**Honeywell**

# ADEMCO VISTA-40

## 2-Partitioned Security System

## Installation and Setup Guide

.

# *Table of Contents*

●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●

# List of Figures

# *Conventions Used in This Manual*

● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●

Before you begin using this manual, it is important that you understand the meaning of the following symbols (icons).

**UL** | These notes include specific information that must be followed if you are installing this system for a UL Listed application.

| These notes include information that you should be aware of before continuing with the installation, and that, if not observed, could result in operational difficulties.

| This symbol indicates a critical note that could seriously affect the operation of the system, or could cause damage to the system. Please read each warning carefully. This symbol also denotes warnings about physical harm to the user.

| ZONE PROG? |
|---|
| 1 = YES  0 = NO  0 |

Many system options are programmed in an interactive mode by responding to alpha keypad display prompts. These prompts are shown in a single-line box.

∗**00**    Additional system options are programmed via data fields, which are indicated by a "star" (∗) followed by the data field number.

**PRODUCT MODEL NUMBERS:**

Unless noted otherwise, references to specific model numbers represent ADEMCO products.

# General Description

∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙ ∙

## About the VISTA-40

The VISTA-40 is a 2-partition, UL Listed control panel with the following features:

- Provides 64 zones using hardwired, polling loop and wireless.
- Provides 70 user access codes

## Features

### Hardwire and Optional Expansion Zones

- Provides 9 hardwire zones.
- Supports up to 16 2-wire smoke detectors on zone 1.
- Supports up to 50 2-wire latching glassbreak detectors on zone 8.
- Supports up to 55 additional expansion zones using a built-in polling (multiplex) loop.
- Supports up to 64 wireless zones (fewer if using hardwire and/or polling loop zones).
- Provides three keypad panic keys: 1 + ✳ (A), ✳ + # (B), and 3 + # (C).

### Peripherals Devices

- Supports up to 16 addressable devices, (keypads, RF receivers, relay modules, etc.).
- Provides 8 relays using 4204 and X-10 devices. Can activate relays in response to system events (e.g., alarm, fault, etc.).
- Supports the 4285/4286 VIP Module, which allows access to the system from either a remote location or on the premises

**UL**  The VIP Module is not Listed for use with the VISTA-40 Control Panel in a UL installation.

- Supports the 4146 Keyswitch on any one of the system's 2 partitions.

### Arming/Disarming and Bypassing

- Provides global arming capability (ability to arm both partitions the user code has access to in one command).

### Partitioning

- Can control 2 separate areas independently, each functioning as if it had its own separate control.

### System Communication

- Supports ADEMCO Contact ID; ADEMCO High Speed; ADEMCO Express; and 3+1, 4+1, and 4+2 ADEMCO and Sescoa/Radionics Low-Speed formats.
- Provides an Audio Alarm Verification (AAV) option that permits voice dialog between an operator at the central station and a person at the premises.  An AAV unit, such as ADEMCO UVS, is required.

### Downloading

- Supports upload and download capability.

**Event Log**

- Provides an event log (history log) that can store up to 100 events.

- Can print the event log on a serial printer using a 4100SM.

- Can view the event log on an alpha keypad.

**Additional Features**

- Provides up to 20 installer-defined, custom words that can be used for zone descriptors.

- Contains a built-in User's Manual, which provides the end user with a brief explanation of the function of a key when the user presses any of the function keys on the keypad for 5 seconds.

- Provides trigger outputs, which may interface with Long Range Radio equipment or other devices such as keyswitch LEDs or printer.

At least one 2-line alpha keypad (6139/6160) must be connected to the system for programming (if you are using keypad programming), and must remain connected to the system in order to allow the primary user to program additional user codes into the system at a later time.

# *Partitioning*

● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●

## Theory of Partitioning

This system provides the ability to arm and disarm up to 2 different areas, as if each had its own control.  These areas are called partitions.  A Partitioned system allows the user to disarm certain areas while leaving other areas armed, or to limit access to certain areas to specific individuals.  Each system user can be assigned to operate any or all partitions, and can be given a different authority level in each.

Before anything can be assigned to those partitions, you must first determine how many partitions (1-2) are required. Following are some facts you need to know about partitioning.

### Keypads

Each keypad must be given a unique "address" and be assigned to one partition.

### Zones

Each zone must be assigned to one partition. The zones assigned to a partition will be displayed on that partition's keypad(s).

### Users

Each user may be given access to one or more partitions.  If a user is to operate more than one partition and would like to arm/disarm all or some of those partitions with a single command, the user must be enabled for Global Arming for those partitions (when entering user codes).

A user with access to more than one partition (multiple access) can "log on" to one partition from another partition's keypad, provided that program field 2*18: Enable GOTO is enabled for each partition he/she wants to log on to from another.

## Setting-Up a Partitioned System

The basic steps to setting up a partitioned system are described below.  If you need more information on how to program the options, see *SECTION 4: Programming*.

1. Determine how many partitions the system will consist of (programmed in field 2*00).
2. Assign keypads to partitions (*Device Programming* in the *#93 Menu Mode*).
3. Assign zones to partitions (*Zone Programming* in the *#93 Menu Mode*).
4. Confirm zones are displayed at the keypad(s) assigned to those partitions.
5. Assign users to partitions.
6. Enable the GOTO feature (program field 2*18) for each partition a multiple-access user can log on to (alpha keypad only).
7. Program partition-specific fields (see the *Data Field Descriptions* section).

# *Installing the Control*

• • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • •

This section describes the procedures for mounting and wiring the control panel and all the peripheral devices.

## Mounting the Control Cabinet

To mount the control cabinet, perform the following steps:

| Step | Action |
|------|--------|
| 1 | Before mounting the circuit board, remove the metal knockouts for the wiring entry that you will be using.<br>**DO NOT ATTEMPT TO REMOVE THE KNOCKOUTS AFTER THE CIRCUIT BOARD HAS BEEN INSTALLED.** |
| 2 | Using fasteners or anchors (not supplied), mount the control cabinet to a sturdy wall in a clean, dry area that is not readily accessible to the general public. The back of the cabinet has 4 holes for this purpose. |

**UL** To provide certificated burglary service for UL installations, refer to the special requirements and *Figure 3-2 Cabinet Attack Resistance Considerations* to follow. For UL Commercial Burglary installations that require ATTACK RESISTANCE, use the cabinet included in the VISTA-ULKT kit.

## Installing the Cabinet Lock

1. Remove cabinet door, then remove the lock knockout from the door. Insert the key into the lock.

2. Position the lock in the hole, making certain that the latch will make contact with the latch bracket when the door is closed.

3. When correctly positioned, push the lock until it is held securely by its snap tabs.

Use Part Number K4445 Lock (supplied).
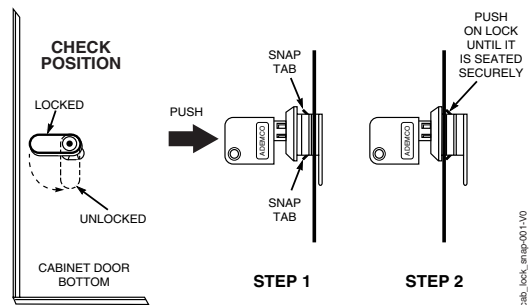


**Figure 3-1:  Installing the Lock**

## Grade A Mercantile Premises Listing Guidelines

• The panel door must be supervised.  Mount the clip-on tamper switch (supplied) to the cabinet's right side wall as shown in the diagram below, and wire it to one of the hardwire zones.

• Use a bell with a tamper-protected housing such as the AB12.  The bell housing's tamper switch and inner tamper linings must also be wired to the hardwire zone.

• Assign the tampers' hardwire zone to a burglary partition.  Program the hardwire zone for day trouble/night alarm (zone type 5) when only one burglary partition is used.  Program it for 24-hr. audible alarm (zone type 7) when more than one burglary partition is used.

• All wiring between the bell and panel must be run in conduit. Remaining wires do not need to be run in conduit.

• All wiring that is not run in conduit must exit from the knockout openings on the bottom or back of the cabinet.

• All unused knockouts must be plugged using the disc plugs and carriage bolts (supplied), as indicated in the diagram below.

• Fasten the cabinet door to the cabinet backbox using the 18 one-inch-long Phillips-head screws (supplied) after all wiring, programming, and checkout procedures have been completed.

(Shows typical local Grade A listing installation)

RUN BELL WIRES
IN CONDUIT

PLUG THIS
KNOCKOUT

CLIP-ON DOOR
TAMPER SWITCH

CABINET
MOUNTING
HOLE
(4 PLACES)

PC
BOARD

PLUG THIS
KNOCKOUT

PLUG THIS
KNOCKOUT

PLUG THIS
KNOCKOUT

RUN ALL REMAINING
WIRE THROUGH HERE

TO PLUG AN UNUSED KNOCKOUT OPENING,
REMOVE KNOCKOUT AND INSTALL A PAIR OF
DISC PLUGS AND A CARRIAGE BOLT AS SHOWN.

DISC PLUGS (DIMPLES IN DISC
PLUG SHOULD REGISTER INSIDE
KNOCKOUT OPENING)

KNOCKOUT
OPENING

CARRIAGE BOLT

HEX NUT AND
WASHER

CABINET SIDE WALL
(OUTSIDE)

cabattack-001-V0

**Figure 3-2: Cabinet Attack Resistance Considerations**

## Grade A Mercantile Safe and Vault Listing Guidelines

- Follow the guidelines given above for Grade A Mercantile Premises listing.

- Mount a shock sensor such as Sentrol No. 5402 to the control's backbox. Follow the manufacturer's instructions for proper sensor mounting. This sensor also must be wired to a hardwire zone.

- For safe and vault applications, a UL Listed contact must be used inside the cabinet through one of the knockouts for pry-off tamper purposes. This sensor also must be wired to a hardwire zone.

## Installing the Control's Circuit Board

To install the circuit board in the cabinet, perform the following steps:

| Step | Action |
|------|--------|
| 1 | Hang the three mounting clips on the raised cabinet tabs. Refer to *Figure 3-3* (Detail B). |
|   | Make sure the clip orientation is exactly as shown in the diagram to avoid damage. This will also avoid problems with insertion and removal of the PC board. |
| 2 | Insert the top of the circuit board into the slots at the top of the cabinet. Make certain that the board rests in the slots as indicated (Detail A). |
| 3 | Swing the base of the board into the mounting clips and secure the board to the cabinet with the accompanying screws. |

**Notes:**

- Make certain that the mounting screws are tight. This ensures that there is a good ground connection between the PC board and the cabinet.

- Dress field wiring away from the microprocessor (center) section of the PC board. Use the loops on the left and right sidewalls of the cabinet for anchoring field wiring using tie wraps (Detail C). These steps are important to minimize the risk of panel RF interference with television reception.

DETAIL A
SIDE VIEW OF
BOARD INSERTED
INTO SLOTS

DETAIL C
SIDE VIEW
OF SLOTS

DETAIL B
SIDE VIEW OF SHORT
MOUNTING CLIPS
(TYP.)

hi_end_mnt-PCB

**Figure 3-3: Mounting the PC Board**

# Installing the Keypads

- Up to 31 addressable keypads (addresses 00-30) may be used (you may need to use an auxiliary power supply if the 750mA aux. output is exceeded). The following keypads may be used:

- 2-line alpha display, 6139/6160

> ✓
> - The length of all wire runs combined, regardless of the wire gauge, must not exceed 2000 feet when unshielded quad conductor cable is used (1000 feet if unshielded cable is run in conduit, which acts a shield, or if shielded cable is used).
> - If more than one keypad is wired to one run, then the above maximum lengths must be divided by the number of keypads on the run (e.g., the maximum length is 225 feet if two keypads are wired on a #22 gauge run).
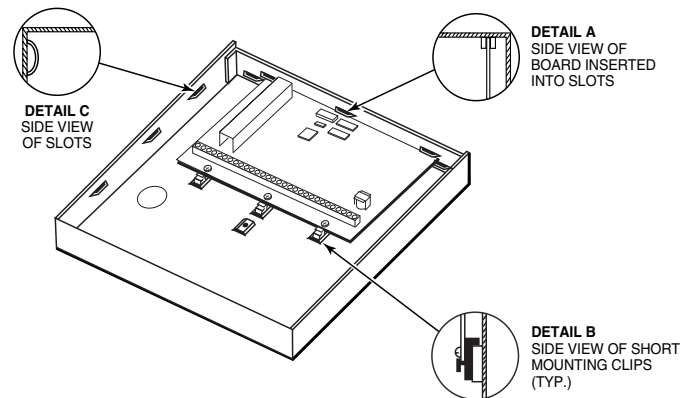
To wire the keypads, perform the following steps:

| Step | Action |
|------|--------|
| 1 | Determine wire gauge by referring to the Wire Run Length/Gauge table below. |

| Wire Run Length/Gauge Table | |
|------|------|
| **Wire Gauge** | **Length** |
| #22 gauge | 450 feet |
| #20 gauge | 700 feet |
| #18 gauge | 1100 feet |
| #16 gauge | 1750 feet |

| Step | Action |
|------|--------|
| 2 | Wire keypads to a single wire run or connect individual keypads to separate wire runs. The maximum wire run length from the control to a keypad, which is homerun back to the control must not exceed the lengths listed in the table. |
| 3 | Run field wiring from the control to the keypads (using standard 4-conductor cable of the wire gauge determined in step 1). |
| 4 | Connect the keypad(s) to terminals 6, 7, 8, and 9 on the control board, as shown in *Figure 3-4*. |
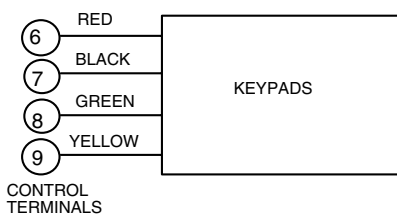


**Figure 3-4: Keypad Connections to Control Panel**

## Addressing the Keypads

> ✓
> The keypads will not operate until they are physically addressed and enabled in the system's *Device Programming* in the *#93 Menu Mode*.

Set each keypad for an individual address (00-15) according to the keypad's instructions. Set an alpha keypad for address 00 and other keypads for higher addresses. Any keypads set for address 02 and above will appear blank until they are enabled in the system's program. Each keypad must be set for a different address.

> ✓
> - Do not set any keypads to address 31 (nonaddressable mode). They will interfere with other keypads (as well as other devices) connected to the keypad terminals.
> - If an "OC" or "OPEN CIRCUIT" message is present on a keypad, data from the control is not reaching the keypad. Please check your wiring.

## Supplementary Power Supply for Additional Keypads

When the control's auxiliary power load for all devices exceeds 750mA, you can power additional keypads from a regulated 12VDC power supply (e.g., AD12612 (1.2A)). Use a UL Listed, battery-backed supply for UL installations.

Connect the additional keypads as shown in *Figure 3-5*, using the keypad wire colors shown. Be sure to observe the current ratings for the power supply used.

> ✓
> - Make connections directly to the screw terminals as shown in *Figure 3-5*. Make no connection to the keypad blue wire (if present).
> - Be sure to connect the negative (–) terminal on the power supply unit to terminal 7 (–) on the control.
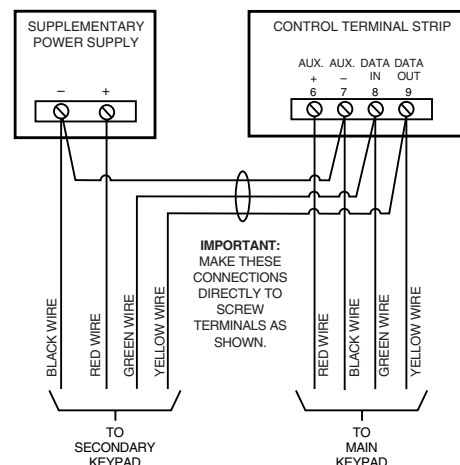


**Figure 3-5: Using A Supplementary Power Supply**

## Installing External Sounders

The VISTA-40 provides a bell circuit output for operating fire and burglary alarm notification appliances. The alarm output is rated as follows: 10VDC – 14VDC, 1.7A max., power-limited.

The output has the following options:

- Selectable for supervision.
- Selectable for confirmation of arming ding.
- Selectable to chime when entry/exit or perimeter zones are faulted.
- Selectable for no timeout or timeout of 2-30 minutes.

**UL**
- Burglary bell circuits must be programmed for a timeout of 16 minutes or longer.
- For Household Fire and combination Household Fire/Burglary installations, the total current drawn from the auxiliary power, polling loop, and alarm output combined must not exceed 750mA.
- For Household Burglary installations, the total current drawn from the alarm output must not exceed 1.7A. A battery must be installed, as it supplies the current for the combined auxiliary power, polling loop, and alarm output in excess of 750mA.

### UL1023 Household Burglary Installations

For Household Burglary installations, the total current drawn from the alarm output must not exceed 1.7A. A battery must be installed, as the battery supplies current from the combined auxiliary power, polling loop, and alarm output in excess of 750mA.

### UL985 Household Fire or Combination Household Fire/Burglary Installations

For installations that must provide UL Listed protection, the total combined current drawn from the alarm output, auxiliary power output, and polling loop must not exceed 750mA in order to comply with the battery independence requirements. If, for example, two System Sensor PA400 piezo alarm sounders, wired in parallel, are used (24mA total), then 726mA (750mA – 24mA) is available for auxiliary output and polling loop use.

### Non-UL Installations

For non-UL installations, the total current drawn from this output can be up to 1.7 amps. A battery must be installed, as the battery supplies current in excess of 750mA. Up to two 719 sirens can be used wired in parallel.

**UL**
This control complies with National Fire Protection Association (NFPA) requirements for temporal pulse sounding of fire notification appliances.

### Alarm Output Supervision

When supervision is enabled, the VISTA-40 monitors the alarm output wiring for open and short circuit faults while the output is inactive. The system provides a trouble indication (Zone 70) when an open occurs; or when a short occurs between the Bell (+) and Bell (-) terminal wiring, or between the Bell (+) terminal wiring and earth ground.

The VISTA-40 indicates the trouble condition regardless of whether the system is armed or disarmed. The zone displays on the keypads, reports to the event log, and transmits to the central station (if programmed) on Partition 1. The Contact ID event code is 321, Bell Trouble. The trouble is cleared from the display by entering the user code + OFF.

### Wiring the Alarm Output

The wiring of the alarm output depends upon whether you are going to supervise the output or not. Use the appropriate procedure below for your application.

**UL**
Use only UL Listed sounding devices for UL installations.

### Compatible Alarm Indicating Devices

| Model Number | Device Type | Polarizing Diode |
|---|---|---|
| 719 | Compact Outdoor Siren (not UL Listed) | Yes |
| 747 | Indoor Siren | Yes |
| AB12 | Grade A Bell | Yes |
| System Sensor MA 12/24D | Fire Piezo Horn | No |
| System Sensor P12575 | Fire Horn/Strobe | No |
| Wheelock AS-121575W | Fire Horn/Strobe | No |



ALARM SOUNDER OUTPUT:
1-VDC - 13.8VDC
1.7A MAXIMUM
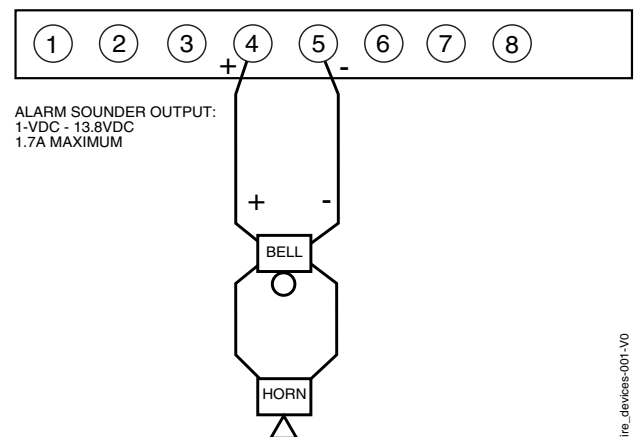
***Figure 3-6: Wiring Polarized Fire Devices***
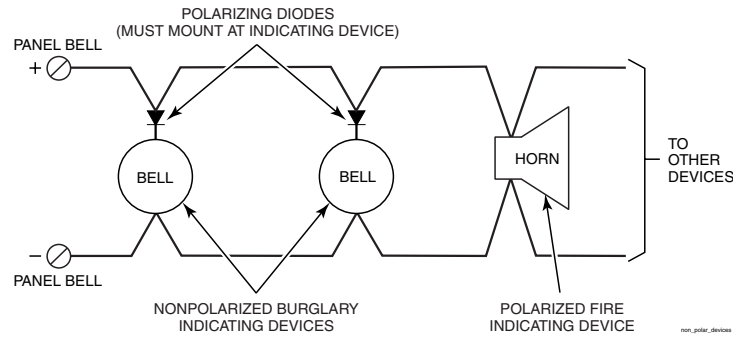
*Figure 3-7: Wiring Nonpolarized Burglary Devices*

### Supervising the Alarm Output

To wire the alarm output using the supervision feature, perform the following steps:

| Step | Action |
|------|--------|
| 1 | Wire polarized fire-indicating devices to the alarm output as shown in *Figure 3-6*. |
| 2 | Wire nonpolarized burglary indicating devices to the alarm output using a polarizing diode (two 2A diodes supplied), as shown in *Figure 3-7*. |
| 3 | Program Zone 70 with a response type of 05 (trouble by day/alarm by night). |

The minimum load on the alarm output must exceed 5mA at 12V for proper supervision operation.

