

# 2GIG-CAM-250P, 2GIG-CAM-250PB

## INDOOR/OUTDOOR MINI-DOME IP CAMERA 2MP

### INSTALLATION INSTRUCTIONS

#### 1 Contents

- 1—2GIG Mini-Dome IP Camera with 18" pigtail
- 1—Auxiliary Analog Video Test Cable
- 1—RJ-45 Network Coupler
- 1—3" Support CD with Documentation & Tools
- 1—Paper Mounting Template
- 2—1-1/4" Mounting Screws and Anchors

#### 2 Installation Tools Required

- Phillips and Flat Head Screwdrivers
- Electric Drill
- T15 Spanner Wrench (included)

#### Camera Components

PART	COMPONENT	DESCRIPTION
A/B	Video (Output)	Analog video signal output plug for use with the Auxiliary Analog Video Test Cable (for test & setup).
C	POWER Indicator	Flashes red when camera has power
D	NET Indicator	Lights green during network traffic
E	Micro SD Card Indicator	Lights red when micro SD card is inserted
F	Micro SD Card Slot	Fits micro SD memory card
G	RESET TO DEFAULT Button	Press for 20 seconds to restore factory settings.

#### Pigtail Harness Components

PART	COMPONENT	DESCRIPTION
H	Audio Input	1-volt line level input
I	Audio Output	1-volt line level output
J	Terminal Block	For hardwired power
K	Power Connector	12 VDC power input
L	Cat-5 Coupler	Female to Female
M	Network Cable	RJ-45 Cat-5 connector

Figure 1. Camera Contents

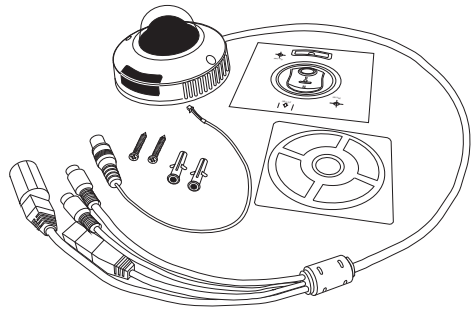


Figure 2. Camera Features

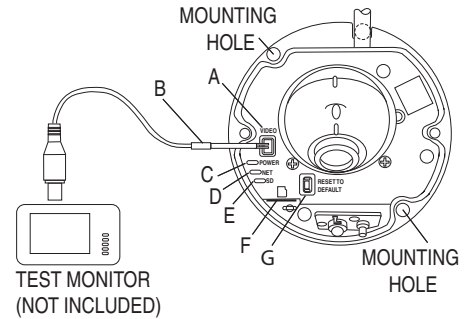
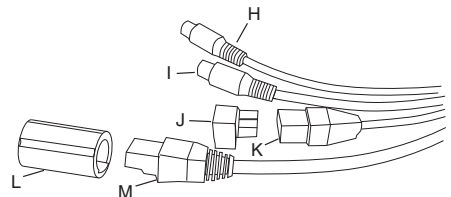


Figure 3. Pigtail Harness Connectors



### 3 Camera Installation

The camera is typically installed on the ceiling. Mini-Dome pigtail can be routed through wallboard or along its surface.

#### Opening the Camera

Open the top of the Mini-Dome camera in preparation for mounting. Loosen the two torx screws from the camera using the T15 Spanner wrench (Included with camera).

#### Mounting the Camera

**NOTE:** To achieve a good angle of view, it is recommended to install the Mini-Dome camera in a location about 9 to 20 feet high.

1. Locate the screw hole template, remove the adhesive backing. Stick the template in the camera installation location. Pay attention to the camera lens position indication making sure the camera is in the orientation desired. Drill two 1/4" holes.
2. Remove the paper template and install the screw anchors (included) into the holes.
3. Route the camera pigtail through a wall hole or along wall board surface, then screw the camera base in place using the two black Phillips 1-1/4" long screws.

#### Adjusting the Camera View

Point the camera lens roughly towards the desired view.

1. Unfasten the screws on both sides of the lens until the lens dome can be manually turned vertically up and down.
2. After the camera is connected, observe the angle of view and adjust the lens until a satisfactory effect is achieved. Tighten screws to lock the lens dome in place.

#### SD Memory Card

If the camera will be using an SD memory card, insert the card into the SD card slot (F) while the cover is off the camera.

