

## HS-WD200+ Z-Wave Plus Wall Dimmer

### OVERVIEW

HS-WD200+ is a Z-Wave wall dimmer that's designed for wireless on-off-dim control of connected dimmable lighting loads. See [HomeSeer.com/lighting](http://HomeSeer.com/lighting) for a complete list of features and applications.

### WARNING RISK OF FIRE | RISK OF ELECTRICAL SHOCK | RISK OF BURNS

DO NOT USE THIS DIMMER TO CONTROL ANYTHING THAT MAY PRESENT A HAZARD WHEN CONTROLLED REMOTELY OR USED IN AN UNATTENDED FASHION. DO NOT USE WITH MEDICAL AND LIFE SUPPORT INSTRUMENTS.

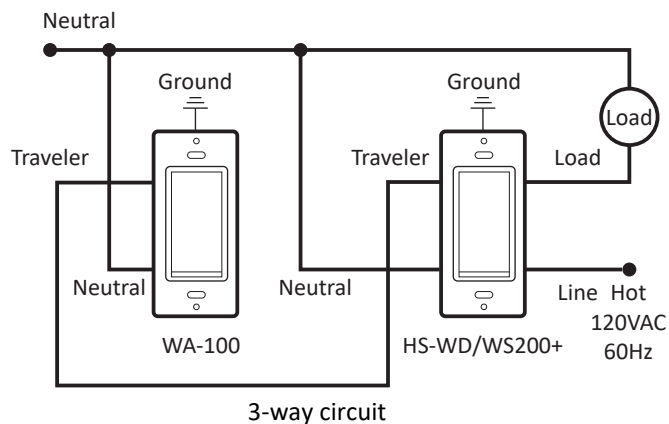
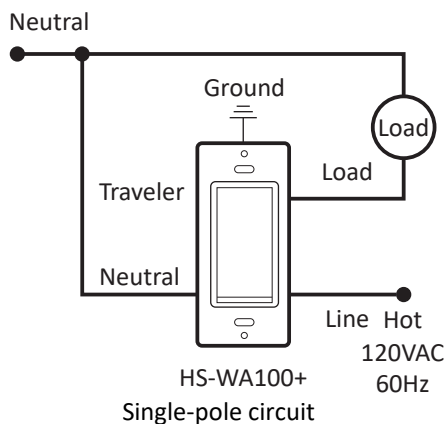
**CAUTION:** TO REDUCE THE RISK OF OVERHEATING AND POSSIBLE DAMAGE TO OTHER EQUIPMENT, DO NOT INSTALL TO CONTROL A RECEPTACLE, A MOTOR-OPERATED APPLIANCE, A FLUORESCENT LIGHTING FIXTURE, OR A TRANSFORMER-SUPPLIED APPLIANCE.

### INSTALLATION

**Tools required:** medium standard and Phillips head screwdrivers, wire strippers/cutters

- 1 Shut off power to the circuit at the circuit breaker or fuse box. **VERIFY power is OFF before continuing!**
- 2 Remove existing dimmer's wall plate and mounting screws. Carefully remove the existing dimmer from the electrical box but leave the wires connected.
- 3 There may be up to five wires connected to the existing dimmer. Make note of these wires and label, if necessary, to ensure correct installation of the HS-WD200+. You will need to match these wires with the corresponding screw terminals on the HS-WD200+. **Note: LINE, NEUTRAL and LOAD wires are required for every installation**
  - LINE (Hot) - Black (connected to power)
  - NEUTRAL - White (this wire is often tied to other neutral wires and may require a jumper to connect with the HS-WD200+)
  - LOAD - Black (connected to load)
  - GROUND — Green or Bare
  - TRAVELER — Red/Other (only used in 3-way circuits)
- 4 Disconnect the wires from the existing dimmer and attach those wires to the HS-WD200+ using the screw terminal connectors on the back with the following procedure:
  - 1 Strip 16 mm (5/8") insulation from each wire\*.
  - 2 With a screw driver, loosen each screw terminal by rotating the screw counter-clockwise a few turns until resistance is felt.
  - 3 There are two holes on the back of the dimmer near each screw terminal. Insert the stripped wire into one of these holes and tighten the screw terminal to secure the connection. Connections should be snug.

\*all wires should be 14 AWG or larger rated at 80°C or higher. Tightening torque should be 12 lbf-in (14kgf-cm).
- 5 Carefully install the wired dimmer back into the electrical box and reattach the trim plate.



## COMPATIBILITY

Your new HomeSeer dimmer is Z-Wave certified and is ready to be used with a wide variety of home automation hubs and controllers. All features are fully supported by HomeSeer systems but some **ADVANCED FEATURES** (see below) may not be fully supported by other controllers. If you're using another brand of controller, be sure to check with that company to determine compatibility.

