

### Thank You.

Thank you for taking the chance on us. We are truly humbled to be a part of your smart home journey and know that out of the many companies out there, you trusted us to make your life simpler and we don't take that for granted. Our mission is to provide the best products, with the best customer support, at the best prices. Sure, every company says that... but we'd like to think we're different. Why? Well, because we have our own smart homes, with our own desires to make our life simpler through home automation. We wake up every day to lights turning on to different colors based on the weather, coffee automatically brewing before we leave for work, and the thermostat changing based on our schedules. We take our nerdiness seriously by engaging in online groups and design our products around community suggestions and needs. We don't pretend to be a multi-billion dollar corporation worried about shareholders and bottom line. We're ok with being the little guy. The underdog, looking out for the best interests of people like us... the everyday smart home enthusiast who is passionate about moving the industry forward and we wouldn't have it any other way. So again, from the bottom of our hearts, thank you for trusting us.



### Table of Contents:

	<b>Page:</b>
How Does the Fan & Light Switch Work?	2
About Z-Wave™ & Range Estimator Tool	3
Z-Wave Distance Worksheet & Best Practices for Installation	4
Wiring Disclaimers	5
Getting to Know Your Switch (LZW36)	6
Switch & Module Wiring (Neutral Required)	7
Installation Instructions (Canopy Module and In-Wall Switch)	7-8
Local Configuration Mode	8
Switch Parameters	9
FCC, Warranty and Z-Wave Information	10
Project Hurricane	11

### Z-Wave SmartStart

This device supports Z-Wave's new SmartStart feature. **Please do not throw out the card within the box that has your unique QR Code with your DSK (Device Specific Key).** This QR Code can also be found on the back of the switch (metal plate) and box.

### HUB Installation Instructions.

All HUB's are different, so why should your installation instructions be the same? Below you'll find a QR Code to specific instructions for your HUB (NOTE: If you don't see your HUB, please scan the, "Other" QR Code). As you can imagine, it's hard to keep written instructions up to date with all the HUB/App changes, so the most recent instructions will be on the site. However, if you're a manual guy/gal, we get it, please see Page 7 for more details! If ever you run into any issues, please reach out to us at: [contact@inovelli.com](mailto:contact@inovelli.com).

#### SmartThings



[inovelli.com/lzw36/setup/smartthings](http://inovelli.com/lzw36/setup/smartthings)

#### Wink



[inovelli.com/lzw36/setup/wink](http://inovelli.com/lzw36/setup/wink)

#### Hubitat



[inovelli.com/lzw36/setup/hubitat](http://inovelli.com/lzw36/setup/hubitat)

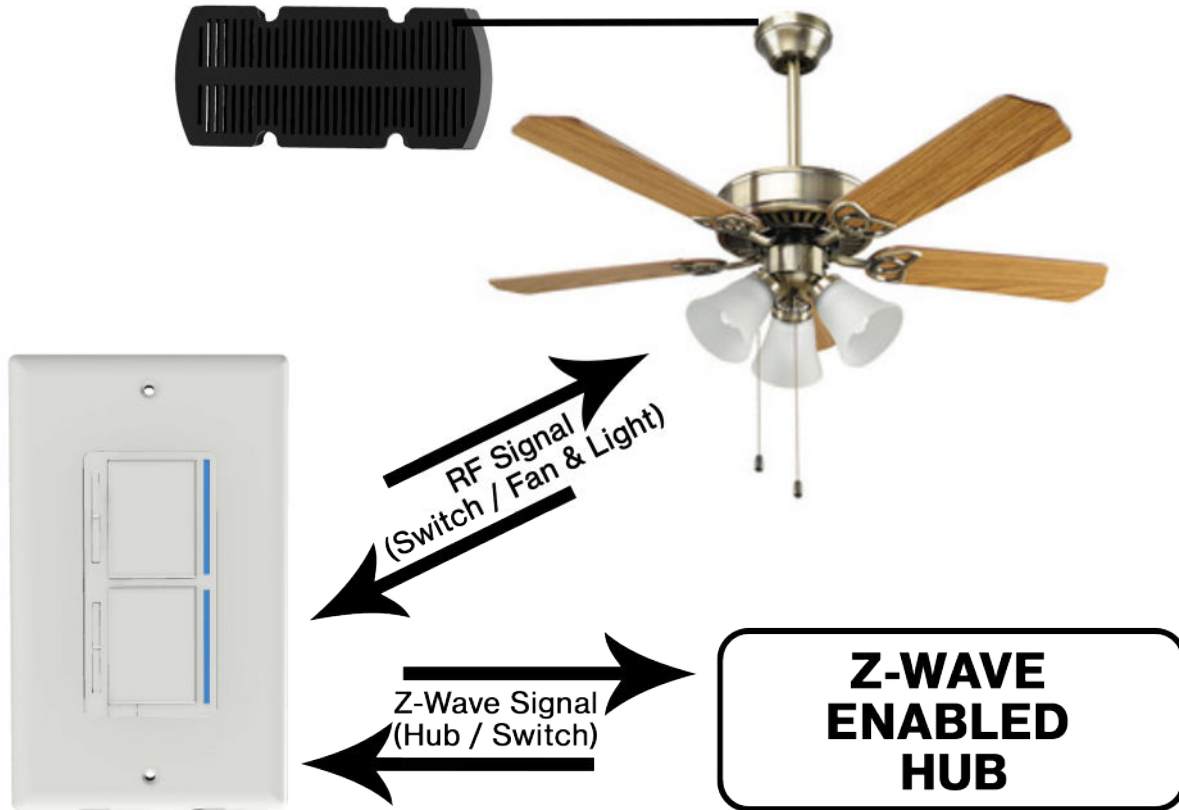
#### Other



[inovelli.com/lzw36/setup/other](http://inovelli.com/lzw36/setup/other)

### Technology Behind the Fan & Light Switch

There are two different wireless protocols that are used to make this fan & light switch. Z-Wave and RF. Z-Wave is what gives the switch remote (smart) control, whereas RF is what connects the switch to the module. In other words, your hub/gateway connects to your switch, where you can tell it to change the speed of the fan or the brightness of the lights. From there the switch sends an RF command to the module to physically make those commands happen at the fan itself.