**NOTE:** When installing an SD card, make sure that write protect is OFF before inserting the card. When removing an SD card, put the write protect ON first, or data may be lost or the SD card may be damaged. When hot plugging an SD card, stop recording first.

#### Installing Mini-Dome Camera Cover

1. Align the camera cover over the camera base.
2. Use the T15 spanner wrench to secure the camera cover.

Figure 4. Camera Mounting Options

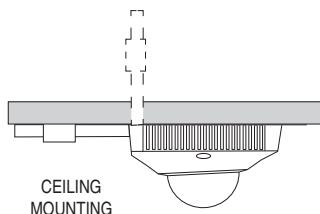


Figure 5. Opening the Camera

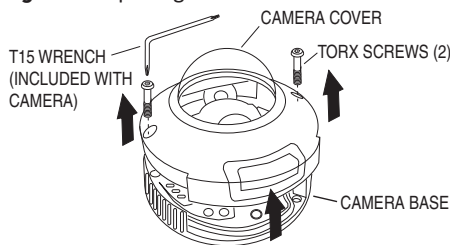


Figure 6. Mounting the Camera

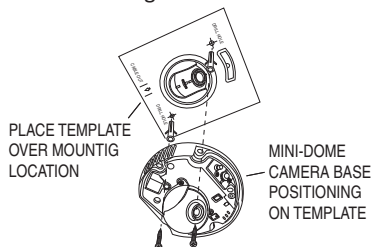


Figure 7. Camera View Adjustments

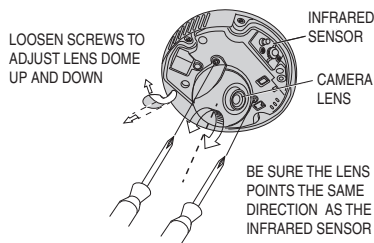
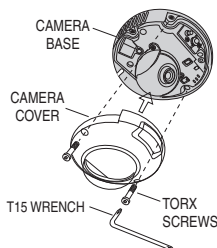


Figure 8. Installing Camera Cover



#### 4 Camera Power

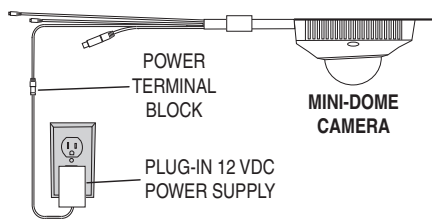
The camera can be powered by 12 VDC through the power connector, **or** through the network cable by Power Over Ethernet (PoE).

##### Hardwired Power Connection

12 VDC power for the camera can originate from a plug-in 12 VDC power supply (not included).

1. On the camera's power lead, plug the terminal block (J) into the power connector (K). (The connector is keyed to fit only one way.)
2. Wire 12 VDC + and - to the terminal block (J). Polarity is marked in the plastic on the power connector (K).

Figure 9. Hardwired Power Connection



#### 5 Camera Network Connection

This IP camera can connect to the network various ways. Choose the connection that best suits the installation.

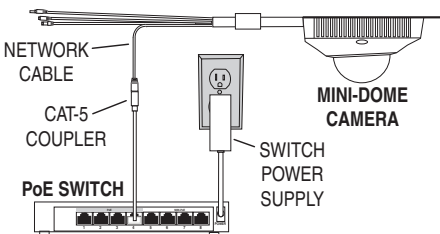
PoE power can be supplied to the camera through the network connection from a PoE source. **If the camera uses PoE power, do not use the hardwired power connection.**

For ethernet cables, plug the Cat-5 Coupler (L) into the camera's network cable (M).

##### Connection to a Switch or Router

1. Plug one end of a Cat-5 (Cat-5e or Cat-6) cable into the Cat-5 Coupler (L).
2. Plug the other end of the cable into an available port on the local area network's router or switch.

Figure 10. PoE Switch Connection



##### Connection to a 2GIG NVR

1. Plug one end of a Cat-5 (Cat-5e or Cat-6) cable into the Cat-5 Coupler (L).
2. Plug the other end of the cable into an available PoE camera port on the 2GIG NVR.

##### Connection to Power Line Adapters

Power line adapters (PLA) can power the camera through PoE and send network traffic through the installations 120 VAC wiring.

