For the latest online manual, please scan the QR Code or visit: inov.li/vzw32sn

VZW32-SN

Instructions

Next Gen Smart Lighting

We're excited to have you on this journey with us and we're here for you every step of the way. Not only are we smart home owners ourselves, but we build all of our products alongside 1,000's of passionate community members. To see how the project came to life and how everyone contributed, please see Page 54 or visit: inov.li/linus. It's truly amazing working with people of all walks of life and even more humbling to see everyone's dedication to making some of the best smart home products.

Thank you so much for your trust in us and welcome to the next generation of smart lighting with Inovelli.

Eric H. - Founder/CEO
Eric M. - Founder/CTO

Table of Contents

DSK information can be found on Page 53

Scan for the most recent instructions or visit:
inov.li/vzw32sn

Navigating this Manual

We designed this manual as if we were installing the switch ourselves. We suggest reviewing the full manual before beginning the installation process. There are four areas this manual covers:

1. Getting to know your switch
2. Figuring out your wiring
3. mmWave Configuration
4. OPTIONAL: Manually programming your switch
5. Connecting to your hub/gateway

As we continue to work with hub manufacturers, and improve our products. It may be necessary to periodically update this manual. You can always find the latest version of this manual by visiting: inov.li/vzw32sn

Quick Setup & Inclusion.

Quick Setup Notes

We get it, you're ready to go. No need to flip through the manual, you want the abridged version. **This section assumes you have your switch wired correctly and the blue LED Bar is lit up.**

It also assumes you know how to enter the Z-Wave® pairing mode on your hub/gateway (and have a Z-Wave® compatible hub/gateway).

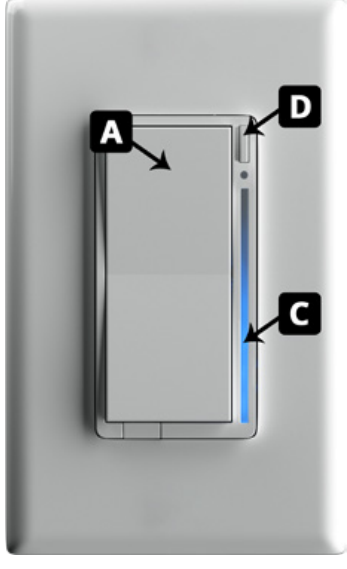
To see which hubs are compatible, please visit: inov.li/vzw32snhubs

While these instructions likely won't change, for the most up-to-date instructions, we recommend scanning the QR code to the right or to visit: inov.li/vzw32snQS

Including/Excluding Your Switch

To include (pair) your switch, start the Z-Wave® inclusion process on your hub and rapidly tap the config/favorites button (D) three times. The LED Bar (C) will pulse blue to indicate inclusion mode and flash green if pairing is successful.

If inclusion fails, you can reset the switch by putting your hub in exclusion mode and pressing the config/favorites button (D) three times. The LED Bar (C) will pulse blue and flash green if exclusion is successful, or red if not. Alternatively, hold down the top paddle (A) and the config/favorites button (D) simultaneously for 20 seconds until the LED Bar turns red, then release. After exclusion, you can try pairing again.



Getting to Know Your Switch

Please use the next couple pages to get to know your smart switch.

A. Light On / Increase Dim % Level: Tap 1x to turn on your light or hold to increase the brightness level (dim percentage). In addition, it can be used to activate scene control (multi-taps and holds) where up to 7 scenes can be added*.

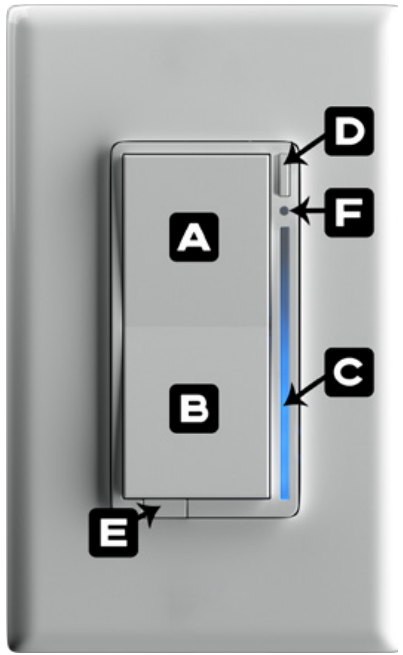
B. Light Off / Decrease Dim % Level: Tap 1x to turn off your light or hold to decrease the brightness level (dim percentage). In addition, it can be used to activate scene control (multi-taps and holds) where up to 7 scenes can be added*.

C. RGB LED Bar: Multi-functional LED bar that shows the % level at which your switch is at. In addition, it can be used as a notifier*

* Hub must support these features. Please see pg. 50.

for various events (ie: turn red when alarm is armed, pulse purple if garage is left open, etc).

D. Config / Favorites Button: Used to configure certain parameters of the switch. In addition, it can be used to activate scene control (multi-taps and holds) where up to 7 scenes can be added*.



E. Air Gap: This can be pulled out to cut power to the load and is there for safety purposes.

F. Lux Sensor: Used to measure the lux in the room

Not Shown - mmWave sensor, which is located under the paddle. For more information, see pages 31-34.

Quick Tap Sequences

If you are using your switch as a Simulated On/Off, please see the quick tap sequences below or visit pages 38-39 for more details. The Single-Pole and Dimmer tap sequence is not shown because it is the default setting (no programming needed).

Wiring Type	Sequence	Confirmation
Multi-Way (Aux)	Hold on ↑ paddle, tap config 5x, release	White
Switch Type	**Sequence**	**Confirmation**
Simulated On/Off	Hold on ↑ paddle, tap config 3x, release	Red
Smart Bulb Mode	Hold on ↑ paddle, tap config 4x, release	Yellow

Wiring.

