

CONNECTED WIRELESS SYSTEM GUIDE

Module 4 - Wireless Accessories



MODULE 4

MrPEX® Connected Wireless System Guide CONTENTS: WIRELESS ACCESSORIES

SEC	IIUN PA	GE
1	Accessories Overview Using this Manual. System Overview	
2	Embedded Door Sensor SS881ZB (5310881) Included Parts / Installation Tools. Pairing Instructions. Installation Instructions. Battery Replacement Resetting Factory Defaults.	2-2 2-4 2-6
3	Window/Door Sensor SS881ZB (5310882) Included Parts / Installation Tools. Pairing Instructions. Installation Instructions. Battery Replacement Resetting Factory Defaults.	. 3-1 . 3-2 . 3-4 . 3-5
4	miniSmartPlug SS881ZB (5310885) Included Parts / Installation Tools. Pairing Instructions. Using the Switch. Schedule Setup with MrPEX* Smart Home Application Resetting Factory Defaults. Rejoining a Current Network LED Indication Troubleshooting	.4-1 .4-2 .4-5 .4-5 .4-5
5	Slim Window/Door Sensor SS881ZB (5310881) Included Parts / Installation Tools. Pairing Instructions. Installation Instructions. Battery Replacement Resetting Factory Defaults.	5-2 5-4 5-5
6	Temperature Sensor SS881ZB (5310881) Included Parts / Installation Tools. Pairing Instructions. Installation Instructions. Battery Replacement Resetting Factory Defaults.	6-2 6-4 6-5

MODULE 4

MrPEX® Connected Wireless System Guide CONTENTS: WIRELESS ACCESSORIES

TION	PAGE
Water Leak Sensor SS881ZB (5310901)	71
nesetting ractory belautes	/ /
Inline Shutoff Valve SS881ZB (5310904)	
	8-1
Smart Relay - Low Voltage SS881ZB (5330006)	
	9-1
_	

Module 4 – Wireless Accessories INTRODUCTION

USING THIS MANUAL

For the latest Instructions go to: <u>WWW.MRPEXSYSTEMS.COM</u>

To cover all MrPEX® 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 Gateway and the MrPEX® 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

Module 4 – Wireless Accessories INTRODUCTION

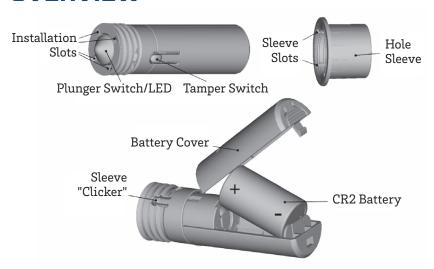
ACCESSORIES OVERVIEW

The MrPEX® 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 MrPEX®. Volume 2 of the Wireless System Guide covers the installation and operation of these devices. Instructions for installing the Gateway and connecting it to the MrPEX® Smart Home application are provided in Volume 1.



Module 1 of the MrPEX® Wireless Systems Guide provides information about installation/setup of the 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 Embedded Door Sensor with the Gateway prior to installation.

PARTS INCLUDED / INSTALLATION TOOLS

Confirm that all required parts are present in the package:



Sensor w/ Battery (CR2, 3Vdc)



Sensor Sleeve



Installation Tools (2)



Self-adhesive Drill Guides (2)



Installation Manual

Confirm that required tools are available:





Power Drill



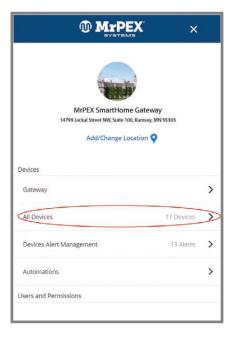
Rubber Mallet

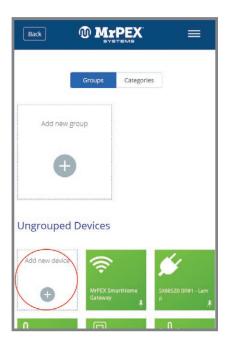
PAIRING INSTRUCTIONS



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



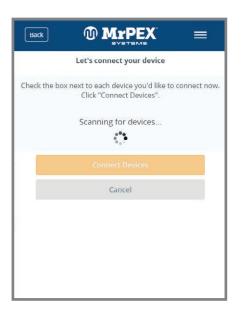




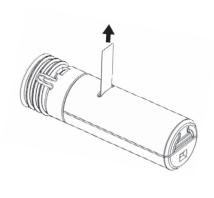
Step 1. Open the MrPEX® Smart Home application, select the drop-down menu from the upper right of the screen and select: All Devices → Add New Device



Step 2. Press Scan Devices.



After pressing "Scan for Equipment", Step 3. Remove the battery tab the MrPEX® Smart Home application scans for devices.



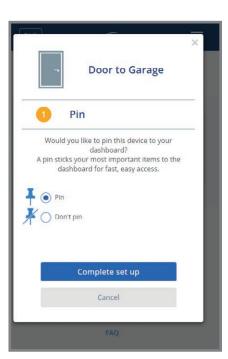
to start the pairing process.

SECTION 2

Module 4 – Wireless Accessories EMBEDDED DOOR SENSOR



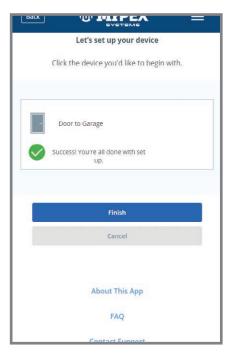
Step 4. Select the check box next to Embedded Door Sensor and press "Connect equipment"



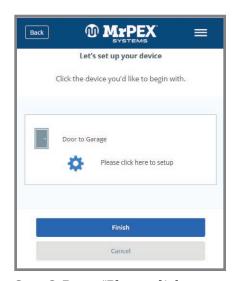
Step 7. Choose from setup options specific to this device. Press "Complete set up."



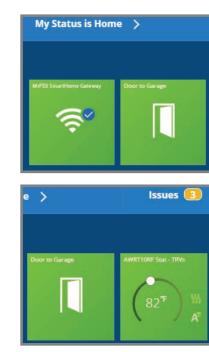
Step 5. Enter a unique descriptive name to identify the device. Press "Next"



Step 8. Press "Finish" to complete pairing.



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

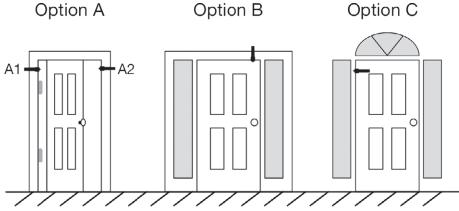


A new icon will appear on your home screen. Since the sensor is not installed it shows the door open.

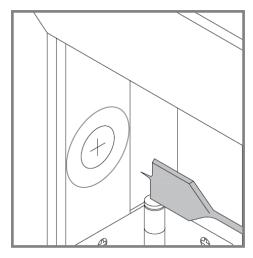


After several minutes without the plunger switch depressed, an issue alert will show on the home screen.

