The Ultimate in Security & Automation

Installation & Operation Manual

ZD2201IN-5
ZD2201MY-5
ZD2201EU-5
ZD2201RU-5
ZD2201US-5
ZD2201IL-5
ZD2201KR-5
ZD2201HK-5
ZD2201JP-5
ZD2201BR-5

Wireless 4 IN 1 Multi-Sensor
(Dry Contact, Humidity, Temperature & Light)

ZD 2201	V2	1041111	6B1Z-22001

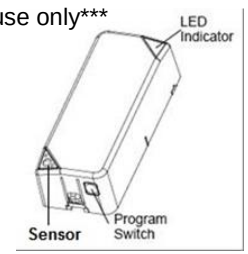
Introduction

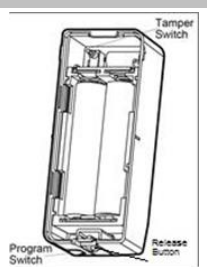
Thanks for choosing the Vision's wireless 4 in 1 Multi-Sensor (door window contact sensor, humidity sensor, temperature sensor, and light sensor) of the home security device. This sensor is a Z-Wave™ enabled device (interoperable, two-way RF mesh networking technology) and is fully compatible with any Z-Wave™ enabled network and its security framework. Every main powered Z-Wave enabled device acts as a signal repeater and multiple devices result in more possible transmission routes which helps eliminate "RF dead-spots"

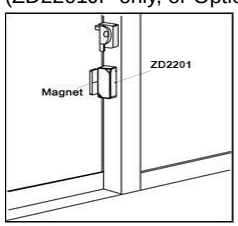
Z-Wave™ enabled devices displaying the Z-Wave™ logo can also be used with it regardless of the manufacturer, and ours can also be used in other manufacturer's Z-Wave™ enabled networks. This multi-sensor sends Z-Wave™ signal when door or window is opened and closed or humidity, temperature, luminous change. When the device is secure included into Z-Wave network, above communication will be encrypted. Security enabled_ Z-Wave controller must be used to fully utilize the product.

Product Description and Specification

*** For indoor use only***





Specification:	Package Content:
Protocol: Z-Wave™ (ZM5202) Frequency Range: 865.22MHz (ZD2201IN-5) 868.10MHz (ZD2201MY-5) 868.42MHz (ZD2201EU-5) 869.00MHz (ZD2201RU-5) 908.42MHz (ZD2201US-5) 916.00MHz (ZD2201IL-5) 919~923MHz (ZD2201KR-5) 919.80MHz (ZD2201HK-5) 921.42MHz (ZD2201BR-5) 922~926MHz (ZD2201JP-5) Operating Range: Up to 100 feet line of sight Operating Temp.: -10°C~ 60°C (14°F ~140°F) Battery: AAA Battery * 2PC	1pc ZD 2201-5 sensor 1pc Bracket for Magnet 1pc Magnet 2pcs Screw to fix magnet 2pcs Adhesive tape for Magnet / sensor 2pc Battery: AAA Battery 1pc Installation & Operation manual 1pc Magnet (flat type) (ZD2201JP only, or Optional) 

Z-Wave Command Classes:

COMMAND_CLASS_ASSOCIATION_GRP_INFO
COMMAND_CLASS_ASSOCIATION_V2
COMMAND_CLASS_BATTERY
COMMAND_CLASS_CONFIGURATION
COMMAND_CLASS_DEVICE_RESET_LOCALLY
COMMAND_CLASS_FIRMWARE_UPDATE_MD_V2
COMMAND_CLASS_MANUFACTURER_SPECIFIC_V2
COMMAND_CLASS_NOTIFICATION_V4
COMMAND_CLASS_POWERLEVEL
COMMAND_CLASS_SECURITY
COMMAND_CLASS_SENSOR_MULTILEVEL_V7
COMMAND_CLASS_VERSION_V2
COMMAND_CLASS_WAKE_UP_V2
COMMAND_CLASS_ZWAVEPLUS_INFO_V2

