

Z-Wave Plus universal smart dimmer

Project Name:	Prepared By:
Project Number:	Date:
Catalog Number:	Type:

Description

Single pole, 3-way, multi-location
 120V/AC, 60Hz
 Loads: LED, CFL, INC, HAL, FLR, MLV, ELV

Design features

- Compatible with Z-Wave Plus accessory dimmer (RF9642-Z) for wireless 3-way control, eliminating the need for traditional 3-way wiring or dedicated traveler wire
- Can be associated with up to 5 other Z-Wave Plus devices
- Neutral wire required for installation
- Programmable rapid start feature ensures lamp start-up even at low dim levels
- Air-gap switch disconnects power from load forcing an OFF condition
- Adjustable high-level trim setting for additional energy savings
- Adjustable low-level trim setting helps prevent flickering
- Dimmable seven step blue LED display alongside push pad indicates selected light level - even in full daylight (coordinates light level status with associated dimmer accessory)
- Pressing and holding push pad for 2 seconds brings light to full brightness without affecting preset levels
- Patented indicator system alerts if the device is not set up in the network
- Programmable fading up to 4 minutes (default is 3 seconds)
- Programmable delayed OFF mode up to 4 minutes (default is 10 seconds)
- Configurable "power ON state"
- Child lockout feature which disables local control at dimmer
- Supports panic mode with compatible hubs
- Available in 10 different colors including metallic finish
- Z-Wave Plus certified with S2 security standard



RF9640-NDW



RF9640-NAW

Table 1. Z-Wave Plus universal smart dimmer master

Catalog no.	Description	Compatible lamp types	Watts	V/AC	Designer color suffix	Decorator color suffix
□ RF9640-N_	Z-Wave Plus universal dimmer	Dimmable LED/CFL	300	120	AW, DS, WS	DBK, DGY, DB, DLA, DRB, DSG, DW
		INC, HAL, FLR, MLV, ELV	600	120		

Compliances, specifications and availability are subject to change without notice.



Powering Business Worldwide

Project Name:	Prepared By:
Project Number:	Date:
Catalog Number:	Type:

Applications

Eaton's Z-Wave Plus universal smart dimmer replaces regular switches to provide local and remote ON/OFF/DIM/BRIGHT control. These are compatible with most common lighting loads including LED, CFL, INC, HAL, FLR, ELV, and MLV. This Z-Wave Plus dimmer provides other programmable features such as scenes, events and associations when used with Z-Wave compliant controllers.

Eaton's Z-Wave Plus universal dimmer is Z-Wave Plus certified and comply with latest S2 Security Standards for advanced cyber security.

Table 2. Specifications

Catalog No.	Dimmer RF9640-N
Performance	Rating: 120V/AC, 60Hz Derating required in multi-gang installations (See multi-unit installation chart listed below) Uses 500 Series Z-Wave chip @ 9.6/40/100 Kbps
Performance Consideration	A Z-Wave enabled device must be within 60 feet of another Z-Wave enabled device to participate in a Z-Wave wireless mesh network. Any one dimmer or switch can be associated with up to 5 devices (dimmers, switches, receptacles, or plug-in modules)
Installation & Programming	Please reference the Instruction Sheet included with the product for wiring installation. For programming of the device, see the Z-Wave User Manual, which is provided with compatible Z-Wave controllers
Testing & Code Compliance	cULus Listed 6B28. NOM Certified. Complies with FCC Part 15, Class B. Z-Wave Plus Compliant Certified
Terminations	Dimmer has four 6" pre-stripped wire leads for line, load, ground and neutral
Material Characteristics	Flammability: Meets UL94 requirements; V2 rated Temperature Rating: 32°F to 104°F (0°C to 40°C)
Warranty	2-year limited product warranty

Table 3. Multi-Unit Installation Chart

Catalog No.	Load Type	1-Gang	2-Gang	3 or more Gangs
RF9640-N	INC/ELV/FLR/HAL/MLV	600W/VA	550W/VA	500W/VA
	LED/CFL	300W	300W	300W

Table 4. Color Ordering Information

For ordering devices, include Catalog No. followed by the Color Suffix: AW (Alpine White), DS (Desert Sand), WS (White Satin), DB (Decorator Brown), DBK (Decorator Black), DGY (Decorator Gray), DLA (Decorator Light Almond), DRB (Decorator Oil Rubbed Bronze), DSG (Decorator Silver Granite), DW (Decorator White).