### Z-Wave & RF Distance Notes

As mentioned above, there are two different protocols that are used with this switch and module combination. It's important to understand the limitations of the distances of RF and Z-Wave so that your switch and module can communicate effectively.

RF (Switch to Fan/Light Module): The maximum distance between the Switch and Module can be 32.8ft (10m)

Z-Wave (Switch to Hub): Please see Pages 3 & 4 to calculate the maximum distance

NOTE: Please start with your Z-Wave switch first to make sure it's within distance and then make sure your module is within distance of the switch.

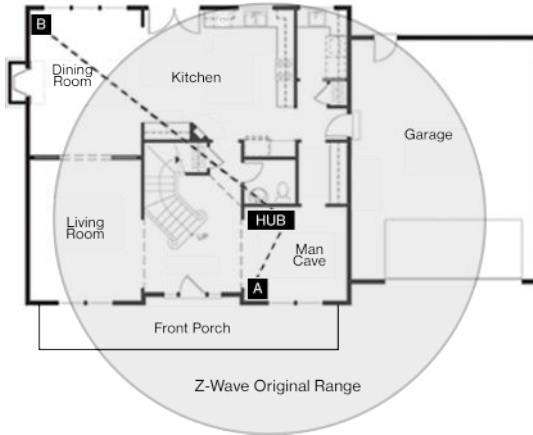
### Z-Wave Range Worksheet.

Feel free to use the below worksheet to give an estimate on where you can put your Z-Wave Switch relative to your HUB (or other Z-Wave repeater). Below is an example of how to use the sheet, using "Example 1" from Page 3.

#### Example #1 -- Original Z-Wave Range

Based on the example chart to the right, you can see that, "Switch B" is out of range as the signal would only reach to about the dining room.

- HUB** Your Z-Wave Enabled HUB
- A** Inovelli Switch #1
- B** Inovelli Switch #2



Starting Distance	Obstacle	Signal Depreciation	Ending Distance
100m // 328ft	Inner Wall	40%	60m // 197ft
60m // 197ft	Inner Wall	40%	36m // 118ft
36m // 118ft	Wood Stairs	60%	14m // 47ft
14m // 47ft	Inner Wall	40%	9m // 28ft
9m // 28ft	Wood Cabinet	50%	5m // 15ft
5m // 15ft	Wood Table & Chairs	60%	2m // 7ft

For the starting Distance, use 100m. Then look directly from your HUB to wherever you'd like to put the outlet and see what obstacles are in the way. Then list those obstacles on the worksheet below (using the charts from Page 2).

Starting Distance	Obstacle	Signal Depreciation	Ending Distance

### Best Practices for Pairing the Z-Wave Portion (Wall Switch) to Your Hub/Gateway:

Now that you've read how to calculate the Z-Wave range and have determined the best location to put your switch, it's important to understand some best practices of how to pair this device. Below are a few things to keep in mind when you start your individualized pairing instructions (Pages 7-8).

**NOTE:** As mentioned on Page 2, please make sure your switch is within Z-Wave distance first, and then make sure the RF portion (switch to module) is within distance (max distance apart is 32.8ft or 10m).

### Calculate the Maximum Distance From the Worksheet Above and Place Well Within That Distance

Please use the worksheet above to calculate your maximum distance. This will save us both the headache of offline devices. Remember to add all objects that could potentially be in the way and it's our recommendation to be conservative with the distance numbers.

### If the Switch is Not Including, Try an Exclusion

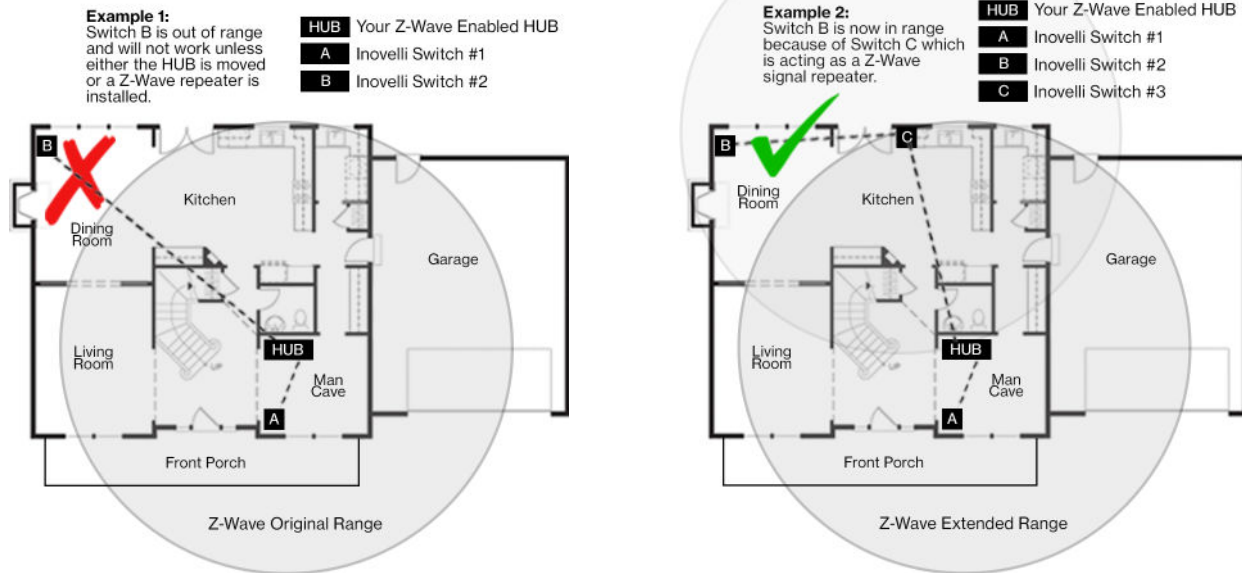
Z-Wave devices can only be included (paired) to one HUB at a time. Sometimes, what happens is that the factory tests the devices by including it to their network and forgets to remove the device from their network, causing the switch to believe that it's paired to the factory HUB. While this is extremely rare, it may happen. This can also happen if you purchased this switch used. Follow the exclusion instructions located on Page 8 if you run into issues or check the range to make sure you are within range of the HUB. Or, if you've installed it already, **simply hold down the A + B buttons for (5) seconds to see whether or not the switch is within range. If it lights up GREEN and stays GREEN after you've let go, then it's within range, however, if it lights up RED, then you are not within range.**

