

Auto Detect Intelligent Push Button UP/DOWN Dimming Universal dimmer

Model : ATE-TS300AU-S

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.

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.

ELECTRICAL SPECIFICATIONS

Parameter	Value
Supply voltage & Frequency	230-240V ~ 50Hz
Maximum Load	300W @ 240V~, derate for multi-gang installations
Dimming Technology 	Auto Detect Trailing / Leading edge driven control Also, Leading edge dimming mode can be set by user manually.
Compatible loads for TEauto mode	   Dimmable LED lighting with compatible Electronic Transformers
	 Incandescent lighting, MV Halogen lamps
	 LV Halogen Lighting with electronic transformers
Compatible loads for LE mode <small>*Must be manual change to LE mode</small>	 LV Halogen Lighting with Iron-core transformers
	 Small motor loads, ceiling sweep fans
Operating Temperature	0° - 45°C
Operating Humidity	10 - 90% R.H.
Mounting Centres	84mm Australian Pattern Plate
Safety Compliance	AS/NZS 60669-2-1 : 2013
EMC Compliance	AS/NZS 60669-2-1 : 2002+A1:2008+A2:2015 Excepting when used in conjunction with electronic load

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.

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

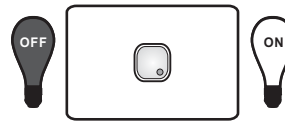
Build-in short circuit protect, once activate, the dimmer will suspend operation around 5 second after that, it will auto-ON again. If detect remain short circuit or over current, the module will suspend operation until disconnect dimmer power and Switch ON dimmer again reset to normal operation. In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

FEATURES :

- Suitable for 1-way or Multi-way full Dimming and switching.
- Minimum load down to 5W 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.
- LED back light for indicate the dimming mode.
- 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.
- Suitable mounting with 84mm Australian Pattern Plate.
- Complies with Australian and International safety standards.

NORMAL OPERATION







Operation of Push Button Dimmer :



Short press button to **ON** or **OFF** the lamp.
Toggle switch to dim.
Press and hold dim up until maximum level,
or release, press and hold dim down until minimum level.



COMPATIBLE LOADS

Compatible loads for TEauto or TE mode	
	Integral Dimmable LED lamps
	Dimmable LED lighting with compatible Electronic Transformers
	Incandescent lighting, MV Halogen lamps
	LV Halogen Lighting with Electronic Transformers
Compatible loads for LE mode *Must be manual change to LE mode	
	LV Halogen Lighting with Iron-core Transformers
	Small motor loads, ceiling sweep fans

NOTE :
When connect with IRON-CORE transformers or MOTOR-LOADS, Only Leading Edge mode (LE) could be applied, the TEauto mode can not be used in this case.

Multiple compatible loads can be used as the total lamp wattage does not exceed the maximum load rating of the dimmer.

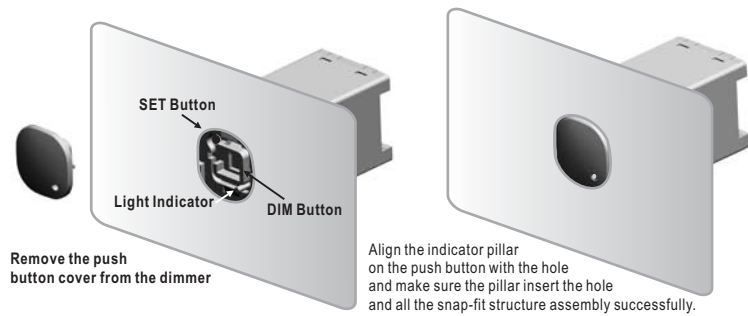
Some lamps may exhibit unexpected performance characteristics when cold. Dimming performance should improve after the lamp warms up. Or in case of lamp appears unstable status, it could be changed to LE mode.

MULTI-GANG DERATING

For applications where Dimmers are multi-ganged, derate the maximum load rating of the unit according to the derating table show as below :

Number of Dimmers	Maximum Load per Dimmer
x1	300W
x2	250W
x3	200W

MINIMUM BRIGHT LEVEL SETTING



How to set the Minimum bright level :

Operate steps of DIM Button & SET Button	Actions
	Lamp in ON state, short press SET Button, lamp will appear min. bright level, after that, is entry minimum Brightness settings.
	Long press DIM Button until desire min. bright level then release button.
	Short press SET Button, lamp will back to previous bright level. it's confirmed and save setting.

