Honeywell

VAM (VISTA Automation Module) - Installation & Setup Guide

Introduction

VISTA Automation Module (herein referred to as "VAM") combines home automation and home security. The VAM's features allow integration with VISTA installations to support Z-Wave devices; is intended for use with compatible VISTA® series controls.

The VISTA Automation Module also supports Remote Services for controlling Z-Wave devices and Scenes remotely from an associated Total Connect™ account or port forwarding option.
VAM is controlled using a web browser on a Wi-Fi enabled smart device such as a Tablet PC, laptop, Smartphone, etc.

DISPLAY NOTE: For optimum viewing of the screens and menus, the tablet's font size setting may need to be adjusted.

VAM Features:
- Supports WPS Enrollment
- Built in Web Server
- Wi-Fi and LAN Connectivity
- Z-Wave® Technology
- Honeywell Total Connect® Remote Services Compatible
- Supports up to 32 IP Cameras
- (4 viewable at one time)

Make Wiring Connections

The VAM connects to the control's keypad data (ECP) terminals using the provided 4-wire keypad harness.
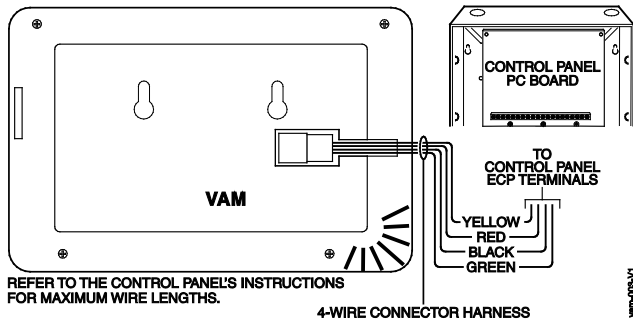
Wire Connections to the Control Panel

Verify that VAM and other connected devices do not exceed the control's Aux Power output capability. If it does, use a supplementary power supply as shown.

IMPORTANT: When VAM is powered from an auxiliary power supply, always apply power to the control panel first and then VAM. Failure to observe this sequence results in improper operation of VAM and may result in an ECP Error indication.
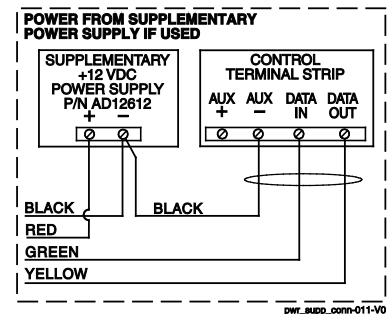

Supplementary Power Connections

Mount the VAM

VAM is for indoor use only and should be mounted near the control or a keypad connected to the control for ease of wiring.

NOTE: If using Z-Wave devices, the best practice is to enroll a device (see Adding Z-Wave Device Section) and position the VAM in centralized location to confirm best Z-Wave reception.

VAM mounts to a wall surface by hanging on two screws. See the diagram to the right.

- Leave the screw heads 1/8" above the wall surface.
- If necessary, drill a hole in the wall for the wire harness to pass through.
- Connect the wire harness to the VAM before mounting.
  Refer to control's installation instructions for correct data (ECP) terminal connections.
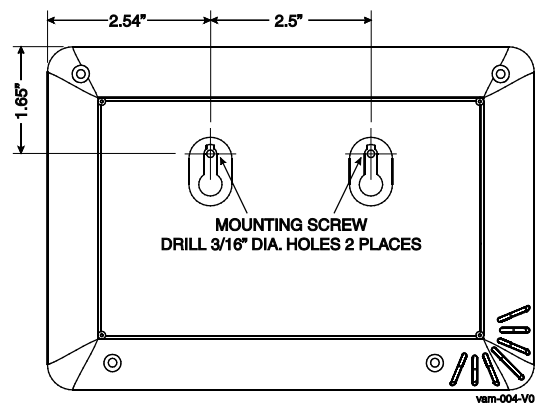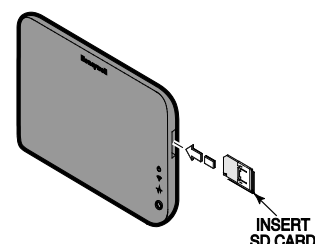