### About Z-Wave.

Z-Wave is an incredible technology. With it powering your home, you can choose from over 600 companies and 2100 products, all of which will work with each other. The more devices, the more stable the network. The purpose of this portion of the manual is to help you understand how Z-Wave works (in layman's terms) as well as help you organize an efficient Z-Wave network, setting you up for success in the long run. After all, we're assuming you'll want more than one smart home device!

### Z-Wave Network | Using Devices That Repeat Signals.

As referenced in the intro, Z-Wave can be used with a few devices or it can be used to build a large network. Below you'll see two examples. In the first example, a user has a HUB which is looking for Z-Wave devices within its radius. Z-Wave devices outside this radius will not be found and need to either be moved within the radius or use a repeating device to reach it. The second example shows how a repeater can be used to reach a device outside of the initial radius. Keep this in mind when building your own network and make sure to use the range estimator below.



**NOTE:** Z-Wave range will never be a perfect circle due to walls, furniture, etc. The above is for reference only, please use the, "Range Estimator" below and the Worksheet on Page 3 for a better idea of where to place your switch or whether or not your chosen location will be in range.

### Z-Wave Range Estimator.

Please use the below information to determine the depreciation of the Z-Wave signal. Z-Wave devices should have a distance of approximately 100m (328ft) without any obstacles in the way. Using the below information, if a signal has to travel through an inner wall, it will lose approximately 40% of its signal. Therefore, 100m multiplied by (100% - 40%) = 60m (197ft). Do this for every wall, window, etc and you will have your approximation. There's a worksheet on Page 3 that will help. As always, this is just an estimate. Depending on the manufacturer's quality for your other Z-Wave products, your signal may vary.

Material	Thickness	Signal Depreciation
Aerated Concrete Stone	< 30cm // 11.8"	20 %
Aluminum Coating	< 1mm // 0.04"	100 %
Ceiling	< 30cm // 11.8"	70 %
Furniture (non-wood)	< 30cm // 11.8"	40-60%
Glass (w/out metal coating)	< 5cm // 2.0"	10 %
Inner Wall	< 30cm // 11.8"	40 %
Iron Reinforced Concrete	< 30cm // 11.8"	30-90 %

Material	Thickness	Signal Depreciation
Metal Grid	< 1mm // 0.04"	90 %
Outer Wall	< 30cm // 11.8"	60 %
Plaster	< 10cm // 3.9"	10 %
Pumice	< 30cm // 11.8"	10 %
Red Brick	< 30cm // 11.8"	35 %
Stone	< 30cm // 11.8"	30 %
Wood	< 30cm // 11.8"	40-60 %

### Wiring Disclaimers

A quick note before we give out the wiring schematics. **Please do not try installing this device if you are unsure of how electrical circuits operate within your home.** As exciting as it is to have a smart switch installed, it can be dangerous and even life-threatening if you do not install this correctly. Please consult a qualified electrician if necessary as **we are unable to give wiring advice outside of schematics.**

#### ⚠ CAUTION - PLEASE READ!

This device (LZW36) 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 the LZW36 on non-approved power lines may have hazardous consequences. Cet appareil (LZW36) est conçu pour

#### ⚠ ATTENTION - VEUILLEZ LIRE SVP!

être installé conformément au National Electric Code et aux réglementations locales aux États-Unis, ou au Canadian Electrical Code et aux réglementations locales au Canada. Si vous n'êtes pas sûr ou mal à l'aise d'effectuer cette installation, consultez un électricien qualifié.

Ce produit est conçu pour une utilisation en intérieur uniquement et n'est pas conçu ou approuvé pour une utilisation sur des lignes électriques autres que 120 VCA, 60 Hz, monophasé. Tenter d'utiliser le LZW36 sur des lignes électriques non approuvées peut avoir des conséquences dangereuses.

#### ⚠ 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, use the LZW36 load output to control no more than 200 watts (Incandescent) or 100W (LED/CFL) plus no more than 1 Amp of Fan load. Dimming an inductive load (by connecting to the light load wire), such as a fan or transformer, could cause damage to the dimmer, the load bearing device, or both.

To install your Fan/Light Switch, you'll need to identify the following four wires:

- 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)

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

#### ⚠ PRATIQUES D'INSTALLATION RECOMMANDÉES

Utiliser uniquement à l'intérieur ou dans une boîte classée extérieure

Éteignez le disjoncteur - L'installation de cet interrupteur et de ce module sous tension vous exposera à des tensions dangereuses

Connectez uniquement du fil en cuivre ou en cuivre au commutateur ou au module

Pour réduire le risque de surchauffe et les dommages possibles à d'autres équipements, utilisez la sortie de charge LZW36 pour contrôler pas plus de 200 watts (incandescent) ou 100W (LED / CFL) plus pas plus de 1 ampère de charge de ventilateur. La gradation d'une charge inductive (en la connectant au fil de charge légère), comme un ventilateur ou un transformateur, pourrait endommager le gradateur, le dispositif de support de charge ou les deux.

