Connected Wireless System Guide

Module 2 – Wireless Accessories

SMC-GM-CWSG-M2-2019.11v1_2019-11-14

Module 2

SALUS Connected Wireless System Guide
Contents: Wireless Accessories

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Using this Manual

For the latest Instructions go to: *WWW.SALUSINC.COM*

To cover all SALUS Wireless Products without requiring customers to download documentation unrelated to their installations, the Connected Wireless Systems Guide has been divided into 5 modules. Module 1 is required for all wireless systems since it covers installation of the SG888ZB Gateway and the SALUS Smart Home application. The remaining modules are specific to a particular group of controls.

Below is a description of several icons used to direct the reader's attention.

Special Attention Boxes
This manual uses special attention icons to alert the reader of important safety concerns, information important to reliable operation of the controls or helpful installation/setup information.

Safety:
Indicates a condition which may cause severe personal injury, death or major property damage

Important Information:
Indicates information which requires special attention for correct operation of the control

Your Benefit:
Indicates helpful installation or setup information

Accessories Overview

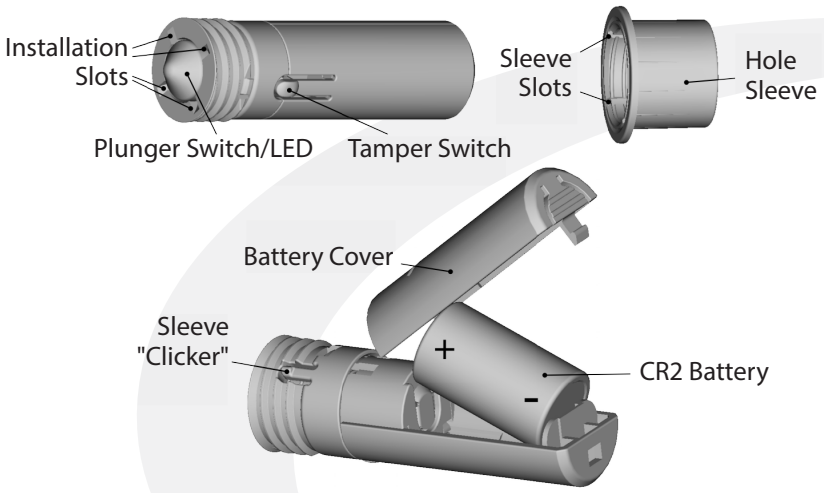
The SALUS Smart Home application can access wireless sensors and other accessories for control and notification of household systems from a smart device or computer. The following diagram shows an overview of wireless accessories available from SALUS. Volume 2 of the Wireless System Guide covers the installation and operation of these devices. Instructions for installing the SG888ZB Gateway and connecting it to the SALUS Smart Home application are provided in Volume 1.

Section 2

Module 2 – Wireless Accessories
SS881ZB Embedded Door Sensor

Module 1 of the SALUS Wireless Systems Guide provides information about installation/setup of the SG888ZB Gateway that provides communication between devices and, if desired, with the internet. The following descriptions provide instructions for installation of the hydronic components.

Overview

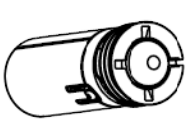


Item	Description
Installation Slots	Slots for installation tool
Plunger Switch/LED	Detects open/close status of door. LED Indicator
Tamper Switch	Detects if sensor is removed from Hole Sleeve
Hole Sleeve	Accepts sensor and allows for sensor height adjustment
Sleeve "Clicker"	Aligns with Sleeve Slots to limit unwanted sensor rotation
Battery Cover	Encloses the battery compartment

Pair the SS881ZB Embedded Door Sensor with the SG888ZB Gateway prior to installation.

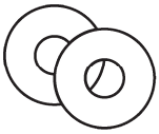
Parts Included / Installation Tools

Confirm that all required parts are present in the SS881ZB package:

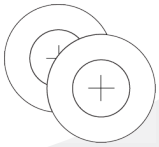


Sensor w/ Battery (CR2, 3Vdc)

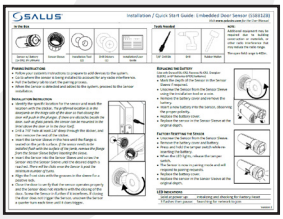
Sensor Sleeve



Installation Tools (2)



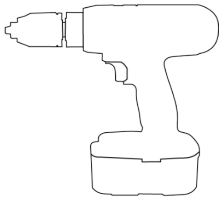
Self-adhesive Drill Guides (2)



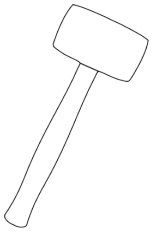
Installation Manual

Confirm that required tools are available:

7/8" Drill Bit



Power Drill

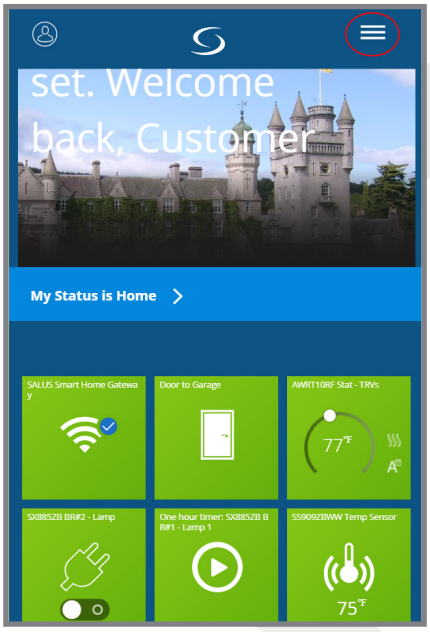


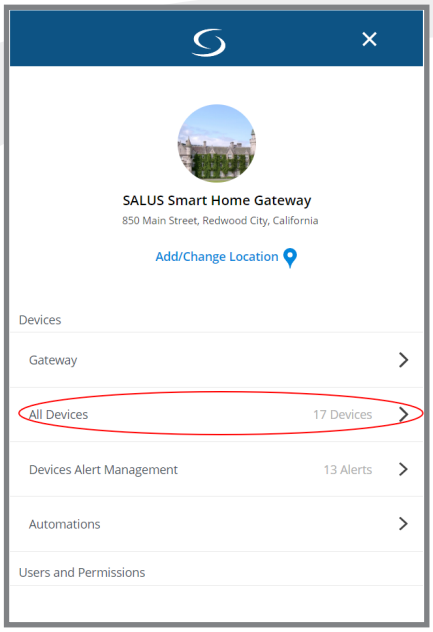
Rubber Mallet

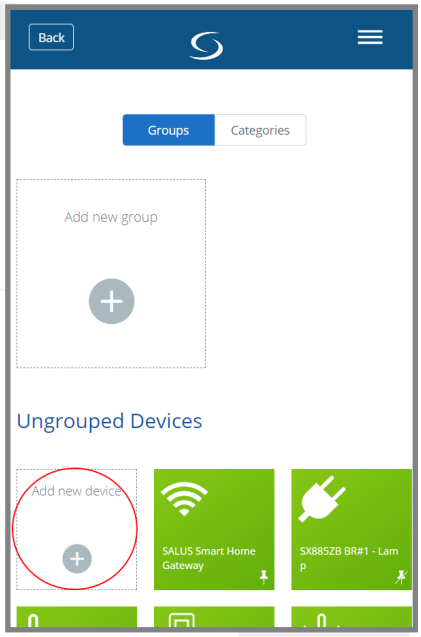
Module 2 – Wireless Accessories
SS881ZB Embedded Door Sensor

Pairing Instructions

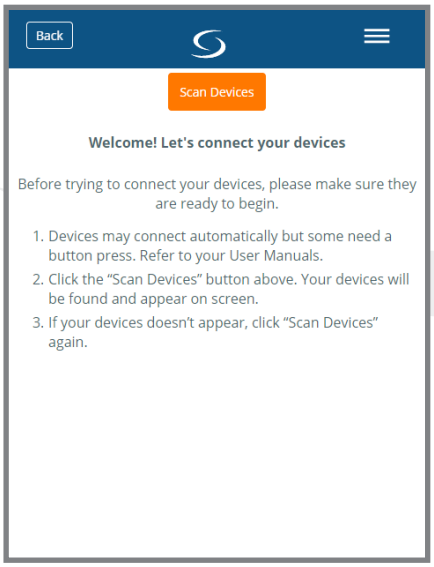
Locate the SS881ZB Embedded Door Sensor in or near the location that it will be installed to account for radio interference.



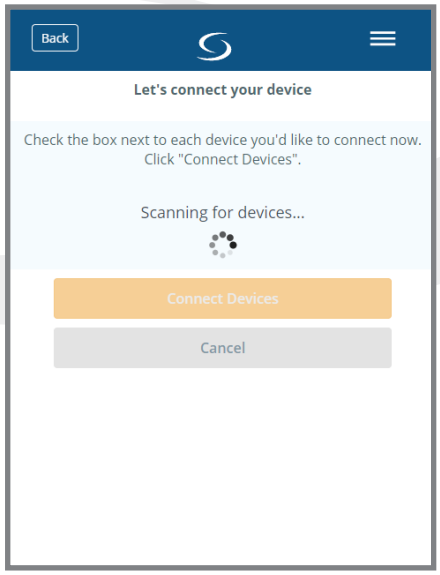




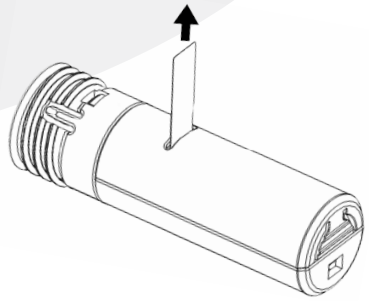
Step 1. Open the SALUS Smart Home application, select the drop-down menu from the upper right of the screen and select: ***All Devices → Add New Device***



Step 2. Press Scan Devices.

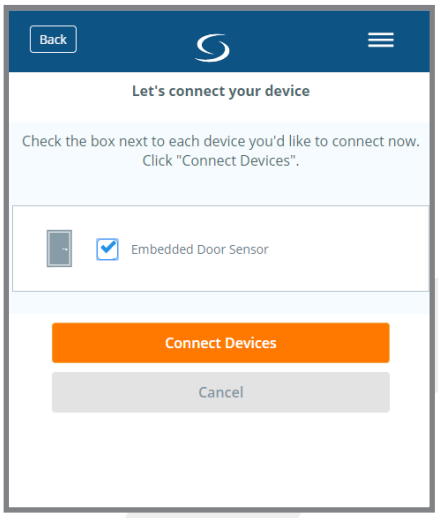


After pressing "Scan for Equipment", the SALUS Smart Home application scans for devices.

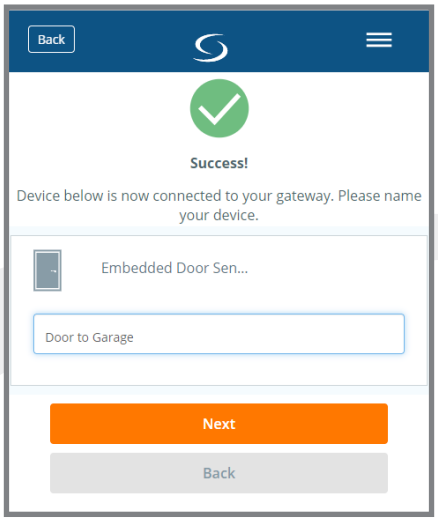


Step 3. Remove the battery tab to start the pairing process.

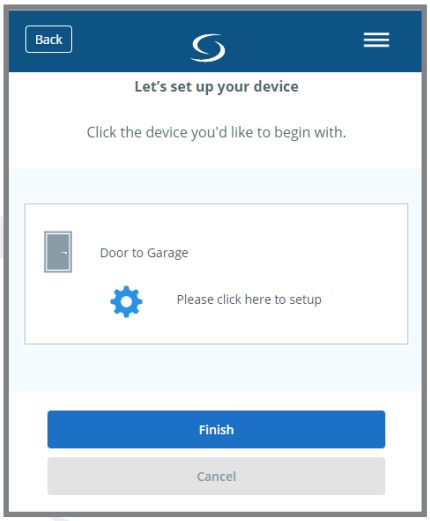
Module 2 – Wireless Accessories
SS881ZB Embedded Door Sensor



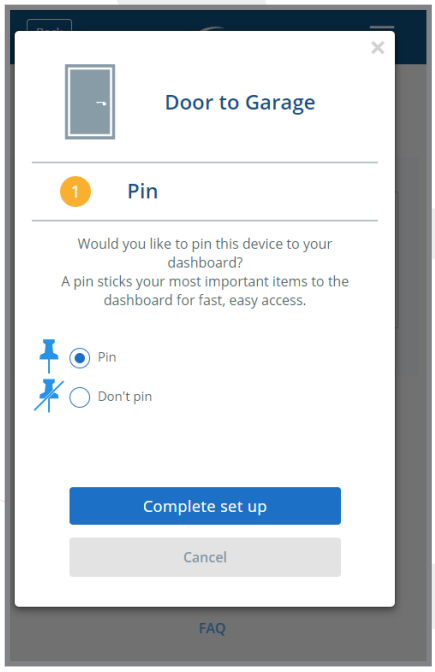
Step 4. Select the check box next to Embedded Door Sensor and press "Connect equipment"



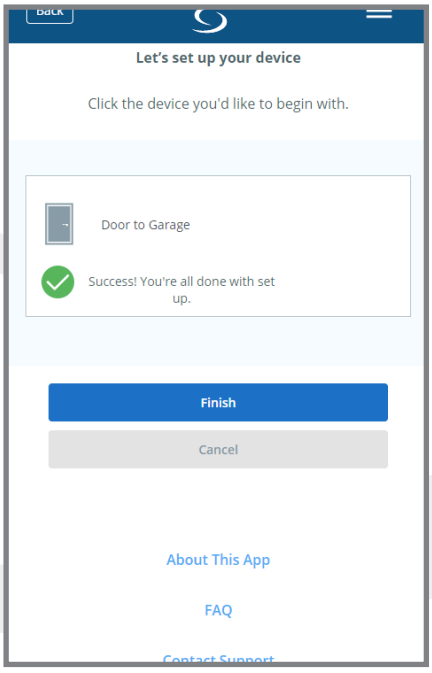
Step 5. Enter a unique descriptive name to identify the device. Press "Next"



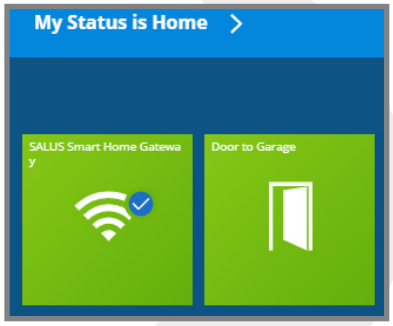
Step 6. Press "Please click here to setup."

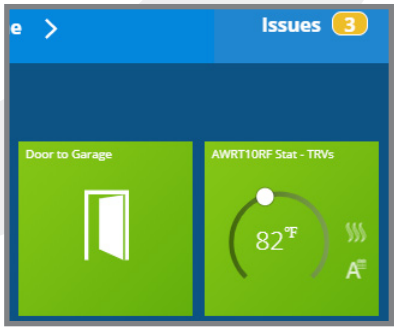


Step 7. Choose from setup options specific to this device. Press "Complete set up."



Step 8. Press "Finish" to complete pairing.



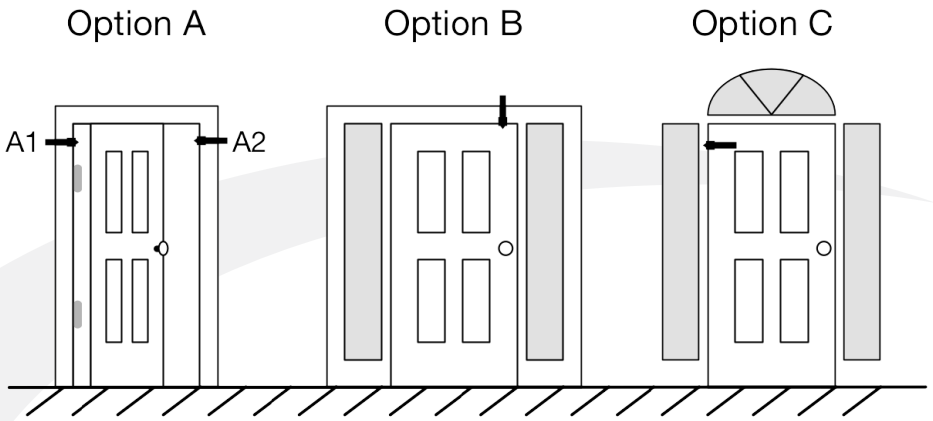


A new icon will appear on your home screen. Since the sensor is not installed it shows the door open.

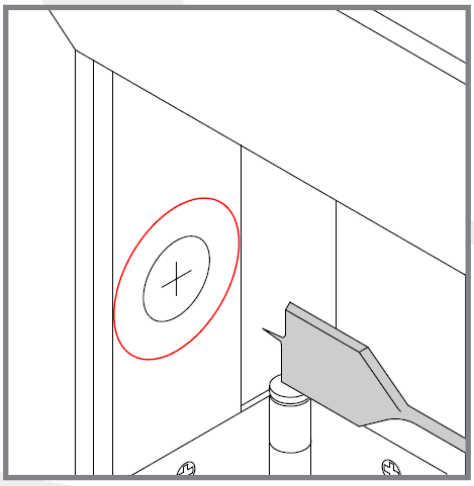
After several minutes without the plunger switch depressed, an issue alert will show on the home screen.

SS881ZB Embedded Door Sensor

Installation Instructions

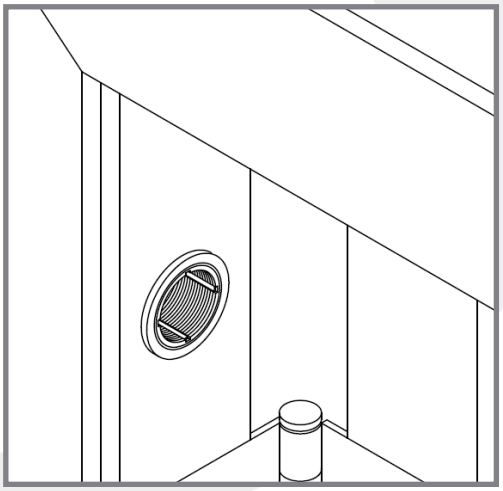


SALUS recommends locating the embedded door sensor in the door jamb on the hinge side of the door so that closing the door activates the plunger (A1 Above). If this location is not convenient due to obstacles such as glass panels, the sensor can be mounted on the opposite door jamb (A2), in the lintel above the door (B) or in the door itself (C). Location C is not recommended for steel doors due to potential signal interference issues.

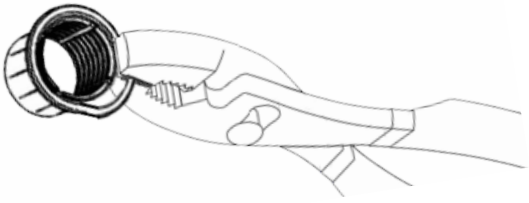


Step 1. Apply a self-adhesive drill guide to mark the desired location.

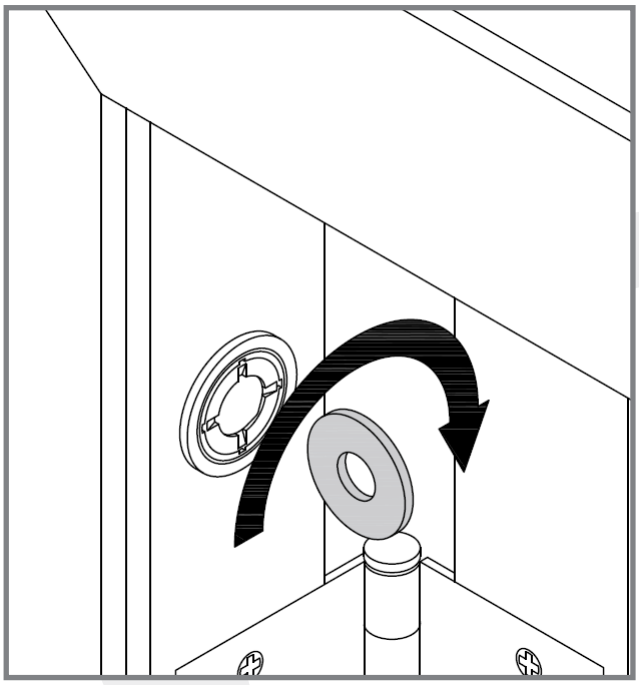
Step 2. Drill a 7/8" diameter hole at least 2.6" deep through the guide. Then remove the guide remnants.



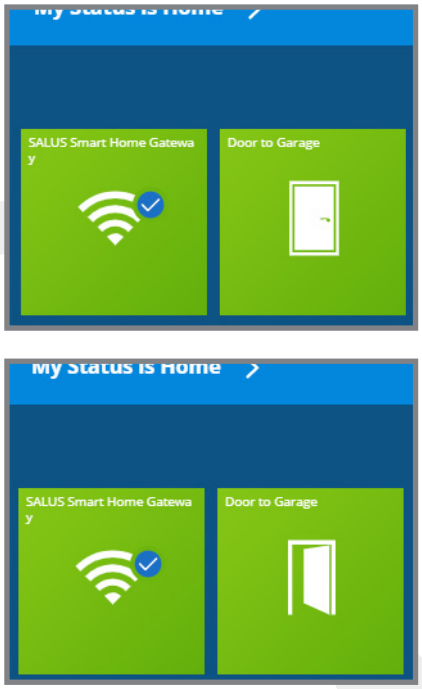
Step 3. Insert the sensor sleeve in the hole until the flange seats on the surface.



If required, remove the flange from the sleeve before inserting.



Step 4. Insert the Sensor into the Sensor Sleeve using the Installation tool until the face of the sensor is flush with the Sensor Sleeve.



Step 5. Close the door and make sure the Sensor operates properly, with the SALUS Smart Home application showing the correct door position.

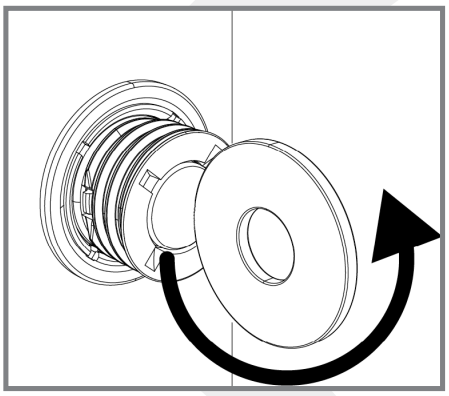
If closing the door doesn't activate the Sensor and show a closed door on the SALUS Smart Home application, turn the Sensor counter-clockwise in ¼ turn increments until it activates when the door is closed.

Step 6. Once the Sensor is at the correct depth, align the Sensor slots with the grooves in the Sensor Sleeve to prevent undesireable rotation.

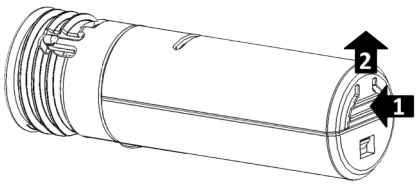
Battery Replacement

Use only Duracell DL-CR2, Energizer EL-CR2, GP Batteries GPCR1, or Ray-O-Vac RL-CR2 batteries to meet UL certification requirements.

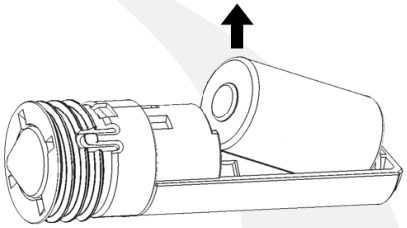
Note the installation depth of the Sensor in the Sensor Sleeve before removing. If convenient, mark the sensor depth before proceeding to STEP 1.



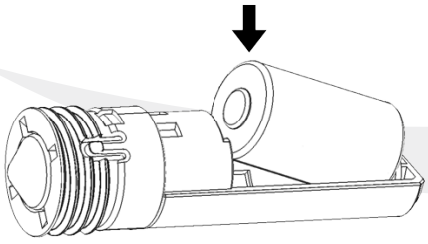
Step 1. Remove the Sensor by turning counter-clockwise with the Installation Tool, a coin or a washer.



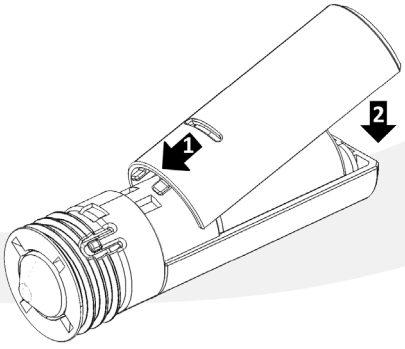
Step 2. Open the battery compartment by pressing on the back and lifting.



Step 3. Remove the old battery by lifting the positive side.



Step 4. Insert the new battery, negative end first.



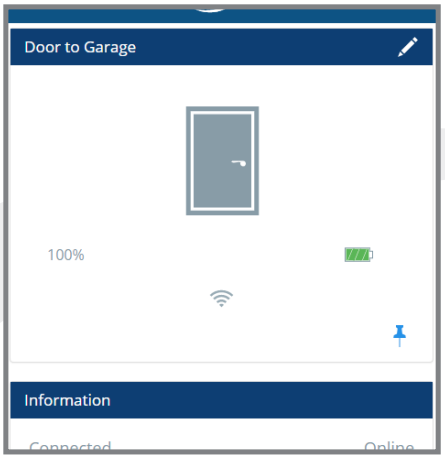
Step 5. Replace the battery cover as shown and re-install the Sensor.

Battery Disposal

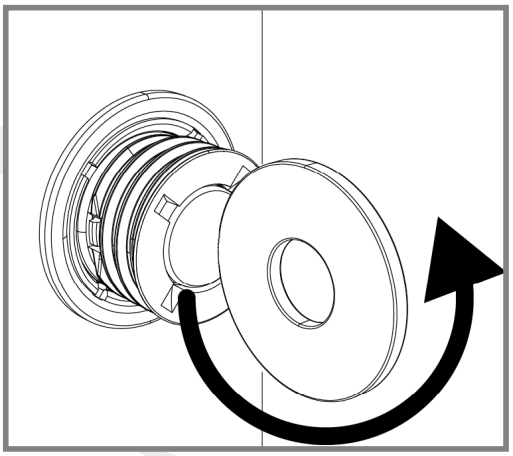
Lithium batteries are considered hazardous waste in most municipalities. Dispose of the used lithium batteries in accordance with all applicable local regulations.

Resetting Factory Defaults

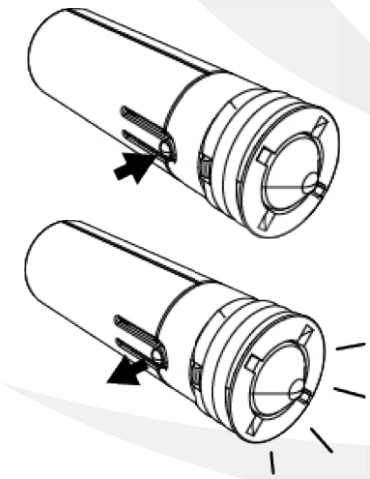
Step 1. Select the SS881ZB icon from the SALUS Smart Home dashboard. After the tile flips, choose the device name in the upper left.



