Quick Install Guide

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CONTENTS

Introduction

This quick start guide introduces 2GIG alarm dealers and professional installers to the 2GIG Vario System. It describes all common 2GIG Vario System installation and programming steps (based on factory default settings). For more detailed instructions, refer to the 2GIG Vario System Installation & Programming Guide.

Select a Mounting Location

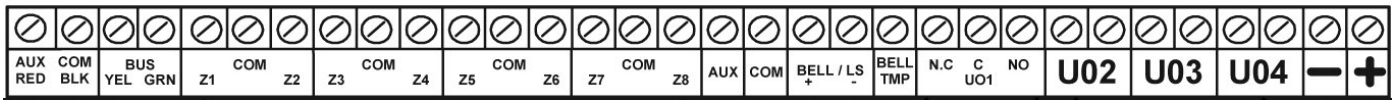
Decide where to position the 2GIG Vario system control panel. If possible, choose a central location in order to minimize wiring to expanders and accessories. Before the installation, prepare map out the physical locations of all expanders and accessories. This will determine which types of expanders are required at each location.

The control panel location should:

- Be in a dry place near an AC power supply
- Be accessible for routing cables to the system from detection devices
- Be accessible to the customer's phone lines or IP network

Install Hardware

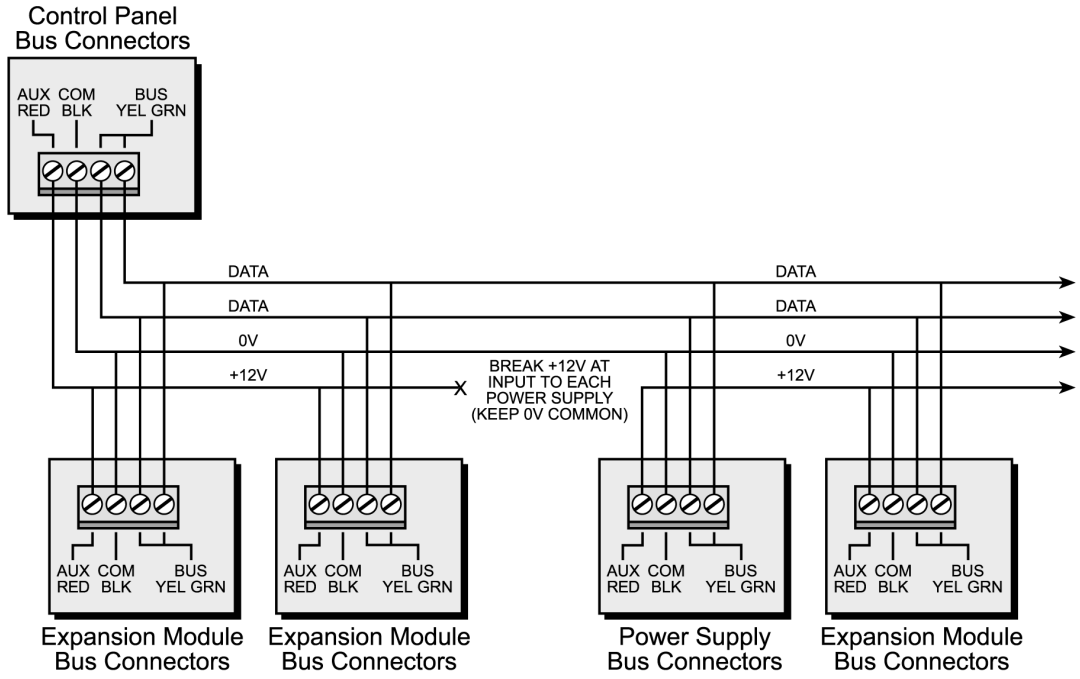
Main Unit—BUS Connection



The four terminals on the left side of the terminal block represent the expansion BUS. These terminal support the connection of keypads and expansion modules. The connections are terminal-to-terminal with color-coded wires, as follows:

- AUX RED: +12VDC power
- COMM BLK: 0V common
- BUS YEL: Yellow data
- BUS GRN: Green data

Connect all keypads, expanders, and accessories necessary for the installation using the BUS connections.



Notes:

- The parallel wiring system supports parallel connections from any point along the wiring.
- The maximum wire run permitted is 300 meters (1000 feet) for all legs of the BUS.
- In case of BUS communication problems, connect two 2.2KΩ resistors—one at each end of the data BUS terminals, between the green and yellow wires.
- **If connecting remote power supplies, DO NOT connect the red wire (+12V) between the power supply unit and the 2GIG Vario system**.
- For long cable runs, use the correct cable, as listed in "Appendix C: Wiring" in the *2GIG Vario System Installation & Programming Guide*.

1. Set BUS Accessory ID Numbers

For most devices, a DIP switch number must be set to identify its ID category number. Devices are split into "Families." Each "Family" of devices has sequential identification numbers which are set by the DIP switches. Before setting power on, define each module's ID number by setting the DIP switches as follows:

ID	DIP switches				
	1	2	3	4	5
01	OFF	OFF	OFF	OFF	OFF
02	ON	OFF	OFF	OFF	OFF
03	OFF	ON	OFF	OFF	OFF
04	ON	ON	OFF	OFF	OFF
05	OFF	OFF	ON	OFF	OFF
06	ON	OFF	ON	OFF	OFF
07	OFF	ON	ON	OFF	OFF
08	ON	ON	ON	OFF	OFF
09	OFF	OFF	OFF	ON	OFF
10	ON	OFF	OFF	ON	OFF
11	OFF	ON	OFF	ON	OFF
12	ON	ON	OFF	ON	OFF
13	OFF	OFF	ON	ON	OFF
14	ON	OFF	ON	ON	OFF
15	OFF	ON	ON	ON	OFF
16	ON	ON	ON	ON	OFF

ID	DIP switches				
	1	2	3	4	5
17	OFF	OFF	OFF	OFF	ON
18	ON	OFF	OFF	OFF	ON
19	OFF	ON	OFF	OFF	ON
20	ON	ON	OFF	OFF	ON
21	OFF	OFF	ON	OFF	ON
22	ON	OFF	ON	OFF	ON
23	OFF	ON	ON	OFF	ON
24	ON	ON	ON	OFF	ON
25	OFF	OFF	OFF	ON	ON
26	ON	OFF	OFF	ON	ON
27	OFF	ON	OFF	ON	ON
28	ON	ON	OFF	ON	ON
29	OFF	OFF	ON	ON	ON
30	ON	OFF	ON	ON	ON
31	OFF	ON	ON	ON	ON
32	ON	ON	ON	ON	ON

Notes:

- Most accessories have four DIP switches, while BUS detectors have five DIP switches.
- IDs 9–32 are only available for BUS detectors.
- **If a DIP switch is changed on any device, it is necessary to shut down the dvice's power and then re-power it.**

The first module in each category is defined as ID = 1.

Families that have sequential ID numbers are:

- Keypads
- Zone expanders
- Outputs
- Power supplies
- BUS zones
- Wireless zone expanders

Notes:

- The main unit can support a maximum load of 1.4 Amp. If more current is required, install additional power supply modules (3 Amp max.).
- On 3 Amp supervised power supplies and on the wireless expander, there are two programmable outputs. These programmable outputs belong

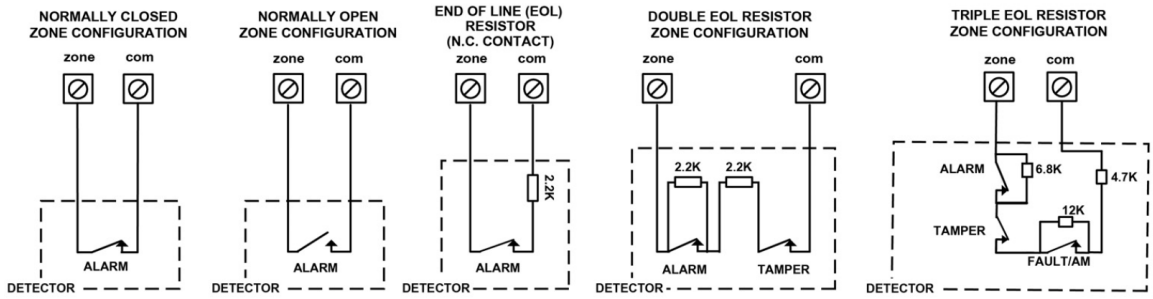
to the Output family. Thees outputs have dedicated DIP switches that identify the OUTPUT ID.

» Maximum number of devices possible:

Device	Total
Wired/BUS expanders	3
BUS zones	32
WL zone expanders	2
BUS zone expanders	4
Output expanders	4
Keypads	4
1.5A or 4A power supplies	4

2. Connect Zone Inputs

The following diagrams illustrate the various possible zone connections to the main unit or to the 8 wired zone expander.



Notes:

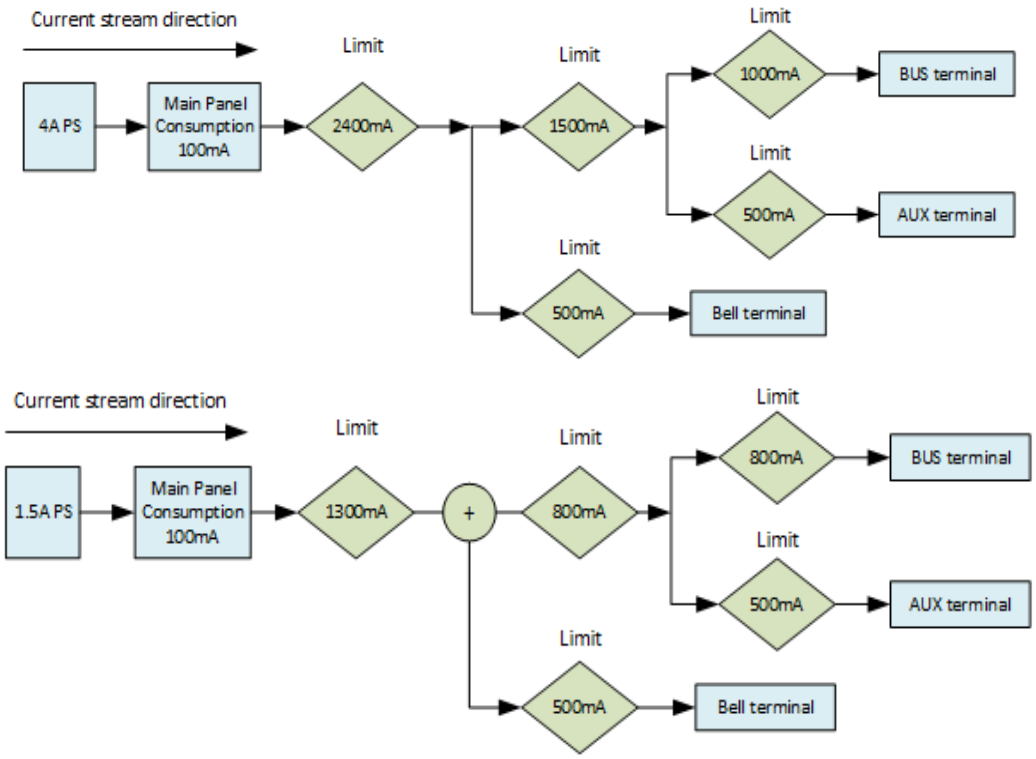
For a zone with a tamper switch, you can use a double end-of-line resistor to save additional main panel connections.

It is recommended that you use an end-of-line resistor at the far end of each hardwired zone (16 x 2.2K resistors are supplied).

In the 2GIG Vario system, you have the ability to separately define the end-of-line resistance of the zones on the main unit and of the wired the wired zones for each eight-unit expander block (Quick Keys ② ① ③). Selection is done by the software with the following available options:

ID	EOL	DEOL
0	Customized	
1	2.2K	2.2K (Default)
2	4.7K	6.8K
3	6.8K	2.2K
4	10K	10K
5	3.74K	6.98K
6	2.7K	2.7K
7	4.7K	4.7K
8	3.3K	4.7K
9	1K	1K
10	3.3K	3.3K
11	5.6K	5.6K
12	2.2K	1.1K
13	2.2K	4.7K

Maximum Current Flows



3. Wire Auxiliary Devices

Use the **Auxiliary Power AUX (+) COM (–)** terminals to power PIRs, glass-break detectors (4-wire types), smoke detectors, audio switches, photoelectric systems and/or any device that requires a 12VDC power supply.

4. Wire the Internal Bell

The Bell/LS terminal provides power to the internal siren. When connecting an internal sounding device, pay attention to the polarity.

It is important to position the BELL/LS DIP switch SW1 correctly. The position varies depending on the type of internal siren.

To avoid bell loop trouble, if no connections are made to an internal siren, use a 2.2KΩ resistor in its place.

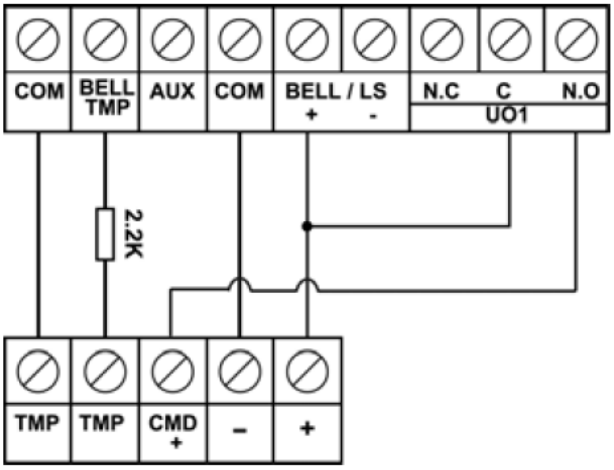
5. Wire the Bell Tamper

Connect the bell tamper to the BELL TMP and COM terminals on the main panel using 2.2KΩ resistors.

> **IMPORTANT:** If you DO NOT use the terminal TMP BELL, remember to connect a 2.2KΩ resistor (resistor colors: red, red, red) between the TMP and COM.

6. Wire Utility Output 1 to Activate Self-Powered Devices

Utility output 1 can be used to activate a self-powered siren or any other self-powered device.



7. Set the Main Unit DIP Switches

DIP Switch 1	Status
1: Bell	**ON:** For bell or electronic siren with a built-in siren driver. **OFF:** (Default) Fr loudspeaker without a built-in sound driver.
2: Default	**ON:** Resets installer, sub-installer, and grand master codes to their default factory values and bypasses main unit front tamper alarm. **OFF:** (Default) Preserves the set values for the codes.
3: Extern—Back Tamper Bypass	**ON:** Back tamper bypass is in effect. Use this setting during programming and if no back tamper has been connected to PLUG 2. **OFF:** (Default) No tamper bypass is in effect.
4: Intern—Front Tamper Bypass	**ON:** Front tamper bypass is in effect. Use this setting when the 2GIG Vario system is installed inside the metal enclosure. **OFF:** (Default) No tampe bypass is in effect.

Connecting BUS Detectors

Up to 23 addressable BUS detectors can be assigned to the 2GIG Vario system. BUS detectors can be wired to the main BUS or to a BUS zone expander. For full installation instructions, refer to the instructions supplied with each BUS detector.

Connecting BUS Detectors to the Main 2GIIG Vario System BUS

1. Set the BUS detector ID number (1–32) using the detector's DIP switches.

   NOTE: For WatchOUT, LuNAR, WatchIN, BWare, and Seismic, set the switch that defines the detector operation mode to BUS mode.

2. Wire the BUS terminal's AUX (RED), COM (BLK), BUS (YEL, and BUS (GRN) to the 2GIG Vario system BUS.

   NOTE: For maximum operation stability, it is best NOT to exceed a total of 300 meters (1000 feet) of wiring from the BUS detector to the 2GIG Vario system panel.

Connecting BUS Detectors Using a BUS Zone Expander

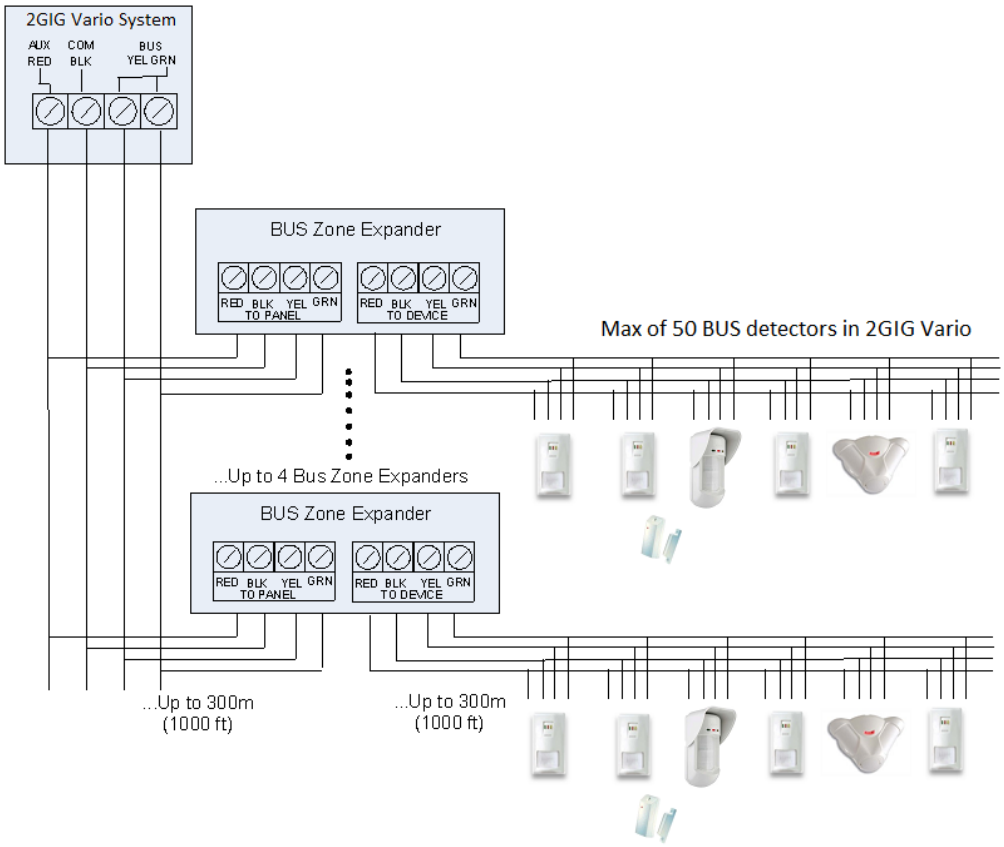
1. Set the BUS zone expander ID number (1–3) using the DIP switches SW1 1–3.
2. Set the BUS zone expander SW2–3 to ON.
3. Wire the BUS zone expander terminals labeled TO PANEL to the 2GIG Vario system BUS.

4. Set the BUS detector ID number (1–32) using the detector's DIP switches.

> **NOTE:** Do not repeat the same ID twice on the same BUS zone expander.

5. Wire each detector's BUS terminals to the relevant BUS zone expander's terminal labeled TO DEVICE.

> **NOTE:** For maximum operation stability, it is best NOT to exceed a total of 300 meters (1000 feet) of wiring from the BUS zone expander to the 2GIG Vario system panel, and 300 meters (1000 feet) of wiring from the BUS zone expander to the last BUS detector.



Programming

Key Menu Navigation

This section describes how to program the 2GIG Vario system from the keypad. The following table describes the functions of the keypad keys during programming:

Keypad Key	Description
① – ⓪	» To enter numeric values where required. » For quick key programming. Press the number keys to access a programming option. » To edit labels and names.
	To go back (up), quit, or don't save.
	Enter or save (to move into the displayed menu or to save the data that you have changed).
 or 	Used to scroll through the menu listing.
	Used to toggle displayed menu options between N and Y.
	Used to increase or decrease selected screen digital values.

If you do not know where you are in a menu structure, press  repeatedly to return to the main menu.

Entering Text Descriptions (Labels)

Key	Label Characters	Key	Label Characters
①	1,'?!"-()@/:_+&*#	⑧	2tuvTUV
②	2abcABC	⑨	9wxyzWXYZ
③	3defDEF	⓪	0
④	4ghiGHI		Move cursor left
⑤	5jklJKL		Move cursor right
⑥	6mnoMNO		Save
⑦	7pqrsPQRS		

Programming Menu Concept

The 2GIG Vario system programming menu is a dynamic menu that adjusts itself to the system hardwired devices. For example, in order to see a menu option regarding wireless zones or keyfobs, you must first add a wireless expander to the system.

Accessing the Installer Programming Menu

First Time Power Up

1. Disconnect all power from the main panel.
2. Set SW1 – 2 (default) to **ON**.
3. Set tamper switches SW1 3, 4 to bypass unused tampers according to the relevant enclosure to prevent tamper alarm.
4. Connect power to the assembled mounted unit. The 2GIG Vario system panel and keypad will initialize for several minutets.
5. Press  .
6. Scroll through the list of language options, choose one and press  .

   NOTE: You can also change the language setting during regular operation by pressing  and ⑨ simultaneously.

7. Enter the Installer code (default: ① ⑤ ⑥ ①) and press  .
8. Enter the current time and date and press  to confirm.
9. The system automatically enters the automatic accessories settings process option.
10. Move on to "Identifying the Connected Devices."

Enter Installer Programming Mode

1. From the main display, press  .
2. Enter the Installer code (default: ① ⑤ ⑥ ①) and press  .
3. Select [1} and press  .
4. You are now in the Installer Programming mode. Move on to "Identifying the Connected Devices."

Identifying the Connected Devices

1. Automatic Setting

NOTE: By default, when entering Installer mode with the default DIP switch 2 in the ON position, the system will take you immediately to Auto Settings. If the keypad is already showing BUS SCANNING, skip to step 2. BUS Scanning.

1. Enter the programming key sequence ⑦ ① ① (Install > BUS Devices, Automatic).
2. Press  to begin the automatic BUS SCANNING (the Auto Settings process) in which the system identifies all devices on the BUS.
3. Verify that the keypad displays all the devices you have connected. If a device does not appear, ensure that you have given it a unique ID within its family.
4. Press  to accept what is being displayed, to progress through the configuration screens, and to advance to the next device.
5. Repeat steps 3 and 4 until you have confirmed the presence of all devices and configuration parameters.

   NOTE: When adding a zone expander, you should define the zone's expander resistance compatibility, depending on the detectors you intend to connect to the expander. By default, the resistance is set to 2.2K for EOL and DEOL termination.

> **NOTE:** When adding a wireless expander, define the Bypass Box Tamper as YES if the wireless expander is mounted inside the 2GIG Vario system housing and not mounted separately.

2. BUS Test

The BUS test (Quick Keys ⑦ ① ③ ①) sends multiple test commands to each device connected to the system to ensure reliable connectivity.

Press  to begin the automatic BUS test in which every device is tested to ensure its connection is 99% or higher.

> **NOTE:** If a low reading is experienced, check connections with the device and repeat the BUS test.

Zone Attributes

The 2GIG Vario system supports up to 50 zones. Each zone can be defined to be a wired zone, a wireless zone, or a BUS zone. The attributes for each zone vary according to the zone's type (wired, wireless, or BUS zone).

You can define the basic parameters for a zone using the One By One option, or you can define all attributes using the zones category (Quick Keys ② ① ②).

1. From the main Installer Programming menu, select ② ① (Zones > Parameters).
2. Select [One By One] and press  .
3. Using the numeric keys, enter the desired zone number and press  .

> **NOTE:** The display next to the selected zone number defines the type of zone and its location in the system in the format **XY:ZZ**.
> **X:** Zone physical type (**E** = Wired zone, **W** = Wireless zone, **B** = BUS zone, **I** = Input zone)
> **Y:** The expander ID number. 0 represents the main BUS (for example, E0:04 refers to wired zone 04 on the main board; B0:15 refers to BUS zone 15 on the main BUS
> **ZZ:** The serial zone number in the system (01–50)

4. Set the following zone parameters
   - **Labels:** Enter a meaningful name for the zone. Use the numeric keys as described in Keys Menu Navigation.
   - **Partitions:** Use the numeric keys to select or deselect the partitions to which the zone will belong and use the  ,  ,  ,  keys to select partition groups. Press  to confirm.
   - **Zone Type:** Use the Up and Down keys to select the required zone typ and press  .
   - **Zone Sound:** Select the required zone sound while the system is armed in Away, Armed at Stay, or Disarmed.

> **NOTE:** This setting determines if the zone will be silent, cause a bell to activate, cause a buzzer to activate, cause a bell and buzzer to activate, create a keypad bleep for chime, etc., when the zone is opened or causes an alarm condition. "Buzzer" refers to the sound emitted fro a keypad.

   - **Zone Termination:** (Only applicable for hard-wired zones.) Use the Up and Down keys to select the required zone termination type (NO, NC, EOL, or DEOL) and press  .
   - **Zone Response:** Use the Up and Down keys to select the required response time and press  .
   - **Advanced:** Includes advanced attributes for a zone, such as supervision for wireless zones, BUS zone parameters, forced arming, and more.

Wireless Zones

Each of the 50 zones in the 2GIG Vario system can be defined as a wireless zone.

1. Allocate a Wireless Expander

1. From the Installer menu, select ⑦ ① ② ⓪ ⑤ (Install > BUS Device > Manual > WL Expander).
2. Set the receiver ID (1 or 2), use the  to set the type to WM, and press  .
3. If the receiver is mounted inside the 2GIG Vario system box, select **Y** to bypass the box tamper. Press  and move to "2. Calibrate the Receiver."

2. Calibrate the Receiver

For successful communication, the strength of the signal should be higher than the noise threshold level, measured in a process called *calibration*.

1. From the Installer menu, select ⑦ ② ① (Install, WL Device, RX Calibration).
2. Select the wireless expander and press  .
3. Use the  key to choose **Y** (Yes) to re-Calibrate the wireless expander and press  to confirm.

> **NOTE:** The calibration measurement shows the amount of background noise that the receiver can hear on the same frequency as the 2GIG wireless sensors. This noise could be from neighboring devices of another system or from other nearby devices operating on the same frequency. These are "unwanted" signals that the 2GIG Vario system wireless expander must be taught not to listed to. The threshold (set above) is the absolute minimum signal strength needed to be heard from a wireless device in order for the receiver to effectively hear it.

