This application guide applies to the following products.



SQR14101WHZ,SQR14101LAZ,SQR14101BKZ

Z-WAVE SWITCH SINGLE POLE ENERGY MONITORING

FCC ID: 2AUCU-14101Z IC: 25381-14101Z CAN ICES-3(B)/NMB-3(B) Add Z-wave plus logo

*** SPECIFICATIONS**

Voltage	120VAC, 60Hz
Incandescent	1000W
LED	5A
Standard Ballast	1200VA
Resistive	1800W(15A)
Motor	1/2 HP
Operating Temperature	32°F∽104°F(0°C∽40°C)
Supply Connection	14 AWG wires rated for at least 90°C
Wireless Type	Z-Wave (Support S2 and SmartStart)
Wireless Frequency	908.40MHz/908.42MHz/916MHz

→ FEATURES

- Z-Wave technology creates a mesh network for command and control interoperability with other Z-Wave compliant controller and devices
- Manual and Remote ON/OFF control of any connected lighting and other electrical load
- Can be used for 3-Way (Multi-location) application together with Z-Wave auxiliary switch SQR50101**Z
- Measure the energy usage of the connected loading, display the actual consumption (in W) and the accumulated power used (in kWh) in the user interface of the gateway

Notice: for energy measurement feature, please refer to the gateway installation manual for energy usage display.

Notice:

The device is meant for non-critical automation activities and is not intended to support life safety or medical equipment being plugged into them over concerns about being unintentionally turned off with an automation routine.



HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- This equipment must only be installed and serviced by qualified electrical personnel.

 Turn off all power supplying this equipment before working on or inside equipment.
- Always use a properly rated voltage sensing device to confirm power is off.
- Replace all devices, doors, and covers before turning on power to this equipment.
- Use with Copper wire onlyIndoor use only.

Failure to follow these instructions will result in death or serious injury..

MARNING: CALIFORNIA PROPOSITION 65

This product can expose you to chemicals including Carbon black, which is known to the State of California to cause cancer, and Bisphenol A (BPA), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

WARNING

Be sure to read the instruction carefully before installation, and the manufacturer will not be responsible for any product damage that does not follow the instruction

- 1. Wet hands are strictly prohibited.
- 2. Must work strictly according to the rated load.
- 3. Do not continue to work after self-disassembly of any nature and damage of external forces.

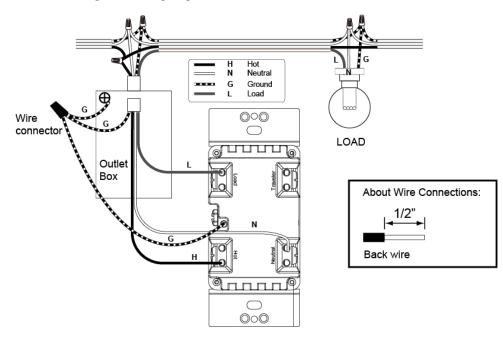
+ INSTALLATION

Step 1 Turn off power at circuit breaker or fuse and test that power is off before wiring.

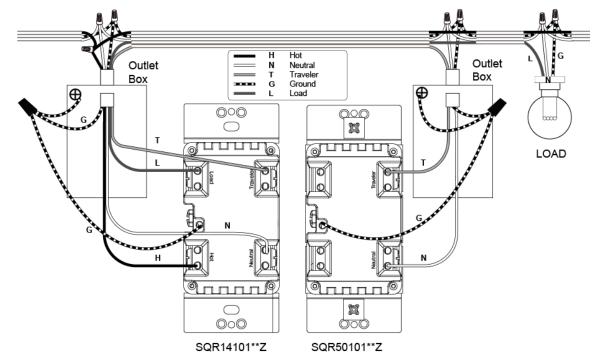


Step 2 Connect the device as shown in the wiring diagram.