### Disabling the Supervision of the Alarm Output

To install the alarm output and disable the supervision feature, perform the following steps:

| Step | Action |
|------|--------|
| 1 | Wire the devices to terminals 4 and 5, observing polarity if necessary. |
| 2 | Cut the blue jumper on the upper left-hand corner of the panel's PC board. |
| 3 | Program Zone 70 with no response type (00). |

### Using a Siren Driver

To install a siren driver, perform the following steps:

| Step | Action |
|------|--------|
| 1 | Mount the siren driver in the panel's cabinet. |
| 2 | Wire the siren driver to the control and to the speaker(s). (See the driver's instructions.) |
| 3 | Cut the blue jumper on the upper left-hand corner of the panel's PC board. |
| 4 | Program Zone 70 with no response type (00). |

**UL** If a device such as a siren driver with a high-resistance trigger input (drawing less than 5mA) is used in a UL Household Fire installation, the siren driver must independently supervise siren speaker wiring.

## Telephone Line Connections

Connect the main dialer output to telephone company lines using the RJ31X cables supplied.

**UL** The telephone line inputs have overvoltage protection in accordance with UL1459, as specified in UL985/UL1023.

To prevent the risk of shock, disconnect phone lines at the telco jack before servicing.

If the communicator is connected to a PABX, be sure it has a backup power supply that can support the PABX for 24 hours (central station) or 60 hours (remote station). Many PABXs are *not* power-backed up, and this can result in a communication failure if power is lost.

### Reporting Formats

The system supports the following formats:

ADEMCO Low Speed 3+1; 4+1; 4+2; Sescoa/Radionics 3+1; 4+1; 4+2; ADEMCO 4+2 Express; ADEMCO High Speed; ADEMCO Contact ID
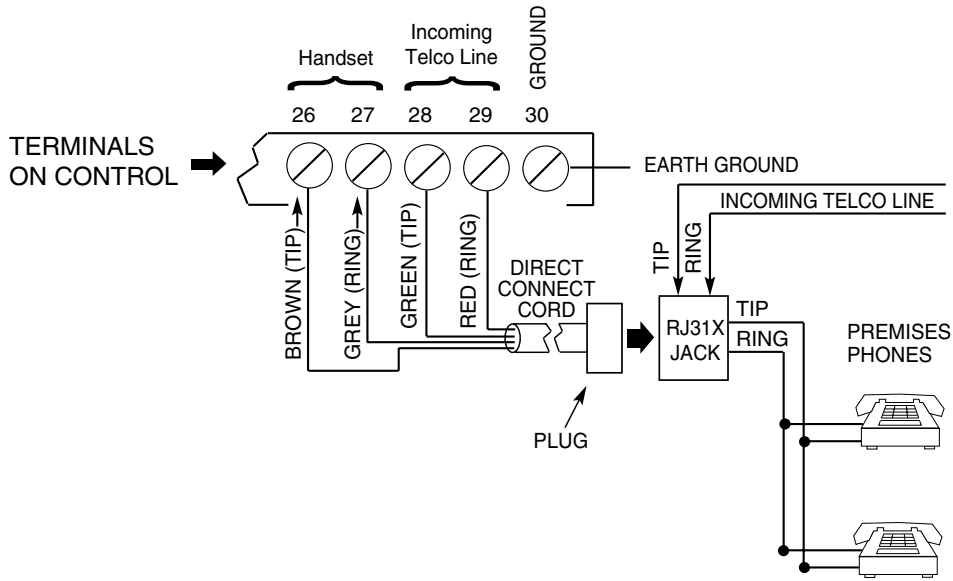
**Figure 3-8: Telephone Line Connections**

## Wiring Burglary, Panic and Smoke Detector Devices to Zones 1-9

The maximum zone resistance is 100 ohms for zones 1 and 8, and 300 ohms for all other zones (excluding the 2K EOL resistor).

To wire burglary and panic devices to zones 1-9, connect sensors/contacts to the hardwire zone terminals (10 through 23). See *Figure 3-9*. Connect N.C. and N.O. devices as follows:

- Connect N.C. devices **in series** with the high (+) side of the loop. The 2K EOL resistor must be connected in series with the devices, following the last device.

- Connect N.O. devices **in parallel (across)** the loop. The 2K EOL resistor must be connected across the loop wires at the last device.
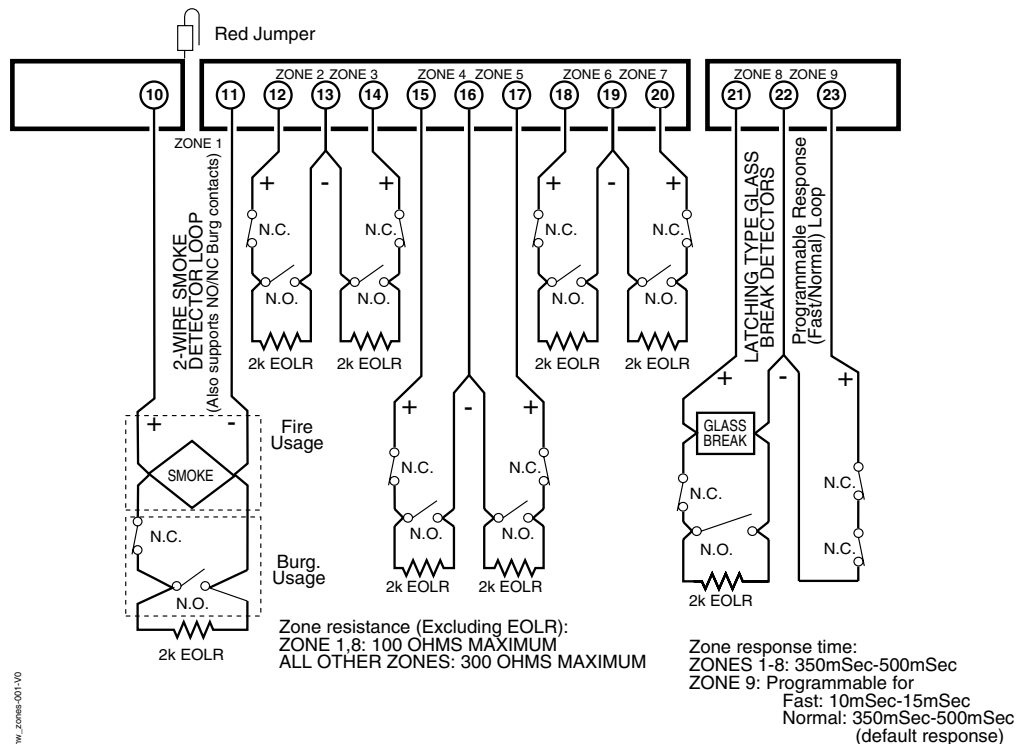


**Figure 3-9: Wiring Connections for Zones 1-9**

**Using 2-Wire Smoke Detectors on Zone 1**

Zone 1 can support up to 16 2-wire smoke detectors.

The alarm current on zone 1 supports only one smoke detector in the alarmed state.

**Compatible 2-Wire Smoke Detectors**

| DETECTOR TYPE | DEVICE MODEL # |
|---|---|
| Photoelectric, direct-wire | System Sensor 2400 |
| Photoelectric w/heat sensor, direct-wire | System Sensor 2400TH |
| Photoelectric w/B401B base | System Sensor 2451 |
| Photoelectric w/heat sensor & B401B | System Sensor 2451TH |
| Ionization, direct-wire | System Sensor 1400 |
| Ionization w/B401B base | System Sensor 1451 |
| Photoelectric duct detect (DH400 base) | System Sensor 2451 |
| Photoelectric duct detect (DH400 base) | System Sensor 2451 |
| Ionization duct detector (DH400 base) | System Sensor 1451DH |
| Ionization, direct-wire | System Sensor 1100 |
| Ionization w/B110LP base | System Sensor 1151 |
| Photoelectric, direct-wire | System Sensor 2100 |
| Photoelectric w/heat sensor, direct-wire | System Sensor 2100T |
| Photoelectric w/B110LP base | System Sensor 2151 |

**UL** These smoke detectors are UL Listed for use with the VISTA-40 and are the **only** 2-wire smoke detectors that may be used.

**Wiring 2-Wire Smoke Detectors to Zone 1**

2K EOL resistors must be used on fire zones and must be connected across the loop wires of each zone at the last detector.

To wire 2-wire smoke detectors to zone 1, perform the following steps:

| Step | Action |
|---|---|
| 1 | Select up to 16 2-wire smoke detectors from the list of compatible detectors. |
| 2 | Connect 2-wire smoke detectors across zone 1 terminals (10 and 11) as shown in *Figure 3-10*. Observe proper polarity when connecting the detectors. |
| 3 | Connect the EOL resistor at the last detector in the loop across the zone 1 terminals. **The EOL resistor must be connected across the loop wires at the last detector.** |
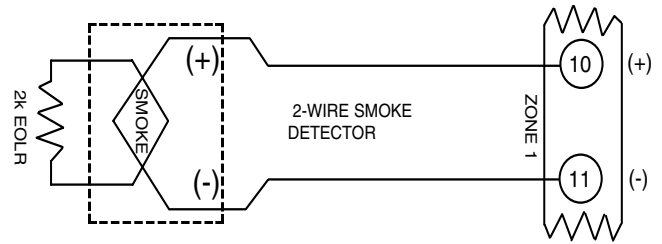


**Figure 3-10: 2-Wire Smoke Detector on Zone 1**

**Using 4-Wire Smoke Detectors on Zones 1-8**

You may use as many 4-wire smoke detectors as can be powered from the panel's Auxiliary Power output without exceeding the output's rating (750mA).

Auxiliary power to 4-wire smoke detectors is not automatically reset after an alarm, and therefore must be momentarily interrupted using a 4204 Relay Module.

**Compatible 4-Wire Smoke Detectors**

Use any UL Listed 4-wire smoke detector that is rated for 10-14VDC operation and that has alarm reset time not exceeding 6 seconds. Some compatible 4-wire smoke detectors are listed below.

| Detector Type | Detector Model # |
|---|---|
| Photoelectric, direct wire | System Sensor 2412 |
| Photoelectric w/heat sensor, direct wire | System Sensor 2412TH |
| Ionization, direct wire | System Sensor 1412 |

**Wiring 4-Wire Smoke Detectors**

**UL** Power to 4-wire smoke detectors must be supervised with an EOL device (use a System Sensor A77-716B EOL relay module connected as shown in *Figure 3-11*).

To wire 4-wire smoke detectors to zones 1-8, perform the following steps:

| Step | Action |
|---|---|
| 1 | Select 4-wire smoke detectors (see list of compatible detectors shown previously in this section). |
| 2 | Connect detectors (including heat detectors, if used) across terminals of the zone selected. All detectors must be wired in parallel. See *Figure 3-11*. |
| 3 | Connect the EOLR at the last detector in the loop across the zone's terminals. **You must connect the EOLR across the loop wires at the last detector.** |
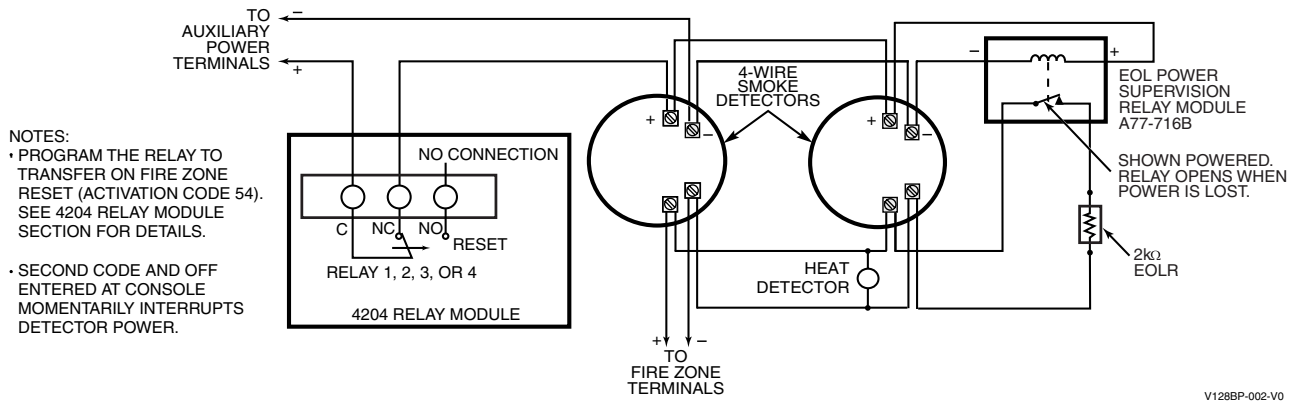
*Figure 3-11:  4-Wire Smoke Detectors*

## Using Smoke Power Reversal Module

The 333PRM Polarity Reversing Module is used to reverse the polarity of the positive and negative voltages powering smoke detectors.  The module is for use with 4-wire smoke detectors that employ a sounder and voltage-reversing feature. The module is triggered by a pulsing bell output.

## Smoke Detectors Compatible with the 333PRM

The 333PRM may be used with the System Sensor 2112/24AT and similar models with the required operating features previously stated.

The 333PRM reverses polarity to smoke detectors with Integral Temp-3 Sounders.  Typically, in alarm, each draws 49-60mA of current. The control panel supplies only enough current for one smoke detector.  In order to attach more than one, an external power supply and an external relay may be required.

## Installing the 333PRM

Mount the 333PRM inside the control panel's cabinet or in a separate cabinet using the double-sided tape provided. Wire the 333PRM as shown in *Figures 3-12, 3-13 or 3-14.*  Refer to the *333PRM Installation Instructions* for detailed information on the installation of the module.
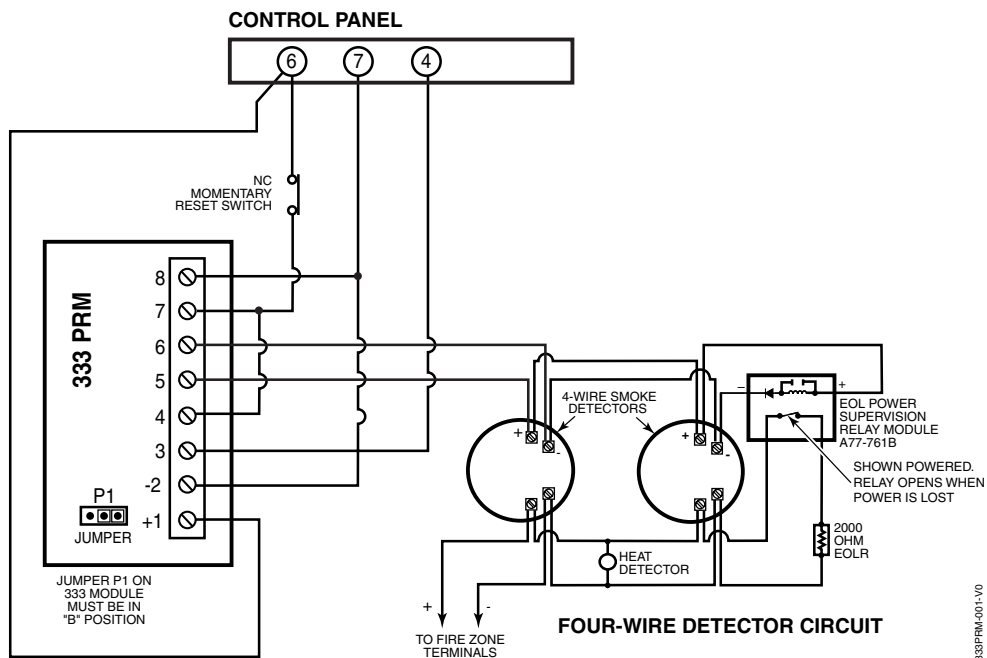


*Figure 3-12:  Wiring a 333PRM to the Control*
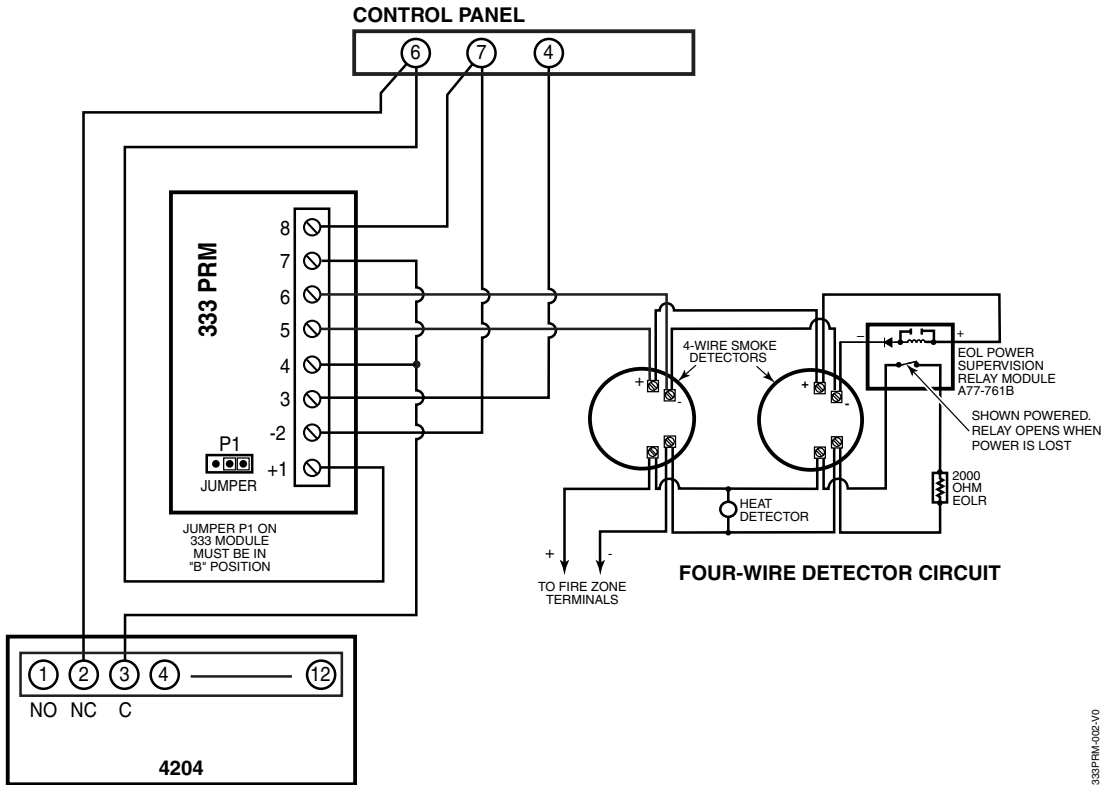
**Figure 3-13:  Wiring a 333PRM using a 4204**
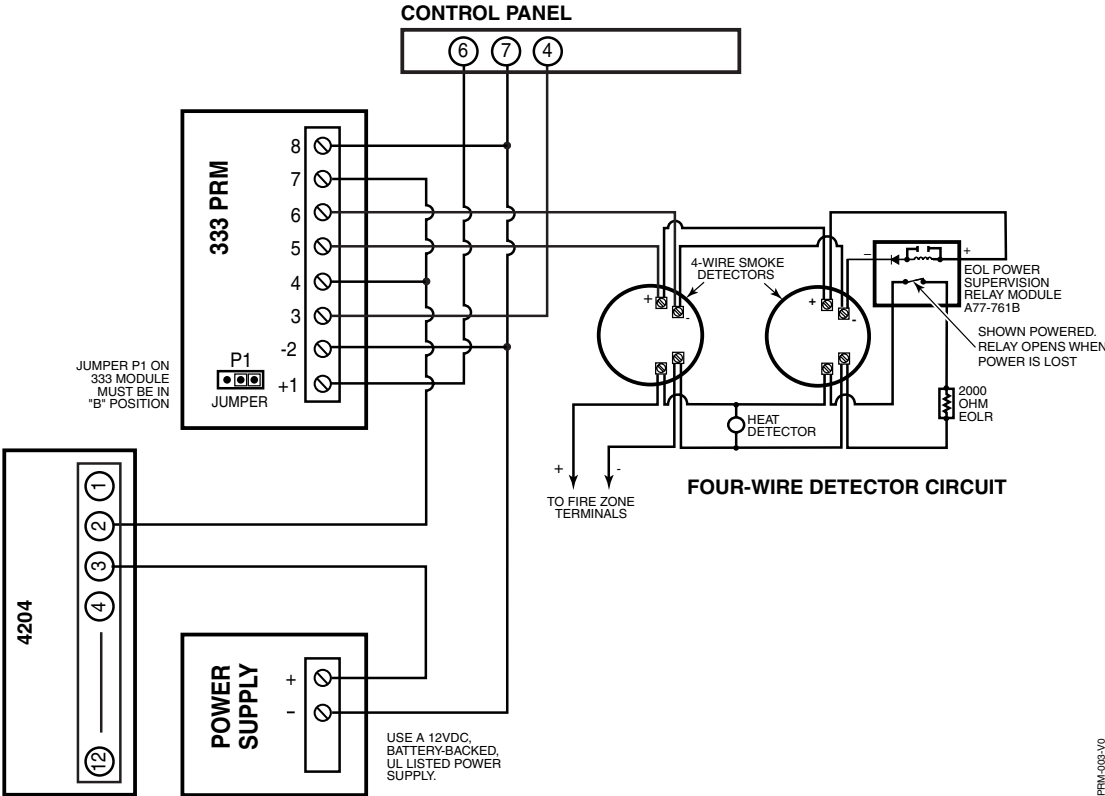


**Figure 3-14:  Wiring a 333PRM using a 4204 and a Power Supply**

**Using 2-Wire Latching Glassbreaks on Zone 8**

Zone 8 can support 2-wire glassbreak detectors. The zone provides enough standby current to power up to 50 2-wire glassbreak detectors meeting the requirements listed below.