INSTALLATION INSTRUCTIONS

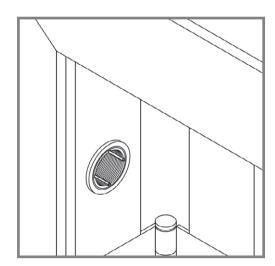


MrPEX® recommends locating the embedded door sensor in the door jamb on the hinge side of the door so that closing the door activates the plunger (A1 Above). If this location is not convenient due to obstacles such as glass panels, the sensor can be mounted on the opposite door jamb (A2), in the lintel 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.

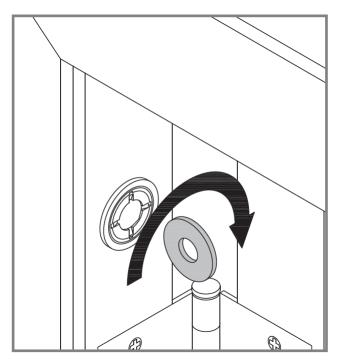


Step 3. Insert the sensor sleeve in the hole until the flange seats on the surface.



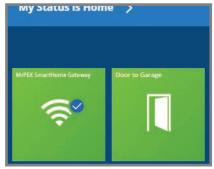


If required, remove the flange from the sleeve before inserting.



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 MrPEX® Smart Home application showing the correct door position.



If closing the door doesn't activate the Sensor and show a closed door on the MrPEX[®] Smart Home application, turn the Sensor counter-clockwise in 1/4 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.

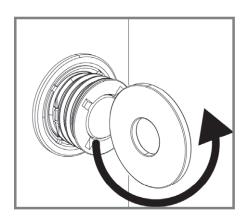
BATTERY REPLACEMENT



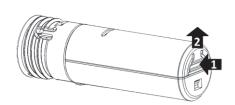
Use only Duracell DL-CR2, Energizer EL-CR2, GP Batteries GPCR1, or Ray-O-Vac RL-CR2 batteries to meet UL certification requirements.



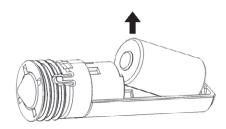
Note the installation depth of the Sensor in the Sensor Sleeve before removing. If convenient, mark the sensor depth before proceeding to STEP 1.



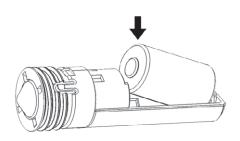
Step 1. Remove the Sensor by turning counter-clockwise with the Installation Tool, a coin or a washer.



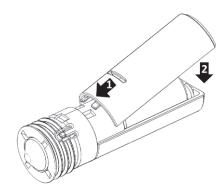
Step 2. Open the battery compartment by pressing on the back and lifting.



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 reinstall 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

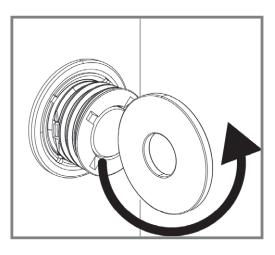




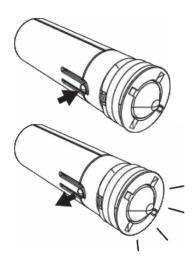
Step 1. Select the icon from the MrPEX® Smart Home dashboard. After the tile flips, choose the device name in the upper left.



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



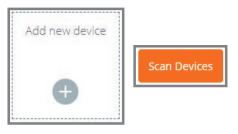
Step 3. Remove the Sensor from the Sensor Sleeve and remove the battery as described under Battery Replacement.



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.

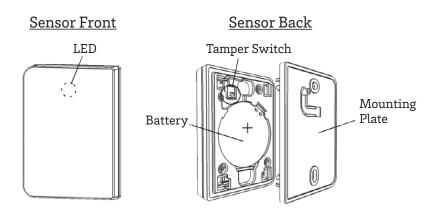




Step 6. Follow the steps for pairing shown in Pairing Instructions.

Module 4 – Wireless Accessories **DOOR/WINDOW SENSOR**

OVERVIEW



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 notool battery change
Battery	CR3032 lithium battery (3 volts dc)



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

INCLUDED PARTS / INSTALLATION TOOLS

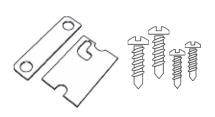
Confirm that all required parts are present in the package:



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



Sensor Sleeve



Mounting Kit

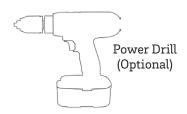


Installation Manual

Confirm that required tools are available:







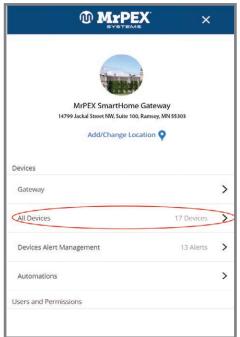
Module 4 – Wireless Accessories **DOOR/WINDOW SENSOR**

PAIRING INSTRUCTIONS



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







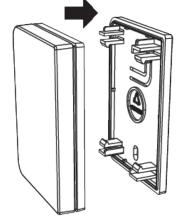
Step 1. Open the MrPEX® Smart Home application, select the drop-down menu from the upper right of the screen and select: *All Devices* → *Add New Device*



Step 2. Press Scan Devices.



After pressing "Scan for Equipment", the MrPEX® 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.

SECTION 3

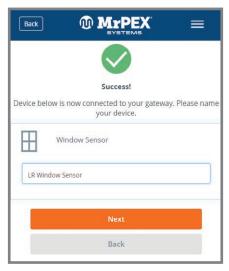
Module 4 – Wireless Accessories **DOOR/WINDOW SENSOR**



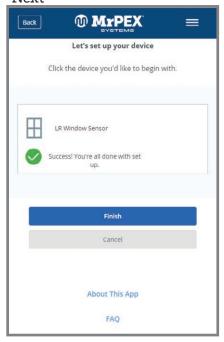
Step 4. Select the check box next to Window Sensor and press "Connect equipment



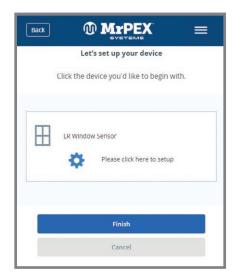
Step 7. Choose from setup options specific to this device. Press "Complete set up."



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



Step 8. Press "Finish" to complete setup.



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



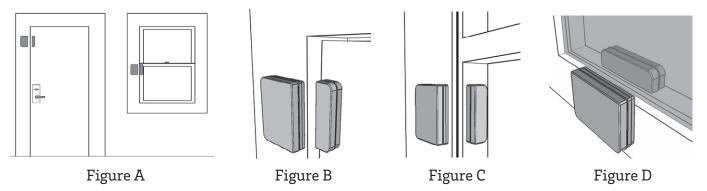
If the door or window opens, the symbol indicates this by showing an open window. Also, the Issue indicator will appear.

Module 4 – Wireless Accessories **DOOR/WINDOW SENSOR**

INSTALLATION INSTRUCTIONS



MrPEX' 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. Locate the Sensor and Magnet. MAKE SURE that the square corners of the Sensor and the Magnet face each other. If the MrPEX® 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).

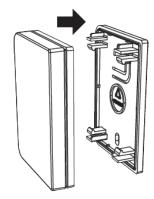


The key criteria for locating the magnet in relation to the sensor are:

- 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 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.