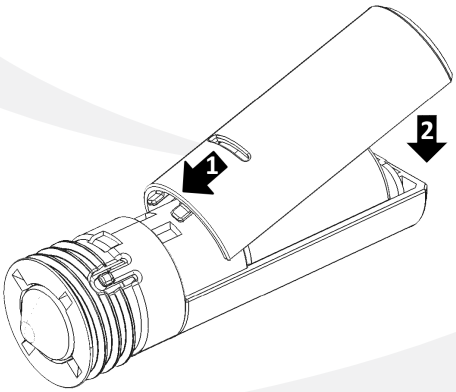
Step 2. Scroll to the bottom of the next screen and select "Remove shared door monitor."



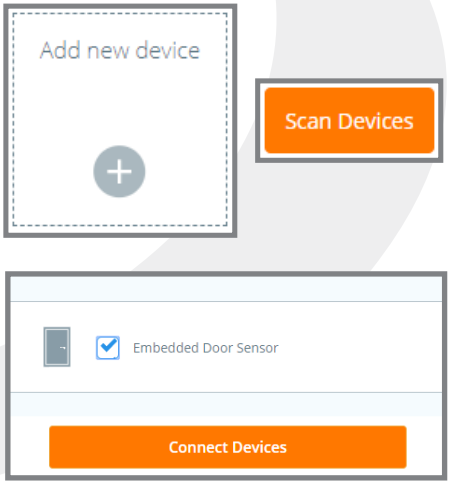
Step 3. Remove the Sensor from the Sensor Sleeve and remove the battery as described under Battery Replacement.



Step 4. Press and hold the tamper switch while re-inserting the battery. Release the switch when the LED plunger switch lights.



Step 5. Close the battery cover and pair and name the Sensor as described in Pairing Instructions. Re-install the Sensor, making sure it activates when the door closes.



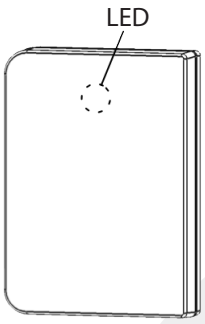
Step 6. Follow the steps for pairing shown in Pairing Instructions.

Section 3

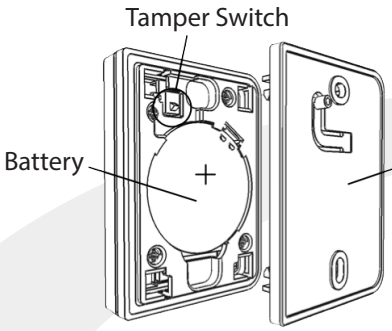
Module 2 – Wireless Accessories
SS882ZB Door/Window Sensor

Overview

Sensor Front



Sensor Back

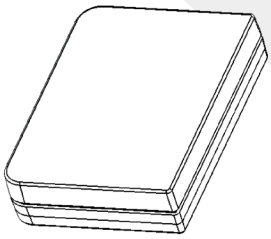


Item	Description
LED	"Hidden" LED indicates network status during pairing
Tamper Switch	Detects if sensor is removed from mounted location
Mounting Plate	Mounting base for Sensor to allow no-tool battery change
Battery	CR3032 lithium battery (3 volts dc)

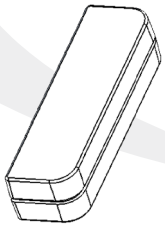
Pair the SS882ZB Door/Window Sensor with the SG888ZB Gateway prior to installation.

Included Parts / Installation Tools

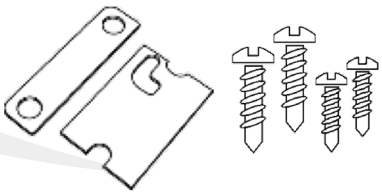
Confirm that all required parts are present in the SS881ZB package:



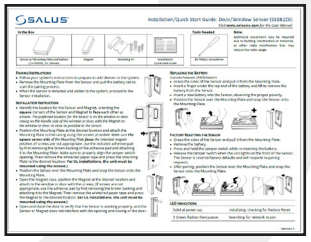
Sensor w/ Mounting Plate & Lithium Battery (CR3032, 3Vdc)



Sensor Sleeve



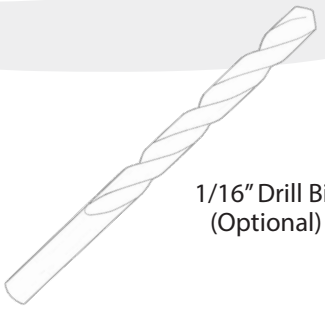
Mounting Kit



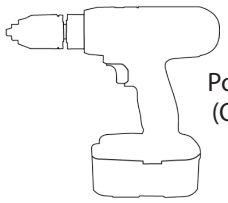
Installation Manual

Confirm that required tools are available:

#1 Phillips Screwdriver



1/16" Drill Bit (Optional)

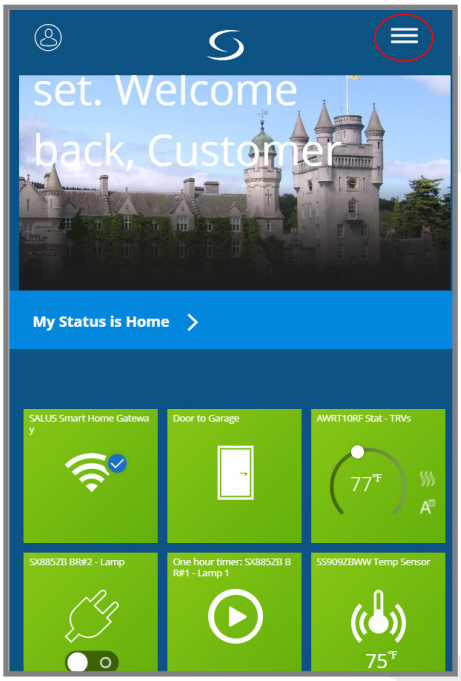


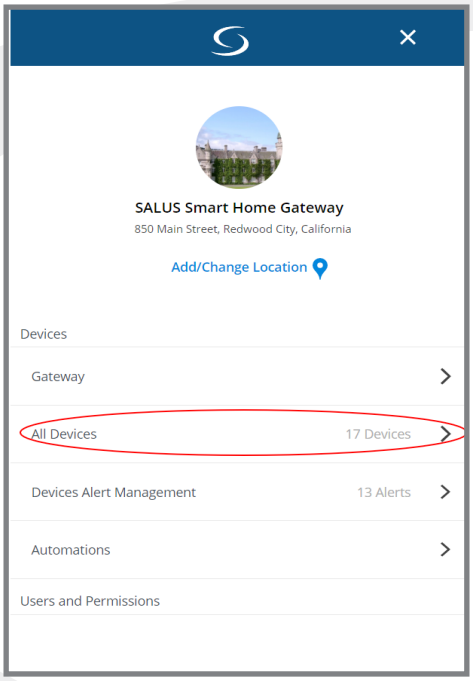
Power Drill (Optional)

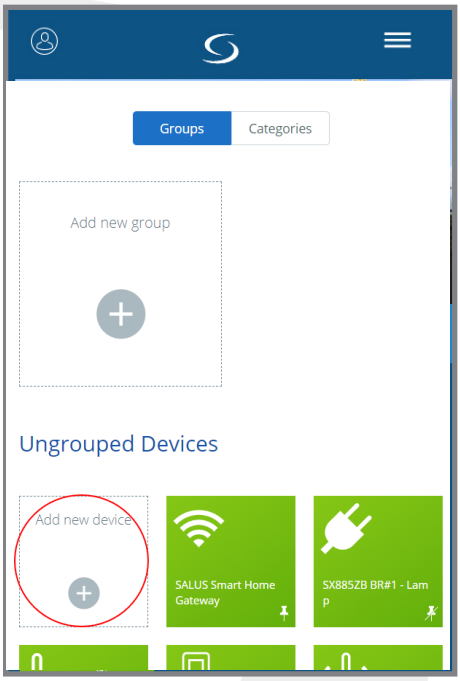
Module 2 – Wireless Accessories
SS882ZB Door/Window Sensor

Pairing Instructions

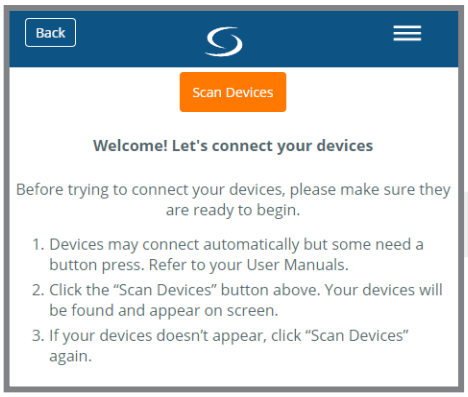
The SS882ZB Door/Window Sensor should be near the location that it will be installed to account for radio interference.



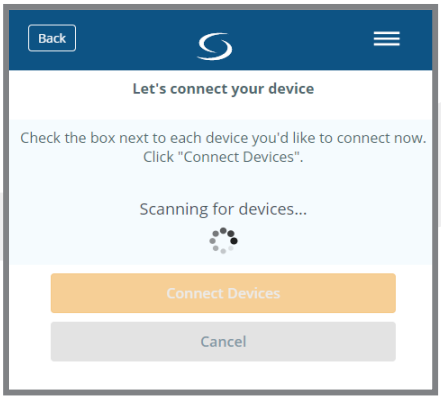




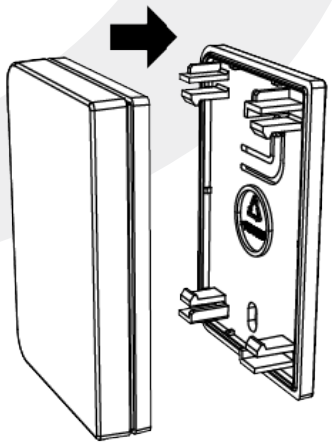
Step 1. Open the SALUS Smart Home application, select the drop-down menu from the upper right of the screen and select: ***All Devices → Add New Device***



Step 2. Press Scan Devices.

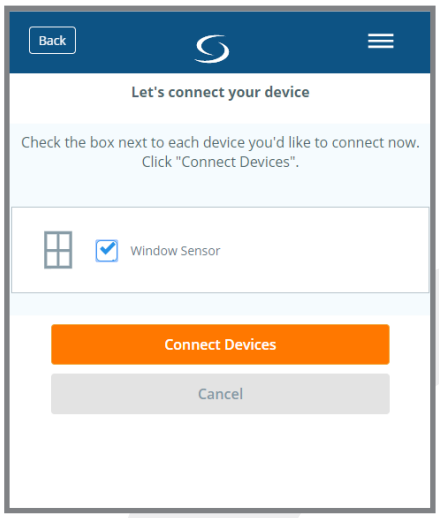


After pressing "Scan for Equipment", the SALUS Smart Home application scans for devices.

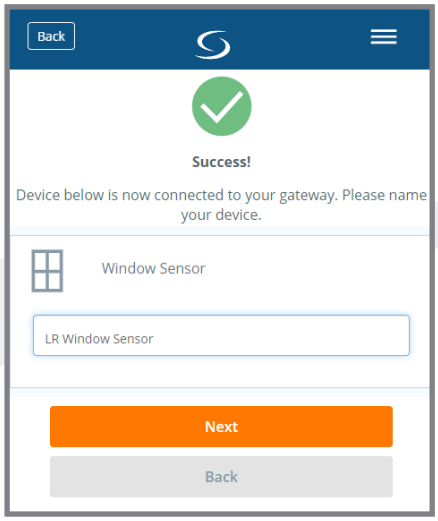


Step 3. Detach the mounting plate from the Sensor and remove the battery tab to start the pairing process.

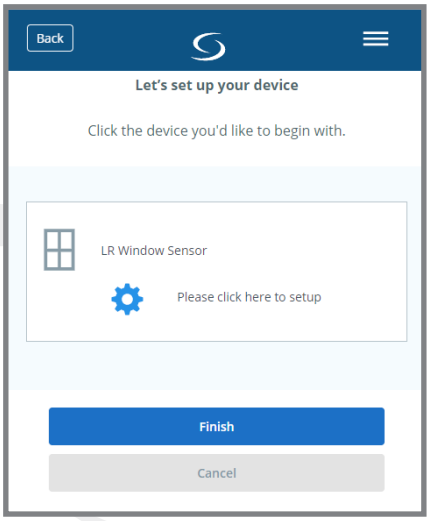
Module 2 – Wireless Accessories
SS882ZB Door/Window Sensor



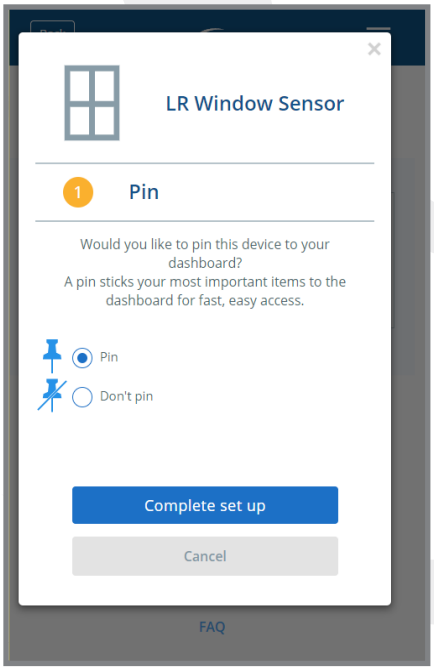
Step 4. Select the check box next to Window Sensor and press "Connect equipment



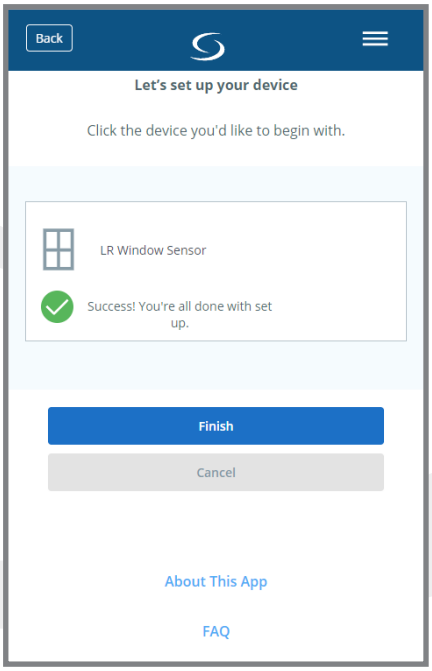
Step 5. Choose a unique descriptive name for each sensor location and press "Next"



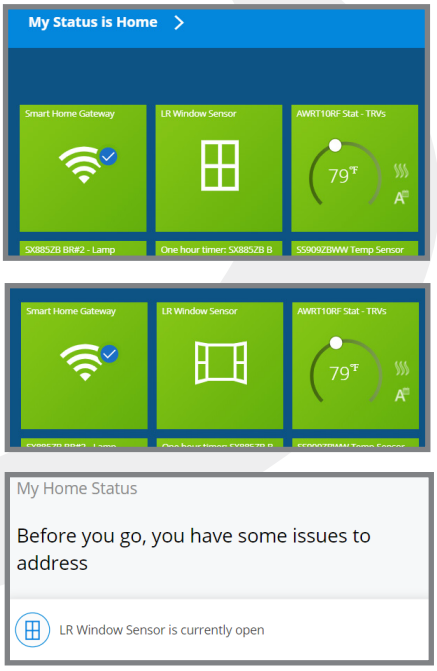
Step 6. Press "Please click here to setup."



Step 7. Choose from setup options specific to this device. Press "Complete set up."



Step 8. Press "Finish" to complete setup.



If the door or window opens, the symbol indicates this by showing an open window. Also, the Issue indicator will appear.

Installation Instructions

SALUS recommends locating the Window/Door Sensor on the window or door casing on the handle side. The Magnet should be mounted on the window or door as close as possible to the Sensor. To be UL compliant, the Sensor and Magnet must be mounted using the screws.

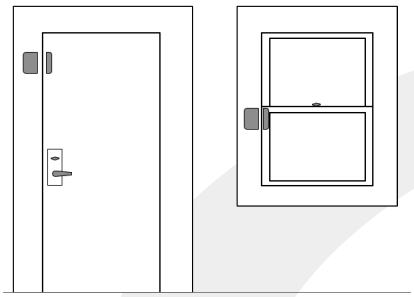


Figure A

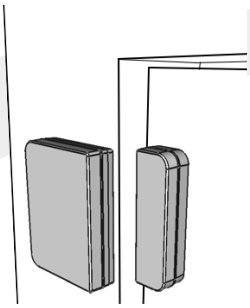


Figure B

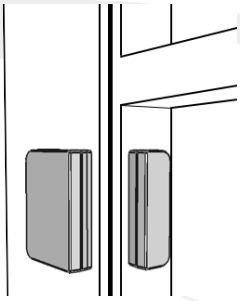


Figure C

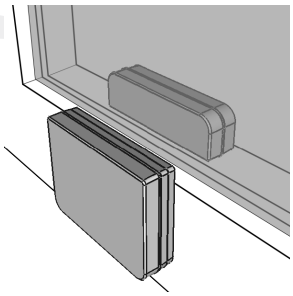
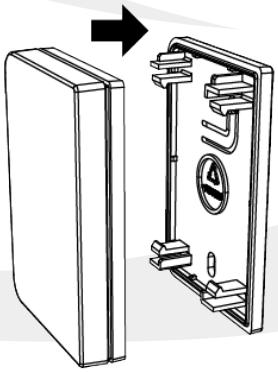
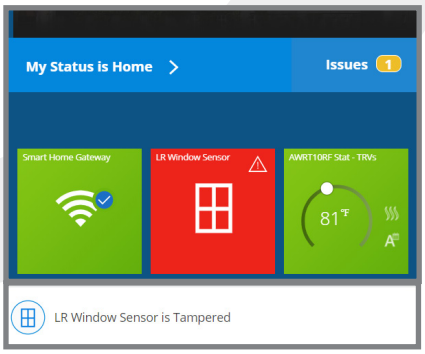


Figure D

Step 1. Locate the Sensor and Magnet. MAKE SURE that the square corners of the Sensor and the Magnet face each other. If the SALUS recommended option (Figure A) is not possible, the sensor can be mounted on the door or window with the magnet mounted on the casing. If necessary, the components can be mounted on different levels (Figure B) or different orientations (Figure C). Because of the narrow gap between the window and the screen on a casement window, the sensor can be mounted inside of the screen (Figure D).

The key criteria for locating the magnet in relation to the sensor are:
- **The magnet should be within 1 inch of the center of the square cornered edge of the sensor**
- **The magnet should be along the same axis as the straight cornered edge**





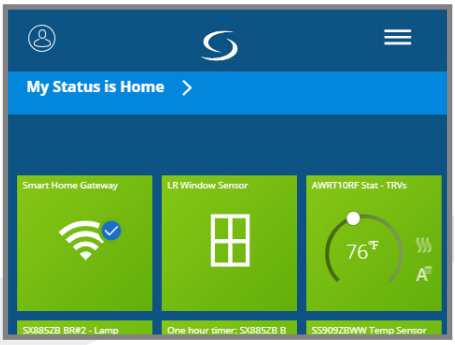
Step 2. Attach the Sensor and Magnet mounting plates in the desired locations.

Step 3. Snap the sensor onto the mounting plate and verify that the tamper switch is engaged.

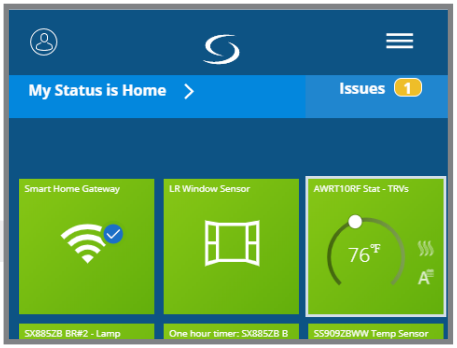
NOTE: If the tamper switch is not engaged, an "Issues" indicator will appear on the dashboard and the Sensor icon will turn red. Pressing "Issues" will show that the "Sensor is Tampered"

The double-sided tape, included with the SS882ZB Door/Window Sensor may be used in cases where water/vapor seals or barriers may cause an issue. For UL certified installation, screws must be used.

Step 4. Open the Magnet Case and position the bottom housing to the surface using the provided screws or double-sided tape. Once it is secure, snap the top housing with the magnet onto the bottom housing.



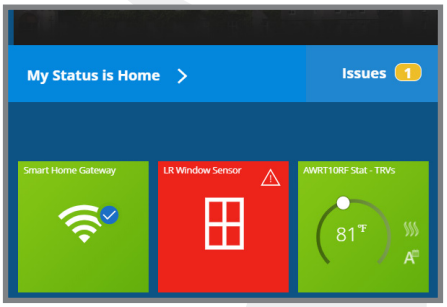
Step 5. With the door or window closed, make sure the dashboard icon shows a closed window.

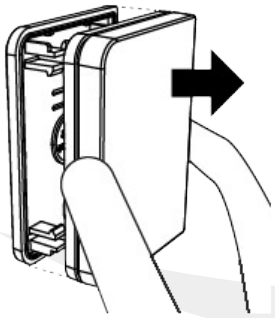


Step 6. Open the window and make sure the window icon is open and, after 60 seconds, the Issue indicator will register the issue.

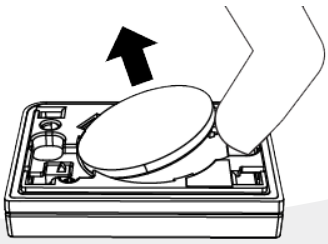
Battery Replacement

If the battery is low, the sensor icon on the SALUS Smart Home dashboard will turn red and the Issue indicator will register a message. Use only Panasonic CR3032 or EVE Energy CR3032 to meet UL certification requirements.

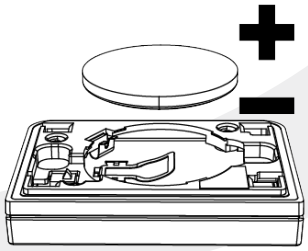




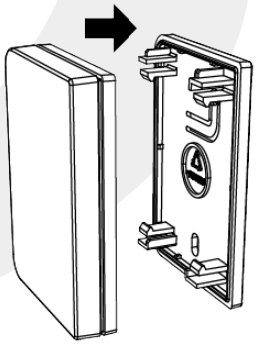
Step 1. Remove the SS882ZB Sensor from the Mounting Plate, exposing the battery attached to the Sensor.



Step 2. Lift the battery to remove it from the battery socket.



Step 3. Insert the new battery into the socket. Make sure the positive terminal faces up after inserting.



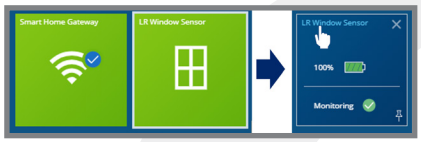
Step 4. Snap the Sensor back onto the Mounting Plate, making sure the rounde corners match.

Battery Disposal

Lithium batteries are considered hazardous waste in most municipalities. Dispose of the used lithium batteries in accordance with all applicable local regulations.

Resetting Factory Defaults

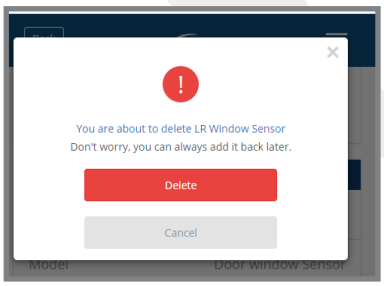
To reset the SS882ZB Door/Window Sensor to factory default values, first remove the sensor from the SALUS Smart Home application.



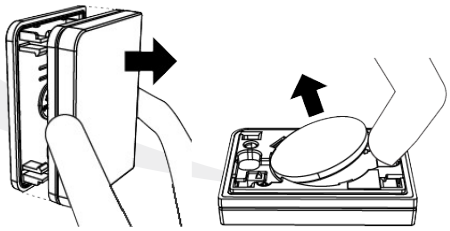
Step 1a. If the Sensor is pinned to the SALUS Smart Home application dashboard, select it and then select the tile label in the upper left corner.

Step 1b. If the Sensor is not on the dashboard, choose Menu ➔ All Devices and find the Sensor. Click on the icon.

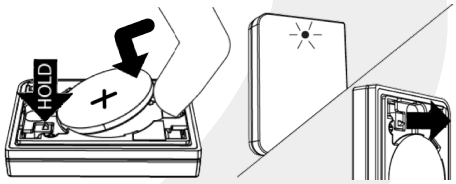
Step 2. Scroll down and choose "Remove shared window monitor" from the screen.



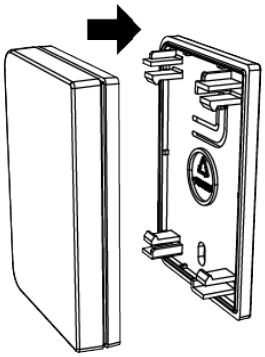
Step 3. Notification that the Sensor will be removed is displayed. Press "Delete" to continue. The SS882ZB Icon will be removed from the application.



Step 4. Remove the Sensor from the Mounting Plate and remove the battery.



Step 5. While holding down the Tamper Switch, re-insert the battery and, when the LED illuminaes, release the switch. The Sensor is no ready to join a network. Follow the pairing sequence to join the network.

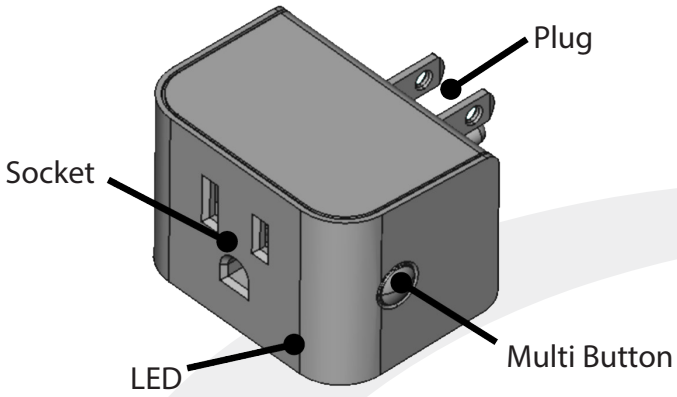


Step 6. Snap the Sensor onto the Mounting Plate observing the proper orientation of the round corners.