Pour installer votre interrupteur ventilateur / éclairage, vous devez identifier les quatre fils suivants:

- Ligne: généralement noire et peut également être appelée HOT ou LIVE, et transporte de l'électricité 120VAC dans le boîtier électrique
- Neutre: généralement blanc et est généralement connecté en guirlande d'une boîte à l'autre, apparaissant généralement sous la forme d'un faisceau de fils blancs
- Charge: généralement noire, bleue ou rouge
- Masse: fil de cuivre nu ou luminaire métallique (si mis à la terre)

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

#### ⚠ OTHER WARNINGS ⚠ AUTRES AVERTISSEMENTS

Risk of Fire  
Risk of Electrical Shock  
Risk of Burns

Risque d'incendie  
Risque de choc électrique  
Risque de brûlures

#### ⚠ MEDICAL EQUIPMENT ⚠ ÉQUIPEMENT MÉDICAL

Please DO NOT use this switch to control Medical or Life Support equipment. Z-Wave devices should never be used to control the On/Off status of Medical and/or Life Support equipment.

Veillez NE PAS utiliser cet interrupteur pour contrôler l'équipement médical ou de survie. Les appareils Z-Wave ne doivent jamais être utilisés pour contrôler l'état On / Off des équipements médicaux et / ou de survie.

**PLEASE NOTE:** As of 05/25/19, we are unable to provide electrical and/or wiring advice outside of our schematics. If you are unable to read a schematic or are not familiar with wiring, we suggest hiring an electrician. We apologize for any inconvenience.

**Bulb Compatibility:** We'll keep a list of compatible bulbs in our community which can be found here:

<https://support.inovelli.com/portal/kb/articles/lzw36-fan-light-switch-compatible-bulbs>

### Getting to Know Your LZW36 Fan Switch

Now that you're familiar with Z-Wave and how it works, it's time to understand the basics of your new smart switch. For more advanced configurations, please see Pages 8-10.

**A. Light Dimmer (and Scene Control\*):** This button can be used to increase or decrease the dimness level on your light. Press (hold) up to increase brightness and press (hold) down to decrease the brightness. Also, a single press will send a scene command to your hub.

**B. Light On/Off Button (and Scene Control\*):** Press this button to turn on and off the fan light(s). This button can also be used to trigger Z-Wave scenes. You may add up to 7 scenes (Tap 1x, 2x, 3x, 4x, 5x, Hold, Release).

**C. Light RGB LED Bar (with Notifications\*):** Shows the level at which the fan light(s) are set at. In addition, it can be used as a notifier for various events (i.e.: turn purple if front door is open).

**D. Fan Speed (and Scene Control\*):** This button can be used to increase or decrease the speed of your fan. Press (hold) up to increase the speed and press (hold) down to decrease the speed. Also, a single press will send a scene command to your hub.

**E. Fan On/Off Button (and Scene Control\*):** Press this button to turn on and off the fan. This button can also be used to trigger Z-Wave scenes. You may add up to 7 scenes (Tap 1x, 2x, 3x, 4x, 5x, Hold, Release).

**F. Light RGB LED Bar (with Notifications\*):** Shows the level at which the fan speed is set at. In addition, it can be used as a notifier for various events (i.e.: turn red when your alarm is armed).

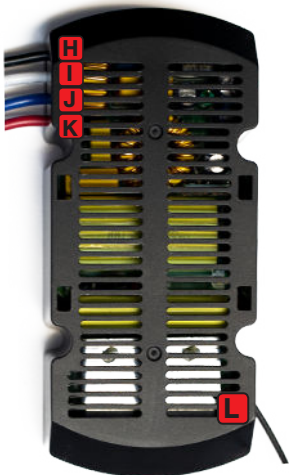
**G. Air Gap Switch:** This will reboot the switch if it needs to be rebooted (NOTE: The air-gap switch will not cut power to the module).

**NOT SHOWN:** Energy Monitoring\* and Scene Control\* are built-in features of this switch as well.

### Button Combination Cheat Sheet

Button Combination	Result
Hold A + B for 10 Seconds	Enter Local Config Mode
Hold A + Tap B 2x	Dismiss Light Notification
Hold D + Tap E 2x	Dismiss Fan Notification
<b>Hold A + Tap B 3x</b>	<b>Enter Z-Wave Inclusion / Exclusion Mode</b>
Hold D + Tap E 3x	Enter Fan Module Pairing Mode
Hold A + Tap B 8x	Enable Local Protection on Light Buttons (Disable Relay)
Hold D + Tap E 8x	Enable Local Protection on Fan Buttons (Disable Relay)
Hold A + B for 5 Seconds	Detect Z-Wave Network Signal
Hold A + B for 20 Seconds	Z-Wave Factory Reset
Hold D + E for 20 Seconds	Fan Module Factory Reset

### Getting to Know Your LZW36 Fan Module



Full wires not shown

**H. Line Wire (Black):** This wire will be what powers the module.

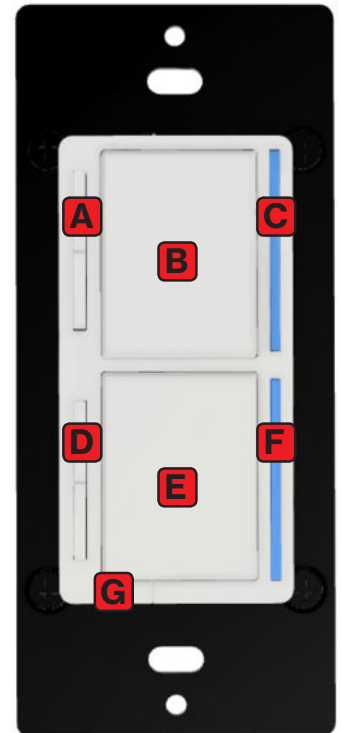
**I. Neutral Wire (White):** This is needed to keep power to the RF chip.