Notification V4 Type

	SWITCH TYPE	STATUS
Notification Type	Reed Switch	0x06
	Tamper Switch	0x07
Event	Reed Switch	Close: 0x17, Open: 0x16
	Tamper Switch	Close:0x00; Open:0x03

V1 Alarm:

	Switch Type	Status
Alarm Type	Reed Switch	0x06
	Tamper Switch	0x07
Alarm Level	Close: 0x00; Open 0xFF	

Configuration -Temperature

Parameter Number	Size	VALUE		Preset
1	1	°C	0x00	°C(0x00)
		°F	0x01	
2	1	1~50 (Set up from 0.1°C~5°C)		1 (°C)

Configuration – Humidity

Parameter Number	Size	VALUE	Preset
3	1	1~50 (Set up from 1%~50%)	10%

Configuration – Light

Parameter Number	Size	VALUE	Preset
4	1	0,5~50 (Set up from 0 for Off or 5%~50%)	10%

Installation

Notice: If you are installing the entire Z-Wave™ system for the first time, please refer to the installation guide of Z-Wave™ Interface Controller before installing ZD2201.

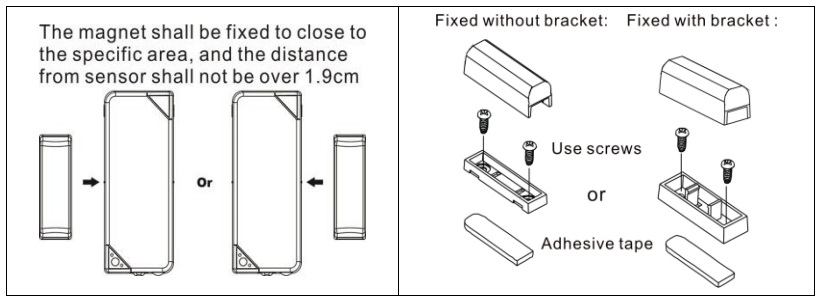
1. Push release button to open the rear cover.
2. Using adhesive tape to affix the rear cover on the frame along the opening edge of door / window.
3. Insert CR14250 battery *1 into the battery compartment, if user press the program switch, ZD2201 will send the NIF. ZD2201 will go to sleep if user didn't press the program switch within 20 seconds.

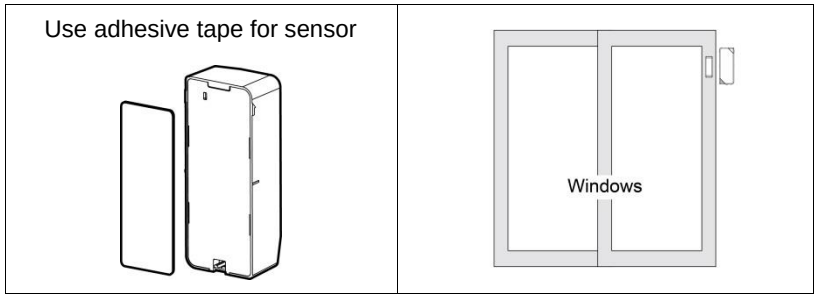
   LED Status for Z-Wave Network:
   * If user presses the program switch, the red LED will flash 5 times if the ZD2201 has not been included yet.
   * If user presses the program switch, the red LED will flash 1 time if the ZD2201 has been included.
4. For **"Inclusion"** in (adding to) a network: Put the Z-Wave™ Interface Controller into "inclusion" mode, and following its instruction to add the ZD2201 to your controller, to get in the "inclusion" mode. Press the program switch of ZD2201 for sending the NIF. After sending NIF, Z-Wave will send the auto inclusion; otherwise, ZD2201 will go to sleep after 20 seconds.
5. For **"Exclusion"** from (removing from) a network: Put the Z-Wave™ Interface Controller into "exclusion" mode, and following its instruction to delete the ZD2201 from your controller. Press the program switch of ZD2201 for 1 second at least to be excluded.