Wiring Notes

Due to the number of ways these switches can be wired, all schematics are housed online and you can access the schematics by scanning the QR Code at the bottom right, or by visiting: inov.li/vzw32snwiring

To work your way through this section, first read the warnings, then familiarize yourself with the vernacular used. Finally, keep notes as you go through the first three (3) steps as you will use them to determine whether or not your wiring is compatible and whether or not you have to pre-program/setup your switch (pg. 35).

Finally, please do not attempt to install these switches if you are unfamiliar with electrical as serious injury can occur.

Safety Reminder

Consult a qualified electrician if necessary as **we are unable to give wiring advice outside of schematics.**

If you are unsure how electrical circuits work, please do not try installing this device. As exciting as it is to have a smart switch installed, it can be dangerous and even life-threatening if you do not install it correctly. Improper installation will void the product's warranty.

Please read through the warnings on the next few pages before installing your switch. We can't stress enough how dangerous installation can be if you don't know what you're doing.

Warnings

Caution - Please Read: This device (VZW32-SN) is intended for installation in accordance with the National Electric Code and local regulations in the United States, or the Canadian Electrical Code and local regulations in Canada. If you are unsure or uncomfortable about performing this installation consult a qualified electrician. This product is made for indoor use only and is not designed or approved for use on power lines other than 120VAC, 60Hz, single phase. Attempting to use this VZW32-SN on non-approved power lines may have hazardous consequences.

Attention – Information importante: Cet appareil (VZW32-SN) est conçu pour être installé conformément au « National Electric Code » et aux réglementations locales aux

États-Unis, ou au Code canadien de l’électricité et aux réglementations locales canadiennes. Si vous ne vous sentez pas à l’aise ou qualifiés pour effectuer cette installation, veuillez consultez un électricien qualifié. Ce produit est conçu pour une utilisation intérieure uniquement et n’est pas conçu ou approuvé pour une utilisation avec une ligne électrique ayant un voltage autre que 120 VCA, 60 Hz, monophasé. L’utilisation du VZW32-SN avec une ligne électrique non approuvée peut avoir des résultats dangereux.

Other Warnings: Risk of Fire, Electrical Shock & Burns

Autres avertissements: Risque d’incendie, de choc électrique et de brûlures

Warnings (Continued)

Recommended Installation Practices: Use only indoors or in an outdoor rated box. Turn off the circuit breaker. Installing this switch and module with the power on will expose you to dangerous voltages. Connect only copper or copper-clad wire to the switch or module.

To reduce the risk of overheating and possible damage to other equipment, do not install to control a receptacle, a motor-operated appliance, a flourescent lighting fixture or a transformer supplied appliance and do not use the VZW32-SN load output to control no more than indicated.

- 400 Watts (Incandescent)
- 300 Watts (LED)
- 150 Watts (CFL)

Dimming an inductive load (by connecting to the light load wire),

such as a fan or transformer, appliance, motor or any device not specifically designed for dimming, could cause damage to the dimmer, the load bearing device, or both. To install your 2-1 Switch (VZW32-SN), you'll need to identify the following four wires (NOTE: Neutral is not mandatory, but recommended):

- **Line:** Usually black and can also be called the, "hot" or "live" and carries 120VAC electricity into the electrical box
- **Neutral*:** Usually white and is commonly daisy chained from box to box, usually appearing as a white wire bundle.
- **Load:** Usually black, blue or red
- **Ground:** Bare copper wire or metal fixture (if grounded)

* Neutral is mandatory in certain installations. See page 29 for additional details.

Warnings (Continued)

If you are having difficulties identifying wires, please consult an electrician.

Pratiques d’installation recommandées: Utiliser uniquement à l’intérieur ou à l’extérieur dans une boîte adaptée aux conditions extérieures. Éteignez le disjoncteur. L’installation de cet interrupteur et de ce module alors que le courant est allumé vous exposera à des tensions dangereuses. Connectez uniquement un fil de cuivre ou gainé de cuivre au commutateur ou au module.

Pour réduire le risque de surchauffe et d’endommager d’autres équipements, il est important de connecter des lumières incandescentes ayant moins de 600 watts, des lumières DEL ayant moins de 300 watts, des ampoules fluocompactes ayant moins de 150

watts ou un ventilateur utilisant moins de 1 ampère et ce dernier avec l'interrupteur en mode marche/arrêt uniquement.

La gradation d'une charge inductive, comme un ventilateur ou un transformateur, pourrait endommager le gradateur, l'interrupteur ou les deux appareils. Veuillez régler l'interrupteur en mode marche/arrêt si vous utilisez un ventilateur.

Pour installer votre interrupteur 2 en 1 (Vzw31-SN), vous devrez identifier les quatre fils suivants (REMARQUE: le neutre est optionnel, mais recommandé) :

- **Ligne:** généralement noire et peut également être appelée « chaud » ou « sous tension » et transporte l'électricité 120 VCA

Warnings (Continued)

dans le boîtier électrique

- **Neutre:** habituellement blanc et connecté en série d'une boîte à l'autre, les fils sont habituellement attachés ensemble dans la boîte électrique
- **Charge:** habituellement noire, bleue ou rouge
- **Mise à terre:** fil de cuivre nu ou boîtier métallique (si celui-ci est mis à la terre)

Si vous rencontrez des difficultés à identifier les fils, veuillez consulter un électricien.

Équipement médical: Veuillez ne pas utiliser cet interrupteur pour contrôler de l'équipement médical ou nécessaire à la survie. Les appareils Z-Wave® ne doivent jamais être utilisés pour contrôler la marche or l'arrêt d'équipement médical et/ou nécessaires à la survie.

