

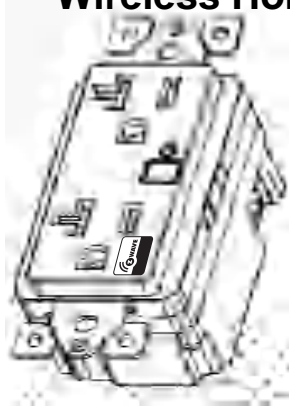
INSTALLATION INSTRUCTIONS



ZW20R

Wireless Home Automation Control Device

20A Tamper Resistant Duplex Receptacle



◆ SPECIFICATIONS

Voltage..... 120VAC, 60Hz
Load.....20 Amp
Motor..... 1/2 HP
Z-Wave Frequency..... 908.42 MHz
Operating Temperature..... 32-104° F
Range.....Up to 100 feet line of sight between the Wireless Controller and the closest Z-Wave receiver module.

◆ FEATURES

- Perfect replacement for regular receptacles, 120VAC, 20 Amp
- Wireless Z-Wave technology creates a mesh network for command and control interoperability with other Z-Wave compliant controller and devices
- Manual and Remote ON/OFF control of any connected lighting and other electrical load for Z-Wave controlled outlet
- Tamper-Resistant (TR) Receptacles keep you and your family safe
- Reduce energy consumption and enjoy Wireless Home Automation
- Enhance the value and technology of your condominiums and homes

◆ DESCRIPTION

The ZW20R TR Duplex Receptacle is a perfect wireless manual and remote on/off control replacement of regular receptacles, controlling table and floor lamps, small appliances, etc. This ZW20R TR Duplex Receptacle provides two different type outlets. One outlet with Z-Wave mark has programmable functions such as scenes, association, schedule event, etc. It can be added to most Z-Wave compliant controllers, and a Blue LED on the face cover indicates the status of the controlled outlet and/or act as a night light. The other outlet with Tamper-Resistant feature provides constant power, helps you and your families prevent electrical injuries. This ZW20R TR Duplex Receptacle also meets the 2011 NEC code requirement.

WARNINGS AND CAUTIONS

To be installed and/or used in accordance with appropriate electrical codes and regulations. Exercise extreme caution when using Z-Wave devices to control appliances. Operation of the Z-Wave device may be in a different

room than the controlled appliance, also an unintentional activation may occur if the wrong button on the remote is pressed. Z-Wave devices may automatically be powered on due to timed event programming. Depending upon the appliance, these unattended or unintentional operation could possibly result in a hazardous condition.

Z-Wave enabled devices should never be used to supply power to, or control the On/Off status of medical and/or life support equipment.

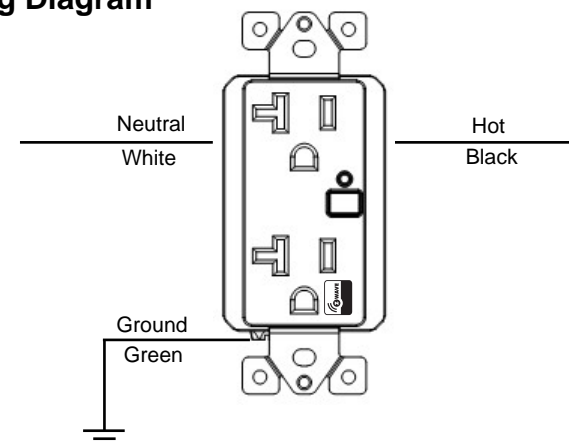
If you are unsure or uncomfortable about performing the installation, please consult a qualified electrician.

◆ INSTALLATION

This receptacle may be used in new installations or to replace an existing wall receptacle.

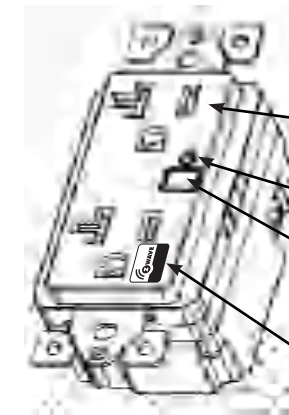
WARNING : TO AVOID FIRE, SHOCK ,OR DEATH ,TURN OFF THE POWER AT THE CIRCUIT BREAKER BEFORE YOU INSTALL THIS RECEPTACLE.

Wiring Diagram



1. For retrofit applications, remove wall plate.
2. Warning!: Verify power is OFF before continuing.
3. Remove the existing receptacle from the box.
4. Disconnect the wiring from the existing receptacle.
5. Connect the Z-Wave receptacle as shown in the wiring diagram: Black lead to hot wire, white lead to neutral wire, green lead to ground wire.
6. Check connections to be sure they are tight and no bare conductors are exposed.
7. Insert the ZW20R receptacle into the outlet box carefully.
8. Make sure the ZW20R receptacle to the box using the supplied screws
9. Attach the wall plate.
10. Restore power at the circuit breaker and test the system.

