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SAMOTECH SM323-v2 Zigbee Dimmer Switch Module

SAMOTECH SM323-v2 Zigbee Dimmer Switch Module Instruction Manual

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SAMOTECH

SAMOTECH SM323-v2 Zigbee Dimmer Switch Module

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Knob

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LED indicator

SM323

220-240V ~ 50Hz

EN 55015	2WAY ZIGBEE
EN 60669-2-1	LED TRAILING
EN 61000-3-3	EDGE DIMMER

N S ⊗ L

Neutral input — Live input
2 way output — Load output
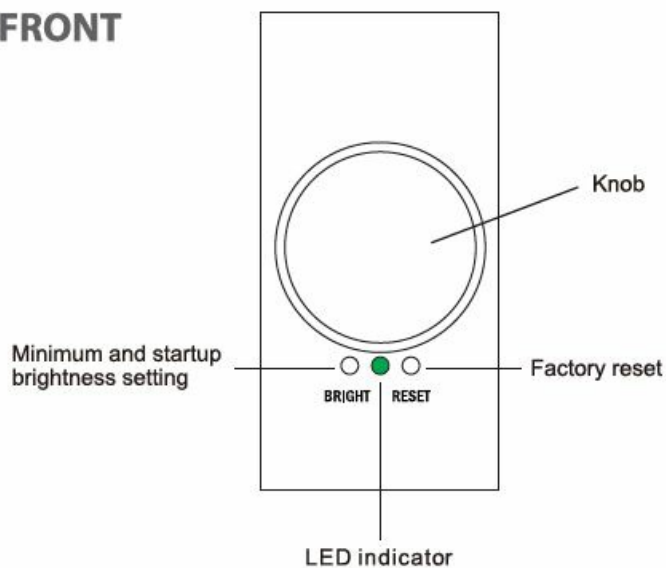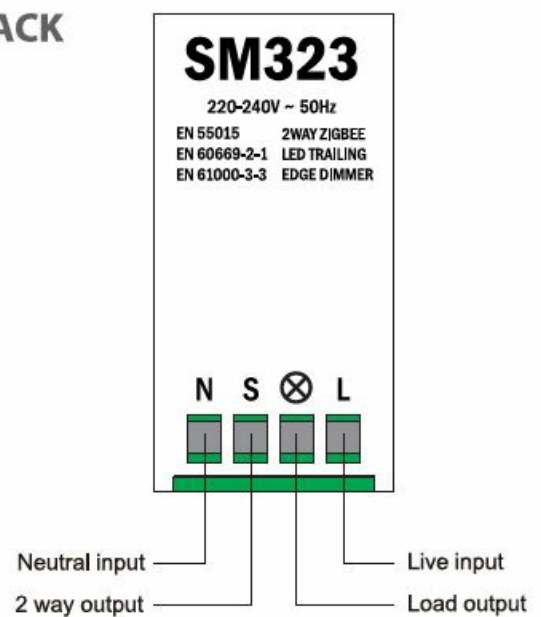
SAFETY WARNING

- This product must be installed according to these instructions and by the current IEE Wiring Regulations (BS 7671). If in doubt, or where required by the law, consult a competent person who is registered with an electrical self-certification scheme. Further information is available online or from your Local Authority.
- To prevent electrocution, do not work on any appliance live. Turn off the mains supply before commencing work.
- To prevent fire hazards do not exceed the load rating of this device as stated on the rear of the product.
- If this product has a metal front plate it must be earthed.
- Use with dimmable LED, CFL bulbs, Incandescent or halogen fixtures only.

- When multiple bulbs are used with one dimmer DO NOT mix bulb types. All bulbs shall be either LED, CFL or Incandescent. Using the same model of each bulb will enhance dimmer performance.
- Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.

TECHNICAL DATA

Input Voltage	Dimmer Type	Output Current	Size(LxWxH)
230VAC	Trailing Edge	1.5A max	25.0x50.0x20.0mm

LAMP TYPE

Load Symbol	Load Type	Max. Load	
⇥⊦	Dimmable LED lamps	175W @ 230V	To achieve best results, use certified dimmable LED bulbs from the same manufacturer.
⇥⊦	Dimmable LED drivers	175W @ 230V	Maximum permitted number of drivers is 250W divided by driver nameplate power rating.
☼	Incandescent lighting, HV Halogen lamps	350W @ 230V	
	Low voltage halogen lighting with electronic transformers	175W @ 230V	