Vocabulary

Before we go into actual steps, it's important to be familiar with the vernacular used on the following pages. Please see below:

- **Line:** This is your hot wire (120V) - aka: "live" wire
- **Load:** This is the wire that runs from your light switch to what you're controlling (ie: bulb(s), fan, etc)
- **Neutral:** This is the wire that carries current back to the power source (you may not have this in your house)
- **Single-Pole:** One switch controlling one or more load(s)
- **Multi-Way:** Refers to 3-Way (2 switches, 1 load), 4-Way (3 switches, 1 load), or 5-Way setups (4 switches, 1 load)
- **Toggle ("Dumb") Switch:** Refers to your existing switch (ie: the switch(es) you had before replacing with your smart switch(es))
- **Aux Switch:** Refers to the Inovelli Aux Switch (inov.li/aux)

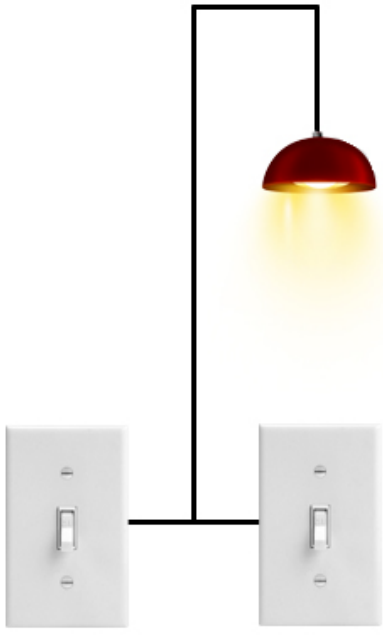
Step 1 - Determine Wiring Type

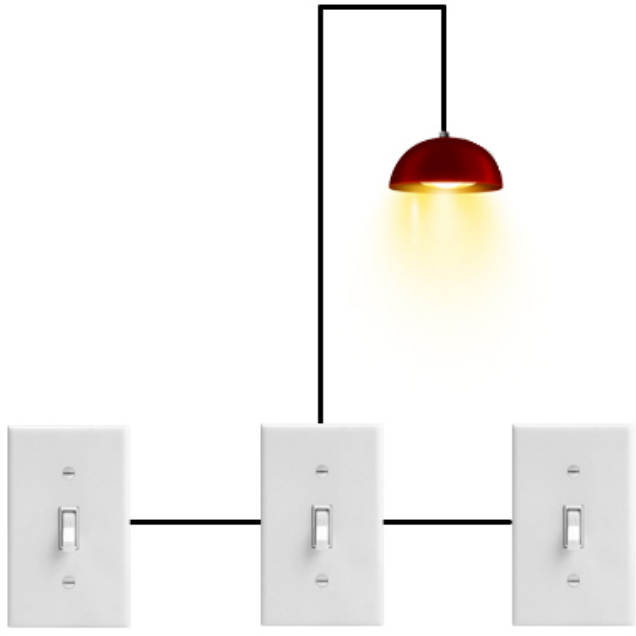
The first step is to determine how many switches control your load(s) (aka: light(s)).

Using the diagram on the next page, please determine what your wiring type is and remember this selection:

- **Single-Pole:** One switch controls one load (load may contain more than one light, etc).
- **Multi-Way:** Two or more switches control one load (load may contain more than one light, etc). We will use the term, “multi-way” instead of 3-Way, 4-Way, 5-Way, etc as the programming of the switch is the same regardless.

Wiring Type (Circle One): Single-Pole or Multi-Way





Single-Pole

One switch controls one (or more) load(s).

Multi-Way

Two or more switches control one (or more) load(s).

Step 2 - Determine Switch Layout

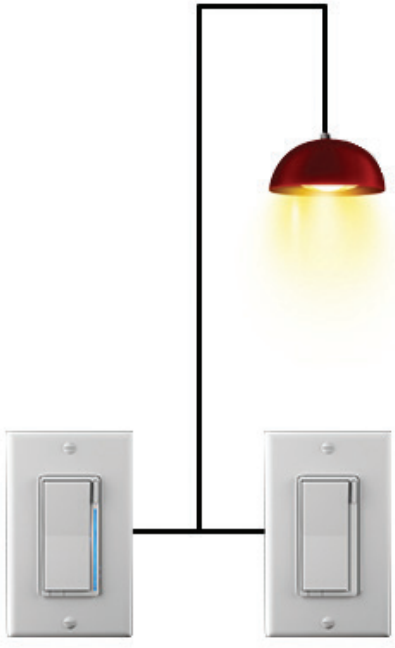
NOTE: If you determined in Step #1 that your switch is single-pole, you can skip this step. This step is for multi-way setups only.

Using the diagram on the next page, please determine what your wiring layout is and remember this selection:

- **Smart Switch + Aux Switch:** One smart switch and one (or more) aux/add-on switch (Model #: AUX01 or inov.li/aux).
- **Smart Switch + Smart Switch:** Two (or more) smart switches.

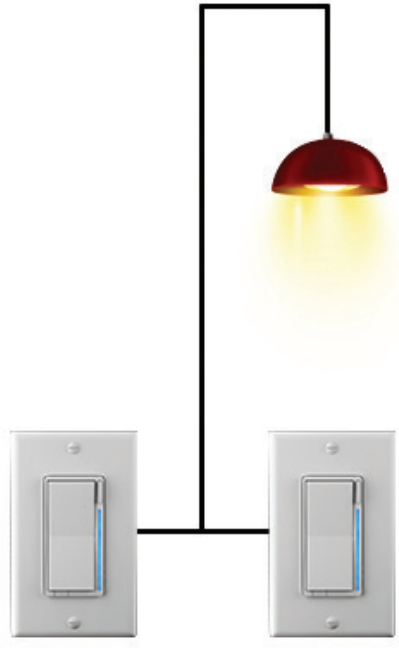
See inov.li/vzw32snlayout for the pro/cons of each setup. You may not mix/match (ie: Smart + Aux) in the same circuit. This switch **DOES NOT SUPPORT USING A, "DUMB" SWITCH**.

Switch Layout (Circle One): Aux, or Smart Switch(es)



Smart + Aux Switch

One Inovelli smart switch & one (or more) Inovelli aux switch (AUX01).