◆ OPERATIONS



Basic Operation

The connected light can be turned ON in two ways:

1. With a remote.
2. Manually with the program button on the Z-Wave receptacle.

Remote Control

Z-Wave remotes provide control of an Individual device, Groups of devices and Scenes. Please refer to your remote control's instructions for details on its capabilities and instructions for adding and controlling devices.

Manual Control

The program button on the ZW20R duplex receptacle allows the user to:

1. Manually turn the connected equipment ON or OFF by pressing program button. When the blue LED indicator turns OFF, the appliance or device plugged into Z-Wave controlled outlet will turn ON, and vice versa.
2. When the controller is in inclusion mode and the blue LED blinks on the ZW20R, press the program button of ZW20R, and then the controller will verify the inclusion. When the controller is in exclusion mode, press the program button of ZW20R, and then the controller will remove it from the current Z-Wave network, and the LED will blink on the receptacle.

Please Note: After a power failure, the ZW20R's Z-Wave controlled receptacle returns to OFF state.

Advanced Operation

The following Advanced Operation parameters require that you have an advanced controller. However, basic remotes do not have this capability.

All-ON and All-OFF

Depending upon your primary controller, the ZW20R receptacle can be set to respond to ALL-ON and ALL-OFF commands in up to four different ways. Some controllers may not be able to change the response from its default setting. Please refer to your controller's instructions for information on whether or not it supports the configuration function and if so, how to change this setting.

INSTALLATION INSTRUCTIONS

The four possible responses are:

- It will respond to ALL-ON and the ALL-OFF command (default).
- It will not respond to ALL-ON or ALL-OFF commands.
- It will respond to the ALL-OFF command but will not respond to the ALL-ON command.
- It will respond to the ALL-ON command but will not respond to the ALL-OFF command.

Configure LED State

By default setting, the LED state is contrary with relay state. For example, when the connected outlet is turned ON, LED will be turned off. We use command_class_configuration to configure LED state. If parameter no.1 is set to 1(by default it is "0") LED state will be as same as relay state.

- Configuration details
- a. valid parameter no., 1 (other variable value will be ignored)
 - b. valid configuration value size, 1 byte (other configuration value will be ignored)
 - c. valid configuration value, 0 /1 (other configuration value will be ignored)

WIRELESS RANGE

This device complies with the Z-Wave standard of open-air, line of sight transmission distances of 100 feet. Actual performance in a home depends on the numbers of walls between the remote controller and the destination device, the type of construction and the number of Z-Wave enabled devices installed in the control network.

Z-Wave Network

Every Z-Wave enabled device acts as a signal repeater and multiple devices result in more possible transmission routes which helps eliminate " RF dead-spots."

Things to consider regarding RF range:

- Each wall or obstacle (i.e.:refrigerator, big screen TV, etc.)between the remote or a Z-Wave device and the destination device will reduce the maximum range of 100 feet by approximately 25-30%.
- Brick, tile or concrete walls block more of the RF signal than walls made of wooden studs and plasterboard (drywall).
- Wall mounted Z-Wave devices installed in metal junction boxes will suffer a significant loss of range (approximately 20%) since the metal box blocks a large part of the RF signal.

Effects of Home Construction on Wireless Range Between Z-Wave Enabled Devices.

From the Remote (or repeating Z-Wave module) to destination device:					
Type of Construction		Wood Frame with Drywall		Brick, Tile or Concrete	
		Plastic J-Boxes*	Metal J-Boxes	Plastic J-Boxes*	Metal J-Boxes
Number of Walls or Obstacles	0**	100’	80’	100’	80’
	1	70’	56’	60’	48’
	2	49’	39’	36’	29’
	3	34’	27’	21’	17’

Restoring Factory Defaults

All network settings and configuration parameters can all be restored to their factory default settings by using your master controller to reset the device. (delete it from network)

Over-Current Protection

Over-current protection is provided by an internal fuse which is not user serviceable. Check your home’s circuit breakers before concluding that that the product must be replaced.

FCC COMPLIANCE STATEMENT

The 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 uses, generates and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. 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.

Operation is subject to the following two conditions:

- This device may not cause interference.
- This device must accept any interference, including interference that may cause undesired operation of the device.

TROUBLESHOOTING

Cannot carry out inclusion, exclusion or association

1. Confirm that the receptacle is powered.
2. Check if the wireless distance is too far.

The LED indicator does not turn ON

1. Check the wiring connection, especially the neutral wire.
2. Manually with the program button on the receptacle.

WARRANTY INFORMATION

Our company warranties its products to be free of defects in materials and workmanship for a period of two(2) years. There are no obligations or liabilities on the part of our company for consequential damages arising out of or in connection with the use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation or reinstallation.

Mar, 2014
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