**J. Light Load (Blue):** This is what connects to the fan's light wire.

**K. Fan Load (Red):** This is what connects to the fan's motor wire.

**L. RF Antenna:** This is the module's RF antenna.

**NOTE:** If power is cut to the switch and module, it will take approximately 30 seconds to reconnect.

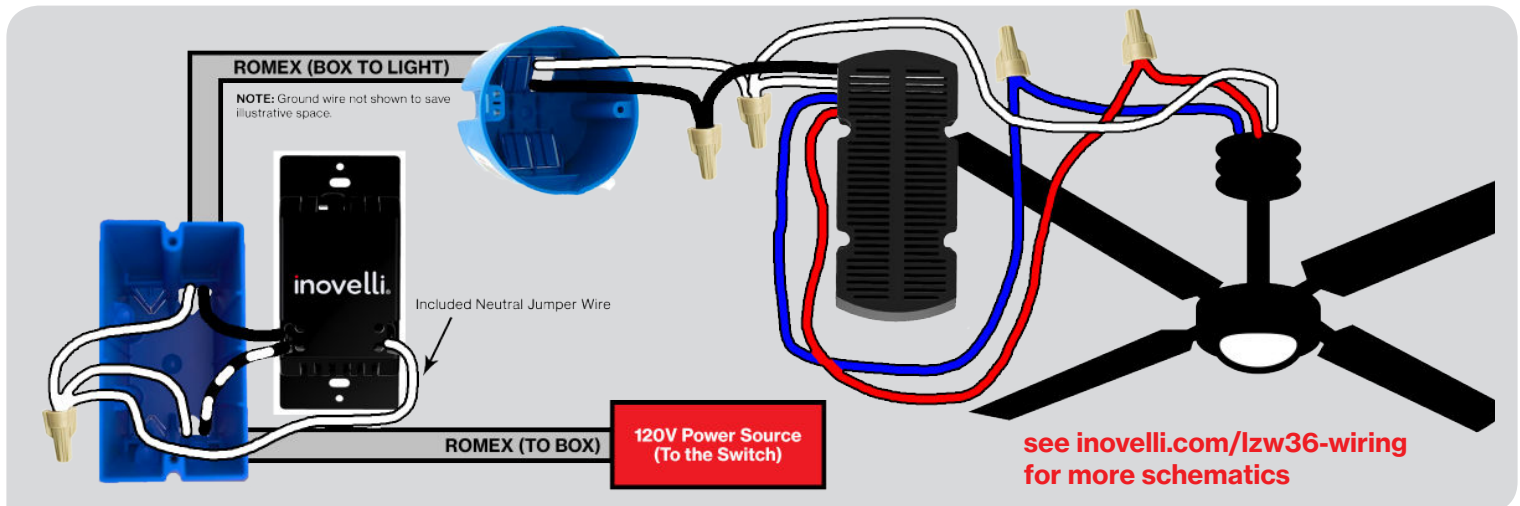


\* Please make sure your HUB supports these features. See website for more details.

### Wiring Instructions: Neutral Wire Required (Quick Notes)

Please note that you will need a neutral wire in order to install this switch. In addition, you will be connecting the Line/Hot to the Load. Here are some quick notes to read prior to installing your switch:

- ▶ If you do not see your wiring diagram here, please check online as we will constantly update and add schematics to our site and also have a forum where you can help each other. Again, we can no longer provide specific wiring or electrical help.
- ▶ This switch will not work in a 3-Way (or multi-switch) setting.



#### WIRING KEY & PRO TIPS

(Please see additional PRO-TIPS on Page 5 if necessary)

	Load		Fan Load Connect to Fan Motor
	Line/Hot		Light Load Connect to Light Load
	Neutral		Romex Cable

- ▶ Remember to turn off the power prior to installation and ensure all connections are made prior to turning the power back on. No need to be a hero!
- ▶ The Line wire is Hot. Please use a multimeter to locate it.
- ▶ Please remember to Ground all connections.

### Installing the Fan Module in the Fan Bracket

Your fan module should fit snugly in the fan bracket that helps hold your fan to the ceiling.



### Including (Pairing) Your Switch & Module: General Instructions

Below are step by step instructions on how to pair your fan switch and fan module. For hub specific instructions, please use the QR codes or URL's on Page 1.

### Step 1: Gather Your Materials, Find an Appropriate Location, and Install the Fan Switch

Materials Needed: Wire nuts, screwdriver, and access to both the line (hot) and neutral wires.

- ▶ Locate an area to install your switch within the recommended distance (Pages 3-4) from your HUB/Gateway.
- ▶ Walls, furniture, and other obstructions may degrade the communication between the Switch and your HUB/Gateway, so please keep this in mind when selecting a location.
- ▶ Before cutting power to your switch and fan, using the fans pull chains, set the fan to the highest speed and turn the light(s) on. Moving forward you will no longer need to use the pull chains to control the fan or light(s).
- ▶ Follow the wiring instructions on page 7 -- **REMEMBER: TURN OFF ELECTRICITY BEFORE INSTALLATION!**

Continued on next page . . .

**NOTE:** If you'd like to verify if the switch is within range of your Z-Wave hub before installing the canopy module, feel free to turn the power back on. The switch should light up and run through a series of colors before finally turning blue. Once the switch LED bars are blue, hold down the top of Button A and Button B for 5 seconds and the switch LED's will turn Green. Release the buttons and if the switch LED's remain Green, then the switch is within Z-Wave range. If the LED bars turn Red, then the switch is not within range.

### Step 2: Installing the Fan Canopy Module

Materials Needed: Wire nuts, screwdriver, access to a neutral (white), load (black), fan and light wires and the included zip-tie.

- ▶ Ensure the distance between your fan switch and module is no more than 32.8ft (10m) as that is the maximum distance the RF signal can travel from the switch to the canopy module.
- ▶ Remove your ceiling fan from the electrical box and identify the load (black -- which is now hot), neutral (white), and the fan motor and light loads (usually red is the fan and blue is the light, but your wires may be different).
- ▶ Connect the wires together as shown on Page 7 or as shown in Figure 1.1.
- ▶ Once completed, it's time to check to make sure everything works and is paired correctly. Please fasten the canopy to the fan bracket using the included zip-tie (as shown on page 7), ensure all connections are secure with no exposed copper and re-assemble your fan.