## Z-WAVE INCLUSION/ EXCLUSION

Inclusion/Exclusion: Add or remove the device into your network by a Z-Wave certified controller. HS-WD200+ supports the latest S2 security offered by Z-Wave certified controllers. If your controller supports S2, please refer to the user guide of the controller for detailed instructions on adding or removing devices to/from the network. You should be able to add/ remove HS-WD200+ into your network using the unique QR code or the DSK 5 digit pin located on the product or packaging. In addition, the device can be added or removed using the following 2-step procedure:

- 1 Put your Z-Wave controller into inclusion mode. Consult your controller manual if you're unsure how to do this.  
HomeSeer users: press "Add Device" on your Z-Tool+ mobile app
- 2 Tap the paddle of your new HomeSeer dimmer to begin the inclusion process. This will take a few moments to complete.

HomeSeer users: Be sure to name the dimmer and assign it to a location using Z-Tool+ when inclusion is done

**MANUAL RESET** - To be used only in the event that the network primary controller is lost or otherwise inoperable.

**(1)** Turn dimmer on by tapping the top of the paddle once. **(2)** Quickly tap top of the paddle 3 times. **(3)** Quickly tap bottom of paddle 3 times. **(4)** If light turns off and then on again, dimmer is reset. If not, repeat manual reset.

**ASSOCIATION** - This product supports association group #1 for lifeline communication. Refer to your controller manual for instructions on setting the lifeline association.

## OPERATION

Your new HomeSeer dimmer may be operated locally (manually) or remotely using a Z-Wave compatible controller or home automation system.

### Local Control:

- Press (tap) the top of the paddle to power the load.
- Press (tap) the bottom of the paddle to cut power to the load.
- Press & Hold the top or bottom of the paddle increase or decrease the dim level of the load. The dimmer's RGB LED indicators will light to represent the relative dim level.

### Remote Control:

- On / Off / Dim control is available remotely. Consult your controller manual for details.  
HomeSeer users: this dimmer creates 3 devices; a root device, central scene device and control device. The root device may be used to manage Z-Wave settings. The central scene device may be used as a trigger for events. The control device will send on / off / dim commands to the dimmer.

## ADVANCED FEATURES

Your new HomeSeer dimmer includes advanced features that may be accessed with HomeSeer (and other\*) systems.

**Multi-tap triggering** - Tapping the top or bottom of the paddle 1, 2, 3, 4 or 5 times in rapid succession may be used as a trigger to launch HomeSeer events. In the example below (using HomeSeer HS3 software), the trigger is set to the top of the paddle being pressed 3 times. You must use the trigger "device had its value set to" and apply it to the "Central Scene" device. Note that "Scene 001" refers to the top of the paddle.

IF This device had its value set to...  
Second Floor Bedroom Dimmer Central Scene is set to Scene 001 Key Pressed 3 Times

In this example, the trigger is set to the bottom of the paddle (Scene 002) being pressed 5 times.

IF This device had its value set to...  
Second Floor Bedroom Dimmer Central Scene is set to Scene 002 Key Pressed 5 Times

Note that pressing the top or bottom of the paddle once will also control the attached load.

## ADVANCED FEATURES (continued)

**RGB LED Indicators** - The color of all LED indicators may be controlled with Z-Wave commands using HS3 event actions.

**In normal mode**, LED indicators glow to reflect the on/off/dim status of each circuit using a palette of 7 possible colors (red, green, blue, cyan, magenta, yellow, white). HS-WD200+ dimmers will operate in normal mode by default. In the example below (using HomeSeer HS3 software), this event action will set the normal mode color of all HS-WD200+ dimmers (and all HS-WS200+ switches) to Magenta.

THEN ▾ Z-Wave Actions ▾  
HS-WX200 Actions ▾ Choose A Device: All ▾  
**Set HS-WX200 Action**  
Action Type: Set Normal Mode Color ▾ Magenta ▾

**In status mode**, individual LEDs can be controlled to reflect the status of nearly anything in the home. In the example below (using HomeSeer HS3 software), this event action will change the bottom LED (Number 1) of the Second Floor Master Bedroom Dimmer to glow red. All other LEDs will be off unless a status command has also been sent to them.

THEN ▾ Z-Wave Actions ▾  
HS-WX200 Actions ▾ Choose A Device: Second Floor Master Bedroom Dimmer Root ▾  
**Set HS-WX200 Action**  
Action Type: Set Status Mode LED Color ▾ LED Number: 1 ▾ LED Color: Red ▾ Blink: No ▾

**Switching between normal mode and status mode:** HS-WD200+ dimmers will operate in normal mode by default. Sending a color status command to any LED will automatically set all LEDs to status mode. Once in status mode, a dimmer will remain in status mode until all LEDs have their status mode LED color set to "Off". In the example below (using HomeSeer HS3 software), this event action will clear status from all dimmers (and switches) on the network, causing all devices to revert to normal mode.

**Note:** If a dimmer is operating in status mode, manually dimming it will cause the LEDs to operate temporarily in normal mode. After the dimming operation is complete, the dimmer will revert to status mode.