**Compatible Glassbreak Detectors**

Use detectors that meet the following ratings:

| | |
|---|---|
| **Standby Voltage:** | 5VDC–13.8VDC |
| **Standby Resistance:** | Greater than 20k ohms (equivalent resistance of all detectors in parallel) |
| **Alarm Resistance:** | Less than 1.1k ohms (see note below) |
| **Alarm Current:** | 2mA–10mA |
| **Reset Time:** | Less than 6 seconds |

**NOTES:**

- You can use detectors that exceed 1.1k ohms in alarm, provided they maintain a voltage drop of less than 3.8 volts in alarm.
- The ASC-SS1 detector has been tested and found to be compatible with these ratings.
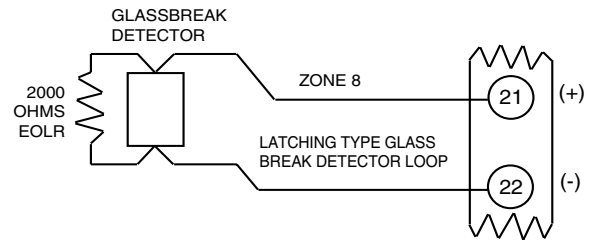


*Figure 3-15: Wiring Latching Glassbreaks to Zone 8*

- The alarm current provided by zone 8 supports only one glassbreak detector in the alarmed state.
- Do not use other N.O. or N.C. contacts when using glassbreak detectors on zone 8. Other contacts may prevent proper glassbreak detector operation.

To wire 2-wire latching glassbreak detectors to zone 8, perform the following steps:

| Step | Action |
|---|---|
| 1 | Select compatible 2-wire glassbreak detectors that meet the requirements stated previously. |
| 2 | Connect detectors across zone 8 (terminals 21 and 22). See *Figure 3-15*. |
| 3 | Connect the EOL resistor at the last detector in the loop across the zone's terminals. **You must connect the EOL resistor across the loop wires at the last detector**. |

# Installing RPM Devices

The polling loop provides both power and data to the RPM devices, and is constantly monitoring the status of all zones enabled on the loop. The maximum current draw of all devices on the polling loop cannot total more than 64mA (unless the system uses a 4297 Polling Loop Extender Module).

Devices that can be programmed via either DIP switches or the built-in unique serial number **must** be set for the serial number mode operation.

All devices on the polling loop must be wired in parallel to the [+] and [-] polling loop terminals of the control panel (24 and 25). You can wire from device to device, or have multiple branches connected directly to the control panel in a star configuration.

**Compatible Polling Loop Devices**

| Model Number | Type |
|---|---|
| 4208 | 8-Zone Expander |
| 4190WH | 2-Zone Expander |
| 4278 | Quad PIR |
| 4275 | Dual PIR |
| 4194 | Surface-Mount Reed Contact (Wide Gap) |
| 4297 | Extender Module |
| 4192SD | Photoelectric Smoke Detector Devices |
| 4192SDT | Photoelectric Smoke Detector w/Heat Detector |
| 4192CP | Ionization Smoke Detector |
| 4101SN | Serial Number Single-Output Relay Module |
| 4208U | Universal 8-Zone Expander |
| 4939SN-BR 4939SN-GY | Serial Number Surface-Mount Reed Contacts |
| 4191SN-WH | Serial Number Recessed Reed Contact |
| 4959SN | Aluminum Overhead Door Contact |

| Model Number | Type |
|---|---|
| 7500 | Single Technology Glassbreak Detector |
| 9500 | Dual Technology Glassbreak Detector |
| 4209U | Universal Group Zoning Module |
| 4193SN | Serialized 2-Zone Expander |
| 4293SN | Serialized 1-Zone Expander |
| 4190SN | Serialized 2-Zone Expander |
| 998MX | Serialized PIR |

**UL**
- The 4208 must be mounted either inside the control panel's cabinet or in a separate enclosure that has a tamper-supervised cover.
- The 4190WH right loop must not be used, and the left loop must be EOLR-supervised.
- The 4278 right loop cannot be used.
- The 4194 is not UL Listed.
- The 4297 must be powered from the control panel's Auxiliary Power Output or from a UL Listed supplementary power supply.
- The 7500 and 9500 detectors are not UL Listed.

- For new polling loop installations, always use twisted pair wiring.  In many cases, existing non-twisted pair wiring may be used, but it is more susceptible to interference from other sources, and may be problematic in installations with long wire runs or in high noise environments.
- Always locate polling loop wiring at least six inches (15cm) of AC power, telephone, or intercom wiring. The polling loop carries data between the control panel and the devices; interference on this loop can cause an interruption of communication.  The polling loop can also cause outgoing interference on the intercom or phone lines. If this spacing cannot be achieved, shielded wire must be used. (Note that the maximum total wire length supported is cut in half when shielded wire is used.)

- No more than 64mA may be drawn on any individual wire run.
- When a star configuration is used, the total length of all wire runs combined cannot exceed 4000 ft (2000 ft. if you are using unshielded wire in conduit or shielded wire).

IMPORTANT NOTE: If the installation exceeds or deviates from these parameters, refer to the application note on the Honeywell website for additional information. To access the application note:

1. Go to the honeywell.com/security website
2. Click the Honeywell Security & Custom Electronics link.
3. Click the Commercial link.
4. Click the Documentation link.
5. Click the V-Plex Application Note.

To install polling loop devices, perform the following steps:

| Step | Action |
|---|---|
| 1 | Select devices from the list of compatible devices shown previously. |
| 2 | Set the DIP switches in the device (if required). Refer to the device's instructions for the DIP Switch Tables. |
| 3 | Mount each device in the desired location. Refer to the device's instructions. |
| 4 | Run wires from the control panel to each device on the polling loop (see *Figure 3-16*). No individual wire run may exceed the lengths shown in the following table. <br><br> **Maximum Polling Loop Wire Runs** <br><br> Wire Gauge / Max. Length <br> #22 gauge / 650 feet <br> #20 gauge / 950 feet <br> #18 gauge / 1500 feet <br> #16 gauge / 2400 feet |
| 5 | Wire each device to the polling loop, making sure of the correct polarity (refer to the device's instructions). <br><br> **NOTE:** If you are using serial number devices, and intend to enroll each device through the keypad automatically, **wire no more than 25 of these devices to the control at a time.**  Then power up and program them before connecting the next 25. Leave previously enrolled devices connected. <br><br> If you intend to **manually enter the serial numbers** through the keypad or through Compass downloading software, all the devices may be connected before powering up to program. |
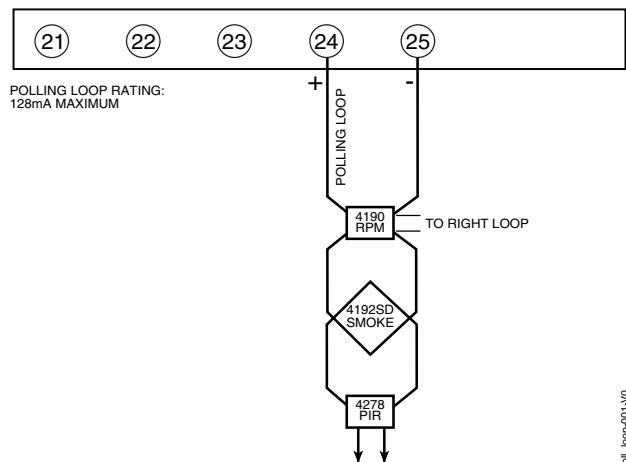


*Figure 3-16:  Polling Loop Connections to the VISTA-40*

## Polling Loop Supervision

A short on the polling loop is indicated by a trouble on zone 997 and reports as a trouble condition only. If annunciation is desired, program the zone as type 05.

If a device on the polling loop fails (the panel cannot "see" that device), the system displays a trouble condition for all zones on that device. If the panel is armed when a device fails, and the zone is a burglary zone, the will go into alarm

A trouble on zone 97 prevents a partition from being armed, unless all polling loop zones on that partition are bypassed.

## Using the 4297 Polling Loop Extender

The 4297 Polling Loop Extender may be used to provide additional polling loop current, to extend the polling loop wire run length, and/or to provide individual electrically isolated polling loops. Refer to *Figures 3-17 and 3-18*, to follow.

Be sure to include the total current drawn on the polling loop when figuring the total auxiliary load on the panel's power supply.
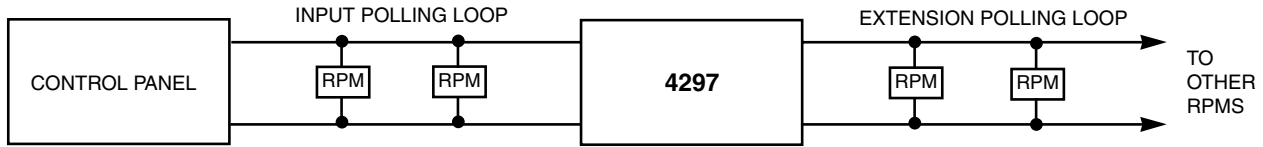


**INPUT LOOP LIMITS:**
- 64 mA MAX. LIMIT CURRENT TO 64mA ON ANY INDIVIDUAL WIRE RUN.
- NO MORE THAN 55 DEVICES MAY BE USED.
- NO INDIVIDUAL WIRE RUN CAN EXCEED:

*COMBINED INPUT AND EXTENSION LOOP LIMITS:*
- NO MORE THAN 55 DEVICES COMBINED.
- TOTAL LENGTH OF ALL WIRE RUNS ON BOTH LOOPS COMBINED CANNOT EXCEED 5200 FT. (2600 FT. IF USING UNSHIELDED WIRE IN CONDUIT, OR IF USING SHIELDED WIRE).

**EXTENSION POLLING LOOP LIMITS = SAME AS INPUT LOOP**

| GAUGE | LENGTH |
|-------|--------|
| #22 | 650 FT |
| #20 | 950 FT |
| #18 | 1500 FT |
| #16 | 2400 FT |

- TOTAL LENGTH OF ALL WIRE RUNS COMBINED CANNOT EXCEED 5200FT. (2600FT. IF USING UNSHIELDED WIRE).

*polling_loop_011-V/0*

*Figure 3-17: Polling Loop Connections Using One 4297 Extender Module*



- DO NOT CONNECT 4297 MODULES IN SERIES (i.e., DO NOT CONNECT ONE MODULE'S EXTENSION LOOP TO ANOTHER MODULE'S INPUT LOOP.)
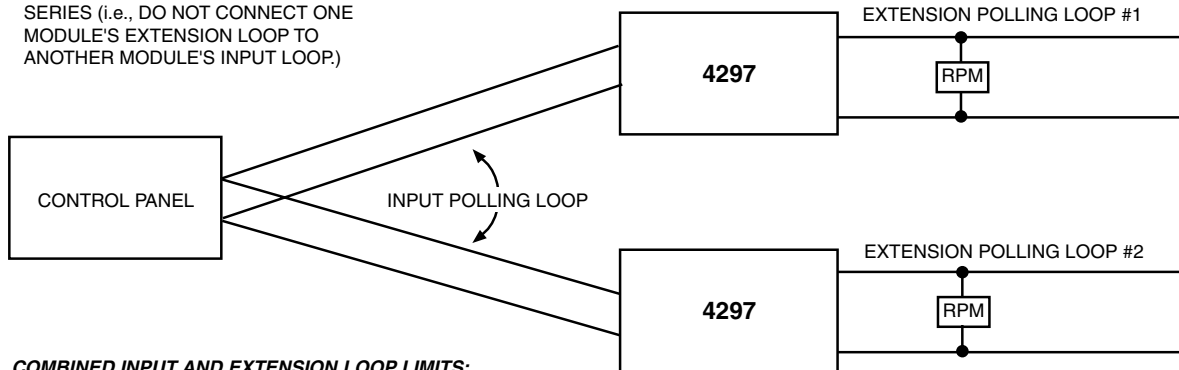
*COMBINED INPUT AND EXTENSION LOOP LIMITS:*
- NO MORE THAN 55 DEVICES COMBINED ON THE INPUT LOOP AND EXTENSION LOOP #1. NO MORE THAN 55 DEVICES COMBINED ON THE INPUT LOOP AND EXTENSION LOOP #2.
- TOTAL LENGTH OF ALL WIRE RUNS ON THE INPUT LOOP AND EXTENSION LOOP #1 COMBINED CANNOT EXCEED 5200 FT. (2600 FT. IF USING UNSHIELDED WIRE IN CONDUIT, OR SHIELDED WIRE). TOTAL LENGTH OF ALL WIRE RUNS ON THE INPUT LOOP AND EXTENSION LOOP #2 COMBINED CANNOT EXCEED 5200 FT. (2600 FT. IF USING UNSHIELDED WIRE IN CONDUIT, OR SHIELDED WIRE).

*polling_loop-010-V/0*

*Figure 3-18: Polling Loop Connections Using Multiple Extender Modules*

**NOTE:** The input loop limits stated in *Figure 3-17* apply to *Figure 3-18* as well.

## Wireless Zone Expansion

The following table lists the receivers that may be used and the number of zones they support.

**5800 Series Receivers**

| Receiver | Zones |
|----------|----------|
| 5881L | up to 8 |
| 5881M | up to 16 |
| 5881H | up to 64 |

In Canada, 5800 systems must use 5882 Series receivers: 5882L/5882H.  Information to the 5881 Receivers applies as well to the 5882 Receivers. Both receivers use the same transmitters.

### RF System Operation and Supervision

The 5800 RF system operation has the following characteristics:

- The receiver responds to a frequency of 345MHz.

- The receiver has a nominal range of 200 feet.

- Supervised transmitters send a supervisory signal every 70-90 minutes.

- Zones 88 and 90 are used to supervise the RF reception of receivers 2 and 1, respectively.  The reception is supervised for two conditions:

  1. The receiver goes "deaf" (doesn't hear from *any* transmitter) within a programmed interval of time (defined by program field 1*30).

  2. Proper RF reception is impeded (i.e., jamming or other RF interference).  The control checks for this condition every 45 seconds.

- The 5881ENHC receiver contains front and back tampers that permit its use in commercial burglary installations.

- You may only mount the 5881ENHC its own plastic housing. Otherwise, the receiver constantly reports a tamper condition.

- The control checks the receiver connections about every 45 seconds. The receiver supervisory zone is 89 and 91 for receivers 2 and 1, respectively.
  **NOTE:** These zones must be programmed with a response type (e.g., type 05 Day/Night Trouble) before they supervise the connection to the receiver.

- Use two identical receivers to provide either a greater area of coverage or redundant protection. They must be set for different addresses.

- Any zone from 1 to 64 can be used as a 5800 Series wireless zone, with the exception of zone 64 (reserved for a wireless keypad).

### RF System Installation Advisories

- Place the receiver in a high, centrally located area. Do not place it on or near metal objects.  This will decrease the range and/or block transmissions.

- Install the RF receiver at least 10 feet from the control panel or any keypads, to avoid interference from the microprocessors in these units.

- If dual receivers are used:

  a. They must be at least 10 feet from each other, as well as from the control panel and remote keypads.

  b. Each receiver must be set to a different device address.  The receiver set to the lower address is considered the 1st RF receiver for supervisory purposes.

  c. The House IDs must be the same.

  d. Using two receivers *does not* increase the number of transmitters the system can support (63 zones using the 5881H, plus a wireless keypad).

### Installation and Setup of the 5881 RF Receivers

Take note of the address you select for the RF receiver, as this address must be enabled in the system's *Device Programming* in the *#93 Menu Mode*.
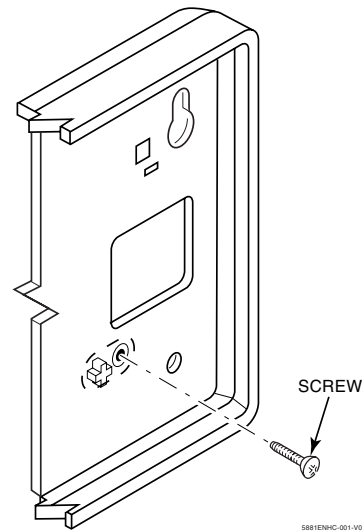


***Figure 3-19: Installing the 5881ENHC with Tamper Protection***

To install the 5881 RF receiver, perform the following steps:

| Step | Action |
|------|--------|
| 1 | Mount the receiver, following the advisories stated previously. |
| 2 | Set the DIP switches in the receiver for the address **(01-07)**. See *Figure 3-20*.<br><br>**Make sure the address setting is not being used by another device (keypad, relay module, etc.).** |
| 3 | If installing a 5881ENHC, install a flat-head screw (supplied) in the case tamper tab as shown in *Figure 3-19*. When the receiver is pried from the wall, the tamper tab will break off and remain on the wall. This will activate a tamper switch in the receiver and cause generation of a tamper signal. Note that this signal will also be generated when the receiver's front cover is removed. |

| Step | Action |
|------|--------|
| 4 | Connect the receiver's wire harness to the keypad terminals (6, 7, 8, and 9).  Plug the connector at the other end of the harness into the receiver. |
| 5 | Refer to the Installation Instructions provided with the receiver for installations regarding antenna mounting, etc. |
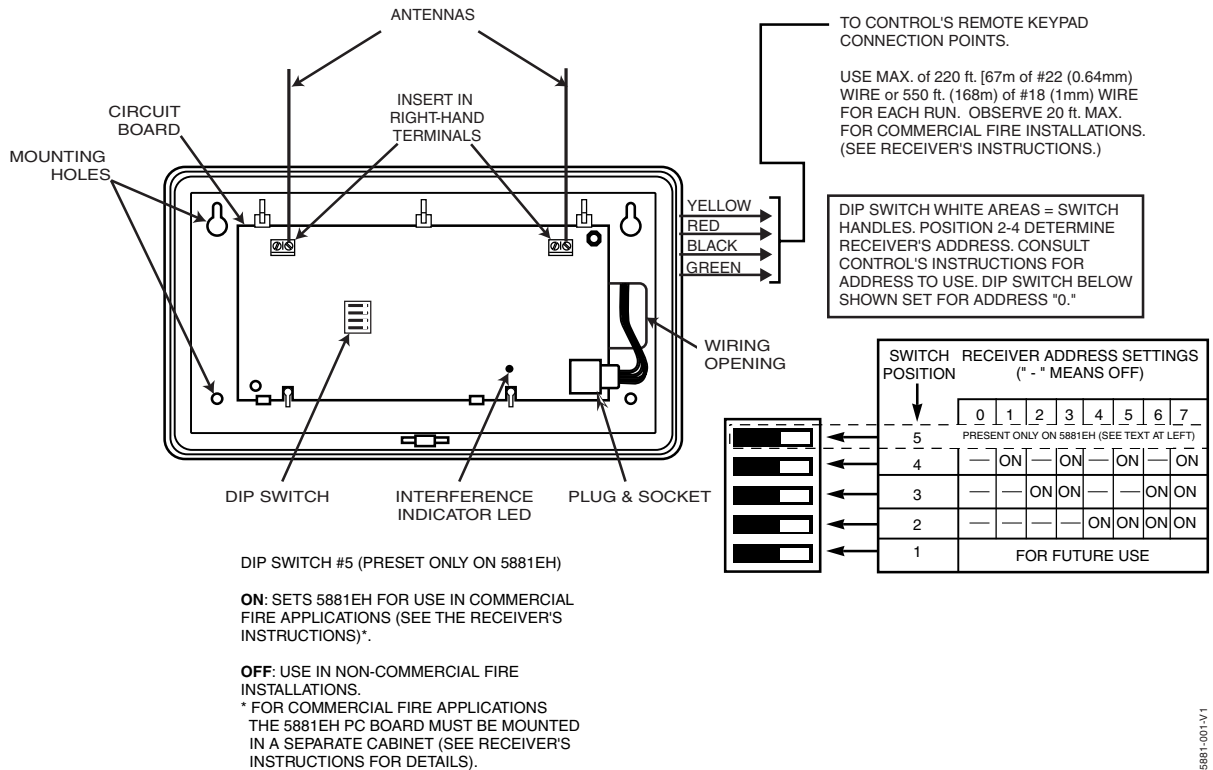


**Figure 3-20:  5881 RF Receiver (cover removed)**

## Installing the 5800TM Module

Installation of this module is necessary only if you are using a 5827BD or 5804BD Bi-directional device.

✓ The address for the 5800TM must be enabled in the control's *Device Programming* in the *#93 Menu Mode* as a keypad and then assigned to a partition.

