EVA LOGIK™

ZW34 Z-Wave Relay/Dimmer controller Manual

Federal Communications Commission (FCC) Statement

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this 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 caus 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.This equipment should be installed and operated with minimum distance 20cm between the radiator and your bod:

IC Caution:

This device complies with Industry 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.

DECLARATION DE CONFORMITE D'INDUSTRIE CANADA

Ce périphérique a été testé et reconnu conforme aux limites spécifiées dans RSS-210.

Son utilisation est soumise aux deux conditions suivantes :

(1) il ne doit pas provoquer d'interférences gênantes et

(2) il doit tolérer les interférences re.ues, notamment cellessusceptibles d'en perturber le fonctionnement.

ZW34 Relay/Dimmer controller

WARRANTY

Evalogik Products warrants this product to be free from manufacturing defects for a period of two years from the original date of consumer purchase. This warranty is limited to the repair or replacement of this product only and does not extend to consequential or incidental damage to other products that may be used with this product.

This warranty is in lieu of all other warranties, expressed or implied. Some states do not allow limitations on how long an implied warranty lasts or permit the exclusion or limitation of incidental or consequential damage, so the above limitations may not apply to you.

This warranty gives you specific rights, and you may also have other rights which vary from state to state. if the unit should prove defective within the warranty period.

SPECIFICATIONS

Model:ZW34

Power: AC120V,60HZ

Signal (Frequency): 908.42 MHZ.
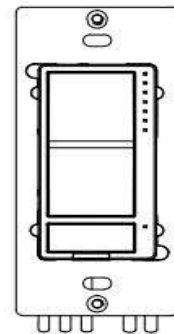
Maximum load   Relay 250 V / 15A

Dimmer 300W

Range: Up to 100 feet line of sight between the Wireless Controller and the closest Z-Wave receiver module.

Operating Temperature Range: 32-104° F (0-40° C)

Specifications subject to change without notice due to continuing product improvement

Website:www.nie-tech.com

FCC ID: 2AQURZW34

WARNING

RISK OF FIRE

RISK OF ELECTRICAL SHOCK

RISK OF BURNS

CONTROLLING APPLIANCES:

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 ANUNINTENTIONAL 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 OPERATIONS COULD POSSIBLY RESULT IN A HAZARDOUS CONDITION. FOR THESE REASONS, WE RECOMMEND DO NOT RETURN THIS PRODUCT TO THE STORE THE FOLLOWING:

DO NOT USE Z-Wave DEVICES TO CONTROL ELECTRIC HEATERS OR ANY OTHER APPLIANCES WHICH MAY PRESENT A HAZARDOUS CONDITION DUE TO UNATTENDED OR UNINTENTIONAL OR AUTOMATIC POWER ON CONTROL.

Introduction:

This product can be operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers.

All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

Each module is designed to act as a repeater, which will re-transmit a radio frequency (RF) signal by routing the signal around obstacles and radio dead spots to ensure that the signal is received at its intended destination.

ZW34 is a security enabled Z-Wave plus device. A security Enabled Z-Wave Plus Controller must be used in order to fully utilize the product.

The Device Type of the ZW34 is on/off power switch.

The Role Type of the ZW34 is Always On Slave Role Type

Key Features:

---Remote ON/OFF control via the Z-Wave controller

---Manual ON/OFF control with the front panel push button

---Support Association Group and Auto Report switch status

---Support firmware upgrades via Over-the-air (need Gateways support)

Product Overview:

A. Dimmer Button
B. Relay Button
C. LED Indicator
D. OutLine

ZW34 Installation Wiring Diagram
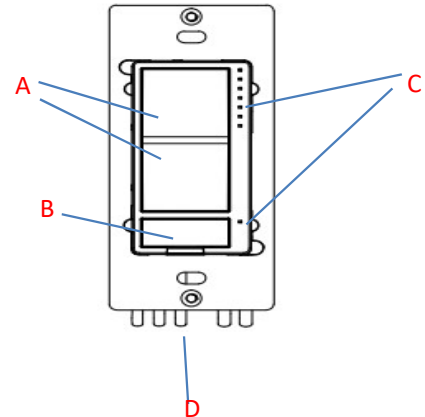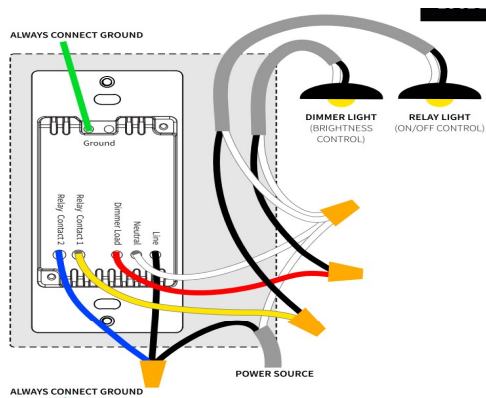
Key function description