THEN ▾ Z-Wave Actions ▾  
HS-WX200 Actions ▾ Choose A Device: All ▾  
**Set HS-WX200 Action**  
Action Type: Set Status Mode LED Color ▾ LED Number: All ▾ LED Color: Off ▾

## COMPATIBILITY (with Non-HomeSeer systems)

The special features of this dimmer are supported using a number of different Z-Wave technologies. HomeSeer systems are designed to support these technologies and will provide the most seamless operation of these features. However, other systems may also provide satisfactory results depending on the level of support they provide for these same technologies. If you're using a non-HomeSeer system, use the information below and consult with your system manufacturer to determine the level of compatibility.

**Multi-tap Triggers:** This feature uses the Z-Wave CENTRAL SCENE command class. If the system supports this command class AND utilizes a general interrogation process for inclusion, this feature should work. However, if the system employs an inclusion process based on the Z-Wave product ID, then specific product support would need to be implemented.

**Instant Status:** This feature is supported using a Z-Wave MULTILEVEL REPORT and the CENTRAL SCENE command class. All Z-Wave certified systems should support the MULTILEVEL REPORT feature.

**RGB LED Control:** This feature is supported using Z-Wave parameter commands. Most Z-Wave certified systems provide a method for issuing parameter commands to individual products. HomeSeer systems simplify the use of this feature by providing event actions to send parameter commands. A complete list of parameters may be found on the next page.

**S2 Security:** S2 security is an advanced encryption technology. The DSK can be found on the front metal yoke of the device\*.

\*Be sure to check our support page (<https://homeseer.com/support-home>) for more detailed information regarding features and integration with other smart hubs and controllers.)

Z-Wave Parameters				
Parameter	Description	Bytes	Value	Default
3	Sets bottom LED operation (in normal mode)	1	0= bottom LED ON if load is OFF 1= bottom LED OFF if load is OFF	1
4	Sets paddle's load orientation	1	0 = Top of Paddle turns load ON 1 = Bottom of Paddle turns load ON	0
5	Sets lowest dim level	1	0 = Lowest dim level is 20% brightness 1 = Lowest dim level is 12% brightness	0
11	Set dimmer Ramp rate for remote control	1	Possible values: 0-90 0=No delay (instant ON), 1=1 second	3
12	Set dimmer Ramp rate for local control	1	Possible values: 0-90 0=No delay (instant ON), 1=1 second	3
13	Sets dimmer mode of operation	1	0=Normal mode (load status) 1=Status mode (custom status)	0
14	Sets the Normal mode LED color	1	Possible values: 0-6 0=White, 1=Red, 2=Green, 3=Blue, 4=Magenta, 5=Yellow, 6=Cyan	0
21	Sets the Status mode LED 1 (bottom) color	1	Possible values: 0-7 0=Off, 1=Red, 2=Green, 3=Blue, 4=Magenta, 5=Yellow, 6=Cyan, 7=White	0
22	Sets the Status mode LED 2 color			
23	Sets the Status mode LED 3 color			
24	Sets the Status mode LED 4 color			
25	Sets the Status mode LED 5 color			
26	Sets the Status mode LED 6 color			
27	Sets the Status mode LED 7 (top) color			
30	Sets dimmer Blink frequency for All LEDs in Status mode	1	Possible values: 0, 1-255 0=No blink, 1=100ms ON then 100ms OFF	0
31	Sets LED(s) 1-7 to Blink in Status mode	1	Bitmask defines specific LEDs to enable for blinking: Note: this decimal value is derived from a hex code calculation based on the following: Bit 0 = led 1, Bit 1 = led 2, Bit 2 = led 3, Bit 3 = led 4, Bit 4 = led 5, Bit 5 = led 6, Bit 6 = led 7 IE: value of 1 = first LED, 64 = led 7	0

## SPECIFICATIONS

<b>Power</b>	Requirements	120VAC / 60 Hz
<b>Max Load</b>	Incandescent   Dimmable CFL/LED	600 watts   150 watts
<b>Derating</b>	Double-gang	500 watts   150 watts
	Triple-gang	400 watts   150 watts
<b>Z-Wave</b>	Frequency	908.4 / 916 MHz
	Range	132 ft. (open air)
<b>Certifications</b>	UL (US, Canada), FCC/IC, Z-Wave Plus	

## WARRANTY

HomeSeer warrants to the original purchaser that this product, for the warranty period, will be free from material defects and workmanship. This warranty is subject to proper installation and operation of the product. HomeSeer's sole obligation, under this warranty, is to repair, replace or correct any defect that was present at the time of delivery. This warranty does not extend to consequential or incidental damage to other products that may be used with this product. Warranty claims must be submitted in writing directly to HomeSeer at HomeSeer.com. Warranty period: limited 1 year from date of purchase

## FCC statements:

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: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications or changes to this equipment. Such modifications or changes could void the user's authority to operate the equipment.

## IC statements:

This device complies with Part 15 of the FCC Rules and with RSS of Industry Canada. 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  
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :  
(1) l'appareil ne doit pas produire de brouillage, et  
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.  
This Class B digital apparatus complies with Canadian ICES-003.  
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.  
Cut out and save the important information below: