



# Getting Started Guide

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FAN SPEED CONTROLLER

Cat. No. ZW4SF

WEB VERSION





## Welcome to the Decora Smart™ family of Z-Wave® enabled devices



See the complete line of Z-Wave enabled dimmers, switches,  
switches, outlet, fan speed controller and plug-ins at  
[leviton.com/decorsmart](http://leviton.com/decorsmart)

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## Welcome



The Decora Smart™ branded Z-Wave® enabled Fan Speed Controller is designed for use with modern Z-Wave hubs.

This product can be operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers. Your fan controller will act as a repeater in the network to increase the reliability of the network.

The Decora Smart Z-Wave fan controller allows you to select one of 4 fan speeds or turn your fan off from a smartphone or tablet or by voice when used with a Z-Wave hub.

The Decora Smart fan controller looks at home with your other Decora® branded products. It has convenient manual on/off control, and an integrated bar to provide easy speed adjustment and hidden indicator lights.



### We are here to help



#### CALL

1-800-824-3005 (USA)

1-800-405-5320 (Canada)



#### ONLINE

[decorasmartsupport.leviton.com](http://decorasmartsupport.leviton.com)



#### CHAT

[www.leviton.com/contactus](http://www.leviton.com/contactus)



#### EMAIL

[dssupport@leviton.com](mailto:dssupport@leviton.com)

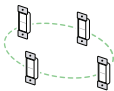


## What you need to make it work:

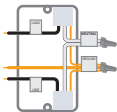
### To install your Z-Wave enabled fan speed controller:



1. A Z-Wave compatible hub.



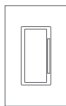
2. A Z-Wave mesh network to join within 30 feet of installation location. To ensure proper communication, do not use with metal wallplates.



3. An available interior wallbox with a hot, neutral, fan load and ground wire.  
**WARNING:** Do not use with aluminum wire.



4. For use with one or more ceiling paddle fans with split-capacitor or shaded pole motors, not to exceed a total of 1.5A. Not for use with lighting loads including ceiling fan light kits.



5. If the fan is controlled from more than one location, you will need a DD00R remote. See the DD00R installation instructions for wiring instructions.

RATINGS	
Fan Motor Fan Motor	1.5A - 120VAC, 60Hz
Operating Temp	0°C - 40°C (32°F - 104°F)
Operating Humidity	0-90% non-condensing
NETWORK	
Z-Wave Plus	908.42 MHz



## Features

### Rocker

Manually turn fan on/off.

### Fan speed bar

Manually adjust speed.

### Speed indicator lights

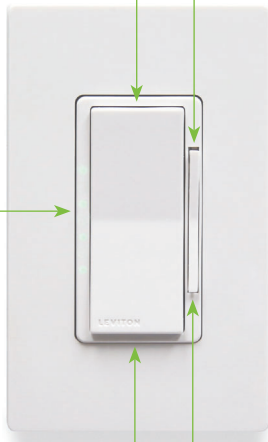
Show fan speed when adjusting levels.

### Status light

Illuminates when fan is off.

### Air gap switch

This feature will stop power to the fan. Gently pull bottom out until a click is heard. Power to the fan and indicator lights will turn off. After servicing is complete, push back in for normal operation.



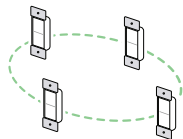
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## Identify your wires

For additional support contact technical services (page 4).

NOTE: Z-Wave is a mesh network. Ensure your device is installed within 30 feet of the hub or another Z-Wave enabled device. Communication through exterior surfaces will likely reduce transmission distances.