3. Allocate Wireless Zones

Each wireless device must identify itself to the system receiver in a process called *enrollment*. Enrollment can be performed by sending an RF signal from each device, or by entering the device's unique serial code into the system. Enrollment can be done locally using the keypad or remotely using the configuration software. The following steps describe quick enrollment by RF signal using a keypad.

1. From the Installer menu, select ⑦ ② ② ① (Install, Wireless Devices, Allocate, By RF).
2. Use the numeric keys to enter the desired zone number and press  .
3. The wireless receiver is in learn mode.
4. Trigger the sensor to be learned.
5. Repeat steps 2 and 3 until all required wireless zones have been enrolled.
6. Enter the wireless zone attributes (see "Zone Attributes" on the previous page).

Communication Method

1. From the main installer programming menu, select ⑤ ① (Communication > Method).
2. Select each method (PSTN or IP through third party providers) and define its parameters.,

> **NOTE:** For IP/CELL communication, a supported backend provider Cell/IP Module must be installed and configured. Please see documentation for the specific communication device.

Report to Monitoring Station

You can define up to three monitoring station accounts and several associated parameters that define the nature of communication, event reporting, and confirmation between the system and the monitoring station.

1. From the main installer programming menu, select ⑤ ② (Communication > MS).
2. Select ① (Report type [Voice]) for each monitoring station and define its parameters.

3. Select ② (Account) number and enter an account number for each monitoring station.
4. Select ③ (Comm Format) to define the transmission format (SIA or Contact ID).
5. Go through the menus to program any other parameters for communicating with the monitoring station.

General Settings

Several system-wide parameters determine how the 2GIG Vario system works. These parameters are set with default values that apply for most installations. If you want to modify the default settings, go through the menus to program any other system parameter settings.

Main System Timers

1. From the main installer programming menu, select ① ① (System > Timers).
2. Select options ① and ② to define exit and entry times.
3. Select option ③ to define siren duration time.
4. Scroll through the other options available in the menu.

Set Up Users

As the installer, you must set up the system users. Owners (Grand Masters) can subsequently change their codes.

1. From the main installer programming menu, select ④ (Codes).
2. Select ① (User) to define the authority level and partitions the user can control.
3. Select ③ (Installer) to change the default installer code.

Keyfobs

Each keyfob and key pad can be set up to perform different system functions and control different utility outputs. Up to eight one-way keyfobs can be enrolled in the system. Each user can be assigned with a single keyfob.

1. Allocate Keyfobs and Keypads

» Allocate and calibrate the devices, as described in the Wireless Zones section (see "Wireless Zones" on the previous page).

2. Set Keyfob Options

1. From the installer programming menu, select ⑧ ② ① (Devices > Keyfobs > Select User).
2. Select the user to assign to the keyfob and press 

.
3. Use the arrow keys to scroll between the menus and the 

key to select menu options for the keyfob.

Keyfob Options

Define the function of each keyfob button (1–4) from the options listed below. Use the respective Quick Keys to assign an option for each button:

» **Button 1 options (**  **):** None, Arm, Stay

» **Button 2 options (**  **):** None, Disarm

» **Button 3 options:** None, Arm, Stay, Panic

» **Button 4 options:** None, Arm S, Stay

Keyfob Option Descriptions

Quick Key	Option	Description
⓪	None	Button disabled.
❶	Arm	The button is used to arm away the partitions assigned to the keyfob.
❷	Disarm	The button is used to disarm the partitions assigned to the keyfob.
❸	Stay	The button is used to arm stay the partitions assigned to the keyfob.
❻	Panic	The button is used to send a panic alarm.

Exit Programming Mode

1. Set SW1 –2 (Default) to the OFF position.
2. Close the main box in order to prevent a Front Tamper alarm.
3. Press  repeatedly to return to the Main Menu.
4. Press ⓪ and then  to exit and save the settings.

> **NOTE:** The system will not allow you to exit from the installer mode if a Tamper or System Fault condition exists. Correct any tamper and/or system fault conditions before attempting to exit the installer mode.

User Definition and System Operation

1. Instruct the user to define the actual user codes. Advise the user to change the Grand Master code.
2. Help the user enroll proximity tags.
3. Instruct the user on the following operations performed from the keypad and keyfobs:

- Arm Away
- Disarm Under Duress
- Operate a Utility Output
- Arm Stay
- Send a Panic Event
- Use the Voice Menu for Remote Operation
- Disarm
- Check System Status

Test the System

Before leaving the site, it is important to fully test the system. The 2GIG Vario system has several testing tools to ensure that the system and its wireless communication features will operate correctly.