SECTION 3

Module 4 – Wireless Accessories **DOOR/WINDOW SENSOR**

Step 4. Open the Magnet Case and position the bottom housing to the surface using the provided screws or doublesided 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.

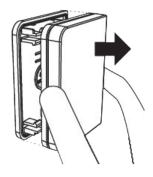


Step 6. Open the window and make sure the window icon is open and, after 60 seconds, the Issue indicator will register the issue.

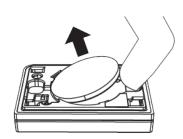
BATTERY REPLACEMENT

If the battery is low, the sensor icon on the MrPEX® 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.

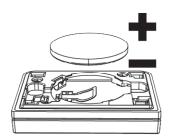




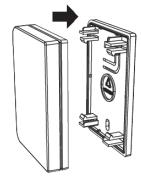
Step 1. Remove the Sensor from the Mounting Plate, exposing the battery attached to the Sensor.



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.



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

Module 4 – Wireless Accessories **DOOR/WINDOW SENSOR**

RESETTING FACTORY DEFAULTS

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



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



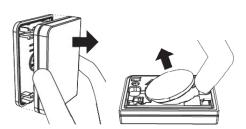
Step 1b. If the Sensor is not on the dashboard, choose Menu → All Devices and find the Sensor. Click on the icon.



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



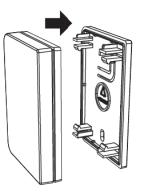
Step 3. Notification that the Sensor will be removed is displayed. Press "Delete" to continue. The Sensor Icon will be removed from the application.



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

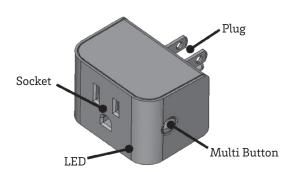


Step 5. While holding down the Tamper Switch, re-insert the battery and, when the LED illuminaes, release the switch. The Sensor is no ready to join a network. Follow the pairing sequence to join the network.



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

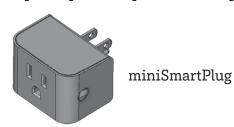
OVERVIEW



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 package:





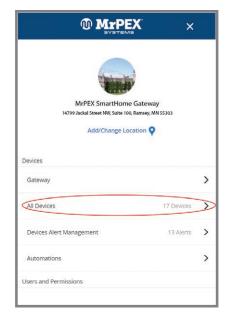
Installation/ User Guide

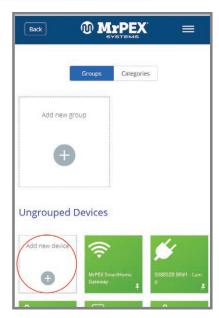
PAIRING INSTRUCTIONS



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







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

SECTION 4

Module 4 – Wireless Accessories **MINISMARTPLUG**



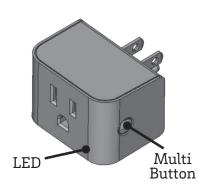
Step 2. Press Scan Devices.



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



Step 3. Plug the 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.



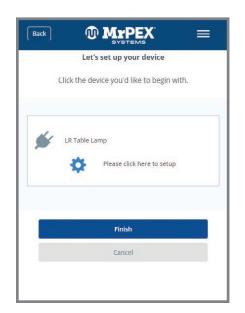
Step 5. Select the check box next to Smart Plug and choose "Connect Devices."



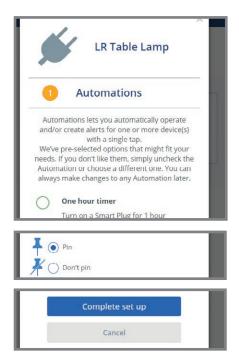
Step 3. After Choose a unique, descriptive name for the Smart Plug and press "Next".

SECTION 4

Module 4 – Wireless Accessories **MINISMARTPLUG**



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



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



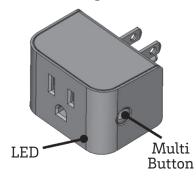
The MrPEX® Smart Home application will return to the system dashboard.

USING THE SWITCH



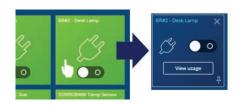
After being plugged in, there is a slight delay before the miniSmartPlug switch starts measuring energy and responding to the button or remote commands.

Manual Operation

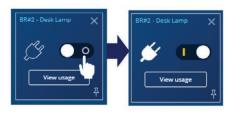


Use the Multi Button to toggle the mini Smart Plug OFF or ON. The LED will illuminate when the switch is ON.

MrPEX® Smart Home Application Operation



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



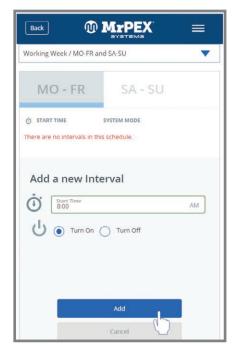
Press the symbol to toggle On/Off.



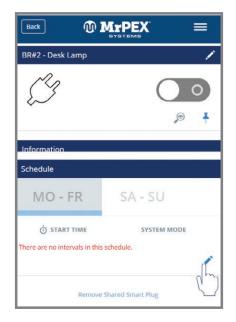
SCHEDULE SETUP WITH MRPEX® SMART HOME APPLICATION



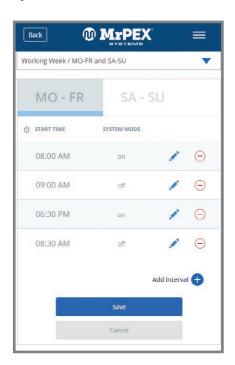
Step 1. To configure the switch schedule, choose the desired switch and click the name in the upper left.



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



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



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



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



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

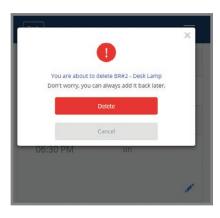
RESETTING FACTORY DEFAULTS



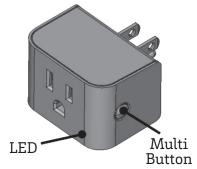
Step 1. First, delete the device from the MrPEX® Smart Home application. Select the device to delete, choose the device title for the configure screen.



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 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 Smart Plug to rejoin the network. To do this, press the multi button 5 times quickly (less than $\frac{1}{2}$ 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	

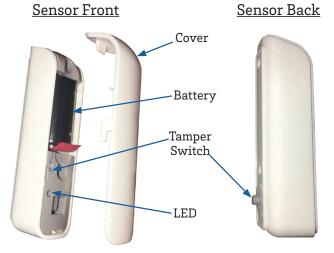
TROUBLESHOOTING

TABLE 4.2 - TROUBLESHOOTING

LED ACTIVITY	DESCRIPTION	CORRECTIVE ACTIONS
Smart Plug will not pair with network	Radio interference at the desired location	Relocated the GatewaySelect a different switch locationAdd AE10RF Repeater to the system
	Is the Gateway powered with a blue LED illuminated?	Connect AC Power to the Gateway Connect the Gateway to the internet
Loss of connection after pairing	Radio interference at the location.	Rejoin networkRelocate GatewaySelect different switch locationAdd AE10RF Repeater
	Appliance switch is off	Turn on appliance switch
Appliance doesn't turn on when miniSmartPlug LED is on	Appliance cannot be con- trolled via the AC supply	1) Manually turn on the 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.
	Appliance isn't working properly	Check appliance operation by plugging directly into an outlet and cycling the on/off switch.
miniSmartPlug LED doesn't turn on when the appliance switch is cycled off/on.	Appliance can't be switch back on from the ON state	1) Manually turn on the 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 miniSmartPlug cannot be used.