**NOTE: Power Line Adapters need to be "synced" with each other before use. Refer to the PLA instructions for details.**

1. Plug one end of a Cat-5 (Cat-5e or Cat-6) cable into the Cat-5 Coupler (L).
2. Plug the other end of the cable into a PLA. Plug the PLA into a power outlet.
3. Plug one end of another Cat5 (Cat-5e or Cat-6) cable into another PLA. Plug the adapter into a power outlet.
4. Plug the other end of the cable into an available switch, router, or 2GIG NVR camera port.

Figure 11. Non-PoE Router Connection

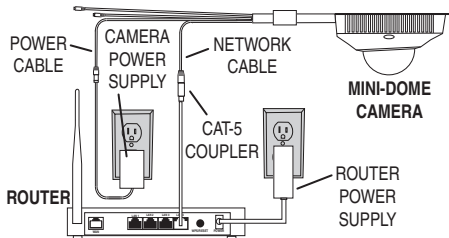


Figure 12. 2GIG NVR Connection

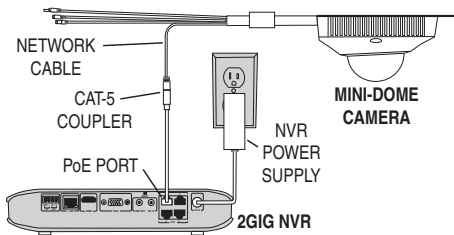
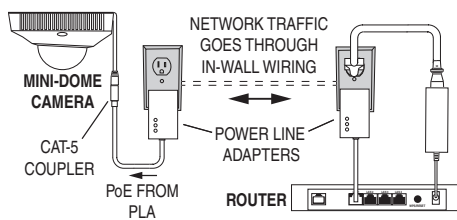


Figure 13. Power Line Adapter Connection



## 6 Smart Phone Applications

For monitoring 2GIG cameras, two smart phone / tablet applications are available on-line.

- For Android devices, "2GIG Video" is an application available in the Google Play Store.
- For Apple iOS devices, "2GIG Video" is an application available in the Apple App Store.

### Installing the 2GIG Video Application

1. Go to the on-line store compatible with the smart phone or tablet and download the 2GIG Video app.
2. Click on INSTALL. Wait for the installation on the device.
3. Click on OPEN. The application should launch.

See Section 7 or Section 8 on the reverse side of this sheet for details on adding and viewing 2GIG cameras with each application.

Figure 14. Android App in Play Store

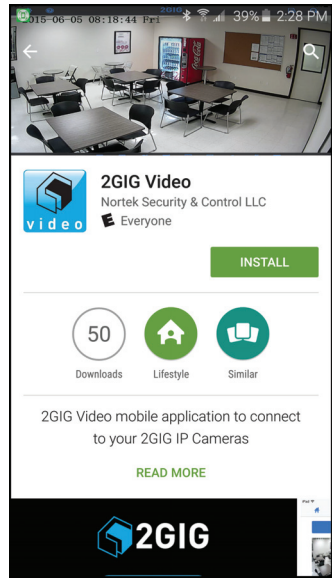
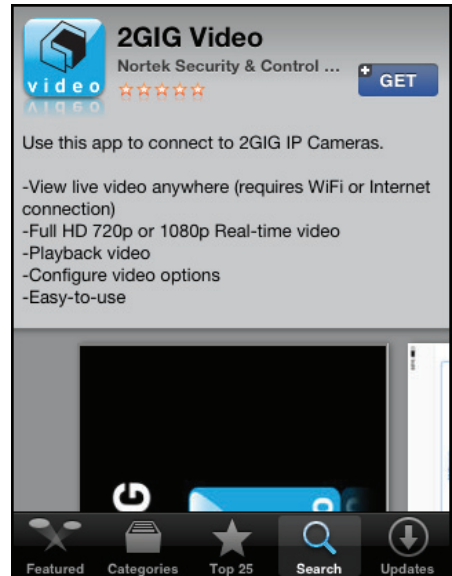


Figure 15. iOS App in Apple Store



## 7 Android 2GIG Video Application

An Android device can run the 2GIG Video Application to monitor 2GIG cameras.

First set up the application while the Android device is connected to the Local Area Network that the camera(s) are installed on. To monitor the camera(s) remotely, on the Internet, from outside the Local Area Network that the camera(s) are installed on, Port Forwarding must be set in the router. Refer to the Initial IP Camera & 2GIG NVR Software Setup sheet included with the camera for details on setting router Port Forwarding.