Function 1:   press 1x: Dimmer Button turn output ON (to last set brightness level) or OFF

Function 2:   hold dimmer button: dimmer up or dimmer down

Function 3:   quickly press 3x UPPER PADDLE FOR DIMMER: inclusion; quickly press 3x LOWER PADDLE FOR DIMMER: exclusion
            (relay button does NOT work for inclusion/exclusion)

Function 4:   quickly press 6x UPPER PADDLE FOR DIMMER: change LED Indicator Parameter 1

Function 5:   quickly press 6x relay button: change LED Indicator Parameter 2

Function 6:   Whatever state the DIMMER is in, quickly press UPPER paddle 2 times, switch turns on to 100% brightness
            (or according to setting in Parameter 17

Function 7:   Press and hold for 15 seconds LOWER PADDLE OF DIMMER until all LED's start blinking quickly, then release and within 5
            press and hold the UPPER PADDLE OF DIMMER for 15 SECONDS until all LED's blink again for 3 seconds to reset factory
            (Node:Please use this procedure only when the network primary controller is missing or otherwise inoperable.)

Function 8:   press and release relay button: relay ON or OFF

Function 9:   Tap 4x and hold more than 10 seconds LOWER PADDLE OF DIMMER to rotate values in parameter 19 for disabling local control

Function10: Tap 4x and hold more than 10 seconds RELAY button to rotate values in parameter 20

Function11: Tap 1x/2x/3x/4x/5x/6x/hold button Activate the scene.

Z-Wave Remote Control

ADD the ZW34 from the existing Z-Wave home control network with your primary controller.

---Refer to your primary controller instructions to process the inclusion / exclusion setup procedure.

---When prompted by your primary controller, quickly press 3x UPPER PADDLE FOR DIMMER

Remove the ZW34 from the existing Z-Wave home control network with your primary controller.

---Refer to your primary controller instructions to process the inclusion / exclusion setup procedure.

---When prompted by your primary controller, quickly press 3x LOWER PADDLE FOR DIMMER

Include ZW34 to/from a Z-Wave Gateway with supporting Security.The ZW34 can support the Primary Controller that implemented the security S2.

Notice: Including a node ID allocated by Z-WaveTM Controller means "Add" or "Inclusion". Excluding a node ID allocated by Z-WaveTM Controller means "Remove" or "Exclusion".

Z-Wave MULTI_CHANNEL

ZW34 is multi channel device , It has two endpoints. Dimmer is Endpoint1, Relay is Endpoint2.

ZW34 Endpoint1 / Endpoint2 Device Type

Generic Device Class: GENERIC_TYPE_SWITCH_BINARY
Specific Device Class: SPECIFIC_TYPE_POWER_SWITCH_BINARY

Z-Wave protocol Command Class Node Info

COMMAND_CLASS_ZWAVEPLUS_INFO,
COMMAND_CLASS_SWITCH_BINARY,
COMMAND_CLASS_ASSOCIATION,
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V2,
COMMAND_CLASS_ASSOCIATION_GRP_INFO,
COMMAND_CLASS_TRANSPORT_SERVICE_V2,
COMMAND_CLASS_VERSION,
COMMAND_CLASS_MANUFACTURER_SPECIFIC,
COMMAND_CLASS_DEVICE_RESET_LOCALLY,
COMMAND_CLASS_POWERLEVEL,
COMMAND_CLASS_CONFIGURATION,
COMMAND_CLASS_MULTI_CHANNEL_V4,
COMMAND_CLASS_SECURITY_2,
COMMAND_CLASS_SUPERVISION
COMMAND_CLASS_FIRMWARE_UPDATE_MD_V2

The Below listed Command Class are all supported the Security S2

COMMAND_CLASS_VERSION,
COMMAND_CLASS_SWITCH_BINARY,
COMMAND_CLASS_ASSOCIATION,
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V2,
COMMAND_CLASS_ASSOCIATION_GRP_INFO,
COMMAND_CLASS_MANUFACTURER_SPECIFIC,
COMMAND_CLASS_DEVICE_RESET_LOCALLY,
COMMAND_CLASS_POWERLEVEL,
COMMAND_CLASS_MULTI_CHANNEL_V4,
COMMAND_CLASS_CONFIGURATION