Mounting Diagram

Insert an SD/SDHC Memory Card

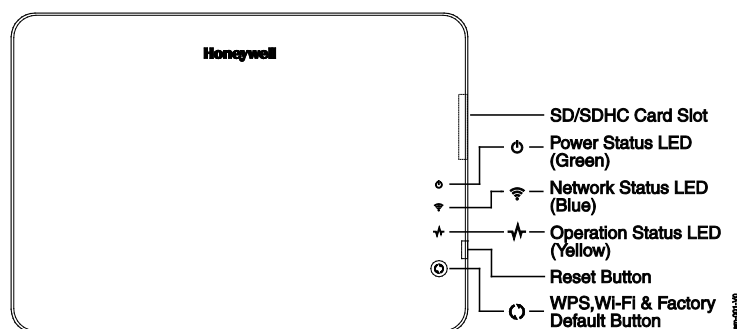When inserting the gold contacts on the card must face you.

NOTES:
- Avoid touching the contacts on the card
- 4GB SD card supplied
- Supports up to 16GB SD/SDHC Card

See "Software Upgrades" section for details on automatic updates.

Front Panel LEDs

Specifications

Width: 7.58'' (192.5mm)
Height: 5.31''(135.0mm)
Depth: 0.53''(13.45mm)
Voltage: 12VDC
Current: 180mA
Humidity : 93% RH, non-condensing
Temperature:
- Operating : 14˚F to 131˚F / -10˚C to 55˚C
- Shipping / Storage: -40˚F to 158˚F / -40˚C to 70˚C

LED Functions

LED	FUNCTION
Power Status (Green)	Indicates power status. • Blinking when it is powered up and booting. • Solid green when it is fully functional.
Network Status (Blue)	Indicates Wi-Fi Status. • In normal operation the LED blinks when VAM is booting • Solid blue when VAM is ready as AP mode (acting as an Access Point) or connects to the internet as station mode (STA mode). STA mode is when the VAM is connected to the Wi-Fi router only, internet access may be available, but the VAM disables all remote access.
Operation Status (Yellow)	In normal operation, the LED is normally off. • It will blink slowly when there is no ECP (including ECP error) or Z-wave controller not responding. • Fast blinking indicates Z-wave is in enrollment or deletion status.
Reset Button	Press to reboot the device.
Wi-Fi, Factory Default, WPS Enrollment Button	• **Wi-Fi Network Reset**: Press and hold down for more than 5 seconds to clear the VAM's Wi-Fi network connection. You then need to reconnect the VAM to your Wi-Fi network. • **Factory Default Reset**: Double press this button, then, while the green, blue, and yellow LEDs blink in sequence, press and hold down this button for more than 5 seconds to set the VAM to its factory default settings. • **WPS Enrollment:** Single press starts the WPS enrollment process.

Program the Control Panel for use with VAM

At the control, assign an appropriate touch screen (AUI) type device address (ECP address) for VAM, and set a partition (if applicable). Refer to the control's programming instructions for detailed procedures.

NOTE: Changing the VAM's ECP address after initial installation will cause a reboot, during this process the VAM will be inaccessible.

On VISTA® Plus series or equivalent
Use data field *189 to enable an unused device address 1, 2, 5 or 6 for the VAM. Addresses 1 and 2 are enabled by default.

On VISTA® Turbo and Commercial VISTA Series (VISTA-128BP, 128BPT, VISTA-128FBP, 128FBPT, etc.)
Use #93 Menu mode to enable an unused device address.
- For older controls under Rev. 10, addresses 1-2, and 3-30 may be used.
- For VISTA Turbo series controls Rev. 10 and higher, addresses 1-30 may be used. These addresses are normally not defaulted for AUI type devices.

If using Remote Services
Enable an appropriate RIS address in the control and verify the option is enable the in the control's programming.
- On VISTA Plus Series panels below revision 10, the second digit of field *91 must be enabled with a 2. On panels with revision 10 or higher, the RIS option is automatic and not necessary to enable.
- On VISTA Turbo Series controls, choose the device address to set to RIS and enter a device type of 12.
   NOTES:
    - These options MUST match how the AlarmNet Communicator is programmed.
    - Z-Wave scene programming requires RIS enabled, to assign different triggers and actions.

Quick Arming Options

In PC or Mobile View, when user presses arm **Away/Night/Stay** they will be prompted to enter a user code. If "Quick Arming" is enabled, a user code is not required. Refer to the control's installation instructions for programming.

