameter	Value
Supply voltage & Frequency	220-240V ~ 50Hz
Rating	10-300W: incandescent lamps, high voltage halogen lamps and electronic step-down converter for extra low-voltage incandescent lamps. 2-300W: dimmable LED lamps.
Compatible loads for TE mode	Dimmable LED lighting with compatible Electronic Transformers
	Incandescent lighting, MV Halogen lamps
	LV Halogen Lighting with electronic transformers
Compatible loads for LE mode	LV Halogen Lighting with Iron-core transformers
Operating Temperature	0° - 35°C
Operating Humidity	10 - 90% R.H.

THERMAL OVERLOAD PROTECTION

Build-in thermal protect circuit. Apply a re-settable thermostat component, when module temperature raise achieve 110°C will activate the protection, while temperature cool down approx. 75°C it will become normal operation. If occur frequently, please reduce loading.

SHORT CIRCUIT PROTECTION

Build-in short circuit protect, once activate, the dimmer will suspend operation around 5 second after that, it will auto-ON again. If detect remain short circuit or over current, the module will suspend operation until disconnect dimmer power and Push ON dimmer again reset to normal operation. In this case, please check the circuit with electrical technician.

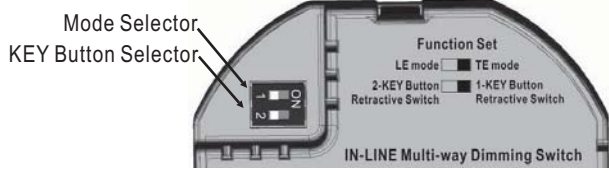
Function Set	1-KEY Retractive Switch	2-KEY UP/DN Retractive Switch
NORMAL OPERATION	<ol style="list-style-type: none"> 1) Short press button to ON or OFF the lamp. 2) Toggle switch to dim. 3) Press and hold dim up until max. level, 4) or release, press and hold dim down until min. level. 5) Short press 3 times button on "ON" or "OFF" lamp reset to "OFF" lamp status. 	<ol style="list-style-type: none"> 1) Short press "UP" button to ON the lamp. 2) Short press "DN" button to OFF the lamp. 3) Press and hold "UP" button to dim up until max. level, 4) Press and hold "DN" button to dim down until min. level.
MIN. BRIGHT LEVEL SETTING	Lamp in OFF state, press and hold button around 5s-8s until lamp will appear at half-bright level then release button, after that, is entry minimum bright level settings. Press and hold button to set your desire min bright level then release button. Short press button again to turn OFF the lamp, it's confirmed and save setting.	Lamp in OFF state, press and hold DN button around 5s-8s until lamp will appear at half-bright level then release button, after that, is entry minimum bright level settings. Press and hold button to set your desire min. bright level then release button. Short press button again to turn OFF the lamp, it's confirmed and save setting.
Note : Setting must be performed within 15 seconds, if no, it will time out and auto exit program without save		
SNOOZE FUNCTION SET (SLEEP MODE)	Lamp is ON , short press twice button and lamp indicator to FLASH once and start snooze function. When lamp on full power, snooze time out around approx. 60 minutes, When lamp on half power, snooze time out around 30 minutes, When lamp on quarter power, snooze time out around 15 minutes, etc. During snooze operation. It can be quit this snooze function , just short press once button to OFF lamp & quit, or press and hold button to set the lamp bright level again & quit.	Lamp is ON , short press twice UP/ON button and lamp indicator to FLASH once and start snooze function. When lamp on full power, snooze time out around approx. 60 minutes, When lamp on half power, snooze time out around 30 minutes, When lamp on quarter power, snooze time out around 15 minutes, etc. During snooze operation. It can be quit this snooze function , just short press once DN/OFF button to OFF lamp & quit, or press and hold UP/ON button to set the lamp bright level again & quit.

MODE SELECT / 1-KEY or 2-KEY SELECT OPERATION

This dimmer built-in TE / LE Mode & 1-KEY / 2-KEY for user select, by using small screw driver select via the "DIP Switch". Please OFF power before switching the selector.