ZW34 protocol Endpoint 1

Full Command Class Node Info

COMMAND_CLASS_ZWAVEPLUS_INFO,
COMMAND_CLASS_ASSOCIATION,
COMMAND_CLASS_ASSOCIATION_GRP_INFO,
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V2,
COMMAND_CLASS_SUPERVISION,
COMMAND_CLASS_SWITCH_BINARY,
COMMAND_CLASS_SECURITY_2

The Below listed Command Class are all supported the Security S2

COMMAND_CLASS_ASSOCIATION,
COMMAND_CLASS_ASSOCIATION_GRP_INFO,
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V2,
COMMAND_CLASS_SWITCH_BINARY

ZW34 protocol Endpoint 2

Full Command Class Node Info

COMMAND_CLASS_ZWAVEPLUS_INFO,
COMMAND_CLASS_ASSOCIATION,
COMMAND_CLASS_ASSOCIATION_GRP_INFO,
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V2,
COMMAND_CLASS_SUPERVISION,
COMMAND_CLASS_SWITCH_BINARY,
COMMAND_CLASS_SECURITY_2

The Below listed Command Class are all supported the Security S2

COMMAND_CLASS_ASSOCIATION,
COMMAND_CLASS_ASSOCIATION_GRP_INFO,
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V2,
COMMAND_CLASS_SWITCH_BINARY

Z-Wave Configuration Parameters

You may use the below configuration parameters to change settings of the corresponding functionality.

1 : LED Indicator Mode for Dimmer

Paramter No: 1(0x01)	Size:1 Byte	Value: 00	On when Off and Off when On(Default)
		Value: 01	On when On and Off when Off
		Value: 02	Always Off
		Value: 03	Always On

2: LED Indicator Mode for Relay

Paramter No: 2(0x02)	Size:1 Byte	Value: 00	On when Off and Off when On(Default)
		Value: 01	On when On and Off when Off
		Value: 02	Always Off
		Value: 03	Always On

3: LED Indicator Color for Dimmer

Paramter No: 3(0x03)	Size:1 Byte	Value: 00	White(default)
		Value: 01	Blue
		Value: 02	Green
		Value: 02	Red

4: LED Indicator Color for Dimmer

Paramter No: 4(0x04)	Size:1 Byte	Value: 00	White(default)
		Value: 01	Blue
		Value: 02	Green
		Value: 02	Red

5: LED Indicator Brightness for Dimmer

Paramter No: 5(0x05)	Size:1 Byte	Value: 00	Bright (100%)
		Value: 01	Medium (60%)(default)
		Value: 02	Low (30%)

6: LED Indicator Brightness for Relay

Paramter No: 6(0x06)	Size:1 Byte	Value: 00	Bright (100%)
		Value: 01	Medium (60%)(default)
		Value: 02	Low (30%)

7: LED Indicator Mode for Scene

Paramter No: 7(0x07) , Size=1 , Value: 0   Enable
                              Values: 1   Disable(default)

8: Auto Turn-Off Timer for Dimmer

Paramter No: 8(0x08) , Size=4 , Value: 0 – timer disabled (default)
                              Values: 1 – 65535 (minutes)

9: Auto Turn-On Timer for Dimmer

Paramter No: 9(0x09) , Size=4 , Value: 0 – timer disabled (default)
                              Values: 1 – 65535 (minutes)

10: Auto Turn-Off Timer for Relay

Paramter No: 10(0x0A) , Size=4 , Value: 0 – timer disabled (default)
                              Values: 1 – 65535 (minutes)

11: Auto Turn-On Timer for Relay

Paramter No: 11(0x0B) , Size=4 , Value: 0 – timer disabled (default)
                              Values: 1 – 65535 (minutes)

12: Restores state after power failure

Paramter No: 12(0x0C)	Size:1 Byte	Value: 00	dimmer, relay off
		Value: 01	dimmer off, relay on
		Value: 02	dimmer on, relay off
		Value: 03	previous state for dimmer, previous state for relay(default)
		Value: 04	previous state for dimmer, relay on
		Value: 05	previous state for dimmer, relay off
		Value: 06	dimmer on, previous state for relay
		Value: 07	dimmer off, previous state for relay
		Value: 08	dimmer on, relay on