Initial Setup

The initial set up of the VAM is performed in 4 steps.

1. Optional WPS Enrollment Process, see the WPS enrollment option below. (Optional)
NOTE: If WPS enrollment is chosen, the Manual Wi-Fi Network screen will not be prompted (as shown below).
2. Choosing the Language.
3. Manual Connecting to the Wi-Fi network.
4. Collecting user data and give the VAM a name.

Language Settings

Upon initial power up, the first option is to select a language (This also occurs after a factory defaulting the unit.)

NOTE: This can be changed later by pressing **Setup > Language**. The VAM can display one of 4 languages: English (default), Español, Português, Français. Once you have selected the language press **Save** at the bottom of the page, or **Next**.

End User License Agreement (EULA)

The end user license displays and gives you the option to skip or accept the EULA. Choose the option to display the home page.

NOTE: This option reappears during initial installation or after a factory default of the unit.

Wi-Fi Protected Setup (WPS) Enrollment Procedure

To use the WPS enrollment you need a router with the WPS enrollment option and an internet connection.

1. Press the WPS button on the router, or Honeywell WAP Plus, and verify it is in the enrollment mode (consult the WAP-Plus or router's installation instructions.)
2. Press the button on the VAM.
    a. The blue LED initially flashes three times every other second.
    b. The blue LED will flash slowly when the router and VAM are processing a secure connection.
    c. Once the blue LED is solid, the VAM is connected to the Wi-Fi network.
3. Go to vam.mylanconnect.com to display a list of devices, then select the desired VAM and press **GO**.
4. Navigate through the initial setup process as shown below.

NOTES:
- This process is recommended upon initial power up, or after a default, before accessing the VAM's easy setup mode.
- An internet connection is required for this process.

Manual Wi-Fi Network Configuration

To set up the Wi-Fi network for the VAM, the following items are needed:

- Wi-Fi enabled smart device (Tablet PC, laptop, Smartphone, etc.)
- VAM SSID and WPA2 password (located on the VAM's label)
- VAM default IP address: **192.168.2.1**
- Home router SSID and WPA2 password (typically located on the home router's label); home router must use WPA2 encryption and have a password (key) assigned.
- The initial configuration for connecting to the VAM and retrieving a local IP address requires internet access to the local area network (LAN).

NOTES:
- Before setting up the network, set your smart device for Wi-Fi operation only (turn off the 3G/4G option).
- If the wireless router is later replaced, these steps must be repeated to connect the VAM to the new router.
- If SSID is lost, contact technical support at (800) 645-74924.
- If AP only mode is desired, press **Skip** on the bottom of the page to skip the Wi-Fi Setup.

1. **Connect a smart device to the VAM.**

    a. Power up the VAM.
    b. Connect the smart device's Wi-Fi to VAM using the device's Wi-Fi settings menu (VAM works as a wireless access point).
        1. Enter the VAM SSID: **VAM_xxxx** (SSID is case-sensitive)
           NOTE: xxxx = the last 4 digits of the MAC address
        2. Enter the Key (found on the VAM and labelled "WPA2 key")
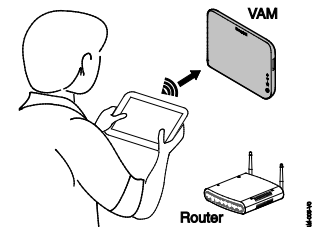
2. **Connect the VAM to the home router.**

   a. Open a web browser on the smart device.
   b. Enter the VAM's default IP address: **192.168.2.1** into the browser on your smart device.
   c. Enter the home routers SSID and security key (SSID and security key are case-sensitive).
   d. Press **Connect**. A 1 minute countdown begins and displays "The device is connecting to "*Network Name*", please keep this page open. Go to Wi-Fi setup and press the *"Network Name"* and return to this page." During this time, a new network IP address is assigned to the VAM.
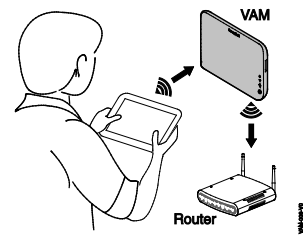
   NOTE: If you have trouble connecting, please follow the onscreen instructions and retry the connection process. If using DHCP option, confirm the router is connected to the internet. If using Static IP option, verify an IP address is available.

   e. When completed, the VAM connects to the assigned router and displays the "User Data Screen".