Smart Switches

Two (or more) Inovelli smart switches.

Step 3 - AC Power Type

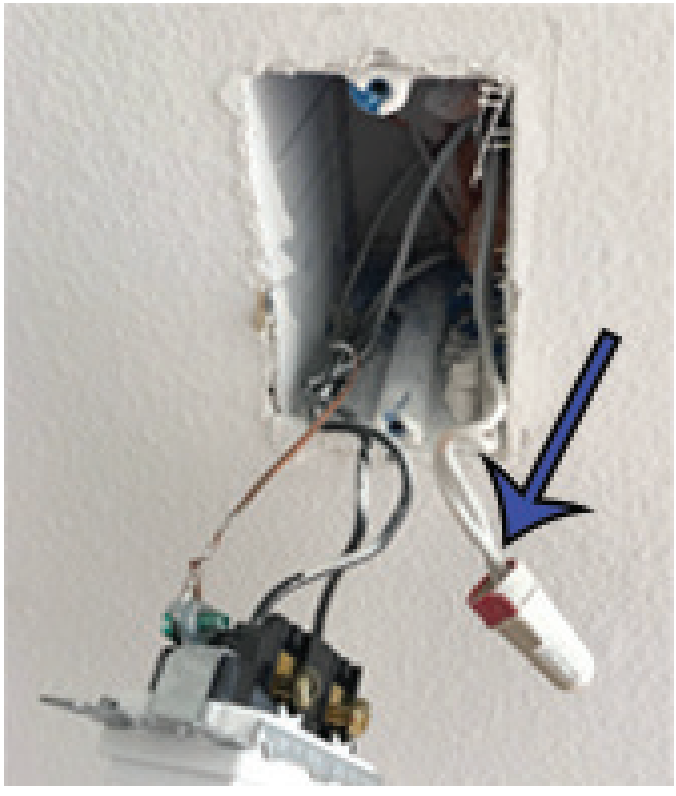
In this step, we will determine if you have a neutral wire, which is typically white and located in the back in your switch gang-box (typically in a bundle of wires tied together).

Here are some signs you may have a neutral wire:

- If your house was built in the mid-1980's or later
- If there is an outlet (receptacle) near the switch
- If switches are in the same gang-box (regardless of the year your house was built)

See the next page for details on checking for a neutral wire.

AC Power Type: Neutral or No Neutral



After turning off your breaker, pull out the switches (**WARNING:** there may be multiple circuits in one gang-box -- please ensure all circuits are turned off). Check the back of your gang-box for a bundle of white wires. These are typically neutrals.

Step 4 - Compatibility Check

In this step, we will determine if your switch can be installed with your current wiring setup. If not, you can see some alternate solutions on how to accomplish compatibility.

Taking the answers you circled in Steps 1-3, please see the chart on the next page to see if your switch is compatible with your setup.

Example: If you circled, “Multi-Way”, “Aux” and “Neutral”, you will see that your wiring is compatible. However, if you circled, “Multi-Way”, “Smart Switch” and “No Neutral”, you will see that your wiring is not compatible and you will need to purchase an auxiliary switch (inov.li/aux).

Wiring Type	Switch Layout	Power Type	Supported
Single-Pole		Neutral	Yes
		No Neutral	Yes
Multi-Way (3+ Way)	Toggle (Switch)	Neutral	No
		No Neutral	No
	Aux (Switch)	Neutral	Yes
		No Neutral	Yes
	Smart (Switch)	Neutral	Yes
		No Neutral	No

IMPORTANT: For installations where no neutral wire is present, you may need to install a special bypass to prevent flickering and/or keep your switch powered. Bypasses can be purchased here: inov.li/bypass

Step 5 - Switch Installation

The last step is to physically install your switch. After you've determined your wiring type, switch layout, AC Power type and whether or not you have a compatible setup, it's time to look at the wiring schematics and install your switch.

As mentioned, there are many different ways your switch can be wired that if we posted them here, we'd have an encyclopedia of a manual, so all of our schematics are housed online. UL specifies the tightening torque for the screws to be 0.8 N.m (7.08 lbf-in).

Keep note of your answers from the prior steps and either scan the QR Code to the right or go to: inov.li/vzw32snwiring and match up your answers to the correct schematic section.

mmWave Sensor Information.

About the mmWave Sensor

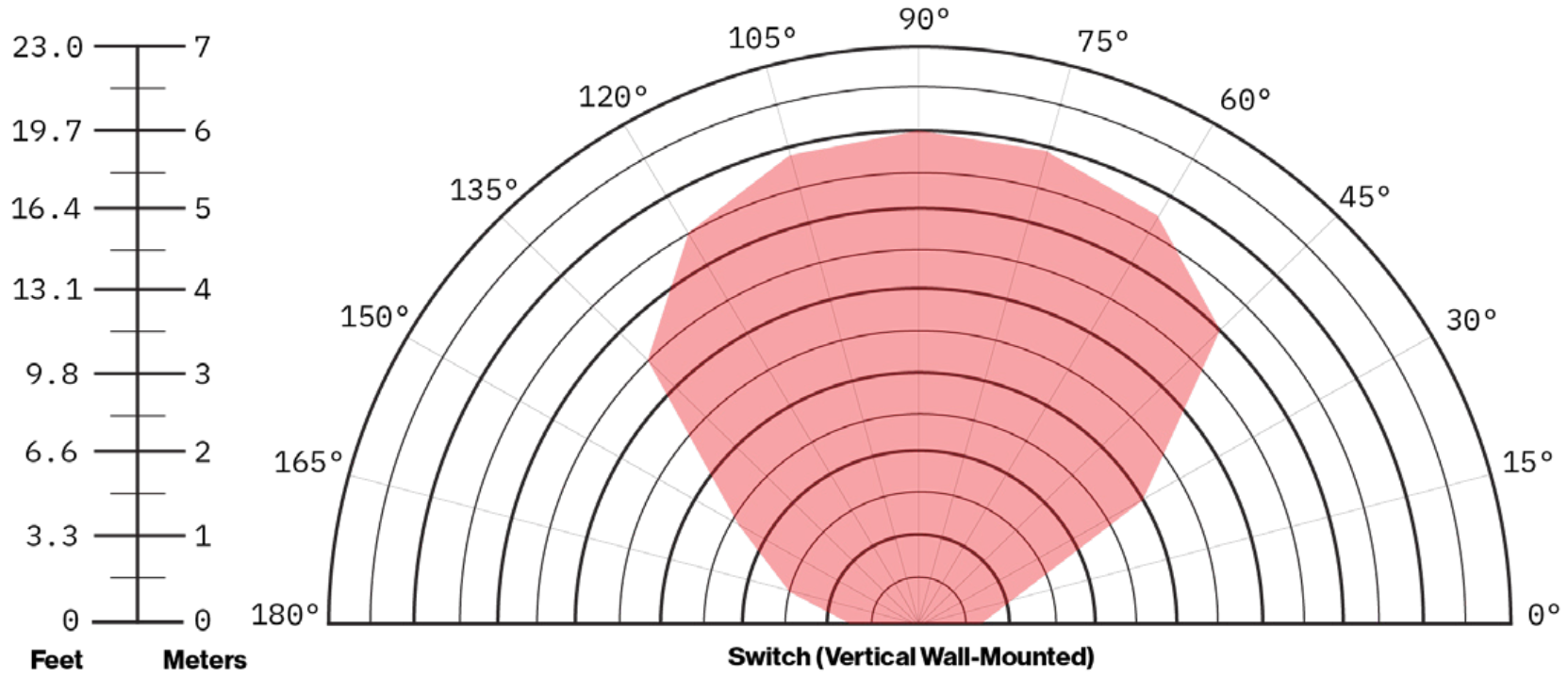
The switch uses a 2T2R mmWave sensor, which has the ability to detect presence and motion. It's important to understand the capabilities on the following pages to set expectations on what the sensor can and cannot do.

Please be sure to read page 33, which describes the field of view. It's important to note that while the maximum range is ~19.7ft (6m), this distance diminishes the closer to the switch, so plan accordingly.

In addition, there are 15 different parameters associated with the sensor. Due to the manual space, we cannot list them all here, so please visit: inov.li/vzw32snMC or scan the QR Code.

Field of View

The sensor has a field of view shown below in pink. For the best results, please take the measurements of your room prior to installing the switch. The Maximum range is ~19.7ft (6m), but as you can see in the graph, the range decreases closer to the switch.



mmWave Sensor Settings

The sensor has a few built-in settings that can be configured. The two main ones are as follows (all can be found at inov.li/vzw32snMC)

- **Detection Area:** This is the area you want to detect presence. It has X, Y, and Z-Axis values. The default detection range is shown on page 33. Change this if you find the sensor is detecting presence through walls

- **Interference Zones:** These are zones within your detection area that can be blocked out if they are interfering with your sensor (e.g., ceiling fans, windows, etc.).

Other settings include: decoupling load, sensitivity, detection speed, and more.

Manual Setup.

Manual Setup Notes

NOTE: If you plan on using your switch as an dimmer switch and in either a single-pole or multi-way with an Aux Switch setting, you may skip this step. If you plan on using your switch as a simulated on/off and/or in a multi-way with a dumb switch, please continue.

If you have SmartThings, Hubitat, or Home Assistant, you can skip this part as you can change these settings on your platform.

Luckily, it's as simple as pressing a couple buttons. Feel free to follow the steps on the next couple of pages, scan the QR Code or visit: inov.li/vzw32snmanualsetup

Manual Setup Example

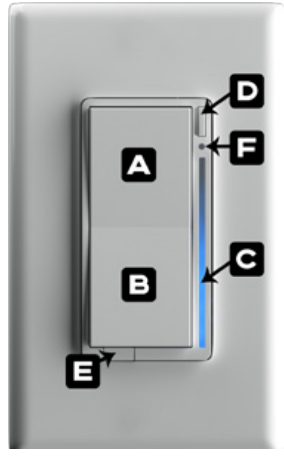
Here’s an example of how to use the charts on pages 38-39:

Let’s say you want your switch to be a simulated on/off switch.

Using the chart on pg. 39, you would first hold down on the top part of the paddle (A), while simultaneously tapping the config button (D) 3x. After seeing the LED bar change color to signify a success (red in this case), release the top of the paddle.

Switch Configuration

Use the button sequence below to adjust the mode of the switch according to your wiring configuration. The LED bar (C) will flash the associated color to indicate success. For a visual example of configuring to a multi-way (toggle) setting, see: inov.li/vzw32snSCVid.

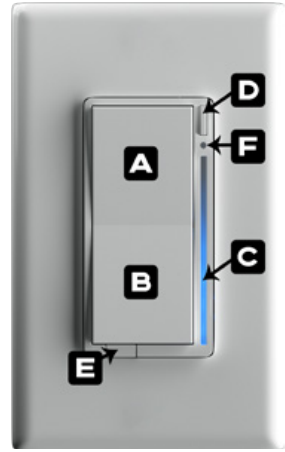


Hubs supporting advanced settings can also update this setting via their respective apps.

Wiring Type	Sequence	Color
Single-pole	Hold on ↑ paddle (A), tap config (D) 6x, release	Cyan
Multi-Way (Aux)	Hold on ↑ paddle (A), tap config (D) 5x, release	White

Switch Mode

Use the button sequence below to adjust the mode of the switch according to the type of switch you want. The LED bar will flash the associated color to indicate success. For a visual example of changing to a dimmer, see: inov.li/vzw32snSMVid.



Hubs supporting advanced settings can also update this setting via their respective apps.