Section 4

Module 2 – Wireless Accessories
SX885ZB miniSmartPlug

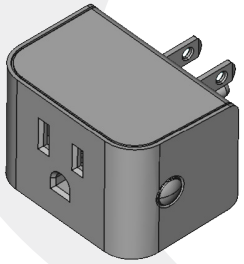
Overview



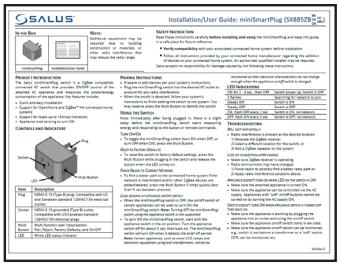
Item	Description
Plug	NEMA 5-15 (Type B) plug compatible with US/CAN 120VAC/15 A outlets
Socket	NEMA 5-15 grounded (Type B) outlet compatible with US/CAN 120VAC/15 A electrical outlets
Multi Button	Multi-functional user input button: Pair, Rejoin, Factory Defaults and On/Off
LED	White LED status indicator

Included Parts / Installation Tools

Confirm that all required parts are present in the SX885ZB package:



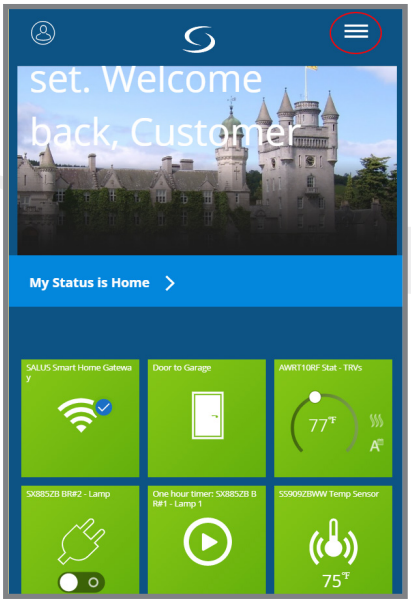
miniSmartPlug

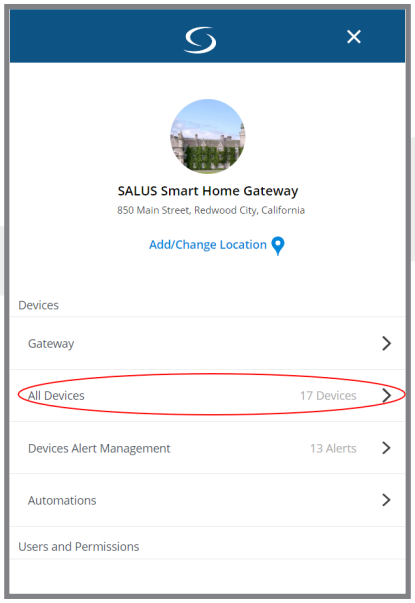


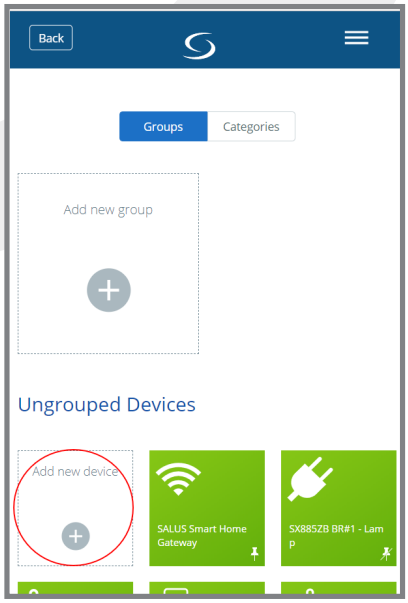
Installation/ User Guide

Pairing Instructions

The SX885ZB miniSmartPlug should be near the location that it will be installed to account for radio interference.

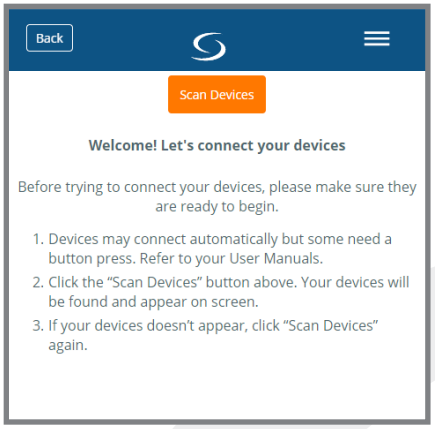




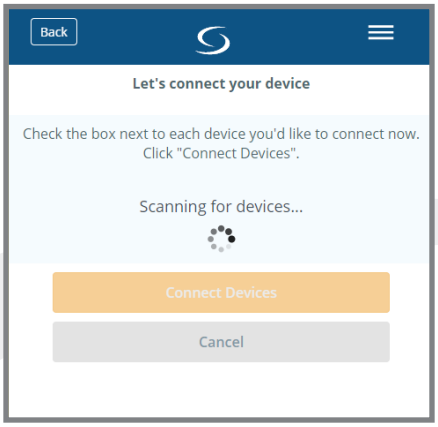


Step 1. Open the SALUS Smart Home application, select the drop-down menu from the upper right of the screen and select: ***All Devices → Add New Device***

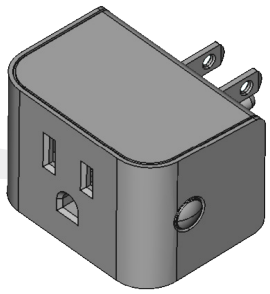
Module 2 – Wireless Accessories
SX885ZB miniSmartPlug



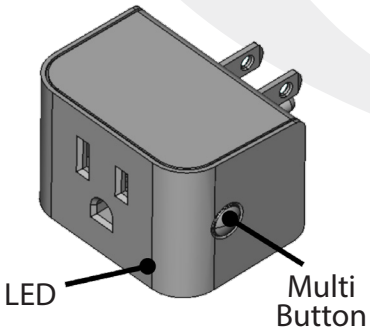
Step 2. Press Scan Devices.



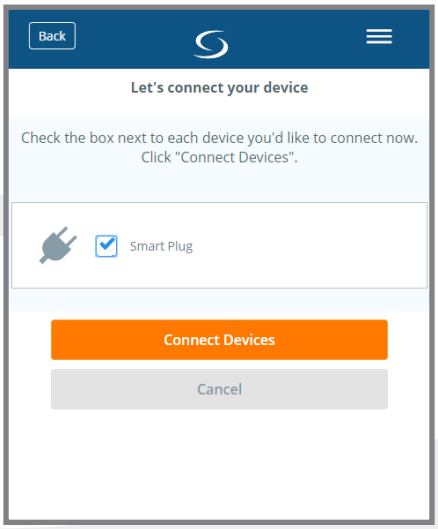
After pressing "Scan for Equipment", the SALUS Smart Home application scans for devices.



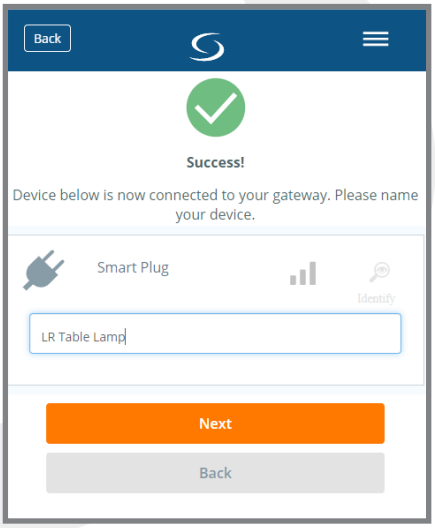
Step 3. Plug the SX885ZB miniSmartPlug switch into the desired AC outlet location to account for any radio interference.



Step 4. Press the multi button to begin pairing. The LED will flash, indicating that the Smart Plug is searching for a network.

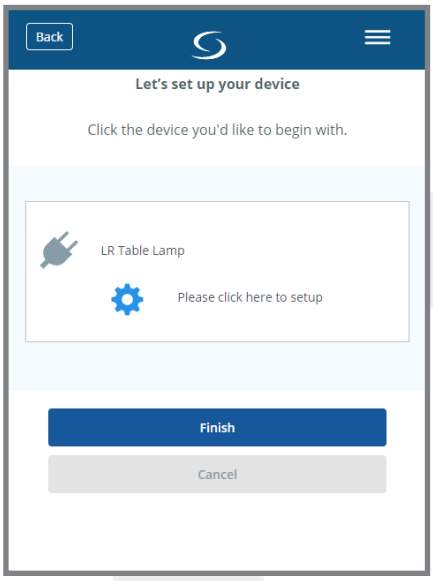


Step 5. Select the check box next to Smart Plug and choose "Connect Devices."

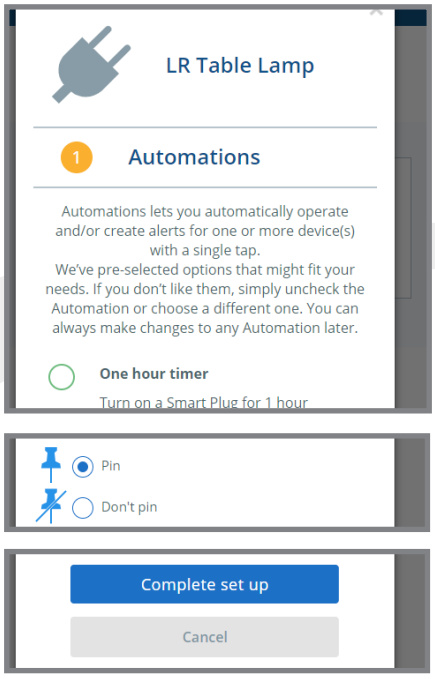


Step 3. After Choose a unique, descriptive name for the Smart Plug and press "Next".

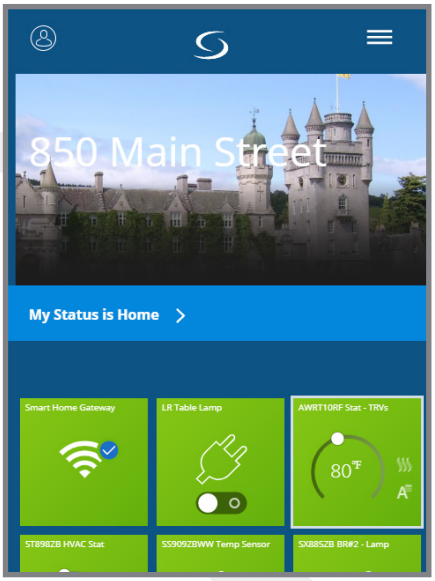
Module 2 – Wireless Accessories
SX885ZB miniSmartPlug



Step 7. Press "Please click here to setup" for extended setup options.



Step 8. Select Choose setup options. Then press "Complete set up"

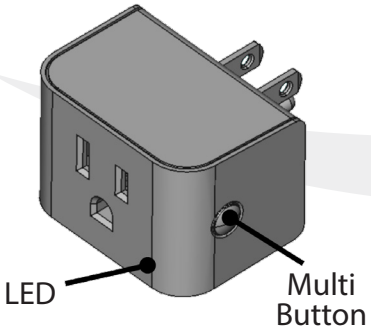


The SALUS Smart Home application will return to the system dashboard.

Using the Switch

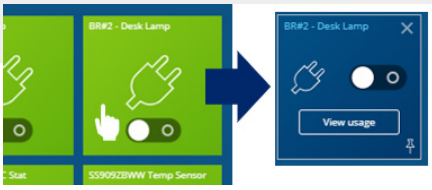
After being plugged in, there is a slight delay before the miniSmartPlug switch starts measuring energy and responding to the button or remote commands.

Manual Operation

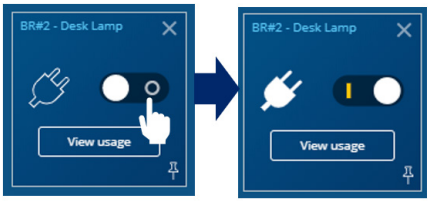


Use the Multi Button to toggle the mini Smart Plug OFF or ON. The LED will illuminate when the switch is ON.

SALUS Smart Home Application Operation



Select the desired switch. The icon will flip on the screen.

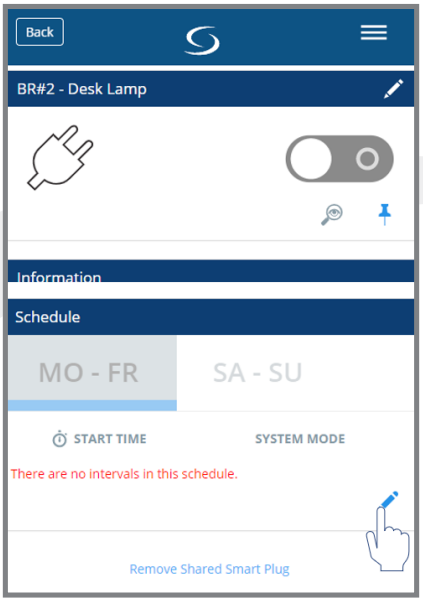


Press the symbol to toggle On/Off.

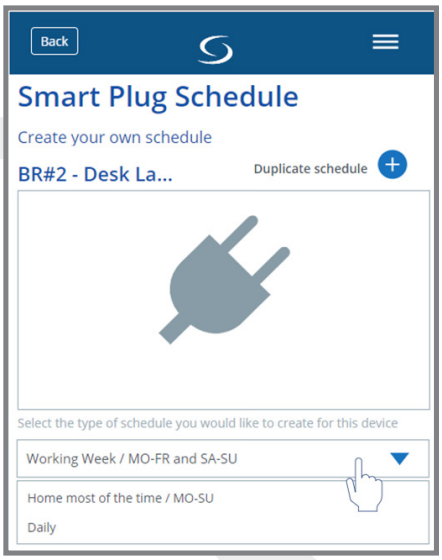
= ON = OFF

Schedule Setup with SALUS Smart Home Application

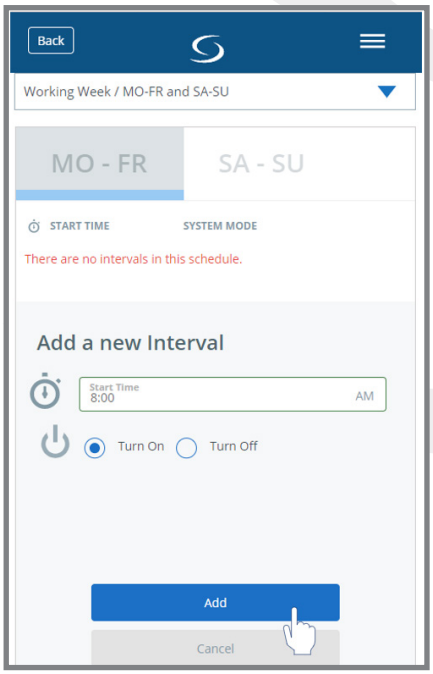
Step 1. To configure the switch schedule, choose the desired switch and click the name in the upper left.



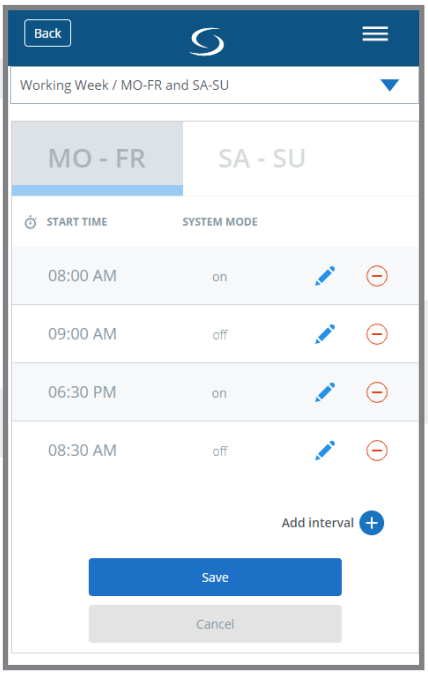
Step 2. In the configuration screen, scroll down to "Schedule" and click the symbol.



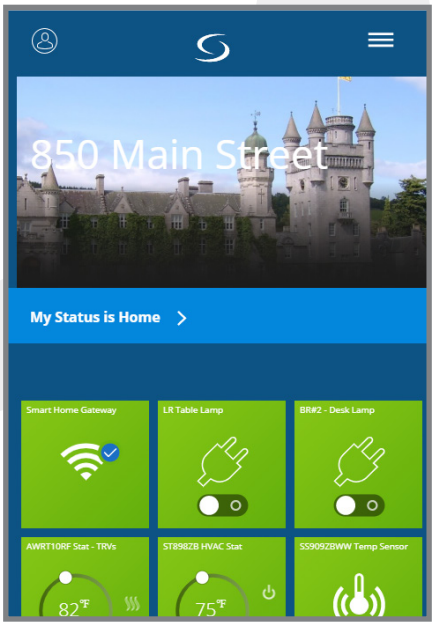
Step 3. Select the schedule type and choose "Add interval".



Step 4. Enter the Start Time and action to be performed. Press "Add".

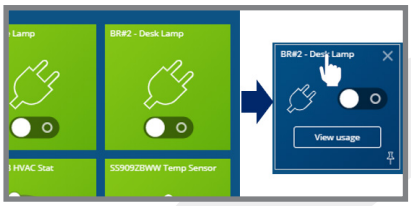


Step 5. Continue adding intervals as desired. Press "Save" when all desired intervals have been entered.

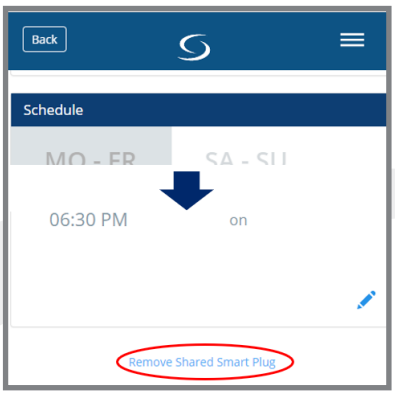


Step 6. Pressing the logo at the top of the screen will return to the application dashboard.

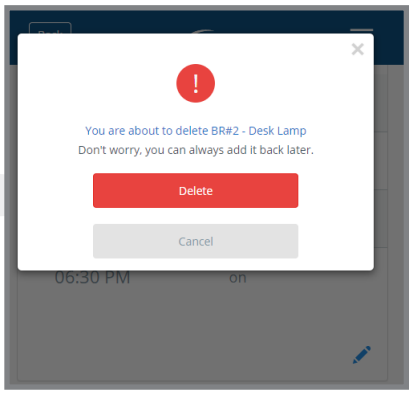
Resetting Factory Defaults



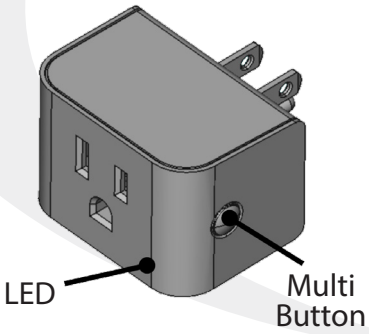
Step 1. First, delete the device from the SALUS Smart Home application. Select the device to delete, choose the device title for the configure screen.



Step 2. Scroll down below the Schedule options and choose, "Remove Shared Smart Plug".



Step 3. A notification will appear warning that you are about to delete the Smart Plug. Press "Delete" to continue.



Step 4. Press and hold the multi button on the SX855ZB Smart Plug.

Step 5. When the LED illuminates, release the button. The Smart Plug is now read for pairing.

Rejoining a Current Network

If the network connection is intermittent and/or other Zigbee devices are added or deleted, it may be necessary to for the SX885ZB Smart Plug to rejoin the network. To do this, press the multi button 5 times quickly (less than ½ second intervals). The LED will begin 3 flash intervals, indicating it is searching for a network to join.

LED Indications

Table 4.1 – LED Indications

LED Activity	Description
ON for 2-4 seconds then OFF	Switch power up, Switch is OFF
3 flashes	Searching for network to join
ON	Switch is ON
OFF	Switch is OFF
ON , flashes every 2 seconds	Switch is ON , no network detected
OFF , flashes every 2 seconds	Switch is OFF , no network detected

Troubleshooting

Table 4.2 – Troubleshooting

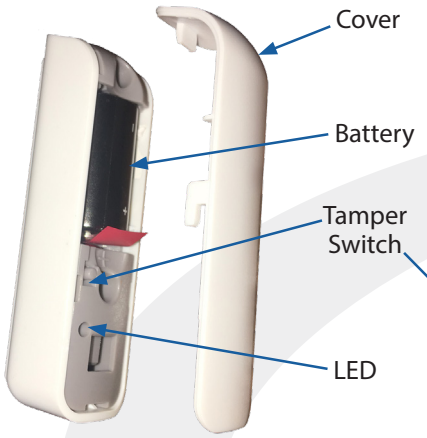
LED Activity	Description	Corrective Actions
Smart Plug will not pair with network	Radio interference at the desired location	• Relocated the SG888ZB Gateway • Select a different switch location • Add AE10RF Repeater to the system
Loss of connection after pairing	Is the SG888ZB Gateway powered with a blue LED illuminated?	• Connect AC Power to the Gateway • Connect the Gateway to the internet
	Radio interference at the location.	• Rejoin network • Relocate SG888ZB Gateway • Select different switch location • Add AE10RF Repeater
Appliance doesn't turn on when miniSmartPlug LED is on	Appliance switch is off	• Turn on appliance switch
	Appliance cannot be controlled via the AC supply	1) Manually turn on the SX885ZB miniSmart Plug 2) Turn on the appliance to be controlled. 3) Manually turn off the miniSmartPlug 4) Manually turn on the miniSmartPlug ***If the appliance cannot be controlled via the 120 vac supply voltage, the SX885ZB miniSmartPlug cannot be used.***
miniSmartPlug LED doesn't turn on when the appliance switch is cycled off/on.	Appliance isn't working properly	Check appliance operation by plugging directly into an outlet and cycling the on/off switch.
	Appliance can't be switch back on from the ON state	1) Manually turn on the SX885ZB Smart Plug 2) Turn on the appliance to be controlled. 3) Manually turn off the Smart Plug 4) Manually turn on the Smart Plug
	Appliance can't be monitored due to switch isolation by a transformer	If the appliance cannot be controlled via the 120-vac supply voltage, the SX885ZB miniSmartPlug cannot be used.

Section 5

Module 2 – Wireless Accessories
SS912ZB Slim Window/Door Sensor

Overview

Sensor Front



Sensor Back

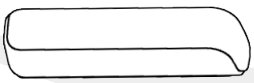
Item	Description
Sensor Cover	Allows access to battery and tamper switch while Sensor is mounted
LED	"Hidden" LED indicates network status during pairing
Tamper Switch	Detects if cover is removed from sensor or if sensor is removed from mounted location
Battery	CR2 lithium battery (3 volts dc)

Pair the SS881ZB Embedded Door Sensor with the SG888ZB Gateway prior to installation.

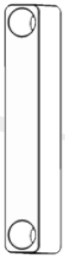
Parts Included / Installation Tools

Confirm that all required parts are present in the SS881ZB package:

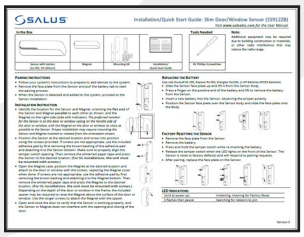
Sensor w/ Battery (CR2, 3Vdc)



Magnet

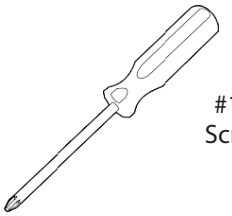


Mounting Kit



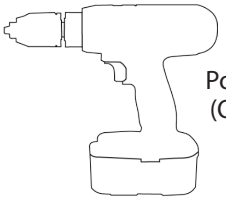
Installation Quick-start Guide

Confirm that required tools are available:



#1 Phillips Screwdriver

1/16" Drill Bit (Optional)

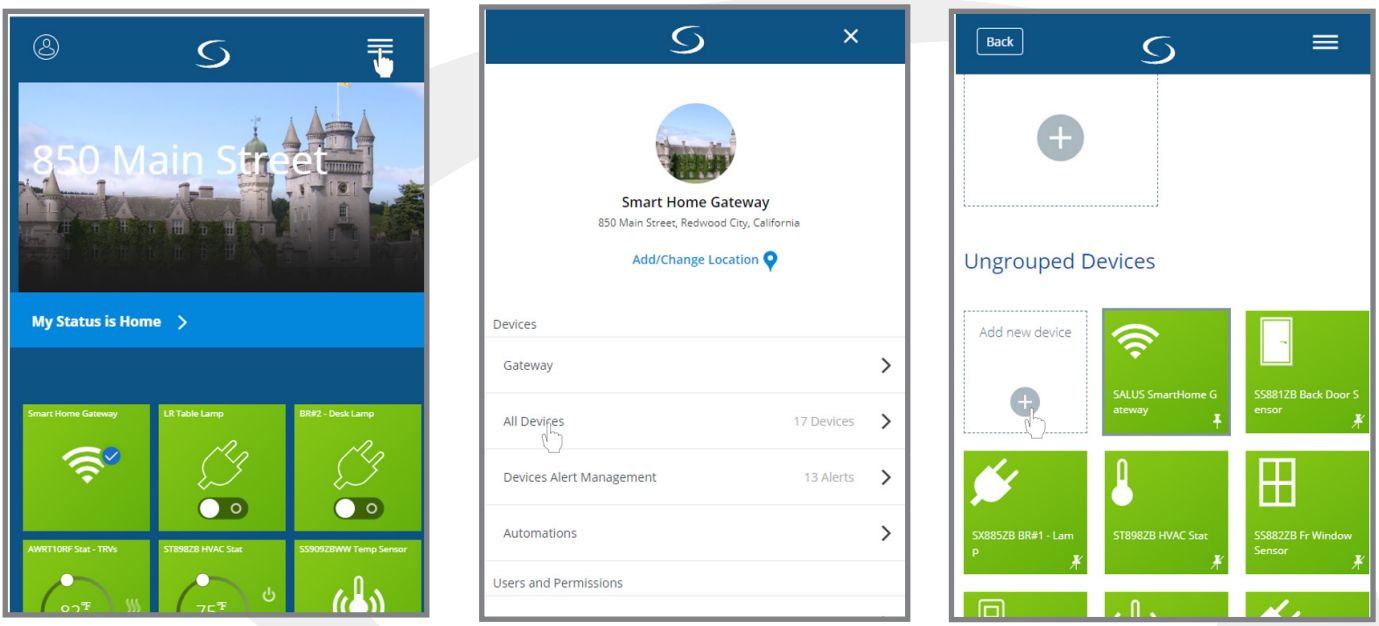


Power Drill (Optional)

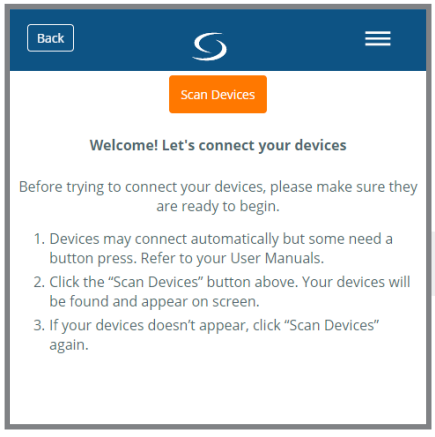
Module 2 – Wireless Accessories
SS912ZB Slim Window/Door Sensor

Pairing Instructions

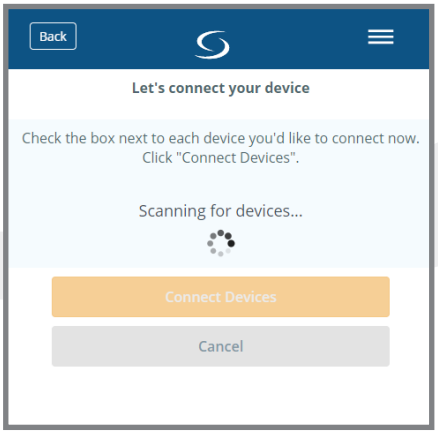
Locate the SS881ZB Embedded Door Sensor in or near the location that it will be installed to account for radio interference.