### Adding 2GIG IP Cameras

1. After downloading the 2GIG Video app from the Google Play store, launch the app.
2. Press **AUTO DISCOVERY** at the bottom of the screen.
3. Enter the default Username and Password. (**admin / admin**)
4. Press **SEARCH**. The app will search for 2GIG IP Cameras on the Local Area Network. The camera(s) discovered will be listed.
5. Select the 2GIG Camera(s) with the blue check mark, then press **ADD**. The **ADD SUCCEED** message should be displayed.
6. Press **DEVICE LIST**. The IP Camera(s) names are displayed.
7. Select a Camera.
8. Select a video stream to view (cameras can send two video streams of different quality).

The camera's view will be displayed. Option buttons display are on the bottom of the screen. Multiple camera views can be tiled, video snapshots, full screen mode, and other options are available.

For details on using the app, refer to the app's built-in help instructions accessed through the gear setup icon.

Figure 16. Auto Discovery Button

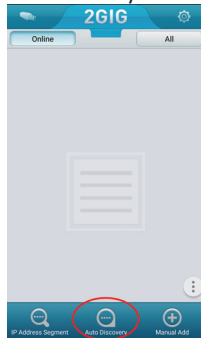


Figure 17. Auto Discovery of Cameras

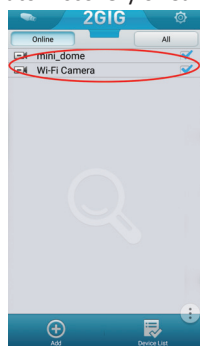


Figure 18. Online Device List

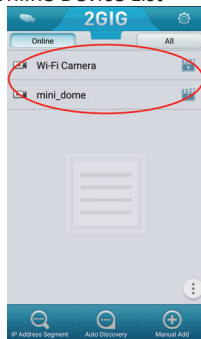
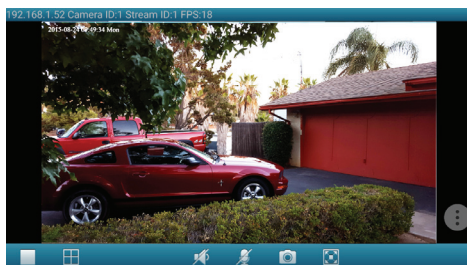


Figure 19. Viewing Camera Video



## 8 iOS Application

An Apple device can run the 2GIG Video Application to monitor 2GIG cameras.

First set up the application while the Apple device is connected to the Local Area Network that the camera(s) are installed on. To monitor the camera(s) remotely, on the Internet, from outside the Local Area Network that the camera(s) are installed on, Port Forwarding must be set in the router. Refer to the Initial IP Camera & 2GIG NVR Software Setup sheet included with the camera for details on setting router Port Forwarding.

### Adding 2GIG IP Cameras

1. After downloading the 2GIG Video app from the Apple store, press **OPEN**.
2. Press **AUTO DISCOVERY** magnifying glass at the top of the screen. The **EXISTING DEVICES** screen will display.
3. Press **AUTO DISCOVERY**, then **SEARCH**. The app will search for 2GIG IP Cameras on the Local Area Network. The IP addresses of the camera(s) discovered will be listed.
4. Click on a camera, then enter the default Username and Password. (**admin / admin**) then press **OK**.
5. If the camera's username and password is OK the camera's IP address will turn blue.
6. Repeat Steps 6 & 7 for additional cameras.
7. Press the blue camera IP address to select the camera. A blue check mark will show.
8. Press **ADD**. The **ADD SUCCEED** message should be displayed. Press **OK**.
9. Press the **HOME** icon. Press the + sign to display the available cameras.
10. Select a Camera.

The camera's view will be displayed. Option buttons display are on the bottom of the screen. Multiple camera views can be tiled, video snapshots, full screen mode, and other options are available.

For details on using the app, refer to the app's built-in help instructions accessed through the gear setup icon.

