



Powering Business Worldwide

ENGLISH

RF9640-N - Z-Wave Plus Universal Smart Dimmer
RF9642-Z - Z-Wave Plus Smart Accessory Dimmer

WARNINGS AND CAUTIONS:

- Turn circuit breaker to OFF position or remove fuse(s) and test that power is OFF before installation process.
Never wire any electrical device with power turned ON. Wiring dimmer HOT may cause permanent damage to dimmer and void warranty.

If you are not sure about any part of these instructions, please contact a licensed electrician.
IMPORTANT: Z-Wave Universal dimmer will not work or will become damaged if wired incorrectly and warranty will be voided. Refer to wiring instructions provided.

- Use only with 120V/AC 60 Hz.
Do not exceed maximum rating of dimmer as indicated on the device.
Must be installed and used in accordance with all national and local electrical codes.
If a bare copper or green ground connection is not available in the wallbox, contact a licensed electrician for installation.
Use only #14 or #12 copper wire rated for at least 75° C with these devices. DO NOT USE WITH ALUMINUM WIRE.

- NOTES:
The Z-Wave Universal Dimmer is wired directly to the light fixture.
The Z-Wave Universal Dimmer is not compatible with standard 3-way switches.
For Multi-location applications (3-Way or 4-Way) the Z-Wave Accessory Dimmer (RF9642-Z) is used along with one Z-Wave Universal Dimmer.
The Z-Wave Accessory Dimmer communicates via RF signals to control the light from more than one location.
For multi-location control use Z-Wave Universal Dimmer Master direct wired to the light along with Z-Wave Accessory (RF9642-Z).
The Z-Wave Accessory dimmer does not require direct connection to the light (use Z-Wave Association function).

Z-WAVE DEVICE NETWORK INSTRUCTIONS:

- This product may be added to a new or existing Z-Wave network. An Eaton Wiring Devices Z-Wave device has a blue LED, which will blink when the device is not included in a Z-Wave network.
This product works with other Z-Wave products from different vendors and product categories as part of the same network.
This product is a listening node and it will act as a repeater in the Z-Wave network. It will perform the repeater function with Z-Wave products from Eaton and from other Z-Wave vendors.
This secure Z-Wave Plus device will only associate with other secure devices based on the Z-Wave controller it's being used with. Please refer to instructions provided with the controller for more details.

Adding Z-Wave Smart Universal Dimmer to a Z-Wave Network:

- 1. To include this device in a Z-Wave network, select the command on your Z-Wave controller for inclusion (Install, Add Device, Add Node, Include Device, etc.). Then press the device ON/OFF switch one time to include it in the network.
2. After the Device is added to the network, the LED will stop blinking. This indicates the device is installed in the Z-Wave network.

Removing Z-Wave Smart Universal Dimmer from a Z-Wave Network:

- 1. To exclude this device from a Z-Wave network, select the setting on your Z-Wave controller for exclusion (Uninstall, Remove Device, Remove Node, Exclude Device, etc.).
2. Once your controller is in exclusion mode, press the device ON/OFF switch one time to exclude it from the network. The LED will start blinking.

Operating Instructions:

- Press ON/OFF button once to turn lights ON at previously selected level.
Press ON/OFF button again to turn lights OFF.
When lights are OFF, press and hold ON/OFF button for 2 seconds for full brightness of overhead light.
Delayed OFF: When overhead lights are ON, press and hold ON/OFF button for 2 seconds until the blue LED blinks. After the preset delay, the lights will begin fading to OFF (Default present delay is 10 seconds; you can configure this through a compatible Z-Wave controller for up to 4 minutes). Please refer to configuration parameters table.
Amber ON/OFF LED indicates that dimmer is turned ON (Default).
Dimming Level Adjustment (RF9640-N only):
For maximum compatibility with different load types, RF9640-N allows the user to set the minimum dim level or low end trim. Also to save on power consumption RF9640-N allows the user to set the maximum dim level or high end trim.
After adding the dimmer to a network, press ON/OFF button to turn ON the overhead light.
Press and hold ON/OFF button for five seconds until the blue indicator LEDs begin to cycle rapidly (Notice - After two seconds blue indicator LEDs will start to flash indicating activation of the 'delayed OFF' feature. Continue to hold the ON/OFF button for three additional seconds until the blue indicator LEDs begin to cycle rapidly.)
Once the indicator LEDs start cycling, release the ON/OFF button. Dimmer will set the light to the previously saved minimum level. During initial setup, the light will set to the factory minimum default.
Press either the dim UP or DOWN buttons to change the minimum level until the light output is acceptable.
Once light output is acceptable, press ON/OFF button once. Blue indicator LEDs will start to cycle rapidly again and the dimmer light will go to previously saved maximum level.
Press either the dim UP or DOWN buttons to change the maximum level until the light output is acceptable.
Press ON/OFF button once, LED will flash indicating completion of programming.