Each step must be performed within 10 seconds, if no, it will time out and auto exit program without save

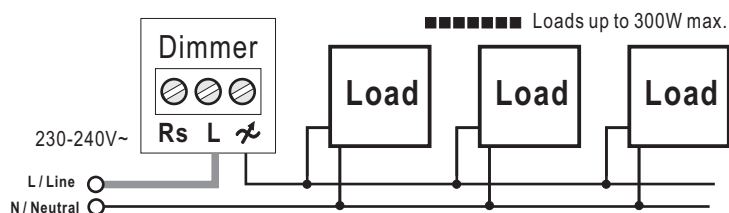
INSTALLATION

Wiring Details :

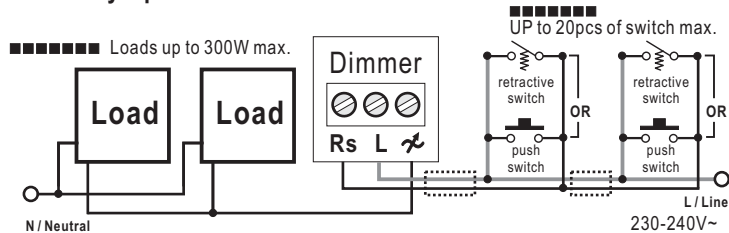
1. Disconnect power. Lock out and tag the relevant circuit at the mains switchboard.
2. Remove existing switch from wall.
3. Connect the dimmer in accordance with the wiring diagrams.
4. Refit switch plate to wall and fit the dimmer knob to the shaft.
5. Reconnect power. Turn the Dimmer on and check its operation by short press button to ON or OFF the lamp.

WIRING DIAGRAMS

One Way Operation



Multi-way Operation



NOTE:

The Dimmer must always be connected to the LINE side of the load.
Multi-way retractive switch or push switch can be control up to 20 units for UP/DOWN dim and ON/OFF function.
Two or more dimmers MUST NOT be connected in parallel or series to control the same load from two different locations.

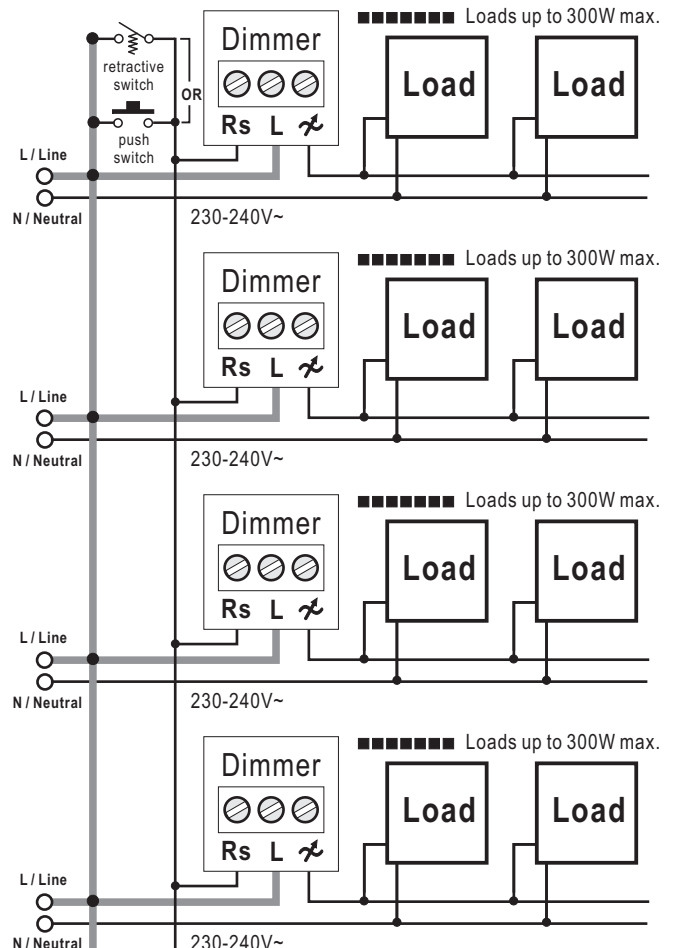
MODE SETTING

How to set TEauto, TE or LE Mode (Factory default TEauto mode) :

Operate steps of DIM Button & SET Button	Actions
	Lamp in OFF state, long press SET Button around 3s until indicator flash once then release button, after that, is entry TEauto, LE or TE mode settings.
For select TEauto mode (Factory default) *SEE COMPATIBLE LOADS	
	Short press DIM Button to select indicator in GREEN colour then Short press SET Button. it's confirmed and save setting.
For select LE mode (for special required*) *SEE COMPATIBLE LOADS	
	Short press DIM Button to select indicator in RED colour then Short press SET Button. it's confirmed and save setting.
For select TE mode (for special required*) *SEE COMPATIBLE LOADS	
	Short press DIM Button to select indicator in GREEN+RED colour then Short press SET Button. it's confirmed and save setting.

Each step must be performed within 10 seconds, if no, it will time out and auto exit program without save

Wiring diagrams for one retractive switch control multi-dimmer :



NOTE :

One retractive switch or push switch can be control up to 20 units of dimmer for UP/DOWN dim and ON/OFF at the same time.