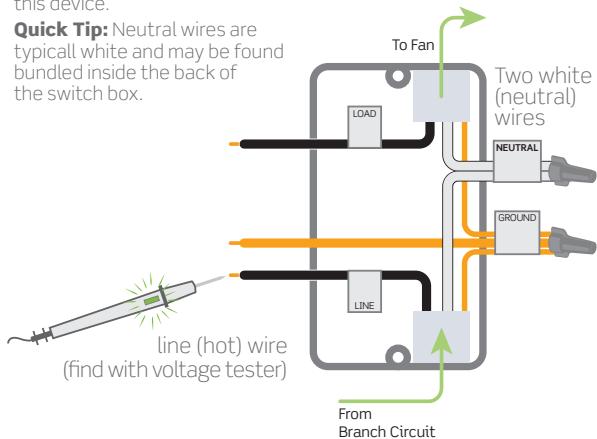


**WARNING: TO AVOID FIRE, SHOCK OR DEATH, turn off power at the circuit breaker.**

### Check your wallbox and identify your wires:

1. Remove wallplate and disconnect switch.
2. Restore power. Carefully test wires with voltage tester to find the line (hot) wire.
3. Turn off power at the circuit breaker.
4. Mark the wires as shown below. Neutral wires are required to operate this device.

**Quick Tip:** Neutral wires are typically white and may be found bundled inside the back of the switch box.



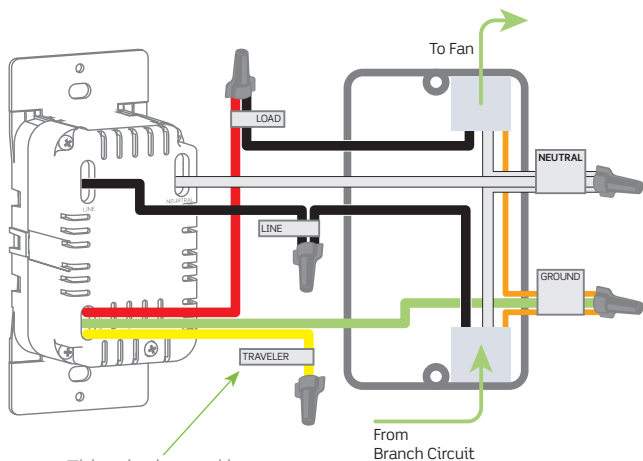
**If your wallbox looks different,  
call an electrician.**



# Wire your fan controller

**WARNING: TO AVOID FIRE, SHOCK OR DEATH, turn off power at the circuit breaker.**

1. Work on only one connection at a time.
2. Connect wires as shown.
3. Secure wire connections.



This wire is used in 3-way installations only.

**If your wallbox looks different,  
call an electrician.**

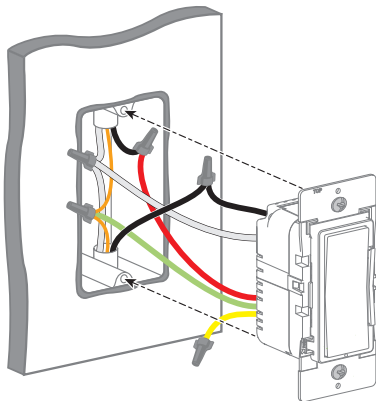
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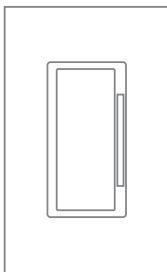


## Test and install

1. Gently push wires into wallbox. Do not overtighten wallbox screws.



2. Install wallplate base and snap on Decora wallplate.



**Congratulations!**  
**Your Z-Wave enabled fan controller wiring is complete**

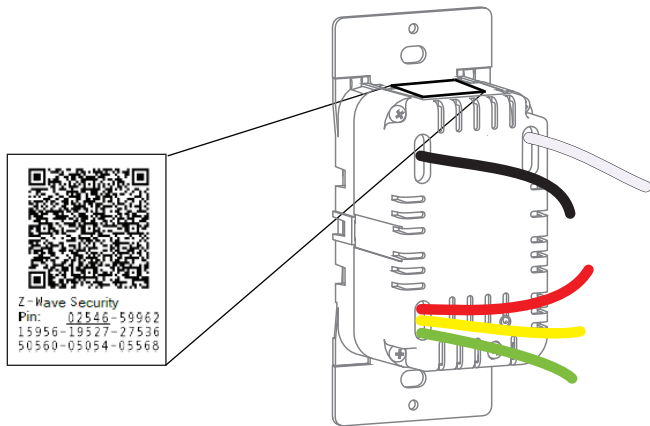
3. Restore power.