Note - User could ignore setting max or min while programming by pressing ON/OFF button without changing the light level.

Rapid start feature (RF9640-N only):

This feature ensures that LED lights turn on when the dimmer preset level is low. With this setting enabled, the lights may momentarily come ON brighter than the preset level (less than one second) and then dim down to the preset level. Depending on the type of light used, this feature may not be needed. To enable/disable the feature, turn lights ON. Press and hold the ON/OFF button for 10 seconds until the blue indicator LEDs flash for the third time, then release the button. This feature is disabled by default.

Changing LED Indicator brightness: (RF9640-N & RF9642-Z):

This feature allows the change of the brightness of the blue LED indicators on the device. There are 5 levels (including fully OFF and full brightness) to change the LED indicator brightness level either while the device is ON or OFF state.

Changing the LED indicator brightness when the device is an ON state:

- Turn the overhead light ON.
Press and hold the ON/OFF button for 15 seconds till the LED indicator flashes for the fourth time. (second time for RF9642-Z)
Release the ON/OFF button.
Use the dim UP or DOWN button to change the LED indicator level (it will cycle between the five levels).
Once the brightness level is selected, double tap on the ON/OFF button and this value will be saved.

Changing the LED indicator brightness when the device is an OFF state:

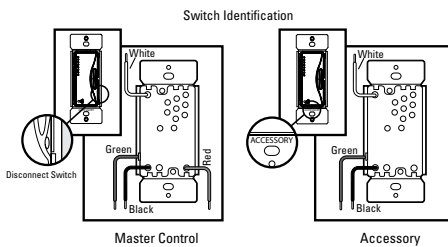
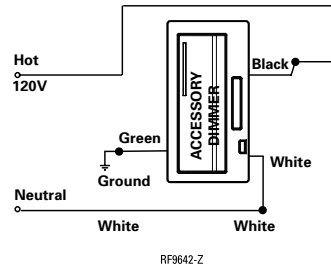
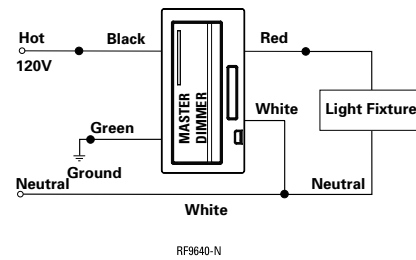
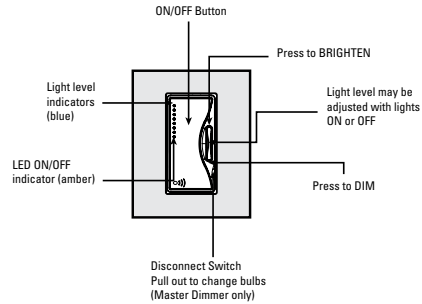
- Turn the overhead light OFF.
Press and hold the ON/OFF button for 15 seconds till the LED indicator flashes for the second time.
Release the ON/OFF button.
Use the dim UP or DOWN button to change the LED indicator level (it will cycle between the five levels).
Once the brightness level is selected, double tap on the ON/OFF button and this value will be saved.

Local Reset (RF9640-N & RF9642-Z)

The device could be reset locally. This will cause the device to be excluded from its network and restore to factory default.

Before leaving the network the dimmer will send a notification to the controller indicating its departure from the Z-Wave network.

- Turn the device ON.
Press and hold ON/OFF button for 20 second till the LED flashes for the fifth time. (third time for RF9642-Z)
Release the ON/OFF button.
LED will start flashing rapidly. Once the LED starts blinking slowly, that indicates the device is not part of the network.



Troubleshooting Guide

Table with 3 columns: Symptom, Possible Cause, and Solution. Rows include: No Function. All LEDs are OFF; Erratic operation or flickering LEDs; Lights turns on after long delay; Functions normally using the dimmer push buttons but not from Z-Wave controller; Functions normally using the Master dimmer control but not from Z-Wave controller; Functions normally both locally and from a Z-Wave controller; Dimmer is warm to touch after a period of time.

Single Location Control Installation (requires one Master dimmer)

Installation steps 1.1 through 1.4: 1.1 Identify existing wiring and tag 'Hot' wire; 1.2 Disconnect existing switch and remove; 1.3 Connect master dimmer as shown; 1.4 Gently push dimmer into place and secure with mounting screws.

## **FCC Statement**

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

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.

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.

## **ISED RSS Warning:**

This device complies with Innovation, Science and Economic Development Canada licence-exempt RSS standard(s). 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.

Le présent appareil est conforme aux CNR d'ISED 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.

ISED RF exposure statement:

This equipment complies with ISED 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. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Le rayonnement de la classe B respecte ISED fixaient un environnement non contrôlés. Installation et mise en œuvre de ce matériel devrait avec échangeur distance minimale entre 20 cm ton corps. Lanceurs ou ne peuvent pas coexister cette antenne ou capteurs avec d'autres.