MONOPRICE
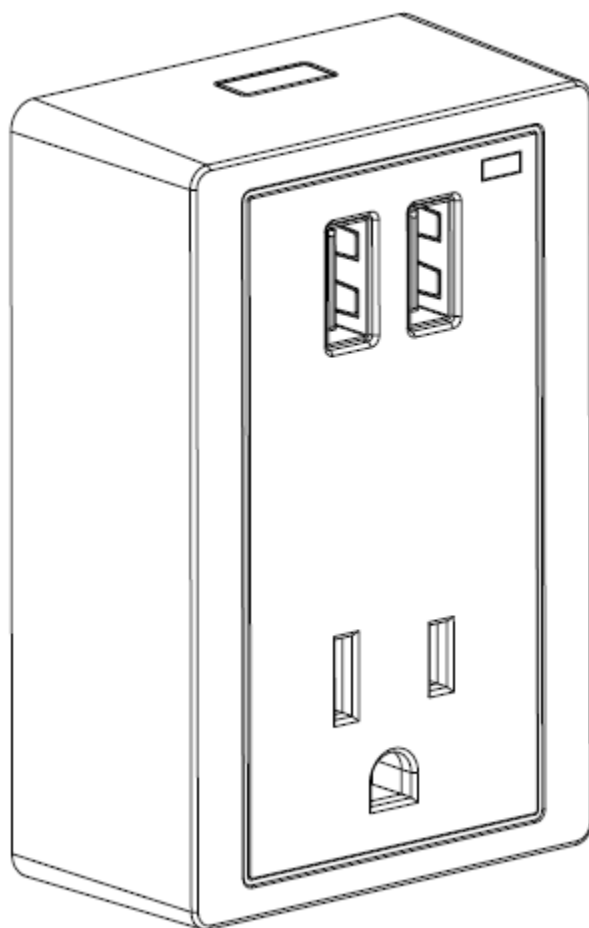
Z Wave Plus® Wall Socket Plug-in Receptacle

P/N 15654

User's Manual

CONTENTS

SAFETY WARNINGS AND GUIDELINES

- This device is intended for indoor use only.

- Do not expose this device to water or moisture of any kind. Do not place drinks or other containers with moisture on or near the device. If moisture does get in or on the device, immediately unplug it from the power outlet and allow it to fully dry before reapplying power.

- Clean using a soft, dry cloth only. Do not use chemical cleaners, solvents, or detergents. For stubborn deposits, moisten the cloth with warm water.

- This device has no user serviceable parts. Do not attempt to open, service, or modify this device.

INTRODUCTION

Thank you for purchasing this Z-Wave Plus® Wall Socket Plug-in Receptacle from Monoprice! This plug-in is an AC powered Z-Wave enabled device and is fully compatible with any Z-Wave enabled network. Z-Wave is an interoperable, two-way RF mesh networking technology used for home automation and security. Every AC powered Z-Wave device acts as a signal repeater, so multiple devices result in more possible transmission routes, which helps eliminate RF "dead spots" in the network. Any Z-Wave enabled device displaying the Z-Wave logo can be used with Z-Wave devices from other manufacturers.

This Plug-in can be operated remotely, using the Z-Wave controller, or directly, using the Z-Button on the device. It plugs into a standard NEMA 5-15 power outlet and includes both a Z-Wave controlled outlet and two USB charging ports. It is designed so that when it is plugged into a standard two-plug wall outlet, it will not block the other power socket. As an AC powered Z-Wave device, this Plugin will act as a Z-Wave repeater.