Figure 20. Setting Auto Discovery

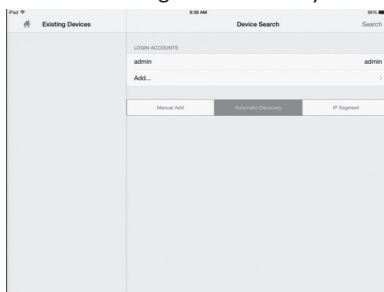


Figure 21. Discovered Cameras

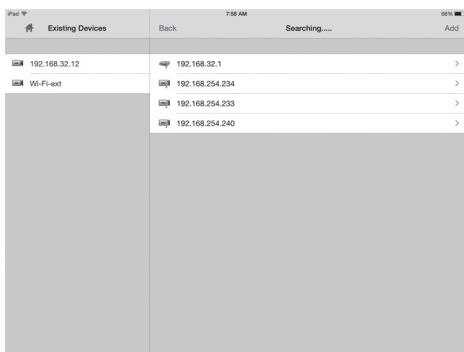


Figure 22. Viewing Camera Video



## 9 Camera & Network Software Setup

Refer to the Initial IP Camera & 2GIG NVR Software Setup sheet included with the camera for step-by-step details on setting up the various initial camera and network system settings.

- Determine the camera's IP address
- Set a static IP address for the camera
- Setup optional DDNS Server
- Setup the camera's port numbers
- Setup the router's Port Forwarding
- Connect to the camera with a browser

After the initial setup, refer to the 2GIG Camera Operation Instructions included on the Support CD for details on all camera settings available.

## 10 Audio/Snapshot/Playback Functions

To enable Audio (including Bi-directional audio) on the 2GIG IP Cameras, Internet Explorer with an ActiveX plug-in is required. **You cannot receive audio on Google Chrome, Apple Safari, Mozilla Firefox, Opera browsers.**

There are two steps to install ActiveX on Internet Explorer.

### Internet Explorer Security Tab

1. Access this menu in Internet Explorer through the **TOOLS -> INTERNET OPTIONS** menu
2. Click on the **SECURITY** Tab. Click **TRUSTED SITES**. Click **SITES**.
3. Enter the IP Address of the IP Camera.
4. Click **CLOSE**.
5. Click **CUSTOM LEVEL**.
6. Scroll down to **DOWNLOAD SIGNED ACTIVEX CONTROLS & DOWNLOAD UNSIGNED ACTIVEX CONTROLS**
7. Set both of these options to **PROMPT**. Click **OK**.
8. Click **OK** to Save changes

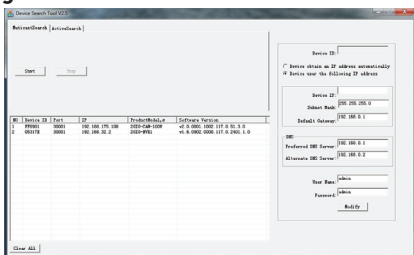
### Installing ActiveX control

1. With the Internet Explorer Web browser, Login to the Live Video screen of the IP Camera.
2. Click on the link "Click here to use short delay Plugin for Live Video." Click **INSTALL** on the prompt that appears. Live video with Audio Controls/Snapshot/Playback should work on the tab.

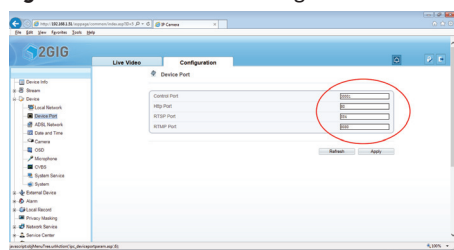
### Maximum Video streams supported

The IP Cameras support Flash and ActiveX technology for video streaming. 10 concurrent video streams are supported over ActiveX, two streams are supported with Flash.

