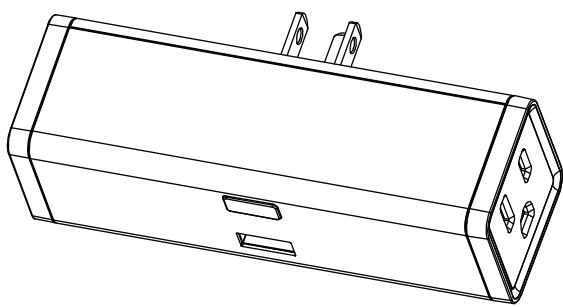


## S2 Double Plug with USB Port

ZW47



### FEATURES

- Z-Wave on/off control of 2 electrical devices
- On/off (charging/charged) reports from USB port to the hub (no Z-Wave control) - turn **off** the charging device for best results
- Energy monitoring for each outlet
- Smart LED indicator displays power use and Z-Wave signal strength
- Built-in overload protection and ETL certification
- Z-Wave Plus signal repeater to extend network range
- S2 security and 500 Z-Wave chip for reliable wireless communication

### SPECIFICATIONS

- Model Number: ZW47
- Z-Wave Signal Frequency: 908.42 MHz
- Power: 120 VAC
- Maximum Load: 10 A total (between 2 outlets)
- Maximum Load for USB port: 2.1 A
- Range: Up to 100 feet line of sight
- Installation and Use: Indoor only

## CAUTION

This is an electrical device - please use caution when installing and operating the Double Plug. Remote control of appliances may result in unintentional or automated activation of power. Do **NOT** use this Z-Wave device to control electric heaters or other appliances which produce the risk of fire, burns, or electrical shock when unattended.

### INSTALLATION

Plug the Double Plug into any standard grounded 110 V receptacle. Do NOT connect any devices to the plug at this point. Click the Z-Wave button **once** to turn on the **left** outlet and **double-click** it to turn the **right** outlet on. See if the LED indicators come on and off. If the LED indicators don't light up at all, please try a different receptacle. If they're still off, please make sure the Double Plug is on.

## BEFORE YOU PLUG ANYTHING IN

**Make sure the load you are about to connect does NOT exceed 10 A in power.** This Double Plug can hold up to 10 A in total. It means that the power of all devices connected to your ZEN25 at a given time can NOT exceed 10 A. It doesn't matter if this is just one device connected to one of the outlets or 2 small appliances plugged into both outlets.

**Connecting heavy duty equipment to this Double Plug will DAMAGE the device and may cause the connected appliance to malfunction.**

X DON'T USE WITH	S2 Double Plug with USB Port ✓ OK. TO USE WITH
• Washers	• Floor Lamps
• Dryers	• Tv's and Video
• Refrigerators	• Computers
• Electric heaters	• Game Consoles
• Fans	• Alarm Clocks
• Pumps	• Printers
• Chargers	• Speakers
• Routers	• Audio Players

## WARNING

- This product should be installed indoors upon completion of any building renovations.
- Prior to installation, the device should be stored in a dry, dust-and-mold-proof place.
- Do not install the Double Plug in a place with direct sun exposure, high temperature, or humidity.
- Keep away from chemicals, water, and dust.
- Ensure the device is never close to any heat source or open flame to prevent fire.
- Ensure the device is connected to an electric power source that does not exceed the maximum load power.
- No part of the device may be replaced or repaired by the user.

### Z-WAVE CONTROL

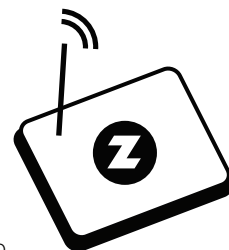
#### 1. ADD DEVICE to your hub (AUTO INCLUSION)

**Initiate inclusion (pairing)** in the app (or web interface).

#### 2. POWER the Double Plug

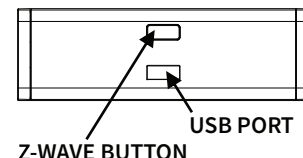
**Plug the device** into a grounded 120 VAC receptacle you're planning to use it at (it doesn't need to be close to the hub). The LED indicators will start blinking and the Double Plug will join the network automatically. If it lights up in yellow, inclusion has failed.

3. You will see 4 new on/off devices in your app: 2 channels for on/off control, 1 channel for on/off **monitoring** (the USB port reporting charging/ charged status, no control), and 1 master node to control both outlets at the same time and to access and adjust advanced settings in (if your hub supports parameter input).



#### MANUAL INCLUSION

Put your Z-Wave hub into inclusion mode and **click the Z-Wave button 3 times** quickly.



### TROUBLESHOOTING

#### The Double Plug won't add to your system? Try this:

1. Initiate **EXCLUSION** and click the Z-Wave button 3 times quickly.
2. Click the Z-Wave button **4-5 times quickly** when adding it.
3. Bring the Double Plug **closer** to your hub, it may be out of range.
4. Double-check if the device is powered.