From the installer menu, select ② (Testing) and compete the following tests:

- Main Unit noise level, buzzer, speaker, and battery
- Perform a communication and battery test for each device.
  - For zones, perform a Walk Test during which you should receive a "TRIP" from each detector (User Menu > Maintenance > Walk Test).
  - Perform a test of the Follow Me feature (User Menu > Follow Me > Test FM).

The system is now programmed and ready for use.

For more comprehensive and detailed instructions, refer to the *2GIG Vario System Installation & Programming Guide*. For information about user functions, refer to the *2GIG Vario System User Guide*.

Technical Specifications

Main Panel	Technical Information
Input Power	AC/DC Adaptor 100–240V 50/60Hz 14.4V—1.5A or 4A PS
Current Consumption	60 mA, typical / 70 mA, maximum
Rechargeable Standby Battery	**1.5A PS:** 12 Volts up to 7 Amp-Hours (AH), typical **4A PS:** 12 Volts up to 17 Amp-Hours (AH), typical
Power Outputs	**Auxiliary Power:** **1.5A PS:** Total current 800mA; Maximum Aux = 500 mA; Maximum BUS (AUX RED) = 80 mA **4A PS:** Total current 1500mA; Maximum Aux = 500 mA; Maximum BUS (AUX RED) = 1000 mA **Bell/LS (External):** 12 Volts DC @@ 500 mA, maximum
Programmable Outputs	**UO1:** Dry contact relay (24V, 1 Amps) **UO2–UO4:** 100mA, opto relay
Main Box Dimensions	**Polycarbonate (1.5A PS):** 290 x 254 x 97 mm **Metal, small (1.5A PS):** 264 x 299 x 80 mm) **Metal, large (4A or 1.5A PS):** 420 x 379 x 95 mm
Operating Temperature:	–10°C to 55°C (14°F to 131°F)
Storage Temperature	–20°C to 60°C (–4°F to 140°F)

Expanders	Technical Information
LCD Keypad (2GIG-VAR-LCD1)	13.8V ± 10%, 48 mA typical, 52 mA maximum
Proximity LCD Keypad (LCDPROX)	13.8V ± 10%, 62 mA typical, 75 mA maximum
Elegant Keypad Black (2GIG-VAR-KEYPROXBLK)	13.8V ± 10%, 30 mA typical, 180 mA maximum
Elegant Keypad White (2GIG-VAR-KEYPROXWHT)	13.8V ± 10%, 30 mA typical, 280 mA maximum
8 Zone Expansion Module	13.8V ± 10%, 25 mA typical, 30 mA maximum
BUS Zone Expansion	13.8V ± 10%, 20 mA typical
Wireless Expansion Module	13.8V ± 10%, 65 mA maximum 868.6–868.7 MHz (narrowband in EU) or 433.92 MHz
4 Relay Output Expansion Module	13.8V ± 10%, 25 mA typical, 160 mA maximum 4 Form C (SPDT) Relays; 5 A / 24V DC
8 Transistor Output Expansion Module	13.8V ± 10%, 25 mA typical, 40 mA maximum Open Collector, Active Pull-Down, 70 mA maximum
Digital Voice Module	13.8V ± 10%, 30 mA typical, 70 mA maximum
3A SMPS	Input: 16.5VAC@ 50VA (via transformer); Output: Aux: 3A@ 13VDC; Bell/Siren: 1.7A@ 13VDC

Regulatory Information

FCC Notice

This device complies with Part 15 of the FCC's 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.

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 product complies with FCC radiation exposure limits for an uncontrolled environment. Avoid operating this product at a distance less than 20 cm from the user.

> **NOTE:** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Industry Canada (IC) Compliance

This device complies with 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.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Limited Warranty

This Nortek Security & Control product is warranted against defects in material and workmanship of two (2) years. This warranty extends only to wholesale customers who buy direct from Nortek Security & Control LLC or through Nortek Security & Control LLC's normal distribution channels. Nortek Security & Control LLC 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 LLC 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 LLC Warranty all other warranties expressed or implied.

All products returned for warranty service require a Return Authorization Number (RA#). Contact Returns at 1-855-546-3351 for an RA# and other important details.

Inquiries

Direct all inquiries regarding this regulatory compliance statement to:

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1950 Camino Vida Roble, Suite 150
Carlsbad, CA 92008-6517
USA
800-421-1587

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