# SmartStart

## Your Decora Smart branded Fan Speed Controller 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 top of the controller or the back of the box with a controller providing SmartStart inclusion. No further action is required and the SmartStart product will be added automatically within 10 minutes of being switched on and in the network vicinity.



The QR Code and DSK is found on the top of the Fan Speed Controller. If required, the pin code is underlined on the label.

**This image is an example, please use the code found on the product or product packaging.**

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## Adding Your Fan Controller to A Hub

Leviton Decora Smart branded Z-Wave enabled products support two methods of inclusion. When using a Z-Wave Plus certified controller choose Network Wide Inclusion or SmartStart. If network wide inclusion does not discover your device, try classic inclusion.

### Network Wide Inclusion to A Z-Wave Network

Modern Z-Wave Plus hubs support network wide inclusion which allows your device to be included into the network using devices already paired to your home automation hub.

**Start with the devices closest to the hub and work your way outward.**

1. To enter programming mode, hold the top of the paddle for 7 seconds. The status light will turn amber, release and the status light will blink.
2. Tap the top of the paddle 1 time. The status light will quickly flash green.
3. The fan controller is now ready to learn into the Z-Wave network. Follow directions for the Z-Wave controller to complete the process.
4. Upon successful addition to network the status light will turn off and then flash green 4 times. If it was not successfully added to the network, the status light will flash red 4 times.

### Classic Inclusion To A Z-Wave Network

For older controllers Classic Inclusion is supported. Depending on the age of the controller it will need to be 3 to 35 feet from the device when including.

1. To enter programming mode, hold the top of the paddle for 7 seconds. The status light will turn amber. Release and the status light will blink.
2. Follow the Z-Wave controller instructions to enter inclusion mode.
3. Tap the top or the paddle of the paddle one time. The status light will quickly flash green.
4. The Z-Wave controller will confirm successful inclusion to the network.



## Exclusion From A Z-Wave Network

When removing a fan speed controller from a Z-Wave network, it is best practice to use the exclusion command found in the Z-Wave controller.

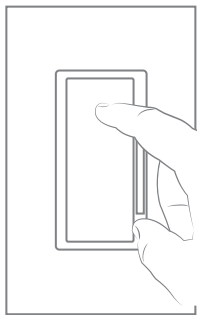
- 1.** To enter programming mode, hold the top of the paddle for 7 seconds. The status light will turn amber. Release and the status light will blink.
- 2.** Follow Z-Wave controller directions to enter exclusion mode.
- 3.** Tap the the top of the paddle 1 time. The status light will quickly flash green.
- 4.** The Z-Wave controller will remove the device from the network.



## Factory Default

When removing a fan speed controller from a network, it is best practice to use the exclusion process. In situations where a device needs to be returned to factory default follow the steps below. A reset should only be used when a controller is inoperable or missing.

- 1.** Hold the top of the paddle for 7 seconds, the status light will turn amber. Continue holding the top of the paddle for another 7 seconds (total of 14 seconds). The status light will quickly flash red/amber.
- 2.** Release the top of the paddle and the device will reset.



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# Customization

## Status Light Setup

The Leviton Decora Smart Z-Wave fan speed controller has a status light. The functionality of this light can be changed.

### Status Mode: Status Light On when the fan is On

The status light shows the current state of the fan:

1. To enter programming mode, hold the top of the paddle for 7 seconds. The status light will turn amber. Release and the status light will blink.
2. Tap the top of the paddle 4 times. The status light will quickly flash green/amber.
3. Tap the top of the paddle 1 time. The status light will flash green 4 times to confirm the selection.