Switch Type	Sequence	Color
Simulated On/Off	Hold on ↑ paddle (A), tap config (D) 3x, release	Red
Dimmer	Hold on ↓ paddle (B), tap config (D) 3x, release	Orange
Smart	Hold on ↑ paddle (A), tap config (D) 4x, release	Yellow

* Used for Smart Bulb Mode or if 2+ Smart Switches are on the same circuit.

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Hub/Gateway Setup.

Hub/Gateway Setup Notes

As manufacturers update their hub/gateway platforms, the setup process may change. We recommend checking our website for the latest directions, by scanning the relvant QR code.

If you don't see your hub, please go to: inov.li/vzw32snOT

SmartThings

inov.li/vzw32snST

Home Asst. Z-Wave® JS

inov.li/vzw32snZWJS

Home Asst. Z-Wave JS® UI

inov.li/vzw32snZWJSUI

Hubitat

inov.li/vzw32snHE

SmartThings Instructions

COMPATIBLE HUBS: Samsung SmartThings Hub V1, V2 and Samsung or Aeotec Hub V3 (NOTE: You will need to install an Edge Driver to ensure full functionality of the switch. For more info, please go to: inov.li/vzw32snSTPrereqs).

First, ensure the QR Code is exposed on your switch (located at the bottom left), then follow the directions below:

- Open the SmartThings app and click on the devices icon
- Tap on the (+) button and click, “Add Device”
- Near the bottom, click, “Scan QR Code” and scan the QR Code
- When it says, “Getting Ready”, click the config button 3x to start pairing (the LED Bar will start to pulse blue)
- If successful, the LED Bar (C) will turn green and your app will show the new switch (feel free to rename it)

Home Assistant Instructions

COMPATIBILITY: We recommend either Z-Wave JS or Z-Wave JS UI (formerly Z-Wave JS2mqtt). NOTE: you will also need a compatible Z-Wave stick - a full list can be found here: Z-Wave JS = inov.li/vzw32snZWJSsticks or Z-Wave JS UI = inov.li/vzw32snZWJSUIsticks).

You didn't think we'd be able to fit the HA instructions in here, did you?! Please visit our website :)

Z-Wave® JS Instructions

inov.li/vzw32snZWJS

Z-Wave® JS UI Instructions

inov.li/vzw32snZWJSUI

Hubitat Instructions

COMPATIBLE HUBS: Hubitat C3, C4, C5 and C7 (NOTE: You will need to install a Device Driver to ensure full functionality of the switch. We recommend doing this prior to pairing. For more info, please go to: inov.li/vzw32snHEPrereqs).

First, ensure the QR Code is exposed on your switch (located at the bottom left), then follow the directions below:

- Login to your Hubitat portal and click on the devices tab
- Tap on the (+) Add Device button and click, “Z-Wave” under, “Add device manually”
- Click, “Start Z-Wave Pairing” and your hub should go into pairing mode (at this point, scan the QR Code on the switch)
- Tap the config button 3x (the LED Bar will start pulsing blue)
- If successful, the LED Bar (C) will turn green and your app will show the new switch

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Advanced Features.

Advanced Features Notes

NOTE: The advanced features shown below are what is built into the switch firmware, and may or may not be supported by your hub/gateway. We've confirmed they're supported on SmartThings, Hubitat, and Home Assistant (Z-Wave JS, and Z-Wave JS UI).

These switches are packed with a ton of amazing features, which include scene control (multi-tap), animated notifications, smart bulb mode, energy monitoring, and approximately 75 different parameters to customize your switch.

The manual does not have enough room to list out and explain all the parameters and advanced features. However, the following pages will direct you to the proper URL's. An overview can be found at the QR code to the right or at the following URL: inov.li/vzw32snAF

Switch Parameters

There are approximately 75 different parameters on this switch, making it one of the most customizable switches out there.

Due to the space constraints in this manual, we had to list them all out on our website. You can access these parameters by scanning the QR Code or by visiting: inov.li/vzw32snparameters

Some of the highlights include: changing the dimming speed, multi-tap speed, min/max brightness, LED bar color (individual LED's or full bar), power/energy monitoring reporting, default dim level, mmWave zones, mmWave sensitivity and so much more.

If your hub does not support parameter changes, you can program a lot of these directly from the configuration button. Please visit: inov.li/vzw32snLC

Other Advanced Features

To setup some of the other advanced features, such as: Animated Notifications, Scene Control, Smart Bulb Mode and Z-Wave Binding, please see the URL's below as the instructions will be different depending on the hub you're using.

- **Animated Notifications:** inov.li/vzw32snAN
- **mmWave Configuration:** inov.li/vzw32snMC
- **Scene Control:** inov.li/vzw32snSC
- **Smart Bulb Mode:** inov.li/vzw32snSBM
- **Z-Wave Associations:** inov.li/vzw32snZA

As noted on page 49, your switch has the ability to program parameters from the configuration button. To learn more, please visit: inov.li/vzw32snLC

Z-Wave® Information.

DSK Location & Long Range

The DSK information required for some inclusion methods can be found either on the product (QR Code located at the bottom front-left of the switch), or on the back of the box at the bottom left (QR Code located at the bottom right). Please keep this in a safe space or write it down for your records.

This switch supports Z-Wave® Long Range and can be included into a network with a compatible Z-Wave® Long Range hub/gateway.

To include via Long Range, enable Long Range support in your hub/gateway and add the DSK into the provisioning list. Then apply power to the switch and wait for the device to be added to the network.