Single Pole Wiring Diagram



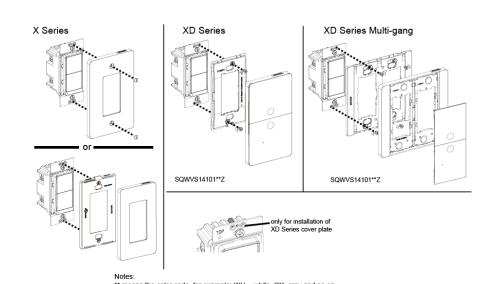
3-Way Wiring Diagram using SQR14101**Z and auxiliary switch SQR50101**Z



Step 3 Check connections to be sure they are tight and no bare conductors are exposed.

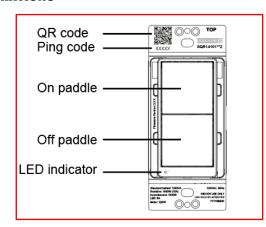
Step 4 Insert the device into the standard outlet box carefully. Make sure the device is fixed to the outlet box using the supplied screws.

Step 6 Install the wall plate (not included) following below figure.

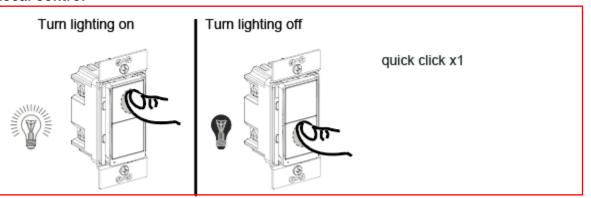


Step 7 Restore power at the circuit breaker and test the system.

◆ OPERATIONS



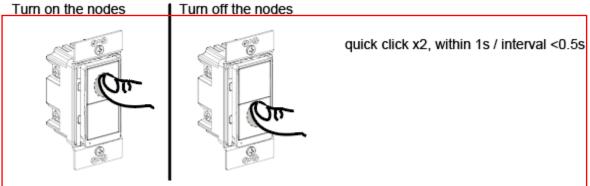
1. Local control



Notice:

- After a power failure, the switch returns to OFF state

2. Group control the nodes of association group 2



Note: Please refer to association setting for nodes group 2 setup. This requires a gateway with advanced features, and assumes the device has included in a network.

3. Inclusion to a Z-Wave network

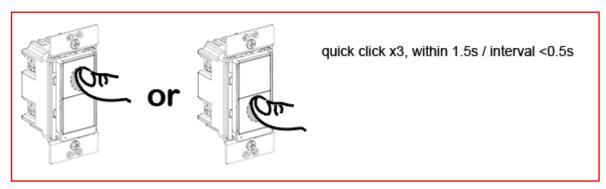
Notice: The device supports up to S2-authenticated inclusion method, based on the gateway's feature, it is highly recommended to only select S2-authenticated or the highest inclusion method, and uncheck the rest methods. This would ensure the highest security level during Z-Wave service. During S2-authenticated inclusion, users may be asked to scan the QR code or entering 5-digit ping code attached on the device.

> Smart Start Inclusion

The feature assumes the gateway has implemented Smart Start. Users could use the APP of the gateway or the gateway camera to scan the QR code on device or on device package even before powering on the device, when the device is powered on, it shall be automatically added to the gateway.

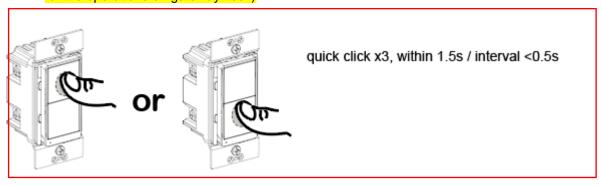
> Manual Inclusion

When the gateway is in adding mode (please refer to the instruction of the Z-Wave gateway for the operations on gateway itself):



4. Exclusion from a Z-Wave network

When the gateway is in removing mode (please refer to the instruction of the Z-Wave gateway for the operations on gateway itself):



5. Remote Control

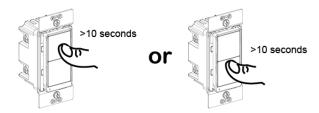
After the device is included to a Z-Wave gateway, the gateway can provide control of an Individual device, Groups of devices and Scenes, depends on the flexibility in how you set up your lighting control network. Please refer to your gateway's instruction for details.