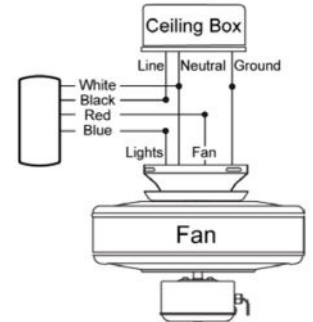


Figure 1.1

### Step 3: Pairing the Switch to the Canopy Module

Now that everything is installed, and your fan is re-assembled it's time to pair the switch to the canopy module.

**NOTE: The fan module should be paired to the Z-Wave switch from the factory. In case you have an issue, below is how you can manually do so. Warning: Do not try to test the fan without it being secured to the ceiling.**

**Avertissement: N'essayez pas de tester le ventilateur sans qu'il soit fixé au plafond.**

- ▶ With the fan secured to the ceiling and the switch secured to the wall, let's start the pairing process of the switch and module.
- ▶ To pair the switch to the module, apply power from the circuit breaker to both devices. Note: After trying to pair to the Z-Wave switch for 30 seconds, if not successful, the fan module goes into pairing mode for 2 minutes. You can tell it is in this mode by the bulb in the fixture pulsing.
- ▶ Press and hold Button D and press Button E 3x. If successful, the LED bar will blink Green.
- ▶ You should now be able to control the fan speed and light brightness from the switch manually. Press Buttons B & E to turn the fan and light on and off, and hold up and down Buttons A & D to change the fan speed and light dim level.

#### Having Problems Including? Try an Exclusion

Place your hub or gateway into exclusion mode. Then:

Hold button A + Press Button B 3x. If it is successful the LED will blink green.

Then, try including again.

### Step 4: Pairing the Switch to Your Hub/Gateway

Now that your switch and canopy module are paired, it's time to pair your switch to your Z-Wave enabled hub or gateway.

- ▶ Enable the inclusion process on your Hub or Gateway.
- ▶ Hold down button A and press button B 3x quickly and your LED Bars will pulse blue signifying the switch is in inclusion mode. If successful, the switch LED Bars will flash Green and if unsuccessful, the LED Bars will flash Red.
- ▶ If the LED Bars flash Red, please check your Z-Wave signal by referencing the Note at the top of the page.
- ▶ If your switch is within range, you may want to try an exclusion. Instructions are to the right.

### Switch (Local) Configuration Mode

There are a couple different ways you can set the configuration parameters of your switch (listed on page 9). It is recommended that you set them from your hub when possible, but if not, you can set them directly from the switch! For more detailed instructions, please check our support webpage at [support.inovelli.com](http://support.inovelli.com). Here are some basic instructions:

1. Enter into either light configuration mode or fan configuration mode based on which parameters you want to edit. **Light: Hold down the A Button + B Button for 10 Seconds. Fan Hold down the D Button + E Button for 10 Seconds.**
2. Press either the **light on/off button (B)** or the **fan on/off button (E)** the number of times that corresponds with the parameter you want to change (listed on page 9).
3. Use the **light level up/down (A)** or **fan level up/down (D)** buttons to set the parameter to the number you would like. Each press increments the value by 1.
4. The LED on the switch will flash yellow to show you which parameter number you are editing. The LED will also flash purple to show you the value that you have assigned. A long flash represents 10s and a short flash represents 1s. So, for example, two long flashes followed by three short flashes would represent 23.
5. After you are finished, **press and hold JUST the B or E button** (depending on whether you are editing the light or fan configuration) for 10 seconds to save and exit.

## Switch Parameters

Below you'll find the various parameters associated with your switch. There are a ton of options for customization and as you can imagine, it's hard to write out all the possibilities in a manual. Please use this as a guide, but also feel free to check out our site where we'll give some specific examples using each parameter.