FEATURES

- Single 15-amp/1800-watt NEMA 5-15 AC outlet

- Outlet can be switched on or off manually or via Z-Wave® commands

- LED indicator illuminates when the AC outlet is on

- Tracks and can report on wattage consumption and kWh energy usage

- Acts as a Z-Wave repeater
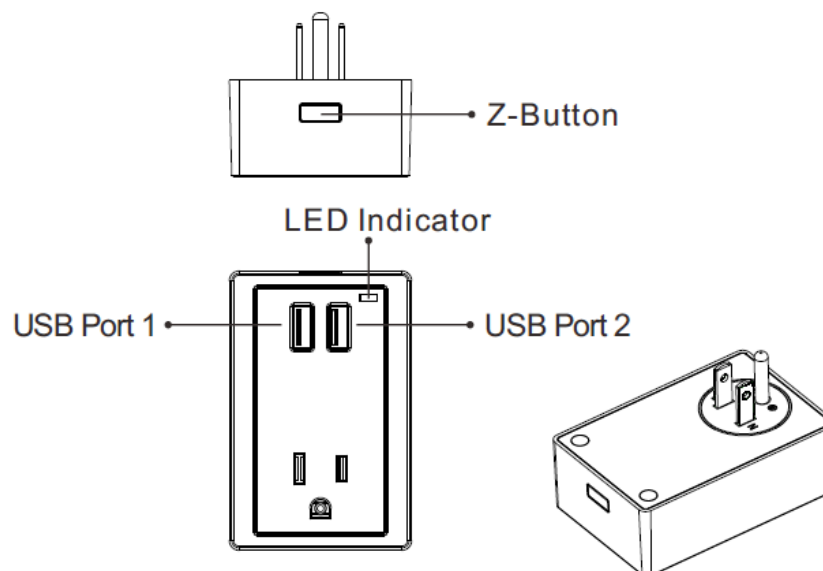
- Supports Over-the-Air firmware updates

PACKAGE CONTENTS

Please take an inventory of the package contents to ensure you have all the items listed below. If anything is missing or damaged, please contact Monoprice Customer Service for a replacement.

1x Z-Wave Plus® plug-in module

1x User's Manual

PRODUCT OVERVIEW

INSTALLATION

Note: If you are installing a complete Z-Wave system for the first time, please refer to the installation guide of your Z-Wave Interface Controller before installing this plug-in.

1. Insert the plug-in into an AC outlet at the desired location.

2. Plug the device that will be controlled into the NEMA 5-15 socket on the plug-in module.

3. Turn on the connected device.

4. Proceed to the *INCLUSION* section below.

INCLUSION

This device can be included manually or using the auto-inclusion feature.

Automatic Non-Secure Inclusion

1. Perform the steps in the *INSTALLATION* section above. If the plug-in has not already been included into a Z-Wave network, the LED indicator will blink rapidly. Otherwise, the plug-in has already been included and should first be excluded by following the instructions in the EXCLUSION section below.

2. Set your Z-Wave controller into learning mode (refer to your controller's manual for instructions). The plug-in should be recognized and automatically included into your Z-Wave network.

3. The auto-inclusion function will be disabled after the plug-in is included.

Manual Non-Secure Inclusion

1. Perform the steps in the *INSTALLATION* section above. If the plug-in has not already been included into a Z-Wave network, the LED indicator will blink rapidly. Otherwise, the plug-in has already been included and should first be excluded by following the instructions in the *EXCLUSION* section below.

2. Set your Z-Wave® controller into learning mode (refer to your controller's manual for instructions).

3. Triple-click the Z-Button on the plug-in. The plug-in should be recognized and included into your Z-Wave network.

Manual Secure Inclusion

1. Perform the steps in the *INSTALLATION* section above. If the plug-in has not already been included into a Z-Wave network, the LED indicator will blink rapidly. Otherwise, the plug-in has already been included and should first be excluded by following the instructions in the *EXCLUSION* section below.

2. Set your Z-Wave controller into node secure mode (refer to your controller's manual for instructions).

3. Press and hold the Z-Button for about 3 seconds. The LED indicator will begin blinking rapidly and the plug-in should be recognized and included into your Z-Wave network.

EXCLUSION

1. Ensure that the plug-in is inserted into an AC outlet.

2. Set your Z-Wave controller into learning mode (refer to your controller's manual for instructions).

3. Triple-click the Z-Button. The plug-in will be removed from your Z-Wave network.

RESETTING THE PLUG-IN

Note that the plug-in can only be reset if it is included in a Z-Wave network.

1. Ensure that the plug-in is inserted into an AC outlet.

2. Press and hold the Z-Button on the plug-in for more than 20 seconds. The LED indicator will illuminate steadily for about 3 seconds, then will begin blinking slowly.

ASSOCIATION

The ASSOCIATION command class allows the plug-in to communicate with other Z-Wave® devices directly, such as sending a BASIC REPORT whenever it is turned on or off. It supports 1 association grouping and up to 5 associated nodes.

ADVANCED CONFIGURATIONS

This plug-in supports a variety of advanced configuration settings. The following parameters can be accessed from your Z-Wave® controller's configuration interface.

Overload Protection

Parameter #:	20
Default Setting:	1
Parameter Size:	1 byte

The Overload protection feature constantly monitors the power load. Once the power load exceeds 16.5 amps for more than 5 seconds, the plug-in will automatically turn off.