3. **User Data Screen**

   This page collects the user's data. Enter the data or press **Skip** to continue to the VAMs home page. The page data entries are as follows:

Name	Zip Code	Mobile Number
Region	Device Name	E-mail ID

   NOTES:

   - This page can be accessed from the home page by pressing **Setup > User Profile.**
   - The data for Region and Zip Code/Postal Code synchronizes to the Time/Date setup if completed during the initial setup.
   - The e-mail address synchronizes to the e-mail setup, if completed during the initial setup.
   - The Zip Code option is needed for the sunset/sunrise for your Z-Wave scenes.
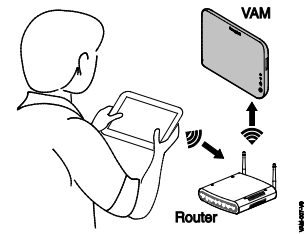
Program the VAM Device Address

The default VAM device address = 1.

1. Press **Setup** > **System**.
2. Press **ECP Address**. Using the Up/Dn arrows, choose the device address assigned for VAM in the control panel.
3. Press **Apply**.
4. The VAM automatically reboots after the device address is set.

NOTE: The Primary RIS option is only selected if the customer is **NOT** using Total Connect remote services. Enabling can cause unpredictable results.

Set the Time & Date

Get Time/Date from the Control Panels

Press **Setup > System > Time/Date Setup >** Verify the time is set in the control panel **> Get Time.**

Note: Some older Commercial panels do not support the get time feature.

Set Up Email Notification

Users (and/or the installer) can receive email notifications when one or more selected system events or conditions occur.

NOTE: Email notification requires that the user has an active email address and note the disclaimer at the bottom of the page. *"Email notification is strictly for convenience use only. Avoid relying on this feature for life critical events. It is not UL certified and may fail at any time without notice."*

1. Press **Setup** > **E-Mail.**
2. Press **User SMTP** to select the email provider. SMTP establishes the email server's domain (the "from" address).
   a. From the drop-down menu, select the email provider (Gmail, Outlook, Yahoo), or Add New.
   b. Enter the email ID (user name) and password.
   c. The Email Server and SMTP port number fields are automatically populated unless "Add New" was selected.

Event	Description
Security	Disarm, Away Secured (End of Exit), Arm Stay
Zones	Alarm, Trouble, Restore
Thermostat	Temperature Above and Below
Door Lock	Locked, Unlocked
Garage Door	Closed, Opened, Operation Disabled/Failed
Water Valve	Closed, Opened

If Add New was selected, enter the appropriate SMTP and port number information (see your email provider for details).

Press **Save**.

3. Select the email addresses that will be notified when event types and conditions occur.

   a. Press **Event 1** to define the event types and conditions that will trigger notifications to the chosen email address(es).
   b. There are 4 events. Each event will allow you to send to 4 separate emails. Choices for email notification options include Security, Zone, Thermostat, Door Lock, Garage Door, and Water Valve.
   c. Press **Save** and you will get a response that says *"Notification Save Success."*
   d. Repeat step 3 for Events 2-4, if desired.

Troubleshooting

If an error is returned through the listed SMTP email provider stating that the email has blocked a sign in attempt, return to the SMTP server page and verify the email settings. The VAM displays *"Warning: Email sending failed. Please check SMTP settings."* If this is the case, check the security settings for the email chosen through the provider.

Adding Z-Wave Devices

EXISTING NETWORK NOTE: Z-Wave products from other manufacturers can be included (added) into the VAM network. Z-Wave devices that are always powered can serve as repeaters regardless of manufacturer.

To add (include) Z-Wave devices, verify the device is properly installed, log onto home screen, then do the following:

1. Press **Automation > Z-Wave Setup** > **Add Device.**
2. Press the **Function Key** on the device; follow the on-screen messages until "Device added successfully."

NOTE: Refer to the manufacturer's instructions for proper installation procedures.

Do not use any garage door automation with any garage door opener that lacks the safety features required by U.S. federal safety standards (this includes any garage door opener model manufactured before January 1, 1993). A garage door opener that cannot detect an object and stop and reverse the door – does not meet current U.S. federal safety standards. Your garage door opener also must signal before unattended door operation. For more information please consult your garage door opener manual.

