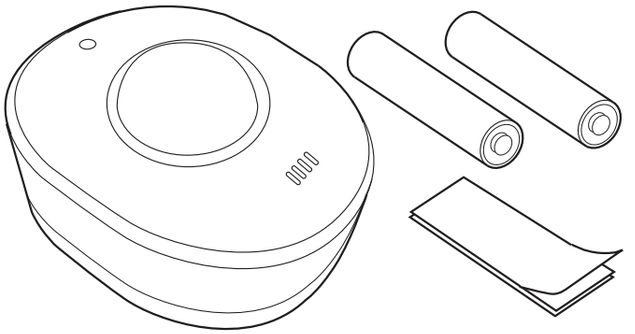
PRINTER'S INSTRUCTIONS:
INSTR,INSTL,M4IN1Z-1,GO CONTROL; P/N: 10012103 X4; INK: BLACK; MATERIAL: 20# MEAD BOND; SIZE: 8.500" x 11.000"; TOLERANCE ± .125"; SCALE: 1-1

NORTEK SECURITY & CONTROL

GoControl™

M4IN1Z-1

Wireless Multi-Function Sensor
360° PIR, Temp, Humidity and Light Sensor



NOTE: This unit must be added to the Network **only where it will be permanently installed.** The proper operation of this node in the mesh network is dependent on it knowing its location with respect to other nodes. You cannot "test bench" configure this unit, then install.

GOCONTROL MINI 4IN1

The GoControl™ family of Z-Wave® certified wireless Lighting Products (smart LED fixtures, bulbs, switches, dimmers, outlets and plug-in modules) Control Products (thermostats, irrigation controller and garage door controller) and Sensors (flood, leak, alert sounder, motion sensor and door/window sensor) bring a new level of intelligent wireless Home Automation capability to commercial and residential environments.

The Z-Wave wireless protocol is an international wireless standard for remote home automation, security and other applications. This product can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers and/or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

The M4IN1Z-1 Smart Multifunction Sensor is simple to set up and combines 4 popular functions in a small battery powered footprint: 360° PIR, Temperature, Humidity and Light Sensors.

GoControl Z-Wave products are easy to install, are Z-Wave Plus certified, and allow dealers to create an integrated wireless network with nearly limitless expansion and interoperability with security, energy management, home entertainment, appliances, and more

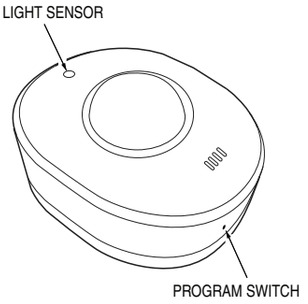


Figure 1. M4IN1Z-1 Mini 4in1 Sensor Components

Z-WAVE PLUS FEATURES

The M4IN1Z-1 contains a Z-Wave 500 Series Module that supports Z-Wave Plus® features. A Z-Wave certified portable or stationary Controller can communicate with the Z-Wave 500 Series Module. Depending on the capability of the Controller or gateway software, the following operations can be performed by Mini 4in1. Refer to the Controller or gateway manual for details.

- Send an alert if motion is sensed.
- Provide the absolute temperature.
- Provide the humidity level.
- Send an alert when light is present.
- Add or Remove Mini 4in1.
- Over-the-air firmware update by the gateway or static Controller.

INSTALLATION

The M4IN1Z-1 can be mounted on a wall or ceiling using the double stick tape (included). It can also be placed on a table top.

1. Remove the rear cover by pushing button on sensor top.

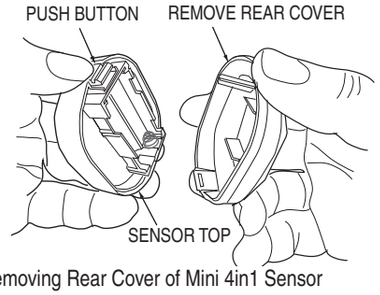


Figure 2. Removing Rear Cover of Mini 4in1 Sensor

2. Insert 2 AAA batteries (included). The LED will briefly illuminate in RED, BLUE, then GREEN.

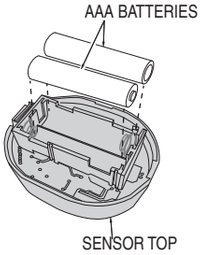


Figure 3. Install Batteries into Sensor Top

3. Replace the rear cover onto the sensor top.
4. Install in permanent location using provided double stick tape. The M4IN1Z-1 should be mounted (6) six feet from the floor.
5. Press the program switch. The Walk Test LED will flash 5 times if the sensor has not been "included" in a Z-Wave network. If the LED flashes once, the sensor has been already been "included".

