

## Z-Wave Home Automation Solutions

Being one of the most advanced Home Automation systems to date, Z-Wave is reliable, affordable and most importantly fully wireless, thus easy to assemble without laying down expensive cables.

The whole Z-Wave Home Automation system is based around the central home controller. It monitors the states of the devices around it and sends the information to the central controller using a secure encrypted channel or to your smartphone or PC using an internet connection. It allows the user to remotely change the state of their devices using a smartphone by first decrypting a message and then forwarding it to the desired device. The central home controller can also be set to automatically turn devices ON/OFF, when for example a sensor is tripped.

Z-Wave devices are not only able to communicate with the home controller but also any nearby devices in the network. They are also capable of forwarding commands from the home controller to neighboring devices, effectively increasing the range of your network and assuring its responsiveness is not only fast but also reliable.

For example you can configure your Z-Wave system to automatically turn on the siren when a motion sensor is tripped. You can also configure your Z-Wave network to send you automated notifications via SMS or email and to save pictures or footage depending on which devices become tripped in your home. You can arm or disarm your system on the go with your smart phone or at home with a conveniently placed switch. You can schedule your light go ON and OFF depends on time of the day, your presents at home or other triggers or events. Not only does Z-Wave allow you to remotely monitor and control your home it also allows you to create unlimited scenarios to enhance your way of life. You can automatically switch on your sirens when an alarm is triggered or turn off your child's night lamp when they fall asleep. The list of possibilities is endless...

You don't have to build your entire home automation system in one go. You can add new devices to your Z-Wave network whenever you wish allowing you to tailor your system to your ever-changing needs.

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DHS Z-Wave Plug-In Switch with energy metering is a Z-Wave enabled device for Home Automation system which can:

- control ON/OFF a lamp or an appliance remotely by Z-Wave gateway / app or manually by the push button on the device
- measure and report the power that is consumed through the socket (connected load)
- has LED light switch status indication (ON and OFF)
- can be used as a repeater in Z-Wave network

### Package Contents

- 1) DHS Z-Wave Plug-In Switch
- 2) Quick Installation Guide

### Specifications:

Item	Description
RF Protocol	Z-Wave
Z-wave device type	POWER SWITCH BINARY / ROUTING SLAVE
Operating Voltage	AC 230V / 50Hz
Maximum load	2200W, 10A
RF Frequency	<b>921.42Mhz AU/NZ</b>
Operating humidity:	30% to 80%
Operation Range	Up to 30m when no obstacles
Application	Indoor use only
Operation Temperature	0 ° C to 50 ° C
Storage Temperature	-5 ~ +65 ° C
Weight	150g
Housing	ABS
Certification	RCM, SAA Approvals SAA-152104-EA

**PLEASE NOTE:**

The device plugged into the Z-Wave™ controlled outlet on this Plug-In Switch must not exceed 2200 watts (50hz, 10A).

#### Specifications are subject to change without further notice

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### Quick Installation Guide



## DHS Z-Wave Plug-In Switch With Energy Measuring

**CATALOGUE NO:  
DHS-LIT-SWP-DHS**

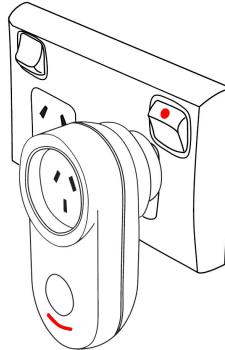


# 1

## Installation

### Mounting

- 1 | Plug the DHS Z-Wave Plug-In Switch into any compatible power outlet. Please note: This device is designed for Australia/New Zealand GPO only. The DHS Z-Wave Plug-In Switch should be installed into any indoor, three-prong (Aus Type), 220-240 volt A/C outlet.
- 2 | Plug a lamp or small appliance into the front of the Plug-In Switch.
- 3 | The Plug-In Switch is now ready for inclusion into /exclusion from your Z-Wave network.



### Include in or Exclude from Z-Wave network

- 1 | Make sure your Z-Wave controller within 2-3 meters from the device.
- 2 | Make sure your Z-Wave controller is in the right operation mode (include or exclude). Do it accordingly to your Z-Wave controller manual.
- 3 | Press and hold the button on the DHS Z-Wave Plug-In Switch for about 4 seconds until LED on the switch starts blinking slowly, then release the button.
- 4 | Observe the lights on the controller. The orange light will blink rapidly while inclusion is taking place. Inclusion is complete when the orange light becomes solid.
- 5 | If inclusion was successful you'll see new device in your home controller interface. Your DHS Z-Wave Plug-In Switch is ready for operations.

