Honeywell

IntelliPath™ Series 4G GSM Communicator
Auto-selects Optimum GSM path – 2G, 3G, or 4G

GSMV4G / GSMVCN4G

supports two-way voice

Installation and Setup Guide

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General Information

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System Overview

Introduction

Congratulations on your purchase of Honeywell's GSMV4G GSM Communicator (referred to as the GSMV4G, or GSMVCN4G in Canada). It represents the latest and most innovative communication technology for the security industry and uses sophisticated encryption to ensure the highest level of security for your customer.

The new 4G connectivity brings faster GSM data transfers with lower latency (response time); together it results in speedier data transfers.

> The communicator requires an AlarmNet–i account. For new installations, please obtain the account information from the central station prior to programming this communicator. For replacement installations, the AlarmNet-i account is created automatically when the communicator is registered (based on the existing account).

In addition to alarm reporting, the communicator provides two-way voice communications with the central station (when used with Honeywell's AVS Audio Verification System) and provides upload/downloading capability of Honeywell's control panel data over the Internet (via the AlarmNet-G network), using GSM (Global System for Mobile) technology.

UL / ULC   Two-way voice has not been evaluated by UL/ULC.

> NOTE: Two-way voice is not compatible with Honeywell Commercial Control Panels (such as the VISTA-128/250 series).

Due to Honeywell's continuing effort to improve our products, your device may look slightly different than pictured.

General Information

The communicator transmits signals to the AlarmNet-G network (GSM cellular network, using GPRS) and forwards them to your central station.

If the GPRS network is unavailable, the communicator (if enabled by the dealer) will attempt to send the transmission via SMS (Short Message Service) and/or email.

ULC   SMS has not been evaluated for ULC central station communication.

The communicator also provides support for AlarmNet Remote Services. These services allow users remote access to their security systems and provide the ability for users to be notified of system events via email.

ULC   The GSMVCN4G is only employed for supplemental use. A listed DACT is required to be used in conjunction with the GSMVCN4G to provide passive communication for fire and Level P2 channel security for burglary.

System Features

Basic features of the communicator include:

- Remote Services allow the end user to access their security system from their computer via a website. Availability of this service is controlled by the dealer via the web-based programming tool on the AlarmNet Direct website. Once enabled, remote access can be programmed via web or 7720P programming tool.
- Quick connection to compatible Honeywell series control panels

- Simple programming using a 7720P programming tool
- Reports fire, burg, and status messages via wireless network
- Allows uploading and downloading of control panel data via the wireless network
- Supports remote control of alarm systems via Remote Services feature
- Two-way voice capability

Encryption

The communicator uses 256 bit AES (Rijndael) encryption (which is required for certain government installations). The AlarmNet-i AES Encryption Software Module Version 1.0 contained in the Honeywell products has NIST approval. Listings for this approval can be found at http://csrc.nist.gov/groups/STM/cavp/documents/aes/aesval.html and search for "Certificate number 979."

Remote Services

Honeywell now offers a new series of web based services that provides consumers with the ability to communicate with their security system remotely in a number of ways. These new web services will allow users to:

- Access their security system from a computer via a website (Remote Access feature)
- Receive email and text message notifications of system events (Multi-Mode feature)
- Perform system functions and receive confirmations using text messages (SMS feature) Dealers will initially enroll their customers for web services during account programming through the AlarmNet Direct website. The features that can be enabled include Remote Access and Multi-Mode. Once enabled, the specific programming fields associated with these features can be programmed into the communications device either remotely using the AlarmNet Direct website or locally using the 7720P local keypad programming tool.

UL	Remote Access and Multi-Mode have not been evaluated by UL.

Modes of Operation

The communicator provides four modes of operation so it can be used with various types of control panels, as summarized below.

ULC	Only ECP Mode has been approved for ULC installations.

UL	Only ECP Mode and Zone Trigger Mode have been evaluated.

ECP Mode

- This mode is for Honeywell control panels that support ECP communication
- The communicator connects to the control panel's keypad terminals and provides 2-way communication with the control panels using ECP messaging
- The control panel treats the communicator as an ECP device, so ensure to program the control panel with the communicator's device address
- Reports are sent in Contact ID format
- The communicator also supports two hardwire zone trigger inputs (zones 6 and 7)

UL	• Opening and Closing ring back is fully supported. • Only the V+ inverted, V– non-inverted, and EOL options have been evaluated.

Zone Trigger Mode

- This mode is for use with control panels that do not support ECP communication nor 4204 Relay Modules
- The communicator provides six input zones
- Each zone can be configured for +V, –V, or EOLR triggering

  UL: For the communicator, only the V+ inverted, V– non-inverted, and EOL options have been evaluated.

- Each zone can be programmed for inverted operation, delayed reporting, and restoral reporting
- Zone 1 input can distinguish between pulsed and steady signals and report fire or burglary alarms respectively
- Zone 1 can also be programmed to report LYNX panic (if used with LYNX control)
  UL: This feature has not been evaluated by UL.
- Reports are sent in ADEMCO High-Speed format

UL	Opening and Closing ring back is supported by the control panel's digital dialer.

4204 Mode and Two-4204 Mode

- This mode is for use with Honeywell control panels that do not support ECP communication, but do support 4204 Relay Modules
- The communicator connects to the control panel's keypad terminals
- The control panel treats the communicator as 4204 Relay Module(s), so program the control panel accordingly, including setting the communicator's proper 4204 device address
- 4204 mode provides up to four zone inputs, plus two optional trigger zones, depending on options programmed
- Two-4204 mode provides up to eight zone inputs, depending on options programmed
- Each 4204 zone can be programmed for delayed reporting and restoral reporting
- Reports are sent in ADEMCO High-Speed format

UL	• Opening and Closing ring back is supported by the control panel's digital dialer. • 4204 Mode and Two-4204 Mode has not been evaluated by UL.

Supervision Features

The communicator provides the following types of supervision and communicator fault detection:

- Network communication failure: In the event the AlarmNet network does not hear a supervisory message from the communicator within a specified time ("Supervision" option, 24 hours, 30 days, or none), AlarmNet notifies the central station of a communication failure.
- Communication path failure: In the event the module detects a communication path failure, both the Central Station and the control panel can be notified of the trouble condition. The failure is considered a true fault when the fault time has expired ("GSM Fault Time" option) provided it has been set to a non-zero value. Notification is sent to the central station upon this expiration.

- <u>Fault output</u>: Terminal 11 can serve as a fail-safe trigger for communicator fault conditions.

  If used, the fault relay will trip when the following conditions occur: tamper*, power loss*, low battery*, battery charger fault*, loss of network connectivity*, the device is not registered and the device is remotely disabled by AlarmNet.

* Alarm reporting for the noted condition must be enabled for it to trigger the fault relay.

- Primary power loss and low battery conditions ("Pwr Loss Rpt," "Low Bat Rpt" options).
- Cover tamper condition ("Tamper Rpt" option).

Antenna

The communicator comes equipped with an internal antenna. This feature provides additional security to the installation by making the device tamper resistant.

UL / ULC	External antenna has not been evaluated by UL.

⚠	AMPS antennas, such as the 7825-OC antenna, cannot be used with this product.

Specifications

Mechanical:	Dimensions: 8.4" x 8.0" x 1.5" Weight: 2.4 lbs., with battery		
Input Power:	16.5VAC, 40VA transformer, or for ULC installations 12VDC from the control panel. (Honeywell transformer # 1361 included with GSMV4G.) (Honeywell transformer # 1361CN not included with the GSMVCN4G.)		
Current Drain:	220mA standby, 380mA active		
Backup Battery:	6V, 3.1AH, (Honeywell # K14139 included with GSMV4G only.) Expected Battery Life: 5 Years (approx.) **Note:** The sealed lead acid battery used for backup will have reduced life expectancy when exposed to elevated temperatures. The useful life of the battery at 25ºC (77ºF) is approximately 4 years. At 35ºC (95ºF) this will drop to 2 years and at 45ºC (113ºF) 1 year. Battery life expectancy should be taken into account when locating the radio.		
Fault Relay Output:	Open collector, 12VDC, 0.25W max.		
Positive Trigger Level:	6V or greater = positive trigger. (4V or less = restore.)		
Negative Trigger Level:	4V or less = negative trigger. (6V or greater = restore.)		
RF Frequency:	2G	GSM/GPRS/EDGE	Quad Band, 850/900/1800/1900 MHz
	3G/4G	UMTS/HSPA+	Band V, Band II
RF Output Power:	2G	GPRS	+33dBm, GMSK modulation
		EDGE	+27dBm, 8-PSK modulation
	3G	UMTS	+24dBm, QPSK modulation
		WCDMA	+24dBm, QPSK modulation
	4G	HSPA+	+24dBm, 64 QAM modulation
		WCDMA	+24dBm, 64 QAM modulation
Environmental:	Operating temperature: –20º to +55ºC, for UL/ULC installations 0ºC to +49ºC Storage temperature: –40º to +70ºC Humidity: 0 to 95% relative humidity, non-condensing for UL installations 0% to 85%; for ULC installations 0% to 93% Altitude: to 10,000 ft. operating, to 40,000 ft. storage		

Compatibility

For a list of control panels that are compatible with various features of this device, go to:

https://mywebtech.honeywell.com/.

After logging on, select the applicable communication product, and then select "Compatibility Chart" under Essential Docs.

For UL installations and ULC Commercial Burglary Installations, any compatible UL or ULC (respectively) Listed Control Panel may be used. Note, that any control panel that does not communicate via Honeywell's ECP data bus is compatible using zone Trigger Mode. For ULC Commercial Fire Installations, only ULC Listed Subscriber's Unit Panels which use Honeywell's ECP data bus are compatible.

For UL and ULC Fire and Burglary installations, compatible receivers are:

- MX8000   (**UL** – can be used for secondary reporting in ECP mode and Zone Trigger mode. Shall be used for opening and closing ring back with the control panel dialer)
- 7810iR-ENT   (**UL** – must be the primary alarm receiver.)
- Ademco 685

UL

The Automation System must be UL1981 listed.

The GSMV4G has been evaluated for connection to police station receivers.

ULC

The GSMVCN4G has only been evaluated for communication with listed Model 7810iR-ENT internet receiver and Model MX8000 central station receiver.

Compliance

This device complies with the following ULC Installation Codes and Standards:

1. The Canadian Electrical Code, Part I, Safety Standard for Electrical Installations, CSA C22.1.
2. National Building Code (NBC).
3. Standard for Installation and Services for Fire Signal Receiving Centers and Systems, CAN/ULC-S561-03.
4. Standard for Installation of Fire Alarm Systems, CAN/ULC-S524-06.
5. Standard for Installation and Classification of Burglar Alarm Systems for Financial and Commercial Premises, Safes and Vaults, CAN/ULC-S302-M91.

Mounting and Wiring

Determine the Signal Strength and Select a Location

The communicator must be mounted indoors within the protected premises. When choosing a suitable mounting location, understand that signal strength is very important for proper operation. For most installations using the supplied antenna, mounting the unit as high as practical, and avoiding large metal components provides adequate signal strength for proper operation.

You will use the communicator to determine signal strength in order to find a suitable mounting location.

> **Note:** If the SIM is already activated, the RSSI signal strength indicators will indicate signal strength.
> If the SIM has not been activated, the firmware in the communicator enables it to communicate with the cellular network towers (without the SIM being activated) so that signal strength measurements can be determined. In this case, you can display the signal strength by simultaneously pressing the MODE and TAMPER switches.
> Allow at least 60 seconds for a reading to establish.

RF Exposure

Warning – The internal or external antenna(s) used with this product must be installed to provide a separation distance of at least 7.8 in. (20 cm) from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with FCC multi-transmitter product procedures.

Mise en Garde

Exposition aux Frequences Radio: L'antenne (s) utilisée pour cet émetteur doit être installée à une distance de séparation d'au moins 7,8 pouces (20 cm) de toutes les personnes.

Note: The communicator must be installed in accordance with the National Fire Alarm Code, ANSI/NFPA 72.

Unshielded, 22 AWG cable is recommended for the communicator power/data wires.

1. Unpack the communicator and open the case by pushing in the two bottom tabs with a screwdriver while separating the case front.

2. Temporarily connect the communicator to the AC transformer or battery.

3. Choose the installation site with the **best signal strength** by observing the signal strength (RSSI) bar graph (refer to *Appendix A for* information about signal strength and status indications). Signal strength should be within 3-5 bars. The best signal strength is usually found at the highest point in the building, near a window.

   ■ ※ ※ ▯ ▯
   R Y Y G G G

4. Mark the location for the communicator.
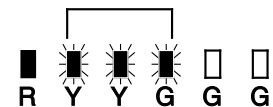
Mounting the Communicator

The communicator can be mounted in two ways depending on the installation requirements.

ULC NOTES:

For <u>Commercial Fire installations</u>, the communicator must be mounted to a single or double gang box.

1. Locate the Drilling Template (provided) and align with case back. Drill at the appropriate locations for either single or double gang box.
2. Locate the gang box into the mounting surface, align case back over mounting surface and install using the screws provided. Pass wires/cables through the opening in the gang box and then through the opening in the case back.
3. When all wiring is completed, attach the case front of the communicator to the case back. Attach the top first then press the bottom section inward until it snaps into place. Secure cover using supplied screw.
4. For <u>Commercial Burglary installations</u>, you must install the rear tamper switch.

UL	The cover must be secured with the supplied screw.

Mounting Procedure, GSMV4G (no rear tamper switch)

1. Locate the case back over selected mounting position such that the opening in the case back is aligned with the wire/cable opening on the mounting surface.

2. Pass the wires/cable through the opening in the case back, or route through the removable knockouts located on the back cover.