To install the 5800TM, perform the following steps:

| Step | Action |
|------|--------|
| 1 | Mount the unit using its accompanying mounting bracket near the RF receiver. **The 5800TM must not be installed within the control cabinet. It must be between one and two feet from the receiver's antennas.** |
| 2 | Set the module for the appropriate address. For Address Setting 28 cut the red jumper; for Address 29 cut the white jumper; for Address 30 cut both jumpers. |
| 3 | Connect the module's wire harness to the keypad terminals (6, 7, 8, and 9). Plug the connector at the other end of the harness into the module. |

## House ID Sniffer Mode

This mode applies only if you are using a wireless keypad (e.g., 5827) or bi-directional devices (e.g., 5804BD). Use the House ID Sniffer mode to make sure you do not choose a House ID that is in use in a nearby system. The House ID must be programmed for the receiver in *Device Programming* in the *#93 Menu Mode*.

To enter House ID Sniffer mode, enter your **Installer Code + [#] + [2].**

The receiver now "sniffs" out any House IDs in the area and displays them. Keep the receiver in this mode for about 2 hours. Use a House ID that is not displayed. Exit the Sniffer mode by entering your **Installer Code + OFF**.

✓ As Sniffer mode effectively disables RF point reception, Sniffer mode **cannot** be entered while any partition is armed.

## 5800 Series Transmitter Setup

5800 Series transmitters have the following characteristics:

- Transmitters have built-in serial numbers that must be enrolled in the system using the *#93 Menu Mode Programming*, or input to the control via the downloader.
- Transmitters do not have DIP switches (except 5827, described separately).
- Some transmitters, such as the 5816 and 5817, can support more than one "zone" (referred to as loops or inputs). Each loop must be assigned a different zone number.
- For button-type transmitters (wireless keys), such as the 5804 and 5804BD, you must assign a unique zone number to each individual button used on the transmitter.

## Transmitter Input Types

All transmitters have one or more unique factory-assigned input (loop) codes. Transmitters can be programmed as one of the following types:

| Type | Description |
|------|-------------|
| **RF (Supervised RF)** | Sends periodic check-in signals, as well as fault, restore, and low-battery signals. The transmitter must remain within the receiver's range. |
| **UR (Unsupervised RF)** | Sends all the signals that the RF type does, but the control does not supervise the check-in signals. The transmitter may therefore be carried off-premises. |
| **BR (Unsupervised Button RF)** | These send only fault signals. They do not send low-battery signals until they are activated. The transmitter may be carried off-premises. |

## Transmitter Supervision

Supervised RF transmitters send a check-in signal to the receiver at 70–90 minute intervals. If at least one check-in is not received from each supervised transmitter within a programmed period (field 1∗31), the "missing" transmitter number(s) and "CHECK" or "TRBL" are displayed. Unsupervised RF transmitters (5802MN, 5804) may be carried off the premises.

Some transmitters have built-in tamper protection, and annunciate a "CHECK" condition if covers are removed.

✓ If a loss of supervision occurs on a transmitter programmed for Fire, it reports in Contact ID as a Fire Trouble (373), not Loss of Supervision (381), to the central station.

**Transmitter Battery Life**

Batteries in the wireless transmitters may last from 4 to 7 years, depending on the environment, usage, and the specific wireless device being used. Factors such as humidity, high or low temperatures, as well as large swings in temperature may all reduce the actual battery life in a given installation.

The wireless system can identify a true low battery situation, thus allowing the dealer or user of the system time to arrange a change of battery and maintain protection for that point within the system.

Some transmitters (e.g., 5802, 5802CP, and 5803) contain long-life but nonreplaceable batteries. At the end of their life, the complete unit must be replaced (and a new serial number enrolled at the control).

Button-type transmitters (e.g., 5801, 5802, 5802CP and 5803) should be periodically tested, as these transmitters do not send supervisory check-in signals.

> To test the transmitters using the Transmitter ID Sniffer mode and the Go/NoGo Test Mode, see *SECTION 10: Testing the System* for the procedures.

**Compatible 5800 Series Transmitters**

| Model | Product | Input Type |
|-------|---------|------------|
| 5801 | Panic Transmitter | UR or RF |
| 5802 5802CP | Pendant (Personal Emergency Transmitter) Belt Clip (Personal Emergency Transmitter) | BR Only |
| 5802MN | Miniature (Personal Emergency Transmitter) | UR or RF |
| 5802MN2 | Miniature (Personal Emergency Transmitter) | UR or RF |
| 5804 | Wireless Key Transmitter | BR Only |
| 5804BD | Wireless Key Bi-directional Transmitter | BR Only |
| 5804BDV | Wireless Key Bi-directional Transmitter with Voice | BR Only |

| Model | Product | Input Type |
|-------|---------|------------|
| 5806/5807/ 5808 | Wireless Photoelectric Smoke Detectors | RF |
| 5816 | Door/Window Transmitter | RF |
| 5816MN | Miniature Door/Window Transmitter | |
| 5816TEMP | Temperature Sensor Transmitter | |
| 5817 | Multi-Point Universal Transmitter | RF |
| 5818 | Recessed Transmitter | RF |
| 5827 | Wireless Keypad | House ID |
| 5827BD | Wireless Bi-directional Keypad | House ID |
| 5849 | Glassbreak Detector | RF |
| 5850 | Glassbreak Detector | RF |
| 5890 | PIR Detector | RF |
| 5890PI | PIR Detector with Pet Immunity | RF |

# Installing Relay Devices

The VISTA-40 support up to 8 relays. Each device must be programmed as to how to act (ACTION), when to activate (START), and when to deactivate (STOP). The 4204 and/or X-10 devices may be used as relay devices.

### Installing the 4204 Relay Modules

Each 4204 module provides 4 relays with Form C (normally open and normally closed) contacts.

> The relay module will not operate until the device address you have set the DIP switches for is enabled in the control's *Device Programming* in the *#93 Menu Mode*.

To install the relay modules, see *Figures 3-21* and *3-22 and* perform the following steps:

| Step | Action |
|------|--------|
| 1 | Set the 4204 or 4204CF's DIP switches for a device address **01-15**. Do not use an address being used by another device (keypads, RF receivers, etc.). |
| 2 | Mount the 4204 and 4204CF Modules per the instructions provided with them. |
| 3 | Connect the module's wire harness to the control (6, 7, 8, and 9). Plug the connector (other end of harness) to the module. If you are mounting remotely, homerun each module to the control. The table below shows the maximum wire run lengths. Refer to the instructions provided with the 4204CF for its maximum permissible wire lengths. <br><br> table below: |

| Wire Gauge | Maximum Length |
|------------|----------------|
| #22 | 125 feet |
| #20 | 200 feet |
| #18 | 300 feet |
| #16 | 500 feet |

| SWITCH POSITION | 4204 ADDRESS SETTINGS ("—" means "OFF") | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ↓ | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 2 | ON | — | ON | — | ON | — | ON | — | ON | — | ON | — | ON | — | ON | — |
| 3 | ON | ON | — | — | ON | ON | — | — | ON | ON | — | — | ON | ON | — | — |
| 4 | ON | ON | ON | ON | — | — | — | — | ON | ON | ON | ON | — | — | — | — |
| 5 | ON | ON | ON | ON | ON | ON | ON | ON | — | — | — | — | — | — | — | — |
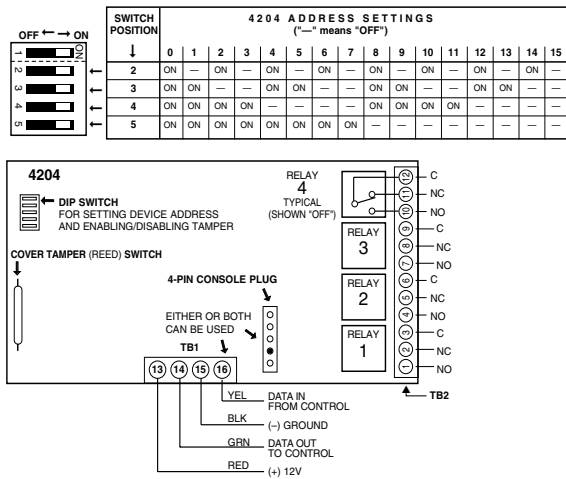


**Figure 3-21: 4204 Relay Module**

| SWITCH POSITION | 4204CF ADDRESS SETTINGS ("—" means "OFF") | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ↓ | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 2 | ON | — | ON | — | ON | — | ON | — | ON | — | ON | — | ON | — | ON | — |
| 3 | ON | ON | — | — | ON | ON | — | — | ON | ON | — | — | ON | ON | — | — |
| 4 | ON | ON | ON | ON | — | — | — | — | ON | ON | ON | ON | — | — | — | — |
| 5 | ON | ON | ON | ON | ON | ON | ON | ON | — | — | — | — | — | — | — | — |
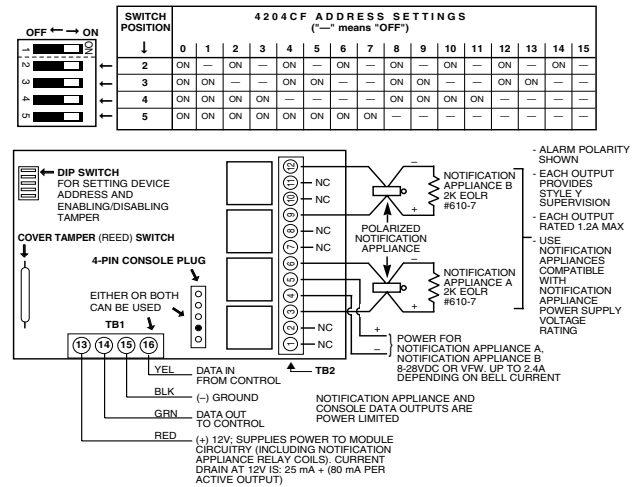


**Figure 3-22: 4204CF Relay Module**

### Installing X10 Devices

X-10 devices are either plugged into standard AC outlets or wired into the AC electrical system by a licensed electrician, depending on the type of device used.

> Note each device's House and Unit Code setup, as these codes will be used to program the devices in *Output Programming* in *#93 Menu Mode* described in the *Programming Guide*.

X-10 devices require the use of a 1361X10 transformer in place of the regular 1361 transformer.

X-10 devices respond to "on" and "off" commands sent from the panel through the 1361X10 transformer.

To connect the 1361X10 transformer, see *Connecting the Transformer,* later in this section.

## Installing the Ground Start Module

> **UL**  The Ground Start Module is not intended for use in UL Listed applications.

Output 1 may be used to trigger an optional 675 Ground Start Module for installations having telephone lines that require ground start instead of loop start operation to obtain a dial tone from the telco central office.

When the panel has a message to transmit to the central station, it seizes the line, goes off hook, and then triggers the 675 Module to connect the RING side of the telephone line to earth ground. The panel causes the module to break the connection between RING and earth ground when it obtains a dial tone.

To install the 675 Ground Start Module, perform the following steps:

| Step | Action |
|---|---|
| 1 | Determine which side of the telephone line is the RING side by connecting the (+) lead of a DC voltmeter to earth ground, and the (-) lead to one side of the telephone line. **The wire that reads + 50VDC is the RING side.** |
| 2 | Connect the 675 Ground Start Module to the panel's J7 connector trigger output 1, to auxiliary power, and to the RING side of the telephone line as shown in *Figure 3-23*. |
| 3 | Program field 1∗46 Auxiliary Output Enable with a [**0**]. |

> You cannot use Output 1 for the Ground Start if you are using it for Open/Close or an AAV module.
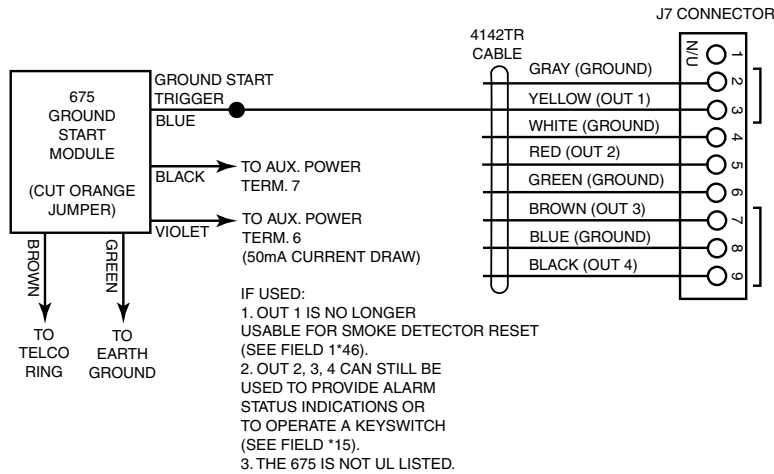
*Figure 3-23:  Ground Start Module Connections*

## Installing a Remote Keyswitch

A UL-Listed remote keyswitch, such as the 4146, can be used for remote arming/disarming of the burglary portion of the system and for silencing alarms.  The keyswitch can operate in only one particular partition.

The keyswitch is wired across zone 7. This zone is no longer available as a protection zone. Be sure to program Zone 7 with a response type (e.g., type 10).

### Operation

- A momentary short across zone 7 arms the partition in the AWAY mode, and a short held for more than 3 seconds arms the partition in STAY mode.  A subsequent short disarms the partition.
- The keyswitch LEDs indicate the partition's status (see table below).
- A momentary short across Zone 7 silences alarm bell and keypad sounds, and disarms the system if it was armed. A subsequent short across Zone 7 clears the alarm memory indication and resets 2-wire smoke and glassbreak detectors (if used).

#### LED Indications

| Green | Red | Indication |
|-------|-----|------------|
| On | Off | Disarmed & Ready |
| Off | Off | Disarmed & Not Ready |
| Off | On Steady | Armed Away |
| Off | Slow Flash | Armed Stay |
| Off | Rapid Flash | Alarm Memory |

The keyswitch reports as user 0, if Open/Close reporting is enabled in field ✳40.

### Keyswitch Tamper Operation

The tamper switch need not be used for fire or UL Household Burglary installations.  For UL Commercial Burglary installations, the tamper switch must be wired to a zone (zone 6 in *Figure 3-24*).

Program that zone for Day Trouble/Night Alarm (response type 5).  When the keyswitch is removed from the wall, the tamper switch opens, causing an alarm or trouble on the zone. This also causes the control to disable keyswitch operation until the tamper is restored and the associated partition is disarmed.

### Wiring for the Remote Keyswitch

To install the 4146 keyswitch, perform the following steps:

| Step | Action |
|------|--------|
| 1 | Connect the 4146 to the panel as shown in *Figure 3-24*. |
| 2 | If you are using the tamper, make sure it is connected to a zone. |
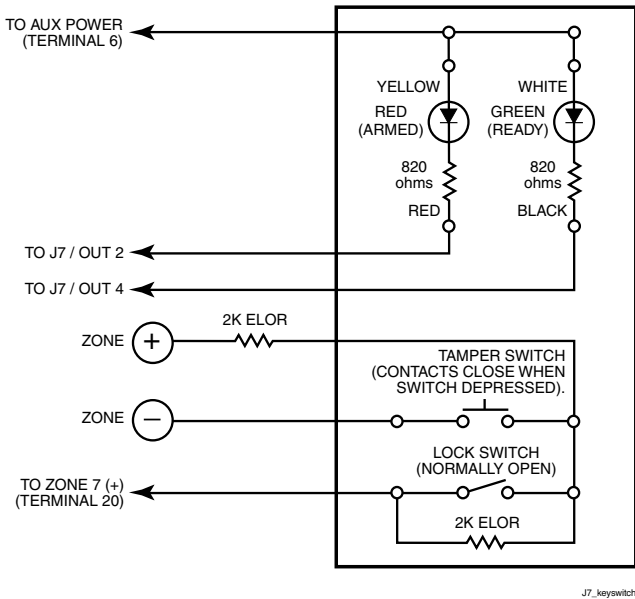
*Figure 3-24:  Remote Keyswitch Wiring*

## Remote Keypad Sounder

An optional Amseco PAL 328N Piezo Sounder can be used to duplicate the sounds produced by the keypad's built-in sounder.  The panel will remote all sounds (e.g., alarm, trouble, chime, entry/exit, etc.) produced by the keypad's built-in sounder except for the short beeps associated with keypad key depression.  One application of this feature might be to produce chime sounds at a distant location from the panel's keypads.

### Remote Keypad Sounder Setup

To setup for a remote keypad sounder, connect the piezo sounder to the panel's positive auxiliary power output and to Output 1 on the J7 connector as shown in *Figure 3-25*.

To duplicate the keypad sounds for a particular partition, program that partition number in field ✳15. Program field 1✳46 Auxiliary Output Enable with a [**2**].
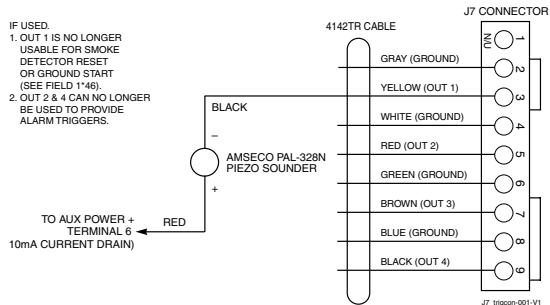


*Figure 3-25:  Remote Keypad Sounder Wiring*

## Long Range Radio Connected to the J7 Triggers

These triggers may be used to trip auxiliary alarm signaling equipment such as the 7720, 7720ULF, and 7920SE Long Range Radios.

The triggers are common to all partitions and must be enabled for each partition (field 2✳20).

The fire and burglary/audible panic alarm triggers are normally LOW and go HIGH until a **User Code + OFF** is entered in all enabled partition(s) that display these conditions.

The silent panic/duress trigger latches HIGH, except for duress, which is momentary.

Refer to the installation instructions that accompany your radio for the connections to the control panel.

## Installing a 4100SM

The 4100SM is used to print event log reports to a serial printer.
**NOTE:** See *SECTION 4: Programming* for the programming details when using the 4100SM.

### Printer Configurations

Configure the serial printer as follows:

- 8 data bits, no parity, 1 stop bit
- 1200 baud
- Hardware handshaking using DTR.

**Connecting the 4100SM to a Serial Printer**

To connect a serial printer using the 4100SM, refer to *Figure 3-26* and perform the following steps:

| Step | Action |
|------|--------|
| 1 | Connect terminal 1 on the 4100SM to the Violet wire on the 4142TR cable. |
| 2 | Connect terminal 6 on the 4100SM to the Brown wire on the 4142TR cable. |
| 3 | Connect the 4142TR cable to J8 on the control. |
| 4 | Connect terminals 8 and 7 of the 4100SM to terminals 6 and 7 (aux. power (+) and (-)), respectively of the control. |
| 5 | Connect the UL EDP Listed serial printer to the 4100SM Interface Module.<br><br>The 4100SM Module is supplied with a 10-foot RS232 cable. A longer cable can be used if the VISTA-40 is separated from the serial printer by more than 10 feet, but the total cable length should be less than 50 feet. |
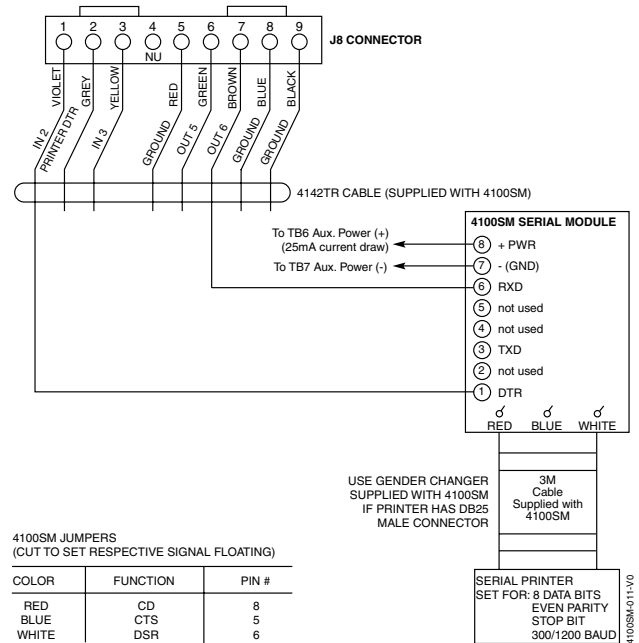


***Figure 3-26: 4100SM Using a Serial Printer***

**NOTE:** See the 4100SM Installation Instructions for details concerning the serial printer operation.

# Installing the 4285/4286 VIP Module

The 4285/4286 VIP Module is an add-on accessory that permits the user to access the security system (and relays) via a TouchTone telephone. This may be done either from the premises or by calling the premises from a remote location. Only one VIP Module can be used in a security system. This module must be enabled as Device Address 4 in the *Device Programming* in *#93 Menu Mode*, and must be assigned to a partition.

**UL**  The 4285/4286 VIP Module is not permitted in UL installations.

✓  Detailed operating instructions for phone access to the security system are provided with the VIP Module.

The 4285/4286 is wired between the control panel and the premises' handset(s) (see *Figure 3-27*). It listens for TouchTones on the phone line and reports them to the control panel. During on-premises phone access, it powers the premises phones. During off-premises phone access, it seizes the line from the premises phones and any answering machines.