Param #	Change at the switch?	Switch Config #	Light or Fan	Name	Description	Size	Range	Default
1	Yes	1	L	Dimming Speed	This changes the speed in which the attached light dims up or down. A setting of 0 should turn the light immediately on or off (almost like an on/off switch). Increasing the value should slow down the transition speed.	1	0.100	3
2	No		L	Dimming Speed (From Switch)	This changes the speed in which the attached light dims up or down when controlled from the physical switch. A setting of 0 should turn the light immediately on or off (almost like an on/off switch). Increasing the value should slow down the transition speed. A setting of 99 should keep this in sync with parameter 1.	1	0.99	99
3	No		L	Ramp Rate	This changes the speed in which the attached light turns on or off. For example, when a user sends the switch a basicSet(value: 0xFF) or basicSet(value: 0x00), this is the speed in which those actions take place. A setting of 0 should turn the light immediately on or off (almost like an on/off switch). Increasing the value should slow down the transition speed. A setting of 99 should keep this in sync with parameter 1.	1	0.99	99
4	No		L	Ramp Rate (From Switch)	This changes the speed in which the attached light turns on or off from the physical switch. For example, when a user presses the up or down button, this is the speed in which those actions take place. A setting of 0 should turn the light immediately on or off (almost like an on/off switch). Increasing the value should slow down the transition speed. A setting of 99 should keep this in sync with parameter 1.	1	0.99	99
5	Yes	2	L	Minimum Level	The minimum level that the dimmer allows the bulb to be dimmed to. Useful when the user has a bulb that does not turn on at a lower level.	1	1.45	1
6	Yes	3	L	Maximum Level	The maximum level that the dimmer allows the bulb to be dimmed to. Useful when the user has an LED bulb that reaches its maximum level before the dimmer value of 99.	1	55.99	99
7	Yes	1	F	Minimum Level	The minimum level that the dimmer allows the fan to be dimmed to. Useful when the user has a fan that does not turn on at a lower level.	1	1.45	1
8	Yes	2	F	Maximum Level	The maximum level that the dimmer allows the fan to be dimmed to.	1	55.99	99
10	No		L	Auto Off Timer	Automatically turns the light off after this many seconds. When the switch is turned on a timer is started that is the duration of this setting. When the timer expires, the switch is turned off.	2	0. 32767	0
11	No		F	Auto Off Timer	Automatically turns the fan off after this many seconds. When the fan is turned on a timer is started that is the duration of this setting. When the timer expires, the fan is turned off.	2	0. 32767	0
12	Yes	4	L	Default Level (Local)	Default level for the dimmer when it is powered on from the local switch. A setting of 0 means that the switch will return to the level that it was on before it was turned off.	1	1.99	0
13	Yes	5	L	Default Level (Z-Wave)	Default level for the dimmer when it is powered on from a Z-Wave command. A setting of 0 means that the switch will return to the level that it was on before it was turned off.	1	1.99	0
14	Yes	3	F	Default Level (Local)	Default level for the fan when it is powered on from the local switch. A setting of 0 means that the switch will return to the level that it was on before it was turned off.	1	1.99	0
15	Yes	4	F	Default Level (Z-Wave)	Default level for the fan when it is powered on from a Z-Wave command. A setting of 0 means that the switch will return to the level that it was on before it was turned off.	1	1.99	0
16	Yes	6	L	After Power Restored	The state the switch should return to once power is restored after power failure. 0 = off, 1-99 = level, 100=previous.	1	0.100	100
17	Yes	5	F	After Power Restored	The state the switch should return to once power is restored after power failure. 0 = off, 1-99 = level, 100=previous.	1	0.100	0
18	Yes	7	L	LED Indicator Color	This is the color of the Light LED strip represented as part of the HUE color wheel. Since the wheel has 360 values and this parameter only has 255, the following equation can be used to determine the color: $\text{value}/255 * 350 = \text{Hue color wheel value}$	2	0.255	170
19	Yes	8	L	LED Strip Intensity	This is the intensity of the Light LED strip.	1	0.10	5
20	Yes	6	F	LED Indicator Color	This is the color of the Fan LED strip represented as part of the HUE color wheel. Since the wheel has 360 values and this parameter only has 255, the following equation can be used to determine the color: $\text{value}/255 * 350 = \text{Hue color wheel value}$	2	0.255	170
21	Yes	7	F	LED Strip Intensity	This is the intensity of the Fan LED strip.	1	0.10	5
22	Yes	9	L	LED Strip Intensity (When OFF)	This is the intensity of the Light LED strip when the switch is off. This is useful for users to see the light switch location when the lights are off.	1	0.10	1
23	Yes	8	F	LED Strip Intensity (When OFF)	This is the intensity of the Fan LED strip when the switch is off. This is useful for users to see the light switch location when the lights are off.	1	0.10	1
24	No		L	LED Strip Effect	This will allow you to add some sweet effects to your LED Bar (i.e.: pulse, chase, solid, etc). Byte 1 = Color, Byte 2 = Brightness Level, Byte 3 = Effect, Byte 4 = Duration. *Please see <a href="https://inovelli.com/lzw36/notifications">https://inovelli.com/lzw36/notifications</a>	4	0.83- 823359	0
25	No		F	LED Strip Effect	This will allow you to add some sweet effects to your LED Bar (i.e.: pulse, chase, solid, etc). Byte 1 = Color, Byte 2 = Brightness Level, Byte 3 = Effect, Byte 4 = Duration. *Please see <a href="https://inovelli.com/lzw36/notifications">https://inovelli.com/lzw36/notifications</a>	4	0.83- 823359	0
26	Yes	10	L	LED Strip Timeout	When the LED strip is disabled (Light LED Strip Intensity is set to 0), this setting allows the LED strip to turn on temporarily while being adjusted.	1	0.10	3
27	Yes	9	F	LED Strip Timeout	When the LED strip is disabled (Fan LED Strip Intensity is set to 0), this setting allows the LED strip to turn on temporarily while being adjusted.	1	0.10	3
28	No		L/F	Active Power Reports	The power level change that will result in a new power report being sent. The value is a percentage of the previous report. 0 = disabled.	1	0.100	10
29	No		L/F	Periodic Power & Energy Reports	Time period between consecutive power & energy reports being sent (in seconds). The timer is reset after each report is sent.	2	0. 32767	3600
30	No		L/F	Energy Reports	Energy level change which will result in sending a new energy report. Available settings: 1-127 (0.01-1.27 kWh) 0 = disabled.	1	0.100	10

## Z-Wave Command Classes

5E - COMMAND\_CLASS\_ZWAVEPLUS\_INFO  
 55 - COMMAND\_CLASS\_TRANSPORT\_SERVICE  
 98 - COMMAND\_CLASS\_SECURITY  
 9F - COMMAND\_CLASS\_SECURITY\_2  
 6C - COMMAND\_CLASS\_SUPERVISION  
 26 - COMMAND\_CLASS\_SWITCH\_MULTILEVEL  
 70 - COMMAND\_CLASS\_CONFIGURATION  
 85 - COMMAND\_CLASS\_ASSOCIATION  
 59 - COMMAND\_CLASS\_ASSOCIATION\_GRP\_INFO  
 86 - COMMAND\_CLASS\_VERSION  
 72 - COMMAND\_CLASS\_MANUFACTURER\_SPECIFIC  
 5A - COMMAND\_CLASS\_DEVICE\_RESET\_LOCALLY  
 73 - COMMAND\_CLASS\_POWERLEVEL  
 75 - COMMAND\_CLASS\_PROTECTION  
 22 - COMMAND\_CLASS\_APPLICATION\_STATUS  
 7A - COMMAND\_CLASS\_FIRMWARE\_UPDATE\_MD  
 5B - COMMAND\_CLASS\_CENTRAL\_SCENE\_V3  
 8E - COMMAND\_CLASS\_MULTI\_CHANNEL\_ASSOCIATION\_V2  
 87 - COMMAND\_CLASS\_INDICATOR  
 60 - COMMAND\_CLASS\_MULTI\_CHANNEL\_V4

## Z-Wave Association Groups

Group #	Max Nodes	Commands
Group 1	5	1. Central Scene 2. Basic Report 3. Multilevel Report 4. Protection Report 5. Device Reset Locally 6. Meter Report
Group2 (Light) Group5 (Fan)	5	Basic Set
Group3 (Light) Group6 (Fan)	5	Switch Multilevel Set
Group4 (Light) Group7 (Fan)	5	Switch Multilevel Set

## Resetting Your Device

You may hold the Light Level Button (A) + Light On/Off Button (B) for 20 seconds or use a certified controller to remove the device from your network to factory default. Only use this procedure in the event that the network primary controller is missing or otherwise inoperable.