Step 1. Open the SALUS Smart Home application, select the drop-down menu from the upper right of the screen and select: ***All Devices → Add New Device***



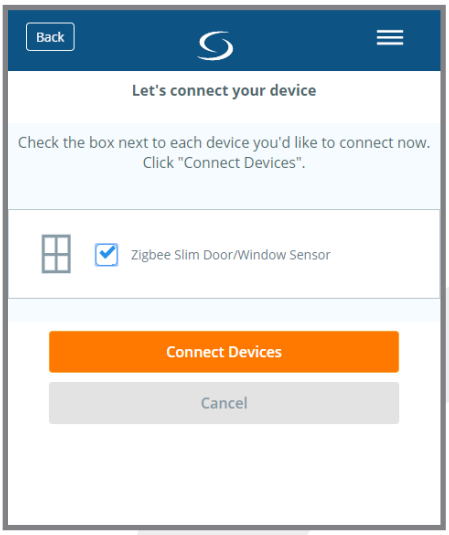
Step 2. Press "Scan Devices."



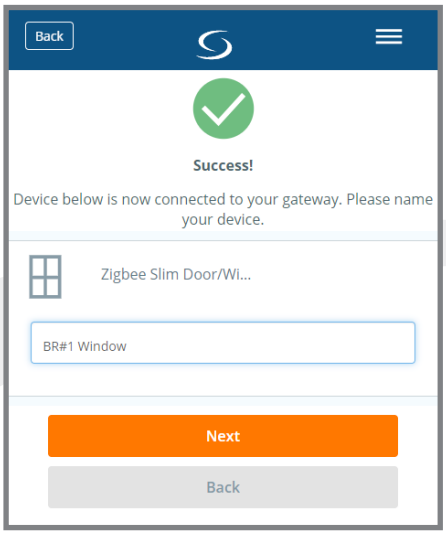
After pressing "Scan for Equipment", the SALUS Smart Home application scans for devices.

Step 3. Remove the battery tab to start the pairing process.

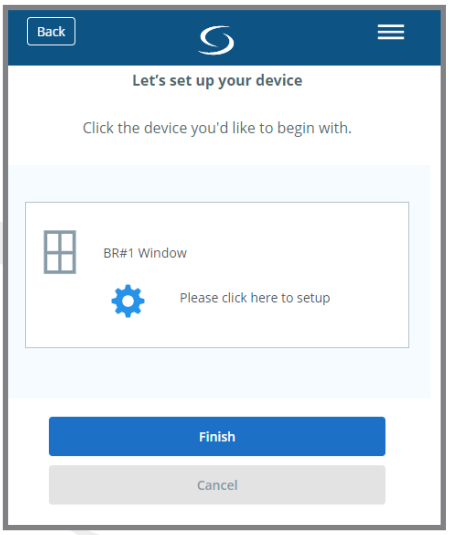
Module 2 – Wireless Accessories
SS912ZB Slim Window/Door Sensor



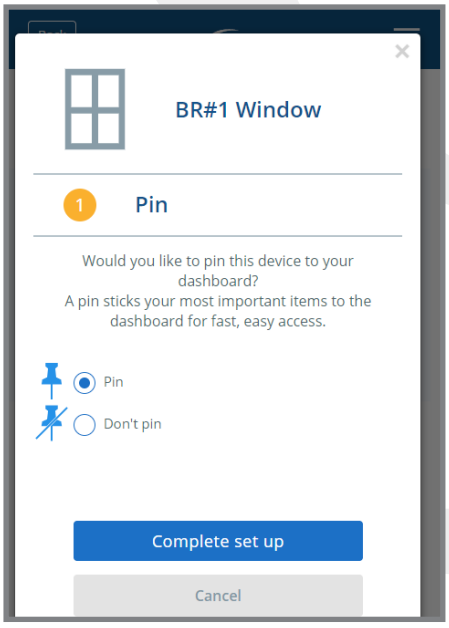
Step 4. Select the check box next to Zigbee Slim Door/ Window Sensor and press "Connect Devices"



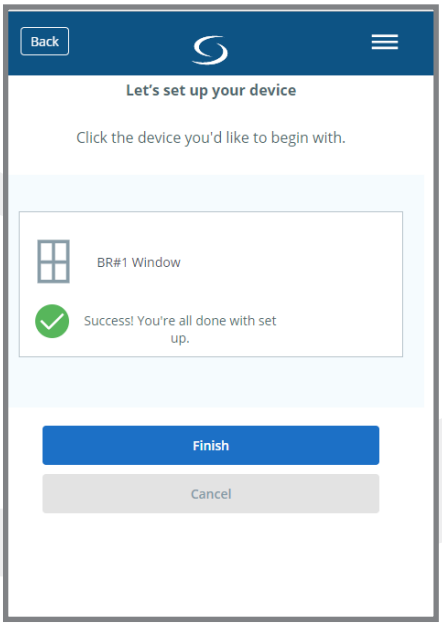
Step 5. Enter a unique descriptive name to identify the device. Press "Next"



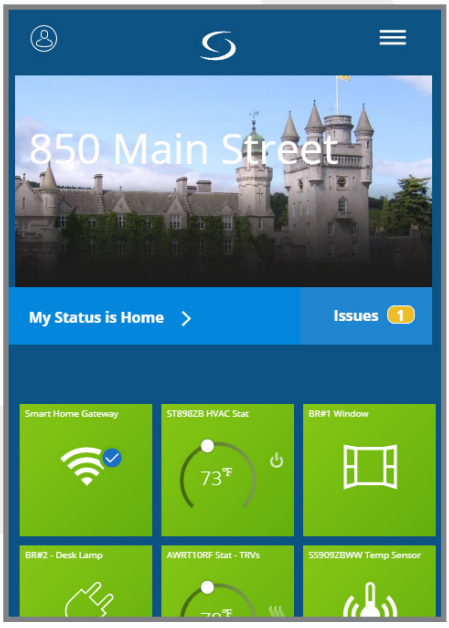
Step 6. Press "Please click here to setup."



Step 7. Choose from setup options specific to this device. Press "Complete set up."



Step 8. Press "Finish" to complete pairing.



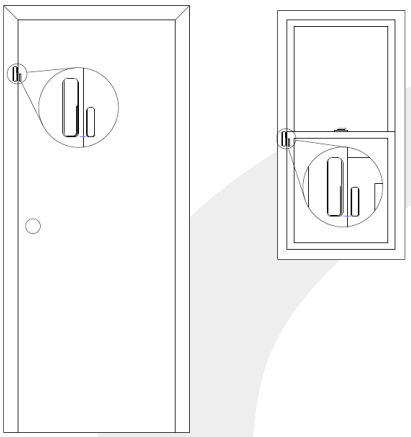
A new icon will appear on your home screen. Since the sensor is not installed it shows the door open.

After several minutes without the plunger switch depressed, an issue alert will show on the home screen.

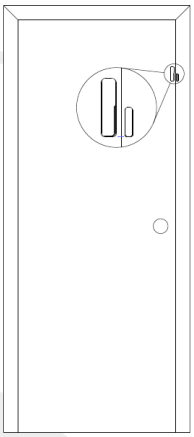
Module 2 – Wireless Accessories
SS912ZB Slim Window/Door Sensor

Installation Instructions

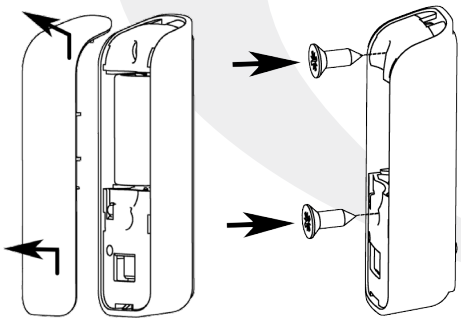
SALUS recommends locating the Window/Door Sensor on the window or door casing on the handle side. The Magnet should be mounted on the window or door as close as possible to the Sensor. To be UL compliant, the Sensor and Magnet must be mounted using the screws.

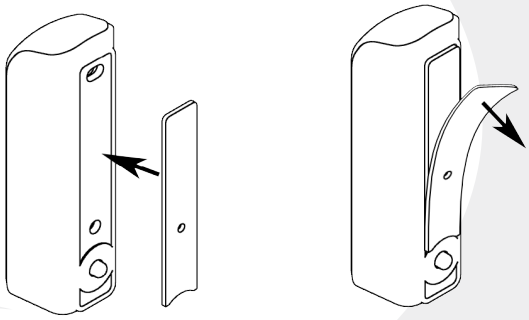


Step 1. Identify location of the Sensor and Magnet. MAKE SURE that the bottom, flat end, of the sensor and magnet are aligned and that the magnet is on the right side (at grey indicator).



NOTE: Proper installation may require the Sensor to be mounted on the door or window with the magnet mounted on the frame.

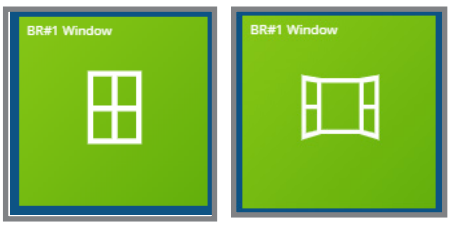




Step 2. Remove the SS912ZB Sensor cover and use the screws provided to attach the sensor at the intended location.

NOTE: If the installation cannot accommodate screw mounting, use the double-sided adhesive mounting tape provided, by first peeling the brown backing from the adhesive and attaching it to the sensor. MAKE SURE the tamper switch on the back of the device can move freely. Remove the white/red paper backing and press the sensor into the intended location.

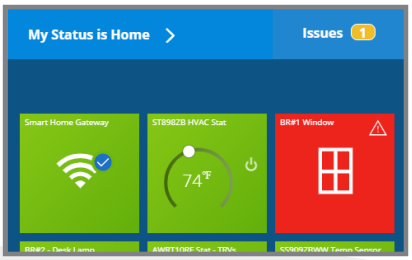
Step 3. Open the Magnet case and use the screws provided to attach the magnet in the intended location. Depending on relative position of the Door/Window in the frame, the included spacer may be required (using the longer screws) to maintain the same height of the Sensor and Magnet.



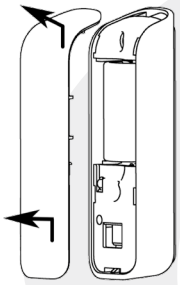
Step 4. Open and close the door or window, observing the icon tile on the SALUS Smart Home dashboard. Make sure the position of the window representation on the tile corresponds to that of the door/window. It may take 1-2 minutes for the application to respond. MAKE SURE that the Sensor or Magnet does not interfere with opening and closing of the window.

Battery Replacement

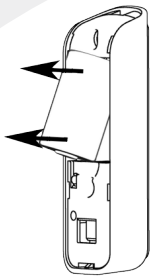
If the battery is low, the sensor icon on the SALUS Smart Home dashboard will turn red and the Issue indicator will register a message.



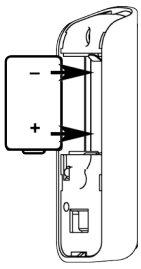
Use only Duracell DL-CR2, Energizer EL-CR2, GP Batteries GPCR1, or Ray-O-Vac RL-CR2 batteries to meet UL certification requirements.



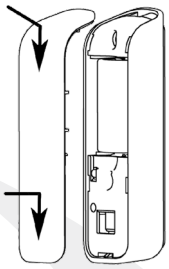
Step 1. Remove the Sensor face plate by sliding it up and off of the Sensor body.



Step 2. Gently press on the positive end of the battery and lift it out of the Sensor body.



Step 3. Insert the new battery with the positive end facing down.

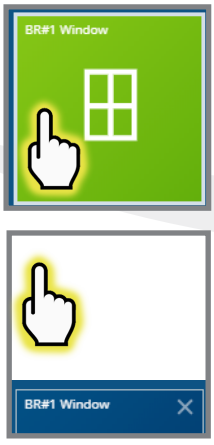


Step 4. Slide the face plate over the Sensor body and down to lock it in place.

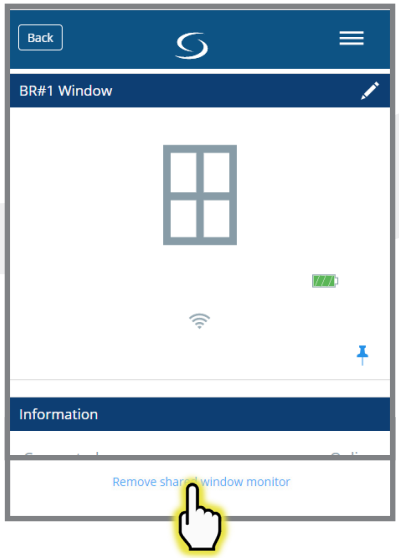
Battery Disposal

Lithium batteries are considered hazardous waste in most municipalities. Dispose of the used lithium batteries in accordance with all applicable local regulations.

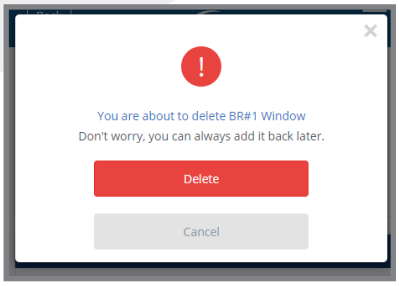
Resetting Factory Defaults



Step 1. Select the SS912ZB icon from the SALUS Smart Home dashboard. After the tile flips, choose the device name in the upper left.

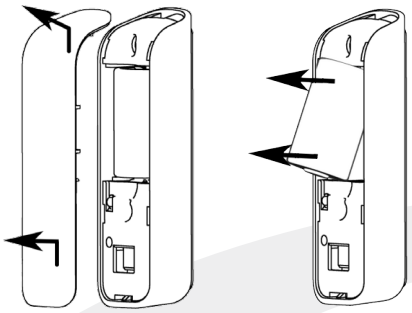


Step 2. Scroll to the bottom of the next screen and select "Remove shared window monitor."

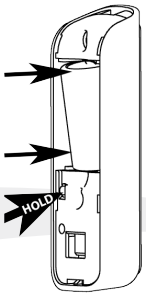


Step 3. Notification that the Sensor will be removed is displayed. Press "Delete" to continue. The SS912ZB Icon will be removed from the application.

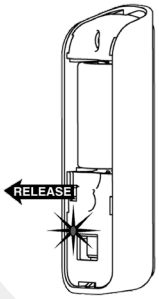
Module 2 – Wireless Accessories
SS912ZB Slim Window/Door Sensor



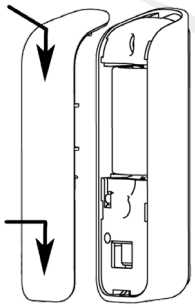
Step 4. Remove the SS912ZB Sensor cover and remove the battery.



Step 5. Press and hold the tamper switch while re-inserting the battery.



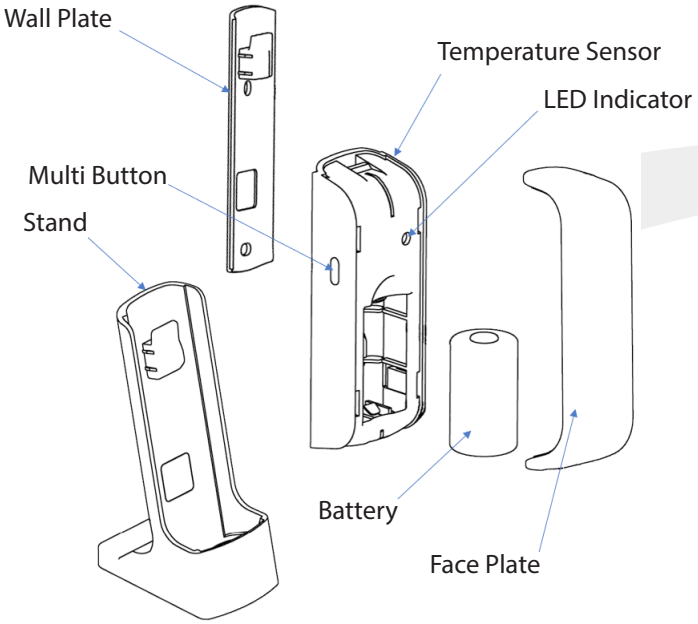
Step 6. When the LED illuminates, release the tamper switch. The Sensor is reset to factory defaults and will respond to pairing requests.



Step 7. Place the face plate on the Sensor.

Module 2 – Wireless Accessories
SS909ZB Temperature Sensor

Overview

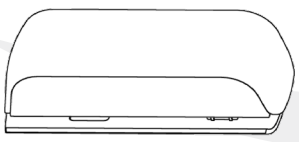


Item	Description
Wall Plate	Allows wireless mounting on a wall at a location where the temperature is most critical
Stand	Allows flexible location of the wireless temperature sensor
Face Plate	Allows access to battery while Sensor is mounted
LED Indicator	"Hidden" LED indicates network status during pairing
Tamper Switch (not shown)	Detects if sensor is removed from mounted location (Wall Plate or Stand)
Battery	CR2 lithium battery (3 volts dc)

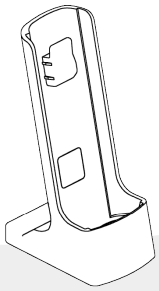
Pair the SS909ZB Embedded Door Sensor with the SG888ZB Gateway prior to installation.

Parts Included / Installation Tools

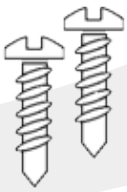
Confirm that all required parts are present in the SS881ZB package:



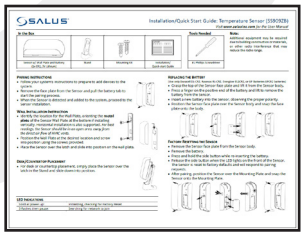
Sensor w/ Wall Plate and Battery (CR2, 3Vdc)



Magnet

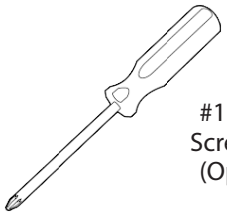


Mounting Kit

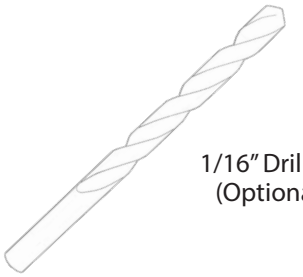


Installation Quick-start Guide

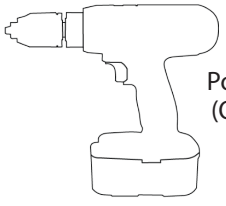
Confirm that required tools are available:



#1 Phillips Screwdriver (Optional)



1/16" Drill Bit (Optional)

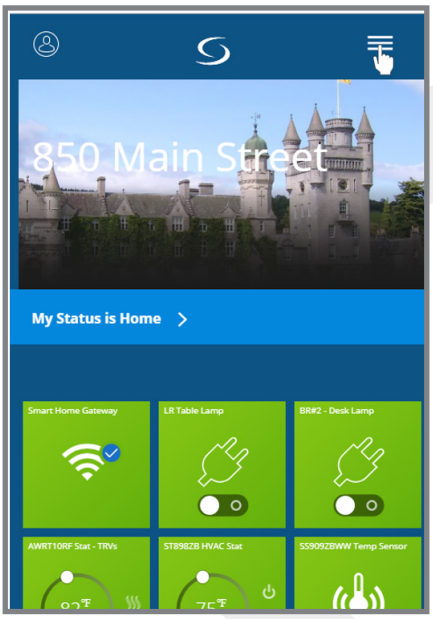


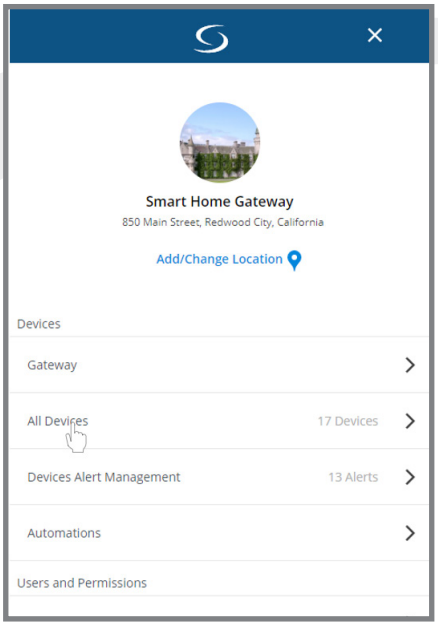
Power Drill (Optional)

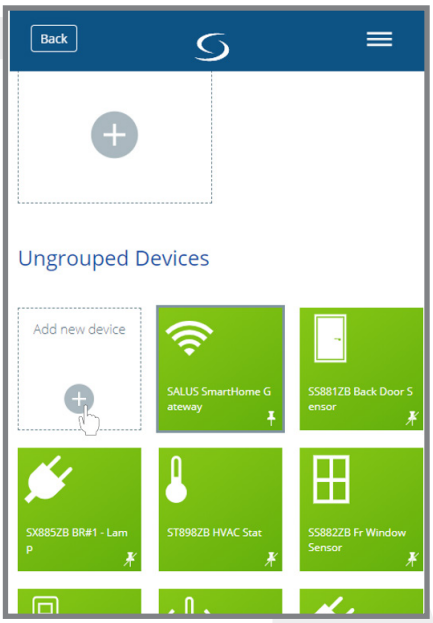
Module 2 – Wireless Accessories
SS909ZB Temperature Sensor

Pairing Instructions

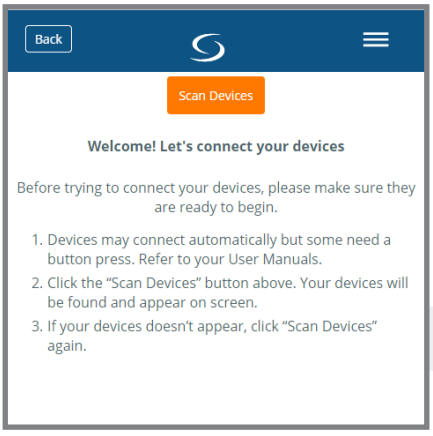
Locate the SS909ZB Temperature Sensor in or near the location that it will be installed to account for radio interference.



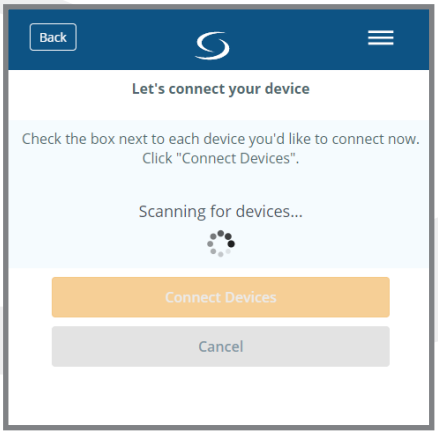




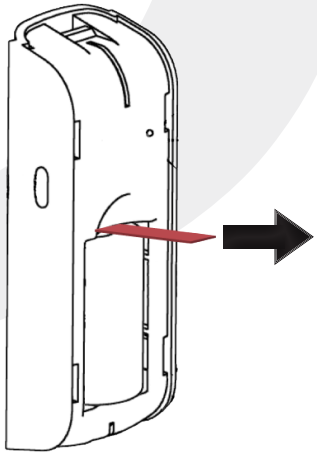
Step 1. Open the SALUS Smart Home application, select the drop-down menu from the upper right of the screen and select: ***All Devices → Add New Device***



Step 2. Press "Scan Devices."



After pressing "Scan for Equipment", the SALUS Smart Home application scans for devices.

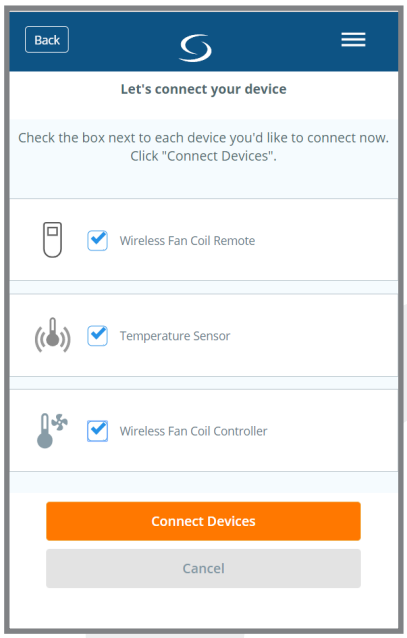


Step 3. Remove the battery tab to start the pairing process.

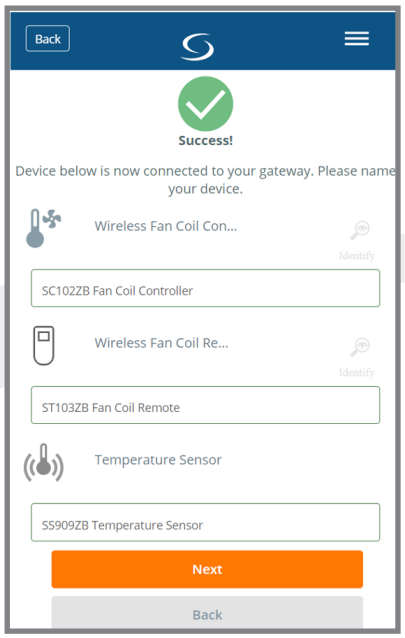
Since the SS909ZB Temperature Sensor will be associated with a thermostat, it may be convenient to pair both components at once. The following shows the Sensor pairing with an SC102ZB Wireless Fan Coil Controller & ST103ZB Wireless Fan Coil Remote.

Follow specific instructions to prepare additional devices for pairing.