The 4285/4286 VIP Module features:

• Allows the user to receive synthesized voice messages over the phone regarding the status of the security system.

• Allows the user to arm and disarm the security system and perform most other commands using the telephone keypad.

• Allows the user to control relays using the telephone keypad.

• Provides voice annunciation over the phone to confirm any command that is entered.

• Announces many of the same words that would normally be displayed on an alpha keypad under the same system conditions. Refer to the words in bold on the Alpha Vocabulary list found in the *#93 Menu Mode* in the *Programming Guide*.

• Can be supervised for connection to control panel (annunciated and reported as Zone 804).

✓  • The VIP module will not operate until the device address (04) is enabled in the control's *Device Programming* in *#93 Menu Mode*.

  • Do not mount the VIP Module on the cabinet door or attempt to attach it to the PC board.

To install the VIP module, perform the following steps:

| Step | Action |
|------|--------|
| 1 | Mount the module in the control cabinet if space is available or, if this is not possible, on the side of the cabinet or adjacent to it. **If you mount the VIP Module inside the control cabinet,** attach it to the cabinet's interior surface with 2-faced adhesive tape. You may leave the module's cover off if it is mounted within the cabinet. **If you mount the module outside the cabinet,** use the screw holes at the rear to mount horizontally or vertically (2-faced adhesive tape may be used, if preferred). |
| 2 | Affix the 4285/4286 connections label (supplied separately) to the inside of the VIP Module's cover, if the cover is used. Otherwise, affix the label to the inside of the *control cabinet's* door. |
| 3 | Make 12V (+) and (–) and data-in and data-out connections from the VIP Module to the control, using the connector cable supplied with the VIP Module. These are the same connections as for remote keypads. |

| Step | Action | |
|------|--------|---|
| 4 | Connect the module to the phone line as shown below. See *Figure 3-27*. | |

| | 4285/4286 Terminal | Connects to direct connect cord: | |
|---|--------------------|----------------------------------|---|
| | **1.** Phone In (Tip) | green wire | |
| | **2.** Phone In (Ring) | red wire | |
| | **3.** Phone Out (Tip) | brown wire | |
| | **4.** Phone Out (Ring) | gray wire | |
| | **5.** No Connection | | |
| | **6.** Audio Out 1∗ | Speaker | |
| | **7.** Audio Out 1∗ | Speaker | |

∗**Supported by the 4286 only**

Use an RJ31X Jack with the phone cable supplied with the control to make connections to the VIP module. Make connections exactly as shown in *Figure 3-27*. **This is essential, even if the system is not connected to a central station. The 4285/4286 will not function if this is not done.**

- If touch-tones are not present following phone access to the security system *via an on-premises phone*, try reversing the pair of wires connected to terminals 3 and 4 on the 4285/4286.
- If the phone plug is disconnected from the control, the premise's phones will not operate.



**SPEAKER NOTE:** IF CONNECTING SINGLE SPEAKER, USE 8-ohm SPEAKER ONLY. IF CONNECTING 2 SPEAKERS, USE 4-ohm or 8-ohm SPEAKERS AND **CONNECT IN SERIES.**
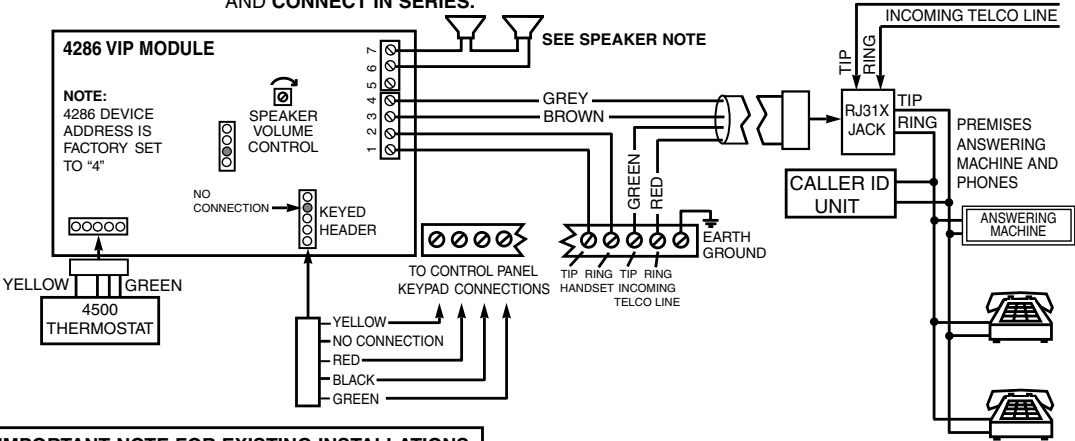
**IMPORTANT NOTE FOR EXISTING INSTALLATIONS:** EXISTING WIRES CONNECTED TO THE "HANDSET" TERMINALS ON CONTROL MUST BE MOVED FROM THERE TO TERMINALS 3 AND 4 ON THE 4286.

U.S. PATENT No. 4791658

THIS DEVICE COMPLIES WITH FCC RULES, PART 68 FCC REGISTRATION No. AC3USA-74659-KX-N RINGER EQUIVALENCE: 1.0B

FOR COMPLETE INFORMATION, SEE INSTALLATION INSTRUCTIONS N6431-3 ACCOMPANYING 4286 VIP MODULE

4286_wiring-002-V1

***Figure 3-27: VIP Module Connections***

## Installing the Audio Alarm Verification Module

**UL**  Audio Alarm Verification (AAV) is not permitted in UL installations.

✓ If the phone plug is disconnected from the control, the premise's phones will not operate.

✓
- 685 Receiver software must be rev. 4.6 or higher. Earlier versions will not hold the phone line connection.
- Contact ID code for "Listen-in to Follow" is 606.  Contact ID is the only reporting format that will send a "Listen-in to Follow."
- If you are also using a 4285/4286 VIP Module, be sure to follow *Figure 3-30* when making connections.

The UVS consists of a UVCM and at least one UVST. The UVCM board has a DC power jack and a 34-position terminal block for making connections to a DC power source, UVSTs, telephone lines, music source, or to the 4286 VIP Module; and to a control panel's voice trigger and bell outputs (if required).  Refer *Figure 3-28* for wiring connections.  For a detailed explanation of the wiring connections and the functions of the DC power jack and terminal block positions, refer to the installation instructions that accompany the UVS.

**NOTES:**
- When the AAV indicates that the audio alarm verification session is completed, all keypad sounds are restored. Sirens are restored if the alarm timeout period has not expired.
- As part of its fail-safe software, the control limits all audio alarm verification sessions to 15 minutes. This is because once the session begins, the AAV Module controls the duration.
- If a new **Fire alarm** should occur during a session, the control breaks the phone connection and sends the new Fire Alarm report, then re-triggers the AAV Mode.  All other dialer messages triggered during ongoing conversation are held until either the AAV Module signals that it is inactive, or the 15-minute timeout occurs.

## UVCM AND UVST SUMMARY OF CONNECTIONS
Refer to UVS Installation and Setup Guide K4214 for complete information

| SW | SWITCH BANK 1 |
|---|---|
| 1 | UVST 1 AUX AUDIO, ON = ENABLED |
| 2 | UVST 2 AUX AUDIO, ON = ENABLED |
| 3 | UVST 3 AUX AUDIO, ON = ENABLED |
| 4 | UVST 4 AUX AUDIO, ON = ENABLED |
| 5 | UVST 5 AUX AUDIO, ON = ENABLED |
| 6 | UVST 6, ON = OUTSIDE, OFF = INSIDE |
| 7 | UVST 7, ON = OUTSIDE, OFF = INSIDE |
| 8 | VOICE TRIGGER, ON = IMMED, OFF = CALLBACK |

| SW | SWITCH BANK 2 |
|---|---|
| 1 | FUTURE USE, SET TO ON |
| 2 | FUTURE USE, SET TO ON |
| 3 | TELEPHONE RING, ON = ENABLED |
| 4 | END USER VOICE, ON = DISABLED |
| 5 | FUTURE USE, SET TO ON |
| 6 | CS CODE LEARN, ON = DISABLED |
| 7 | USER CODE LEARN, ON = DISABLED |
| 8 | FUTURE USE, SET TO ON |

SHIPPED WITH ALL SWITCHES IN "ON" POSITION.

NOTE 1: CONNECT TO PROPER EARTH GROUND.

NOTE 2: POWER MAY ALSO BE SUPPLIED BY A LISTED CLASS 2 POWER SUPPLY RATED 12VDC, MIN 600mA CONNECTED TO THE UVCM +12VDC IN AND GND TERMINALS.

NOTE 3: SOME CONTROL PANELS USE BUILT-IN TRIGGER AND SOME USE 4204 RELAY MODULE. REFER TO AAV SECTION OF CONTROL PANEL INSTALLATION AND SETUP GUIDE FOR CONNECTION.

NOTE 4: EITHER MUSIC SOURCE OR 4286 VIP MODULE CAN BE USED BUT NOT AT THE SAME TIME.

NOTE 5: DO NOT CONNECT IF 4286 VIP MODULE IS USED.



***Figure 3-28: UVS Connections to the Control Panel***

## Connecting the Transformer

This product uses the 1361 transformer (1361CN in Canada). If you are using X-10 devices, the 1361X10 transformer interface must be used ***instead*** of the regular 1361 transformer. The 1361X10 supplies the control panel with AC, and also sends control pulses through the premises electrical system to control the X-10 devices.

**UL** Use 1361CN Transformer in Canadian installations.

## Power Limiting Outputs

All outputs are power-limited as per UL985/UL1023. The following table shows the maximum current that may be drawn from each output.

| Output | Maximum Current Draw |
|---|---|
| Auxiliary Power | 750mA |
| Polling Loop | 64mA |
| Alarm Output | 1.7A |

**For Household Fire or Combination Household Fire/Burglary Installation:** The total current drawn from the auxiliary power, the polling loop, and the alarm output combined must not exceed 750mA to comply with the battery independence requirements in UL985.

**For Household Burglary-Only Installations:** The total current drawn from the alarm output may be up to 1.7A. A battery must be installed to supply the current of the combined auxiliary power, polling loop, and alarm output in excess of 750mA.

Failure to observe the polling loop current rating will cause polling loop malfunction. Failure to observe the auxiliary power current rating will result in a battery that does not charge properly or possibly a tripped circuit breaker.

To connect the transformer to the control, perform the following steps:

| Step | Action |
|---|---|
| 1 | Connect all installed devices to the control. |
| 2 | Wire the 1361 Transformer (1361CN in Canada) to the panel (before connecting the battery) as shown in *Figure 3-29*, or wire the 1361X10 Transformer as shown in *Figure 3-30* (if using X-10 devices). |
| 3 | Plug the transformer into a 24-hour, uninterrupted, 120VAC, 60Hz outlet. After a few seconds, the keypad display appears. |



**PRIMARY POWER**
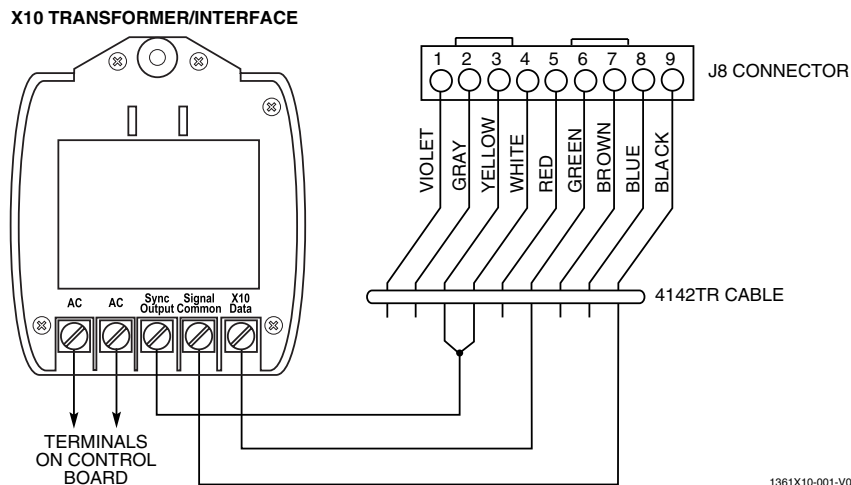Supplied by a transformer which is rated at 16.5VAC, 40VA. Caution must be taken when wiring this transformer to the panel to guard against blowing the fuse inside the transformer (non-replaceable).

**NOTE:**
WHEN POWERING UP THE PANEL, PLUG THE TRANSFORMER IN BEFORE CONNECTING THE BATTERY.
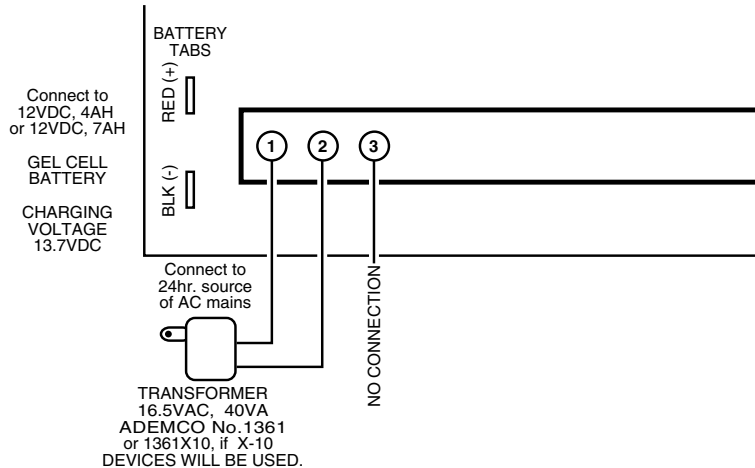
*Figure 3-29: 1361 Transformer and Battery Connections*



*Figure 3-30: 1361X10 Transformer Connections*

## Panel Earth Ground Connections

In order for the lightning transient protective devices in this product to be effective, the designated earth ground terminal (terminal 30) must be terminated in a good earth ground. Recommended wire gauge for the ground connection is #16 AWG, run no farther than 30 feet. The following are examples of good earth grounds available at most installations:

- **Metal Cold Water Pipe:** Use a noncorrosive metal strap (copper is recommended) firmly secured to the pipe to which the ground lead is electrically connected and secured.

- **AC Power Outlet Ground:** Available from 3-prong, 120VAC, power outlets only. To test the integrity of the ground terminal, use a three-wire circuit tester with neon lamp indicators, such as the UL-Listed Ideal Model 61-035, or equivalent, available at most electrical supply stores.

> The panel requires the earth ground connection for its lightning transient protection devices.

## Determining the Control's Power Supply Load

Use the tables that follow to calculate the total current for the Auxiliary Power, the Alarm Output, and the Polling Loop. In each table, multiply each device's standby and/or alarm current by the number of units used.

1. In Table 1, enter devices used on the polling loop. Calculate total current draw on the polling loop.

**Table 1: Total Polling Loop Current Draw**

| Polling Loop Device | Current | # of Units | Total |
|---|---|---|---|
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| **Polling Loop Subtotal** (terminals 24 & 25 – 64mA) ✶ |  |  |  |

✶ The total current cannot exceed 64mA. If total load exceeds 64mA, then a 4297 Loop Extender Module can be used. Note that the total number of points connected to the panel cannot exceed 55.

2. In Table 2, enter devices used on Auxiliary Power. Calculate standby and alarm currents, then add to get Auxiliary Power current subtotal.

**Table 2: Auxiliary Power Current Load**

| Device Model # | Device Current X # of Units | | Total Current Standby | Alarm |
|---|---|---|---|---|
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| **Auxiliary Power Subtotal** (terminals 6 & 7 – 750mA max.) |  |  |  |  |

3.  In Table 3, enter devices connected to the Alarm Output. Calculate alarm currents, then add to get the Alarm Output current subtotal.

**Table 3: Alarm Output Current Load**

| Device Model # | Device Current X # of Units | | Total Current | |
|---|---|---|---|---|
| | | | Standby | Alarm |
| | | | XXXXXX | |
| | | | XXXXXX | |
| | | | XXXXXX | |
| | | | XXXXXX | |
| | | | XXXXXX | |
| | | | XXXXXX | |
| | | | XXXXXX | |
| **Alarm Output Subtotal** (terminals 4 & 5 – 1.7A max.) | | | | |

4.  In Table 4, enter the total calculated subtotals of all listed outputs from Tables 1 through 3, then add to get the combined current.

**Table 4: Total VISTA-40 Current Load**

| | Total Current | |
|---|---|---|
| | Standby | Alarm |
| Polling Loop Subtotal (see Table 1) | | |
| Aux. Power Subtotal (see Table 2) | | |
| Alarm Output Subtotal (see Table 3) | | |
| VISTA-40 PCB Current (Includes 2-wire smoke detector loading on zone 1) | 250mA | 330mA |
| **Total Current Load** | | |

## Determining the Size of the Standby Battery

The cabinet supplied with the control panel can house batteries of up to 12V, 14AH (two 12V, 7AH batteries wired in parallel). The VISTA-ULKT kit provides a cabinet that can house batteries of up to 12V, 17.2AH and that may be used with this panel. The total standby current drawn from the auxiliary power and polling loop outputs combined must be limited to 270mA when 14AH batteries are used; and to 390mA when 17.2AH batteries are used.

> ⚠️ **DO NOT** use Gates batteries (sealed lead-acid type). These batteries require a different charging voltage than is supplied by the panel.

**UL** Household Fire or Combination Household/Fire/Burglary installations require the use of a backup battery that is capable of providing 24 hours of standby time followed by 4 minutes of alarm time. UL1023 Household Burglary-only installations require the use of a backup battery that is capable of providing 4 hours of standby time followed by 4 minutes of alarm time.

Use Table 5 to determine the required backup battery capacity and use Table 6 to determine the battery model number. **A dual battery harness is supplied** that allows two batteries to be wired in parallel for increased capacity.

5.  Using the total calculated from Table 4, calculate the battery capacity required for the installation.

**Table 5: Battery Capacity Calculation Table**

| Capacity | Formula | Calculated Value |
|---|---|---|
| **Standby Capacity** | For 4-hour standby time: Total **standby current** X 4 hours X 1.4 contingency factor. | |
| | For 24-hour standby time: Total **standby current** X 24 hours X 1.1 contingency factor. | |
| **Alarm Capacity** | For 4-, 5-, or 15-minute alarm time: Total **alarm curr.** X 0.067 (4 min) X 0.250 (15 min) | |
| **Total Capacity** | **Add standby and alarm capacities** | |

6.  Use the Battery Selection Table to select the appropriate battery for the installation.

**Table 6: Battery Selection Table**

| Capacity | Recommended Battery | Comment |
|----------|---------------------|---------|
| 4AH | Yuasa NP4-12 | |
| 7AH | Yuasa NP7-12 | |
| 12AH | Yuasa NP12-12 | Fits in large mercantile cabinet only. |
| 14AH | Yuasa NP7-12 | Connect two in parallel. |
| 17.2AH | Yuasa NPG18-12 | Fits in large mercantile cabinet only. |

7.  Connect the battery, referring to *Figure 3-29*.

The standby battery is automatically tested for 10 minutes every 4 hours, beginning 4 hours after exiting Programming mode. In addition, entry into the Test mode initiates a battery test.

# *Programming*

• • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • •

## Program Modes

There are two programming modes for the VISTA-40. These are the Data Field Program Mode and the #93 Menu Mode. The Data Field Program Mode is where many system options are programmed. The #93 Menu Mode is an interactive mode that requires a 2-line alpha keypad (6139/6160).

> ✓ The factory-loaded defaults (∗97) enable keypad addresses 00-03 only. A keypad set to one of these addresses must be used to program the system initially.

> ✓ Local keypad programming can be disabled through Compass downloading software. If this is done, Program mode can only be accessed via the downloading software.

## Entering and Exiting Programming Mode

Enter Programming mode using either method a or b:

a. Press both the [∗] and [#] keys at the same time within 30 seconds after power is applied to the control.

b. Enter the **Installer Code + [8] + [0] + [0]** keys. The factory installer code can be changed once in the Program mode (field ∗00).

**NOTE: The default for the Installer Code is 4140.**

Exit the Programming mode by either method a or b:

a. Press [∗] + **[9]** + **[8]**. Exiting by this method prevents the installer code from being used to re-enter Programming mode. Only method "a" can be used to re-enter Programming mode.

b. Press [∗] + **[9]** + **[9]**. Exiting by this method permits the installer code to be being used to re-enter Programming mode.

## Data Field Programming Mode

In the Data Field Program Mode you may access any field simply by entering either [∗] or [#] + the field number:

- To write or change information in a field press [∗] + the field number (∗03).

- To read the information in a field press [#] + the field number (#03).

When the entries for a field are completed, the keypad beeps three times and advances to the next field.

#### Summary of Data Field Programming Commands

| | |
|---|---|
| ∗**91** | Select partition for programming partition-specific fields |
| ∗**92** | Display the software revision level of the control panel |
| ∗**93** | Enter Menu mode programming |
| ∗**94** | Go to next page of fields |
| ∗**99** | Go back to previous page of fields or exit Programming Mode with no installer code lockout |
| ∗**98** | Exit Programming Mode with Installer Code lockout |

### Moving Between Programming Levels

The data fields are grouped into three levels (referred to as "pages"). The first page is accessed as soon as Programming Mode is entered.

The second and third pages of data fields are indicated at the keypad by a 1 and 2, respectively, in front of the 2-digit field address. "ALT PROGRAM MODE" is displayed along with a "100" or "200," indicating which page of program fields is accessed.

To access the next level of programming fields, perform the following steps:

| Step | Action |
|---|---|
| 1 | Press ∗94. |
| 2 | Press [∗] + [XX], where XX = the last two digits of the program field, and make the desired entry. |

**NOTES:**

Press ∗94 to move to 2$^{nd}$ page, (fields 1∗01 - 1∗76); press ∗99 to move back to 1$^{st}$ page.

Press ∗94 to move to 3$^{rd}$ page (fields 2∗00 - 2∗21); press ∗99 to move back to 2$^{nd}$ page

### Entry Errors

- If an address is improperly entered, the keypad displays "FC."

- If a program entry is improperly entered (for example, a larger number than is permitted), the keypad display will go blank.

In either of the above cases, simply re-enter [✱] + the correct field number and then enter the correct data.

### Programming System-Wide Data Fields

Values for some programming fields are system-wide (global), and some can be different for each partition (partition-specific).

✓ The partition-specific programming fields are automatically skipped when programming the global fields. If the system has only 1 partition, the partition-specific fields *are not* automatically skipped.

To program system-wide data fields, perform the following steps:

| Step | Action |
|------|--------|
| 1 | Enter Program Mode: **Installer Code + 8 0 0.** <br><br> The following display appears: <br><br> Program Mode <br> ✱Fill # View – 00 |
| 2 | If the control has not been programmed before, enter ✱97 to load factory defaults**.** |
| 3 | Press [✱] and enter the first field number to be programmed (for example, ✱00, Installers Code). Make the desired entry. When the field is complete, the keypad beeps three times and advances to the next field. If you do not want to change the next field, press [✱] and enter the next field number to be programmed. <br><br> First Page of fields <br> (✱00 - ✱90) <br><br> To change to the next page of fields, press ✱94. To return to the previous page of fields, press ✱99. |
| 4 | Press ✱99 or ✱98 to exit Program Mode. |

**NOTE:** If the number of digits that you enter in a data field is fewer than the maximum permitted (for example, a phone number), the keypad displays the last entry and waits. To proceed, enter [✱] + the next data field you wish to program.
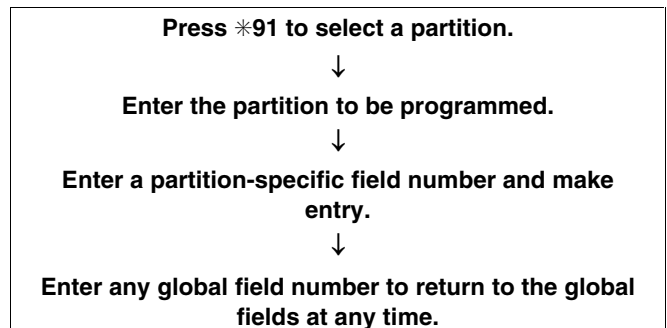
### Programming Partition-Specific Data Fields

To program partition-specific data fields once in Program Mode, do the following:

| Step | Action |
|------|--------|
| 1 | Enter Program Mode: **Installer Code + 8 0 0.** |
| 2 | Press ✱91, which will prompt you for the partition number desired. |
| 3 | Enter a partition-specific field number (e.g., ✱09) to begin programming. <br><br> When the first field's entry is completed, the next partition-specific field is automatically displayed. When all partition-specific fields are programmed, the system returns to the global programming fields (page 1 fields). |
| 4 | Repeat this procedure for the other partition. |

**NOTE:** To return to the global program fields before finishing all fields, enter any global field number.

**Programming Partition-Specific Fields**

**Press ✱91 to select a partition.**
↓
**Enter the partition to be programmed.**
↓
**Enter a partition-specific field number and make entry.**
↓
**Enter any global field number to return to the global fields at any time.**

# #93 Menu Mode Programming

The #93 Menu Mode is an interactive mode through which much of the system's programming is done. In this mode, there are "question and answer" prompts that can be accessed once Data Field Program Mode has been entered. These prompts require a 2-line alpha keypad (6139/6160).

After programming all system-related programming fields in the usual way, press #93 while still in programming mode to display the first choice of the menu-driven programming functions. Press 0 (NO) or 1 (YES) in response to the displayed menu selection. Pressing 0 will display the next choice in sequence.

Below is a list of the main menus. For details refer to the *VISTA-40 Programming Guide.*

| MAIN MENU | OPTIONS |
|---|---|
| ZONE PROG?<br><br>1 = YES  0 = NO        0 | For programming the following:<br>• Zone Number<br>• Zone Response Type<br>• Partition Number for Zone<br>• Dialer report code for zone<br>• Input Device Type for zone (whether RF, polling loop, etc.)<br>• Enrolling serial numbers of 5800 Series transmitters & serial polling loop devices into the system. |
| EXPERT MODE?<br><br>1 = YES  0 = NO        0 | Same as Zone Programming except:<br>• Done with a minimum number of keystrokes.<br>• Can program wireless keys using pre-defined templates. |
| ALPHA PROG?<br><br>1 = YES  0 = NO        0 | For entering alpha descriptors for the following:<br>• Zone Descriptors<br>• Installer's Message<br>• Custom Words<br>• Partition Descriptors<br>• Relay Descriptors |
| DEVICE PROG?<br><br>1 = YES  0 = NO        0 | For defining the following device characteristics for addressable devices, including keypads, RF receivers (5881), relay modules (4204), and 4285/4286 VIP Module:<br>• Device Address<br>• Device Type<br>• Keypad Options  (including Partition assignment)<br>• RF House ID |
| RELAY PGM?<br><br>1 = YES  0 = NO        0 | For defining relay device functions. |
| RLY VOICE DESCR?<br><br>1 = YES  0 = NO        0 | For entering voice descriptors for relays to be used with the 4285/4286 VIP Module. |
| CUSTOM INDEX ?<br><br>1 = YES  0 = NO        0 | For creating custom word substitutes for VIP Module annunciation. |

Following is a list of commands used while in the Menu Mode:

### #93 Menu Mode Programming Commands

| | |
|---|---|
| **#93** | Enters Menu Mode. |
| [✳] | Serves as [ENTER] key. Press to have keypad accept entry. |
| [#] | Backs up to previous screen. |
| **0** | Press to answer NO. |
| **1** | Press to answer YES. |
| **00, or 000+[✳]** | Quits Menu Mode and goes back to Data Field Programming Mode, if entered at first prompt of each main menu option. |

## Zone Number Designations

The VISTA-40 supports up to 64 zones of hardwire, polling loop and/or wireless protection, distributed among up to 2 partitions. The following table lists the zone numbers and the types of sensors that can be used with each, and some alternate functions of the zones.

| Zone | Function |
|------|----------|
| 1 | 2-wire Smoke Detectors (if used) |
| 5 | Audio Alarm Verification (if used) |
| 7 | Keyswitch (if used) |
| 8 | Latching-Type Glassbreak Detectors (if used) |
| 1-9 | Traditional Hardwired Zones |
| 1-64 | 5800 Series Wireless Devices |
| 10-64 | Polling Loop Devices |
| 95 | ✶ + 1 Panic |
| 96 | # + 3 Panic |
| 99 | ✶ + # Panic |

### Zone Defaults

| Zone # | Zone Type | Zone # | Zone Type |
|--------|-----------|--------|-----------|
| 01 | 09 | 70 | 00 |
| 02 | 03 | 87 | 00 |
| 03 | 03 | 88 | 00 |
| 04 | 03 | 90 | 00 |
| 05 | 03 | 91 | 00 |
| 06 | 03 | 92* | N/A |
| 07 | 03 | 95 | 00 |
| 08 | 03 | 96 | 00 |
| 09 | 03 | 97 | 05 |
| 10–64 | 00 | 99 | 06 |

**NOTES:** *Zone 92 is the Duress zone. Programming of the zone response type is not applicable. This zone requires only the report code programming.

### Zone Index

The zones are designated as follows:

| ZONE # RANGE | ZONE FUNCTION | ACTUAL ZONE | |
|--------------|---------------|-------------|---|
| 01 – 64 | Protection zones | As indicated | |
| 70, 88, 89, 90, 91, & 97 | System Supervisory Zones | 70: | Bell Supervision |
| | | 88: | 2nd Wireless Receiver – not receiving signals |
| | | 89: | 2nd Wireless Receiver – not talking to control |
| | | 90: | 1st Wireless Receiver – not receiving signals |
| | | 91: | 1st Wireless Receiver – not talking to control |
| | | 97: | Polling Loop (short circuit) |
| 92, 95, 96, & 99 | Duress and Keypad Panics | 92: | Duress |
| | | 95: | 1 + ✶ panic (A key) |
| | | 96: | 3 + # panic (C key) |
| | | 99: | ✶ + # panic (B key) |

Supervisory zones should be given a response type of 05 (Trouble by Day, Alarm by Night).

### Communication Defaults

*45    PRIMARY FORMAT            [1] ADEMCO Contact ID

*46    LOW SPEED FORMAT (Prim) [0] ADEMCO Low Speed

*47    SECONDARY FORMAT         [1] ADEMCO Contact ID

*48    LOW SPEED FORMAT (Sec.)  [0] ADEMCO Low Speed

*49    CHECKSUM VERIFICATION [0]      [0]

No checksum                             Primary    Secondary

*50    SESCOA/RADIONICS SEL.    [0] Radionics

*51    DUAL REPORTING              [0] no

*52    STANDARD/EXPANDED REPORT FOR PRIMARY

[0]    [0]    [0]    [0]    [0]    [0]     standard

Alarm   Rstr   Bypass   Trbl   Opn/Cls Low Bat

*53    STANDARD/EXPANDED REPORT FOR SECONDARY

[0]    [0]    [0]    [0]    [0]    [0]     standard

Alarm   Rstr   Bypass   Trbl   Opn/Cls Low Bat

**Communication Defaults for Zones**

| ZONE # | 1st | 2nd | ZONE # | 1st | 2nd | ZONE # | 1st | 2nd | ZONE # | 1st | 2nd |
|--------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|
| 1 | 01 | 00 | 21 | 06 | 00 | 41 | 11 | 00 | 61 | 01 | 00 |
| 2 | 02 | 00 | 22 | 07 | 00 | 42 | 12 | 00 | 62 | 02 | 00 |
| 3 | 03 | 00 | 23 | 08 | 00 | 43 | 13 | 00 | 63 | 02 | 00 |
| 4 | 04 | 00 | 24 | 09 | 00 | 44 | 14 | 00 | 64 | 04 | |
| 5 | 05 | 00 | 25 | 10 | 00 | 45 | 15 | 00 | 70 | 00 | 00 |
| 6 | 06 | 00 | 26 | 11 | 00 | 46 | 01 | 00 | 88 | 00 | 00 |
| 7 | 07 | 00 | 27 | 12 | 00 | 47 | 02 | 00 | 89 | 00 | 00 |
| 8 | 08 | 00 | 28 | 13 | 00 | 48 | 03 | 00 | 90 | 00 | 00 |
| 9 | 09 | 00 | 29 | 14 | 00 | 49 | 04 | 00 | 91 | 00 | 00 |
| 10 | 10 | 00 | 30 | 15 | 00 | 50 | 05 | 00 | 92 (DURESS) | 11 | 00 |
| 11 | 11 | 00 | 31 | 01 | 00 | 51 | 06 | 00 | 95 | 00 | 00 |
| 12 | 12 | 00 | 32 | 02 | 00 | 52 | 07 | 00 | 96 | 00 | 00 |
| 13 | 13 | 00 | 33 | 03 | 00 | 53 | 08 | 00 | 97 | 06 | 00 |
| 14 | 14 | 00 | 34 | 04 | 00 | 54 | 09 | 00 | 99 | 06 | 00 |
| 15 | 15 | 00 | 35 | 05 | 00 | 55 | 10 | 00 | ALARM RST. | 00 | 00 |
| 16 | 01 | 00 | 36 | 16 | 00 | 56 | 11 | 00 | TROUBLE | 00 | 00 |
| 17 | 02 | 00 | 37 | 17 | 00 | 57 | 12 | 00 | TRBLE. RST | 00 | 00 |
| 18 | 03 | 00 | 38 | 18 | 00 | 58 | 13 | 00 | BYPASS | 00 | 00 |
| 19 | 04 | 00 | 39 | 19 | 00 | 59 | 14 | 00 | BYP. RST. | 00 | 00 |
| 20 | 05 | 00 | 40 | 10 | 00 | 60 | 15 | 00 | | | |

## Zone Response Type Definitions

Each zone must be assigned a zone type, which defines the way in which the system responds to faults in that zone. There are three keypad-activated zones (panic keys; see note) for each partition, a polling loop supervision zone, and four RF supervisory zones, two for each RF receiver installed. Zone types are defined below.

### Type 00: Zone Not Used

Program with this zone type if the zone is not used.

### Type 01: Entry/Exit #1 Burglary

Provides entry delay whenever the zone is faulted and the system is armed in the AWAY or STAY mode. When the panel is armed in the INSTANT or MAXIMUM mode, no entry delay is provided. Exit delay begins whenever the control is armed, regardless of the arming mode selected. These delays are programmable.

Assign this zone type to zones that are used for primary entry to and exit from the facility.

### Type 02: Entry/Exit #2 Burglary

Provides a secondary entry delay, if the system is armed in the AWAY or STAY modes and the zone is faulted. When the panel is armed in the INSTANT or MAXIMUM mode, no entry delay is provided. Secondary exit delay begins whenever the control is armed, regardless of the arming mode selected. These delays are programmable.

Assign this zone type to zones that are used for entry and exit of the facility and require more time than the primary entry and exit point. Delay times for this zone type must be greater than those for zone type 01 (e.g., a garage, loading dock, or basement door).

### Type 03: Perimeter Burglary

Provides an instant alarm if the zone is faulted and the system is armed in the AWAY, STAY, INSTANT, or MAXIMUM mode.

Assign this zone type to all exterior door and window zones.

### Type 04: Interior, Follower

Provides a delayed alarm (using the programmed entry delay time) if an entry/exit zone is faulted first. Otherwise it produces an instant alarm. It is active when the system is armed in the AWAY or MAXIMUM mode, but the MAXIMUM mode eliminates the entry delay.

Zones programmed for Interior Follower zone are automatically bypassed when the panel is armed in the STAY or INSTANT mode.

Assign this zone type to a zone covering an area such as a foyer, lobby, or hallway through which one must pass upon entry or exit (to and from the keypad).

### Type 05: Trouble by Day/Alarm by Night

Provides an instant alarm if the zone is faulted and the system is armed in the AWAY, STAY, INSTANT, or MAXIMUM mode. During the disarmed state (day), the system annunciates a latched trouble sounding from the keypad (and a central station report, if desired).

Assign this zone type to a zone that contains a foil-protected door or window (such as in a store), or to a zone covering a sensitive area such as a stock room or drug supply room. It can also be used on a zone in an area where immediate notification of an entry is desired.

### Type 06: 24-Hour Silent Alarm

Sends a report to the central station but provides no keypad display or sounding. Assign this zone type to a zone containing an Emergency button.

### Type 07: 24-Hour Audible Alarm

Sends a report to the central station and provides an alarm sound at the keypad and an audible external alarm. Assign this zone type to a zone containing an Emergency button.

### Type 08: 24-Hour Auxiliary Alarm

Sends a report to central station and provides an alarm sound at the keypad only. **(No bell output is provided.)** Assign this zone type to a zone an Emergency button or one containing monitoring devices such as water sensors or temperature sensors.

### Type 09: Supervised Fire (Without Verification)

Provides a fire alarm on a short circuit and a trouble condition on open circuit. A fire alarm produces a pulsing of the bell output. A zone of this type is always active and cannot be bypassed.

### Type 10: Interior with Delay

Provides entry and exit delays (using the programmed entry and exit delay times) when armed in the AWAY mode. Provides only exit delay when armed in the MAXIMUM mode (no entry delay). Delay begins whenever sensors in this zone are violated, regardless of whether or not an entry/exit delay zone was tripped first.

Zones programmed for Interior with Delay are automatically bypassed when the panel is armed in the STAY or INSTANT mode.

Assign this zone type to a zone covering an area such as a foyer, lobby, or hallway through which one must pass upon entry or exit (to and from the keypad).

### Type 20: Arm-STAY (5800 Series devices only)

Causes the system to arm in the STAY mode when the zone is activated.

### Type 21: Arm-AWAY (5800 Series devices only)

Causes the system to arm in the AWAY mode when the zone is activated.

### Type 22: Disarm (5800 Series devices only)

Causes the system to disarm when the zone is activated.

### Type 23: No Alarm Response

Used on a zone when an output relay action is desired, but with no accompanying alarm (e.g., for access door).

---

**NOTE FOR PANIC KEYS:** Keypad panic zones share the same zone response type for both partitions, but panics may be individually enabled for each partition.

---

**IMPORTANT! FAULT ANNUNCIATION**

Polling loop and RF troubles (zones 88, 89, 90, 91, and 97) report as trouble conditions only, and as such, should be assigned zone type 05 if annunciation is desired. See *Polling Loop Supervision* and *RF System Operation and Supervision* in *SECTION 3 Installing the Control* for more information.

---

## Zone Input Type Definitions

Each zone must be assigned an input type, which defines the where the system will "look" for status of the zone (RF receiver, polling loop, etc.). Zone input types are defined below.

### Type 01 Hardwired (HW)

Reserved for the built-in hardwired zones 1-9.

### Type 03 Supervised RF (RF)

Select for 5800 Series RF transmitters that will be supervised for check-in signals. The transmitter must remain within the receiver's range.

### Type 04 Unsupervised RF (UR)

Select for 5800 Series RF transmitters that will not be supervised for check-in signals. The transmitter may therefore be carried off-premises.

### Type 05 Unsupervised Button RF (BR)

Select for 5800 Series RF transmitters specifically designed for this input type. Check the transmitter's instructions for proper programming of the input type. These transmitters send only fault signals. They do not send low-battery signals until they are activated. The transmitter may be carried off-premises.

### Type 06 Serial Number Polling Loop (SL)

Select for polling loop devices with a built-in serial number.

### Type 07 DIP Switch Loop (DP)

Select for polling loop devices that use DIP switches for programming the zone number of the device.

### Type 08 Dip Switch Polling Loop Right Loop (PS)

Select for the second loop of two-zone polling loop devices (e.g., 4190WH; 4278).

## Programming for 4100SM

- **1∗40 & 1∗41** Date and Time Set Report Codes
- **1∗70** Event Log Types (**1**=enable; **0**=disable
- **1∗71** 12/24-Hour Time Stamp (**0**=12 hr; **1**=24 hr)

## Programming for Access Control

A user can trigger an access point (i.e., door strike) for 2 seconds by entering User Code + [0].

To program the VISTA-40 for access control, perform the following steps:

| Step | Action |
|------|--------|
| 1 | Enter Relay Programming in the #93 Menu Mode. |
| 2 | Program the relay type as 1, or 2. |
| 3 | For type 1, program the ECP address and relay number. |
| 4 | For type 2, program the house and unit codes. |
| 5 | Program the relay number in field 1∗76 (partition-specific). |

*See Relay Programming in the Programming Guide for a detailed explanation.*

# *Data Field Descriptions*

• • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • •

## About Data Field Programming

The following pages list this control's data fields in numerical order. Field numbers are listed in the left column, followed by a "Title and Data Entries column, which lists the valid entries for each field. Experienced installers can simply follow this column when programming the data fields. The "Explanation" column provides explanatory information and special notes where applicable.

**NOTE:** Refer to the *Programming Guide* for the default values. They are not listed in this section.

Use the *Programming Guide* to record the data for this installation.