Defaulting the Z-Wave Controller

To remove all Z-Wave devices, do the following:
1. Press **Automation > Z-Wave Setup** to display the "Z-Wave Device Management" screen.
2. Press **Z-Wave Default** to delete all devices from the controller.
3. Select **Yes**. The following message is displayed:

This Z-WAVE controller is about to be factory defaulted and will lose all devices in the enrolled list.
All Z-WAVE devices must be re-enrolled after this reset.
Each device will have to be excluded before it can be re-enrolled.

Yes or No

NOTE IF SYSTEM DEFAULT IS PERFORMED:

If VAM is reset to Factory Defaults the controller will assign a new network ID. All Z-Wave devices must be re-included into the system, even if they appear on the Device List. Remove all Z-Wave devices first, then re-include all desired devices (see Adding Z-Wave Devices section).

Changing Z-Wave Device Names and Icons

To change the icons, do the following:
1. Press **Automation > Z-Wave Setup** to display the "Z-Wave Device Management" screen.
2. Press Z-Wave device to be edited.
3. Choose the icon to represent the device.

NOTE: This applies to Binary and Multilevel switches only.

Light Bulb	Light Switch	Garage Door	Sprinkler	Pool	Water Faucet	Strobe	Window	Siren/Sounder	Fan

Using VAM as a Secondary Controller

VAM can be used as a secondary controller when connected to another Z-Wave network.

NOTE: If VAM is configured as secondary controller, it **cannot** be used with Total Connect Remote Services.

1. Remove any Z-Wave devices previously included in the VAM.
2. Press **Automation > Z-Wave Setup** to display the Z–Wave Management screen, press **Z-Wave Default** and press **Yes**.
3. Press the **Z-Wave Primary** icon to switch the VAM to a secondary controller. The Z-Wave Primary icon changes to Z-Wave Secondary accordingly.
4. Start the inclusion process at the other network's primary controller (see controller's manual), then press the **Add Device** icon in the VAM's Z-Wave Management screen. To remove (exclude) VAM from the primary controller, start the exclusion process at the primary controller, then press the **Remove Device** button in VAM.

NOTES:
- Some manufacturers have software that can configure the network. If this is the case, after all devices are enrolled in the network, you must learn in the VAM as a secondary controller to "import" all the devices over to the VAM. Once this is complete, you can switch roles to primary. This is done by accessing the "role shift" option on the primary controller and on the VAM by pressing **Setup > System > Z-Wave advanced Setup > Z-Wave Secondary Controller Shift to Primary.**
- When VAM is configured as secondary it cannot be used with Total Connect 2.0.

Integrating Total Connect

1. Pressing the **Diagnostic Connect** icon in the bottom left corner will test the AlarmNet server's connection status. If the test has failed, check your network connection
2. Verifies the Z-Wave status, if enabled it will communicate Z-Wave status to Total Connect 2.0.

Pressing the "TC" icon will populate a list of all your Z-Wave devices with an enable or disable option. This enables or disables those chosen devices from appearing on the Total Connect 2.0 account.

Compatible Z-Wave Devices

Z-Wave devices may vary; follow the instructions in the *User's Guide* for your specific device when adding and deleting devices into the Z-Wave network.

Visit https://mywebtech.honeywell.com/ or http://www.tuxedotouchtoolkit.com/ for a complete list of compatible Z-Wave devices. Refer to the document titled **"Z-Wave Compatibility Chart."**

Adding Cameras

The VAM supports up to 32 cameras.

> **IMPORTANT:** Connect cameras only when accessing VAM via the home router network and follow the camera's instructions for mounting.

1. To add a camera to VAM, it must be initially connected via an Ethernet cable, even if the camera is wireless. After a wireless camera is added, the Ethernet cable can be removed.
   a. Connect an Ethernet cable to the back of the camera (LAN); connect the opposite end to the Ethernet port on the router.
   b. Apply power to the camera; wait for initial power-up.
   c. Press **Multi-Media > Camera Setup**.
   d. Press the **Discovery** button to locate the camera. The screen displays an "in progress" message.
   NOTE: For best performance set video resolution to 320 x 240, at 8 frames per second, Normal quality.
      - Maximum suggested camera resolution = 640 x 480.
      - Maximum suggested frame rate = 15 fps.

   e. If the camera information is not discovered automatically, press the **Add** button to enter camera information manually.