3. Secure the case back to the mounting surface using four screws (supplied).

4. When all wiring is completed, attach the case front. Position the top first, then press the bottom section until it snaps in place. Secure bottom using the supplied cover screw. (This is required for UL installations.)
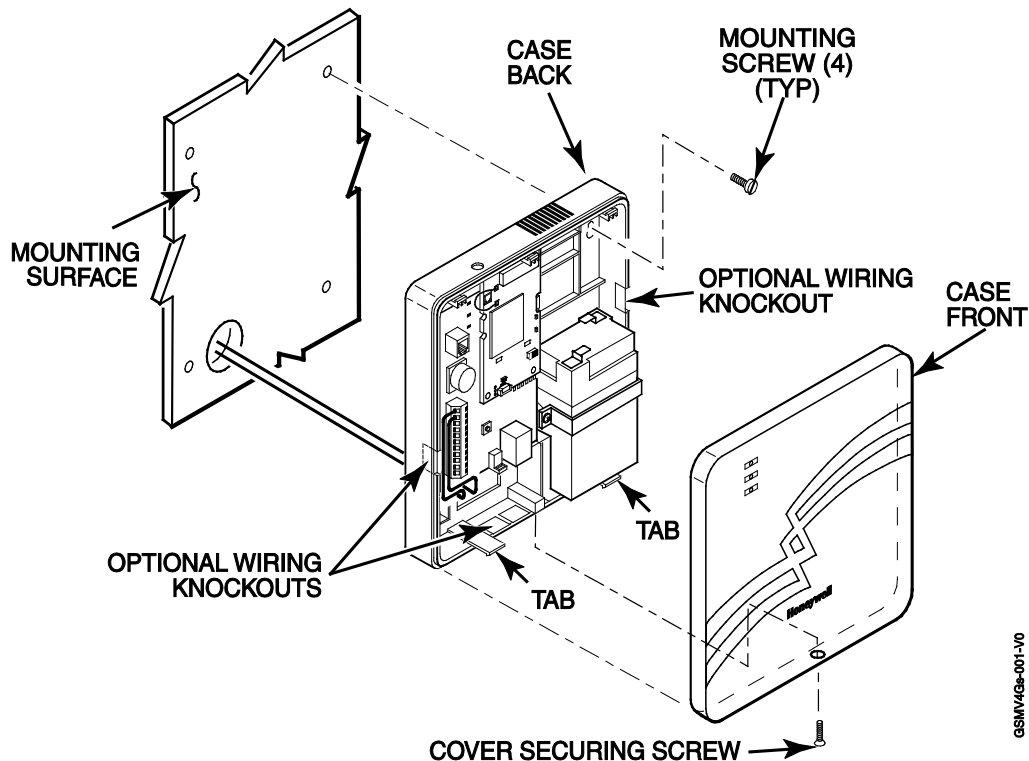
Standard Mounting

Mounting Procedure, GSMVCN4G (with rear tamper switch)

For Canadian installations where the rear tamper switch is used, this procedure requires the removal of the printed circuit boards and installation of the tamper screw.

1. Remove the two mounting screws, and standoff from the daughter card, as shown in **Step A** below.

2. Remove the daughter card by pivoting upward, as shown in **Step B** below.

3. Remove the lower printed circuit board by pushing down on the lower tabs and pivoting the board upward, as shown in **Step C** below.
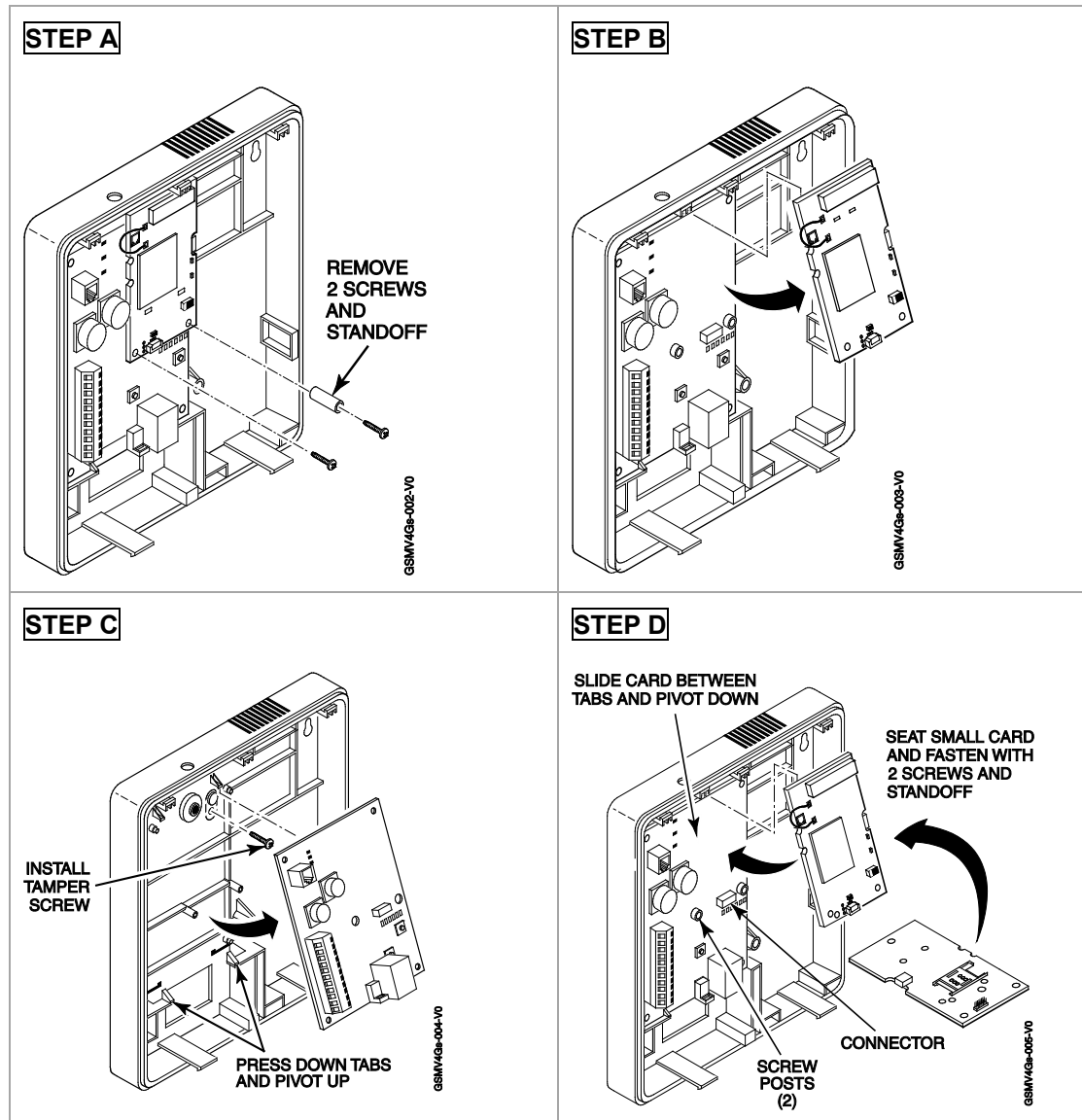
4. Locate the case back over selected mounting position such that the opening in the case back is aligned with the wire/cable opening on the mounting surface.

5. Pass the wires/cable through the opening in the case back, or route through the removable knockouts located on the back cover.

6. Secure the case back to the mounting surface using four screws (supplied).

7. Install the tamper screw (provided), as shown in **Step C** above.

8. Replace lower printed circuit board and then daughter card, as shown in **Step D** above. Be sure to engage receptacle pins by pushing in before securing the daughter card with mounting screws.

When all wiring is completed, attach the case front. Position the top first, then press the bottom section until it snaps in place. Secure bottom using the supplied cover screw.

Wiring the Communicator

UL
- Installation must be in accordance with the National Electrical code and UL681, Installation and Classification for Burglar and Hold-Up Alarm Systems.
- The communicator must be connected to a UL Listed dry contact or voltage trigger outputs of a UL Listed compatible control panel.
- All interconnecting wires between the UL Listed control panel and the communicator must be less than 3 feet in length contained in the same room. All interconnecting wiring must be installed in rigid or EMT (where exposed on interior walls) or in flexible metal tubing if run in the walls or ceiling.
- Requires dialer reporting with a UL Listed control panel. Reporting occurs over both paths.
- A UL listed control panel must monitor the radio fault output of the communicator. A No. 659 or other UL listed Telco Line Fault Monitor's output must be connected to an input zone on the communicator. Premises openings and closings should be sent via the UL listed control panel.

ULC For ULC Commercial Fire and Burglary installations, only use the ULC wiring specified in the "*Power Connections and Options*" topic.

Wiring for two-way voice

The GSMV4G requires an optional audio cable (GSMV-AUDIO, grey) to support two-way voice using the AVS Base Unit. Note the AVS Base Unit is part of Honeywell's <u>AVS Audio Verification System</u>. This system consist of the AVS Base Unit, Remote Station, and the Remote Station PC board. For detailed information, refer to the AVS Audio Verification System documentation. Follow the guidelines below for connecting the audio cable.

1. Power down the communicator, control panel and AVS Audio Verification System. (When the communicator is fully wired up, restore power to the communicator, control panel and AVS Audio Verification System.)
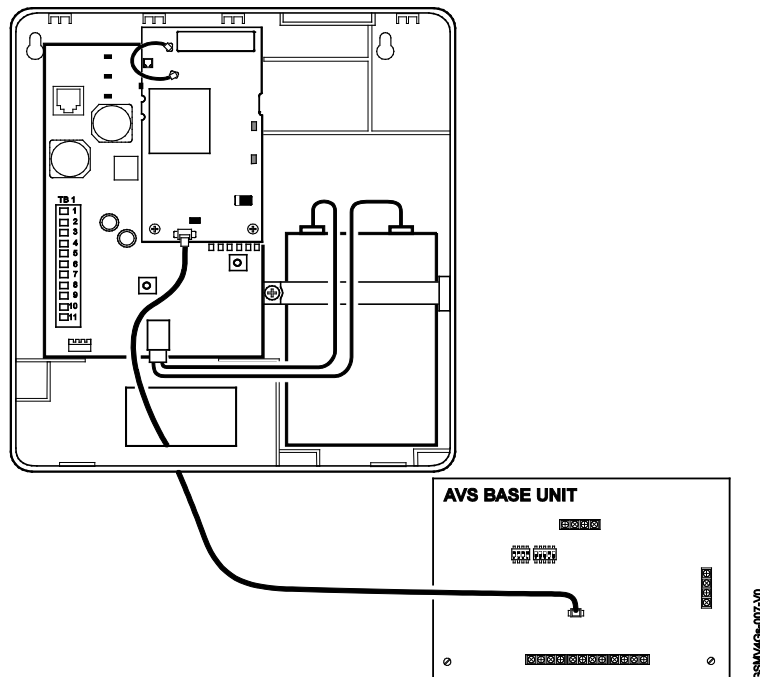
2. Connect one end of the audio cable to the audio connector located on the small PC board.

3. Route the audio cable to the connector on the AVS Base Unit and connect the cable.

4. Ensure the audio cable ends are secured with tie wraps to reduce strain.

Wiring for ECP, 4204 and Two-4204 Modes

Most Honeywell ADEMCO control panels support ECP data communication, (e.g., VISTA-10P, VISTA-15P, VISTA-20P, VISTA-128BP and VISTA-128FBP). However, there are some panels that do not. Check the Installation and Setup Guide for the control panel you are using to see if it supports ECP communication.

Connect the communicator to a compatible Honeywell VISTA control panel's ECP terminals, in parallel with keypads and other peripheral devices such as RF receiver, VIP module, etc. Wire length/gauge limitations are the same for the communicator as they are for keypads and other peripheral devices. To wire the communicator for ECP or 4204 modes, see the figure below and make the following connections:
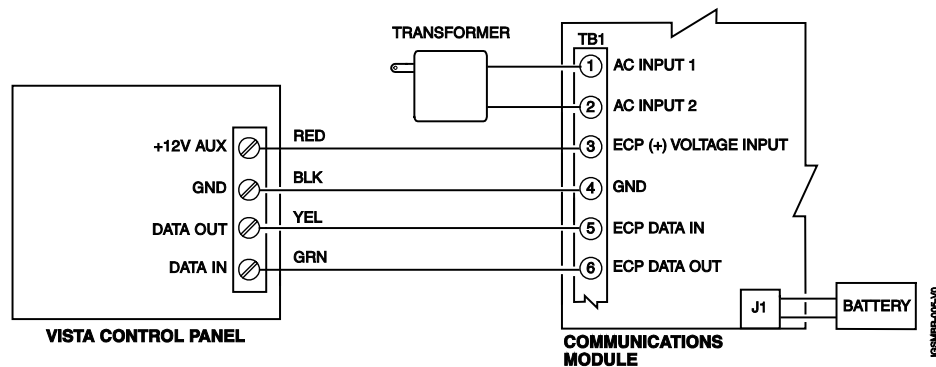
Wiring a VISTA for ECP Mode or 4204 Modes

Wiring for Zone Trigger Mode

To trip a zone <u>using a positive trigger</u>, the voltage level must be:

    6V or greater = positive trigger. (Levels above +14V may cause damage to the unit.)
    4V or less = restore.

To trip a zone <u>using a negative trigger</u>, the voltage level must be:

    4V or less = negative trigger.
    6V or greater = restore. (Levels above +14V may cause damage to the unit.)

Note: Remember to program the communicator's zone for the desired trigger type.

Connect a wire from the triggering source (bell output, voltage trigger, etc.) of the control panel to the zone input of the communicator, and connect a common ground between the communicator and control panel. Examples of zone connections follow:
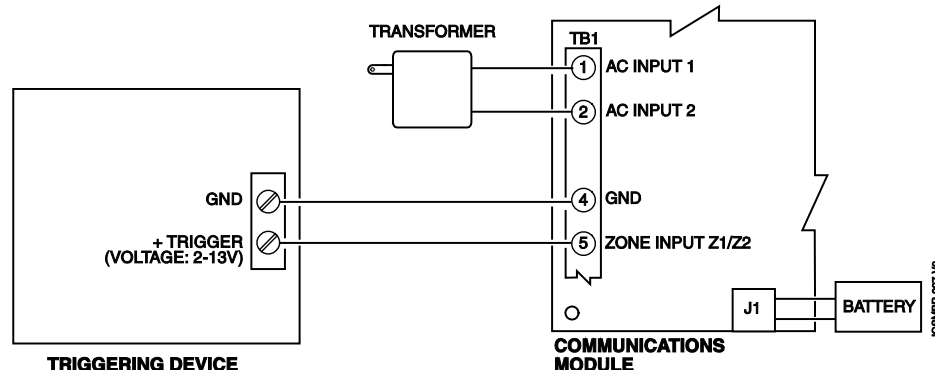
Wiring the Zone 1 Input for a Positive (+) Trigger
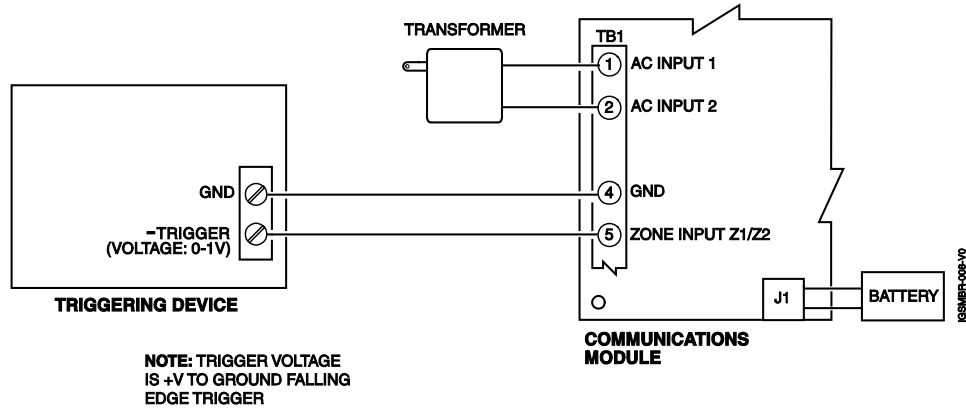
Wiring the Zone 1 Input for a Ground (-V) Trigger

UL
- Zones should use EOL resistors, and be programmed as V+ Inverted or V– Inverted operation such that a cut line results in an alarm.
- Do not use zones 1 and 2 for UL installations.
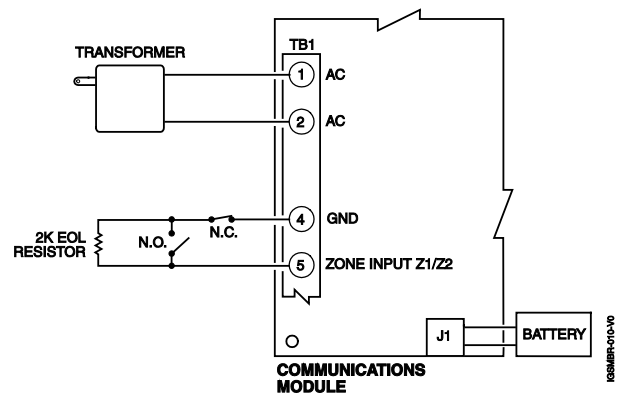
Wiring the Zone 1 Input for EOL Supervised N.O./N.C. Triggers

Wiring the Fault Relay

You may wire and program the communicator's fault output trigger for fail-safe mode (see the question "FLT REL ON Y/N").

To sense a communicator fault at the control panel, see the figure below and make the following connections. Include the proper EOL resistor required by the control panel.

UL / ULC A 24 hour supervisory zone must be assigned on the control panel, with the communicator's fault relay wired to that zone.
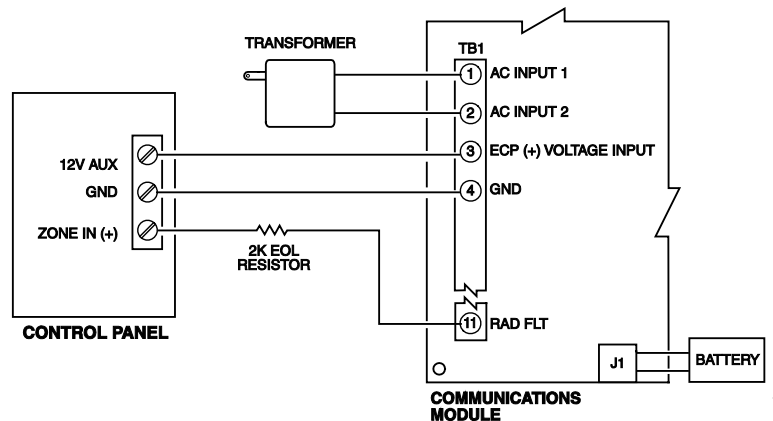
Wiring the Fault Relay to a Control Panel Zone for Normally Closed Fault

Power Connections and Options

Powering the Communicator

There are three ways to power the communicator (see illustrations below):

Standard Installation – The communicator is powered by the supplied AC plug-in transformer.

ULC Commercial Fire and Burglary Compliant Installation – The communicator must be powered by the control panel.

Shared Transformer Installation – In this installation the supplied AC plug-in transformer may be used to power both the communicator and the control panel under the following conditions:

- You must use the Honeywell 1361 Transformer.
- This configuration ONLY applies to the VISTA-10P, VISTA-15P, VISTA-20P control panels when used with the GSMV4G communicator.
- DO NOT use this configuration with any other control panel.
- DO NOT use this configuration if using two-way voice.
- This configuration has not been evaluated by UL.

For all installations the control panel ground (GND) must be connected to TB1-4 GND on the communicator. In addition, if using ECP communication, you must connect the +12VDC AUX voltage output on the control panel (9.6V-13.8V typical) to TB1-3 on the communicator.
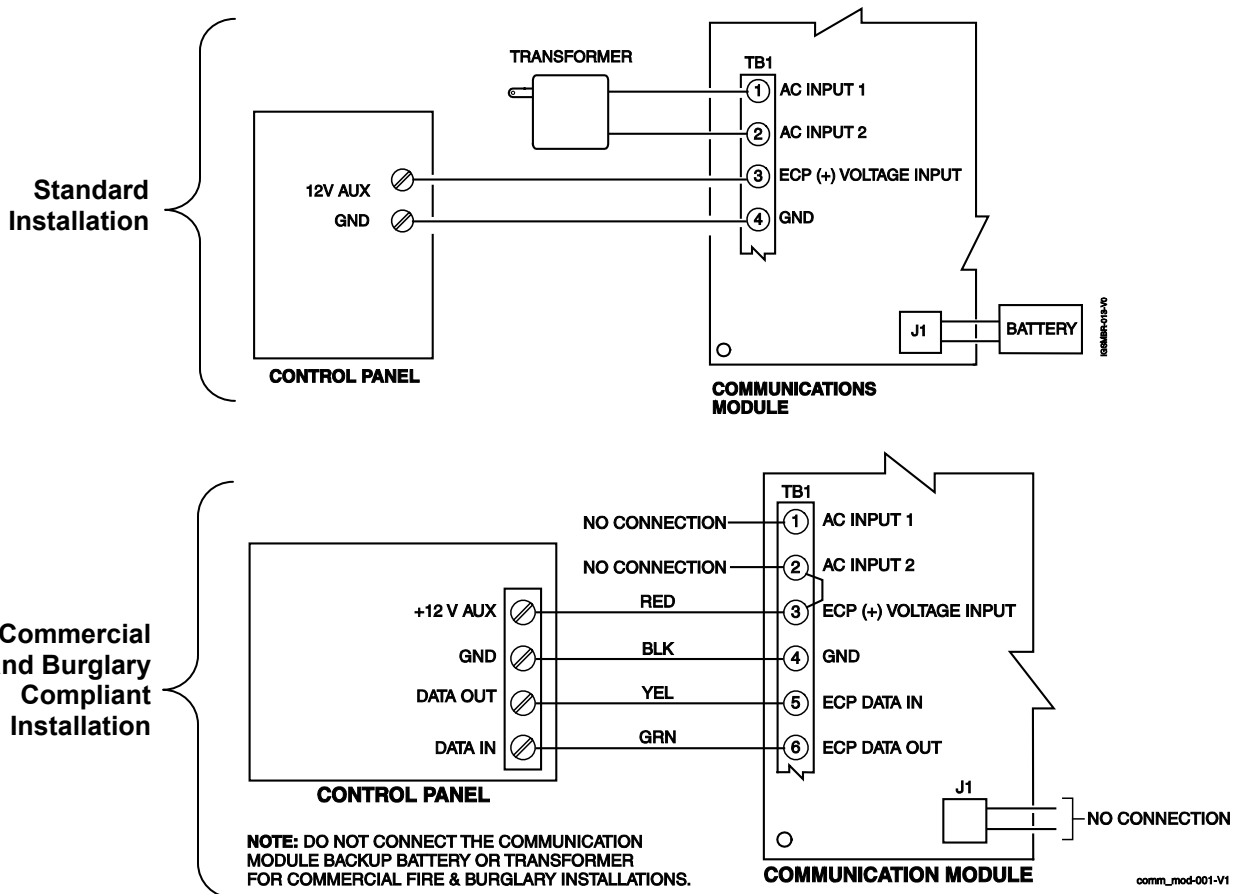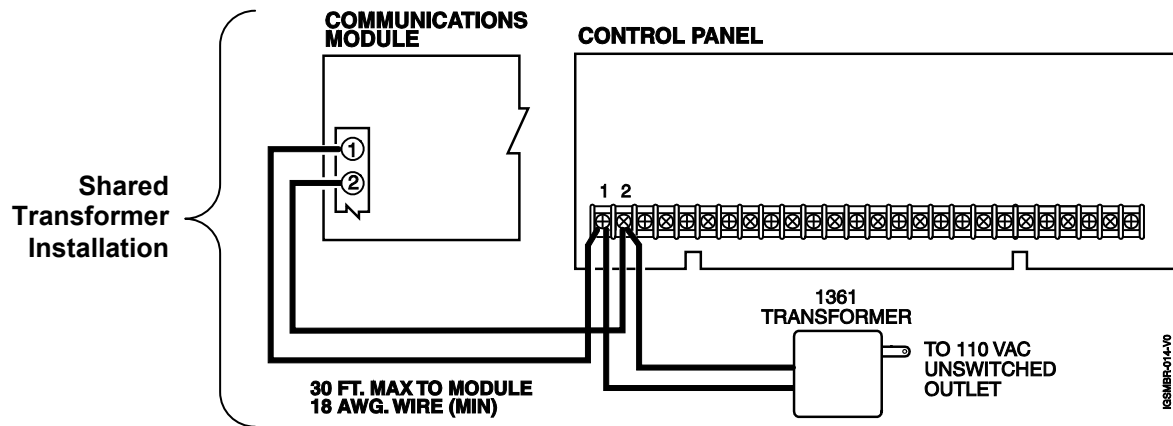
NOTE: When calculating the total load on the auxiliary power output of the control panel, budget 10mA for the communicator when using ECP mode.

Backup Battery Connection

The included battery (K14139) is used for backup in the event of power loss to the communicator. It does not provide power to the control panel.

In ULC installations this battery is not connected, and all backup power is supplied by the control panel.

- The battery can provide over 24 hours of system life in the event of a power failure.
- A programmable power loss message can alert the AlarmNet Control Center when system power is lost (power loss messages are reported within 1-3 hours of actual loss).
- The communicator transmits a low-battery message (programmable) when the battery reaches 5.7V ±5%, indicating subsequent messages may not be transmitted.
- The system shuts down when the battery reaches 5.1V, and radio transmissions are no longer possible.
- If system power is restored before the communicator shuts down, a power restore message is sent within 1-3 hours after power is restored, and the battery is recharged using the communicator's built-in battery charger. If system power is restored after the communicator has shut down, a power-on reset condition exists, the communicator initializes itself and the battery will recharge.

Install the battery as follows, and refer to the *Summary of Connections* diagram at the end of this document.

1. Place the battery inside the case back.
2. Snap the right side of the battery clip onto the inside of the case back and secure the left side with the screw provided.

Do not plug the battery in until after you have powered-up the communicator.

Initial Power-Up Sequence

Before connecting power, check that the following have been completed:

- If using ECP, 4204 or 2-4204 Mode, terminal block TB1 V+ and GND terminals are connected to the control panel's auxiliary power output: 12VDC nominal.
- Plug in the transformer. Then connect the red and black battery cables to the battery terminals. Connect battery cable to connector J1.
- Power up the control panel. (Initially, all communicator programming options are set to the factory default settings.)

Programming the Communicator

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General Information

The communicator is designed to deliver alarms via the GSM network to an AlarmNet central station when it is registered with a valid AlarmNet account.

> The communicator requires an AlarmNet–i account. For new installations, please obtain the account information from the central station prior to programming this communicator. For replacement installations, the AlarmNet-i account is created automatically when the communicator is registered.

You can program the communicator by one of the following methods:

- Through the AlarmNet Direct website

- Through use of a 7720P Programming Tool

- Through a programming mode in the control panel on panels that support this option (e.g., VISTA-128BP and FBP)

> **UL** Only ECP and Zone Trigger modes have been evaluated by UL.

Using the AlarmNet Direct Website

To program the communicator via the website (if you are already signed up for this service), go to: https://services.alarmnet.com/AlarmNetDirect/userlogin.aspx

If you are not signed up for this service, click on "Dealer Sign-Up."

Log in and follow the on-screen prompts.

Please have the following information available when programming the communicator:

1. Primary City ID (two-digit number)

2. Primary Central Station ID (two-digit hexadecimal number)

3. Primary Subscriber ID (four-digit number)

4. MAC ID and MAC CRC number (located on the box and inside the communicator)

After programming is complete, you must transfer the data to the communicator and the communicator must be registered. Refer to *Section 4: Registration*, for further instructions.

Using a 7720P Programming Tool

Connect the 7720P Programming Tool as shown below. The communicator powers the 7720P Programming Tool via the programming jack, and automatically senses the presence of the 7720P when it is plugged in.
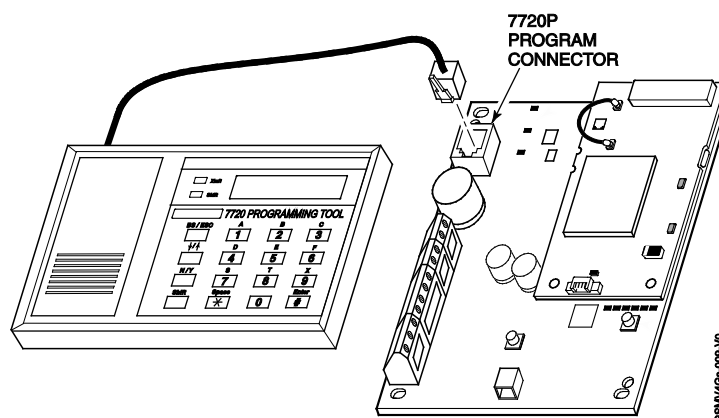
7720P Programmer Tool Connection

Each key of the 7720P has two possible functions: a normal function and a Shift function.

To perform a normal key function, simply press the desired key.

To perform a Shift function, press the [Shift] key, and then press the appropriate key.

The prompts in this document reflect use of the 7720P Programming Tool. *Table 3-1* below lists each normal and shift key function.

Table 3-1. 7720P Normal and Shift Key (shift LED lit) Functions

KEY	NORMAL KEY FUNCTION	SHIFT KEY FUNCTION
BS/ESC	[BS]: Press to delete entry	[ESC]: Press to quit program mode; also can reset programming defaults*
↓/↑	[↓]: Scroll down programming	[↑]: Scroll up programming
N/Y	[N]: Press for "NO" answer	[Y]: Press SHIFT-Y for "YES" answer
SHIFT	Press before pressing a SHIFT key function. Will light SHIFT LED. LED goes out once a key is pressed. Press again for each SHIFT function desired.	
1/A	[1]: For entering the number 1	[A]: For entering letter A
2/B	[2]: For entering the number 2	[B]: For entering letter B
3/C	[3]: For entering the number 3	[C]: For entering letter C
4/D	[4]: For entering the number 4	[D]: For entering letter D
5/E	[5]: For entering the number 5	[E]: For entering letter E
6/F	[6]: For entering the number 6	[F]: For entering letter F
7/S	[7]: For entering the number 7	[S]: For entering letter S
8/T	[8]: For entering the number 8	[T]: For entering letter T
9/X	[9]: For entering the number 9	[X]: For entering letter X
SPACE	[SPACE]: For scrolling option list	No SHIFT function
0	[0]: For entering the number 0	No SHIFT function
#/ENTER	[#/ENTER]: Starts programming mode; Press to accept entries	No SHIFT function

*Active only when the "Exit Programming Mode" prompt is displayed.

Using the Control Panel Programming Mode

Some control panels support programming of the communicator through the control panel programming mode (e.g., Vista-128BP). If programming through the control panel, only the ECP Mode programming options are available. The "mode" questions will not be displayed, and the mode cannot be changed. For a description of key functions on the control panel keypad, and how they map to the 7720P Programming tool, refer to the control panel's Programming Guide.

Programming Conventions

Programming is accomplished by answering a series of prompts (questions). Most prompts require only a [Y]es or [N]o response, while others require a numerical response (ID numbers, etc.).

The current value is displayed on the second line in parentheses ( ). A "?" indicates an invalid entry.

Use the [ENTER] key to accept the current entry and proceed to the next prompt. If the entered value is invalid, pressing [ENTER] re-displays the prompt; the next prompt is not displayed until a valid answer is entered.

Use the up/down arrow keys to scroll through the programming questions without changing any values. Press the [ESC] key to go to the end of the list of questions.

ECP Mode Programming

The communicator supports ECP messaging to communicate with the control panel. Likewise the control panel sends Contact ID format alarms to the communicator via the ECP bus. Not all control panels support the communicator interface on ECP, so be sure to check the Installation and Setup Guide of the control panel to see if it supports this feature.

ULC	Only ECP Mode has been approved for ULC installations.

Refer to *Table 3-2* for ECP Mode programming and follow the prompts.

Press the [ENTER] key to begin programming.

NOTE: The central station can remotely block access to local device programming. If this has been done, the following prompt appears:	**Access to Prog Mode Denied**

NOTE: The default programming values for ECP mode are listed in the prompts below.

Table 3-2. Programming the communicator for ECP mode only.

	PROMPTS	OPTIONS	DESCRIPTION
1	**Strt Prog Mode? (Y/N)_**	[Y], [N]	Enters programming mode.
2	**Enter Password**	[0-9, A-F, N, S, T, X, Y]	If a password has been previously assigned, this prompt appears. Enter a 4-digit password (0-9, A-F, N, S, T, X, Y). The next prompt appears.
3	**Program Device? (Y/N)_**	[Y], [N]	To begin programming the communicator, press [Y] and go to Prompt 9: "Device Mode." To create a password if none has been assigned, press [N] and go to Prompt 4: "Create Password." To change an existing password, press [N] and go to Prompt 5: "Change Password."
4	**Create Password? (Y/N)_**	[Y], [N]	Passwords can be used to protect account and programming information. If no password has been assigned, this prompt appears after pressing [N] at the "Program Device?" prompt. If a password is desired, press [Y] and go to Prompt 6: "Enter Password."
5	**Change Password? (Y/N)_**	[Y], [N]	If a password has already been assigned, this prompt appears after pressing [N] at the "Program Device?" prompt. Press [Y] if you want to change the password. **NOTE:** To clear an existing password, without entering a new one, answer [Y] to the "Change Password?" prompt, then press the [Enter] key when prompted for the new password and its confirmation.

	PROMPTS	OPTIONS	DESCRIPTION
6	**Enter Password**	[0-9, A-F, N, S, T, X, Y]	This prompt is displayed if [Y] was pressed in Prompt 4 or 5. Enter a 4-digit password (0-9, A-F, N, S, T, X, Y).
7	**Verify Password**	[0-9, A-F, N, S, T, X, Y]	Re-enter the password as confirmation. If the password doesn't match the first entry, the following is displayed followed by the "Exit Prog. Mode?" prompt: **Verify Not OK** **PSWD not created** Otherwise, the "Exit Prog. Mode?" prompt is displayed directly.
8	**Exit Prog. Mode? (Y/N)_**	[Y], [N] [ESC]	Exits program mode. Press [N] to go back to Prompt 3. Press [ESC] to load factory defaults. Refer to the *Exiting Programming Mode* paragraph in this section.
9	**Device Mode (ECP)_**	• ECP • Zone Trig. • 4204 Emu • Two 4204s	Press the [space] key to scroll through the modes of operation. Press [ENTER] to select **ECP** mode. **IMPORTANT**, if either Zone Trig, 4204 Emu, or Two 4204s device mode is desired, use *Table 3-4* for programming.
	Important Information Regarding Multi-Mode Options		
	NOTE: In order for the Multi Mode, Remote Access, and Keypad Address programming fields to appear an account must be created in the AlarmNet Direct website and "Remote Access" must be enabled for the comm device. Users can receive email notification of system events by using the Multi-Mode feature. In ECP mode, this is accomplished through emulation of a 4204 relay module, or two 4204 relay modules. • When "4204-sourced" is selected, the user can be notified of up to four events, plus two additional events if using the optional communication device zones of 6 and 7. • When "2-4204-sourced" is selected, the user can be notified of up to eight events. The Multi-Mode address must match the address of a relay module enabled in the control panel (although you don't actually connect a module). If using "2-4204-sourced," the address of the second module is automatically assigned the next device address after the first 4204. • When "Enhanced Reports" is selected, a device address of 25 should be selected. Make sure the addresses are also enabled in the control panel. Program outputs to trigger on system events the user would like to be notified of through Output Device (Relay) programming in the control panel. These events are configured at the AlarmNet Total Connect website at: https://services.alarmnet.com/TotalConnect		
✓		Multi-Mode (email notification) is intended as a convenience for the user, and does not replace Central Station reporting of critical events (alarms, troubles, etc.).	
UL / ULC		Multi-Mode has not been evaluated by UL or ULC.	
10	**Multi Mode (Disabled)_**	• Disabled • 4204 Sourced • 2-4204 Sourced • Enhanced Reports	Enable if you want system events sent by email to the user. Select "4204 Sourced" to send up to four events (plus two additional reports triggered by optional hardwire zones 6 and 7), or "2-4204 Sourced" to send eight events. Disable for normal alarm processing and go to Prompt 12: "Primary City ID". Select "Enhanced Reports" to enable reporting to TC2 web services. Note, to use "Enhanced Reports" ensure the control panel is Total Connect 2.0 Ready.
11	**Multi Mode Addr (12)_**	[01-30]	This address must be programmed if using the Multi- Mode feature. The address must be unique from the normal communicator (or LRR) device address, and the Keypad Address used for Remote Access or Direct Wire downloading. The address used must also be enabled as a 4204 relay module in Vista and First Alert control panels. See Important Information above.
	Important Information Regarding Primary and Secondary Accounts (Questions 12-18)		
	Account information is provided by the central station administrator. If the control panel supports secondary account reporting, you will need secondary account information. The City ID, CS ID or Subscriber ID of the		

	PROMPTS	OPTIONS	DESCRIPTION
	secondary account must differ from that of the primary account.		
12	**Primary City ID (??)_**	[01-99]	Enter the 2-digit primary city ID, 01-99 (decimal).
13	**Primary CS ID (???)**	[01-FE]	Enter the 2-digit primary central station ID number, 01-FE (HEX).
14	**Primary Sub ID (????)**	[0001-9999]	Enter the 4-digit subscriber account number, 0001-9999 (decimal).
15	**En. 2ⁿᵈ CS Y/N (N)_**	[Y], [N]	Applicable only if control panel supports Central Station #1 and #2 Category Enable reporting for the communicator device (e.g., VISTA-128BP, FA1660C). Used if reporting to a second central station is desired. If [N], go to Prompt 19: "Device Address."
16	**2ⁿᵈ City ID (??)_**	[01-99]	Enter the 2-digit secondary city ID, 01-99 (decimal).
17	**2ⁿᵈ CS ID (??)_**	[01-FE]	Enter the 2-digit second central station's ID number, 01-FE (HEX).
18	**2ⁿᵈ Sub ID (????)_**	[0001-9999]	Enter the 4-digit subscriber account number for the second central station, 0001-9999.
19	**Device Address (03)_**	[01-30]	In ECP mode, the GSMV4G communicates with the control panel using the ECP bus. Enter the appropriate ECP device address. For VISTA-10 and VISTA-20 series control panels, use address 03. For other control panels, see the their Installation and Setup Guide. **NOTES:** 1. When programming the control panel, enable the communicator (or LRR) output. 2. The device address must be unique from the "Keypad Address" entered in Prompt 22.

UL / ULC	Remote access has not been evaluated by UL or ULC.

	PROMPTS	OPTIONS	DESCRIPTION
20	**Remote Access Y/N (N)_**	[Y], [N]	Press [Y] to allow the end user to access their system via a website. Availability of this service is controlled by the dealer via the web-based programming tool on the AlarmNet Direct website.
21	**Direct Wire Y/N (N)_**	[Y], [N]	Applies only to VISTA-128BP/250BP and FBP Series control panels, and FA1660C and 1700C Series control panels. If [N], and if Prompt 20: "Remote Access" is disabled, skip to Prompt 23: "Supervision."
22	**Keypad Address (28)_**	[01-30]	Must be programmed if using either the Remote Access feature or Direct Wire downloading. **NOTES:** 1. This address must be programmed as an alpha keypad in the control panel (Device Programming Mode). If using Remote Access, the keypad must also be enabled as an AUI (advanced user interface) keypad. DO NOT connect an actual keypad (or any other device) assigned to this address. 2. This address must be unique from the "Device Address" entered in Prompt 19.
23	**Supervision (24 Hours)_**	• 30 Day • 24 Hour • None	The AlarmNet network must hear at least one supervisory message from the communicator during this supervision period; otherwise, AlarmNet notifies the central station that a communication failure has occurred. (If the supervision period is changed after registration, you must re-register the communicator.) Press the [space] key to scroll through choices. **UL/ULC:** Must be set to 24 hours.

	PROMPTS	OPTIONS	DESCRIPTION
24	**Old Alarm Time 10 Minutes_**	•10 Minutes • 4 Hours • 15 Minutes • 8 Hours • 30 Minutes • 12 Hours • 1 Hour • 24 Hours • 2 Hours • 4 Hours • 8 Hours • 12 Hours • 24 Hours	The old alarm time sets how long an undeliverable alarm is retried for delivery to the central station. If the message is not validated, it is retried until the old alarm time is reached or the message is validated. Press the [space] key to scroll through choices. **UL/ULC:** Must be set to 10 minutes.
25	**GSM Flt Time (00 mins)_**	[00-99] [00] = not used	In the event the communicator detects a communication path failure, enter the time delay (in minutes) before the communicator notifies the control panel with a trouble message (and trips the Fault Output if used; (terminal 11) see next prompt). The control panel can then notify the central station. **UL/ULC:** Must be one (01) minute.
26	**Flt Rel ON Y/N (N)_**	[Y], [N]	If enabled, the fault open collector output is normally energized to ground, and de-energizes (open circuit) in the event of a communicator fault. For conditions that trip the fault relay refer to *Supervision Features* in Section 1. Set to [Y] if fail-safe mode is desired. See *Wiring the Fault Relay* in Section 2. **UL/ULC:** Must be set to "Y."
27	**Pwr Loss Rpt Y/N (Y)_**	[Y], [N]	Sends a primary power loss report to the central station within 1-3 hours after its detection. A restore report is sent within 1-3 hours after power is restored. **UL/ULC:** Must be set to "Y."
28	**Low Bat Rpt Y/N (Y)_**	[Y], [N]	Sends a low-battery report when a low battery condition exists. **UL/ULC:** Must be set to "Y."
29	**Tamper Rpt Y/N (Y)_**	[Y], [N]	Sends a tamper report when the communicator detects a tamper condition. A tamper restore is automatically sent when the tamper condition clears. **UL/ULC:** Must be set to "Y."

Important Information Regarding Zone Input Options

ECP mode supports two optional hardwire zone input triggers by making connections to the communicator's zone 6 and/or zone 7 terminals and programming the appropriate zone trigger options below.

Each zone input can be programmed to cause an alarm under one of the following conditions:
- (V+), where a positive voltage causes an alarm for normally low connections (voltage trigger, NO, NC)
- (V–), where a ground trigger causes an alarm for normally high connections (open collector, NO, NC)
- (EOLR) End of Line Resistor, where the input is supervised by a 2K EOL resistor. The zone can be triggered by open collector, voltage trigger, NO, NC.

UL: Set V+ to inverted, and V– as non-inverted.

In addition to the above, zones can be programmed for an Inverted Trigger, where the alarm and normal states of the zones are inverted; this can serve a fail-safe supervisory purpose for certain installations.

These zone inputs can also be programmed for restore reporting, and for delayed reporting, which allows time for the user to abort false alarms.

NOTE: Optional hardwire zones report in ADEMCO High-Speed format.

	PROMPTS	OPTIONS	DESCRIPTION
30	**Enable Zn6 Y/N (N)_**	[Y], [N]	Enables alarm reporting for zone 6. If [N], skip to Prompt 35: "Enable Zn7."
31	**Zn6 Trigger Type (V+)_**	• (V+) • (V–) • (EOLR)	Selects the triggering method for this zone input. Press the [space] key to scroll through choices.
32	**Invert Zn6 Y/N (N)_**	[Y], [N]	Inverts the alarm and normal states of the zone 6 trigger; otherwise uses normal input signal.
33	**Restore Zn6 Y/N (Y)_**	[Y], [N]	Enables restore reporting for zone 6. **UL/ULC:** Must be set to "Y."
34	**Delay Zn6 (secs) (00)_**	[01-15] [00] = no delay	Defines the reporting delay in seconds for zone 6. **UL/ULC:** Must be set to "00."
35	**Enable Zn7 Y/N (N)_**	[Y], [N]	Enables alarm reporting for zone 7. If [N], skip to Prompt 40: "Review."
36	**Zn7 Trigger Type (V+)_**	• (V+) • (V–) • (EOLR)	Selects the triggering method for this zone input. Press the [space] key to scroll through choices.
37	**Invert Zn7 Y/N (N)_**	[Y], [N]	Inverts the alarm and normal states of the zone 7 trigger; otherwise uses normal input signal.
38	**Restore Zn7 Y/N (Y)_**	[Y], [N]	Enables restore reporting for zone 7. **UL/ULC:** Must be set to "Y."
39	**Delay Zn7 (secs) (00)_**	[01-15] [00] = no delay	Defines the reporting delay in seconds for zone 7. **UL/ULC:** Must be set to "00."
40	**Review? Y/N**	[Y] = review [N] = exit	**Reviewing Programming Mode Entries** To review the programming options, press [Y]. The programming prompts are displayed again. Use the up/down arrow keys to scroll through the program fields without changing any of the values. If a value requires change, simply type in the correct value. When the last field is displayed, the "REVIEW?" prompt again appears. **To exit the programming mode**, press [N] in response to the "REVIEW?" prompt, and refer to *Exiting Programming Mode* paragraph at the end of this section.

ECP Status Codes

When the communicator is configured for ECP mode, it sends status messages to the control panels for battery, power, tamper, and network connectivity failures. Some of the control panels, (e.g., VISTA-10P, VISTA-15P and VISTA-20P Series) display these on the keypad as "LngRng Radio" followed by a 4-digit code (listed below). In addition, the Contact ID codes (listed in Appendix B) for these conditions are sent to the central station by the communicator.

UL The information in the following table is based on the VISTA-20 which has not been evaluated with this communicator.

Table 3-3. Common ECP Keypad Display Status Codes

STATUS CODE	DESCRIPTION
0000	Control panel lost communication with communicator.
0880	Communicator tamper detected (cover removed).
0005	Communicator has lost contact with AlarmNet-G network.
000F	Communicator is not registered; account not activated.

0019	Communicator shutdown.
0400	Communicator power on / reset AND the control panel lost communications with the communicator.
0C80	Communicator power on / reset AND tamper detected.
0C8F	Communicator power on / reset AND tamper detected AND not registered.
08E0	Communicator tamper detected AND communicator battery low.
3000	Primary power loss (will only be displayed in conjunction with another event).
8000	Battery charger failure (will only be displayed in conjunction with another event).
0060	Low battery (will only be displayed in conjunction with another event).

Alternative Mode Programming (Zone Trigger, 4204 and Two-4204)

UL / ULC   The LYNX controls have not been evaluated with this communicator.

Zone Trigger Mode

There are six input zones available on the communicator. Each zone is selectable for +V, -V, or EOLR trigger. The first zone input can detect both pulsed and steady signals if connected to a bell output.

When using Zone Trigger mode, messages are sent in ADEMCO High-Speed format.

Zones 3, 4, 5, 6 and 7 are voltage trigger inputs located on TB1 pins 6-10.

Refer to *Table 3-4* for Zone Trigger Mode programming and follow the prompts that pertain to Zone Trigger Mode.

4204 Emulation Mode

In 4204 Emulation Mode, the GSMV4G communicates with a compatible Honeywell VISTA series or First Alert control panel as though it were a 4204 Relay Module. If two 4204s are enabled in the communicator, it acts as two 4204s at consecutive device addresses. The control panel must be configured to recognize one or two 4204 relay modules accordingly. On VISTA-32FB (or higher) control panels and First Alert equivalents, addresses 6 and 13 should not be used when the secondary 4204 is enabled. Messages are sent in ADEMCO High-Speed format.

NOTE: See your control panel Installation and Setup Guide for the number of 4204 modules supported.

4204 Emulation Mode Options

For control panels that do not support ECP communication, the 4204 Emulation modes provide a means of sending up to eight unique reports based on defined system conditions. In 4204 mode, the communicator functions as a logical 4204 Relay Module, where each relay number, referred to in the communicator as zone number, can be programmed to send a report based on the output function programmed in the control panel for that relay. Each relay-zone can be programmed to; send a restore message of the reported condition, delay the transmission of messages, and to send reports only when a conditional zone is triggered (armed). See "*Important Information Regarding Zone Input Options*" later in this section.

In single 4204 mode, the communicator supports up to four relay-zones. In Two-4204 mode, the communicator functions as two 4204 modules, supporting up to eight relay-zones.

UL   4204 Mode and Two-4204 Mode has not been evaluated.

4204 Relay Outputs map to communicator zones as follows:

First 4204 Zones (device address entered in Prompt 14)**:**	Second 4204 Zones (device address entered in Prompt 14, plus 1)**:**
Relay 1 = Zone 1 Relay 2 = Zone 2 Relay 3 = Zone 3 Relay 4 = Zone 4 or conditional zone trigger if "report only if armed" is selected in any zone 1-3 when using single 4204 mode. **NOTE:** Zone 4 status is not reported when being used as the conditional (arming) trigger zone.	Relay 1 = Zone 5 Relay 2 = Zone 6 Relay 3 = Zone 7 Relay 4 = Zone 8 or conditional zone trigger if "report only if armed" is selected in any zone 1-7 when using Two-4204 mode. **NOTE:** Zone 8 status is not reported when being used as the conditional (arming) trigger zone or if tamper reporting is enabled.

When using the communicator in 4204 Emulation Mode, DO NOT enable the communicator (or LRR) in control panel programming. Instead, enable the module device address(es) and program the appropriate relay activation functions for the relay-zones being used. In some control panels, it is called "relay programming" and in others it is called "output device programming." It is recommended that "close and stay closed" (usually choice 2) action is selected. Selection of momentary activation will cause the communicator to generate an alarm and NOT a restore, even if the communicator is programmed to send a restore for the given zone.

In 4204 mode, messages are reported in ADEMCO High-Speed format. Zone alarms (status 7) are reported with "1" (alarm) or "3" (restore) displayed in the zone position for the respective zone (e.g. alarm on zone 2: 5155 5555 7; restore 5355 5555 7). A supervision fault trouble message is automatically sent if the communicator detects no activity on its connection to the control panel. The message is: 5555 5515 5; restore message is: 5555 5535 5.

Refer to *Table 3-4* for 4204 Emulation Mode programming and follow the prompts that pertain to 4204 or Two-4204 mode. A "**X"** indicates whether the prompt applies to that mode.

Alternative Mode Programming

Press the [ENTER] key to begin programming and follow the prompts for the mode of operation being programmed.

NOTE: The central station can remotely block access to local device programming. If this has been done, the following prompt appears:	**Access to Prog Mode Denied**

Table 3-4. Programming for Zone Trigger, 4204 Emulation, or Two-4204 Emulation modes.

	PROMPTS	ZONE TRIG.	4204/ 2-4204	OPTIONS	DESCRIPTION
1	**Strt Prog Mode? (Y/N)_**	X	X	[Y], [N]	Enters programming mode.
2	**Enter Password**	X	X	[0-9, A-F, N, S, T, X, Y]	If a password has been previously assigned, this prompt appears. Enter a 4-digit password (0-9, A-F, N, S, T, X, Y). The next prompt appears.
3	**Program Device? (Y/N)_**	X	X	[Y], [N]	To begin programming the communicator, press [Y] and go to Prompt 9: "Device Mode." To create a password if none has been assigned, press [N] and go to Prompt 4: "Create Password." To change an existing password, press [N] and go to Prompt 5: "Change Password."
4	**Create Password? (Y/N)_**	X	X	[Y], [N]	Passwords can be used to protect account and programming information. If no password has been assigned, this prompt appears after pressing [N] at the "Program Device?" prompt. If a password is desired, press [Y] and go to Prompt 6: "Enter Password."
5	**Change Password? (Y/N)**	X	X	[Y], [N]	If a password has already been assigned, this prompt appears after pressing [N] at the "Program Device?" prompt. Press [Y] if you want to change the password. **NOTE:** To clear an existing password, without entering a new one, answer [Y] to the "Change Password?" prompt, then press the [Enter] key when prompted for the new password and its confirmation.
6	**Enter Password**	X	X	[0-9, A-F, N, S, T, X, Y]	If [Y] was pressed in Prompt 4 or 5, this prompt appears. Enter a 4-digit password (0-9, A-F, N, S, T, X, Y).
7	**Verify Password**	X	X	[0-9, A-F, N, S, T, X, Y]	Re-enter the password as confirmation. If the password doesn't match the first entry, the following is displayed followed by the "Exit Prog. Mode?" prompt: **Verify Not OK PSWD not created** Otherwise, the "Exit Prog. Mode?" prompt is displayed directly.
8	**Exit Prog. Mode? (Y/N)_**	X	X	[Y], [N] [ESC]	Exits program mode. Press [N] to go back to Prompt 3. Press [ESC] to load factory defaults. Refer to the *Exiting Programming Mode* paragraph in this Section.

	PROMPTS	ZONE TRIG.	4204/ 2-4204	OPTIONS	DESCRIPTION
9	**Device Mode (ECP)_**	X	X	• ECP • Zone Trig. • 4204 Emu • Two 4204s	Press the [space] key to scroll through the modes of operation. Press [ENTER] to select the mode of operation. **IMPORTANT**, if ECP device mode is desired, use *Table 3-2* for programming.
	Important Information Regarding Multi-Mode Options				
	NOTE: In order for the <u>Multi Mode</u>, <u>Remote Access</u>, and <u>Keypad Address</u> programming fields to appear an account must be created in the AlarmNet Direct website and "Remote Access" must be enabled for the comm device. In Zone Trigger mode, the options for Multi-Mode are "Enabled" or "Disabled." If enabled, whenever a zone on the communication device is triggered, a corresponding email message is sent INSTEAD of normal central station reports. Cover tamper will send email event 8. All communication device system events (such as power loss, low battery, Telco, etc.) are still sent to AlarmNet. Events used to send email messages are defined on the Honeywell Total Connect web site, and must correspond to events triggering the hardwired zones.				
✔	Multi-Mode (email notification) is intended as a convenience for the user, and does not replace Central Station reporting of critical events (alarms, troubles, etc.).				
UL	Multi-Mode has not been evaluated by UL.				
10	**Multi Mode (Disabled)_**	X		• Enabled • Disabled	Enable if you want all events sent by email to the user. Disable for normal alarm processing.
	Important Information Regarding Primary Account (Questions 11-13)				
	Account information is provided by the central station administrator.				
11	**Primary City ID (??)_**	X	X	[01-99]	Enter the 2-digit primary city ID, 01-99 (decimal).
12	**Primary CS ID (???)**	X	X	[01-FE]	Enter the 2-digit primary central station ID number, 01-FE (HEX).
13	**Primary Sub ID (????)**	X	X	[0001-9999]	Enter the 4-digit subscriber account number, 0001-9999 (decimal).
14	**Device Address (12)_**		X	[01-15]	The GSMV4G communicates with the control panel as a 4204 relay module. Enter the appropriate address. For VISTA-10P and FA130CP Series control panels, this must be address 12. For other control panels, see their Installation and Setup Guide. **NOTES:** 1. The 4204 protocol limits address range to 01-15. If using 2-4204 mode, the communicator assigns the second 4204 to the next higher device address (e.g., if entering address 12 for the first 4204, then address 13 is automatically assigned to the second 4204 module). Program the control panel accordingly. 2. The device address(es) must be unique from the "Keypad Address" entered in Prompt 17 and any other address used on the control panel.
UL / ULC	Remote access has not been evaluated by UL or ULC.				
15	**Remote Access Y/N (N)_**		X	[Y], [N]	Press [Y] to allow the end user to access their system via a website. Availability of this service is controlled by the dealer via the web-based programming tool on the AlarmNet Direct website.