0 = Overload protection disabled

1 = Overload protection enabled (default)

Status Memory

Parameter #:	21
Default Setting:	0
Parameter Size:	1 byte

The plug-in can be set to remember and restore its on/off status after a power outage.

0 = The plug-in remembers its on/off status when power is lost and will restore the on/off status when power is restored.

1 = The plug-in will not remember its on/off status when power is lost. The connected device will be turned on when power is restored.

2 = The plug-in will not remember its on/off status when power is lost. The connected device will be turned off when power is restored.

Load Status Change Notification

Parameter #:   24

Default Setting: 1

Parameter Size: 1 byte

The plug-in can send notifications to an association device (Group Lifeline) whenever the power load changes.

0 = Notifications are disabled.

1 = The plug-in sends a BASIC REPORT whenever the power load changes.

2 = The plug-in sends a BASIC REPORT only when the power load changes by some means other than by Z-Wave® command.

LED Indicator Modes

Parameter #:   27

Default Setting: 0

Parameter Size: 1 byte

Whenever the plug-in is included in a Z-Wave network, the LED indicator will indicate the status of the load.

0 = The LED illuminates when the plug-in is turned on and is off when the plug-in is turned off.

1 = The LED illuminates when the plug-in is turned on, but turns off after 5 seconds if the Z-Button is not pressed and no Z-Wave command is received.

Absolute Threshold of Power Report

Parameter #:   151

Default Setting: 50 (watts)

Parameter Size: 2 bytes

The plug-in can be set to send a power report to an association device (Group Lifeline) when the power load changes by the set number of watts.

0 = Power report disabled.

1 - 65535 = The number of watts by which the load must change to trigger a power report.

Percentage Threshold of Power Report

Parameter #:   152

Default Setting: 10 (%)

Parameter Size: 1 byte

The plug-in can be set to send a power report to an association device (Group Lifeline) when the power load changes by the set percentage.

0 = Power report disabled.

1 - 255 = The percentage by which the power load must change to trigger a power report.

Power Report Interval

Parameter #:   171

Default Setting: 30 (seconds)

Parameter Size: 4 bytes

To prevent continuous transmission of power reports, the power report is only sent after the set amount of time has elapsed since the last report.

0 = The function is disabled, allowing the power report to be sent whenever the power load changes.

5 - 2678400 = The number of seconds that must elapse before another power report is sent.

Energy Report Interval

Parameter #:   172

Default Setting: 300 (seconds)

Parameter Size: 4 bytes

To prevent continuous transmission of energy reports, the energy report is only sent after the set amount of time has elapsed since the last report.

0 = The function is disabled, allowing the energy report to be sent whenever the energy value changes.

5 - 2678400 = The number of seconds that must elapse before another energy report is sent.

Voltage Report Interval

Parameter #:   173

Default Setting: 300 (seconds)

Parameter Size: 4 bytes

To prevent continuous transmission of voltage reports, the voltage report is only sent after the set amount of time has elapsed since the last report.

0 = The function is disabled, allowing the voltage report to be sent whenever the voltage changes.

5 - 2678400 = The number of seconds that must elapse before another voltage report is sent.

Electricity Report Interval

       Parameter #:   174

       Default Setting: 300 (seconds)

       Parameter Size: 4 bytes

To prevent continuous transmission of electricity reports, the electricity report is only sent after the set amount of time has elapsed since the last report.

       0 = The function is disabled, allowing the electricity report to be sent whenever the electricity level changes.

       5 - 2678400 = The number of seconds that must elapse before another electricity report is sent.

SPECIFICATIONS

Radio Protocol	Z-Wave®
Radio Frequency	908.42 MHz
Radio Range	More than 150 meters outdoors, about 40 meters indoors, depending on building materials
Input Power	120 VAC ±10%, 60Hz
Power Load Current	15 amps
Power Output (for resistive load)	1800 watts
Power Consumption	Less than 1.5 watts
USB 1 Output	5.0 ±0.25 VDC, 1A, 5 watts
USB 2 Output	5.0 ±0.25 VDC, 2.4A, 12 watts
Operating Temperature	+14 ~ +104°F (-10 ~ +40°C)
Storage Temperature / Humidity	-4 ~ +140°F (-20 ~ +60°C)
Dimensions	3.2" x 2.2" x 1.1" (82 x 55 x 28 mm)

REGULATORY COMPLIANCE

Radio Notice for FCC

Caution

This FCC Part 15 radio device operates on a non-interference basis with other devices operating at this frequency. Any changes or modification to said product not expressly approved by Monoprice, including the use of non-approved antennas, could void the user's authority to operate this device.

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.