2. To edit camera information, select the camera name and press the **Edit** button. Enter required information and then press **Save**.

Manual Camera Setup
1. Connect an Ethernet cable to the back of the camera (LAN); connect the opposite end to the Ethernet port on the router. (**NOTE**: A LAN connection is initially required and once configured the **Camera WIFI** (o) will change from a LAN to Wi-Fi.)
2. Apply power to the camera; wait for initial power-up.
3. press **Multi-Media > Camera Setup**.
4. Enter the camera details below:

• Camera Name	• Camera Model
• Camera IP Address or URL	• RTSP Streaming URL
• MJPEG Streaming URL	• Mobile Streaming URL
• RTSP (Real Time Streaming Protocol) Port #	• HTTP Port
• Resolution (Options are 160x120, 320x240, 640x480)	• Frame Rate (Ranges from 1-30 Frames Per Second)

NOTES:

- In general, VAM is designed to support cameras with the following features: **UPnP** for camera discovery on LAN, **RTSP** streaming, **MPEG4, H.264, and Onvif** for streaming on the VAM, **MJPEG** for streaming to browsers.
  NOTE: Every camera manufacturer makes their cameras slightly different, so it is not a guarantee that VAM will work with every camera that supports the above network and codec features.
- Maximum number of enrolled cameras cannot exceed 32, with only 4 viewable at any one time.

NOTE: If using Total Connect 2.0 remote services, only Honeywell AlarmNet IP cameras (with a maximum of 6) have the capability to be viewed from the customers remote service account. Settings are defaulted for Honeywell AlarmNet IP Cameras, changing the model Number will not automatically adjust to the cameras correct settings. Refer to the cameras setup utility to gather this information.

Software Upgrades

System Information

To view the current software version installed on your system, do the following: Press **Setup > System Info**.

Automatic Software Updates

To receive automatic remote updates an SD card with a minimum of 200mb available space is required. When an update is available, the system will automatically update the system.

NOTES:

1. After a software upgrade, it is recommended that you delete your browser's Temporary Internet Files (cache). Undesired operation may occur if these files are not deleted.
2. Upon next login to the VAM, an End User License Agreement (EULA) will be prompted. Press **Accept**, then proceed to using the VAM as normal.

Options

IMPORTANT: This menu is intended for the installer only and should not be changed by the user. See the "Full Installation and Setup Guide" for more information.

Set Up Remote Access (Account Setup)

Remote access lets the user access the VAM's menus directly via the Internet when away from home. The home router must first be configured for port forwarding. Refer to the router's instructions for details on port forwarding.

NOTE: When using VAM via remote access, the System HTTP API link will not display.

To set up a remote access log in, do the following:
1. Press **Setup > Account**.
2. Enter the desired user name and password. Passwords must be a minimum of 8 alphanumeric characters, and must include at least one uppercase, one lowercase, and one number.
3. "Enable local access authentication" will prompt the user to enter a user name and password. This allows them to gain access to the VAM, when connecting using the local IP address.
> **NOTE:** If the user forgets the password (or one does not exist) they can always locally access the VAM within 20 minutes of power up.
4. Press **Save**. The new user is displayed. (To clear a user's login, Press the **CLEAR** icon.)

NOTES:
- Remote login is blocked after 3 failed attempts. To reset remote access, you must connect to VAM locally via the home router; then re-enable remote access. Press **Setup > Account**, then press the appropriate user **Enable** icon and press **Save**.
- Port 443 is the fixed port assigned to the VAM and cannot be changed. It is a secure login procedure, the URL must begin with HTTPS:// then the external IP address. If not, you may receive an error of "There is a problem with this devices security certificate."

For an external dynamically assigned IP address, using a DYNDNS can prevent troubles logging in due to the external IP address changing. Refer to the DYNDNS provider for set up instructions.

SUPPORT & WARRANTY

For the latest documentation and online support information, please go to:
https://mywebtech.honeywell.com/

For the latest warranty information, please go to:
www.honeywell.com/security/hsc/resources/wa.

For patent information, see www.honeywell.com/patents

MyWebTech   Warranty   Patents

NOTE: This is a Security Enabled Z-Wave Controller

Honeywell

2 Corporate Center Drive, Suite 100
P.O. Box 9040, Melville, NY 11747
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