Z-Wave® Association Groups

Grouping Identifier	Max Nodes	Send Commands
Group 1 * Mapping info can be found on pg. 57	10	1. Meter Report
		2. Protection Report
		3. Central Scene Notification
		4. Device Reset Locally
		5. Indicator Report
		6. Sensor Multilevel Report
		7. Switch Multilevel Report
		8. Notification Report
Group 2	10	Basic Set
Group 3	10	Switch Multilevel Set

Grouping Identifier	Max Nodes	Send Commands
Group 4	10	Switch Multilevel Start/Stop
Group 5	10	Double-Tap Basic Set
Group 6	10	Triple-Tap Basic Set
Group 7	10	Fan Module Basic Set

Group 1: Lifeline

Members of this group will receive unsolicited messages related to the status of the switch

Group 2: Basic Set

Sends On & Off commands to associated devices

1. Single press on the up button sends BasicSet (0xFF)
2. Single press on the down button sends BasicSet (0x00)

Group 3: Switch Multilevel Set

Sends set level commands to associated devices when switch is pressed.

1. Release up or down button sends Switch MultiLevelSet which keeps associated devices in sync with this device
2. Single press on the up button sends SwitchMultiLevelSet (0xFF)
3. Single press on the down button sends SwitchMultiLevelSet (0x00)
4. If param. 53 = 1, 2x press up sends SwitchMultiLevelSet to P55
5. If param. 54 = 1, 2x press down sends SwitchMultiLevelSet to P56

Group 4: Switch Multilevel Start/Stop

Sends start / stop level change to associated devices (only in dimmer mode)

1. Hold up button sends SW_MULTILEVEL_START_LEVEL_CHANGE (Up)
2. Hold down button sends SW_MULTILEVEL_START_LEVEL_CHANGE (Down)
3. Release either button sends SW_MULTILEVEL_STOP_LEVEL_CHANGE

Group 5 & 6: Double or Triple-Tap Basic Set

Sends On & Off commands to associated devices

1. 2x/3x press on the up button sends BasicSet (0xFF)
2. 2x/3x press on the down button sends BasicSet (0x00)

Group 7: Fan Module Basic Set**

Sends On & Off commands to associated devices. Please refer to parameters 130 & 134.

* **NOTE:** While Group 7 is labeled “Fan Module”, it can be used for other Z-Wave devices that support on/off.

Z-Wave® Parameters & Meter

As mentioned on page 49, there are over 75 parameters on this switch and this manual would turn into an encyclopedia if we listed them all out. The most up-to-date parameter documentation can be found on our website here: inov.li/vzw32snparameters

Meter Command Information

Meter Type: 0x01 - Electric Meter
Meter Scale: 0x00 - kwh
Meter Scale: 0x02 - W
Rate Type: 0x01 - Import only (consumed)

Multilevel Switch Device Type Basic Mapping

- Basic Set (Value) maps to Multilevel Switch Set (Value)
- Basic Report (Current Value, Duration) maps to Multilevel Switch Report (Value, Duration)

Notification Command Class

This device uses the Notification Command Class to report different events.

Notification Type	Event
Home Security	MOTION DETECTION UNKNOWN LOCATION, NO EVENT

Indicator Command Class

The indicator (blue color) on the LED Bar will flash according to the indicator set command received from the hub.

Indicator ID	Property ID
0x50 (NODE IDENTIFY)	0x03 (ON/OFF PERIOD)
0X50 (NODE IDENTIFY)	0x04 (ON/OFF CYCLES)
0X50 (NODE IDENTIFY)	0x05 (ONE TIME ON/OFF PERIOD)

Security 2 Command Classes

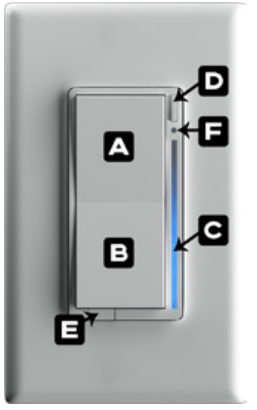
Command Class	Version	Required Security Class
Association	V2	S0/S2
Association Group Information	V3	S0/S2
Central Scene	V3	S0/S2
Configuration	V4	S0/S2
Device Reset Locally	V1	S0/S2
Firmware Update Meta Data	V5	S0/S2
Indicator	V3	S0/S2
Manufacturer Specific	V2	S0/S2
Meter	V2	S0/S2
Multi-Channel Association	V3	S0/S2
Notification	V8	S0/S2

Command Class	Version	Required Security Class
Power Level	V1	S0/S2
Protection	V2	S0/S2
Security 0	V1	None
Security 2	V1	None
Sensor Multilevel	V11	None
Supervision	V1	None
Switch Multilevel	V4	S0/S2
Time	V2	S0/S2
Transport Service	V2	None
Version	V3	S0/S2
Z-Wave® Plus Info	V2	None

This device supports the Indicator Command Class (Version 3), which supports the Indicator ID 0x50 (Identify) and Properties ID 0x03, 0x04 and 0x05. In addition, it supports the Notification Command Class (Version 8), which supports the Home Security ID (0x07) and Properties ID (0x00 and 0x08).

LED Bar Indicators

This switch uses its LED bar to display when certain events take place and/or during configuration modes. Please see the chart below for more details and please visit the following URL to understand how to setup Animatied Notifications: inov.li/vzw32snAN



About	Sequence	Color / Animation
Inclusion / Exclusion	Auto-inclusion or tap Config (D) 3x rapidly	Blue / Pulse (Flashes Green if successful, Red if failed)
Factory Reset	Hold (A) & then config (D) together for 20s, and let go on red	Red / Slow Blink

About	Sequence	Color / Animation
Z-Wave® Signal Test	Hold Config (D) for 5-10 sec.	Green / Solid (Will change to Red if no signal, Yellow if weak signal, Green for good signal)
On / Off Mode	Hold Up (A) and tap Config (D) 3x	Red / Solid
Dimmer Mode	Hold Down (B) and tap Config (D) 3x	Orange / Solid
Enable Smart Bulb Mode	Hold Up (A) and tap Config (D) 4x	Yellow / Solid
Disable Smart Bulb Mode	Hold Down (B) and tap Config (D) 4x	Blue / Solid

