

PAD02

Z-Wave Smart Dimmer Socket



Warning: Do not use Non-Dimmable LED lamps.

PAD02 is an E27(EU)/ E26(US) Edison screw based lamp socket, which provides electrical connection to the E14(EU)/ E12(US) Edison screw based lamps and support it in the lighting fixture. The use of socket allows lamps to be safely and conveniently replaced. You can On/Off the light by pressing the button briefly, or a long pressing to control the brightness of dimmable light bulb.

This dimmer is a transceiver which is a security enabled device which based on Z-Wave Plus technology, and it is fully compatible with any Z-Wave™ enabled network. Since PAD02 supports Security Command Class, it can learn with Secured controller. Its functionality and supported command classes is identical when included as a secure and non-secure device.

Adding to Z-Wave™ Network

In the front casing, there is an on/off button with LED indicator below which is used to

switch on and off or carries out inclusion, exclusion, reset or association. When first power applied, its LED flashes on and off alternately and repeatedly at 0.5 second intervals. It implies that it has not been assigned a node ID and start auto inclusion.

Auto Inclusion

The function of auto inclusion will be executed as long as the dimmer does not have Node ID and just connect the switch to main power.
Note: Auto inclusion timeout is 2 minute during which the node information of explorer frame will be emitted once every several seconds. Unlike “inclusion” function as shown in the table below, the execution of auto inclusion is free from pressing the On/Off button on the dimmer.

The table below lists an operation summary of basic Z-Wave functions. Please refer to the instructions for your Z-Wave™ Certificated Primary Controller to access the Setup function, and to include/exclude/associate devices

Function	Description	Annotation
No node ID	The Z-Wave Controller does not allocate a node ID to the Switch.	LED 2-second on, 2-second off
Inclusion	1. Put your Z-Wave controller into inclusion mode by following the instructions provided by the controller manufacturer.	One press one flash LED
	2. Pressing Include button of PAD02 three times within 2 seconds will enter inclusion mode.	

Exclusion	1. Put your Z-Wave controller into exclusion mode by following the instructions provided by the controller manufacturer.	One press one flash LED
	2. Pressing Include button of PAD02 three times within 2 seconds will enter exclusion mode.	
	3. Node ID has been excluded.	0.5s On, 0.5s Off (Enter auto inclusion)
Reset	1. Pressing Include button of PAD02 three times within 2 seconds will enter inclusion mode.	Use this procedure only in the event that the primary controller is lost or otherwise inoperable.
	2. Within 1 second, press Include button of PAD02 again for 5 seconds.	
	3. IDs are excluded.	0.5s On, 0.5s Off (Enter auto inclusion)
Association	1. The PAD02 is an always listening Z-Wave device, so associations may be added or removed by a controller at any time. Or If your controller requires to have the PAD02 send a 'node information frame' or NIF for associations, then pressing the On/Off button three times within 2 seconds will cause the PAD02 to send its NIF.	

	2. There are only one group for the switch	
✕Including a node ID allocated by Z-Wave Controller means inclusion. Excluding a node ID allocated by Z-Wave Controller means exclusion. ✕Failed or success in including/excluding the node ID can be viewed from the Z-Wave Controller.		

LED Indication

To distinguish what mode the switch is in, view from the LED for identification.

State Type	LED Indication
Normal	Whenever we switch On and off of the PAD02 by On/Off button or RF command, the LED will lights up when switch on; whereas LED off when switch off.
No node ID	Under normal operation, when the Switch has not been allocated a node ID, the LED flashes on and off alternately at 2-second intervals. By pressing On/Off button, it will stop flashing temporarily.
Learning	When PAD02 is in learning mode, LED flashes on and off alternately and repeatedly at 0.5 second intervals.

Choosing a Suitable Location

1. Do not locate the dimmer facing direct sunlight, humid or dusty place.
2. The suitable ambient temperature for the Switch is 0°C~40°C.

3. Do not locate the dimmer where exists combustible substances or any source of heat, e.g. fires, radiators, boiler etc.
4. After putting it into use, the body of dimmer will become a little bit hot of which phenomenon is normal.

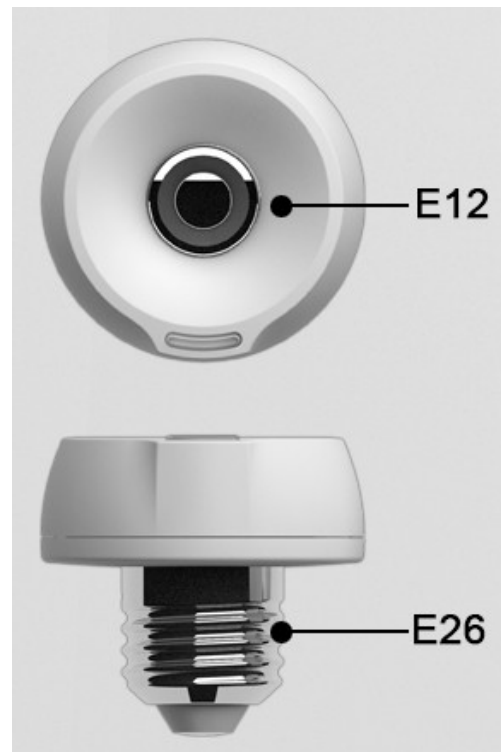
screw lamp holder Type:

Since the socket type for each country in Europe varies, refer to the outline for each socket suited for each country as follows:

EU TYPE: PAD02-1



US TYPE: PAD02-2



Note: Please make sure that the intensity of the screw lampholder of the electrical device must be Maximum Load (Watts) and have same head as the enclosed screw lampholder before inserting to the socket.

Troubleshooting

Symptom	Cause of Failure	Recommendation
The Switch not working and LED off	4. The Switch is not plugged into the electrical outlet properly 5. The Switch break down	1. Check power connections 2. Don't open up the Switch and send it for repair.
The Switch LED illuminating, but cannot control the ON/OFF Switch of the load attached	1. Check if the load plugged into the Switch has its own ON/OFF switch 2. The switch is protected	1. Set the ON/OFF switch of the load attached to ON 2. Unprotected the switch or follow the instruction of protection.
The Switch LED illuminating, but the Detector cannot control the Switch	1. Not carry out association 2. Same frequency interference	1. Carry out association 2. Wait for a while to re-try

Specification

Operating Voltage	100V~240V / 50Hz~60Hz
Maximum Load (watts)	40W (Incandescent bulbs); (PAD02-1; PAD02-2)
Maximum Load (watts)	13W (Dimmable LED bulbs); (PAD02-1; PAD02-2)
Screw lamp holder Type:	EU type: E27 to E14; PAD02-1
	US type: E26 to E12; PAD02-2

Operating Temperature	0°C ~ 40°C
Frequency Range	868.40MHz & 869.85MHz/ EU (PAD02-1); 908.4MHz & 916.0MHz/ USA (PAD02-2);
RF Maximum Power	+5dBm
Transmission Range	Minimum 40 m in door 100m outdoor line of sight
Modulation Type	FSK (Frequency-Shift Keying)

** Specifications are subject to change and improvement without notice.

FCC ID : RHHPAD02



Warning: Do not use Non-Dimmable LED lamps.

Warning:

1. Plug out to disconnect from power supply; Do not plug in line.
2. Do not exceed the max rating.
3. Do not use Non-Dimmable LED lamps.

Disposal

	This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.
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Company of License Holder : Philio Technology Corporation
Address of License Holder : 8F., No.653-2, Zhongzheng Rd., Xinzhuang Dist., New Taipei City 24257, Taiwan(R.O.C)

FCC Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.