	PROMPTS	ZONE TRIG.	4204/ 2-4204	OPTIONS	DESCRIPTION
16	Direct Wire Y/N (N)_		X	[Y], [N]	Applies only to VISTA-128BP/250BP and FBP Series control panels. If [N], and if Prompt 15: Remote Access is disabled, skip to Prompt 18: "Supervision."
17	Keypad Address (28)_		X	[01-30]	This address must be programmed if using either the Remote Access feature or Direct Wire downloading. **NOTES:** 1. This address must be programmed as an alpha keypad in the control panel (Device Programming Mode). If using Remote Access, the keypad must also be enabled as an AUI (advanced user interface) keypad. DO NOT connect an actual keypad (or any other device) assigned to this address. 2. This address must be unique from the "Device Address" entered in Prompt 14, and cannot equal that device address plus 1 (one) if using 2-4204 mode.
18	Supervision (24 Hours)_	X	X	• 30 Day • 24 Hrs • None	The AlarmNet network must hear at least one supervisory message from the communicator during this supervision period; otherwise, AlarmNet notifies the central station that a communication failure has occurred. (If the supervision period is changed after registration, you must re-register the communicator.) Press the [space] key to scroll through choices. **UL/ULC:** Must be set to 24 hours.
19	Old Alarm Time 10 Minutes_	X	X	• 10 Min • 15 Min • 30 Min • 1 Hr • 2 Hrs • 4 Hrs • 8 Hrs • 12 Hrs • 24 Hrs	Sets how long an undeliverable alarm is retried for delivery to the central station. If the message is not validated, it is retried until the old alarm time is reached or the message is validated. Press the [space] key to scroll through choices. **UL/ULC:** Must be set to 10 minutes.
20	GSM Flt Time (00 mins)_	X	X	[00-99] [00] = not used	In the event the communicator detects a communication path failure, enter the time delay (in minutes) before the communicator notifies the control panel with a trouble message (and trips the Fault Output if used (terminal 11); see next question). The control panel can then notify the central station. **UL/ULC:** Must be one (01) minute.
21	Flt Rel ON Y/N (N)_	X	X	[Y], [N]	If enabled, the fault open collector output is normally energized to ground, and de-energizes (open circuit) in the event of a communicator fault. For conditions that trip the fault relay refer to *Supervision Features* in Section 1. Set to [Y] if fail-safe mode is desired. See *Wiring the Fault Relay* in Section 2. **UL/ULC:** Must be set to "Y".

	PROMPTS	ZONE TRIG.	4204/ 2-4204	OPTIONS	DESCRIPTION
22	**Pwr Loss Rpt Y/N (Y)_**	X	X	[Y], [N]	Sends a primary power loss report to the central station within 1-3 hours after its detection. A restore report is sent within 1-3 hours after power is restored. **UL/ULC Standard Installations** (using transformer and battery)**:** Must be set to "Y" unless used with a LynxR-I series control. Must be set to "N" when using a LynxR-I series control. **ULC Commercial Fire & Burglary Installations** (powered from the control panel)**:** Must be set to "N."
23	**Low Bat Rpt Y/N (Y)_**	X	X	[Y], [N]	Sends a low-battery report when a low battery condition exists. A low-battery restore is automatically sent when the low battery condition clears. **Alternate Installations** (powered from the control panel)**:** Must be set to "N." **UL/ULC Standard Installations** (using transformer and battery)**:** Must be set to "Y" unless used with a LynxR-I series control. Must be set to "N" when using a LynxR-I series control. **ULC Commercial Fire & Burglary Installations** (powered from the control panel)**:** Must be set to "N."
24	**Tamper Rpt Y/N (Y)_**	X	X	[Y], [N]	Sends a tamper report when the communicator detects a tamper condition. A tamper restore is automatically sent when the tamper condition clears. **UL/ULC:** Must be set to "Y."
25	**Lynx Panic Y/N (N)_**	X		[Y], [N]	Applies only if used with a Lynx, LynxR or LynxR-EN controls where the communicator (or LRR) trigger is connected to the communicator's zone terminal. Reports a Panic alarm on zone 3 when the communicator detects a single pulse on zone 1. No restores are generated for a Panic alarm.

Important Information Regarding Zone Input Options

If desired, **4204 mode** supports two optional hardwire zone input triggers by making connections to the communicator's zone 6 and/or zone 7 terminals and programming the appropriate zone trigger options below.

NOTE: These triggers are not available when using 2-4204 mode.

Zone Trigger Mode provides six hardwire zone input triggers by making connections to the communicator's zone terminals and programming the appropriate zone trigger options below. Zones are numbered 1-7, with zone 2 serving as a reporting zone only (see Bell Output Zone below).

Bell Output Zone 1 (and 2): The zone 1 terminal can detect both pulsed and steady signals. If connecting the bell output to the communicator zone causes a bell fault on the control panel, enable the "Trip Inputs 1 or 2" option. The communicator reports an alarm on zone 1 (fire) when it detects a pulsed signal and an alarm on zone 2 (burglary) when it detects a steady signal.

> **UL:** Use of the Bell output is not supported.

Telco Zone and Open/Close Zone: Dedicated zones can be assigned as the Telco fault zone and/or an open/close (arm/disarm) reporting zone. When triggered, these zones report a Telco line fault or open/close report respectively, in ADEMCO High-Speed format. Connect the appropriate trigger from the control panel to the selected zone input for each of these options.

Input Trigger Types: Triggering of each zone input can be programmed to cause an alarm under one of the following conditions:

* (V+), where a positive voltage causes an alarm for normally low connections (voltage trigger, NO, NC)

	PROMPTS	ZONE TRIG.	4204/ 2-4204	OPTIONS	DESCRIPTION
	• (V–), where a ground trigger causes an alarm for normally high connections (open collector, NO, NC) • (EOLR) End of Line Resistor, where the input is supervised by a 2K EOL resistor. The zone can be triggered by open collector, voltage trigger, NO, NC. **UL:** Set V+ to inverted, and V– as non-inverted.				
	Inverted Trigger: Zones can be programmed for inverted trigger, where the alarm and normal states of the zones are inverted; this can serve a fail-safe supervisory purpose for certain installations. **Restore and Delayed Reports:** Zone inputs can be programmed for restore reporting, and for delayed reporting (allowing time for the user to abort false alarms). **UL/ULC:** Zone restoral must be enabled.				
	Report Only if Armed option: To help eliminate redundant reports, zone alarms can be restricted to report only if a conditional zone is triggered (armed). If this feature is desired, the conditional zone is automatically used as the "arming" zone. Connect the appropriate control panel trigger to the conditional (arming) zone. The trigger must be programmed as necessary in the control panel. The conditional (arming) zone on the communicator is a different dedicated zone for each programming mode, as follows:				

Mode	Conditional (Arming) Zone
Zone Trigger	7
4204	4
2-4204	8

IMPORTANT: If any zone (zones 1-6 in zone trigger mode, zones 1-3 in 4204 mode, zones 1-7 in 2-4204 mode) is set for Report Only if Armed, the conditional (arming) zone becomes unavailable for reporting (as it is reserved for the "arming" trigger connection).

	PROMPTS	ZONE TRIG.	4204/ 2-4204	OPTIONS	DESCRIPTION
26	**Trip Inputs 1or2 w/Bell Out (N)_**	X		[Y], [N]	Use if the zone 1 connection to the control panel's bell output causes a bell fault on the control panel. **NOTE:** If used, EOLR trigger type is not available for zones 1 and 3.
27	**Telco Zone (0)_**	X	X	Zone Trig: [3-7] 4204: [1-4] 2-4204: [1-8] [0] = not used	See "Important Information Regarding Zone Input Options" on previous page. Enter the zone number to be used for Telco line fault reports. This zone assignment must be unique from the open/close zone selected in Prompt 28. **Zone Trigger Mode:** If any zone is programmed for "report only if armed," zone 7 cannot be used. **4204 Mode:** If any zone is programmed for "report only if armed," zone 4 cannot be used as a Telco zone. **2-4204 Mode:** If any zone is programmed for "report only if armed," or if tamper reporting is enabled, zone 8 cannot be used. **NOTE:** Connect the Telco line fault output (or relay output programmed for "Telco line fault") to the Telco zone.

	PROMPTS	ZONE TRIG.	4204/ 2-4204	OPTIONS	DESCRIPTION
28	**Open/Close Zone (0)_**	X	X	Zone Trig: [3-7] 4204: [1-4] 2-4204: [1-8] [0] = not used	Enter the zone number to be used for open/close (arm/disarm) reports. This zone assignment must be unique from the Telco zone selected in Prompt 27. **Zone Trigger Mode:** If any zone is programmed for "report only if armed," zone 7 cannot be used. **4204 Mode:** If any zone is programmed for "report only if armed," zone 4 cannot be used as an open/close zone. **2-4204 Mode:** If any zone is programmed for "report only if armed," or if tamper is enabled, zone 8 cannot be used. **NOTE:** Connect an open/close (arm/disarm) trigger (or relay output) from the control panel to the open/close zone.
29	**Zn1 Trigger Type (V+)_**	X		• (EOLR) • (V+) • (V−)	Selects the triggering method for this zone input. Press the [space] key to scroll through choices.
30	**Restore Zn1 Y/N (Y)_**	X	X	[Y], [N]	Enables restore reporting for zone 1.
31	**Delay Zn1 (secs) (00)_**	X	X	[01-15] [00] = no delay	Defines the reporting delay in seconds for zone 1.
32	**Rpt Zn1 ONLY if Armed (N)_**	X	X	[Y], [N]	Reports alarms on zone 1 ONLY if the conditional zone (zone 7 in zone trigger mode; zone 4 in 4204 mode; or zone 8 in 2-4204 mode) is triggered (armed). If [N], always reports alarms on zone 1.
33	**Invert Zn2 Y/N (N)_**	X		[Y], [N]	Inverts the alarm and normal states of the zone 2 trigger; otherwise uses normal input signal.
34	**Restore Zn2 Y/N (Y)_**	X	X	[Y], [N]	Enables restore reporting for zone 2. **UL/ULC:** Must be set to "Y."
35	**Delay Zn2 (secs) (00)_**	X	X	[01-15] [00] = no delay	Defines the reporting delay in seconds for zone 2. **UL/ULC:** Must be set to "00."
36	**Rpt Zn2 ONLY if Armed (N)_**	X	X	[Y], [N]	Reports alarms on zone 2 ONLY if the conditional zone (zone 7 in zone trigger mode; zone 4 in 4204 mode; zone 8 in 2-4204 mode) is triggered (armed). If [N], always reports alarms on zone 2.
37	**Zn3 Trigger Type (V+)_**	X		• (EOLR) • (V+) • (V−)	Selects the triggering method for this zone input. Press the [space] key to scroll through choices.
38	**Invert Zn3 Y/N (N)_**	X		[Y], [N]	Inverts the alarm and normal states of the zone 3 trigger; otherwise uses normal input signal.
39	**Restore Zn3 Y/N (Y)_**	X	X	[Y], [N]	Enables restore reporting for zone 3. **UL/ULC:** Must be set to "Y."
40	**Delay Zn3 (secs) (00)**	X	X	[01-15] [00] = no delay	Defines the reporting delay in seconds for zone 3. **UL/ULC:** Must be set to "00."

	PROMPTS	ZONE TRIG.	4204/ 2-4204	OPTIONS	DESCRIPTION
41	**Rpt Zn3 ONLY if Armed (N)_**	X	X	[Y], [N]	Reports alarms on zone 3 ONLY if the conditional zone (zone 7 in zone trigger mode; zone 4 in 4204 mode; zone 8 in 2-4204 mode) is triggered (armed). If [N], always reports alarms on zone 3. **4204 mode:** If any zone is programmed to "Report Only if Armed," skip to Prompt 52: "Enable Zn6."
42	**Zn4 Trigger Type (V+)_**	X		• (EOLR) • (V+) • (V–)	Selects the triggering method for this zone input. Press the [space] key to scroll through choices.
43	**Invert Zn4 Y/N (N)_**	X		[Y], [N]	Inverts the alarm and normal states of the zone 4 trigger; otherwise uses normal input signal.
44	**Restore Zn4 Y/N (Y)_**	X	X	[Y], [N]	Enables restore reporting for zone 4. **UL/ULC:** Must be set to "Y."
45	**Delay Zn4 (secs) (00)**	X	X	[01-15] [00] = no delay	Defines the reporting delay in seconds for zone 4. **UL/ULC:** Must be set to "00."
46	**Rpt Zn4 ONLY if Armed (N)_**	X	2-4204 only	[Y], [N]	Reports alarms on zone 4 ONLY if the conditional zone (zone 7 in zone trigger mode; zone 8 in 2-4204 mode) is triggered (armed). If [N], always reports alarms on zone 4.
47	**Zn5 Trigger Type (V+)_**	X		• (EOLR) • (V+) • (V–)	Selects the triggering method for this zone input. Press the [space] key to scroll through choices.
48	**Invert Zn5 Y/N (N)_**	X		[Y], [N]	Inverts the alarm and normal states of the zone 5 trigger; otherwise uses normal input signal.
49	**Restore Zn5 Y/N (Y)_**	X	2-4204 only	[Y], [N]	Enables restore reporting for zone 5. **UL/ULC:** Must be set to "Y."
50	**Delay Zn5 (secs) (00)_**	X	2-4204 only	[01-15] [00] = no delay	Defines the reporting delay in seconds for zone 5. **UL/ULC:** Must be set to "00."
51	**Rpt Zn5 ONLY if Armed (N)_**	X	2-4204 only	[Y], [N]	Reports alarms on zone 5 ONLY if the conditional zone (zone 7 in zone trigger mode; zone 8 in 2-4204 mode) is triggered (armed). If [N], always reports alarms on zone 5.
52	**Enable Zn6 Y/N (N)_**		4204 only	[Y], [N]	Enables alarm reporting for zone 6. If [N], skip to Prompt 58: "Enable Zn7."
53	**Zn6 Trigger Type (V+)_**	X	4204 only	• (EOLR) • (V+) • (V–)	Selects the triggering method for this zone input. Press the [space] key to scroll through choices.
54	**Invert Zn6 Y/N (N)_**	X	4204 only	[Y], [N]	Inverts the alarm and normal states of the zone 6 trigger; otherwise uses normal input signal.
55	**Restore Zn6 Y/N (Y)_**	X	X	[Y], [N]	Enables restore reporting for zone 6. **UL:** Must be set to "Y."
56	**Delay Zn6 (secs) (00)_**	X	X	[01-15] [00] = no delay	Defines the reporting delay in seconds for zone 6. **UL/ULC:** Must be set to "00."