   Note: All user and network settings will be cleared and the device reset to factory defaults when the device is excluded.
6. Push back the rear cover, the LED should go off.
7. Fix the Magnet by using the adhesive tape; locate the Magnet close to the ZD2201 sensor the distance between these two devices should be in 1.9cm. Make sure the location of device without shelter above or block the sensor area.
8. **Awake Mode**:

Press the Program SW, the LED will flash one time and ZD2201 will send "Wake Up Notification" after 5 seconds. If ZD2201 received "Wake Up No More Information" command then the ZD2201 will go to sleep or it will wait 10 seconds then go to sleep. It will precede all the commands after sending the "Wake Up Notification"

9. **Auto Wake Up**:
   Use "Wake Up" command to set up the awaking time and send the wake up notification to controller. User can use command to change the auto wake up from 10 minutes to 1 week, Interval increment is 3 minutes.
10. **Battery Capacity Detection**:
    * Use "Battery Get" command to have the battery capacity back in %
    * It will detect the battery capacity automatically
    * Low Battery Auto Report (low battery is set as 2.6+/-0.1 Voltage, detects every 2 hours)
11. **Association**:
    * Support grouping identifier=1, one group with 5 nodes,
    * Association is used for other grouping devices chain reaction.
    * All triggering reports & low voltage report will be sent to the associated nodes
12. **Power Level Control**:
    * Use "Power Level Set" to set up the RF strength
    * Use "Power Level Test Node Set" to test specific node's RF sensitivity
13. Support Explorer Frame Function.
14. Support AES Function. Security enabled Z-Wave controller must be used to fully utilize the product.
15. All the rest commands depend on Z-Wave standard
16. **Factory Default Reset**:
    *Open the rear cover to send the Alarm Report and then press the program switch 10 times in 10 seconds, ZD2201 will send the "Device Reset Locally" command and reset to the factory default.
    * Please use this procedure only in the event that the network primary controller is missing or otherwise inoperable.





Operation

1. Opening/Closing the door/window to separate the magnet from the sensor will send signal to any association nodes according to the Status/Signal table on page 2 and the LED will flash once.
2. When ZD2201 no trigger, the LED will flash every minute to show the color of temperature.
3. If the cover of sensor is removed, the tamper switch will send signal according the Status/Signal table, and the LED will flash once. ZD2201 will send signal according the status / signal table after closing the rear cover back 2 seconds.
4. **Temperature**-If the present temperature is different with the sensor record and exceed the setting program, the sensor will report the present temperature. LED flash every minute to represent the temperature or wake up by press the Program SW.

Temperature	LED Color
Under 15°C	Green
15~23°C	Blue
23~28°C	Yellow
28~36°C	Orange
Over 36°C	Red

Multilevel Sensor Report	
Sensor Type	0x01
Scale	0x00 (°C) 0x01 (°F)
Size and Precision	2

5. **Humidity Report**- If the present humidity is different with the sensor record and exceed the setting program, the sensor will report the present humidity.

Multilevel Sensor Report	
Sensor Type	0x05
Scale	0x00 (%)
Size and Precision	2

6. **Light Report**- If the present illumination is different with the sensor record and exceed the setting program, the sensor will report the present illumination.

Multilevel Sensor Report	
Sensor Type	0x03
Scale	0x00 (%)
Size and Precision	2

Federal Communications Commission Statement

This equipment has been followed 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 instruction, 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 and correct the interferene by one of the following measures:

-Reorient or relocate the receiving antenna,
-Increase the separation between the equipment and receiver,
-Connect the equipment into and 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 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 undersired operation.
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.

Limited Warranty

Vision Guarantees that every wireless 4-in-1 multi sensor is free from physical defects in material and workmanship under normal use for one year from the date of purchase. If the product proves defective during this one-year warranty period, Vision will replace it free of charge. Vision does not issue any refunds. This warranty is extended to the original end user purchase only and is not transferable. This warranty does not apply to: (1) damage to units caused by accident, dropping or abuse in handling, or any negligent use; (2) units which have been subject to unauthorized repair, taken apart, or otherwise modified; (3) units not used in accordance with instruction; (4) damages exceeding the cost of the product; (5) transit damage, initial installation costs, removal cost, or reinstallation cost. For information on additional devices, please visit us at www.visionsecurity.com.tw