Please note: if you can't include DHS Plugin Switch to your compatible Z-Wave controller in AUS version, then please run the exclusion procedure first and follow with inclusion procedure again.

### LED indication modes

The indicator gives various statuses of the device as follows:

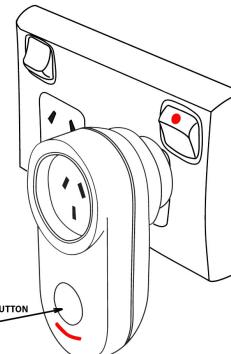
1. Ready for learn mode: Indicator light blinks every second.
2. Learn in progress (add): Indicator light blinks 2 times every second.
3. Learn in progress (remove): Indicator light blinks 3 times every second.
4. Learn mode success: Indicator light is on for second.
5. Learn mode failed: Indicator light blinks 8 times fast.

# 2

## Operation

### Manual control

Press the button once to turn the lamp/appliance ON or OFF



### Remote operation

After successful inclusion DHS Z-Wave Plug-In Switch will be represented in the home controller interface by the single icon with two buttons ON and OFF you can use to turn switch ON and OFF.

### Configuration

Parameter Number	Size	Value	Preset
1 - Set to Default (Factory Reset)	1 byte*	All values(00 – 255) except for <b>85</b> can be used to reset	170
2 – Measure Decimals	1 byte*	<b>0,1,2,3</b> (decimals in power report)	0
3 – Power Limit The relay auto switches off when load is higher than	2 bytes*	<b>0</b> : no power limit selected <b>1 – 2500</b> : variable power limit	3600
4 – Startup with last known socket status	1 byte*	<b>0</b> : When power applied socket is OFF <b>1 – 255</b> : When power applied socket is the state before power was disconnected.	0
<ul style="list-style-type: none"> <li>• if a size is other then given size the frame is ignored totally so configuration values are not changed</li> </ul>			

### Supported Command Classes

**Basic type:** BASIC\_TYPE\_ROUTING\_SLAVE  
**Generic type:** GENERIC\_TYPE\_SWITCH\_BINARY  
**Specific type:** SPECIFIC\_TYPE\_POWER\_SWITCH\_BINARY Listening: TRUE,  
**Z-Wave Lib:** 4.51

class: 0x25 COMMAND\_CLASS\_SWITCH\_BINARY  
class: 0x32 COMMAND\_CLASS\_METER\_V2  
class: 0x70 COMMAND\_CLASS\_CONFIGURATION  
class: 0x72 COMMAND\_CLASS\_MANUFACTURER\_SPECIFIC  
class: 0x73 COMMAND\_CLASS\_POWERLEVEL  
class: 0x75 COMMAND\_CLASS\_PROTECTION  
class: 0x85 COMMAND\_CLASS\_ASSOCIATION  
class: 0x86 COMMAND\_CLASS\_VERSION  
class: 0x31 COMMAND\_CLASS\_SENSOR\_MULTILEVEL  
class: 0x27 COMMAND\_CLASS\_SWITCH\_ALL

# 3

## Troubleshooting

**NOTE:** Before including the product to your Z-Wave network it is advised to perform exclusion procedure to reset network settings.

This device is using a radio signal that passes through walls, windows and doors. The range can be influenced by local conditions such as large metal objects, house wiring, concrete, furniture, refrigerators, microwaves and similar items. On average, the indoor range is approximately 12-30 meters.

- Do not expose this product to excessive heat or moisture.
- Prevent long term exposure to direct sunlight.
- Do not attempt to repair this product. If the product is damaged or if you are in doubt about the proper operation, take the product back to the place of purchase.
- Do not clean the product with any liquid.
- Do not paint.

### Frequently Asked Questions

- Q: Why does the push button on the switch not work?  
A1: Check whether the Protection is enabled or not. If it is, disable the protection and try again. For more information about disabling the protection please refer to the supporting command classes (parameter 3).
- A2: Check if the DHS Plug-in Switch is completely plugged into the socket.
- Q: Where can I see the energy consumption measurement?  
A1: The energy consumption measurement can be viewed by the use of a Z-Wave controller. You can request the accumulated or instant measured values by the use of the meter command class.
- Q: Why is the energy measurement not working?  
A1: A device must be plugged into the socket of the DHS Plug-in Switch. Please check if you had any device plugged in before checking the energy measurement.
- Q: Why does the indicator light not work?  
A1: Check if the DHS Plug-in Switch is fully plugged into a socket. The indicator light will not work if there is no power supplied to the switch.  
A2: The Indicator light is only on when the switch is on. Press the push button to turn it on.