About	Sequence	Color / Animation
3-Way Aux Mode	Hold Up (A) and tap Config (D) 5x	White / Solid
Single Pole Mode	Hold Up (A) and tap Config (D) 6x	Cyan / Solid
Single Pole (Full Sine Wave)*	Hold Down (B) and tap Config (D) 6x	Green / Solid
Button Delay Time Set to 0	Hold Up (A) and tap Config (D) 7x	Green / Solid
Button Delay Time Set to 5 (500ms)	Hold Down (B) and tap Config (D) 7x	Yellow / Solid

* Switch must be in On/Off & Neutral Modes

About	Sequence	Color / Animation
Enable Local Protection Mode	Hold Up (A) and tap Config (D) 10x	Green / Solid
Disable Local Protection Mode	Hold Down (A) and tap Config (D) 10x	Red / Solid
Enable Leading Edge Dimming	Hold Up (A) and tap Config (D) 13x	Pink / Solid
Enable Trailing Edge Dimming	Hold Down (A) and tap Config (D) 13x	Indigo / Solid
Enable Remote Protection Mode	Hold Up (A) and tap Config (D) 15x	Green / Solid
Disable Remote Protection Mode	Hold Down (A) and tap Config (D) 15x	Red / Solid

This device supports the Indicator Command Class (Version 3), supports the Indicator ID 0x50 (Identify) and Properties ID 0x03, 0x04

Manufacturer Compatibility

This product can be operated in any Z-Wave® network with other Z-Wave® certified devices from other manufacturers. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network. Each module is designed to act as a repeater, which will re-transmit a radio frequency (RF) signal by routing the signal around obstacles and readio dead spots to ensure that the signal is received at its intended destination. The Inovelli Red Series Presence Switch is a security enabled Z-Wave Plus® device. A security enabled Z-Wave Plus® controller must be used in order to fully utilize the product.

Z-Wave® SmartStart

This device is compatible with SmartStart.

SmartStart enabled products can be added into a Z-Wave® network by scanning the Z-Wave® QR Code found on the bottom left corner of the switch, the back of the box or the insert inside the package with a controller providing SmartStart inclusion. No further action is required and the SmartStart product will be added automatically within 10 minutes of being switch on and in the network vicinity.

Factory Reset / Exclusion Info

To factory reset your device, first, hold the Configuration / Favorites Button (C) followed by the up button (A) for 20 seconds until the LED Bar (D) turns red and let go. The switch should blink red a few times indicating it has been factory reset. You may also use a certified Z-Wave® controller to remove the device from your network to factory default. Only use these procedures in the event that the primary controller is missing or otherwise inoperable.

Exclusion will reset your device as well and can be done directly from the hub. This is helpful if you're running into issues with inclusion. To exclude a device, start the exclusion process on your hub and press the Configuration / Favorites Button (C) 3x rapidly. The LED Bar (D) will start pulsing blue and if successful, it will flash green. If unsuccessful it will flash red.

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Product & Contact Info.

Product & Contact Info Notes

As mentioned in the beginning of the manual, we're all smart home owners ourselves and have an amazing community of people who are eager to help and share their setups.

If you ever run into any issues, please do not hesitate to submit a ticket, or post in the community. We'd love to hear from you.

Community Link: inov.li/community

Submit a Ticket: inov.li/support (or scan the QR Code below)

Thanks again for your support and we look forward to helping you get the most out of our smart home!

FCC/IC Statements

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency

FCC/IC Statements (Cont.)

energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna, increase the separation between the equipment and receiver, connect the equipment into an outlet on a circuit different from that to which the receiver is connected or consult the dealer or an experienced radio/ TV technician for help. This equipment should be installed and

operated with minimum distance 8in (20cm) between the radiator and your body.

IC Caution: This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

DECLARATION DE CONFORMITE D'INDUSTRIE CANADA: Ce périphérique a été testé et reconnu conforme aux limites spécifiées dans RSS-210. Son utilisation est soumise aux deux conditions suivantes: (1) il ne doit pas provoquer d'interférences gênantes et (2) il doit tolérer les interférences, notamment celles susceptibles d'en perturber le fonctionnement.

Product Info

Name: Smart Presence Sensing Dimmer
SKU #: VZW32-SN
Power: 120V AC, 60Hz
Signal (Frequency): 908.42 MHz
Operating Temperature Range: 32-95° F (0-35° C)
Maximum Load (Watts): 400W Incandescent, 300W LED, 150W CFL
Not rated for inductive loads or fans.
Range: Up to 100 meters line of sight between the Wireless Controller (HUB) and the closest Z-Wave® Repeater.
Certifications: ETL Listed, FCC/IC & Z-Wave Plus® Certified

For indoor use. Specifications subject to change without notice due to continuing product improvement.

Company Info / Warranty

If you run into any issues, feel free to reach out to us at: contact@inovelli.com. We typically answer tickets within 24-48 hours and are staffed by actual smart home owners.

All Inovelli products come with a one (1) year warranty (defined as 365 days). This warranty protects you from breakdowns in the material or workmanship under normal use. This warranty is limited in a couple areas. Purchases must be made from Inovelli or an authorized reseller. The product should be used in the manner directed in the instructions. The product must only be used and/or installed in the United States or Canada.

For full warranty info, please visit: inov.li/warranty

Project Linus

This project started as a challenge to come up with a better solution to a PIR switch. A popular YouTuber was having a ton of issues with his PIR switch and it was his first foray into home automation. We offered to create a switch that would solve his problems and get rid of the bad taste in his mouth of what a smart home could be.

It's been quite the journey as mmWave is a very new technology that's ever improving. Being the first to launch a product is challenging, but together with our 1,000's of community members, we made it happen and we couldn't be more proud of the final product.

To see the origin of this project, as well as the journey scan the code or visit: inov.li/redlinus


Andy
Peter
Nathan
Geroge
Rachel
NATE
Jameson
Don
Chris
Alex
Mark
Kris
Cody
Thank You.