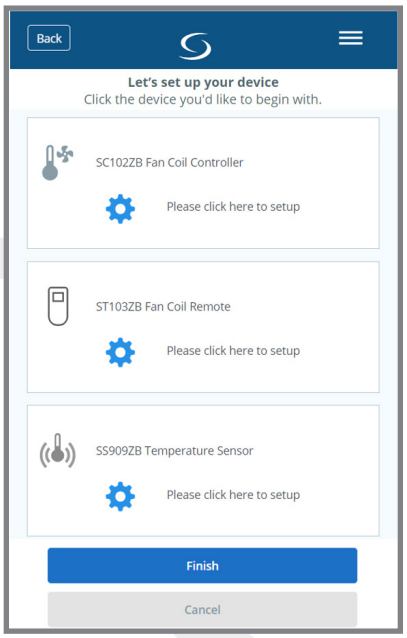
Module 2 – Wireless Accessories
SS909ZB Temperature Sensor



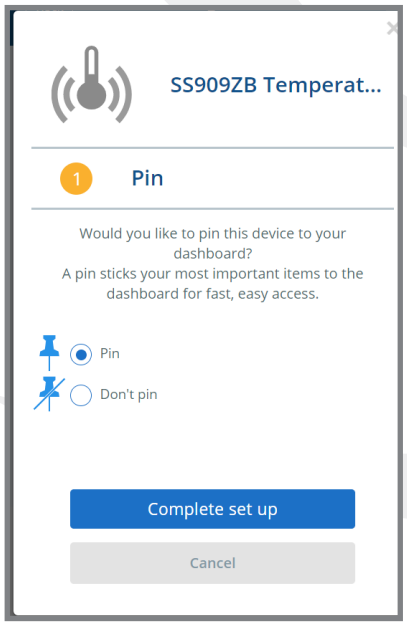
Step 4. Select the check boxes next to Temperature Sensor and other associated devices. Press "Connect Devices"



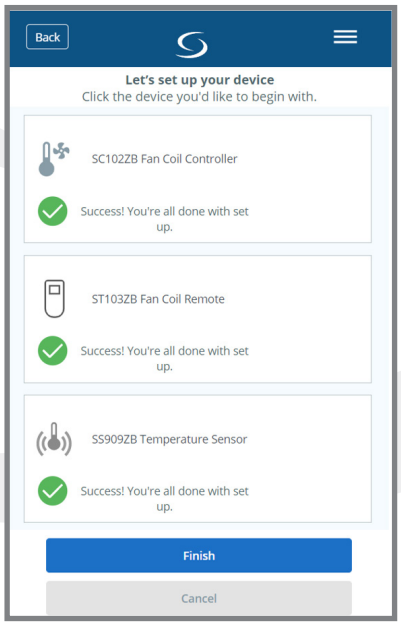
Step 5. Enter a unique descriptive name to identify each device. Press "Next"



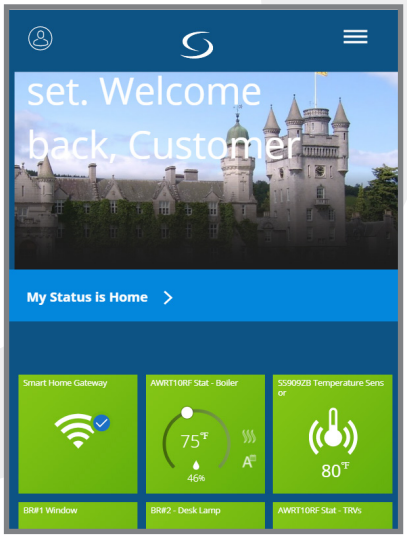
Step 6. Press "Please click here to setup."



Step 7. Choose from setup options specific to each device. Press "Complete set up."



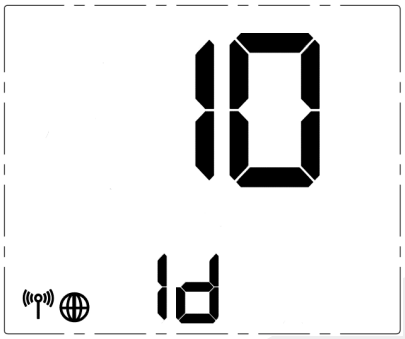
Step 8. Press "Finish" to complete pairing.



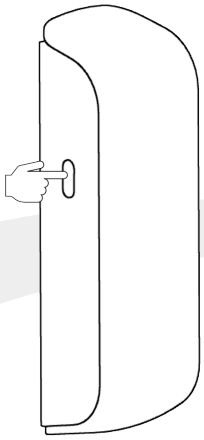
A new icon will appear on your home screen. Since the sensor is not installed it shows the door open.

A thermostat must be set to "EXT" temperature sensor in the setting menu and associated with a Zigbee Temperature Sensor in the parameters menu for it to read the SS909AB Sensor. If the SS909ZB Temperature Sensor does not connect with the thermostat, it may be necessary to do a find and bind operation as follows.

Module 2 – Wireless Accessories
SS909ZB Temperature Sensor



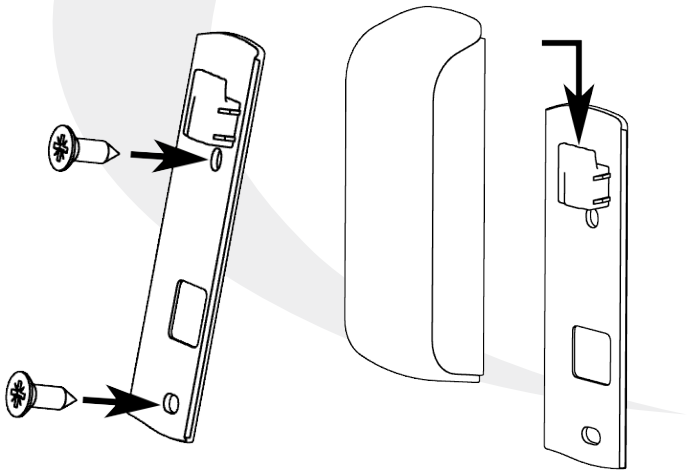
Step 1. Follow the thermostat instructions to make sure it is in the Identify Mode.



Step 2. Press and hold the pairing button on the SS909ZB Sensor for 3 seconds until the LED Illuminates. Release immediately and then press the button again.

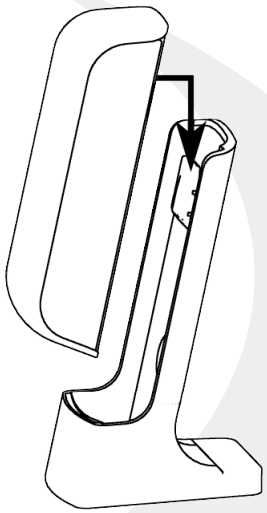
When the LED goes out, the Sensor will be associated with the Thermostat and the temperature should read, correctly.

Installation Instructions



Wall Mounting

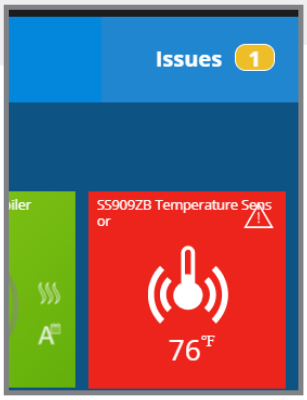
Attach the Wall Plate in the desired location. Slide the SS909ZB Sensor on to the Wall Plate as shown.

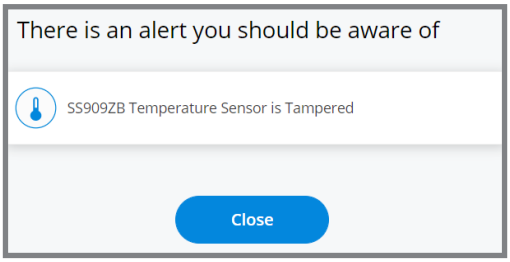


Wall Mounting

Slide the SS909ZB Sensor on to the Stand as shown. Locate the stand as desired.

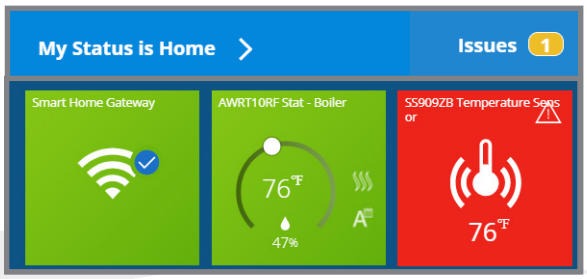
If the Temperature Sensor is not mounted on either the Wall Plate or the Stand, a warning message indicating the tamper switch has been activated.

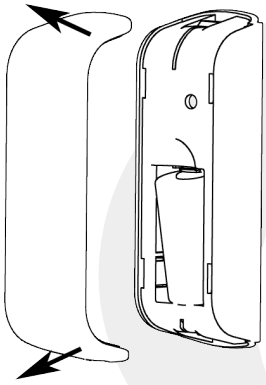




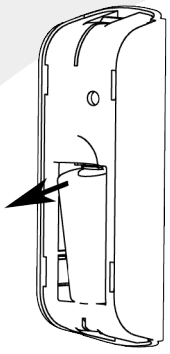
Battery Replacement

If the battery is low, the sensor icon on the SALUS Smart Home dashboard will turn red and the Issue indicator will register a message. Use only a CR2, 3 volt lithium battery for replacement.

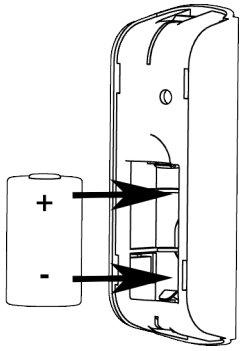




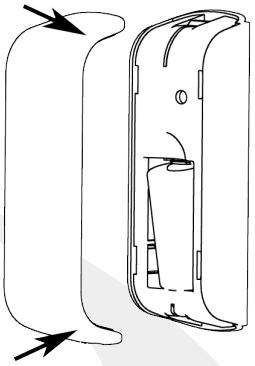
Step 1. Remove the Sensor face plate by sliding it up and off of the Sensor body.



Step 2. Gently pull on the positive end of the battery and lift it out of the Sensor body.



Step 3. Insert the new battery with the positive end facing down.

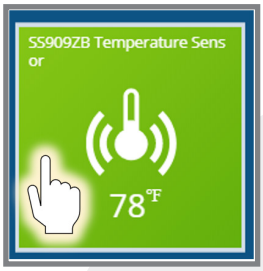


Step 4. Slide the face plate over the Sensor body and down to lock it in place.

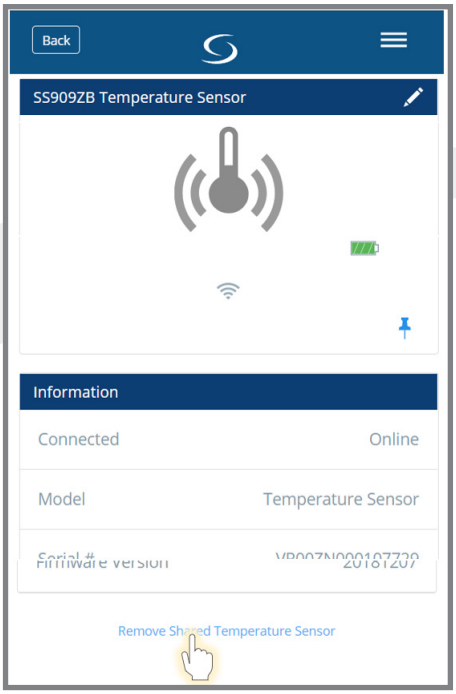
Battery Disposal

Lithium batteries are considered hazardous waste in most municipalities. Dispose of the used lithium batteries in accordance with all applicable local regulations.

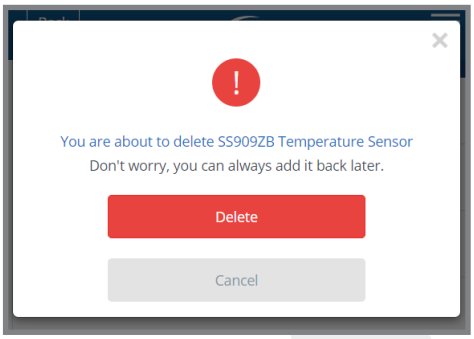
Resetting Factory Defaults



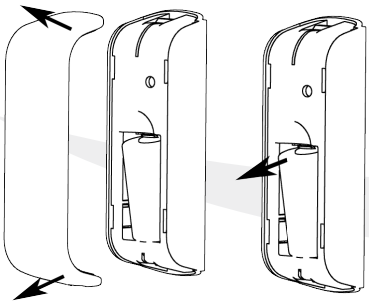
Step 1. Select the SS909ZB icon from the SALUS Smart Home dashboard. After the tile flips, choose the device name in the upper left.



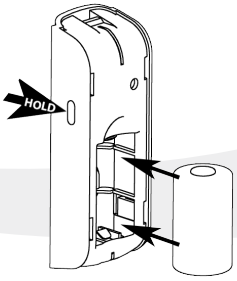
Step 2. Scroll to the bottom of the next screen and select "Remove shared window monitor."



Step 3. Notification that the Sensor will be removed is displayed. Press "Delete" to continue. The SS909ZB Icon will be removed from the application.

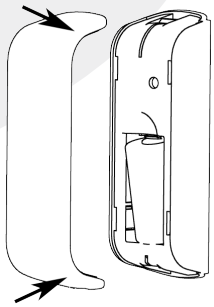


Step 4. Remove the SS909ZB Sensor cover and remove the battery.



Step 5. Press and hold the Pair Button while re-inserting the battery.

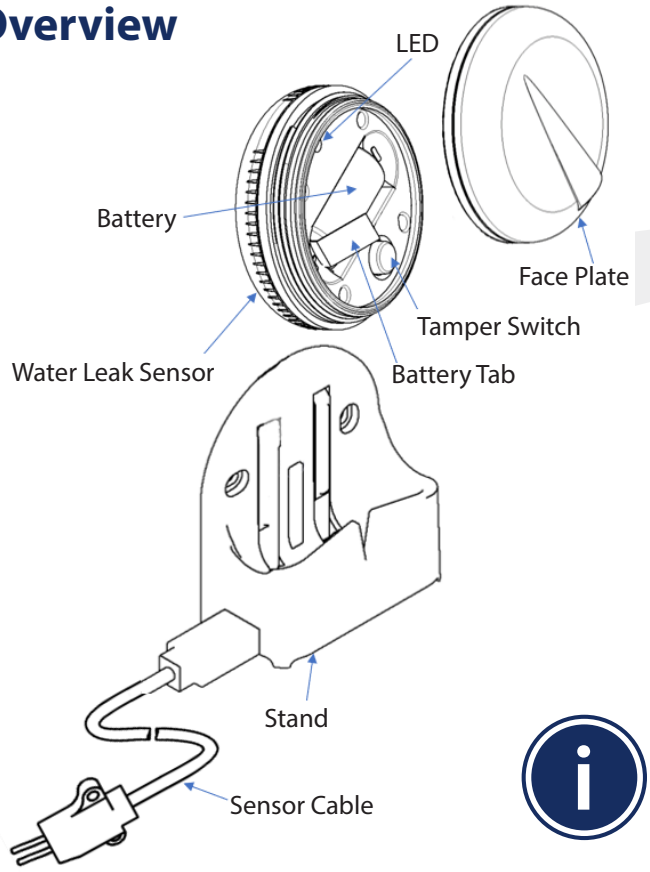
Step 6. When the LED illuminates, release the Pair Button. The Sensor is reset to factory defaults and will respond to pairing requests.



Step 7. Place the face plate on the Sensor.

Module 2 – Wireless Accessories
SS901ZB Water Leak Sensor

Overview

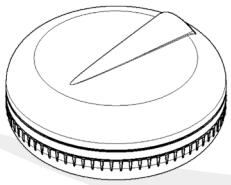


Item	Description
Stand	Allows wireless mounting to a wall. Also works as a functional testor.
Sensor Cable	Extends the sensor's range to hard-to-reach locations.
Face Plate	Allows access to battery and tamper switch.
LED Indicator	"Hidden" LED indicates network status during pairing
Tamper Switch	Detects if sensor face plate has been removed.
Battery (3 volts dc)	CR2 lithium battery
Battery Tab	Pull to activate the battery before starting operation

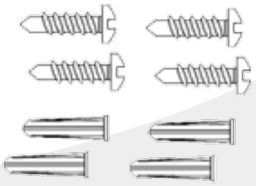
Pair the SS901ZB with the SG888ZB Gateway prior to installation. The Water Leak Sensor can be paired simulataneously with an SC900ZB Ball Valve Controller, SC904ZB Inline Shutoff Valve or an SC906ZB PVC Ball Valve Controller by preparing it for pairing before beginning the pairing sequence.

Parts Included

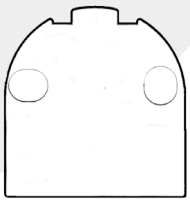
Confirm that all required parts are present in the SS901ZB package:



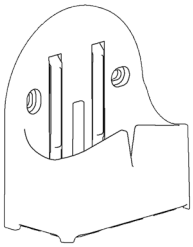
Water Leak Sensor with CR2, 3V Lithium Battery



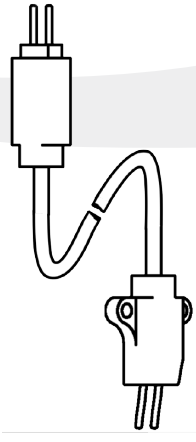
Mounting Screws & Anchors



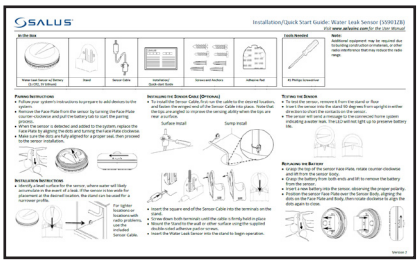
Double-sided Adhesive



Stand



Sensor Cable

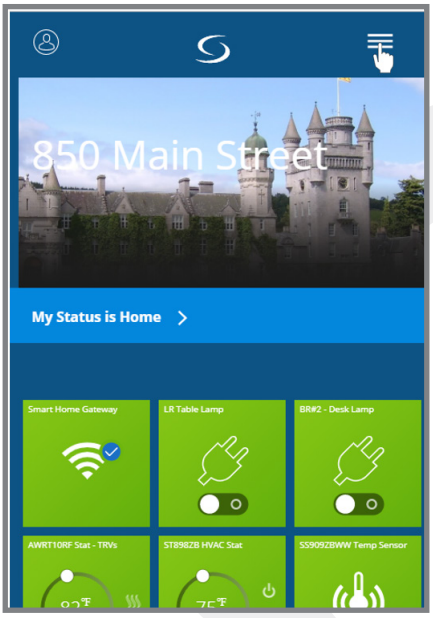


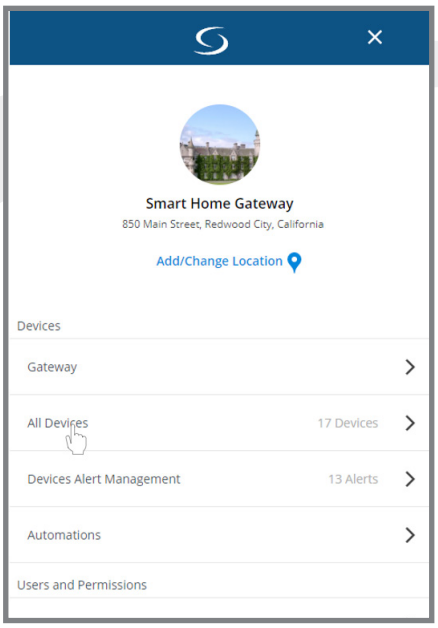
Installation Quick-start Guide

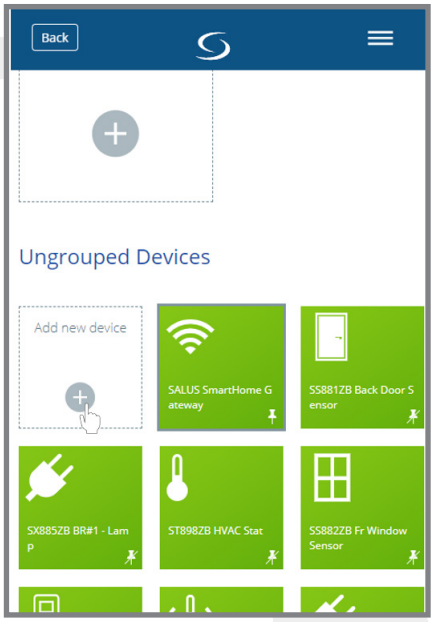
Module 2 – Wireless Accessories
SS901ZB Water Leak Sensor

Pairing Instructions

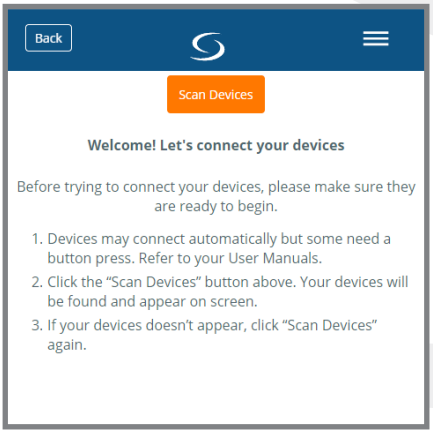
Locate the SS901ZB Water Leak Sensor in or near the location that it will be installed to account for radio interference.



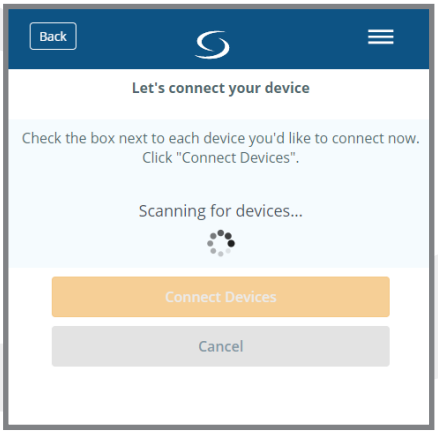




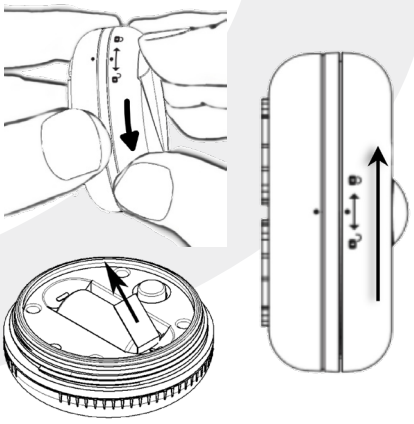
Step 1. Open the SALUS Smart Home application, select the drop-down menu from the upper right of the screen and select: ***All Devices → Add New Device***



Step 1. Press "Scan Devices."



Step 2. After pressing "Scan for Equipment", the SALUS Smart Home application scans for devices.

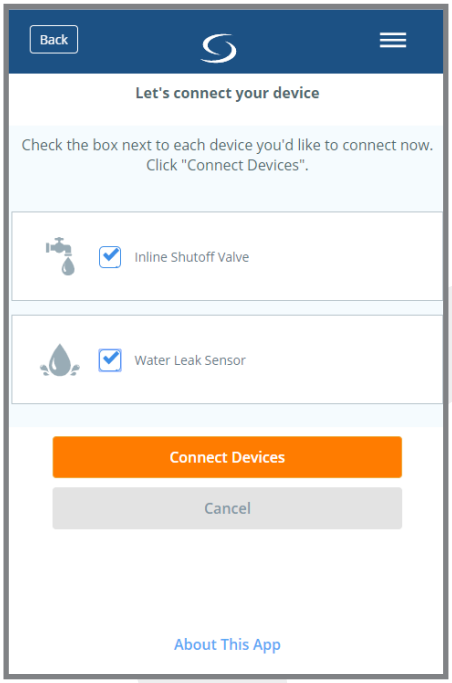


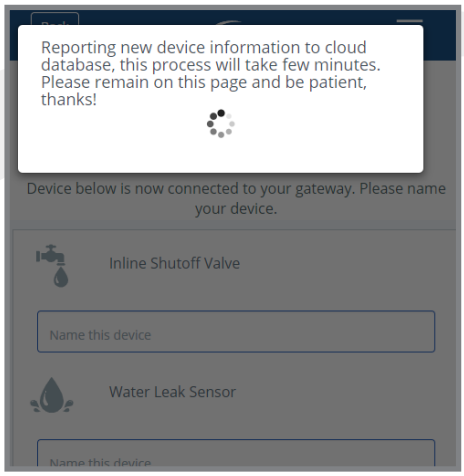
Step 3. Unscrew the Sensor face plate and remove the battery tab to start the pairing process. Replace the face plate making sure it is locked and sealed.

Since the SS901ZB Water Leak Sensor will likely be associated with a valve controller, it may be convenient to pair both components at once. The following shows the Sensor pairing with an SC904ZB Inline Shutoff Valve.

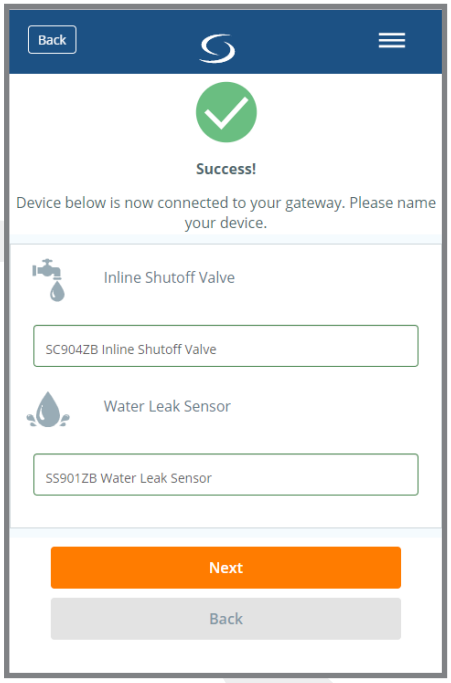
Follow specific instructions to prepare additional devices for pairing.

Module 2 – Wireless Accessories
SS901ZB Water Leak Sensor

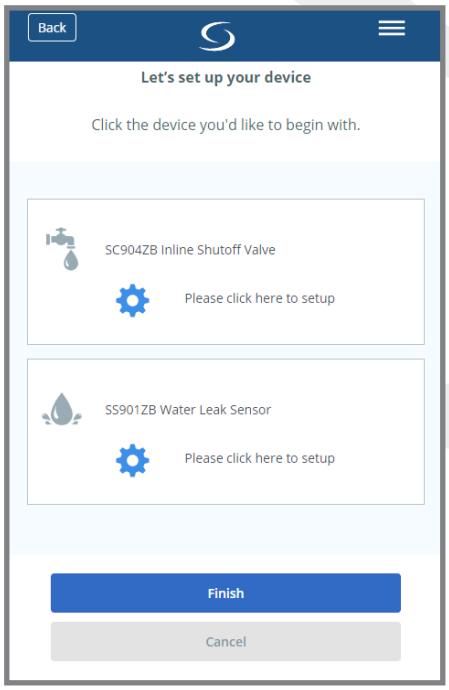




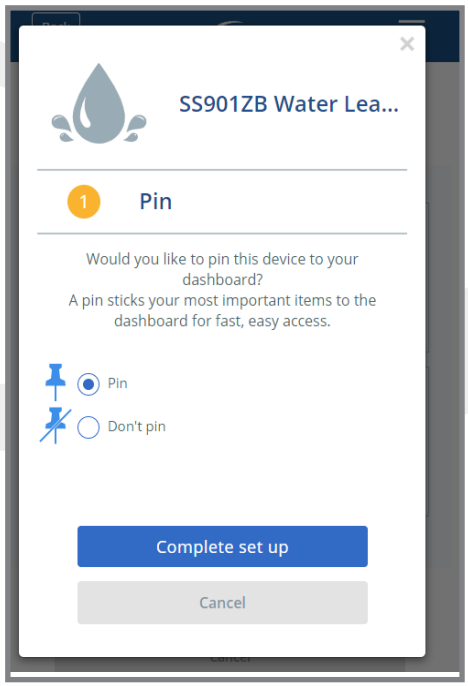
Step 4. Select the check boxes next to Water Leak Sensor and other associated devices. Press "Connect Devices". An information box may appear indicating that the device is being added. Be patient and wait for the next screen display.