	PROMPTS	ZONE TRIG.	4204/ 2-4204	OPTIONS	DESCRIPTION
57	**Rpt Zn6 ONLY if Armed (N)_**	X	X	[Y], [N]	Reports alarms on zone 6 ONLY if the conditional zone (zone 7 in zone trigger mode; zone 4 in 4204 mode; zone 8 in 2-4204 mode) is triggered (armed). If [N], always reports alarms on zone 6.
58	**Enable Zn7 Y/N (N)_**		4204 only	[Y], [N]	Enables alarm reporting for zone 7, if used. If [N], skip to Prompt 66: "Review."
59	**Zn7 Trigger Type (V+)_**	X	4204 only	• (EOLR) • (V+) • (V−)	Selects the triggering method for this zone input. Press the [space] key to scroll through choices.
60	**Invert Zn7 Y/N (N)_**	X	4204 only	[Y], [N]	Inverts the alarm and normal states of the zone 7 trigger; otherwise uses normal input signal.
61	**Restore Zn7 Y/N (Y)_**	X	X	[Y], [N]	Enables restore reporting for zone 7. **Zone Trigger mode:** This question will only be displayed if zone 7 is not used as the conditional (arming) trigger zone. **UL/ULC:** Must be set to "Y."
62	**Delay Zn7 (secs) (00)_**	X	X	[01-15] [00] = no delay	Defines the reporting delay in seconds for zone 7. **Zone Trigger mode:** This question will only be displayed if zone 7 is not used as the conditional (arming) trigger zone. **UL/ULC:** Must be set to "00."
63	**Rpt Zn7 ONLY if Armed (N)_**		X	[Y], [N]	Reports alarms on zone 7 ONLY if the conditional zone (zone 4 in 4204 mode; zone 8 in 2-4204 mode) is triggered (armed). If [N], always reports alarms on zone 7. **2-4204 mode:** If any zone is programmed to "Report Only if Armed," or if tamper is enabled, skip to "Review."

NOTE: The next two prompts (2 x 4204 Emulation Device Mode) are available ONLY when option "Tamper Rpt" is DISABLED.

	PROMPTS	ZONE TRIG.	4204/ 2-4204	OPTIONS	DESCRIPTION
64	**Restore Zn8 Y/N (Y)_**		2-4204 only	[Y], [N]	Enables restore reporting for zone 8. **UL/ULC:** Must be set to "Y."
65	**Delay Zn8 (secs) (00)_**		2-4204 only	[01-15] [00] = no delay	Defines the reporting delay in seconds for zone 8. **UL/ULC:** Must be set to "00."
66	**Review? Y/N**	X	X	[Y] = review [N] = exit	**Reviewing Programming Mode Entries** To review the programming options (to ensure that the correct entries have been made), press [Y]. The programming questions are displayed again. Use the up/down arrow keys to scroll through the program fields without changing any of the values. If a value requires change, simply type in the correct value. When the last field is displayed, the "REVIEW?" question again appears. **To exit the programming mode**, press [N] in response to the "REVIEW?" question, and refer to *Exiting Programming Mode* below.

Exiting Programming Mode

To exit the programming mode, press [N] in response to the "REVIEW?" question. Then press [Y] to the "Exit Prog Mode?" question. Upon exiting, the message "Checking Root File TX Path" will be displayed, and the configuration file at the server is updated to log the changes made. When complete, the message "DONE" is displayed to indicate the file was successfully uploaded.

> ✓ If critical configuration changes were made, such as the mode of operation, the communicator will reset to ensure that the programming features are enabled.

If the file is not successfully uploaded, one of the following prompts will be displayed. Follow the steps shown below until the upload is successful.

Display	Description	What to do
Cannot Upload Try Again? Y/N_	GSM communicator is not yet initialized.	Wait for RSSI LEDs to be lit. Press [Y].
Failed to Update Root File!	Network problem, or you answered "N" to "Cannot Upload Try Again?" prompt.	Initiate the Force Server Update command by pressing the [0] key; refer to *Section 5: Programmer Keyboard Commands.*

Setting Factory Defaults

To reset the programming options to factory-default values, press [ESC] at the "Exit Prog Mode?" prompt.

Set Default?
Y/N_

Press [Y] to reset factory default values.

Press [N] to cancel this function.

If you press [Y], all programmed values are reset to the original factory settings. PLEASE NOTE THAT THIS WILL ERASE ANY PASSWORD THAT MAY HAVE BEEN ENTERED. After pressing [Y], the Create Password prompt appears (see Prompt 4).

Registration

●   ●

Registering the Communicator

Once you have initialized and programmed the communicator, it must be registered to enable the account. The registration status is indicated below:

LED	DESCRIPTION
STATUS (green)	ON – Is NOT registered with AlarmNet. OFF – Is registered with AlarmNet.
MESSAGE (yellow)	ON – Message transmission pending. QUICK PERIODIC BLINK - Normal SLOW BLINK – In unison with green LED, Registration in progress.
FAULT (red)	OFF – No fault present.

STATUS
MESSAGE
FAULT

Honeywell
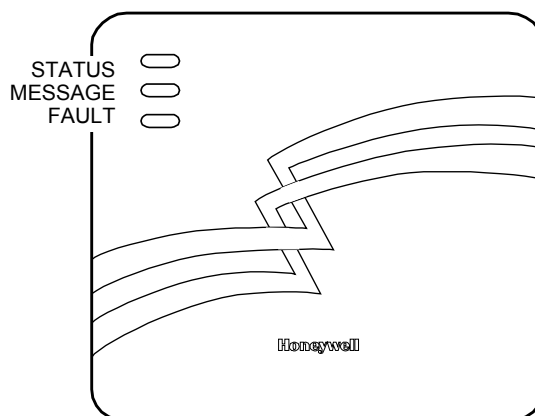
Upon completion of the registration process, the communicator transmits a registration message and receives a registration validation indicating that the account is now enabled. Wait for the "Registration Success" message to appear, regardless of which registration method used.

You can register the communicator by one of the following methods:

- Through the AlarmNet Direct website
- Through use of the Tamper Switch
- Through use of a 7720P Programming Tool
- By phone

Registering through AlarmNet Direct Website

The communicator can be registered through the AlarmNet Direct Website. To program the communicator via the website (if you are already signed up for this service), go to: https://services.alarmnet.com/AlarmNetDirect/userlogin.aspx.

Log in and follow the on-screen prompts.

If you are not signed up for this service, click on "Dealer Signup" from the login screen to gain access to the Honeywell web-based programming.

Dealer Sign-Up Direct Link: https://services.alarmnet.com/AlarmNetDirectP_Sign-Up.

You will be instructed how to proceed upon completing the sign-up form. Only one sign-up per dealer is required. Once an initial user is established, additional logins may be created by that user.

NOTE: Central Stations sign up by contacting AlarmNet Administration at 800-222-6525 option 3.

Please have the following information available when programming the device:

- Primary City ID (two-digit number)

- Primary Central Station ID (two-digit hexadecimal number)
- Primary Subscriber ID (four-digit number)
- MAC ID and MAC CRC number (located on the box and inside the communicator)

Once the communicator is registered, you may log out of the AlarmNet Direct website.

Register using the Tamper Switch

Initiate the registration sequence by clicking the Tamper Switch three times.

You can monitor the registration process by viewing the Status Display. The Message (yellow) LED and the Status (green) LED will blink slowly in unison while registration is in progress.

Once the registration has been completed successfully, the communicator enters normal operating mode; the Status (green) LED goes out and the Message (yellow) LED is lit to indicate that the Power On / Reset message is waiting to be sent. This message will appear at the receiving station as "E339 C08xx", where "xx" is the ECP device address. The description may read "Trouble – Exp. Mod. Reset". If registration is not validated within 90 seconds, the communicator times out, and the (green) LED will be lit (solid).

The Power On / Reset message will be sent in Ademco High-Speed format if the communicator is programmed for zone trigger, 4204 or 2x4204 modes.

If repeated registration attempts time out, verify the communicator account information has been entered correctly.

Register using the Programming Tool

The interactive registration feature allows the installer to register the communicator through a series of keyboard commands on the 7720P Programming Tool. This method of registration lets the installer monitor the registration process.

Registering …	Once the installation is complete, press the **[↑]** key on the 7720P. The registration message is sent and the unit waits for the acknowledgment.
Registration SUCCESS	If this is a new installation and the city, central station, and customer numbers have been correctly entered, the communicator is registered and this message is displayed. The communicator is now in full service and available for alarm reporting to the central station.

Possible Errors

Registration BAD Timed Out	Displayed if no response to the registration request is received.
Registration BAD Pri Sub ID BAD	Indicates the city, central station, or customer number for the labeled account(s) is not accepted. The ID information was either entered incorrectly, or the central station failed to pre-authorize programmed ID numbers with AlarmNet customer service.
Registration BAD 2nd Sub ID BAD	Indicates the city, central station, or customer number for the Secondary account is not accepted. The ID information was either entered incorrectly, or the central station failed to pre-authorize programmed ID numbers with AlarmNet customer service.
Registration BAD Pri&Sec – IDs BAD	Displayed when both primary and secondary subscriber IDs are invalid.

Possible Errors

Registration BAD Pri ID – Need PIN	Displayed if this is a repair/replacement, or an error was made in programming the Primary account information of the communicator for an existing account. This prompt appears for 2 seconds. See the *Replacing an existing communicator* section below for further displays.
Registration BAD 2nd ID – Need PIN	This prompt is displayed if this is a repair/replacement, or an error was made in programming the Secondary account information of the communicator for an existing account. This prompt appears for 2 seconds. See the *Replacing an existing communicator* section below for further displays.
Registration BAD Pri&2nd – Need PIN	This prompt is displayed if this is a repair/replacement, or an error was made in programming BOTH the Primary and Secondary account information of the communicator for an existing account. This prompt appears for 2 seconds. See the *Replacing an existing communicator* section below for further displays.

Replacing an existing communicator

Enter PIN#	This prompt appears after pressing [Shift] and the down arrow **[↓]** on the 7720P. Enter a 4-digit alphanumeric PIN number provided by your central station, your dealer or an authorized AlarmNet representative. Press the [Enter] key.
Registering …	The registration message is sent and the unit waits for acknowledgement.
Registration SUCCESS	If the PIN is valid, the new communicator is registered and the old unit unregistered. Additionally, AlarmNet sends a substitution alarm to the central station.
Registration BAD	If you entered an invalid PIN, the appropriate message is displayed depending on which account number is being replaced (see above for exact wording). The registration process is repeated. **NOTE:** Each attempt causes a substitution alarm to be sent to the central station.

Register by Phone

You can register the communicator by calling the AlarmNet Technical Assistance Center (TAC) at 1-800-222-6525. You will need the following information:

- MAC number (found on the box and inside the communicator).
- Subscriber information (provided by the central station), including a city code, CSID, and a subscriber ID.
- When instructed to do so, triple-click the tamper switch to complete the registration.

Programmer Keyboard Commands

Programmer Keyboard Commands

Programmer keyboard commands can be used to quickly view your connectivity settings and options. Most commands require you to press the [shift] key and then the designated command key. (See the keys designated in red on the 7720P Programming Tool.)

[A]	7845GSM RIS x.x.xx mm/dd/yy	**Software Revision** "x.x.xx" indicates the installed software Revision. Mm/dd/yy indicates month, day and year of the revision.

Identification Displays

[B]	MAC xxxxxxxxxxxx MAC CRC yyyy	**MAC Address** "xxxxxxxxxxxx" indicates the communicator's unique identification number. "yyyy" indicates the MAC CRC number. This number is located on the box and inside the communicator. Press the [Space] key to go to the next field. Press the backspace [BS] key to go to the IMEI display.
	SCID xxxxx xxxxx xxxxx xxxxx	**SCID Display** Displays the identification number assigned to the SIM card (SCID) in this device. Press the [Space] key to go to the next field. Press the backspace [BS] key to go to the previous field.
	IMEI xxxxxxxx xxxxxx x	**IMEI Display** Displays the identification number assigned to the GSM communicator in this device. Press the [Space] key to get the MAC Address. Press the backspace [BS] key to go to the previous field.
[C]	Mon 01 Jan 2001 05:48:39 am	**Time** Retrieves the current date and time from the AlarmNet network in Greenwich Mean Time (GMT). This display confirms that the communicator is in sync with network.

GSM Status Displays

[E]	**Operating with 3G/4G service**

```
PriRSSI     3/4G  REG
-xxxdbm     stat    x
```

Status Display Screen 1

PriRSSI – Primary site RSSI level in dBm.

3/4G – Communicator is on the 3G/4G network where "stat" can be:

Good	RSSI	–20 to –90 dBm
OK	RSSI	–91 to –99 dBm
Marginal	RSSI	–100 to –105 dBm
Bad	RSSI	–106 to –150 dBm

REG – Registration status where "x" can be:
N – Not Registered
H – Registered Home
S – Searching
D – Registration Denied
R – Registered Roaming
? – Unknown Registration State

Press the [space] key to go to the next screen.
Press the [backspace] key to go to the last screen.

```
RAT        Ec/N0
3G/4G      -xxxxx
```

Status Display Screen 2

RAT – Radio Access Technology.
Ec/N0 – Carrier Noise Ratio (CNR)
Press the [space] key to get to the next screen.
Press the [backspace] key to go to the previous field.

```
Cntry   Netw   LAC
xxx     xxx    xxxxx
```

Status Display Screen 3

Cntry – Country Code
Netw – Network Code
LAC – Local area code
Press the [space] key to get to the next screen.
Press the [backspace] key to go to the previous field.

```
Cell      Chan   PSC
xxxxxxx   xxxx    xxx
```

Status Display Screen 4

Cell – Base Station ID
Chan – Control Channel in use
PSC – Primary Sync Code
Press the [space] key to go to the next screen.
Press the [backspace] key to go to the previous field.

```
Second  Site   RSSI
Available
```

Status Display Screen 5

Secondary Site RSSI availability. Available or Not Available will be displayed.
Press the [space] key to go to Status Display Screen 1.
Press the [backspace] key to go to the previous field.