Module 4 – Wireless Accessories **SLIM WINDOW/DOOR SENSOR**

OVERVIEW



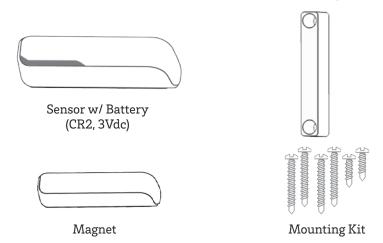
ITEM	DESCRIPTION
Sensor Cover	Allows access to battery and tamper switch while Sensor is mounted
LED	"Hidden" LED indicates network status during pairing
Tamper Switch	Detects if cover is removed from sensor or if sensor is removed from mounted location
Battery	CR2 lithium battery (3 volts dc)

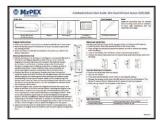


Pair the Embedded Door Sensor with the Gateway prior to installation.

PARTS INCLUDED / INSTALLATION TOOLS

Confirm that all required parts are present in the package:



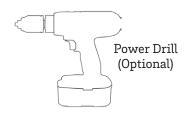


Installation Quick-start Guide

Confirm that required tools are available:







Module 4 – Wireless Accessories **SLIM WINDOW/DOOR SENSOR**

PAIRING INSTRUCTIONS



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







Step 1. Open the MrPEX® 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 MrPEX® Smart Home application scans for devices.



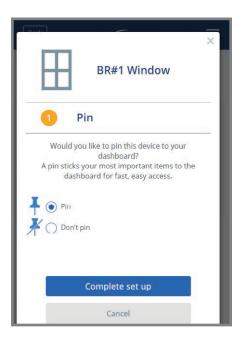
Step 3. Remove the battery tab to start the pairing process.

SECTION 5

Module 4 – Wireless Accessories **SLIM WINDOW/DOOR SENSOR**



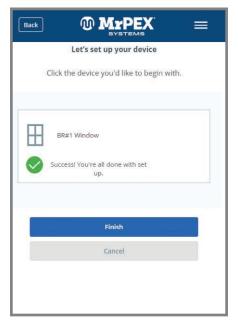
Step 4. Select the check box next to Zigbee Slim Door/ Window Sensor and press "Connect Devices"



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



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



Step 8. Press "Finish" to complete pairing.



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



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



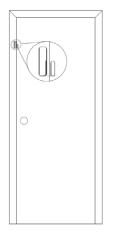
After several minutes without the plunger switch depressed, an issue alert will show on the home screen.

Module 4 - Wireless Accessories **SLIM WINDOW/DOOR SENSOR**

INSTALLATION INSTRUCTIONS

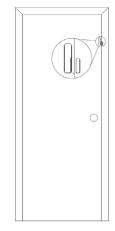


MrPEX® recommends locating the Window/Door Sensor on the window or door casing on the handle side. The Magnet should be mounted on the window or door as close as possible to the Sensor. To be UL compliant, the Sensor and Magnet must be mounted using the screws.

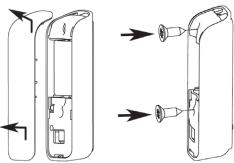


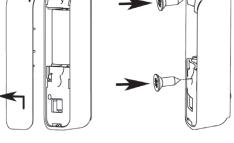


Step 1. Identify location of the Sensor and Magnet. MAKE SURE that the bottom, flat end, of the sensor and magnet are aligned and that the magnet is on the right side (at grey indicator).



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 Sensor cover and use the screws provided to the double-sided adhesive mounting tape provided, by first peeling the brown backing from the adhesive and attaching it to the sensor. attach the sensor at the intended location. MAKE SURE the tamper switch on the back of the device can move freely. Remove the white/red paper backing and press the sensor

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.

into the intended location.





Step 4. Open and close the door or window, observing the icon tile on the MrPEX® 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.

Module 4 – Wireless Accessories **SLIM WINDOW/DOOR SENSOR**

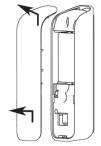
BATTERY REPLACEMENT

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

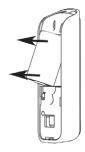




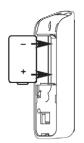
Use only Duracell DL-CR2, Energizer EL-CR2, GP Batteries GPCR1, or Ray-O-Vac RL-CR2 batteries to meet UL certification requirements.



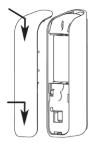
Step 1. Remove the Sensor face plate by sliding it up and off of the Sensor body.



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.



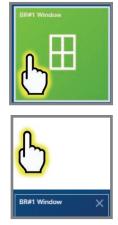
Step 4. Slide the face plate over the Sensor body and down to lock it in place.



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 MrPEX® Smart Home dashboard. After the tile flips, choose the device name in the upper left.

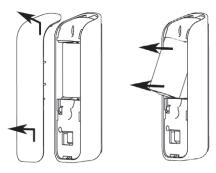


Step 2. Scroll to the bottom of the next screen and select "Remove shared window monitor."

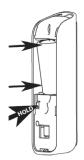


Step 3. Notification that the Sensor will be removed is displayed. Press "Delete" to continue. The Icon will be removed from the application.

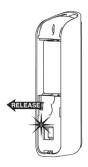
Module 4 – Wireless Accessories **SLIM WINDOW/DOOR SENSOR**



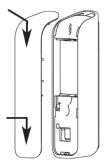
Step 4. Remove the Sensor cover and remove the battery.



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

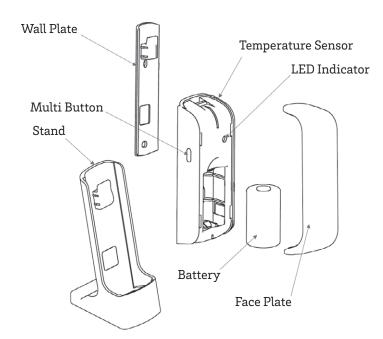


Step 6. When the LED illuminates, release the tamper switch. The Sensor is reset to factory defaults and will respond to pairing requests.



Step 7. Place the face plate on the Sensor.

OVERVIEW



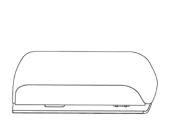
ITEM	DESCRIPTION
Wall Plate	Allows wireless mounting on a wall at a location where the temperature is most critical
Stand	Allows flexible location of the wireless temperature sensor
Face Plate	Allows access to battery while Sensor is mounted
LED Indicator	"Hidden" LED indicates network status during 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 Embedded Door Sensor with the Gateway prior to installation.