### Status Light On when the Fan is Off

The status light is used to easily find the fan controller in a dark room:

1. To enter programming mode, hold the top of the paddle for 7 seconds. The status light will turn amber. Release and the status light will blink.
2. Tap the top of the paddle 4 times. The status light will quickly flash green/amber.
3. Tap the top of the paddle 2 times. The status light will flash amber 4 times to confirm the selection.

### Status Light is always Off

1. To enter programming mode, hold the top of the paddle for 7 seconds. The status light will turn amber. Release and the status light will blink.
2. Tap the top of the paddle 4 times. The status light will quickly flash green/amber.
3. Tap the top of the paddle 3 times. The status light will flash red 4 times to confirm the selection.



## Customization (cont'd)

### Minimum and Maximum Speed Setup

The Leviton Decora Smart Z-Wave fan speed controller has the ability to set the maximum and minimum speed. The maximum speed may be set lower than the fastest speed to prevent wobbling and the slowest speed can be increased for larger fans which may struggle to turn on at the lowest level.

#### Set Fan Minimum Speed Level:

1. To enter programming mode, hold the top of the paddle for 7 seconds. The status light will turn amber. Release and the status light will blink.
2. Tap the top of the paddle 5 times. The status light will quickly flash red/amber.
3. Tap the top of the paddle 1 time. The status light will flash amber.
4. Use the fan speed bar to adjust the minimum fan speed.
5. Hold the top of the paddle to exit.

#### Set Fan Maximum Speed Level:

1. To enter programming mode, hold the top of the paddle for 7 seconds. The status light will turn amber. Release and the status light will blink.
2. Tap the top of the paddle 5 times. The status light will quickly flash red/amber.
3. Tap the top of the paddle 2 times. The status light will flash red.
4. Use the fan speed bar to adjust the maximum fan speed.
5. Hold the top of the paddle to exit.



## Customization (cont'd)

### Turn On Speed

The Leviton Decora Smart Z-Wave fan speed controller can be setup to always turn on to a specific speed or to always return to the last speed.

#### Fan Speed Level When Fan is Turned On:

1. To enter programming mode, hold the top of the paddle for 7 seconds. The status light will turn amber. Release and the status light will blink.
2. Tap the top of the paddle 7 times. The status light will quickly flash red/amber.
3. Use the fan speed bar to adjust the desired fan speed or use Off to always return to the last level.
4. Hold the top of the paddle to exit.



### Quick Tips

If your controller is not performing as expected, visit [leviton.com/decorasmart](http://leviton.com/decorasmart) or contact technical services.

- Fan turns on but does not run as fast as is should:
  - Use the fan speed bar to select 100%.
  - If the fan has a pull chain or similar speed control, ensure it is at 100% and use only the Decora Smart fan speed controller to set the fan's speed.
- Intermittent operation:
  - Confirm the load does not exceed ratings.
  - Confirm that a neutral is connected.



## Advanced Options

Leviton Decora Smart Devices are configurable over the Z-Wave network. Compatible Z-Wave controllers can add support for additional advanced options. Consult your Z-Wave controller manufacturer for compatibility with advanced feature support.

### Status LED Configuration

- Parameter No: 7, Length: 1 Byte
- Valid Values = 0 to 255 (default 255)
  - 0 = LED Off
  - 254 = Status Mode
  - 255 = Locater Mode

### Preset Fan Speed Level

- Parameter No: 5, Length: 1 Byte
- Valid Values = 0 to 99 (default 0)
  - 0 = Memory Dim - Last dim state
  - 1 - 99 = Level

### Minimum Fan Speed Level

- Parameter No: 3, Length: 1 Byte
- Valid Values = 0 to 99 (default 10)

### Maximum Fan Speed Level

- Parameter No: 4, Length: 1 Byte
- Valid Values = 0 to 99 (default 99)

### LED Level Indicator Timeout

- Parameter No: 6, Length: 1 Byte
- Valid Values = 0 to 255 (default 3)
  - 0 = Level Indicators Off
  - 1 - 254 = Level Indicator Timeout (seconds)
  - 255 = Levels Always On





