

Z-Wave® OUTDOOR DOUBLE PLUG User Manual



FCC

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 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. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

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.

Specifications

ITEM	INFORMATION
Model	NVN-220
Power Supply	AC 120V 60HZ
Signal(Frequency)	908.42/920MHz
Long Range	Support
Range	Up to 100 feet line of sight between the Wireless Controller and the closest Z-Wave® receiver module.
Operating Temperature Range	5-104° F (-10-40° C)

- Specifications subject to change without notice due to continuing product improvement

Introduction

This product can be operated in any Z-Wave® network with other Z-Wave Plus® 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.

NVN-300 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.

- **Type**
 - GENERIC_TYPE: GENERIC_TYPE_SWITCH_BINARY(0x10)
 - SPECIFIC_TYPE: SPECIFIC_TYPE_NOT_USED(0x00)
 - APP ICON TYPE: ICON_TYPE_GENERIC_ON_OFF_POWER_SWITCH(0x0700)

Key Features

- Remote ON/OFF control via the Z-Wave® controller
- Manual ON/OFF control
- Support Association Group and Auto Report switch status
- Support firmware upgrades via Over-the-air (need Gateways support)
- Support Z-Wave® Long Range (need Gateways support)
- Support SmartStart

Product Overview



Button & Indicator Function Description

- **Button Definition**

1. Press 1x: control ON/OFF the left outlet of plug
2. Press 2x control ON/OFF the right outlet of plug
3. Long press 3 seconds, All ON & OFF
4. Press 3x: **Z-Wave® network inclusion(ADD) /exclusion(REMOVE)**
5. Factory Reset: Click Z-Wave® button 2 times quickly, and hold for at least 10 seconds

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

Adding Your Device To Hub

- The device support two methods of inclusion, When using a Z-Wave Plus® certified controller choose Network Wide Inclusion or SmartStart.
 - TAP the button three times to **ADD/INCLUDE** the device.
- Network Wide Inclusion To A Z-Wave® Network
 - TAP the button three times to **REMOVE/EXCLUDE** the device
 - Refer to your primary controller instructions to process the inclusion / exclusion setup procedure.
 - When prompted by your primary controller, click the Z-Wave® button three times .
- The device is compatible with SmartStart.

SmartStart enabled products can be added into a Z-Wave® network by scanning the Z-Wave® QR Code found on the top of the outlet or the back of the box with a controller providing SmartStart inclusion. No further action is required and the SmartStart product will be added automatically within 10 minutes of being switched on and in the network vicinity.
- Note:

Z-Wave® Long Range device can only support be included via SmartStart.Extract the DSK from end device and paste itinto the Dsk Value in PC Controller, make sure the Long Range' option is ticked.

QR Code and DSK

- The QR code are stocked to the side of the case, DSK is included in the QR code.
- The DSK code can be found on the DSK label which is attached on the packaging box.

PACKAGE	DEVICE
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PACKAGE	DEVICE
 CONNECTION 1. Follow the instructions for your z-wave authentication to add device controller to the z-wave network. 2. Once the controller is ready to include your device, quickly, three times press the top or bottom of the wireless smart switch(rocker) to include it in the network. Compatible With All Certificated Gateway SmartThings[®] wink vera FIBARO and more... LED CFL Halogen & Incandescent Adjust brightness (10~100%) QR Code: DSK: 16641 -27013-34482 -34482-34482 -34482-34482 -34482-34482	

Command Class

- Endpoint ROOT CC List

Command Class Name	Version	Required Security Class
Z-Wave Plus Info	V2	none
Security 2	V1	none
Supervision	V1	none
Transport Service	V2	none
Association	V2	highest granted
Association Group Information	V3	highest granted
Multi Channel Association	V3	highest granted
Version	V3	highest granted
Manufacturer Specific	V2	highest granted
Device Reset Locally	V1	highest granted
Power Level	V1	highest granted
Indicator	V3	highest granted
Firmware Update Meta Data	V5	highest granted
Configuration	V4	highest granted
Switch Binary	V2	highest granted
Multi Channel	V4	highest granted
Basic	V2	highest granted

- ENDPOINT 1 & ENPOINT 2

Command Class Name	Version	Required Security Class
Z-Wave Plus Info	V2	none
Security 2	V1	none
Supervision	V1	none
Switch Binary	V2	highest granted
Association	V2	highest granted
Multi channel association	V3	highest granted
Association group information	V3	highest granted
Basic	V2	highest granted

Basic Set Mapping

- Basic CC is mapped to Switch Multilevel CC and Binary Switch CC as below:

Basic Set Node	Mapping
ENDPOINT ROOT	Binary Switch Set EP1 & EP2
ENDPOINT 1	Binary Switch Set EP1
ENDPOINT 2	Binary Switch Set EP2

Indicator Command Class

- The indicator (blue color) will flashes according the indicator set command received from HUB.

Indicator ID	Property ID
0x50 (NODE IDENTIFY)	0x03(ON OFF PERIOD)
0x50 (NODE IDENTIFY)	0x04(ON OFF CYCLES)
0x50 (NODE IDENTIFY)	0x05(ONE TIME ON OFF PERIOD)

Association Group

- Endpoint ROOT

ID	Name	Node Count	Profile	Function
1	Lifeline	5	General: Lifeline	Device Reset Locally Notification Indicator Report Switch Binary Report
2	Basic Set Group 1	5	Control: Key01	Mapped to EP1's association group 2

ID	Name	Node Count	Profile	Function
3	Basic Set Group 2	5	Control: Key02	Mapped to EP2's association group 2

- ENDPOINT 1

ID	Name	Node Count	Profile	Function
1	Lifeline	0	General: Lifeline	Switch Binary Report
2	Basic Set Group 1	5	Control: Key 1	Basic Set Click Z-Wave button 1 times

- ENDPOINT 2

ID	Name	Node Count	Profile	Function
1	Lifeline	0	General: Lifeline	Switch Binary Report
2	Basic Set Group 2	5	Control: Key 2	Basic Set Click Z-Wave button 2 times quickly

Configuration Parameters

Number	Name	Information	Format / Size	Read Only	Altering	Advanced	MIN	MAX	Default
1	Reaction of led	Change the reaction of the indicator.	1 byte unsigned integer	NO	NO	NO	0	2	0
2	Auto Turn Off 1	Minutes for EP1 to turn off automatically.	4 bytes unsigned integer	NO	NO	NO	0	65535	0
3	Auto Turn Off 2	Minutes for EP2 to turn off automatically.	4 bytes unsigned integer	NO	NO	NO	0	65535	0
4	Auto Turn On 1	Minutes for EP1 to turn on automatically.	4 bytes unsigned integer	NO	NO	NO	0	65535	0
5	Auto Turn On 2	Minutes for EP2 to turn on automatically.	4 bytes unsigned integer	NO	NO	NO	0	65535	0
6	Status restore	Restore status after power failure.	1 byte unsigned integer	NO	NO	NO	0	2	2
7	Indicator brightness	Setting indicator's brightness.	1 byte unsigned integer	NO	NO	NO	0	2	2
8	Manual control output	Enable or disable output manually.	1 byte unsigned integer	NO	NO	NO	0	1	1