Designer series color options:

AW	AW	DS	DS	WS	WS
(Alpine White)		(Desert Sand)		(White Satin)	

Decorator series color options:

DB	DBK	DGY	DLA	DRB	DSG	DW
(Decorator Brown)	(Decorator Black)	(Decorator Gray)	(Decorator Light Almond)	(Decorator Oil Rubbed Bronze)	(Decorator Silver Granite)	(Decorator White)

Table 5. Multi-location dimming

Catalog No.	Use with RF9642-Z	Use with RF9642 (Wired 3-way)
RF9640-N	(5)	—

Project Name:	Prepared By:
Project Number:	Date:
Catalog Number:	Type:

Table 6. Device Configuration Parameters

Parameter	Description	Value range
1	Delayed OFF time	*0 to 255 secs
2	Panic ON time	*0 to 255 secs
3	Panic OFF time	*0 to 255 secs
4	Not Used	N/A
5	Power up state	1=OFF, 2=ON, 3=Last state
6	Panic mode enable	0=OFF, 1=ON
7	Dimmer ramp time	*0 to 255 secs
8	Kickstart enable/disable	0 disables, 1 enables
9	Reset max/min levels to factory default	0
10 to 12	Not Used	N/A
13	Blue LED brightness level while dimmer is ON	0 to 4
14	Blue LED brightness level while dimmer is OFF	0 to 4
15	Amber LED brightness level while the dimmer is ON	0 to 4
16	Amber LED brightness level while the dimmer is OFF	0 to 4

Table 7. Device Association Information

Association Groups for RF9640-N	
Group 1 (life line)	5 nodes maximum
Group 2 (set) ON/OFF	5 nodes maximum
Group 3 (DIM) UP/DOWN	5 nodes maximum

Product Dimensions

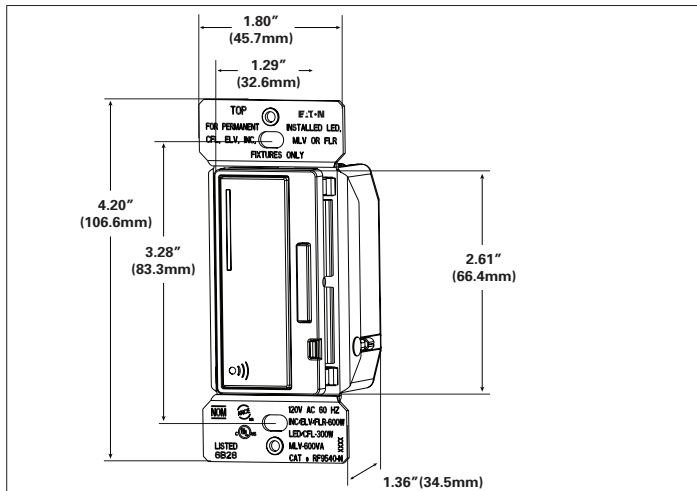
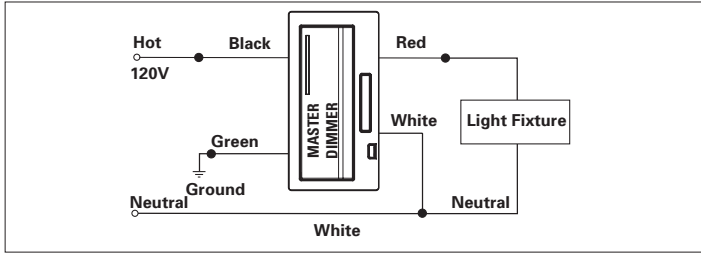


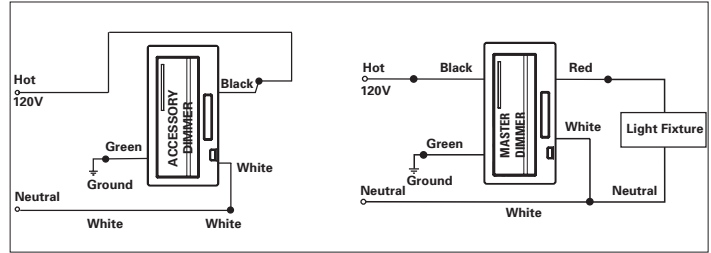
Figure 1. RF9640-N

Project Name:	Prepared By:
Project Number:	Date:
Catalog Number:	Type:

Single-Pole Location Wiring Diagram



Two-Way Location Control Wiring Diagram



Certifications & Compliances

Catalog No.	cULus	NOM 426	FC	Z-Wave Plus
RF9640-N	•	•	•	•

KEY: cULus cULus NOM 426 NOM FC FCC Z-Wave Plus

Related Products

Z-Wave controller



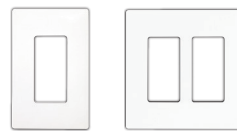
Eaton home automation hub

Z-Wave Plus wireless products



RF9642-Z, RF9601, RFTR9605

Wallplates



PJS26, PJS262

Compliances, specifications and availability are subject to change without notice.

Electrical Sector
203 Cooper Circle
Peachtree City, GA 30269
United States
Eaton.com
Eaton.com/wiringdevices

Electrical Sector
Canada Operations
5925 McLaughlin Road
Mississauga, Ontario, L5R 1B8
Canada
EatonCanada.ca
Eaton.com/wiringdevices

Electrical Sector
Mexico Operations
Carr. Tlalnepantla -
Cauatitlan Km 178 s/n
Col. Villa Jardin esq.
Cerrada 8 de Mayo
Cauatitlan, Mexico CP 54800
Mexico
Eaton.mx
Eaton.com/wiringdevices



Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com
© 2018 Eaton
All Rights Reserved
Printed in USA
Publication No. TD610093EN
November 2018

Eaton is a registered trademark.
All other trademarks are property
of their respective owners.