## Z-Wave Supported Associations

Your fan controller supports the following associations:

Group Number: 1

- Maximum Nodes: 5
- Name: Lifeline
- Profile: 0x0001
- Command Class: 0x5A01, 0x2603, 0x8703



## Additional Supported Z-Wave Classes

In addition to the standard Z-Wave Commands, your fan controller supports:

Z-WAVE PLUS INFO  
ASSOCIATION  
ASSOCIATION GRP INFO  
S2 SECURITY  
S0 SECURITY  
VERSION  
MANUFACTURER SPECIFIC  
CONFIGURATION  
DEVICE RESET LOCALLY  
POWERLEVEL  
SWITCH MULTILEVEL  
BASIC  
SCENE ACTUATOR CONF  
SCENE ACTIVATION  
TRANSPORT SERVICE  
FIRMWARE UPDATE MD  
SUPERVISION  
INDICATOR  
MULTI CHANNEL ASSOCIATION



## Safety First

**WARNING: TO AVOID FIRE, PERSONAL INJURY OR DEATH DO NOT USE** for the control of high power heating appliances such as portable heaters. There can be unexpected consequences if not used with care. For example, an empty coffee pot can be remotely turned on. If that should happen, your coffee pot could be damaged from overheating. If an electric heater is turned on by remote control while clothing is draped over it, a fire could result. This module will not control lighting that is used with electronic low-voltage and high frequency power supply transformers, nor high pressure discharge lamps (HID lighting). This includes mercury-vapor, sodium vapor and metal halide lamps.

### **WARNINGS:**

- This product is to be installed and/or used in accordance with electrical codes and regulations.
- Indoor use only.
- If you are unsure about any part of these instructions, consult an electrician.
- Turn off power at the circuit breaker when servicing.
- Save this instruction sheet. It contains important technical data along with testing and troubleshooting information which will be useful after installation is complete.

### **ADDITIONAL RATINGS:**

- Purpose of control: Operating Control
- Action Control Type: 1
- Pollution Degree: 2
- Impulse Voltage: 2500V

# Limited 2 Year Warranty

For Leviton's limited product warranty, go to [www.leviton.com](http://www.leviton.com). For a printed copy of the warranty, call 1-800-824-3005.

## FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at Leviton Manufacturing of Canada ULC to the attention of the Quality Assurance Department, 165 Hymus Blvd, Pointe-Claire (Quebec), Canada H9R 1E9 or by telephone at 1-800-405-5320.

## FCC COMPLIANCE STATEMENT

The enclosed device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (i) This device may not cause harmful interference (ii) This device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications not expressly approved by Leviton could void the user's authority to operate this equipment. 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.
- Consult the dealer or an experienced radio/TV technician for help.

## FCC CAUTION

Any changes or modifications not expressly approved by Leviton Manufacturing Co., Inc., could void the user's authority to operate the equipment.

## FCC SUPPLIER'S DECLARATION OF CONFORMITY:

Model ZW4SF - Fan Speed Controller is manufactured by Leviton Manufacturing Co., Inc. 201 N. Service Road, Melville, NY 11747. [www.leviton.com](http://www.leviton.com) 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.

## IC STATEMENT

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.

## RF EXPOSURE AND CO-LOCATION:

To comply with FCC OET Bulletin 65 and ISED RF exposure limits for general population and uncontrolled exposure, this device shall be installed and operated with a minimum distance of 7.9 inches (20 cm) between the radiator and your body. Also, must not be co-located or operated in conjunction with any other antenna or transmitter.

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# If you need help...



## CALL

1-800-824-3005 (USA)

1-800-405-5320 (Canada)



## ONLINE

[decorasmartsupport.leviton.com](http://decorasmartsupport.leviton.com)



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## EMAIL

[dssupport@leviton.com](mailto:dssupport@leviton.com)

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201 North Service Road, Melville, NY 11747  
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Visit Leviton's website at [www.leviton.com](http://www.leviton.com)  
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