PARTS INCLUDED / INSTALLATION TOOLS

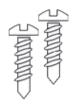
Confirm that all required parts are present in the package:



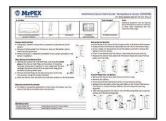
Sensor w/ Wall Plate and Battery (CR2, 3Vdc)



Magnet



Mounting Kit

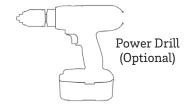


Installation Quick-start Guide

Confirm that required tools are available:







PAIRING INSTRUCTIONS



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







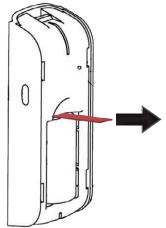
Step 1. Open the MrPEX® Smart Home application, select the drop-down menu from the upper right of the screen and select: *All Devices* → *Add New Device*



Step 2. Press "Scan Devices."



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



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

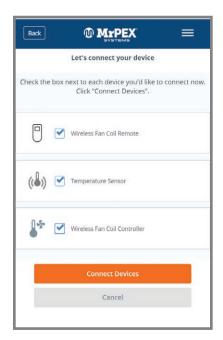


Since the Temperature Sensor will be associated with a thermostat, it may be convenient to pair both components at once. The following shows the Sensor pairing with an Wireless Fan Coil Controller & Wireless Fan Coil Remote.

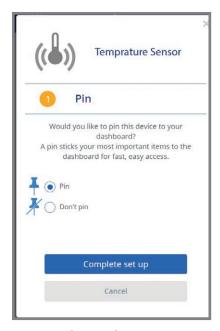
Follow specific instructions to prepare additional devices for pairing.

SECTION 6

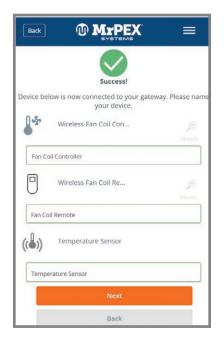
Module 4 – Wireless Accessories **TEMPERATURE SENSOR**



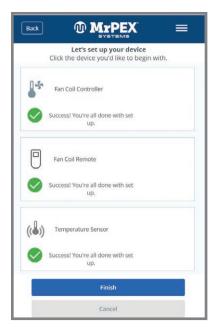
Step 4. Select the check boxes next to Temperature Sensor and other associated devices. Press "Connect Devices"



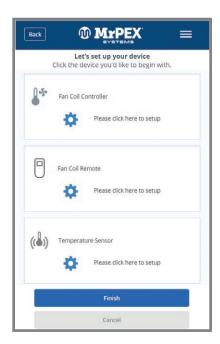
Step 7. Choose from setup options specific to each device. Press "Complete set up."



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



Step 8. Press "Finish" to complete pairing.



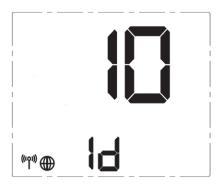
Step 6. Press "Please click here to setup."



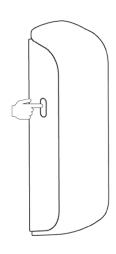
A new icon will appear on your home screen. Since the sensor is not installed it shows the door open.



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 Sensor. If the Temperature Sensor does not connect with the thermostat, it may be necessary to do a find and bind operation as follows.



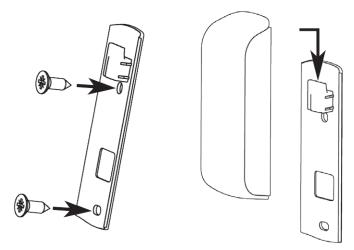
Step 1. Follow the thermostat instructions to make sure it is in the Identify Mode.



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

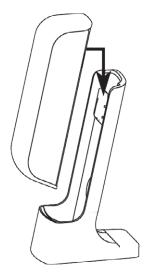
When the LED goes out, the Sensor will be associated with the Thermostat and the temperature should read, correctly.

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.

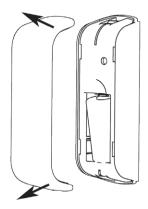




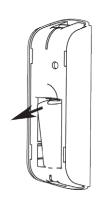
BATTERY REPLACEMENT

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

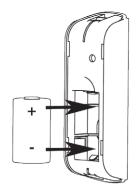




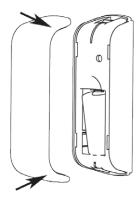
Step 1. Remove the Sensor face plate by sliding it up and off of the Sensor body.



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

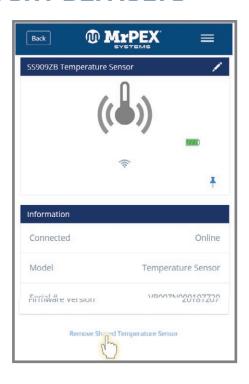
Lithium batteries are considered hazardous waste in most municipalities. Dispose of the used lithium batteries in accordance with all applicable local regulations.

RESETTING FACTORY DEFAULTS

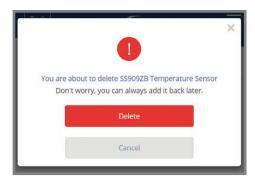




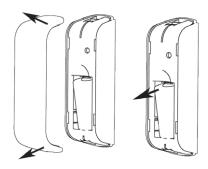
Step 1. Select the icon from the MrPEX® Smart Home dashboard. After the tile flips, choose the device name in the upper left.



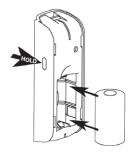
Step 2. Scroll to the bottom of the next screen and select "Remove shared window monitor."



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



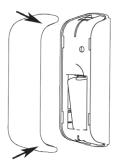
Step 4. Remove the Sensor cover and remove the battery.



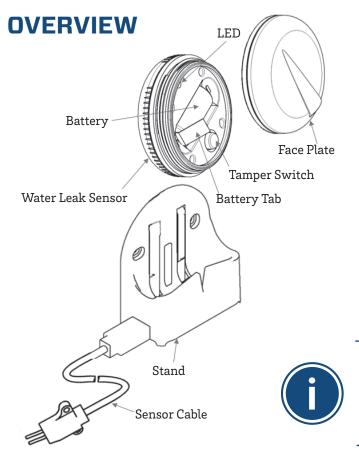
Step 5. Press and hold the Pair Button while re-inserting the battery.



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.

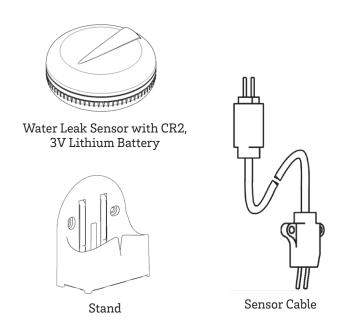


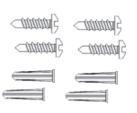
ITEM	DESCRIPTION
Stand	Allows wireless mounting to a wall. Also works as a functional testor.
Sensor Cable	Extends the sensor's range to hard-to-reach locations.
Face Plate	Allows access to battery and tamper switch.
LED Indicator	"Hidden" LED indicates network status during pairing
Tamper Switch	Detects 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 water leak sensor with the Gateway prior to installation. The Water Leak Sensor can be paired simulataneously with an Ball Valve Controller, Inline Shutoff Valve or a 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 package:

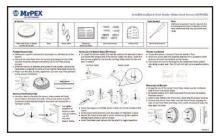




Mounting Screws & Anchors



Double-sided Adhesive



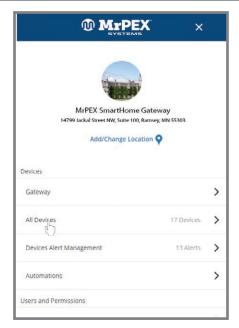
Installation Quick-start Guide

PAIRING INSTRUCTIONS



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







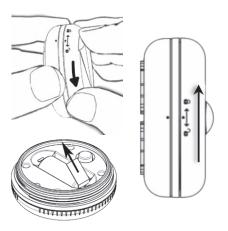
Step 1. Open the MrPEX® Smart Home application, select the drop-down menu from the upper right of the screen and select: *All Devices* → *Add New Device*



Step 1. Press "Scan Devices."



