User manual

ZW38 Smart PLUG-IN APPLIANCE MODULE

Willis's family of Z-Wave credited wireless lighting controls (switches, dimmers, outlets and plug-in modules) brings a new level of intelligent wireless capability to commercial and residential environments.

The Z-Wave wireless protocol is an international wireless standard for remote home automation, security and other applications. Embedded in each device, the Z-Wave smart chip enables two-way RF communication among hundreds of Z-Wave enabled devices, allowing products and services from multiple manufacturers to work seamlessly.

Willis Z-Wave products are easy to install, and allow dealers to create an integrated wireless network with nearly limitless expansion and interoperability with security and health monitoring systems, energy management, home entertainment, appliances, and more.

This product supports 40Kbps data transmission. This product can also be used for network support in systems that stream metadata. An example might include transmission of information from audio devices such as song title, artist, and album information to various displays around the home. As part of a Z-Wave network, the ZW38will act as a wireless repeater to insure that commands intended for another device in the network are received. This is useful when the device would otherwise be out of the radio range of the wireless controller.

INSTALLATION

Plug this Appliance Module into the wall outlet near the load to be controlled, and plug the load into the Appliance Module. Make sure the load to be controlled is 10 amps or less.

INCLUDING ZW38TO THE NETWORK

STEP 1. Prepare the Controller to include a unit to the network, by adding it to a group (method of adding a node to the network). Refer to controller instructions.

STEP 2. The ZW38must be in its permanently installed location. Tap the button on the ZW38once.

STEP 3. You should see an indication on your Controller that the "DEVICE WAS INCLUDED" in the network.

NOTE: If you have trouble adding the ZW38to a group it may be that the Home ID and Node ID were not cleared from it after testing. You must fi rst "RESET UNIT" with your controller to remove it from the network. Although adding it to a group includes it in the network, removing it from a group does not remove it from the network. If removed from a group, it functions only as a repeater

BASIC OPERATION

Button (Local Control)

The button on the ZW38allows the user to:

• Turn the attached load on or off.

• Include or exclude the module from the Z-Wave system.

When a controller prompts you to "Send Node ID" or to "Press Button on Unit", quickly tap the button once to satisfy those instructions.

Tapping button toggles the load attached ON or OFF.

Remote Control

The ZW38will respond to BASIC and BINARY commands that are part of the Z-Wave system. Refer to your controller's instructions as to whether your controller can transmit those commands.

All On/All Off

The ZW38supports the ALL ON/ALL OFF commands.

The ZW38can be set to respond to ALL ON and ALL OFF commands 4 different ways. Refer to your controller for information on how to set the ZW38to operate in the manner you desire. Some controllers may be only able to set certain settings of ALL ON/ALL OFF response. The 4 different ways the ZW38can be set up to respond to ALL ON and ALL OFF commands are:

• ZW38will not respond to ALL ON or the ALL OFF command.
• ZW38will respond to ALL OFF command but will not respond to ALL ON command.
• ZW38will respond to ALL ON command but will not respond to ALL OFF command.
• ZW38will respond to ALL ON and the ALL OFF command.

Manufacturer Specifi c

The ZW38supports the Manufacturer Specifi c command. The ZW38can return Manufacturer Specifi c information about itself. Refer to your Controller's instructions on how to get this information from the ZW38.

SUC Support

There must be a Static Update Controller in your Z-Wave system for this feature to work. The Static Controller can act as a gateway in the system, since other nodes always know its position (not moved after addition to the network. The "always listening" advantage of the Static Controller is that other nodes can transmit information frames to it whenever needed. You can assign an "SUC Route" to the ZW38. Refer to your controller's instructions on how to do this (if it supports it). Assigning an SUC Route to the ZW38allows it to request an update of the Z-Wave devices that are between it and the Z-Wave device to which it was trying to transmit. The ZW38will only request an update when a transmission fails. Confi guration

The ZW38supports the Confi guration command.

The ZW38can be confi gured to operate slightly differently that it works when you fi rst install it. Using the confi guration command you can confi gure the following (if your controller supports it) Set this parameter to 1 for normal ON/OFF operation. Set this parameter to 0 to enable fl ash mode which operates as follows:

• With Parameter 104 value set to 0, relay is closed and ZW38defaults to ON (relay closed)

- Whenever the ZW38receives a Z-Wave ON command,
the ZW38will begin cycling its output relay on and off
approximately once per second (1/2 second Off, 1/2 second
On) for 20 seconds.
- If at any time during that 20 seconds, the ZW38receives
a Z-Wave OFF command, the ZW38will stop cycling its
output relay and default to ON.
- At any time during that 20 seconds, if the ZW38receives a
Z-Wave ON command, the ZW38will add an additional 20
seconds on/off cycling of its output relay. At the end of the 20
seconds, the ZW38will again default to ON (relay closed).
- At any other time, if the ZW38receives an OFF command,
it will have no effect and the ZW38remains ON. INTEROPERABILITY WITH Z-WAVE™
DEVICES
A Z-Wave™ network can integrate devices of various classes, and
these devices can be made by different manufacturers. The ZW38
can be incorporated into existing Z-Wave™networks. The button on the
face of the ZW38can be used to carry out inclusion (add to a group),
association (operate coincidently with other nodes), exclusion (remove
from a group) or reset.

SPECIFICATIONS

Power 120VAC, 60 Hz

Signal (Frequency) 908.42MHz

Load Incandescent: 400W maximum, 120VAC
  Resistive: 10 amps maximum 120 VAC

Range Up to 100 feet line of sight between the
  Controller and or closest Z-Wave Receive
  module.

REGULATORY INFORMATION

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.

FCC Notice

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 to help.

· Changes or modifications not expressly approved by the party responsible for compliance could void the

user's authority to operate the equipment

IC NOTICE

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. 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.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada. 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.

WARRANTY

This Willis product is warranted against defects in material and workmanship for twelve (12) months. This

warranty extends only to wholesale customers who buy direct from Willis or through Willis's normal

distribution channels. Willis does not warrant this product to consumers. Consumers should inquire from their

selling dealer as to the nature of the dealer's warranty, if any. There are no obligations or liabilities on the part

of Willis Corporation for consequential damages arising out of or in connection with use or performance

of this product or other indirect damages with respect to loss of property, revenue, or profi t, or cost of

removal, installation, or reinstallation. All implied warranties, including implied warranties for merchantability

and implied warranties for fi tness, are valid only until Warranty Expiration Date as labeled on the product.

IMPORTANT !!!

Willis radio controls provide a reliable communications link and fi ll an important need in portable wireless

signaling. However, there are some limitations which must be observed.

· For U.S. installations only: The radios are required to comply with FCC Rules and Regulations as Part 15

devices. As such, they have limited transmitter power and therefore limited range.

· A receiver cannot respond to more than one transmitted signal at a time and may be blocked by radio signals

that occur on or near their operating frequencies, regardless of code settings.

· Changes or modifications to the device may void FCC compliance.

· Infrequently used radio links should be tested regularly to protect against undetected interference or fault.

· A general knowledge of radio and its vagaries should be gained prior to acting as a wholesale distributor or

dealer, and these facts should be communicated to the ultimate users.