#### EXCLUSION (REMOVING / UNPAIRING DEVICE)

1. Bring the plug within direct range of your Z-Wave gateway (hub).
2. Put the Z-Wave hub into exclusion mode.
3. Press and release the Z-Wave button 3 times quickly.
4. Your hub will confirm exclusion and all of the channels (child outlets) and the main device will disappear from your controller's device list.

#### FACTORY RESET

If your primary controller is missing or inoperable, you may need to reset the device to factory settings. To complete the reset process manually, **click-click-click'n'hold the Z-Wave button** for at least **10 seconds**. **NOTE: All previously recorded activity and custom settings EXCEPT for the kWh record will be erased from the device's memory. Click the Z-Wave button 9 times quickly to reset the kWh record from the left outlet and 10 times to reset the kWh record from the right outlet.**

#### LED INDICATOR

#### How to read LED indicator colors?

The LED indicators on your Double Plug will visually report power use and Z-Wave range (see next page for range test details).

No light / White = Plug is off	Blue = 0 – 200 W
Cyan = 200 – 400 W	Green = 400 – 600 W
Orange = 600 – 800 W	Red = 800 – 1000 W
Purple = 1000 – 1200 W	Purple blink = over 1200 W

### WARRANTY

This product is covered under a 12-month limited warranty.

#### FCC NOTE

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT. STORE INDOORS WHEN NOT IN USE. SUITABLE FOR DRY LOCATIONS ONLY. DO NOT IMMERSE IN WATER. NOT FOR USE WHERE DIRECTLY EXPOSED TO WATER.

#### FCC Caution.

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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**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.
- Consult the dealer or an experienced radio/TV technician for help.

#### \*RF warning for Mobile device:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

## ADVANCED SETTINGS

Please refer to your controller's user guide for advanced programming instructions as they are a little different for every software.

### ASSOCIATION

The Double Plug supports Group 1 for lifeline communication of on/off status to the Z-Wave gateway controller (hub).

It supports Group 2 for on/off and overload notifications (BASIC\_SET) to other devices in the group.

### CUSTOMIZE YOUR DOUBLE PLUG

#### On/Off Status Recovery After Power Failure

**Parameter 1:** Choose the recovery state for your Double Plug's outlets if power outage occurs.

**Values:** 0 – Double Plug remembers the status for each outlet prior to power outage and turns back to it (default); 1 – Double Plug automatically turns ON for each outlet once power is restored (it does not remember the status prior to power outage); 2 – Double Plug automatically turns OFF each outlet once power is restored (it does not remember the status prior to power outage); **Size:** 1 byte dec.

#### Power Wattage Report Value Threshold

**Parameter 2:** Choose how you want your Double Plug to report power consumption to your hub. The number entered as value corresponds to the number of Watts the appliance needs to go over for the change to be reported. So if 5 Watts are entered by default, the Double Plug will report any change in power usage over 5 Watts for each outlet (whether it's at least 5 Watts more or 5 Watts less compared to previous report).

**Values:** 0 – 65535. 0 – disabled (Double Plug will not report power consumption based on this setting). Default set to 5. **Size:** 4 byte dec.

#### Power Wattage Report Frequency

**Parameter 3:** The number entered as value corresponds to the number of seconds. So if 30 is entered by default, the Double Plug will report power consumption (Wattage) every 30 seconds.

**Values:** 30 – 2678400. Default set to 30. **Size:** 4 byte dec.

#### Energy (kWh) Report Frequency

**Parameter 4:** Choose how often you want your Double Plug to report power consumption (W) to your controller (hub). The number entered as value corresponds to the number of seconds. So if 300 is entered by default, the Double Plug will report energy usage every 300 seconds (5 minutes).

**Values:** 5 – 2678400. Default set to 300. **Size:** 4 byte dec.

#### Voltage (V) Report Frequency

**Parameter 5:** Choose how often you want your Double Plug to report voltage to your controller (hub). The number entered as value corresponds to the number of seconds. So if 300 is entered by default, the Double Plug will report voltage every 300 seconds (5 minutes).

**Values:** 5 – 2678400. Default set to 300. **Size:** 4 byte dec.

#### Electrical Current (A) Report Frequency

**Parameter 6:** Choose how often you want your Double Plug to report electrical current (A) to your controller (hub). The number entered as value corresponds to the number of seconds. So if 300 is entered by default, the Double Plug will report current every 300 seconds (5 minutes).

**Values:** 5 – 2678400. Default set to 300. **Size:** 4 byte dec.

#### Overload Protection

**Parameter 7:** Set the amp level for overload protection to kick in. The number entered as the value corresponds to the total number of amps the Double Plug needs to detect across both outlets to turn off automatically and send a notification to the hub and associated devices.

**Values:** 1 – 10 (A). Default set to 10 A.

**Size:** 1 byte dec.

#### Auto Turn-Off Timer

**Parameter 8:** Use this parameter to enable or disable the auto **turn-off** timer for **the left (CH1)** outlet. If this feature is enabled, the device connected to CH1 outlet will automatically turn off after a fixed period of time from being turned on (set in parameter 9).

**Values:** 0 – timer disabled (default); 1 – timer enabled; **Size:** 1 byte dec.

**Parameter 9:** Use this parameter to set the time after which you want the device connected to **the left (CH1)** outlet to automatically turn off once it has been turned on. The number entered as value corresponds to the number of minutes.

