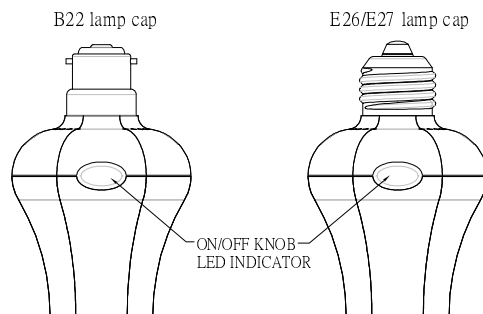


# AN145 SCREW-IN ON/OFF MODULE

The AN145 Screw-in On/Off Module is a transceiver which is a Z-Wave™ enabled device and is fully compatible with any Z-Wave™ enabled network. Z-Wave™ enabled devices displaying the Z-Wave™ logo can also be used with it regardless of the manufacturer, and ours can also be used in other manufacturer's Z-Wave™ enabled networks. Inclusion of this Module on other manufacturer's Wireless Controller allows remote turn-on of On/Off status. Each Module is designed to act as a repeater. Repeaters will re-transmit the RF signal to ensure that the signal is received by its intended destination by routing the signal around obstacles and radio dead spots.

## Adding to Z-Wave™ Network

In the front casing, there is an On/Off knob coupled with LED indicator which is used to carry out inclusion, exclusion or association. Put a Z-Wave™ Wireless Controller into inclusion/exclusion mode, press the knob on the Module to complete the inclusion/exclusion process.



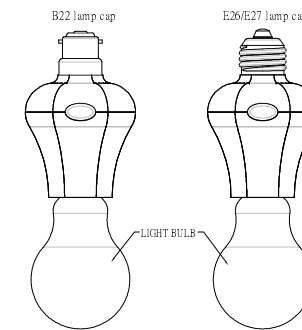
## Installation

As soon as the light bulb is screwed into the lamp holder, the LED on the Module will be flashing slowly. This implies that the Module is not included in Z-Wave system and cannot be controlled by the Wireless Controller. However, pressing

the On/Off knob will control directly the On/Off status of the connected incandescent lamp without using the Wireless Controller.

- (1) Turn off the wall switch on the wall or mains power supply.
- (2) There are three types of lamp caps – B22, E26, E27. Choose whichever suits you most.
- (3) The Module is designed for ceiling mounting. Fit the Module into the existing lamp cap.
- (4) Place the light bulb into the lamp holder.

**Note:** The Module cannot be screwed in an air tight environment/ lamp stand.



## Operation

To turn on or off the incandescent lamp controlled by the Module:

- Simply press and release the On/Off knob. The red indicator LED will turn On/Off and the incandescent lamp screwed into the Module will also turn On/Off.
- With Z-Wave controller: simply press On or Off button on the controller.
- With Z-Wave routing slave: To do association between routing slave and Module through Z-Wave controller, the routing slave can control the On/Off status of Module.

## Advanced Operation

As long as any Z-Wave™ enabled device that can send below mentioned alarm command

( **ALARM\_ REPORT**, Alarm Type ==0x01,Alarm Level ==0x11)

to the Screw-in On/Off Module will enable its red indicator LED and the load plugged into the Module to be on and off intermittently for 10 times.

## Programming

The On/Off knob allows the user

- Turn on or off the load attached
- Include or exclude the Module from the Z-Wave™ system

## Troubleshooting

Symptom	Cause of Failure	Recommendation
The module not working and LED off	<ol style="list-style-type: none"> <li>1. Poor connection between lamp cap of mounted ceiling and lamp cap of the lamp holder</li> <li>2. The module break down</li> </ol>	<ol style="list-style-type: none"> <li>1. Check if the lamp cap of mounted ceiling fits well into the module</li> <li>2. Don't open up the module and send it for repair</li> </ol>
The module's LED working, but the connected light bulb not working	<ol style="list-style-type: none"> <li>1. Light bulb has burnt out</li> <li>2. Poor connection or improper assembly between lamp cap of the light bulb and lamp holder of the module</li> <li>3. The module break down</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace a new bulb</li> <li>2. The light bulb has screwed tightly to the lamp holder of the module</li> <li>3. Don't open up the module and send it for repair</li> </ol>
The LED on the module working, but the module cannot control Motion Detector SP103 and Door/Window Detector SM103	<ol style="list-style-type: none"> <li>1. Not carry out association</li> <li>2. Same frequency interference</li> </ol>	<ol style="list-style-type: none"> <li>1. Carry out the association</li> <li>2. Wait for a while to re-try</li> </ol>

## Specification

Operating Voltage / Type of Lamp Cap	AN145-1	120VAC/60Hz	E26
	AN145-2	230VAC/50Hz	E27
	AN145-4	230VAC/50Hz	B22
Maximum Load	100 Watts incandescent, 27 Watts energy saving bulb		
Operating Temperature	0°C~40°C		
Operating Humidity Range	85%RH		

Receiving Range	30 meters min. line of sight
Frequency Range	908.42MHz or 868.42MHz

A501111195R

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



## Federal Communication Commission 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.

### IMPORTANT NOTE:

#### FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating

instructions for satisfying RF exposure compliance.

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

**WARNING:**

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities.

Contact your local government for information regarding the collection systems available.

If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

When replacing old appliances with new ones, the retailer is legally obligated to take back your old appliance for disposal at least for free of charge.

The logo for DIREKTRONIK is displayed in a bold, italicized, sans-serif font. The letters are white with a thick red outline. The logo is positioned on a yellow curved background that resembles a rising sun or a stylized horizon.

Direktronik AB tel. 08-52 400 700 [www.direktronik.se](http://www.direktronik.se)