13: Ramp rate (local button only, remote control by command class)

Paramter No: 13(0x0D)	Size:1 Byte	Value: 00	instant on/off
		Value: 01	from 0x63 to 0x00 or from 0x00 to 0x63 need 1s(default)
		\\\\\\	
		Value: 99	from 0x63 to 0x00 or from 0x00 to 0x63 need 99s

14: Multilevel minimum value can be set

Paramter No: 14(0x0E)   Size:1 Byte   Value: 00--99   (default 01)

15: Multilevel maximum value can be set

Paramter No: 15(0x0F)   Size:1 Byte   Value: 00--99   (default 99)

16: Association reports for dimmer only

Paramter No: 16(0x10)   Size:1 Byte   (default 00)

Value: 00	Manual control(long press & relay enable): Basic report(without each level, just final level)
	Manual control(long press & relay disable): Multilevel report (each level will be reported)
Value: 01	Manual control(long press & relay enable OR disable): Basic report (without each level, just final level)

17: when switch is on or off and quickly press UPPER paddle 2 times, switch turns on to x brightness

    Paramter No: 17(0x11)   Size:1 Byte   Value: 00   turn on to 99(default)

                                Value: 01   turn on to the value relate with parameter 15

18: Double Tap Behavior

    Paramter No: 18(0x12)   Size:1 Byte   (default 00)

        Value: 00   enable double tap to full brightness, single tap to last brightness level or custom value set in parameter 23

        Value: 01   disable double tap to full brightness, single tap to last brightness level or custom value set in parameter 23

        Value: 02   disable double tap to full brightness, single tap always to full brightness

19: Enable or Disable local / Z-Wave control for DIMMER

    Paramter No: 19(0x13)   Size:1 Byte   (default 01)

        Value: 00   disable local on/off control

        Value: 01   enable local and Z-Wave control (normal operation like now)

        Value: 02   disable local and Z-Wave on/off control

20: Enable or Disable local / Z-Wave control for RELAY

    Paramter No: 20(0x14)   Size:1 Byte   (default 01)

        Value: 00   disable local on/off control

        Value: 01   enable local and Z-Wave control (normal operation like now)

        Value: 02   disable local and Z-Wave on/off control

21: Dimmer Speed Setting (only for local press & hold)

    Paramter No: 21(0x15)   Size:1 Byte   (default 04)

        Value: 00--99(Seconds)   from 0x63 to 0x00 or from 0x00 to 0x63 need value seconds

22: Ramp rate for Z-Wave on/off controlled

    Paramter No: 22(0x16)   Size:1 Byte   (default 00)

        Value: 00   on/off ramp rate for Z-Wave same as manual control (set in Parameter 13)

        Value: 01   on/off ramp rate for Z-Wave control set through command class (like now)

23:Default brightness level - in this parameter define default brightness level

    Paramter No: 23(0x17)   Size:1 Byte   (default 00)

        Value: 00   last brightness level

        Value: 01-99   custom brightness level

Support for Association Groups

ZW34 supports 3 association groups. Group 1 support 1 node ID,Group 2 , 3 Support maximum of 5 node ID's

Root Device	Endpoint1	Endpoint2
Group 1:Lifeline	Group 1:Lifeline	Group 1:Lifeline
Group 2:Basic set From Endpoint1	Group 2:Basic set command	
Group 3:Basic set From Endpoint2		Group 3:Basic set command

Association group_1:Z-Wave Plus Lifeline

    Association group_1 is default to associate with the primary controller (Gateway/Hub/Controller) for ZW34 Status change report,

        1. ZW34 will trigger AUTO report function if the Switch status had been changed.

Association group_2:basic set command

  When the output of the ZW34 EP1 state is changed, On (0xFF) or Off (0x00). The ZW34 will automatically send out a related basic set command.   On (0xFF) or Off (0x00) to its associated group.

Association group_3:basic set command

  When the output of the ZW34 EP2 state is changed, On (0xFF) or Off (0x00). The ZW34 will automatically send out a related basic set command.   On (0xFF) or Off (0x00) to its associated group.

Restoring Factory Defaults

ZW34 is removed from the network and will be restored to the factory setting

All Configuration Parameters values and Association information will be restored to factory default settings and excluded from the network.

Remark : All the setting and data will be permanently deleted.

Please use this procedure only when the network primary controller is missing or otherwise inoperable.