Notices for wireless range:

The wireless range of remote control is the effective distance of remote control, and it will be impacted by following conditions.

- Each wall or obstacle (i.e. refrigerator, big screen TV, etc.) between the remote or Z-Wave device and the destination device will reduce the wireless range.
- Brick, tile or concrete walls block more of the wireless signal than walls made of wooden studs and plasterboard (drywall).
- The direction angle between remote or Z-Wave device and the destination device will also impact the wireless range, normally put the Z-Wave devices face to face will get the best wireless range.
- Wall mounted Z-Wave devices installed in metal junction boxes may suffer a significant loss of range since the metal box blocks a large part of the wireless signal.

6. Reset to factory defaults



Note

1.Please use this procedure only when the network primary controller is missing or otherwise

2.Reset the Switch to factory default settings will sets the Switch to not in Z-Wave network state, delete the Association setting and restore the Configuration setting to the default.

3. When the paddle is pressed and hold, the LED will start blink quickly for 10 seconds, the paddle can be released after the LED change to solid on, the LED will blink quickly for 3s when factory reset succeeds.

ADVANCED SETTING

The following Advanced setting requires an advanced gateway. Basic gateway does not support this setting. Users can do the setting through the interface of the advanced gateway. All Configuration Parameters can all be restored to their factory default settings by the gateway or by manual reset.

Configuration

Comiguration					
Parameter No.	Size	Description	Valid Value	Default Value	
1	1 Bvte	Synchronization of load power	0: Power on, LED off	Default=0	
	and LED indicator	1: Power on, LED on			

Association

Grouping ID	Max number of nodes	<u>Description</u>
<mark>1</mark>	<mark>5</mark>	Lifeline: Send device reset locally notification
_		StatusReport: On/Off status report
		PowerReport: Power metering report
<mark>2</mark>	<mark>5</mark>	AssGroupSet: Send on/off set command

◆ LED INDICATION

LED blink slowly:

LED blink fast:

LED keep on for 2s:

LED blink fast for 3s:

Device not in the network

Adding to / Leaving the network

Add to / leave the network successfully

Factory reset success

When device is in network:

LED On: The switch is switched off (default setting, can be configured) **LED Off:** The switch is switched on (default setting, can be configured).

Trouble Shooting:

Phenomena Phenom	Solution
Smart Start inclusion is too long	Power cycle the device to escalate the inclusion
Inclusion doesn't success	Get the device closer to the gateway, repeat the inclusion operation

♦ FCC COMPLIANCE STATEMENT

Federal Communication Commission Interference Statement

The 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 uses, generates and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. 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 or more 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.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

RF Exposure: A distance of 20 cm shall be maintained between the antenna and users, and the transmitter module may not be co-located with any other transmitter or antenna.

Non-modification Statement:

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

FCC Supplier's Declaration of Conformity

Product name:Z-Wave Switch

Model number: SQR14101WHZ, SQR14101LAZ, SQR14101BKZ

Suppliers Name: Schneider Electric

Suppliers Address (USA): 800 Federal Street Andover, MA 01810 USA

Suppliers Website: www.schneider-electric.us

FCC Compliance Statement

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.

♦ ISED STATEMENT

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- 1. This device may not cause interference.
- 2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- 1. L'appareil ne doit pas produire de brouillage;
- 2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment complies with ISED RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and any part of your body.

Pour se conformer aux exigences de conformité CNR 102 RF exposition, une distance de séparation d'au moins 20 cm doit être maintenue entre l'antenne de cet appareil ettoutes les personnes.

WARRANTY INFORMATION

Our company warranties its products to be free of defects in materials and workman-ship for a period of two (2) years. There are no obligations or liabilities on the part of our company for consequential damages arising out of or in connection with the use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation or reinstallation.