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



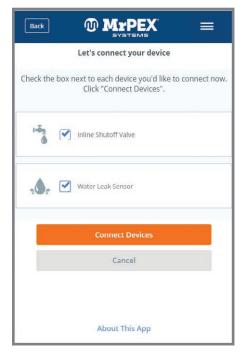
Step 3. Unscrew the Sensor face plate and remove the battery tab to start the pairing process. Replace the face plate making sure it is locked and sealed.

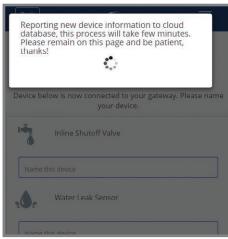


Since the Water Leak Sensor will likely be associated with a valve controller, it may be convenient to pair both components at once. The following shows the Sensor pairing with an Inline Shutoff Valve.

SECTION 7

Module 4 - Wireless Accessories **WATER LEAK SENSOR**

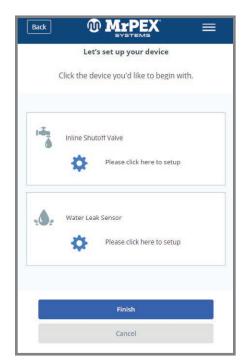




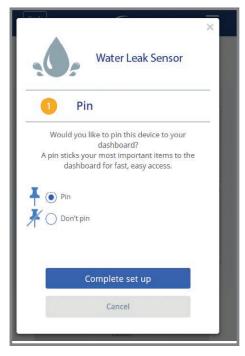
MrPEX Back = Successi Device below is now connected to your gateway. Please name vour device. Inline Shutoff Valve Water Leak Sensor Water Leak Sensor Back

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

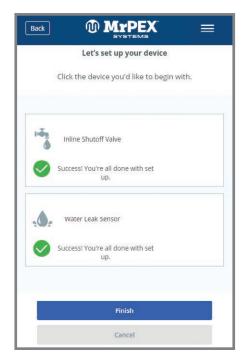
Step 4. Select the check boxes next to Water Leak Sensor and other associated devices. Press "Connect Devices". An information box may appear indicating that the device is being added. Be patient and wait for the next screen display.



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

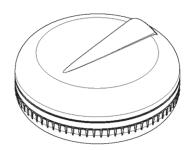


Step 7. Choose from setup options specific to each device. Press "Complete set up."

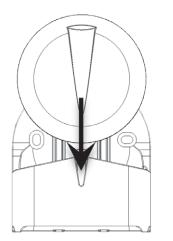


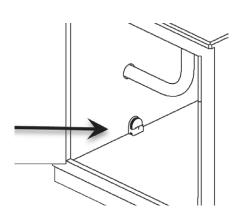
Step 8. Press "Finish" to complete pairing.

INSTALLATION INSTRUCTIONS



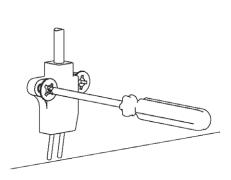
Place the sensor on a level surface where water is likely to accumulate when a leak occurs.

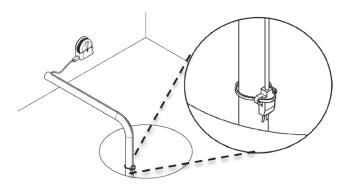




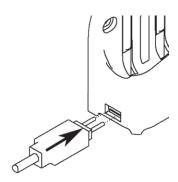
If the sensor doesn't lay flat in the desired location, the stand, which has integral sensing electrodes can be used for a narrower profile.

INSTALLING THE OPTIONAL SENSOR CABLE

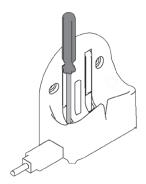




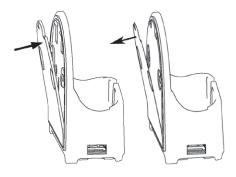
Step 1. Fasten the end of the Sensor Cable with the mounting brackets in the desired location. The brackets can be used for screw mounting to a flat surface or with a wire tie for a below grade sump.



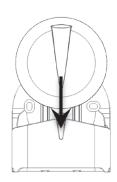
Step 2. Insert the opposite end of the Sensor Cable into the connector on the Stand.



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

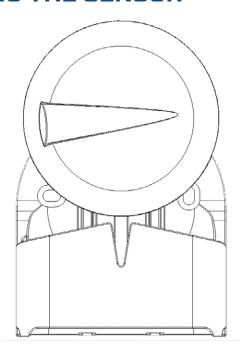


Step 4. Mount the stand on a flat surface using the double-sided adhesive or screws provided.

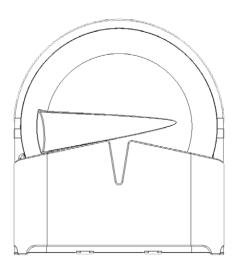


Step 5. Insert the Water Leak Sensor into the Stand.

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.





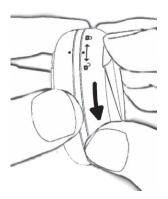


MrPEX® Smart Home will show an alert indicating a water leak. Based on the automations and the devices associated with the leakage, this may send a message (email or SMS text) and activate an associated device such as the Inline Shutoff Valve. Removing the Sensor from the Stand and returning it to the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

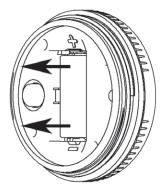
BATTERY REPLACEMENT



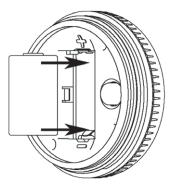
If the battery is low, the Water Leak Sensor icon on the MrPEX® Smart Home dashboard will turn red and the Issue indicator will register a message. Use only a CR2, 3 volt lithium battery for replacement.



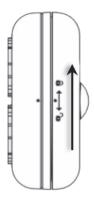
Step 1. Unscrew the Sensor face plate by turning it counterclockwise.



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.



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





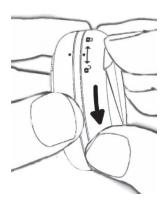
Step 1. PressSelect the Sensor icon from the MrPEX® Smart Home dashboard. After the tile flips, choose the device name in the upper left.



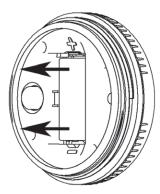
Step 2. Scroll to the bottom of the next screen and select "Remove Shared Water Leak Sensor."