- * TE / Trailing Edge Mode (Factory default), suitable for most LED lamps,
- * LE / Leading Edge Mode, for special required for LE lamp or IRON CORE Transformer, (SEE COMPATIBLE LOADS)

- * 1-KEY Button (Factory default), suitable for single button key retractive switch operation,
- * 2-KEY Button, for two button key UP/ON & DN/OFF retractive switch operation.



Wiring Notice :

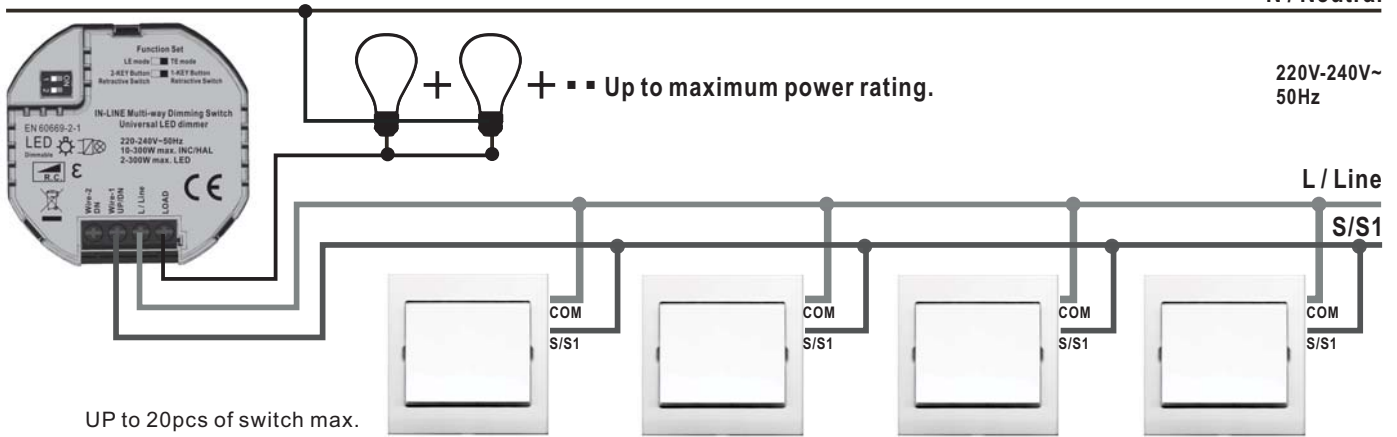
1. When connect with IRON-CORE transformers, only Leading Edge mode (LE) could be applied, TE mode can not be used in this case.
2. Multiple compatible loads can be used as the total lamp wattage does not exceed the maximum load rating of the dimmer.
3. Some lamps may exhibit unexpected performance characteristics when cold. Dimming performance should improve after the lamp warms up. Or in case of lamp appears unstable status, it could be changed to LE mode.
4. The Dimmer must always be connected to the LINE side of the load.
5. Two or more dimmers MUST NOT be connected in parallel or series to control the same load from two different locations.

Wiring Details :

1. Disconnect power. Lock out and tag the relevant circuit at the mains switchboard.
2. Remove existing switch from wall.
3. Connect the dimmer in accordance with the wiring diagrams.
*the copper conductors for the terminals is 1,0 to 1,5mm rigid wire.
4. Refit switch plate to wall.
5. Reconnect power. Push ON and dim with retractive switch.