## OTA NOTE

Over-the-Air updates are available on this switch. It will take about 1 minute after completion for it to, "settle", so please leave the switch alone for a minute after flashing. If the power is cut off immediately after OTA is completed, OTA may fail.

**Group 1: Lifeline** -- Members of this group will receive unsolicited messages related to the status of the switch.

**Group 2: Basic Set - Light** -- Sends On & Off commands to associated devices. (1. Single press UP button sends BasicSet (0xFF) and 2. Single press Down sends BasicSet (0x00)

**Group 3: Switch Multilevel Set - Light** -- Sends set level commands to associated devices when switch is pressed.

(1. Hold & Release Up or Down button sends SwitchMultiLevelSet which keeps associated devices in sync with this device. 2. Single press Up button sends SwitchMultiLevelSet(0xFF) and 4. Single press Down button sends SwitchMultiLevelSet(0x00)

**Group 4: Switch Multilevel Set - Light** -- Sends start / stop level change to associated devices.

(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: Basic Set - Fan** -- Sends On & Off commands to associated devices. (1. Single press UP button sends BasicSet (0xFF) and 2. Single press Down sends BasicSet (0x00)

**Group 6: Switch Multilevel Set - Fan** -- Sends set level commands to associated devices when switch is pressed.

(1. Hold & Release Up or Down button sends SwitchMultiLevelSet which keeps associated devices in sync with this device. 2. Single press Up button sends SwitchMultiLevelSet(0xFF) and 4. Single press Down button sends SwitchMultiLevelSet(0x00)

**Group 7: Switch Multilevel Set - Fan** -- Sends start / stop level change to associated devices.

(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

## Federal Communications Commission (FCC) Statement

**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 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 licence-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 reçues, notamment celles susceptibles d'en perturber le fonctionnement. Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.

## Warranty and Specifications

**Warranty:** Inovelli will replace any defective unit for the lifetime of the unit, pending the unit was used in the manner it was intended to. Please email us at: [contact@inovelli.com](mailto:contact@inovelli.com) or visit us at [www.inovelli.com/warranty](http://www.inovelli.com/warranty) for full details.

### Specifications for Model # LZW36:

Power: 120V AC, 60Hz, Signal (Frequency): 908.42 MHz, Operating Temperature Range: 32-95° F (0-35° C)

Maximum Load: 200W Incandescent, or 100W LED / CFL

Range: Up to 100 meters line of sight between the Wireless Controller (HUB) and the closest Z-Wave Module

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

Approval: UL Listed / FCC / IC / Z-Wave Plus™ Certified

CAN ICES-003 (B)/NMB-003(B)

### Project Hurricane

You may have noticed our signatures and project name on the inside of the box and wondered, “what is that all about?”. Well, great question! All of our products have a project name associated with them that means something to us and speaks directly to the device itself. It's personality if you will. In addition to the project name, our signatures indicate that we've all signed off on the project. We believe in the project and worked hard, along with you, to bring it to life.

Project, “Hurricane” has a couple of meanings to it. The first meaning was that this device was one of the first smart home products ever requested by the community, even before Inovelli started. I was attending the University of Miami (Hurricanes) and one of the projects we had to do involved smart home products. I put a poll out to see what the most requested product was that doesn't exist yet and the fan/light combo was it. So, project, “Hurricane” is a shout out to my alma-mater as without us doing a project in class, Inovelli (and project, “Hurricane”) wouldn't exist. The other meaning is just silly in that it's a fan that creates breeze and of course Hurricane's produce wind.

Anyway, thank you not only for your support, but for helping us put out the first Z-Wave Fan & Light module. A special thank you goes out to our Beta Testers as well, we couldn't have done it without you!



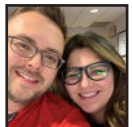
Eric H.  
Founder / CEO

Project Hurricane has been my favorite innovation project to work on. It's been something I've wanted personally ever since I began my smart home journey. I've been able to automate everything in my house except these darn fans and, of course, it's the one thing my daughters always leave on! Anyway, we're super pumped to be the first to offer these in Z-Wave and hope you like them too.



Eric M.  
CTO

This has been an exciting project for me. It will be our first Z-Wave 700 series product to go to market and is one of (if not) the first in the industry. Other than being the first in that regard, it has an innovative design that utilizes Z-Wave & RF to provide a compact product that solves a need that has been in the smart home market for many years. Inovelli customers can rejoice knowing that they finally have a highly capable device to control the fans in their home.



Nathan  
CSO

The fan and light switch is going to be huge for the smart home industry. There are so many ceiling fans out there that just want a little automation in their lives! The part I'm most excited about is the scenes, notifications and all the other bells and whistles that come with this switch. Finally, the fact that we had an entire group of community beta testers testing this has been amazing.



Brianna  
Sr. Marketing  
Manager

Working with the team on this was so much fun. Watching everyone get excited about making something that has been asked for going on three years now from the community was truly an amazing experience. I can't wait to start posting on social, sending out emails and letting the world know about these switches!



Courtney  
Operations  
Manager

This project holds a special place in my heart in that it was the first one I really got to manage on my own. It had its fair share of challenges (literally a pandemic happening) but we've pulled through and came out with a pretty awesome product that's being used in my own smart house! It was also really cool to work with the community to bring this project to life -- it really felt like a team effort.