SPECIFICATIONS & COMPATIBILITY

- Zigbee smart dimmer switch based on the latest Zigbee 3.0 protocol
- 230VAC input/output voltage can be wired with or without a neutral wire
- Trailing edge dimmer mode supports resistive, capacitive and inductive loads
- Adjustable minimum and startup brightness controls
- 1 channel output, max 350W
- ON/OFF and dimming control
- Zigbee router-type device with Touchlink commissioning support
- Can be controlled both physically and via a Zigbee gateway or remote
- Radio Frequency: 2.4GHz
- Supports self-forming Zig bee network without a coordinator
- Supports find and bind mode to bind a Zigbee remote
- Supports Zigbee green power and can bind max. 20 remotes
- Supports retractive light switches in two-way mode

Supported light sources:

- Conventional incandescent and HV halogen light sources
- ELV halogen lamps and dimmable LED bulbs (with electronic transformers)
- MLV halogen lamps (with ferromagnetic transformers)
- Dimmable LED bulbs
- Dimmable compact fluorescent CFL tube lamps
- Supports dimmable light sources (power factor> 0.5) with minimal power of 3VA using the SM107 Bypass chip

WIRING DIAGRAM

- Before commencing work always isolate the power at the consumer unit.
- Only one dimmer is allowed in a two-way circuit.
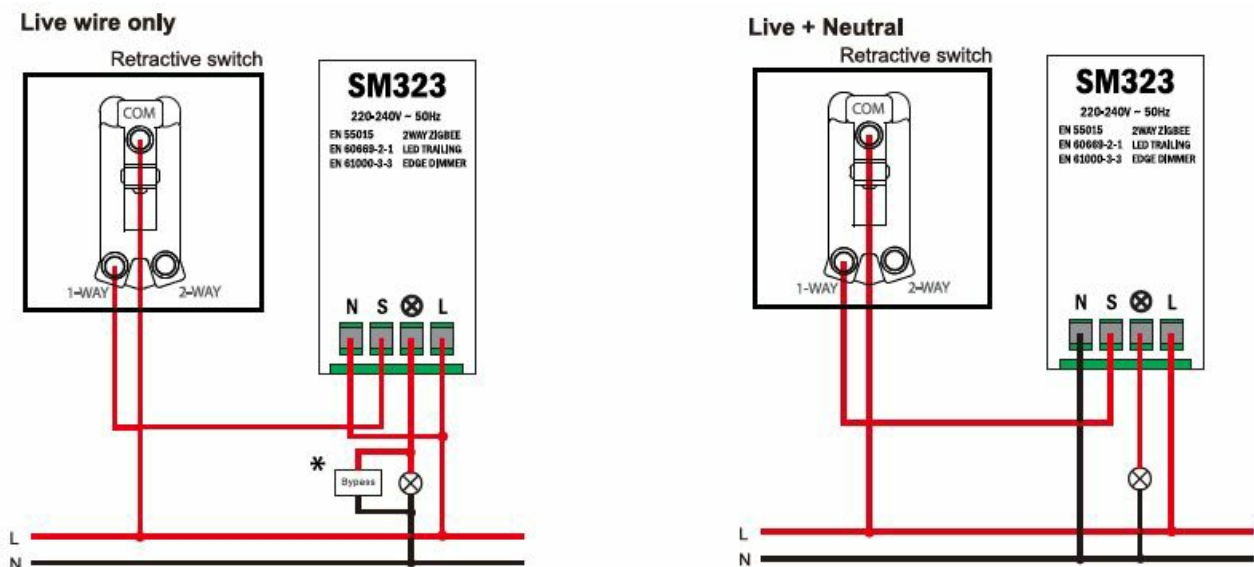
The primary purpose of the bypass chip is to operate efficiently even under minimal electrical loads, effectively resolving two common issues encountered in LED lighting systems – the unwanted glowing and flickering of LEDs. Bypass chips can be purchased separately from our website.

ZIGBEE CONFIGURATION

RESET
Method 1 – Factory reset.
Press the RESET button 5 times. A successful reset will be indicated by the connected light source flashing twice.

Note: If the reset button is not accessible, you can still perform the reset procedure by consecutively power-cycling the module 5 times from a consumer unit or fuse box.

PAIRING

- **Method 1 – Pairing with a Zigbee coordinator.**
  - Press the RESET button 5 times. A successful reset will be indicated by the connected light source flashing twice.
  - Next, initiate the pairing process using the corresponding app that accompanies your Zigbee coordinator. Upon successful pairing, the light will flash 5 times and then remain steadily on.
- **Method 2 – Pairing with a Zigbee remote via Touchlink.**

  To activate Touchlink commissioning, press the RESET button 4 times. Connected lights will flash twice. You will have a 3-minute window to perform the pairing process. Bring a Zigbee remote within a 10cm distance of the dimmer and follow the pairing instructions provided in the remote's manual to initiate Touchlink pairing. Once paired, the light will flash twice.