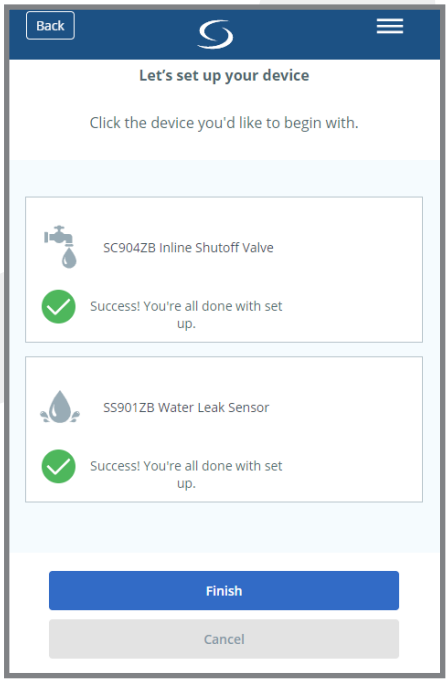
Step 5. Enter a unique descriptive name to identify each device. Press "Next."



Step 6. Press "Please click here to setup."



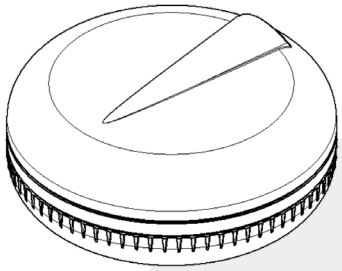
Step 7. Choose from setup options specific to each device. Press "Complete set up."



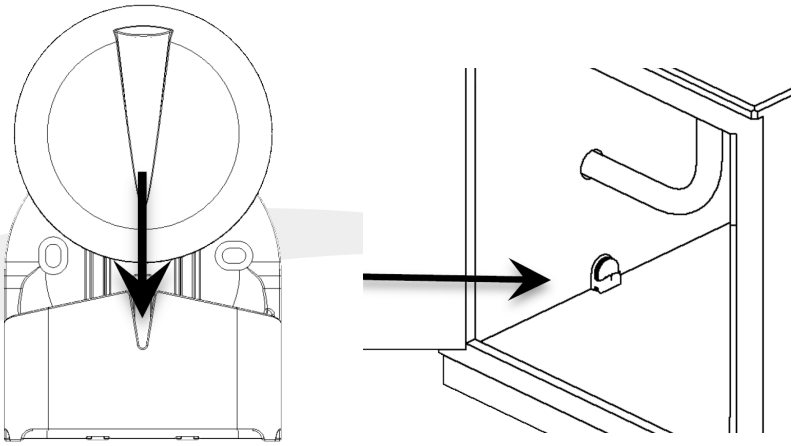
Step 8. Press "Finish" to complete pairing.

Module 2 – Wireless Accessories
SS901ZB Water Leak Sensor

Installation Instructions

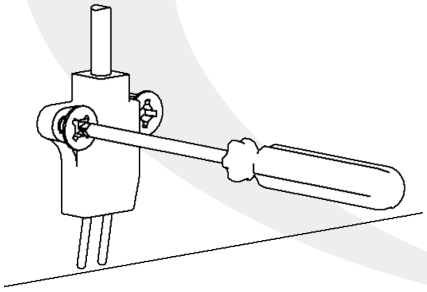


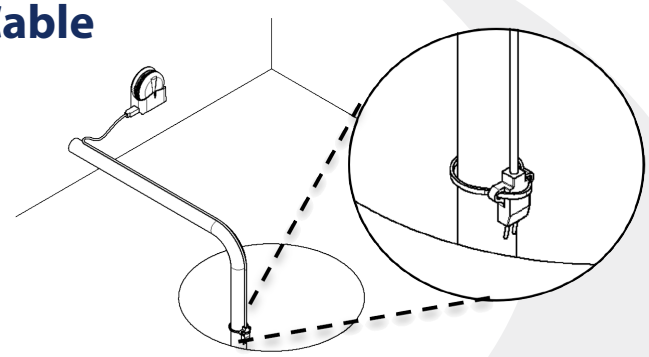
Place the sensor on a level surface where water is likely to accumulate when a leak occurs.



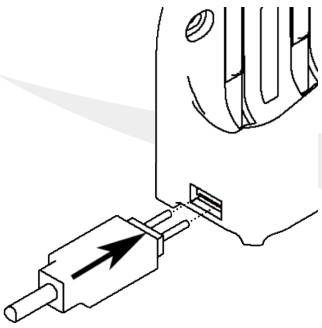
If the sensor doesn't lay flat in the desired location, the stand, which has integral sensing electrodes can be used for a narrower profile.

Installing the optional Sensor Cable

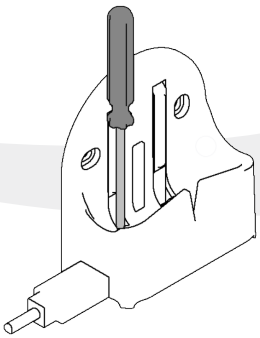




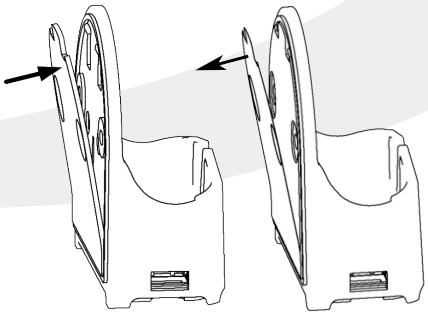
Step 1. Fasten the end of the Sensor Cable with the mounting brackets in the desired location. The brackets can be used for screw mounting to a flat surface or with a wire tie for a below grade sump.



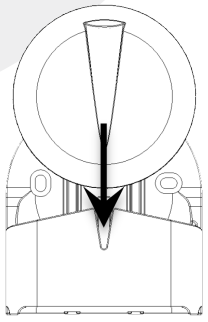
Step 2. Insert the opposite end of the Sensor Cable into the connector on the Stand.



Step 3. Tighten the terminals snugly taking care not to overtighten.

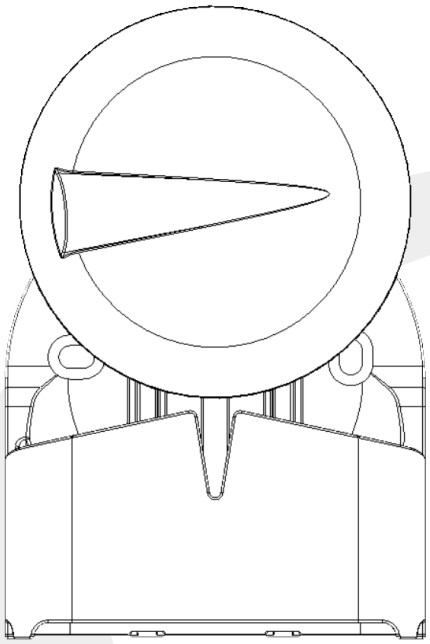


Step 4. Mount the stand on a flat surface using the double-sided adhesive or screws provided.

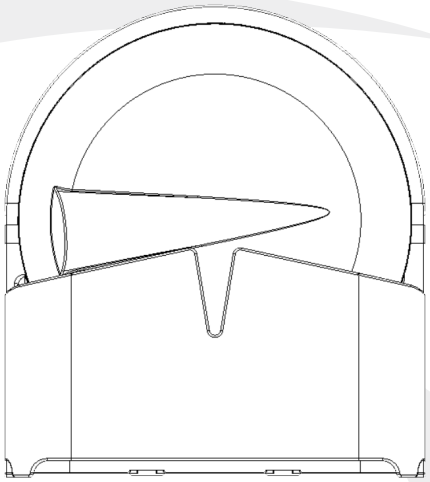


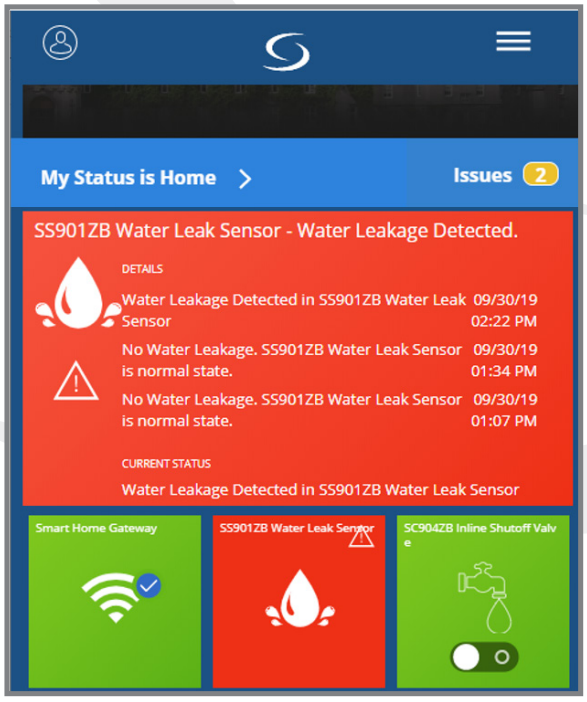
Step 5. Insert the Water Leak Sensor into the Stand.

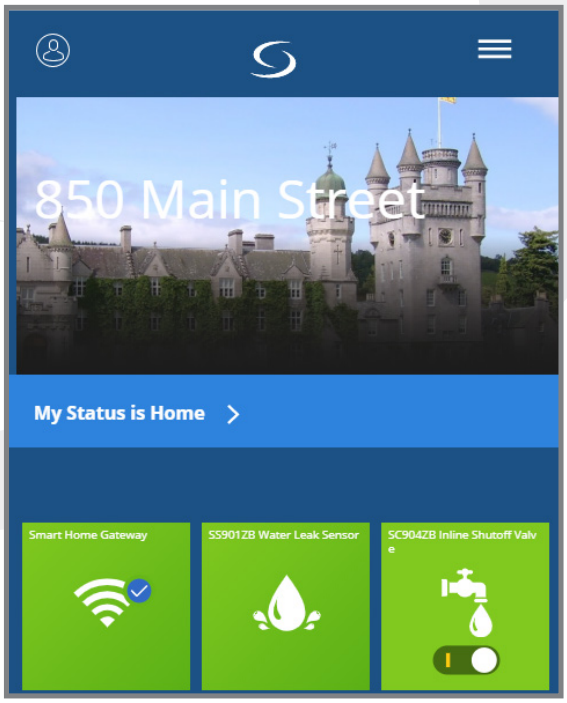
Testing the Sensor



Insert the sensor into the Stand with the centering feature at 90 degrees from upright in either direction. This will short the contacts on the Sensor.

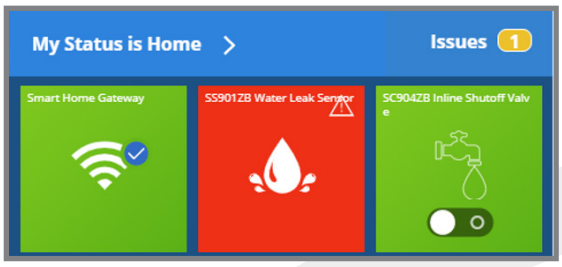




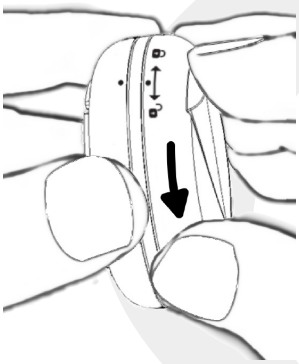


SALUS Smart Home will show an alert indicating a water leak. Based on the automations and the devices associated with the leakage, this may send a message (email or SMS text) and activate an associated device such as the SC904ZB Inline Shutoff Valve. Removing the SS901ZB Sensor from the Stand and returning it to the upright position will clear the alert and return associated devices to the desired status.

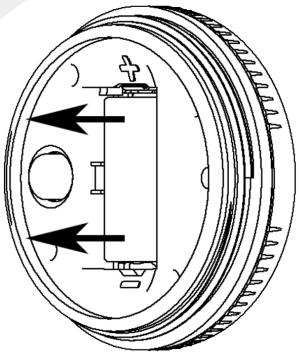
Battery Replacement



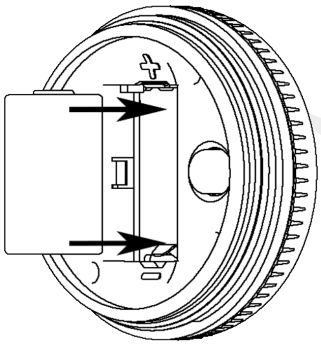
If the battery is low, the Water Leak Sensor icon on the SALUS Smart Home dashboard will turn red and the Issue indicator will register a message. Use only a CR2, 3 volt lithium battery for replacement.



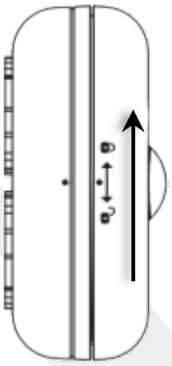
Step 1. Unscrew the Sensor face plate by turning it counter-clockwise.



Step 2. Gently pull on the positive end of the battery and lift it out of the Sensor body.



Step 3. Insert the new battery according to the polarity markings molded into the plastic housing.

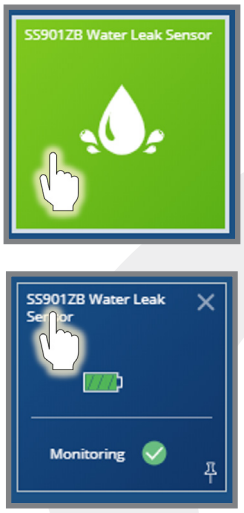


Step 4. Screw the face plate on to the sensor making sure the dots are aligned to lock it.

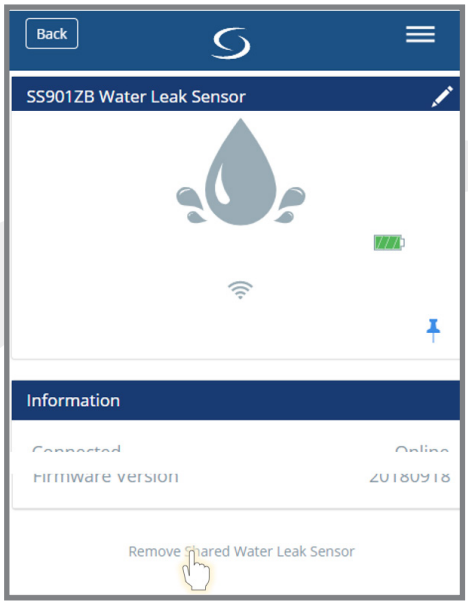
Battery Disposal

Lithium batteries are considered hazardous waste in most municipalities. Dispose of the used lithium batteries in accordance with all applicable local regulations.

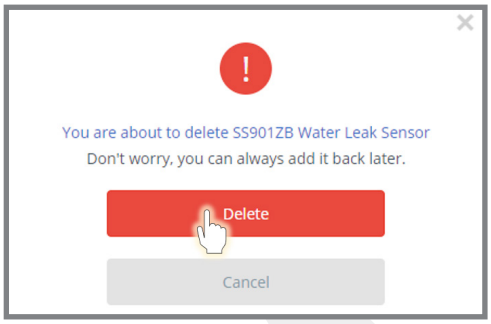
Resetting Factory Defaults



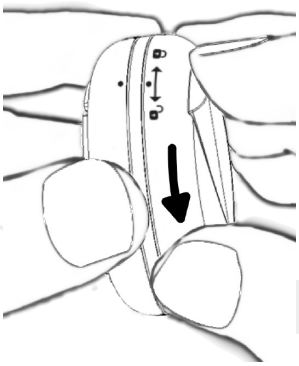
Step 1. PressSelect the SS901ZB icon from the SALUS Smart Home dashboard. After the tile flips, choose the device name in the upper left.



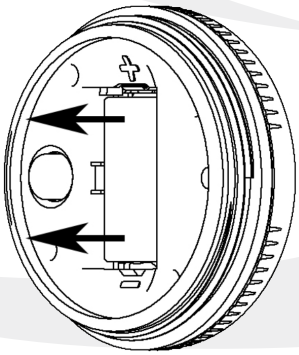
Step 2. Scroll to the bottom of the next screen and select "Remove Shared Water Leak Sensor."



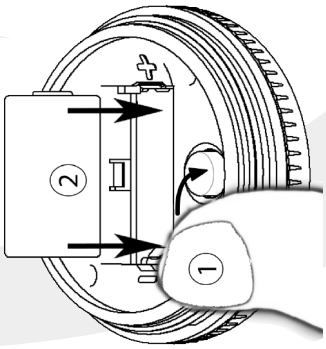
Step 3. Notification that the Sensor will be removed is displayed. Press "Delete" to continue. The SS901ZB Icon will be removed from the application.



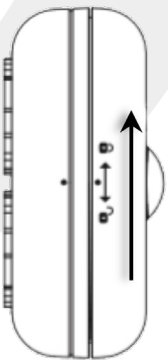
Step 4. Unscrew the SS901ZB face plate.



Step 5. Remove the battery.



Step 6. Insert the battery while holding the tamper switch.



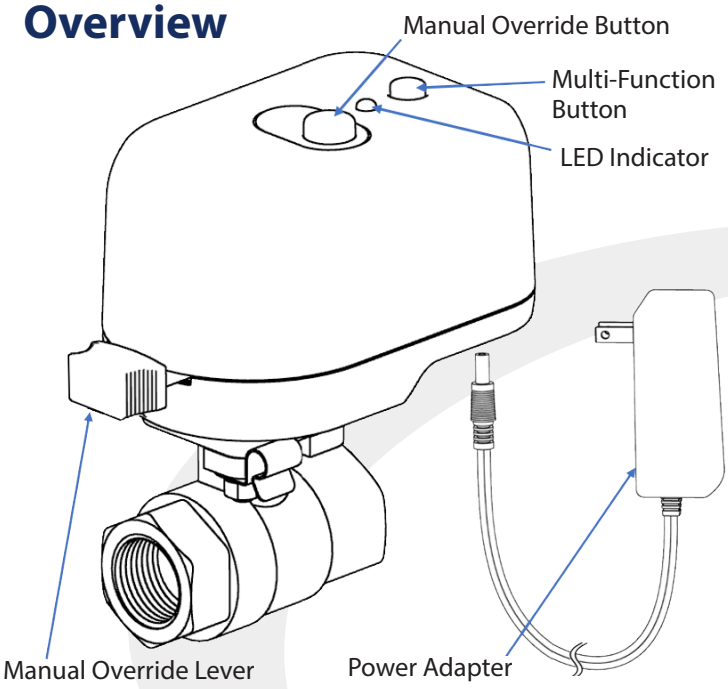
Step 7. Screw the face plate onto the sensor making sure it is fully locked and sealed.

After this, the sensor has been reset to factory default settings and will respond to pairing requests.

Section 8

Module 2 – Wireless Accessories
SC904ZB Inline Shutoff Valve

Overview

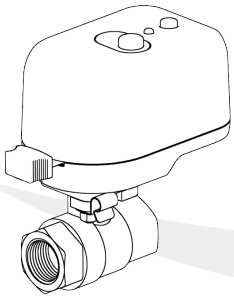


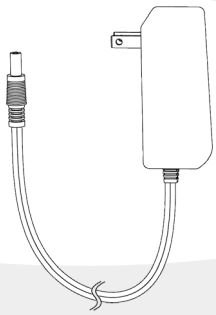
Item	Description
Multi-Function Button	Used for local opening and closing of the Inline Shutoff Valve as well as pairing the Valve with SALUS network
LED Indicator	Provides Inline Shutoff Valve status feedback
Manual Override Button	Allows a user to open or close the valve with the Manual Override Lever in case of a power outage or system malfunction
Manual Override Lever	Used to manually open or close the valve if the Manual Override Button is pressed.
Power Adapter	Converts line voltage to low voltage to power the valve actuator

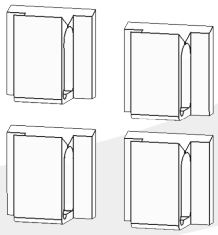
Pair the SC904ZB with the SG888ZB Gateway prior to installation. The Inline Shutoff Valve can be paired simulataneously with an SS901ZB Water Leak Sensor by preparing both devices for pairing before beginning the pairing sequence.

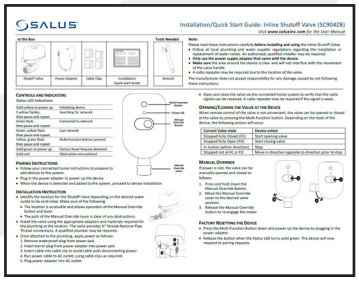
Parts Included

Confirm that all required parts are present in the SS904ZB package:

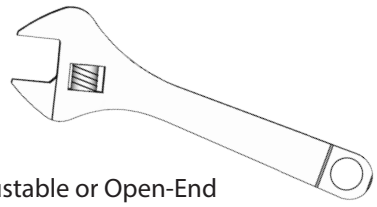

Inline Shutoff Valve

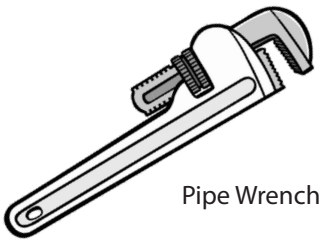

Power Adapter


Cable Clips


Installation Quick-start Guide

Tools Needed

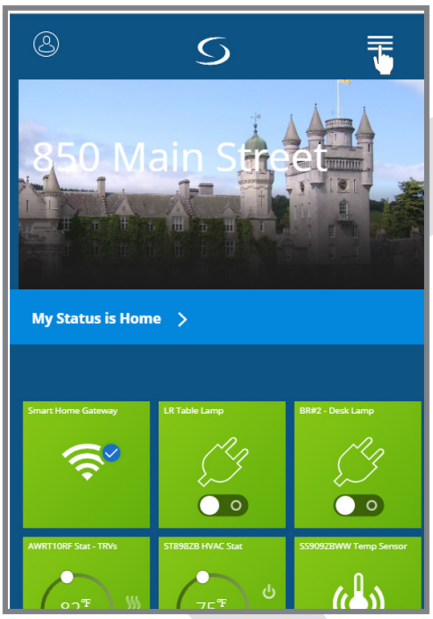

Adjustable or Open-End Wrench

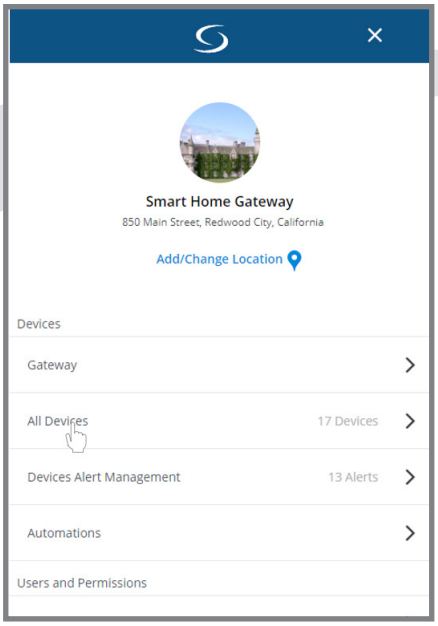

Pipe Wrench

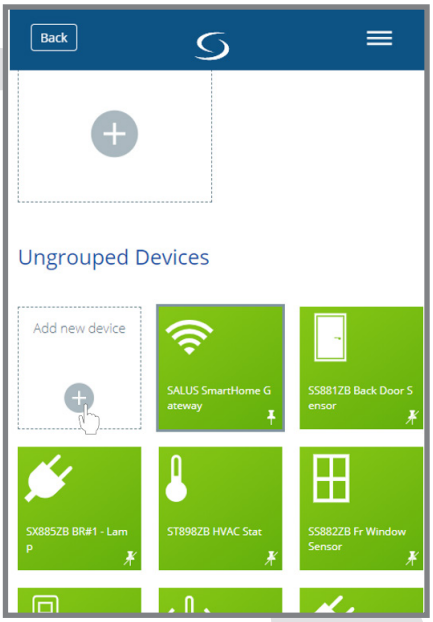
Module 2 – Wireless Accessories
SC904ZB Inline Shutoff Valve

Pairing Instructions

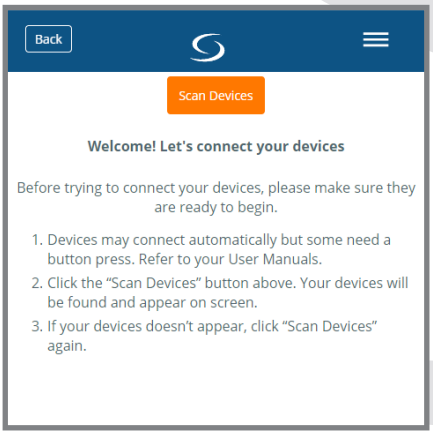
Locate the SC904ZB Inline Shutoff Valve in or near the location that it will be installed to account for radio interference



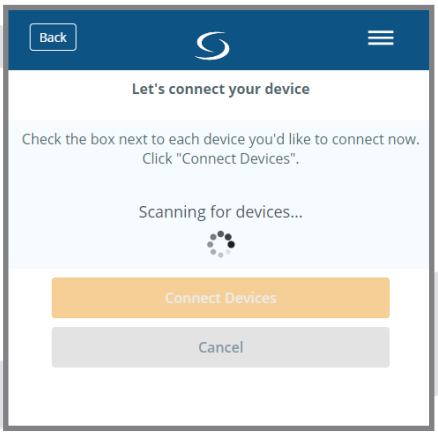




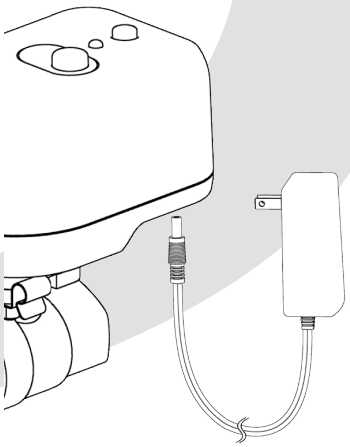
Step 1. Open the SALUS Smart Home application, select the drop-down menu from the upper right of the screen and select: ***All Devices → Add New Device***



Step 2. Press "Scan Devices."



After pressing "Scan for Equipment", the SALUS Smart Home application scans for devices.