[E]   **Operating with 2G service**

```
PriRSSI    2G    REG
-xxxdbm    stat    x
```

Status Display Screen 1
PriRSSI – Primary site level in dBm.
2G – Communicator is on the2G network where "stat" can be:

Good	RSSI –20 to –89 dBm
OK	RSSI –90 to –98 dBm
Marginal	RSSI –99 to –104 dBm
Bad	RSSI –105 to –150 dBm

REG – Registration status where "x" can be:
    N – Not Registered
    H – Registered Home
    S – Searching
    D – Registration Denied
    R – Registered Roaming
    ? – Unknown Registration State
Press the [space] key to go to the next screen.
Press the [backspace] key to go to the last screen.

```
RAT        Ec/N0
2G           NA
```

Status Display Screen 2
RAT – Radio Access Technology.
Ec/N0 – Carrier Noise Ratio (CNR). This is not a 2G parameter, therefore, NA is displayed.
Press the [space] key to get to the next screen.
Press the [backspace] key to go to the previous field.

```
Cntry   Netw   LAC
xxx      xxx     xxxxx
```

Status Display Screen 3
Cntry – Country Code
Netw – Network Code
LAC – Local area code
Press the [space] key to get to the next screen.
Press the [backspace] key to go to the previous field.

```
Cell    BaseSt   Chan
xxxx     xxxx      xxx
```

Status Display Screen 4
Cell – Base Station ID
BaseSt – Base Station Antenna Sector
Chan – Control Channel in use
Press the [space] key to go to the next screen.
Press the [backspace] key to go to the previous field.

```
Second   Site    RSSI
Available
```

Status Display Screen 5
Secondary Site RSSI availability. Available or Not Available will be displayed.
Press the [space] key to go to Status Display Screen 1.
Press the [backspace] key to go to the previous field.

System Status Displays

[S]	
| ```
ECP  67  TmPB    Flt
     xx  5  ++   OK
``` | **ECP Mode**<br>Displays the zone and system fault status.<br>Press the [Space] key to go to the next field.<br>Press the backspace [BS] key to go to the previous field. |
| ```
1234 67  TmPB Flt
5555 xx  5  ++ OK
``` | **4204 Emulation Mode**<br>Displays the zone and system fault status.<br>Press the [Space] key to go to the next field.<br>Press the backspace [BS] key to go to the previous field. |
| ```
12345678  TmPB Flt
5555555x  5  ++ OK
``` | **Two-4204 Emulation Mode**<br>Displays the zone and system fault status.<br>Press the [Space] key to go to the next field.<br>Press the backspace [BS] key to go to the previous field. |
| ```
1234567  TmPB Flt
5555555  5   ++ OK
``` | **Zone Trigger Mode**<br>The status display includes: |

Zone input status (1234567) – the numbers 1-7 represent the seven mappings of the zone input, and follow ADEMCO high-speed format codes:

> 1 = New Event
> 5 = Normal
> X = Not Enabled

Tm – Tamper status follows high-speed format codes above.

P – Represents line voltage as follows:

> + = Power line voltage OK
> – = Power line voltage bad and reported
> V = Power line voltage bad, not reported
>   (reporting window not expired)
> ^ = Power voltage restored, not yet reported

B – Represents battery condition as follows:
> + = Battery voltage acceptable
> – = Battery voltage below 5.7V ±5%

Flt – Represents radio faults:
> OK = Normal ; No fault
> G = No network connectivity over GSM; fault
>   time expired.
> g = No network connectivity over GSM; fault time
>   NOT yet expired.

| ```
Bat NLd:  x.xxV
Bat Ld:    x.xxV
``` | **Battery Voltage Display**<br>The voltage levels of the battery connected to the communicator can be viewed on the 7720P.  The first line of the display shows the voltage level of the battery with no load.  The second line of the display shows loaded battery voltage.  An asterisk (*) next to the voltage indicates that this is below the accepted level.<br>Press the [Space] key to go to the next field.<br>Press the backspace [BS] key to go to the previous field. |

System Status Displays – continued

	Battery Charger OK	**Battery Charger** Indicates the battery charger circuit status (either OK or NOT OK). Press the [Space] key to go to the next field. Press the backspace [BS] key to go to the previous field.
	Line Voltage xx.xxV	**Line Voltage Display** The line voltage [this value is the peak voltage from the power transformer or RMS x 1.414] of the communicator can be viewed on the 7720P. An asterisk (*) next to the voltage indicates that this is below the accepted level. Press the [Space] key to go back to the System Status Display. Press the backspace [BS] key to go to the previous field.
[T]	Test Msg Sent	**Test Alarm** Sends a Test alarm to AlarmNet. Functional for a *registered* communicator only. If the device is not registered, a message is displayed indicating that the command cannot be executed. **NOTE:** If two CSIP's are used, test alarms are sent to each central station. In addition, if the primary fails to report, a second (backup) message is sent to the secondary station.
[X]	Reset CPU Y/N	**Reset the communicator.** Pressing [N] returns to normal mode. Pressing [Y] resets the device.
[↑] (UP arrow)	Registering …	**Registration** Registers a programmed communicator with AlarmNet.
[↓] (DN arrow)	Enter PIN#	**Registration with PIN for Replacement** Registers a replacement communicator with AlarmNet, once programmed, using the existing PIN #.
[0]	Force Server Update? Y/N	**Force Upload of Configuration File to Server** Pressing [Y] will force the device to upload its entire configuration file to the server. Pressing [N] cancels the operation. **NOTE:** If the GSM communicator is not initialized when you enter this command, the following screen will be displayed: Cannot Upload Try Later! _ Wait for the RSSI LEDs to light, indicating the GSM communicator has completed its initialization, and try again.
[ENTER]	Strt Prog Mode? Y/N_	**Enter Program Mode** Press [Y] to enter program mode; otherwise, press [N].

Appendix A: Summary of LED Operation

GSMV4Gs-010-V0

Note: If all LEDs FAST BLINK in unison with the RSSI LEDs this indicates a Hardware Error.

GRN
ON – NOT registered with AlarmNet.
OFF – Registered with AlarmNet.
FAST BLINK – Download session with Compass in progress.
SLOW BLINK – In unison with yellow LED, registration in progress.

YEL
ON – Message transmission pending.
QUICK PERIODIC BLINK – Normal.
FAST BLINK – Message waiting for network ACK.
SLOW BLINK – Idle power abnormal.
SLOW BLINK – In unison with green LED, registration in progress.

RED
ON – No contact with network.
OFF – Normal.
SLOW BLINK – Loss of communication with the panel (ECP fault).
FAST BLINK – No network contact AND loss of communication with the panel.

MODULE'S RECEIVED SIGNAL STRENGTH (RSSI)

When the **Mode Switch** is NOT depressed, LED 1 will illuminate red.
• The remaining LEDs indicate RSSI (Received Signal Strength).

MODULE'S OPERATION MODE

When the **Mode Switch** IS depressed, LED 1 will be OFF.
• LEDs 2 and 3 indicate the module's communication mode with the control panel.

Mode	LED 2 (yellow)	LED 3 (yellow)
ECP	OFF	OFF
Zone	ON	OFF
4204	OFF	ON
2 - 4204	ON	ON

MODULE'S STATUS

When the **Mode Switch** IS depressed, LED 1 will be OFF.
• LEDs 4, 5, and 6 indicate the module's Status.

LED 4 (green)	LED 5 (green)	LED 6 (green)
NOT USED	ON - GPRS service available.	ON - Module registered, no second site available.
	OFF - No GPRS service available.	OFF - Module not registered with network carrier.
	FAST BLINK - GPRS in use.	SLOW BLINK - Module registered, second site available, and low signal strength.
		NORMAL BLINK - Module registered, second site available, acceptable signal strength.
		FAST BLINK - Module registered, second site available, excellent signal strength.

FACTORY USE ONLY

Cellular Status LED

Voice Session – Short blink every second

Data Session – Short blink every 2 seconds

Connected to Cell network – Short blink every 4 seconds

No or deactivated SIM – Long blink every second

RSSI / MODE AND STATUS LEDs

MODE SWITCH

TAMPER SWITCH

TB 1

1 2 3 4 5 6 7 8 9 10 11

Appendix B: Central Station Messages

Alarm Condition	ECP Mode		Zone and 4204 Modes	
	Alarm Code	Restore Code	Alarm Code	Restore Code
Power On / Reset	E339 C08xx*		5551 5555 6	
Tamper **(Compromise Indication)**	E341 C08xx*	R341 C08xx*	5555 5551 7	5555 5553 7
Power Loss	E337 C08xx*	R337 C08xx*	1555 5555 6	3555 5555 6
Low Battery	E338 C08xx*	R338 C08xx*	5155 5555 6	5355 5555 6
Battery Charger Failure	E314 C08xx*	R314 C08xx*	5155 5555 1	5355 5555 1
ECP Supervision **(Compromise Indication)**	E355 C0000	R355 C0000	5555 5515 5	5555 5535 5
Communication Path Supervision		R350 C0951		5555 5553 5
Telco **(Compromise Indication)**			5555 5155 6	5555 5355 6
Open/Close			2 sent in selected zone	4 sent in selected zone
Test	5555 5555 9		5555 5555 9	
Specific to RESIDENTIAL / COMMERCIAL Control Panels (Such as the VISTA-10P, 15P, and 20P series.)				
UL The information provided in this section for the VISTA-10P, 15P, and 20P series control panels has not been evaluated with this communicator.				
Communicator Trouble (low battery, ECP bus, network) **(Possible Compromise Indication)**	E353 C08xx* ◊	R353 C08xx* ‡		
Radio Fault	E353 0 1xx* ‡	R353 0 1xx* ‡		
Specific to COMMERCIAL Control Panels (Such as the VISTA-128/250 series.)				
Communicator Trouble (low battery, ECP bus, network) **(Possible Compromise Indication)**	E333 C08xx* ‡	R333 C08xx* ‡		
Radio Loss of Signal **(Possible Compromise Indication)**	E357 0 8xx* †	R357 0 8xx* ‡ or R380 0 8xx* ‡		
Radio Fault (low battery, tamper, ECP Bus)	E333 0 8xx* ‡	R333 0 8xx* ‡		
AlarmNet Messages				
Communication failure. **(Possible Compromise Indication)**	5555 1555 6	5555 3555 6		
Authorized Radio Substitution	00D0 010C 0			
Unauthorized Radio Substitution Attempt	00D0 010E 0			
Service Termination	00D0 020E 0			

* xx = Communicator Device Address

† = Message is sent by dialer only.

‡ = Message is sent by dialer and radio.

◊ = Message is sent by dialer only, or dialer and radio, depending on failure.

Appendix C: Glossary

4G	Refers to the fourth generation of cellular wireless standards. It is a successor to 3G and 2G families of standards. 4G provides up to 10 times the data transfer speeds of 3G.
AES	Advanced Encryption Standard
DACT	Digital Automated Communications Terminal
DHCP	Dynamic Host Configuration Protocol, which provides a mechanism for allocating IP addresses dynamically so that addresses can be reused when hosts no longer need them.
DNS	Domain Name System, which is a distributed hierarchical naming system used to resolve domain names (e.g., www.yahoo.com) into numerical IP addresses (e.g., 204.17.25.1.).
DSL	Digital Subscriber Line.
ECP	Enhanced Console Protocol, which is a proprietary bus used in Honeywell control panels to communicate with keypads and peripheral devices. It uses four wires; power, ground, data in, data out.
Gateway IP Address	A gateway (sometimes called a router) is a computer and/or software used to connect two or more networks (including incompatible networks) and translates information from one network to the other. The Gateway IP address is the IP address for the gateway.
GPRS	General Packet Radio Service.
GSM	Global System for Mobile communications, which is an international standard for digital mobile phone systems used for cellular communication.
IMEI	International Mobile Equipment Identity number.
IP	Internet Protocol.
IP Address	A unique number consisting of four parts separated by periods (for example: 204.17.29.11). An IP Address can be fixed or "static", or "dynamic," where the IP Address is assigned via DHCP at every startup.
ISDN	Integrated Services Digital Network.
ISP	Internet Service Provider.
LAN	Local Area Network.
LRR	Long Range Radio, an older term now referred to as communicator. A broader term communications module or communications device may also be used.
MAC ID	Media Access Code, this is a unique address assigned to every network communications device. It is located on box and inside the communicator.
Subnet Mask	A Subnet is a portion of a network that shares a network address with other portions of the network, and is distinguished by a subnet number. The Subnet Mask is a 32-bit address mask used in IP to indicate the bits of an IP address that are being used for the subnet address.
TCP/IP	Transmission Control Protocol / Internet protocol.

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Summary of Connections

NOTE: All circuits are supervised and all circuits are power limited except the battery.

Communicator TB1 Wiring

TB1	ECP Mode	Zone Trigger Mode	4204 Mode	Two – 4204 Mode
1	AC 1	AC 1	AC 1	AC 1
2	AC 2	AC 2	AC 2	AC 2
3	ECP V+ (RED)	NOT USED	ECP V+ (RED)	ECP V (RED)+
4	GND (BLK)	GND (BLK)	GND (BLK)	GND (BLK)
5	ECP IN (YEL)	Z1/Z2	ECP IN (YEL)	ECP IN (YEL)
6	ECP OUT (GRN)	Z3	ECP OUT (GRN)	ECP OUT (GRN)
7	NOT USED	Z4	NOT USED	NOT USED
8	NOT USED	Z5	NOT USED	NOT USED
9	Z6	Z6	Z6	NOT USED
10	Z7	Z7	Z7	NOT USED
11	FLT OUT	FLT OUT	FLT OUT	FLT OUT

IMPORTANT NOTE ABOUT EXTERNAL ANTENNAS
If an external cellular radio antenna is used, the antenna may be installed or replaced ONLY by a professional installer.

TO THE INSTALLER
For the 7847i-E, the external antenna must not exceed a maximum directional gain (including cable loss) of 3.2 dBi at 850 MHz and 2.3 dBi at 1900 MHz.

DOCUMENTATION AND ONLINE SUPPORT
For the latest documentation and online support information, please go to:
http://www.security.honeywell.com/hsc/resources/MyWebTech/

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

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