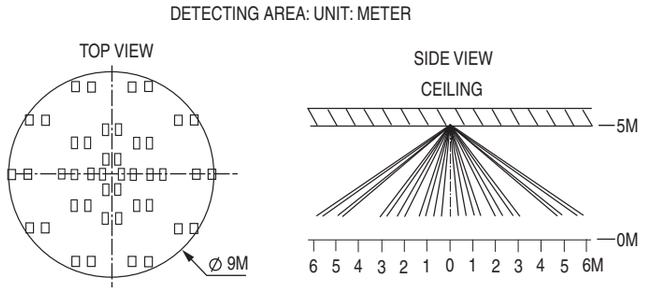


Figure 4.Detecting Area

Z-WAVE PROGRAMMING

Adding to a Network

Refer to your Controller operating instructions to add this switch under the command of the Wireless Controller

1. With your Controller in Discovery or Add Mode, press the Program Switch for 1 (one) second. The Yellow LED will blink. The device will appear in the list of devices and should display as (4) four items: M4IN1Z-1 (Motion), Light Sensor, Temperature Sensor and Humidity Sensor.

If the Controller/Gateway shows the addition failed, repeat Steps 1-3.

✓ *NOTE: If you have trouble adding the M4IN1Z-1 to a group it may be that the Home ID and Node ID were not cleared from it after testing. You must first "RESET UNIT" to remove it from the network. Although adding it to a group includes it in the network, removing it from a group does not remove it from the network. "RESET UNIT" removes it completely from the network.*

To Reset Unit (if required):

In the event that your primary Controller is lost or otherwise inoperable, to reset the M4IN1Z-1 and clear all network information, follow these steps:

1. Remove cover to trigger the tamper switch. The LED will flash once and send out Alarm Report.
2. Press Program Switch 10 times within 10 seconds. The M4IN1Z-1 will send the "Device Reset Locally Notification" command and reset to the factory default. (Remark: This is to be used only in the case of primary controller being inoperable or otherwise unavailable).
3. The M4IN1Z-1 will completely reset to factory defaults.

Removing from a Network:

The M4IN1Z-1 can be removed from the network by the Controller/Gateway.

Refer to the Controller operating instructions for details. Be sure to select the M4IN1Z-1 (PIR) to remove as the other Sensors are tied to this main device.

1. With your Controller in Remove Mode, press the **Program Switch** for one (1) second.
2. You should see an indication on your Controller that the device was removed from the network.

Association

1. Press the program switch on the M4IN1Z-1 to initiate the "Awake" mode. The LED will flash once.
2. Put your Controller into "Association," and following its instruction to associate the M4IN1A-1 to other devices.

Other Z-Wave Commands

Auto Wake Up:

Use "Wake Up" command to set up the awaking time (from 10 minutes to 1 week) and send the wake up notification to the controller.

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 when power is lower than 2.6V +/-0.1V.

Temperature:

If the present temperature is different than previously recorded and has changed by more than the value in Parameter 2 (see below), the sensor will report the present temperature to the hub. The LED will flash every (3) three minutes to represent the temperature.

Temperature	LED Color
Under 59°F	Green
60 - 73° F	Blue
74 - 82° F	Yellow / Yellow Green
83 - 97° F	Purple
Over 97° F	Red

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

Humidity Report:

If the present humidity is different than previously recorded and has changed by more than the value in Parameter 3(see below), the sensor will report the present illumination.

Light Report:

If the present illumination is different than previously recorded and has changed by more than the value in Parameter 4 (see below), the sensor will report the present illumination.

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

OPERATION

- When a person walks in from of M4IN1Z-1, the sensor will send Basic set On (0xFF) and the Red LED will flash once. Refer to status report as table below.
- In no movement is detected in (3) three minutes (default), it will send Basic Set OFF (0x00) will be sent and the Red LED will flash once.
- The M4IN1Z-1 is equipped with tamper switch. If the tamper switch is triggered (or the cover is removed), the M4IN1Z-1 will send an Alarm Report.
- If the tamper switch is closed (or the cover closed), the M4IN1Z-1 will send an Alarm Report.
- Supports OTA Firmware update from the controller. Please refer to your controller manual and use COMMAND_CLASS_FIRMWARE_UPDATE_MD_V2. To proceed with the OTA process. Once the OTA function is successful, make sure to exclude the device and include again before using the device.

	Alarm V1 Movement & Tamper Switch	Notification V4 (Movement)	Notification V4 (Tamper Switch)
Alarm Type	0x07		
Alarm Level	0x00 (No movement after 3 min.) 0xFF (Motion detected)		
Notification Type		0x07	0x07
Notification Event		0x08 (Motion detected) 0x00 (No movement after 3 min.)	0x03 (Cover removed) 0x00 (Cover closed)
Notification Event Parameter		0x08 (Motion detected) 0x00 (No movement after 3 min.)	0x03

CONFIGURATION

The M4IN1Z-1 supports the Configuration command. Each unit can be configured to operate slightly differently that how it works when it is first installed.