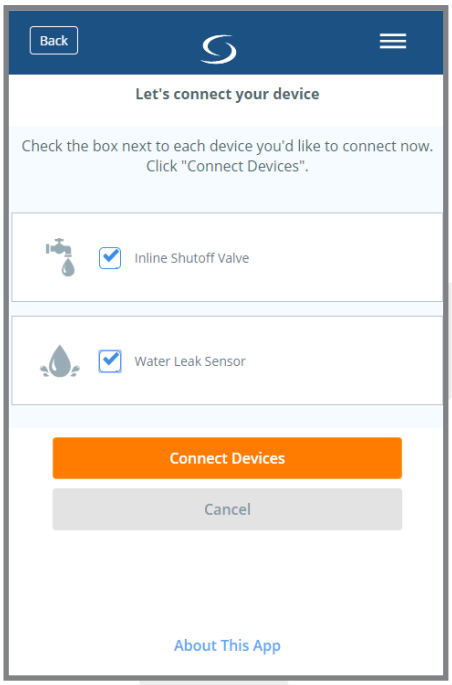
Step 3. Plug the power adapter into the device to power it.

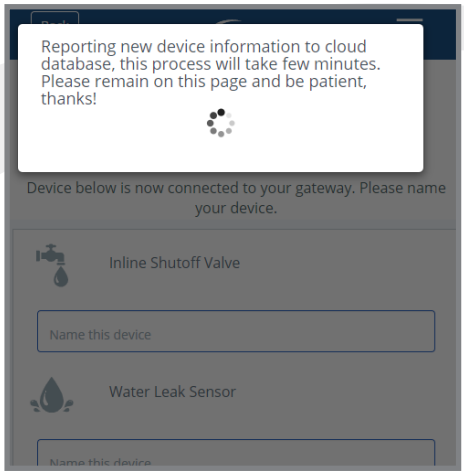
When the LED indicator begins flashing yellow in a 3 flash then pause cycle, the Inline Shutoff Valve is searching for a network to join.

Since the SC904ZB Inline Shutoff Valve will likely be associated with a water leak sensor, it may be convenient to pair both components at once. The following shows the Valve pairing with an SS901ZB Water Leak Sensor.

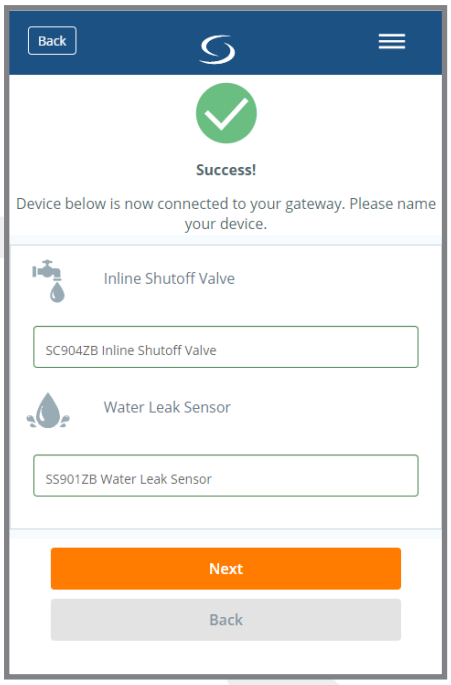
Follow specific instructions to prepare additional devices for pairing.

Module 2 – Wireless Accessories
SC904ZB Inline Shutoff Valve

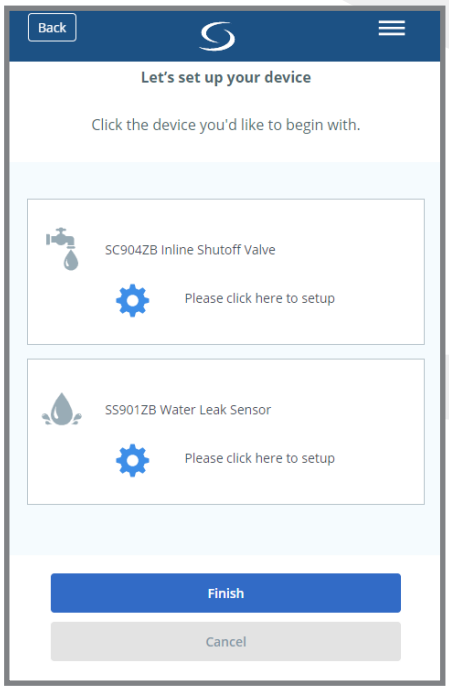




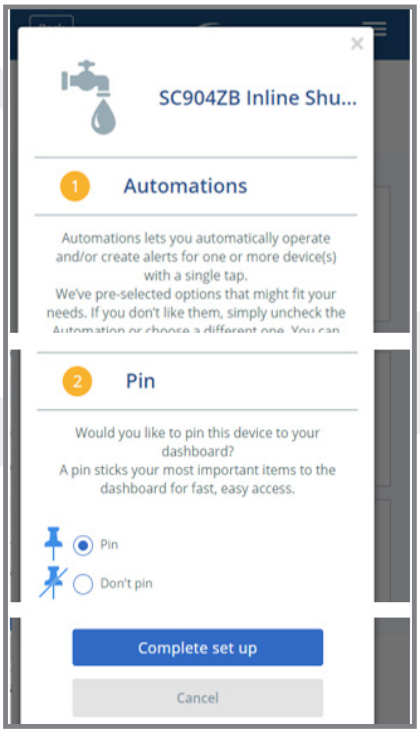
Step 4. Select the check boxes next to Inline Shutoff Valve and other associated devices. Press "Connect Devices". An information box may appear indicating that the device is being added. Be patient and wait for the next screen display.



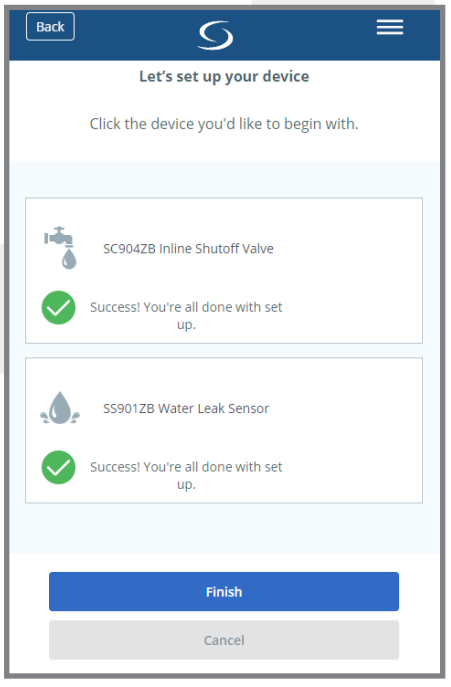
Step 5. Enter a unique descriptive name to identify each device. Press "Next."



Step 6. Press "Please click here to setup."



Step 7. Choose from setup options specific to each device. Press "Complete set up."

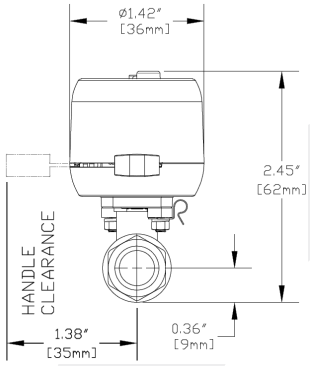


Step 8. Press "Finish" to complete pairing.

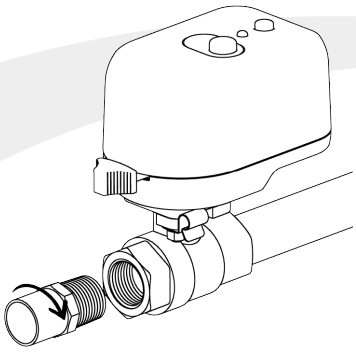
Module 2 – Wireless Accessories
SC904ZB Inline Shutoff Valve

Installation Instructions

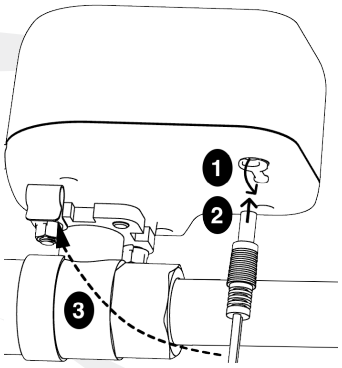
This device should be installed by a qualified plumber. Installations and repairs are to be performed in strict accordance with the requirements of state and local regulating agencies and codes dealing with plumbing installations.



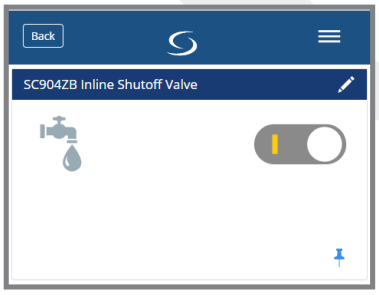
Step 1. Identify the location for the Inline Shutoff Valve to control the desired water supply. Make sure that the valve is accessible and there is adequate clearance for operation of the Manual Override Lever.



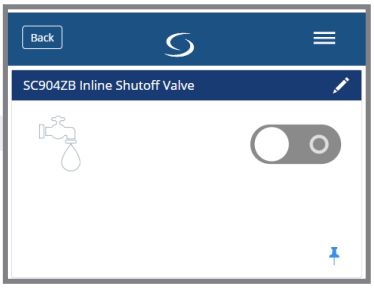
Step 2. Install the valve using appropriate ¾" NPT fittings, adapters and thread sealant. Check for leaks before proceeding to power the valve.



Step 3. Connect the power adaptor to the jack provided under the waterproof cap ❶ inserting the cable into the cable clip ❸. This provides strain relief to avoid accidental power disconnection.



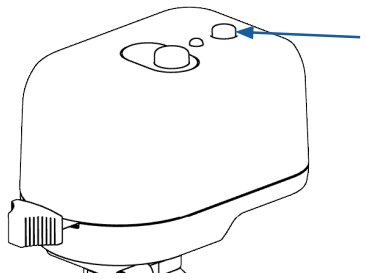
Step 4. Using the SALUS Smart Home application, close the valve to be sure it operates correctly and no interferences exist.



Step 5. Open the valve using the app and watch for proper operation.

In case of a weak wireless signal, a wireless repeater may be required.

Local Opening/Closing the Inline Shutoff Valve

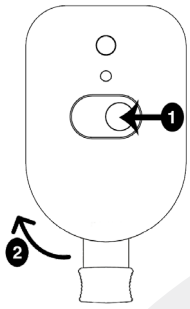


Valve State	Multi-Function Button Action
Fully Closed	Start opening valve
Fully Open	Start closing valve
In Motion	Stop valve at its current position
Partially Open	Moves valve toward fully open/closed (opposite of last direction)

To operate the valve locally, without the SALUS Smart Home app, press and release the Multi-Function Button. The chart above describes the resulting actions based on the current state of the valve.

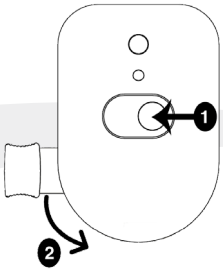
Manual Override

The Inline Shutoff Valve can be operated manually as follows in case of a loss of power:



Step 1. Press and hold the Manual Override Button ❶.

Step 2. Move the Manual Override Lever ❷ to the desired valve position.

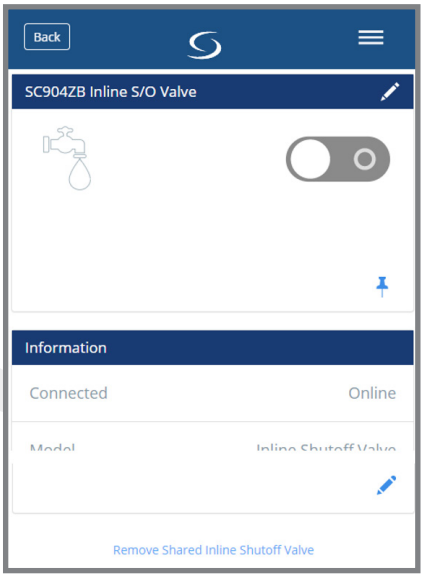


Step 3. Release the Manual Override Button ❶ to re-engage the actuator motor.

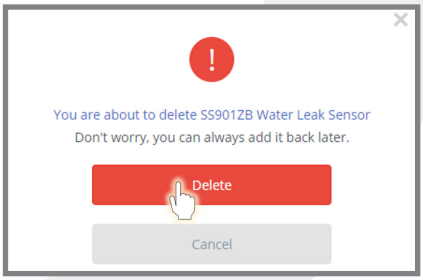
Note that the SC904ZB Inline Shutoff Valve is intended for operation either fully closed or fully open. Throttling operation is not recommended since the ball valve does not open or close proportionally.

Resetting Factory Defaults

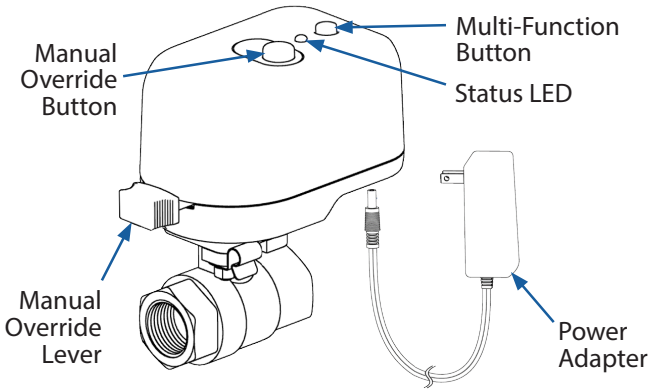
Step 1. Select the SC904ZB icon from the SALUS Smart Home dashboard. After the tile flips, choose the device name in the upper left.



Step 2. Scroll to the bottom of the next screen and select "Remove Shared Water Leak Sensor."



Step 3. Notification that the Sensor will be removed is displayed. Press "Delete" to continue. The SC901ZB Icon will be removed from the application.



Step 4. Unplug the power adapter to power off the device.

Step 5. Hold down the Multi-Function Button while re-connecting the power.

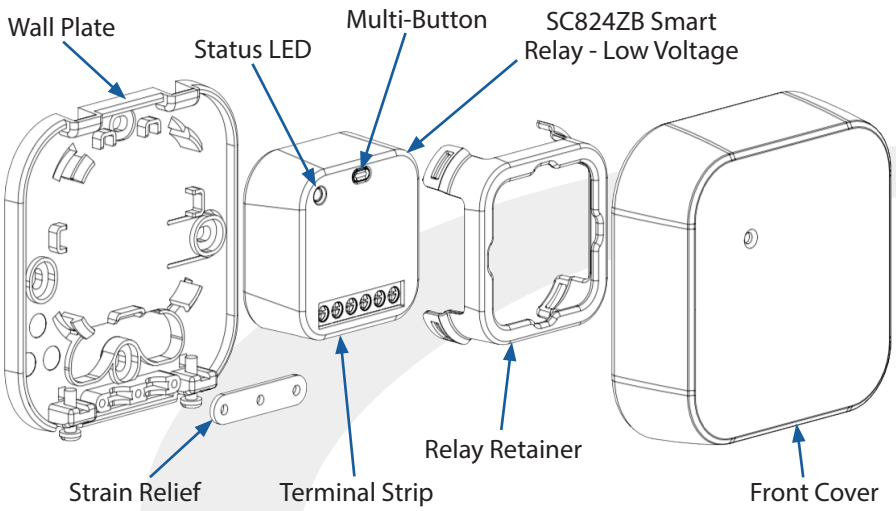
Step 6. Release the Button when the LED Indicator turns solid green.

At this point, the valve has been reset to factory default settings and will respond to pairing requests.

Section 9

Module 2 – Wireless Accessories
SC824ZB Smart Relay – Low Voltage

Overview

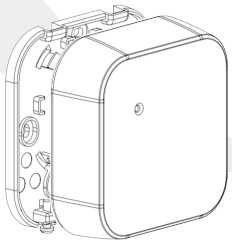


Item	Description
Wall Plate	Allows surface mounting of the SC824ZB Smart Relay
Relay Retainer	Attaches the SC824ZB to the Wall Plate
Multi-Button	For pairing and identification of the Smart Relay
Strain Relief	Prevents pressure on the wiring terminals from the connectors
Terminal Strip	For attaching relay contacts and power
Status LED	Provides feedback about Smart Relay status

Parts Included

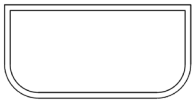
Confirm that all required parts are present in the SS904ZB package:

SC824ZB Smart Relay

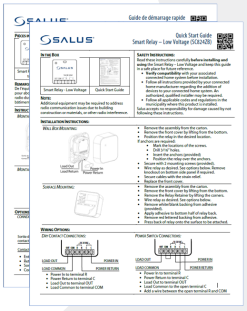


Wall Mount with Cover

Mounting Screws



Double-sided Adhesive



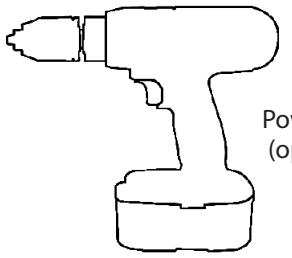
Installation Quick-start Guide English / French

Tools Needed

#1 Phillips Screwdriver

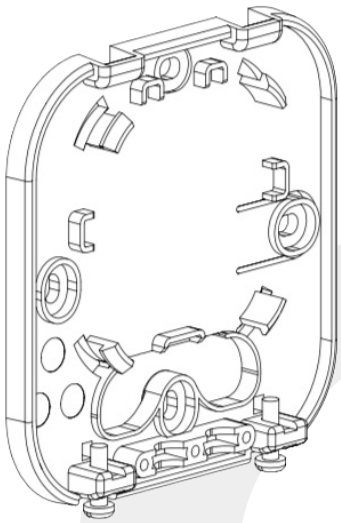
1/8" Flat Screwdriver

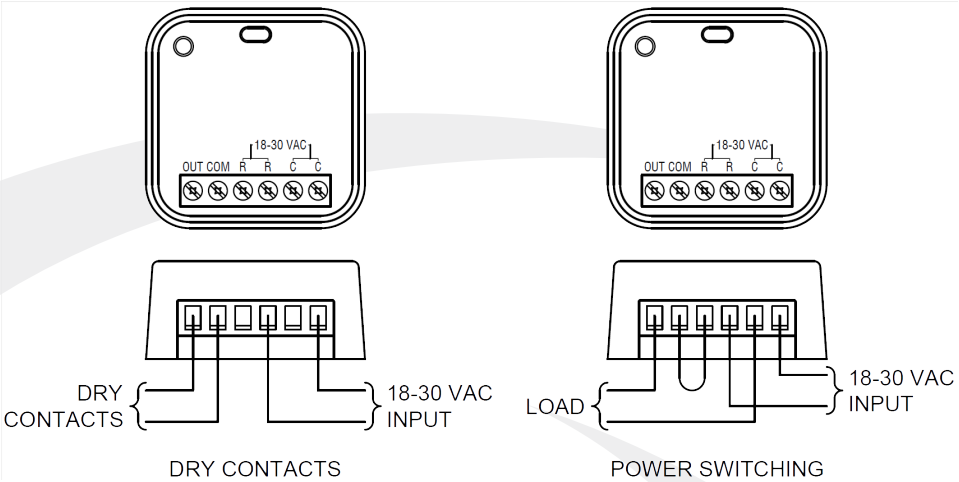
3/16" Drill Bit (optional)



Power Drill (optional)

Installation - Wall Mount with Cover

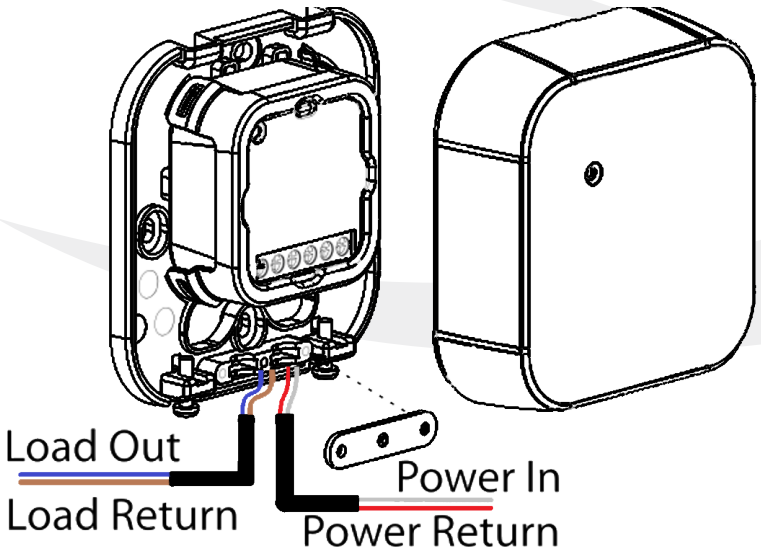


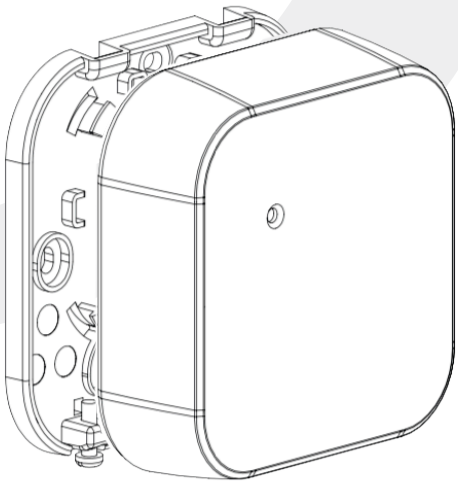


Step 1. Attach the wall plate (if used) for the Smart Relay in a suitable location using the screws included.

Step 2. Wire the SC824 Smart Relay using the appropriate diagram above. Run wires through the strain relief before proceeding to the next step. For a power switching application, a jumper must be applied between R & COM.

- **Locate the Smart Relay in or near the location that it will be installed to account for radio interference**
- **Avoid locations where exposure to splashing water, accumulation of dirt/grease or where temperatures exceed 104°F (40°C)**

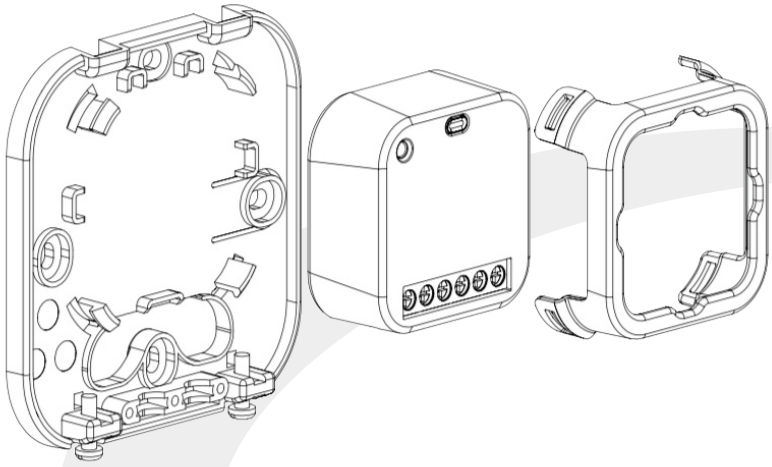




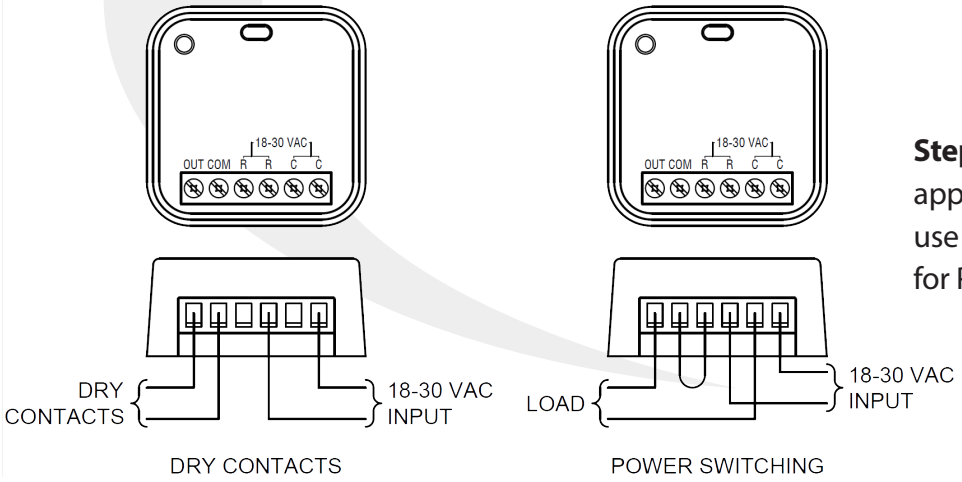
Step 3. Place SC824ZB Smart Relay in the space provided on the wall plate and use the retaining clip to hold it in place. Tighten the strain relief to hold wires securely.

Step 4. Remove the knockout portion of the cover to allow wires to pass through. Assemble the enclosure cover, making sure the wires don't interfere with proper closure.

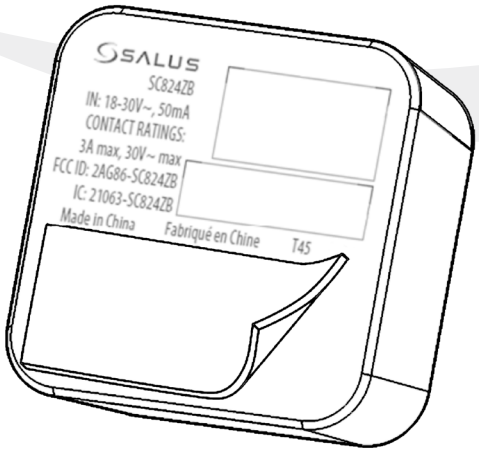
Installation – Adhesive Surface Mounting



Step 1. Remove Smart Relay from Mounting Kit.



Step 2. Wire the relay using the appropriate diagram. Be sure to use a jumper between R & COM for Power Switching.



Step 3. Remove the white backing with no text from the adhesive provided.

Step 4. Apply the adhesive to the back of the Smart Relay at the bottom below the text.

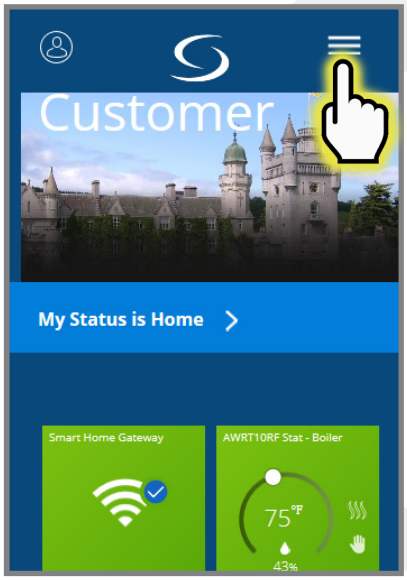
Step 5. Remove the lettered backing from the double-sided adhesive and apply the relay to the desired surface.