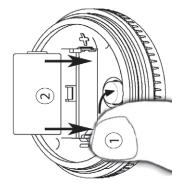
Step 3. Notification that the Sensor will be removed is displayed. Press "Delete" to continue. The Sensor Icon will be removed from the application.



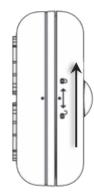
Step 4. Unscrew the face plate.



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.

Module 4 – Wireless Accessories INLINE SHUTOFF VALVE



ITEM	DESCRIPTION
Multi- Function Button	Used for local opening and closing of the Inline Shutoff Valve as well as pairing the Valve with MrPEX® 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 Shut Off Valve with the Gateway prior to installation. The Inline Shutoff Valve can be paired simulataneously with an 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 package:







Power Adapter

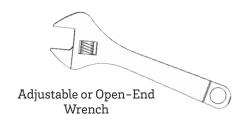


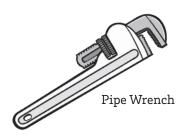
Cable Clips



Installation Quick-start Guide

TOOLS NEEDED





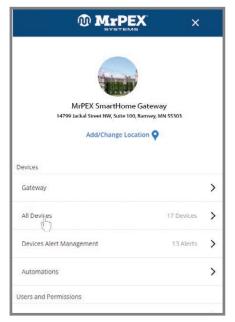
Module 4 – Wireless Accessories INLINE SHUTOFF VALVE

PAIRING INSTRUCTIONS



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



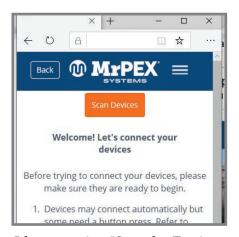




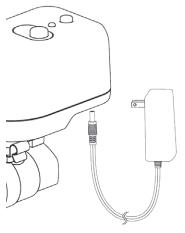
Step 1. Open the MrPEX® Smart Home application, select the drop-down menu from the upper right of the screen and select: *All Devices* → *Add New Device*



Step 2. Press "Scan Devices."



After pressing "Scan for Equipment", the MrPEX® 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 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 Water Leak Sensor.

SECTION 8

Module 4 – Wireless Accessories INLINE SHUTOFF VALVE





Success!

Device below is now connected to your gateway. Please name your device.

Inline Shutoff Valve

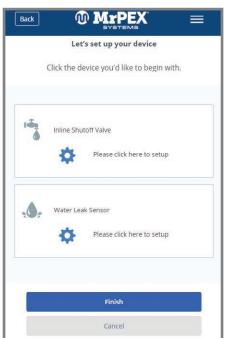
Inline Shutoff Valve

Water Leak Sensor

Water Leak Sensor

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

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 6. Press "Please click here to setup."



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



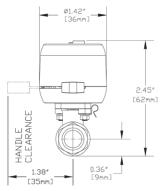
Step 8. Press "Finish" to complete pairing.

Module 4 – Wireless Accessories INLINE SHUTOFF VALVE

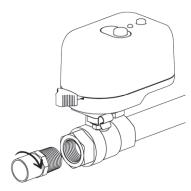
INSTALLATION INSTRUCTIONS



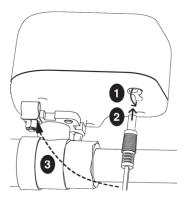
This device should be installed by a qualified plumber. Installations and repairs are to be performed in strict accordance with the requirements of state and local regulating agencies and codes dealing with plumbing installations.



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 ① inserting the cable into the cable clip ③. This provides strain relief to avoid accidental power disconnection.



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

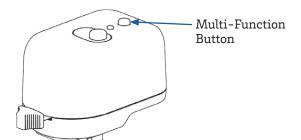


Step 5. Open the valve using the app and watch for proper operation.



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

LOCAL OPENING/CLOSING THE INLINE SHUTOFF VALVE



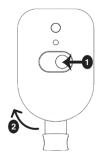
VALVE STATE	MULTI-FUNCTION BUTTON ACTION
Fully Closed	Start opening valve
Fully Open	Start closing valve
In Motion	Stop valve at its current position
Partially Open	Moves valve toward fully open/closed (opposite of last direction)

To operate the valve locally, without the MrPEX® 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.

Module 4 – Wireless Accessories INLINE SHUTOFF VALVE

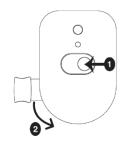
MANUAL OVERRIDE

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 **①**.

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



Step 3. Release the Manual Override Button **1** to re-engage the actuator motor.



Note that the 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





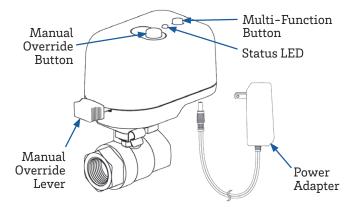
Step 1. Select the Inline Shutoff Valve icon from the MrPEX® Smart Home dashboard. After the tile flips, choose the device name in the upper left.



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



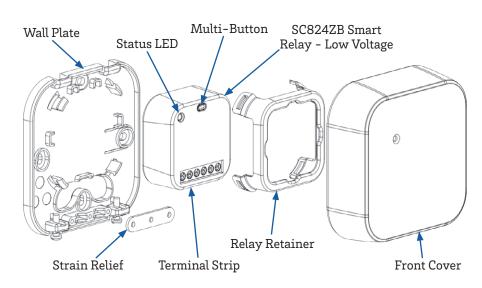
Step 3. Notification that the Sensor will be removed is displayed. Press "Delete" to continue. The Inline Shutoff Valve Icon will be removed from the application.



- **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.

OVERVIEW



ITEM	DESCRIPTION
Wall Plate	Allows surface mounting of the Smart Relay
Relay Retainer	Attaches the Smart Relay 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 package:



Smart Relay



Wall Mount with Cover



Mounting Screws



Double-sided Adhesive



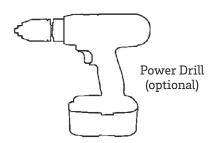
Installation Quick-start Guide English / French

TOOLS NEEDED

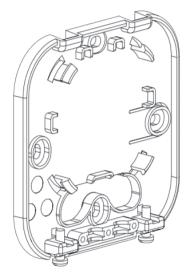




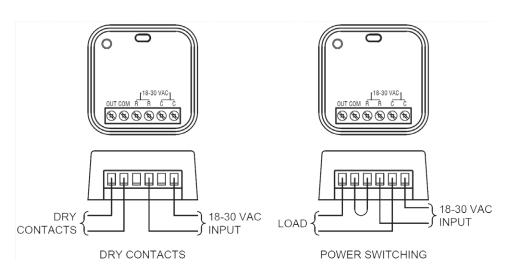




INSTALLATION - WALL MOUNT WITH COVER



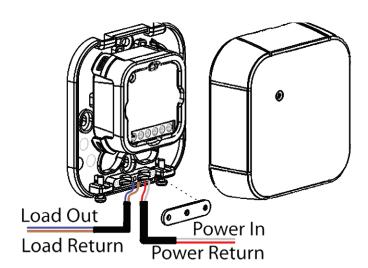
Step 1. Attach the wall plate (if used) for the Smart Relay in a suitable location using the screws included.