Using the Configuration command , the following can be configured:

Temperature

The reporting temperature parameters can be set to the consumer's specific needs, changing from Celsius (default) to FaHrenheit and the reporting threshold (default 1° C)

Parameter	Size	Value		Default
1	1 bit	0°C	0x00	°C (0x00)
Parameter		°F	0x01	
2	1 bit	1 - 50 (Setup from 0.1° C - 5° C		1 (1°C)

Humidity

Parameter	Size	Value	Default
3	1 bit	1 - 50 (Setup from 1% - 50%)	10%

Light

Parameter	Size	Value	Default
4	1 bit	0.5 - 50 (Setup from 0 for OFF or 5% - 50%)	10%

Motion Sensor

Parameter	Size	Value
5	1 bit	1 - 255 (unsigned decimal) Minutes (default: 3 minutes)
Parameter	Size	Value
6	1 bit	1 - 7 (default: 4)

(Parameter 5) Re-trigger duration: User can change value from 1 to 255 minutes to setup the re-trigger time when there is no movement detected in the period of time. Default is 3 minutes.

(**Parameter 6) Infrared sensor sensitivity adjustment**, 7 levels sensitivity, 1= most sensitive, 7 = most insensitive, default values = 4.

LED Mode

Parameter	Size	Value
7	1 bit	1 - 3 (Mode 1 - Mode 3) Mode 1➜LED Turn Off (Both Temp / PIR Trigger) Mode 2 ➜ (Breathing Light Mode) PIR (Quick Flash) Mode 3 ➜ LED Quick Flash (Temp / PIR Trigger)

SPECIFICATIONS

Power: 2 - AAA battery (Included)

Signal (Frequency): 908.42 MHz / 916 MHz

Range: Up to 130 feet line of sight

Z-WAVE COMMAND CLASSES

COMMAND_CLASS_ASSOCIATION_GRP_INFO
COMMAND_CLASS_ASSOCIATION_V2
COMMAND_CLASS_BATTERY
COMMAND_CLASS_CONFIGURATION
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

REGULATORY INFORMATION

The M4IN1Z-1is certified to comply with applicable FCC and IC rules and regulations governing RF and EMI emissions.

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.

FCC Notice

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

IC Notice

This Class B digital apparatus complies with Canadian ICES-003

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada. Le présent appareil est conforme aux CNR d'Industrie Canada 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.

This device complies with the Industry Canada license 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.

NOTICES

Z-Wave® and Z-Wave Plus® are registered trademarks of Sigma Designs and its subsidiaries in the United States and other countries.

WARRANTY

What is Covered?

Nortek Security & Control ("NS&C") warrants to consumers who purchase this product for personal, family or household purposes new from NS&C directly or from an authorized NS&C dealer, that the product will be free from defects in materials and workmanship for a period of (1) year from the date of purchase. This warranty only applies if the product is installed at a residence in the 50 United States or District of Columbia, and only at the site of the original installation. It is not transferable. This warranty is not extended to resellers.

If a defect exists, NS&C will have you ship the defective part or product to us and we will, at our option, either repair or replace it. This warranty does not cover the cost of labor to remove a defective part or product or to reinstall any repaired or replacement part.

This warranty does not cover defects or damages caused by improper handling, maintenance, storage, installation, removal or re-installation, misuse, non-factory authorized modification or alteration, use of incompatible accessories, electrical power problems or surges, impact by foreign objects, accident, fire, acts of God, normal wear and tear or shipping damage other than a shipment from NS&C. Note that all NS&C products are designed to be installed, removed and serviced by trained individuals or professionals.

Keep your original sales receipt as it will be required to obtain warranty service.

This warranty shall not be extended or restarted upon receipt of any repaired or replacement part or product under this warranty. No person is authorized to extend or otherwise modify this warranty.

How do I Obtain Warranty Service?

To obtain warranty service, email our Returns Department at returns@nortek.com. Include your name, address, telephone number, the model number of your product, a copy of your original sales receipt, and a description of the problem. Unless we need to discuss the situation further with you, you will be emailed a Return Authorization Number and shipping instructions. If we need to discuss the situation further with you, we will call or email you. NS&C may require troubleshooting on installed product before a Return Authorization Number is issued. Anything shipped to us without a Return Authorization Number will be automatically returned unopened. You are responsible for the charges for shipment to us, unless you are a California resident

Limitations

THE DURATION OF ANY IMPLIED WARRANTY, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXCEED THE WARRANTY PERIOD PROVIDED HEREIN.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

NS&C SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE BREACH OF ANY WRITTEN OR IMPLIED WARRANTY.

Some states do not allow the exclusion of limitation or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other legal rights which vary from State to State.

Important !!!

Radio controls provide a reliable communications link and fi ll an important need in portable wireless signaling.

However, there are some limitations which must be observed.

- For U.S. installations only: The radios are required to comply with FCC Rules and Regulations as Part 15 devices.
- As such, they have limited transmitter power and therefore limited range.
- A receiver cannot respond to more than one transmitted signal at a time and may be blocked by radio signals that occur on or near their operating frequencies, regardless of code settings.
- Changes or modifications to the device may void FCC compliance.
- Infrequently used radio links should be tested regularly to protect against undetected interference or fault.
- A general knowledge of radio and its vagaries should be gained prior to acting as a wholesale distributor or dealer, and these facts should be communicated to the ultimate users

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