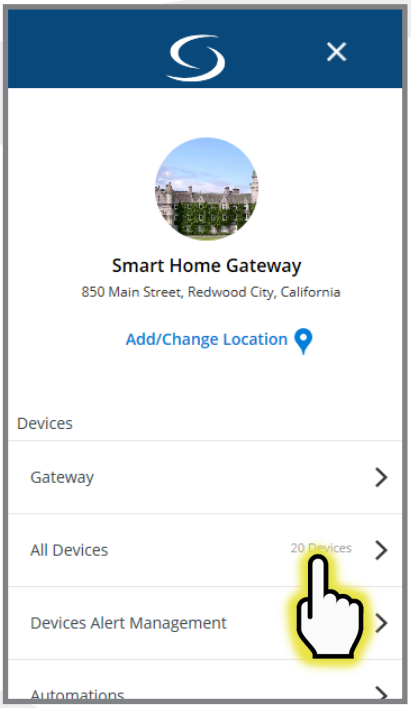
Module 2 – Wireless Accessories
SC824ZB Smart Relay – Low Voltage

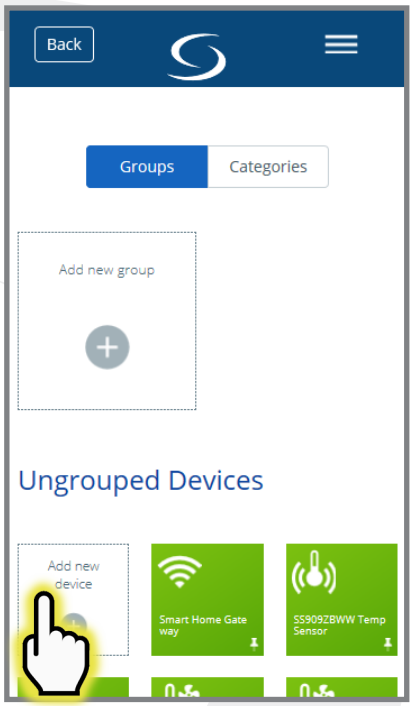
Pairing Instructions

Be sure the Smart Relay is located at or near its intended location to account for potential radio interference.

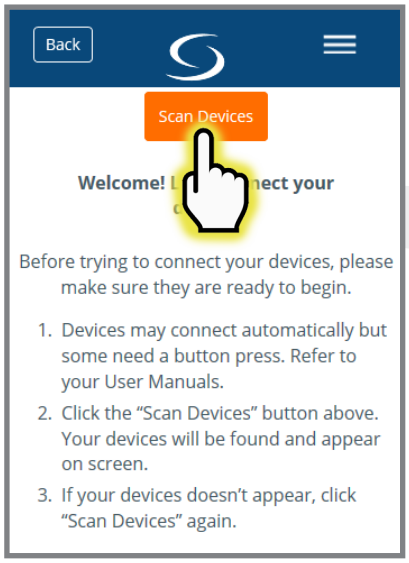
Step 1. Be sure that there is power applied to the SC824ZB Smart Relay and the Status LED is repeating a sequence of 3 red flashes then pause.



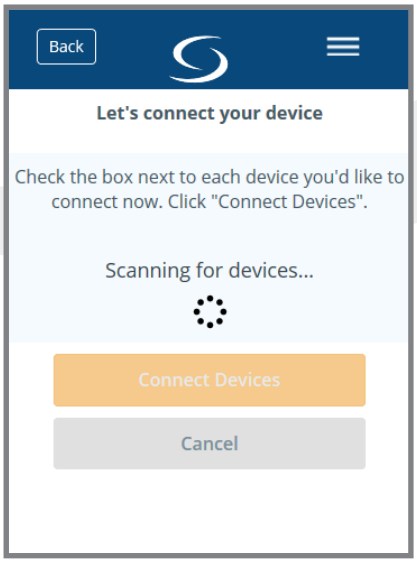




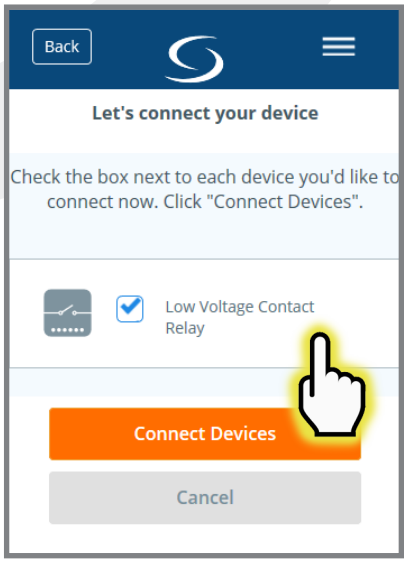
Step 2. Open the SALUS Smart Home application, select the drop-down menu from the upper right of the screen and select: ***All Devices → Add New Device***



Step 3. Press "Scan Devices."

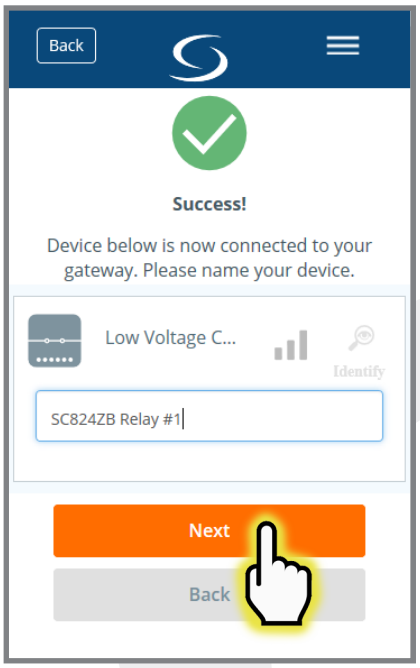


After pressing "Scan for Equipment", the SALUS Smart Home application scans for devices.

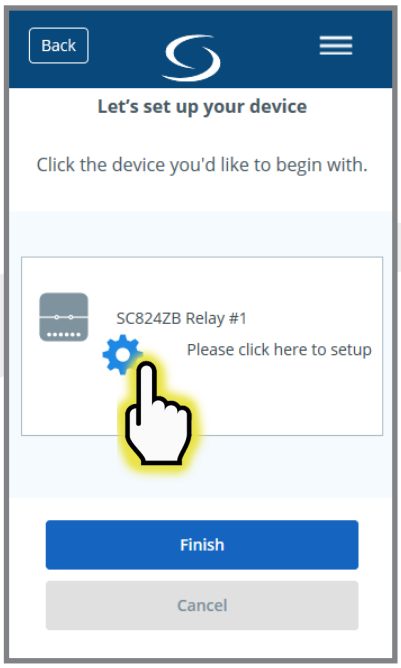


Step 4. Check the box for the Smart Relay and press "Connect Devices".

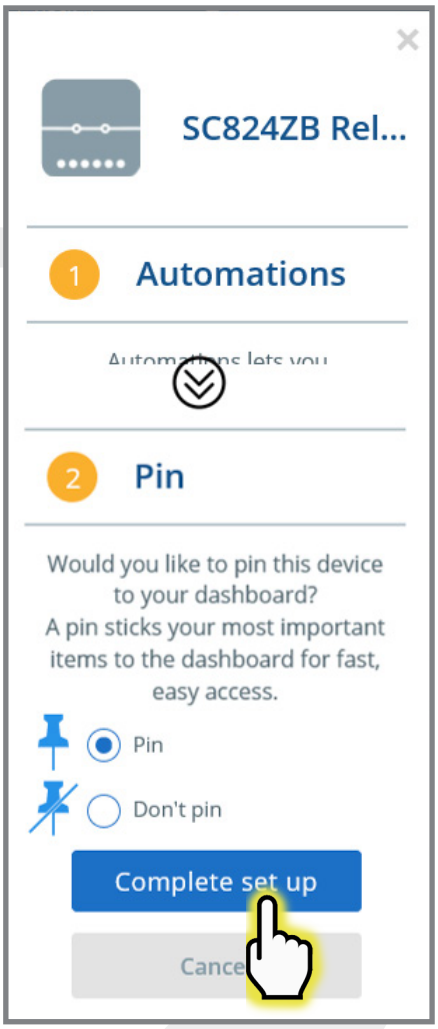
Module 2 – Wireless Accessories
SC824ZB Smart Relay – Low Voltage



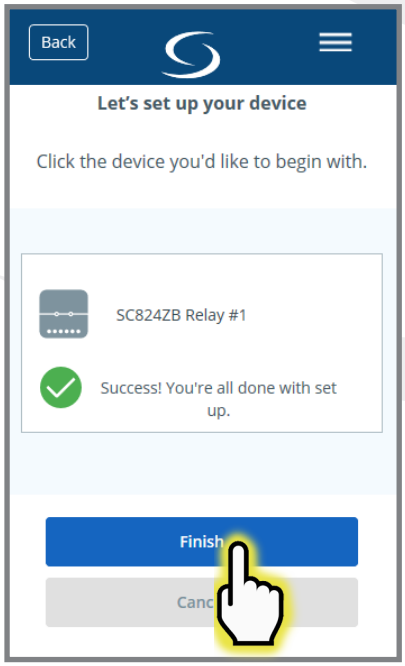
Step 5. Enter a unique descriptive name for each Smart Relay to easily identify each device. Press "Next".



Step 6. Press "Please click here to setup".



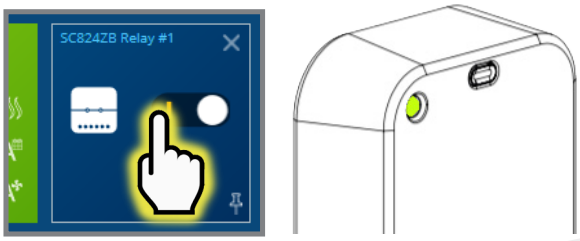
Step 7. Press "Complete set up" to continue



Step 8. Press Finish to complete pairing.

In case of a weak wireless signal, an AE10RF Wireless Repeater may be required.

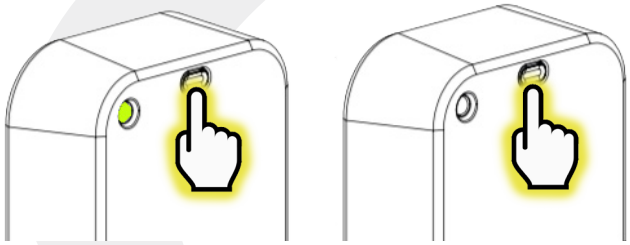
Module 2 – Wireless Accessories
SC824ZB Smart Relay – Low Voltage



Step 9. Using the SALUS Smart Home application, power the relay and make sure the Status LED is green.

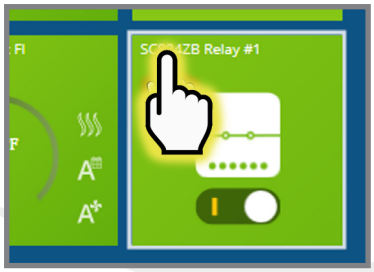
Step 10. Switch off the relay and make sure the Status LED goes off.

Local Relay Operation

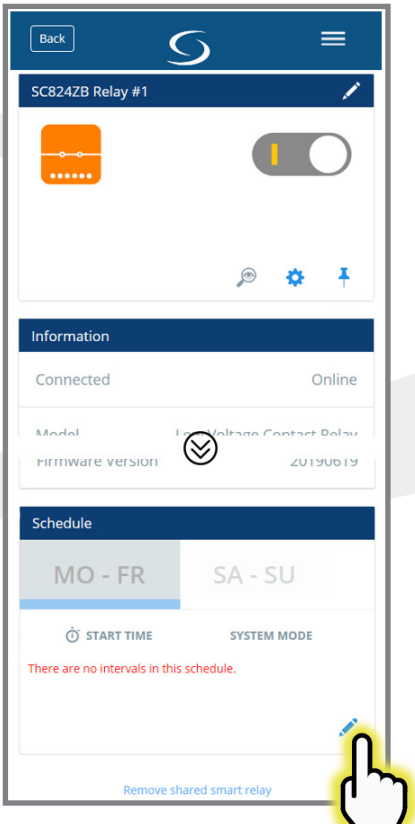


To operate the valve locally, without the SALUS Smart Home app, press and release the Multi-Button.

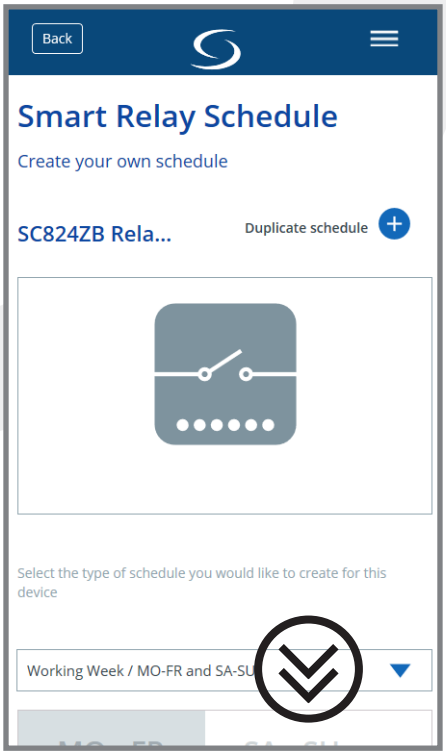
Schedule Setup - SALUS Smart Home Application



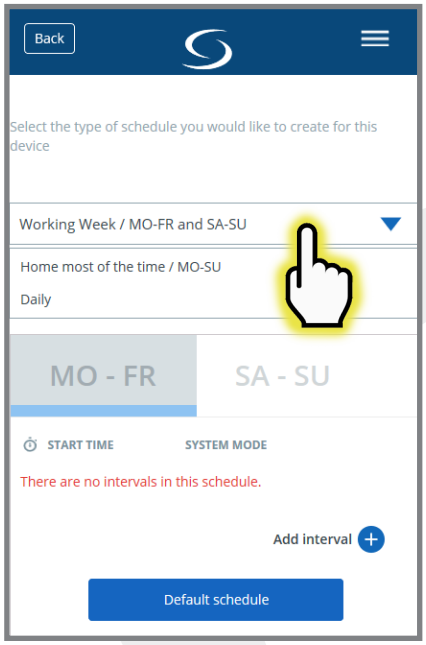
Step 1. Select the SC824ZB icon from the SALUS Smart Home dashboard. After the tile flips, choose the device name in the upper left.



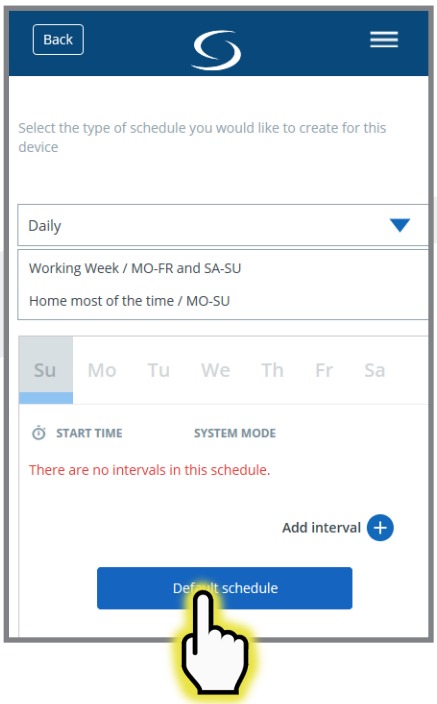
Step 2. Scroll to "Schedule" and choose the icon.



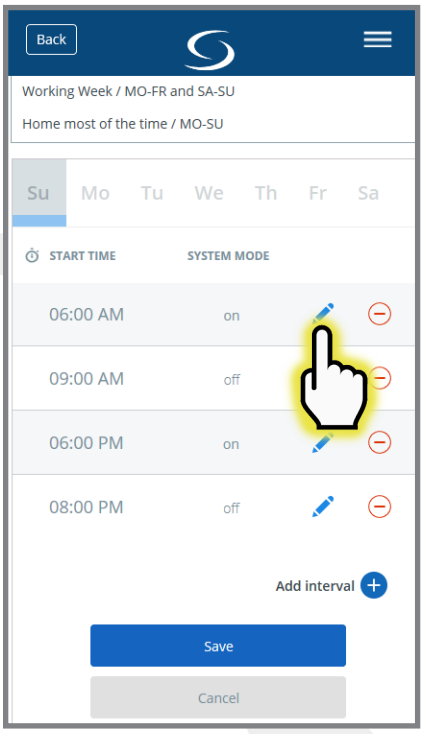
Step 3. Scroll down to view the schedule types.



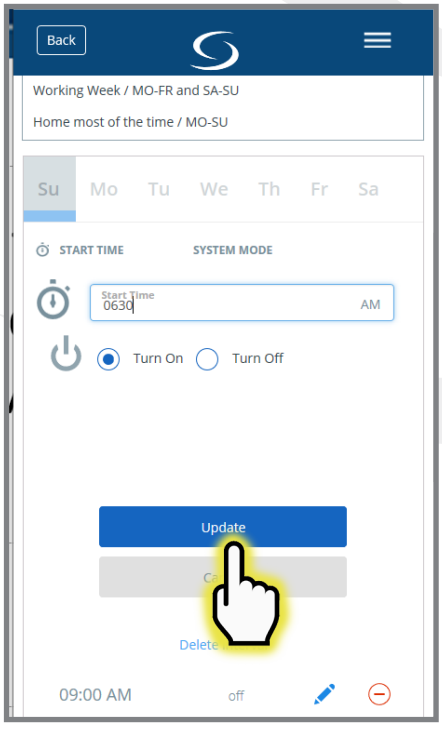
Step 4. Choose the drop-down menu and select the desired schedule type.



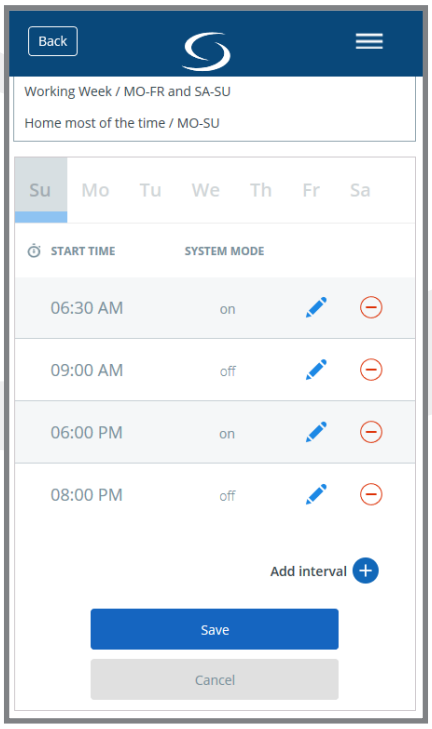
Step 5. Choose "Default schedule" to start with a basic schedule format.



Step 6. Click the icon next to any interval to change values.

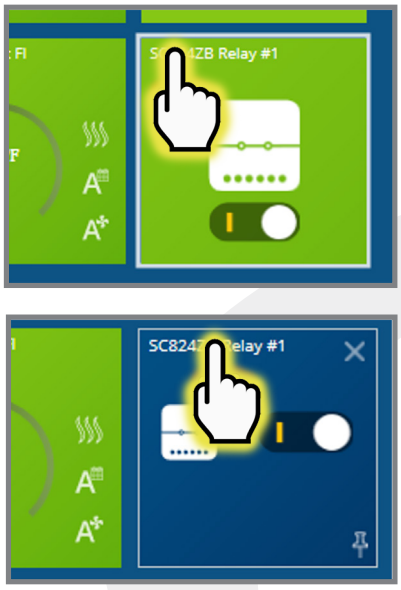


Step 7. Make the desired changes. Then click "Update".

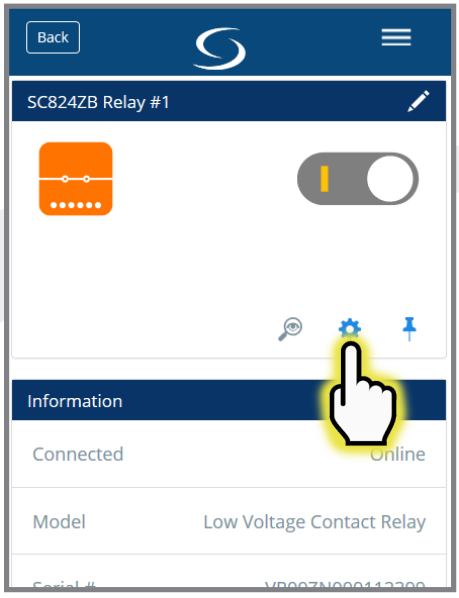


Make further changes as desired. The relay will switch on and off according to the schedule.

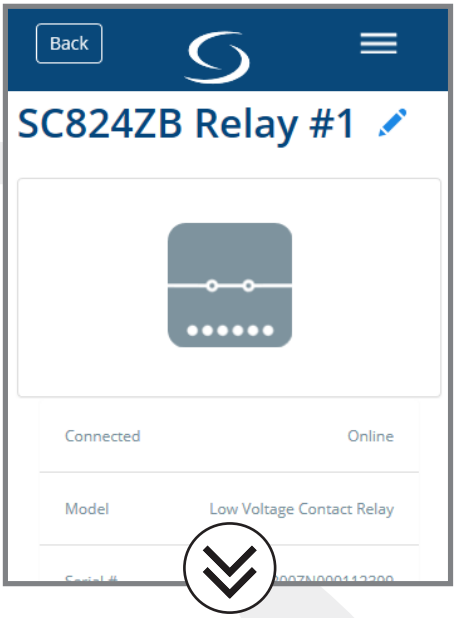
Setup Options



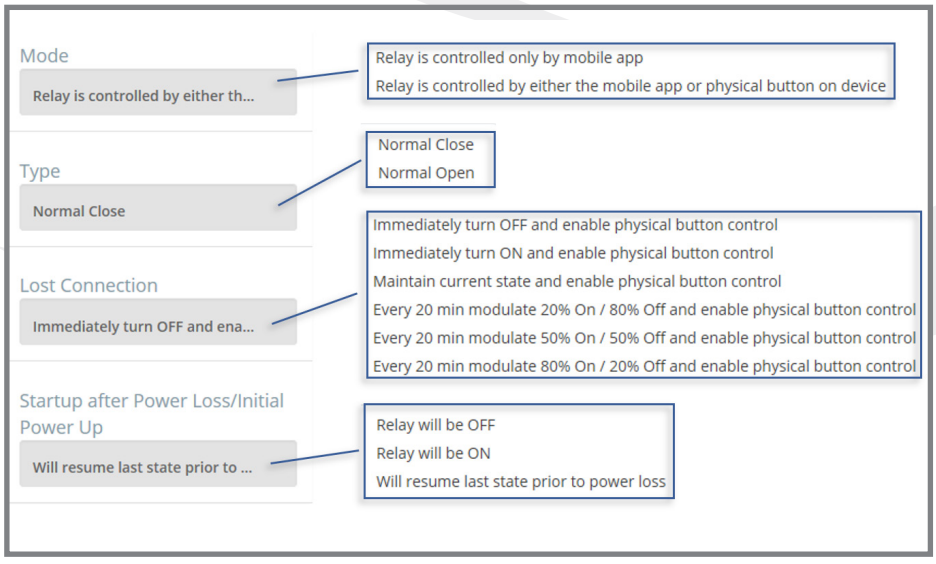
Step 1. Select the SC824ZB icon from the SALUS Smart Home dashboard. After the tile flips, choose the device name in the upper left.



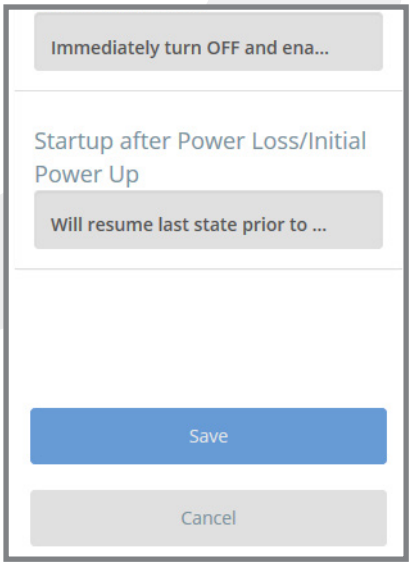
Step 2. Choose the icon from the setup screen.



Step 3. Scroll down to the bottom of the screen.

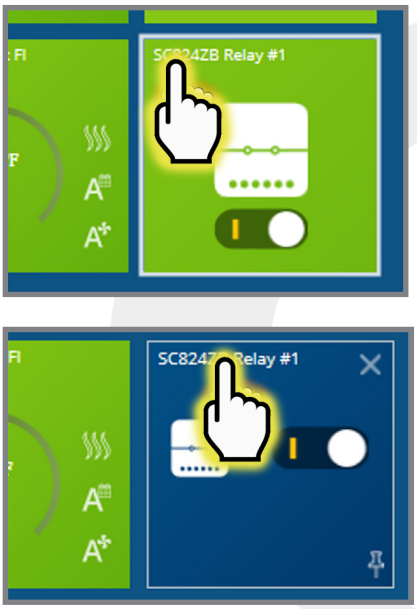


Step 4. Select options from drop-down menus.

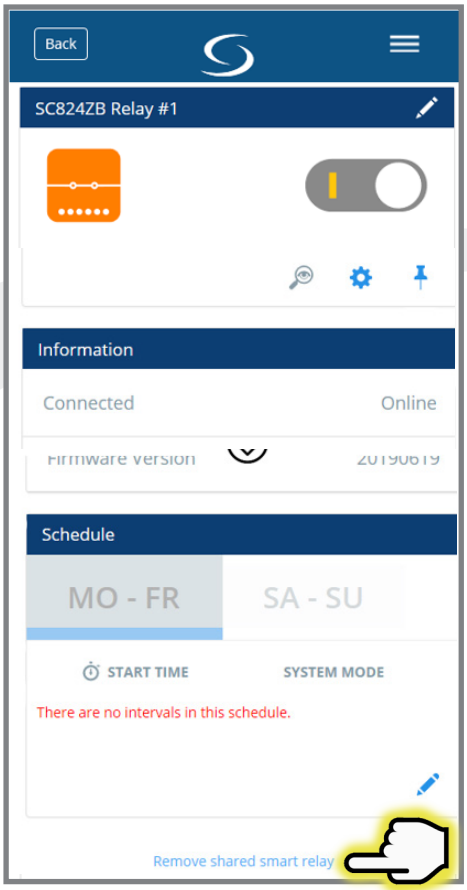


Step 5. Press "Save"

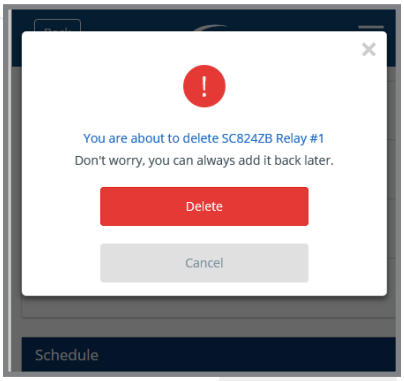
Resetting Factory Defaults



Step 1. Select the SC824ZB icon from the SALUS Smart Home dashboard. After the tile flips, choose the device name in the upper left.



Step 2. Scroll to the bottom of the next screen and select "Remove shared smart relay"



Step 3. Notification that the Sensor will be removed is displayed. Press "Delete" to continue. The SC824ZB Icon will be removed from the application.

Step 4. Hold down the Multi-Button for 10 seconds.

Step 5. When the Status LED turns red, release the Multi-Button.

Step 6. The LED will repeat a sequence of 3 red flashes followed by a pause while it is searching for a network.

At this point, the valve has been reset to factory default settings and will respond to pairing requests.