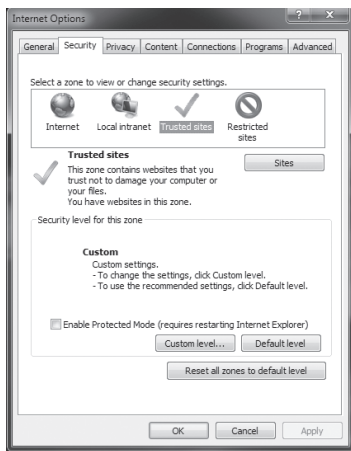
## Figure 23. IP Search Tool Results



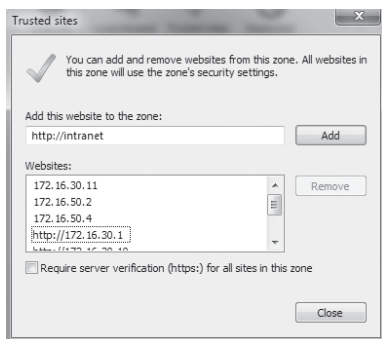
## Figure 24. Camera Port Configuration



## Figure 25. IE Security Tab



## Figure 26. Trusted Sites Setting





## 2GIG Video Troubleshooting

### **Q: I cannot see the IP Camera on my network**

A: Make sure that the IP Camera is powered on. If using PoE for power ensure that the Ethernet cable is connected to the correct PoE port. If using a power supply ensure that the power supply is plugged into the wall.

On the 2GIG-CAM-250P IP Camera, remove the cover to check that the power LED is solid red. Ensure that the network cable is connected to the router/switch on the Local Area Network. If using a tablet or smart phone to detect the IP Camera, make sure the mobile device is on the same network as the IP Camera(s).

### **Q: The image is not clear at night**

A: Check the IP cameras' lens for any smudges or moisture left from fingerprints. Wipe down with a non-abrasive towel. Also make sure that no object is blocking the path of the IR Emitter. Check the Sensor Settings in the IP Camera to verify that the Day/Night option is set to Auto. The WDR feature of the IP camera may need to be disabled when the IR LEDs are active.

### **Q: I cannot see Video when I am away from my house.**

A: The ports needed to see the video from a mobile device is 30001. Port forward this port in the router. Use both UDP/TCP for the protocol option in the Port Forwarding section of the router. When registering the device on the 2GIG Video app, the WAN IP address will be needed from the router. The WAN IP Address can be found at the home router.

### **Q: I cannot view multiple high resolution video streams on my mobile device.**

A: High resolution streams require high amounts of data to be processed on mobile devices. The application and mobile device have a limit on how many high resolution streams can be processed.

### **Q: How do I format the SD card for recording?**

A: Insert the SD Card into the IP Camera(s). Refer to the installation manual for the exact location of the SD Card slot. Login to the IP Camera(s). Default User Name and Password is admin. Navigate to Device Configuration-> Record Configuration -> Record Directory. Select SD Card and press the Format Button.

### **Q: What if SD Card formatting fails?**

A: Remove the SD Card and format it on another device such as a PC or Camera that supports SD cards. After formatting, re-insert the SD Card into the IP Camera(s) and format the SD card again in the IP Camera(s). Note that the file SD Card format needs to be ext4.

### **Q: How many users can stream video at the same time on the IP Cameras?**

A: When connected to the IP Camera using Flash technology the maximum number of video connections is 2. When connected to the IP Camera using ActiveX technology, the maximum number of video connections is 10.

### **Q: How long does it take to update the firmware on the IP Camera?**

A: The Update Tool is designed to update the IP Camera firmware. Note that the firmware update process can take between 5 and 10 minutes for both wired and wireless updates.

## Regulatory Information

WARNING: Changes or modifications not expressly approved by Nortek Security & Control could void the user's authority to operate the equipment.

This device complies with FCC Part 15 Rules and 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.

Cet appareil est conforme la norme d'Industrie Canada exempts de licence RSS. Son fonctionnement est soumis aux deux conditions suivantes: (1) cet appareil ne peut pas provoquer d'interférences, et (2) c'est appareil doit accepter toute interférence, y compris les interférences, y compris les interférences qui peuvent causer un mauvais fonctionnement de la dispositif.

## Limited Warranty

This Nortek Security & Control LLC product is warranted against defects in material and workmanship for two (2) years. **This warranty extends only to wholesale customers** who buy direct from Nortek Security & Control LLC or through Nortek Security & Control normal distribution channels. **Nortek Security & Control does not warrant this product to consumers.** Consumers should inquire from their selling dealer as to the nature of the dealer's warranty, if any.

There are no obligations or liabilities on the part of Nortek Security & Control for consequential damages arising out of or in connection with use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation, or reinstallation. All implied warranties for functionality, are valid only until the warranty expires. This Nortek Security & Control Warranty is in lieu of all other warranties express or implied.

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### **For technical support outside of the USA and Canada:**

Contact your regional distributor

Visit [www.nortekcontrol.com](http://www.nortekcontrol.com) for a list of distributors in your region