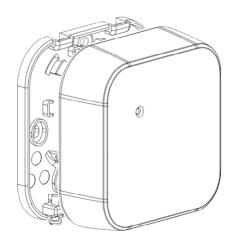
Step 2. Wire the Smart Relay using the appropriate diagram above. Run wires through the strain relief before proceeding to the next step. For a power switching application, a jumper must be applied between R & COM.



- · 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)

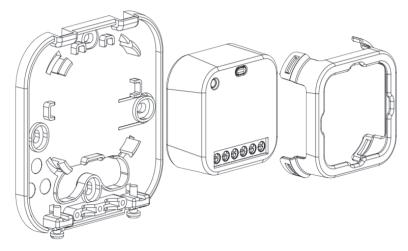


Step 3. Place Smart Relay in the space provided on the wall plate and use the retaining clip to hold it in place. Tighten the strain relief to hold wires securely.

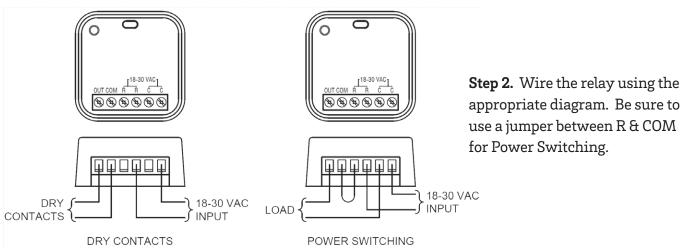


Step 4. Remove the knockout portion of the cover to allow wires to pass through. Assemble the enclosure cover, making sure the wires don't interfere with proper closure.

INSTALLATION - ADHESIVE SURFACE MOUNTING



Step 1. Remove Smart Relay from Mounting Kit.





Step 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.

PAIRING INSTRUCTIONS



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

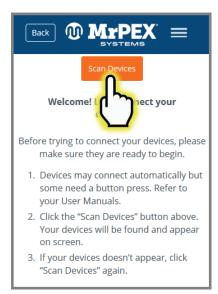
Step 1. Be sure that there is power applied to the Smart Relay and the Status LED is repeating a sequence of 3 red flashes then pause.







Step 2. Open the MrPEX® 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."



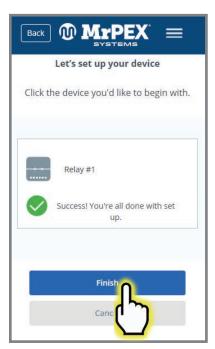
After pressing "Scan for Equipment", the MrPEX® Smart Home application scans for devices.



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



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



Step 8. Press Finish to complete pairing.



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



Step 7. Press "Complete set up" to continue



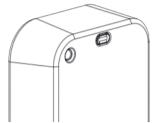
In case of a weak wireless signal, an Wireless Repeater may be required.





Step 9. Using the MrPEX® 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 MrPEX® Smart Home app, press and release the Multi-Button.

SCHEDULE SETUP - MRPEX® SMART HOME APPLICATION

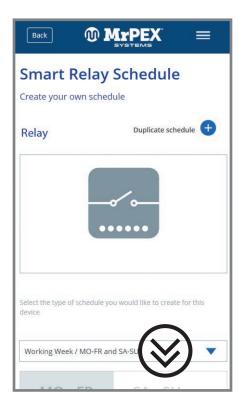




Step 1. Select the icon from the MrPEX® Smart Home dashboard. After the tile flips, choose the device name in the upper left.



Step 2. Scroll to "Schedule' and choose the \nearrow icon.



Step 3. Scroll down to view the schedule types.

SECTION 9

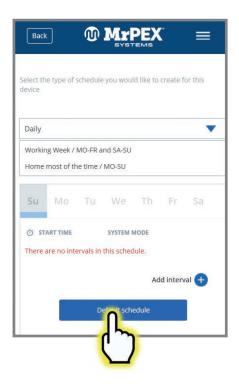
Module 4 – Wireless Accessories **SMART RELAY – LOW VOLTAGE**



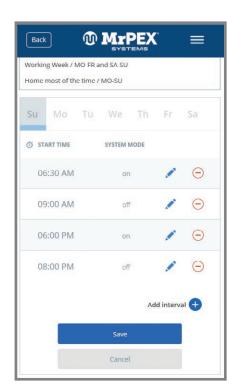
Step 4. Choose the drop-down menu and select the desired schedule type.



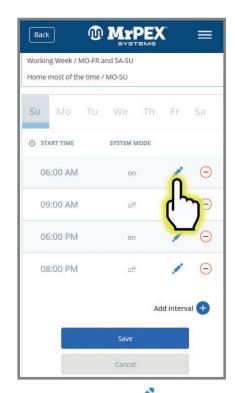
Step 7. Make the desired changes. Then click "Update".



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

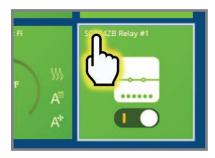


Make further changes as desired. The relay will switch on and off according to the schedule.



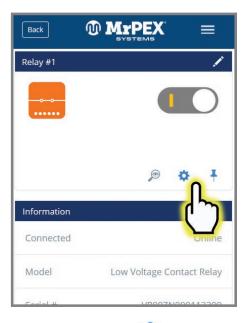
Step 6. Click the icon next to any interval to change values.

SETUP OPTIONS





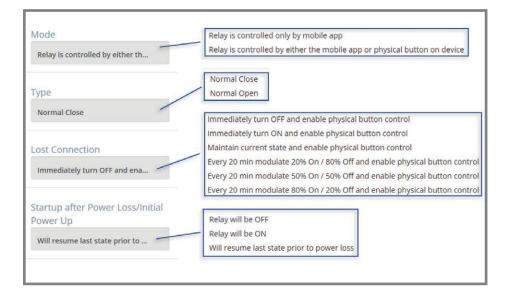
Step 1. Select the Smart Relay icon from the MrPEX® Smart Home dashboard. After the tile flips, choose the device name in the upper left.



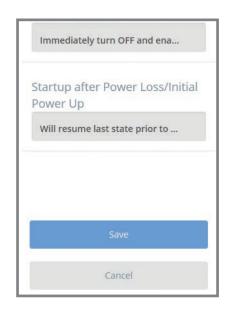
Step 2. Choose the icon from the setup screen.



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

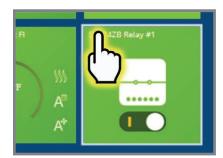


Step 4. Select options from drop-down menus.



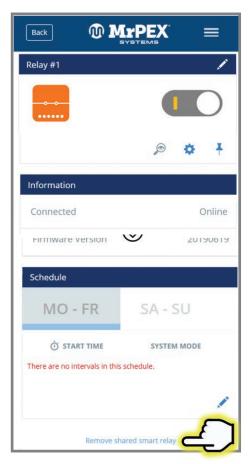
Step 5. Press "Save"

RESETTING FACTORY DEFAULTS

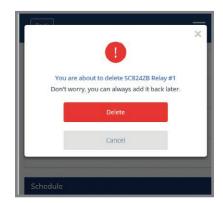




Step 1. Select the Smart Relay icon from the MrPEX® Smart Home dashboard. After the tile flips, choose the device name in the upper left.



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 Smart Relay 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.