**Values:** 1 – 65535 (minutes). Default set to 60 (minutes). **Size:** 4 byte dec.

**Parameter 12:** Enable or disable the auto **turn-off** timer for **the right (CH2)** outlet.

**Values:** 0 – timer disabled (default); 1 – timer enabled; **Size:** 1 byte dec.

**Parameter 13:** Set the time after which you want the device connected to **the right (CH2)** outlet to automatically turn off once it's been turned on.

**Values:** 1 – 65535 (minutes). Default set to 60 (minutes). **Size:** 4 byte dec.

#### Auto Turn-On Timer

**Parameter 10:** Use this parameter to enable or disable the auto **turn-on** timer for **the left (CH1)** outlet. If this feature is enabled, the device connected to left outlet will automatically turn on after a fixed period of time from being turned off (set in parameter 11).

**Values:** 0 – timer disabled (default); 1 – timer enabled; **Size:** 1 byte dec.

**Parameter 11:** Use this parameter to set the time after which you want the device connected to **the left (CH1)** outlet to automatically turn on once it has been turned off. The number entered as value corresponds to the number of minutes.

**Values:** 1 – 65535 (minutes). Default set to 60 (minutes). **Size:** 4 byte dec.

**Parameter 14:** Enable or disable the auto **turn-on** timer for **the right (CH2)** outlet.

**Values:** 0 – timer disabled (default); 1 – timer enabled; **Size:** 1 byte dec.

**Parameter 15:** Set the time after which you want the device connected to **the right** outlet to automatically turn on once it has been turned off.

**Values:** 1 – 65535 (minutes). Default set to 60 (minutes). **Size:** 4 byte dec.

#### Manual Control

**Parameter 16:** Choose if you want to use the Z-Wave button on the Double Plug to turn the outlets on or off manually or if you want to disable this function. If this parameter is set to 0 (disabled), you will only be able to turn any of the outlets on or off remotely using your Z-Wave gateway controller.

**Values:** 0 – manual control disabled for both outlets; 1 – manual control enabled for both outlets (default). **Size:** 1 byte dec.

#### LED Indicator Mode

**Parameter 17:** Choose if you want the LED indicators next to each outlet to come on when power is on or off, or if you want to disable them.

**Values:** 0 – LED indicator will display power consumption whenever the device is plugged in (LED stays on at all times, even if the plug is off); 1 – LED indicator will display power consumption whenever the device is ON in and will turn off when the plug is OFF (default); 2 – LED indicator will display the level of power consumption for 5 seconds only whenever the device is turned on or off (LED indicator will stay off for most of the time); 3 – LED indicator is OFF at all times except for inclusion, exclusion, and Z-Wave range test.

**Size:** 1 byte dec.

You can also switch between the LED indicator modes by **clicking the Z-Wave button 6 times quickly**.

## RANGE TEST TOOL

You can easily check if the Double Plug is within your Z-Wave hub's range:

**Press and hold** the Z-Wave **button** for **6 to 8 seconds** until the LED indicator turns **violet**. The LED indicator will then report signal strength.

**Solid green** = direct communication with the primary controller is stable

**Flashing green** = direct communication with the primary controller is established but signal is weak

**Solid orange** = stable communication with hub via repeaters

**Flashing orange** = communication with the primary controller is established via repeaters but signal is weak

**Solid red** = communication with the primary controller has failed

**Press and release** the Z-Wave **button** to **exit** testing mode.

NOTE: This function may only be activated once the Double Plug has been included to a Z-Wave network.

This device requires the following **command classes** to be supported and recognized by your Z-Wave controller:

COMMAND\_CLASS\_ASSOCIATION\_GRP\_INFO  
COMMAND\_CLASS\_ASSOCIATION  
COMMAND\_CLASS\_CONFIGURATION  
COMMAND\_CLASS\_DEVICE\_RESET\_LOCALLY  
COMMAND\_CLASS\_FIRMWARE\_UPDATE\_MD  
COMMAND\_CLASS\_MANUFACTURER\_SPECIFIC  
COMMAND\_CLASS\_METER  
COMMAND\_CLASS\_MULTI\_CHANNEL\_ASSOCIATION  
COMMAND\_CLASS\_MULTI\_CHANNEL  
COMMAND\_CLASS\_NOTIFICATION  
COMMAND\_CLASS\_POWERLEVEL  
COMMAND\_CLASS\_SECURITY\_2  
COMMAND\_CLASS\_SUPERVISION  
COMMAND\_CLASS\_SWITCH\_BINARY  
COMMAND\_CLASS\_TRANSPORT\_SERVICE  
COMMAND\_CLASS\_VERSION  
COMMAND\_CLASS\_ZWAVEPLUS\_INFO



This product can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers and/or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

This product features the latest Security 2 (S2) framework to remove smart home network hacking risks.

This is an ETL certified device. ETL, just like UL, is a Nationally Recognized Testing Laboratory. The ETL mark is proof of product compliance to North American safety standards.