Wiring Connect diagram for

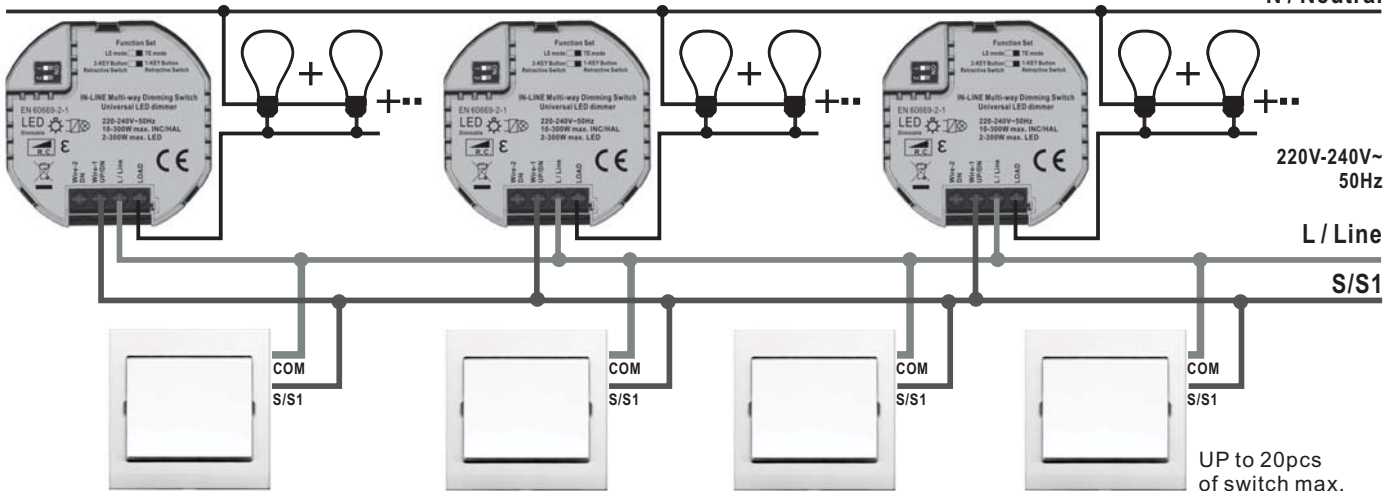
One dimmer module to 1-KEY or 2-KEY multi-way retractive switch



UP to 20pcs of switch max.

Wiring Connect diagram for

Multi-dimmer module to 1-KEY multi-way retractive switch



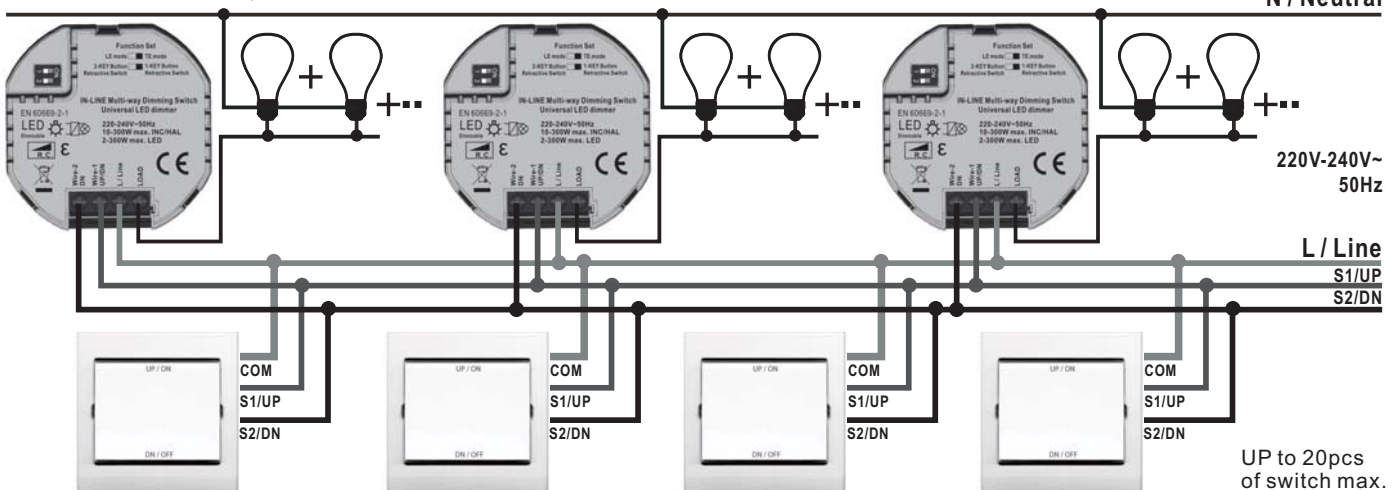
UP to 20pcs of switch max.

All Dimmer modules will be synchronous ON/OFF/Dim UP/Dim DN by all 1-KEY retractive switch

If all of the lamps NOT in ON or OFF status, short press 3 times button on "ON" or "OFF" lamp reset to "OFF" lamp status.

Wiring Connect diagram for

Multi-dimmer module to 2-KEY multi-way retractive switch



UP to 20pcs of switch max.