## Programming Data Fields

Data field programming involves making the appropriate entries for each of the data fields. Start Data Field programming by entering the installer code + 8 + 0 + 0.

| FIELD | TITLE and DATA ENTRIES | EXPLANATION |
|---|---|---|
| **\*00** | **Installer Code**<br>Enter 4 digits, **0-9** | The Installer Code is a 4-digit code reserved for installation company use.<br>This is the only code that can be used to enter the Program Mode from the keypad. This code cannot be used to disarm the system if it isn't used to arm the system.  This code cannot be used to re-enter Program Mode if Program Mode is exited by the \*98 command. |
| **\*02** | **Response Types for Zones 01–08** | Skip this field. Use #93 Menu Mode, Zone Programming to program the response types. Refer to the *Programming Guide* for details. |
| **\*03** | **Response Types for Zones 09–16** | Skip this field. Use #93 Menu Mode, Zone Programming to program the response types. Refer to the *Programming Guide* for details. |
| **\*04** | **Response Types for Zones 17–24** | Skip this field. Use #93 Menu Mode, Zone Programming to program the response types. Refer to the *Programming Guide* for details. |
| **\*05** | **Response Types for Zones 25–27, 97, 95, 96, and 99** | Skip this field. Use #93 Menu Mode, Zone Programming to program the response types. Refer to the *Programming Guide* for details. |
| **\*09** | **Entry Delay #1 (partition-specific)**<br>Enter **02-15** multiplied by 15 seconds.<br>**00** = no delay. | Entry delay defines the delay time that allows users to re-enter the premises through a door that has been programmed as an entry delay door and disarm the system without sounding an alarm. The system must be disarmed within this period or an alarm will occur.<br>**NOTE:** The delay may not exceed 45 seconds for UL installations. |
| **\*10** | **Exit Delay #1 (partition-specific)**<br>Enter **03-15** multiplied by 15 seconds.<br>**00** = no delay. | Exit delay defines the delay period that allows users to leave the premises through a door that has been programmed as an entry/exit delay door after arming the system without setting off the alarm. |
| **\*11** | **Entry Delay #2 (partition-specific)**<br>Enter **02-15** multiplied by 15 seconds.<br>**00** = no delay. | Entry Delay #2 is used for a secondary door requiring a longer delay than those assigned to Entry Delay #1.<br>**NOTE:** The delay may not exceed 45 seconds for UL installations. |

| FIELD | TITLE and DATA ENTRIES | EXPLANATION |
|---|---|---|
| **\*12** | **Exit Delay #2 (partition-specific)**<br>Enter **03-15** multiplied by 15 seconds.<br>**00** = no delay. | Exit Delay #2 is used for a secondary door requiring a longer delay than those assigned to Exit Delay #1.<br>**NOTE:** The delay may not exceed 60 seconds for UL installations. |
| **\*13** | **Alarm Sounder Duration (partition-specific)**<br>Enter **01-15** multiplied by 2 minutes.<br>**00** = no timeout. | Defines the length of time the Bell Output and the keypad's sounder will sound for all audible alarms.<br>Must be minimum 16 minutes for UL Commercial Burglary installations. |
| **\*14** | **Zone 9 Fast/Slow Response**<br>**0** = slow 350ms<br>**1** = fast 10ms | Select the response time for devices connected to zone 9. |
| **\*15** | **Keyswitch Assignment**<br>Enter **1-2** partition keyswitch is being used.<br>Enter **0** if the keyswitch is not used. | The keyswitch requires the use of zone 7 wired loop (zone 7 is no longer available as protection zone). The fire and panic alarm voltage triggers (J7) automatically become ARMING and READY status outputs for the Keyswitch LEDs.<br>Openings/closing report as user "0" if enabled in field \*40. |
| **\*16** | **Confirmation of Arming Ding (partition-specific)**<br>**0** = disable<br>**1** = enable | If enabled, produces ½-second external alarm sounding ("ding") at the end of exit delay (or after kissoff from the central station, if sending closing reports).<br>Must be 1 for UL installations. |
| **\*17** | **AC Loss Keypad Sounding**<br>**0** = disable<br>**1** = enable | If enabled, sounding at the keypad (rapid beeping) occurs when AC power is lost (sounding occurs about 2 minutes after actual AC loss). |
| **\*19** | **Randomize AC Loss Report**<br>**0** = disable<br>**1** = enable | If enabled, randomizes AC loss reporting between 10 and 40 min. after an actual AC loss.<br>If disabled, AC loss reporting about 2 minutes after actual AC loss.<br>Selecting this option helps prevent an overload of AC loss messages at the central station during a community blackout. |
| **\*20** | **VIP Module Phone Code**<br>**1-9** = first digit of access code<br>**\*** or **#** = second digit of access code (enter # +11 for "\*", or # +12 for "#")<br>To disable enter **00** for the 1<sup>st</sup> digit | If a 4285/4286 Voice Module is being used, enter the 2-digit phone code used to access the system.<br>Must be disabled for UL installations. |
| **\*21** | **Prevent Fire Timeout**<br>**0** = disable (timeout)<br>**1** = enable (no timeout) | If enabled, there is no timeout of the alarm sounder duration for all fire zones, regardless of partition, so that fire sounding continues until the system is reset.<br>If disabled, (timeout) the normal burglary sounder duration (field \*13) applies to fire alarms. |
| **\*22** | **Keypad Panic Enables (partition-specific)**<br>**0** = disable<br>**1** = enable | If enabled, the keypad panics (zones 995, 996, and 999) may be used in this partition. There are 3 entries in this field, one for each panic. |
| **\*23** | **Multiple Alarms (partition-specific)**<br>**0** = disable<br>**1** = enable | If enabled, allows more than one alarm sounding for a given zone during an armed period.<br>**NOTE:** that multiple alarm soundings will not occur more frequently than allowed by the programmed alarm sounder duration. This has no impact on the number of communication messages transmitted.<br>Must be 1 for UL installations. |

| FIELD | TITLE and DATA ENTRIES | EXPLANATION |
|---|---|---|
| **\*24** | **Ignore Expansion Zone Tamper**<br>**0** = disable (tamper detection)<br>**1** = enable (no tamper detection) | If disabled, the system monitors the tampers on expansion zones.<br>**NOTE:** Only applicable to certain polling loop sensors with tamper switches or 5800 Series transmitters.<br>Must be **0** for UL installations. |
| **\*25** | **Burglary Trigger for Response Type 8**<br>**0** = disable<br>**1** = enable | If enabled, allows triggering of Output 3 (pin 7) of the J7 header to include zone response type 8 (24-hr. auxiliary). |
| **\*26** | **Intelligent Test Report**<br>**0** = disable<br>**1** = enable | If enabled, no test report is sent if any other type of report was sent since the last test report.<br>If disabled, test reports are sent at the set intervals, regardless of whether or not any other report has been sent.<br>Must be **0** for UL applications. |
| **\*27** | **Test Report Interval**<br>Enter **001-199** for the test report interval in hours.<br>Enter **000** for test reporting. | If a test report is desired, enter a test code in field \*81 and \*82. Set first test report time in field \*83.<br>Maximum Test report interval is 024 for UL installations. |
| **\*28** | **Power-Up in Previous State**<br>**0** = disable<br>**1** = enable | If enabled, the system, upon power-up, reverts to its status prior to a complete power loss.<br>If disabled, the system always powers up in a disarmed state.<br>**NOTE:** Neither authority level 0 nor 5 can be used to disarm the system if the control powers up armed.<br>Must be **1** for UL applications. |
| **\*29** | **Quick Arm (partition-specific)**<br>**0** = disable<br>**1** = enable | If enabled, allows arming of the burglary system in AWAY, STAY, INSTANT, or MAXIMUM mode by using the [#] key instead of the user code.<br>**NOTES:**<br>When armed, the system reports closing as User 0 if Open/Close reporting for User #2 (typically a Master level user) was enabled for a given partition.<br>If Quick Arm is used, the Installer Code and Authority Level 5 codes cannot disarm the system. |
| **\*30** | **TouchTone or Rotary Dial**<br>**0** = disable<br>**1** = enable | Select the dialing method for the system |

> ✓ If you select TouchTone, make sure the subscriber has requested and is paying for TouchTone service.  Note that whether or not TouchTone dialing for call placement is permitted, communication by the use of DTMF signaling (ADEMCO High Speed) will still take place. See field 1\*33 for TouchTone w/Rotary backup

| FIELD | TITLE and DATA ENTRIES | EXPLANATION |
|---|---|---|
| **\*31** | **PABX Access Code**<br>Enter **00-09; B-F (11-15)** | This field is used to enter up to four 2-digit numbers representing the prefix needed to obtain an outside telco line.  If not required, enter nothing and proceed to next field. |
| **\*32** | **Primary Subscriber's Account Number (partition-specific)**<br>Enter **00-09; B-F (11-15)** | Enter a 3- or 4-digit (depending on report format) primary subscriber account number. Each number requires a 2-digit entry so as to allow entry of hexadecimal digits (B-F). If a 3-digit account number is to be used, enter data only in the first 3 locations, and enter \* in the fourth location. |

| FIELD | TITLE and DATA ENTRIES | EXPLANATION |
|---|---|---|
| **\*33** | **Primary Phone Number** <br> Enter **0-9; #11** for \*, **#12** for **#, #13** for a 2-second pause. | Enter the primary central station phone number, up to 17 digits. This is the phone number the control will use to transmit Alarm and status messages to the central station.  Do not fill unused spaces. <br> **NOTE:** Backup reporting is automatic only if a secondary phone number is entered. |
| **\*34** | **Secondary Phone Number** <br> Enter **0-9; #11** for \*, **#12** for **#, #13** for a 2-second pause. | Enter the secondary phone number, up to 17 digits. The secondary phone number is used if communication on the primary number is unsuccessful, or if split/dual reporting is desired.  Do not fill unused spaces. <br> **NOTE:** If this field is programmed, a secondary subscriber account number (field \*90) *must* also be programmed. |
| **\*35** | **Download Phone Number** <br> Enter **0-9; #11** for \*, **#12** for **#, #13** for a 2-second pause. | Enter the downloading phone number, up to 17 digits. Do not fill unused spaces. <br> **NOTE:** This field is applicable only if downloading is utilized. |
| **\*36** | **Download ID Number** <br> Make entries as 2-digit numbers as follows: <br> 00=0  01=1  02=2  03=3  04=4  05=5 <br> 06=6  07=7  08=8  09=9  10=A  11=B <br> 12=C  13=D  14=E  15=F | Enter eight digits. <br> **NOTE:** This field is applicable only if downloading is utilized. |
| **\*37** | **Download Command Enables** <br> **0** = disable <br> **1** = enable | Enabling a function means that you are able to perform that function via the Compass Downloading software. <br> Functions are as follows: Dialer Shutdown; System Shutdown; Not Used; Remote Bypass; Remote Disarm; Remote Arm; Upload Program; Download Program. <br> For UL installations, all entries must be **0**. |
| **\*38** | **Prevent Zone XX Bypass (partition-specific)** <br> Enter a zone number **(01-64)**. <br> Enter **00** if all zones can be bypassed. | Enter two digits for zone that cannot be bypassed by the user. <br> **NOTES:** <br> The actions manual bypass, and STAY/INSTANT arming modes cannot bypass any zone programmed in this field. |
| **\*39** | **Enable Open/Close Report for Installer Code (partition-specific)** <br> **0** = disable <br> **1** = enable | If enabled, whenever the Installer Code is used to arm or disarm the partition, an open/close report is sent to the central station. |
| **\*40** | **Enable Open/Close report for Keyswitch** <br> **0** = disable <br> **1** = enable | If enabled, whenever the keyswitch is used to arm or disarm the partition, an open/close report is sent to the central station. |
| **\*41** | **Normally Closed or EOLR (Zones 2-8)** <br> **0** = disable <br> **1** = enable | If disabled, end-of-line resistors must be used on zones 2-8. <br> If enabled end-of-line resistors cannot be used and only **normally closed** devices must be used. <br> Must be **0** for UL installations. |
| **\*42** | **Dial Tone Pause** <br> Enter the wait time for dial tone detection: <br> **0** = 5 seconds; **1** = 11 seconds; **2** = 30 seconds. | Enter the time the system waits for dial tone before dialing.  Applies if true dial tone is not selected in field \*43. <br> Must be **0** for UL installations. |

| FIELD | TITLE and DATA ENTRIES | EXPLANATION |
|---|---|---|
| **\*43** | **Dial Tone Detection**<br>**0** = disable<br>**1** = enable | If enabled, the system waits for true dial tone. If no dial tone is detected, control dials at end of pause programmed in field \*42.<br>If disabled, the system pauses for seconds entered in field \*42, then dials.<br>**NOTE:** Disabling may be necessary in high-noise environment telco networks where noise can be confused with dial tone, resulting in premature dialing. |
| **\*44** | **Ring Detection Count**<br>Enter **00** to disable ring detection.<br>Enter **01-14** for ring counts of 1-14.<br>Enter **15** to select Answering Machine Defeat Mode | Only applicable if using a 4285/4286 VIP Module and/or if station-initiated downloading will be used.<br>**NOTES:**<br>Do not enter 00 if a 4285/4286 is installed.<br>In the Answering Machine Mode, the caller should let the phone ring once, then hang up, and call again within 30 seconds. The system, upon hearing one ring followed by nothing, does not answer the first call, but readies itself to pick up on the first ring of the next incoming call that is received within 30 seconds (i.e., the downloader calling again).<br>Must be **00** for UL installations. |
| **\*45** | **Primary Format**<br>**0**=Low Speed; **1**=Contact ID; **2**=ADEMCO High Speed; **3**=ADEMCO Express | Enter the reporting format for the primary telephone number. |
| **\*46** | **Low Speed Format (Primary)**<br>**0** = ADEMCO Low Speed<br>**1** = Sescoa/Radionics | Enter the low speed format for the primary telephone number. |
| **\*47** | **Secondary Format**<br>**0**=Low Speed; **1**=Contact ID; **2**=ADEMCO High Speed; **3**=ADEMCO Express | Enter the reporting format for the secondary telephone number. |
| **\*48** | **Low Speed Format (Secondary)**<br>**0** = ADEMCO Low Speed<br>**1** = Sescoa/Radionics | Enter the low speed format for the secondary telephone number. |
| **\*49** | **Checksum Verification**<br>Enter 2 digits, one for the primary and one for the secondary.<br>**0** = disable<br>**1** = enable | If enabled, the system for either or both primary/secondary formats sends a verification digit to validate the message at the receiver without having to send two message rounds. Selection is valid for 3+1, 4+1, and 4+2 reports. |
| **\*50** | **Sescoa/Radionics Select**<br>**0** = disable<br>**1** = enable | If disabled, selects Radionics, which uses hexadecimal 0-9, B-F reporting.<br>If enabled, selects Sescoa, which uses only numeric reporting (0-9).<br>**NOTE:** The selection applies to both primary and secondary phone numbers. |
| **\*51** | **Dual Reporting**<br>**0** = disable<br>**1** = enable | If enabled, all reports are to be sent to both primary and secondary phone numbers.<br>**NOTE:** If used with Split Reporting option 1 (1\*34), alarms go to both primary and secondary numbers, while all other reports go to secondary only. If used with Split Reporting option 2, alarms go to both lines, open/close and test messages go to secondary only, while all other reports go to primary. |

| FIELD | TITLE and DATA ENTRIES | EXPLANATION |
|---|---|---|
| **\*52** | **Standard/Expanded Reporting Primary**<br>**0** = disable<br>**1** = enable | This field has six entries as follows: Alarm, Restore, Bypass, Trouble, Open/Close, Low Battery. If enabled, expanded reports are sent to the primary phone number if low speed format is selected in field \*45.<br>**NOTE:** Expanded overrides 4+2 format. |
| **\*53** | **Standard/Expanded Reporting Secondary**<br>**0** = disable<br>**1** = enable | This field has six entries as follows: Alarm, Restore, Bypass, Trouble, Open/Close, Low Battery. If enabled, expanded reports are sent to the secondary phone number if low speed format is selected in field \*47.<br>**NOTE:** Expanded overrides 4+2 format. |
| **\*54** | **Alarm Code for Zones 01–08** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **\*55** | **ID Digit for Zones 01–08** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **\*56** | **Alarm Code for Zones 09–16** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **\*57** | **ID Digit for Zones 09–16** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **\*58** | **Supervisory and Restore Codes for Zones 01–16**<br>Enter **00-15**. | This field has five two-digit entries as follows: Alarm Restore, Trouble, Trouble Restore, Bypass, and Bypass Restore. Enter the report code **01-15** for each type of report. Enter **00** for no report.<br>**NOTE:** Each report code is the same for zones 01-16. When using 4+2 format, the system uses the ID digit of the zone (fields \*55 and \*57). |
| **\*59** | **Alarm Code for Zones 17–24** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **\*60** | **ID Digit for Zones 17–24** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **\*61** | **Alarm Code for Zones 25–32** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **\*62** | **ID Digit for Zones 25–32** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **\*63** | **Supervisory and Restore Codes for Zones 17–32**<br>Enter **00-15**. | This field has five two-digit entries as follows: Alarm Restore, Trouble, Trouble Restore, Bypass, and Bypass Restore. Enter the report code **01-15** for each type of report. Enter **00** for no report.<br>**NOTE:** Each report code is the same for zones 17-32. When using 4+2 format, the system uses the ID digit of the zone (fields \*60 and \*62). |
| **\*64** | **Alarm Code for Zones 33–40** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **\*65** | **ID Digit for Zones 33–40** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **\*66** | **Alarm Code for Zones 41–48** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **\*67** | **ID Digit for Zones 41–48** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |

| FIELD | TITLE and DATA ENTRIES | EXPLANATION |
|---|---|---|
| **\*68** | **Supervisory and Restore Codes for Zones 33–48**<br>Enter **00-15**. | This field has five two-digit entries as follows: Alarm Restore, Trouble, Trouble Restore, Bypass, and Bypass Restore. Enter the report code **01-15** for each type of report. Enter **00** for no report.<br>**NOTE:** Each report code is the same for zones 33-48. When using 4+2 format, the system uses the ID digit of the zone (fields \*65 and \*67). |
| **\*69** | **Alarm Code for Zones 49–56** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **\*70** | **ID Digit for Zones 49–56** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **\*71** | **Alarm Code for Zones 57–64** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **\*72** | **ID Digit for Zones 57–64** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **\*73** | **Supervisory and Restore Codes for Zones 49–64**<br>Enter **00-15**. | This field has five two-digit entries as follows: Alarm Restore, Trouble, Trouble Restore, Bypass, and Bypass Restore. Enter the report code **01-15** for each type of report. Enter **00** for no report.<br>**NOTE:** Each report code is the same for zones 49-64. When using 4+2 format, the system uses the ID digit of the zone (fields \*70 and \*72). |
| **\*74** | **Alarm Code for Zones 87–88** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **\*75** | **ID Digit for Zones 87–88** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **\*76** | **Alarm Code for Zones 89–99** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **\*77** | **ID Digit for Zones 89–99** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **\*78** | **Supervisory and Restore Codes for Zones 87–99**<br>Enter **00-15**. | This field has five two-digit entries as follows: Alarm Restore, Trouble, Trouble Restore, Bypass, and Bypass Restore. Enter the report code **01-15** for each type of report. Enter **00** for no report.<br>**NOTE:** Each report code is the same for zones 17-32. When using 4+2 format, the system uses the ID digit of the zone (fields \*75 and \*77). |
| **\*79** | **Zone Type Restores for Zone Types 1-8**<br>**0** = disable<br>**1** = enable | This field has eight entries, one for each zone type. Select the zone types that will send Restore reports. |
| **\*80** | **Zone Type Restores for Zone Types 9 and 10**<br>**0** = disable<br>**1** = enable | This field has two entries, one for each zone type. Select the zone types that will send Restore reports. |
| **\*81** | **Non-Alarm Report Codes (First Digit**<br>Enter **00-15**. | This field has ten two-digit entries as follows: Close, Open Low Battery, Low Battery Restore, AC Loss, AC Restore, Test, Power-up, Cancel, and Program Tamper. Enter the report code **01-15** for each type of report. Enter **00** for no report. |

| FIELD | TITLE and DATA ENTRIES | EXPLANATION |
|---|---|---|
| **\*82** | **Non-Alarm Report Codes (Second Digit**<br>Enter **00-15**. | This field has ten two-digit entries as follows: Close, Open, Low Battery, Low Battery Restore, AC Loss, AC Restore, Test, Power-up, Cancel, and Program Tamper. Enter the report code **01-15** for each type of report. Enter **00** for no report. |
| **\*83** | **First Test Report Time**<br>Enter **00-07** the for day (01 = Monday)<br>Enter **00-23** for the hour<br>Enter **00-59** for the minutes | Enter the day and time that the first Test report shall be transmitted. Enter **00** in all locations if the Test report is to be sent immediately upon exiting. Enter **00** in the day location if the report is to be sent at the next occurrence of the time that is set. |
| **\*84** | **Swinger Suppression (partition-specific)**<br>Enter **01-15**.<br>Enter **00** for unlimited reports | This option limits the number of messages (alarms or troubles) sent for a specific zone in an armed period.<br>Must be **00** for UL installations. |
| **\*85** | **Enable Dialer Reports for Panics & Duress (partition-specific)**<br>**0** = disable<br>**1** = enable | This field has four entries as follows: Zone 95, 96, 99, and Duress. Enable for each partition that the panics and duress reporting is desired.<br>**NOTE:** Non-zero report code must be assigned to zone 92 to enable Duress reporting. |
| **\*86** | **4208 Module Zone Assignment**<br>**0** = other configurations<br>**1** = 10-17 only | Entering **1** allows a single 4208 to be set to zone numbers 10-17, but precludes the use of any other polling loop devices.<br>Entering **0** allows all other configurations, such as no 4208, more than one 4208, or other polling loop expansion present. |

4208 Zone #s available when:

| *86 = 1 | *86 = 0 |
|---|---|
| 10-17 | 10-16 |
| Precludes use of any other polling loop expansion | 17-24 |
| | 25-32 |
| | 33-40 |
| | 41-48 |
| | 49-56 |
| | 57-64 |