  Note:

  Each time the dimmer powers up from the consumer unit, Touch/ink pairing is automatically activated for 3 minutes.
- **Method 3 – Find and Bind.**
  - Press the RESET button 3 times. A successful reset will be indicated by the connected light source flashing twice. Connected lights will flash slowly for 3 minutes. Bring a Zig bee remote within a 10cm distance of the dimmer and follow
  - Find & Bind instructions are provided in the remote's manual.
    Note: Both devices must already be added to the same Zigbee network.
- **Method 4 – Pairing with a Zigbee Green Power remote.**
  - Press the RESET button 4 times. Set the Green Power remote into a Learning mode following the instructions that come with the remote. Upon successful connection, the light will flash twice.
  - To delete a paired Green Power remote, press the RESET button 3 times and set the paired remote into Learning mode. Lights will flash 4 times, indicating successful deletion.

SUPPORTED ZIGBEE CLUSTERS

Input Clusters

- **0x0000:** Basic
- **0x0003:** Identify
- **0x0004:** Groups
- **0x0005:** Scenes
- **0x0006:** On/off
- **0x0702:** Simple Metering
- **0x0008:** Level Control
- **0x0b04:** Electrical Measurement

Output Clusters

- 0x0019: OTA

COMPATIBLE LIGHTS SOURCES

|			
	Resistive loads Conventional incandescent and halogen light sources	20-350W @ 230V	
	Capacitive loads Fluorescent tube lamp (compact / with electronic ballast), electronic transformer, LED	Using Bypass: 3-175W @ 230V	No Bypass Used: 20-175W @ 230V
	Inductive loads Ferromagnetic transformers	20-175W @ 230V	

BRIGHTNESS SETTINGS

MINIMUM BRIGHTNESS
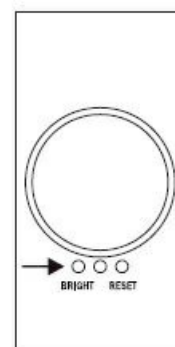
Setting up minimum brightness.

- Adjust the light source to a desired level between 1 %-50%.
- Press and hold down the BRIGHT key for 3 seconds to save the settings.

Resetting minimum brightness.

- Adjust the light source to maximum brightness.
- Press and hold down the BRIGHT key for 3 seconds until the lights flash.

STARTUP BRIGHTNESS
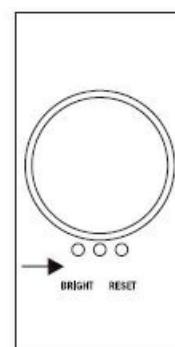
Setting up startup brightness.

- Adjust the light source to a desired level between 1 %-50%.
- Double-click the BRIGHT key to save the adjusted brightness level.

Resetting minimum brightness.

- Adjust the light source to the maximum brightness.
- Press and hold down the BRIGHT key for 3 seconds until the lights flash.

Note:
The startup brightness function is meant to prevent an issue where certain dimmable LED drivers fail to turn on after being switched off at a very low brightness /eve/. When the startup brightness is configured, the dimmer will turn on at that specific brightness level, and then return to the level it was switched off at. If the startup brightness is lower than the previous brightness setting before turning off the lights, the lights will immediately switch on to the previous brightness level.
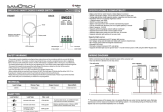
ENVIRONMENTAL PROTECTION

The "Crossed-out Wheelie Bin Symbol" signifies that the product or battery it's marked on should not be mixed with regular household rubbish. Electrical and electronic products or batteries can contain chemicals detrimental to both our health and the environment. Always dispose of these items through designated collection programs that focus on material recovery and recycling. Your active participation is crucial for these programs to work effectively and safeguard our environment.

TECHNICAL HELPLINE

- If you find yourself in need of further technical assistance or support, don't hesitate to reach out to our Technical Helpline.
- You can contact us via email at **info@samotech.co.uk**, where our team is ready to assist you with your inquiries.

Documents / Resources

SAMOTECH SM323-v2 Zigbee Dimmer Switch Module [pdf] Instruction Manual
SM323-v2 Zigbee Dimmer Switch Module, SM323-v2, Zigbee Dimmer Switch Module, Dimmer Switch Module, Switch Module, Module

References

- **User Manual**