When *86 = 1 4208 DIP switches must be set to:

| With word OFF | With word ON |
|---|---|
| sw 2 = ON | sw 2 = OFF |
| sw 3 = ON | sw 3 = OFF |
| sw 4 = ON | sw 4 = OFF |
| sw 5 = OFF | sw 5 = ON |

| FIELD | TITLE and DATA ENTRIES | EXPLANATION |
|---|---|---|
| **\*87** | **Entry Warning (partition-specific)**<br>**0** = 3 short beeps<br>**1** = slow continuous beeps | Select the type of warning for the entry delay period. |
| **\*88** | **Burglary Alarm Communicator Delay (partition-specific)**<br>**0** = no delay<br>**1** = 16-second delay | Select the delay, if any, for burglary alarm communications.<br>Must be **0** for UL installations. |
| **\*89** | **Restore Report Timing**<br>**0** = instant<br>**1** = after bell timeout<br>**2** = when system is disarmed | Select the time when restore reports are sent after an alarm.<br>Must be **2** for UL installations. |
| **\*90** | **Secondary Subscriber Account Number (partition-specific)**<br>Enter **00-09; B-F (11-15)** | Enter a 3- or 4-digit (depending on report format) secondary subscriber account number. Each number requires a 2-digit entry so as to allow entry of hexadecimal digits (B-F). If a 3-digit account number is to be used, enter data only in the first 3 locations, and enter * in the fourth location.<br>**NOTE:** This field *must* be programmed if a secondary phone number is used (field *34). This account number can be the same as the primary account number. |

| FIELD | TITLE and DATA ENTRIES | EXPLANATION |
|---|---|---|
| **1*01** | **Response Types for Zones 28–32** | Skip this field. Use #93 Menu Mode, Zone Programming to program the response types. Refer to the *Programming Guide* for details. |
| **1*02** | **Response Types for Zones 33–40** | Skip this field. Use #93 Menu Mode, Zone Programming to program the response types. Refer to the *Programming Guide* for details. |
| **1*03** | **Response Types for Zones 41–48** | Skip this field. Use #93 Menu Mode, Zone Programming to program the response types. Refer to the *Programming Guide* for details. |
| **1*04** | **Response Types for Zones 49–56** | Skip this field. Use #93 Menu Mode, Zone Programming to program the response types. Refer to the *Programming Guide* for details. |
| **1*05** | **Response Types for Zones 57–64** | Skip this field. Use #93 Menu Mode, Zone Programming to program the response types. Refer to the *Programming Guide* for details. |
| **1*09** | **Response Types for Zones 87–91** | Skip this field. Use #93 Menu Mode, Zone Programming to program the response types. Refer to the *Programming Guide* for details. |
| **1*28** | **RF Transmitter Low Battery Sound**<br>**0** = disarmed state only<br>**1** = both armed and disarmed states | Select when the RF transmitter low-battery condition should display and audible beep annunciate on the keypad.<br>Must be **1** for UL installations. |
| **1*29** | **RF Transmitter Low Battery Reporting**<br>**0** = disable<br>**1** = enable | If enabled, the system sends a Trouble message for RF transmitter low-battery condition to the central station.<br>**NOTE:** The Trouble message will be sent for a transmitter supervision failure, independent of this selection.<br>Must be **1** for UL. |
| **1*30** | **RF Receiver Supervision Check-in Interval**<br>Enter **02-15** times 2 hours (4-30 hours).<br>**00** = disable receiver supervision. | Select the check-in monitoring interval for the RF receiver(s).<br>Failure of a receiver to receive any RF signal within the time entered results in the activation of the response type programmed for zone 990 for the first receiver and zone 988 for the second receiver and their related communication reports.<br>Maximum is 2 (4 hr) for UL installations. |
| **1*31** | **RF Transmitter Check-in Interval**<br>Enter **02-15** times 2 hours (4-30 hours).<br>**00** = disable transmitter supervision. | Select the check-in monitoring interval for the RF transmitters.<br>Failure of an individual transmitter to send a supervision signal within the time entered will result in a trouble response and related communication report.<br>Maximum is 2 (4 hr) for UL. |
| **1*33** | **TouchTone with Rotary Backup**<br>**0** = disable<br>**1** = enable | If enabled, the system reverts to rotary dialing if communicator is not successful in dialing using TouchTone DTMF on first attempt. |
| **1*34** | **Communicator Split Reporting**<br>**0** = Split Reporting disabled<br>**1** = Alarm, Alarm Restore, and Cancel reports to primary, all others to secondary<br>**2** = Open/Close and Test reports to secondary, all other reports to primary | Select the type of split reporting for system communication.<br>**NOTE:** See *51 for split/dual reporting combinations. |
| **1*35** | **Alarm Code for Zones 65–72** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |

| FIELD | TITLE and DATA ENTRIES | EXPLANATION |
|---|---|---|
| **1*36** | **ID Digit for Zones 65–72** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **1*37** | **Alarm Code for Zones 73–80** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **1*38** | **ID Digit for Zones 73–80** | Skip this field. Use #93 Menu Mode, Zone Programming to program the report codes. Refer to the *Programming Guide* for details. |
| **1*39** | **Supervisory and Restore Codes for Zones 65–80**<br>Enter **00-15**. | This field has five two-digit entries as follows: Alarm Restore, Trouble, Trouble Restore, Bypass, and Bypass Restore. Enter the report code **01-15** for each type of report. Enter **00** for no report.<br>**NOTE:** Each report code is the same for zones 17-32. When using 4+2 format, the system uses the ID digit of the zone (fields *75 and *77). |
| **1*40** | **Arm Stay and Time Set Report Codes (First Digit)**<br>Enter **00-15**. | This field has two two-digit entries as follows: Arm STAY, and Time/Date set or Event Log Reset. Enter the report code **01-15** for each type of report. Enter **00** for no report. |
| **1*41** | **Arm Stay and Time Set Report Codes (Second Digit)**<br>Enter **00-15**. | This field has two two-digit entries as follows: Arm STAY, and Time/Date set or Event Log Reset. Enter the report code **01-15** for each type of report. Enter **00** for no report. |
| **1*43** | **Permanent Keypad Display Backlighting (partition-specific)**<br>**0** = disable<br>**1** = enable | If enabled, backlighting for the keypad display remains on at all times. Otherwise the backlighting comes on when a key is pressed.<br>**NOTE:** When a key is pressed, display backlighting turns on for **all** keypads in that partition. |
| **1*44** | **Wireless Keypad Tamper Detect**<br>**0** = disable<br>**1** = enable | If enabled, when more than 40 key depressions are received without a valid sequence (arm, disarm, etc.), the control panel disables the wireless keypad. The inhibit is removed once a valid key sequence is received from a wired keypad. |
| **1*45** | **Exit Delay Sounding (partition-specific)**<br>**0** = disable<br>**1** = enable | If enabled, the system produces slow beeping from the keypads during exit delay and reverts to rapid beeping during the last 10 seconds of the exit delay.<br>**NOTE:** The duration of the beeping is the programmed value of field *10 regardless of which entry/exit zone is used to exit the premises. |
| **1*46** | **Auxiliary Output Mode**<br>**0** = ground start output.<br>**1** = open/close trigger.<br>**2** = keypad sounds at an auxiliary sounder.<br>**3** = AAV module. | Select the mode for output 1 on the J7 triggers.<br>**NOTES:**<br>Only one of the options may be active within the system.<br>Open/close trigger is produced only when both partitions are armed.<br>Keypad sounds apply only to the partition enabled in field *15. |
| **1*47** | **Chime on External Siren (partition-specific)**<br>**0** = disable<br>**1** = enable | If enabled, the system produces chime annunciation on the external alarm sounder. |
| **1*48** | **Wireless Keypad Assignment**<br>**0** = none<br>**1-8** = partition number | Select the partition in which RF keypad is used. |

| FIELD | TITLE and DATA ENTRIES | EXPLANATION |
|---|---|---|
| **1∗49** | **Suppress Transmitter Supervision Sound**<br>**0** = disable<br>**1** = enable | If enabled, no trouble soundings occur on the keypad for transmitter check-in failures.<br>Must be **0** for UL. |
| **1∗52** | **Send Cancel If Alarm + Off (partition-specific)**<br>**0** = disable<br>**1** = enable | If enabled, Cancel reports are sent when the system is disarmed after an alarm, regardless of how much time has gone by.<br>If disabled, Cancel reports are sent within Bell Timeout period only.<br>**NOTE:** This option must be enabled so Cancel reports are always sent. |
| **1∗53** | **Disable Download Callback**<br>**0** = callback required<br>**1** = no callback required | Select whether a callback from the control panel is required for downloading.<br>Must be **0** for UL installations. |
| **1∗57** | **Enable 5800 RF Button Global Arm**<br>**0** = disable<br>**1** = enable | If enabled, the system arms/disarms in accordance with the button's user's global arming settings. |
| **1∗58** | **Enable 5800 RF Button Force Arm**<br>**0** = disable<br>**1** = enable | If enabled, allows the RF button user to force a bypass of all faulted zones when arming the system.<br>**NOTE:** When attempting to arm the system, the keypad beeps once after the button is pressed if any faulted zones are present. The user should then press the button again within 4 seconds to force-bypass those zones and arm the system. |
| **1∗60** | **Zone 5 Audio Alarm Verification**<br>**0** = disable<br>**1** = enable | If enabled, zone 5 is used for 2-way audio (AAV).<br>Must be **0** for UL installations.<br>**NOTE:** Zone 5 cannot be used as protection zone. |
| **1∗70** | **Event Log Types**<br>**0** = disable<br>**1** = enable | This field has five entries as follows: Alarm, Check, Bypass, Open/Close, and System. If enabled, the system logs those events into the event log. |
| **1∗71** | **12/24 Hour Type Stamp Format**<br>**0** = 12-hour<br>**1** = 24-hour | Select the type of time stamping for the event log. |
| **1∗74** | **Relay Timeout XXX Minutes**<br>Enter **000-127** times 2 minutes (000-254). | This is used for *Relay Programming* in the *#93 Menu Mode Programming* relay command "56." |
| **1∗75** | **Relay Timeout YYY Seconds**<br>Enter **000-127** seconds. | This is used for *Relay Programming* in the *#93 Menu Mode Programming* command "57." |
| **1∗76** | **Access Control Relay (partition-specific)**<br>**01-08** = relay number<br>**00** = relay not used. | If enabled, the assigned relay closes for 2 seconds when the user enters his code and presses 0.<br>Must be **00** for UL installations. |
| **2∗00** | **Number of Partitions**<br>Enter **1-2**. | Enter the number of partitions used in the system. |
| **2∗01** | **Daylight Saving Time Start/End Month**<br>**0** = disable<br>**1** = enable | Enter the months (**00-12**) in which daylight saving time starts and ends.<br>Enter **00, 00** if daylight saving time does not apply to the user's region.<br>Standard setting for U.S. is 04,10. |

| FIELD | TITLE and DATA ENTRIES | EXPLANATION |
|---|---|---|
| **2*02** | **Daylight Saving Time Start/End Weekend**<br>**0** = disable<br>**1** = enable | Enter the start and end weekends for daylight saving time as follows: 1=first; 2=second; 3=third; 4=fourth; 5=last; 6=next to last; 7=third from last.  Standard setting for U.S. is 1,5. |
| **2*17** | **Number of Codes per Partition**<br>Enter **01-69** | This field has two 2-digit entries. Enter the number user codes for each partition. The total number of user codes cannot exceed 70 for the system. Enter 01 for an unused partition.<br>**NOTE:** The installer code is automatically assigned to each partition regardless of whether that partition has been enabled. |
| **2*18** | **Enable GOTO for this Partition (partition-specific)**<br>**0** = disable<br>**1** = enable | If enabled, this partition can be accessed from another partition's keypad using the GOTO command. |
| **2*19** | **Use Partition Descriptor**<br>**0** = disable<br>**1** = enable | If enabled, the normal keypad display will include a partition number and four-digit descriptor. |
| **2*20** | **Enable J7 Triggers for Partition (partition-specific)**<br>**0** = disable<br>**1** = enable | If enabled, the J7 triggers function for this partition. |
| **2*21** | **Supervision Pulses for LRR**<br>**0** = disable<br>**1** = enable | There are three entries in this field as follows: Fire, Burglary/Audible Panic, Silent Panic/Duress.<br>If enabled, causes the control to send periodic short pulses on the J7 radio triggers to the LRR. The LRR uses these pulses to determine that its connection to the control is still intact.<br>Must be **1** for UL installations. |

# *Downloading Primer*

***(Remote Downloading is not a UL Listed feature)***

● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●

## General Information

Downloading allows the operator to remotely access, program, and control the security system over normal telephone lines.  Anything that can be done directly from the keypad can be done remotely, using the COMPASS downloading software.  To communicate with the control panel, the following is required:

1.  IBM PC-compatible 486 33MHz PC or better with 30 MB of available hard disk space and at least 8MB of RAM (12MB is preferred). Windows 3.X, Windows 95, 98, or Windows NT.

2.  One of the following modems:

    *   ADEMCO CIA

    *   Hayes Smartmodem 1200 (external: level 1.2 or higher; internal: level 1.1 or higher)

    *   Hayes Optima 24 + Fax 96 external

    *   Hayes Optima 336

    *   BizComp Intellimodem 1200 w/volume

    *   BizComp Intellimodem 2400

    *Other brands are not compatible, even if claimed to be 100% compatible.*

3.  COMPASS DOWNLOADING software available on CD ROM with a complete User's Manual.  It may also be downloaded from the Honeywell web page. The web address is www.honeywell.com/security.

> Internal modems must have a 4-position DIP switch.  Modems with a 6-position DIP switch will not work.

### Access Security

The following four levels of protection guard the control against compromise while it is being accessed from a remote location:

1.  Security code handshake: The subscriber's account number as well as an 8-digit ID number (known only to the office) must be matched between the control and computer.

2.  Hang-up and callback: The control panel "hangs up" and calls the computer back at the pre-programmed number only if the security codes match.

3.  Data encryption: All data that is exchanged between the computer and control is encrypted to reduce the possibility of anyone "tapping" the line and corrupting data.

4.  Operator access levels: Operators may be assigned various levels of access to the downloader, each having its own log-on code.  The access levels allow the operators read/write capabilities of the customers' account information. For a detailed explanation of the access levels, see the downloading software User Manual.

**NOTES:**

*   Each time the control panel is accessed successfully, a Callback Requested report is sent to the central station, if Opening reports are programmed.

*   When the system is downloading, the keypad displays "MODEM COMM."

*   After each download or save, an automatic time stamp is done, to indicate the last download (or save) and the operator ID number.

*   A complete hard copy of each individual account can be obtained by connecting a printer to the computer. Refer to your computer Owner's Manual or contact your dealer for printer recommendations.

## Getting On-Line with a Control Panel

At the protected premises, the control panel must be connected to the existing telephone line (refer to *SECTION 3: Installing the Control*). No programming of the panel is required before downloading to an initial installation unless you are performing an unattended download.

When establishing a connection between the computer and the control panel, the following occurs:

| Stage | What Happens |
| --- | --- |
| 1 | The computer calls up the control panel. (The phone number for each customer must be entered into the customer's account file on the computer.) |
| 2 | The control panel answers the phone call at the pre-programmed ring count and executes a handshake with the computer. |
| 3 | The computer sends a request for callback to the control, unless callback is not required. |
| 4 | The panel acknowledges the request and hangs up. During the next few seconds, the control processes the request, making sure certain encrypted information received from the computer matches its own memory. |
| 5 | Upon a successful match, the control panel seizes the phone line and calls the computer back, unless callback is not required. (The phone number to which the computer's modem is connected must be programmed into the control field ∗35.) |
| 6 | The computer answers, usually by the second ring, and executes a handshake with the panel. |
| 7 | The panel then sends other default information to the computer. If this information matches the computer's information, a successful link is established. The system is now "on-line" with the computer. |

> Alarms and Trouble responses and reports are disabled during actual uploading or downloading sessions.

To download a control without programming any information, perform the following steps:

| Step | Action |
| --- | --- |
| 1 | Enter the **Installer Code + [#] + [5]**. The panel temporarily enables a ring count of 5 and sets the Download Callback option to "1" (callback not required). |
| 2 | From the computer, call the panel using the downloader software set to "First Communication" Mode.<br><br>The downloader establishes a session with no callback. The panel information can then be downloaded. |

### On-Line Control Functions

The following functions can be performed while on-line with a control panel (see field *37):

- Arm the system in the AWAY Mode; disarm the system
- Bypass a zone
- Force the system to accept a new program download
- Shut down communication (dialer) functions (for nonpayment of monitoring fees in an owned system)
- Shut down all security system functions (for nonpayment for a leased system)
- Inhibit local keypad programming (prevents takeover of your accounts)
- Leave a message for customer

  **NOTE:** Messages sent to the control panel from the downloader will be viewable at ALL partitions.
- Command the system to upload a copy of its resident program to the office
- Read: arming status, AC power status, list of faulted zones, list of bypassed zones, 100 event log, list of zones currently in alarm, list of zones currently in trouble, and ECP equipment list
- Set the real-time clock

## Direct-Wire Downloading

The VISTA-40 can be downloaded without using a modem or telephone line by using a 4100SM Serial Module and Compass Downloading Software. The direct-wire downloading connection is to be temporary, and is not part of the permanent installation. Direct-wire downloading is meant as a tool for the installer during the installation process.

> The connections between the control and the 4100SM are different than those shown in the 4100SM Installation Instructions. See *Figure 6-1* for the correct connections. In addition, in place of the green wire, referred to in step 2 of the "IN CASE OF DIFFICULTY" section of the 4100SM Instructions, use the violet wire instead.

Connector J8 on the main PC board (see the *Summary of Connections* diagram on the inside back cover of this manual) is intended to be interfaced to either a local serial printer (see *SECTION 3:Installing the Control*) or a computer. Make connections to a computer as shown below. **Note that the violet wire connection for a computer differs from that used when connecting a serial printer.**

*Figure 6-1:  Direct-Wire Downloading Connections*

## Telco Handoff

Telco handoff is another method of getting on-line with the downloader. The installer or customer enters the **User Code + [#] + [1]**, while on the phone line with the computer's modem phone line. The customer will get cut-off and the panel and download computer will establish a connection.

# Setting the Real-Time Clock

• • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • •

## General Information

This system provides a real-time clock, which must be set in order for the system's event log to keep track of events by time and date.

Use a 6139/6160 alpha keypad to set the real-time clock, or set the clock via the downloader software. Only users with Installer or Master authority level can set the clock.

## Setting the Time and Date

To set the real time clock, perform the following steps:

| Step | Action |
|------|--------|
| 1 | Enter Installer or Master Code + [**#**] **63**. Typical display shows: <br><br> TIME/DATE — THU <br> 12:01 AM      01/01/90 <br><br> The day of the week is automatically calculated based on the date entered.  Time and date entries are made by simply entering the appropriate hour, minute, month, day and year. <br><br> Press [✳] to move the cursor to the right of the display, to the next position. <br><br> Press [#] to move the cursor to the left of the display, to the previous position. |
| 2 | Enter the correct hour. Then press [✳] to move to the "minutes" field. |
| 3 | Enter the correct minutes. Press [✳] to move to the AM/PM position. |
| 4 | Press any key 0-9 to change AM to PM, or PM to AM. Press [✳] to move cursor to the "month" field position. |
| 5 | Enter the correct month using a 2-digit entry. Press [✳] to move cursor to the "day" field position. |
| 6 | Enter the correct day using a 2-digit entry. Press [✳] to move cursor to the "year" field position. |
| 7 | Enter the correct year. <br><br> Press [✳] to continue. |

# User Access Codes

●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●

## General Information

The VISTA-40 allows a total of 70 security access codes to be allocated. Each security access code is identified by a user ID number. A maximum of 69 user codes may be assigned to any one of the partitions. The installer code is automatically assigned to both partitions regardless of whether both partitions are used.

The Quick Arm feature can also be programmed (partition-specific program field *29). The Quick Arm feature allows the user to arm the system by pressing the [#] key instead of the security code. The security code must always be entered to disarm the system.

> User code number 2 must be programmed in order for the Quick Arm feature to function. Open/Close reporting for Quick Arm is enabled if User 2 is enabled for Open/Close and reports as User 0.

## User Codes & Levels of Authority

Each user of the system can be assigned a level of authority, which authorizes the user for certain system functions. A user can have different levels of authority within different partitions

Use the "View Capabilities" keypad function (**User Code + [✳] + [✳]**) to view the partitions and authority levels for which a particular user is authorized. These levels are described below.

### Level 0: Installer (User 1) Code

- Programmed in field *00 (default = 4-1-4-0). Installer Open/Close reporting selected in field *39.
- Can perform all system functions (arm, disarm, bypass, etc.), but **cannot disarm** if armed by another code (or by Quick Arm).
- Can add, delete, or change all other codes, and can select Open/Close reports for any user.
- Is the only code that can be used to enter program mode. The Installer Code can be prevented from re-entering the Program Mode by exiting using ✳98.
- Must program at least one Master Code during initial installation. Master Codes are codes intended for use by the primary user(s) of the system.

### Level 1: Master Codes

- Can perform all normal system functions.
- Can be used to assign up to 68 lower-level codes, which can be used by other users of the system.
- Cannot assign anybody a level of 0 or 1.
- May change his own code.
- Can add, delete, or change Manager or Operator Codes. Each user's code can be individually eliminated or changed at any time.
- Open/Close reporting is automatically the **same** as that of the Master who is adding the new user.

### Level 2: Manager Codes

- Can perform all system functions (arm, disarm, bypass, etc.) programmed by Master.
- May add, delete, or change other users of the system below this level (Manager cannot assign anybody a level of 0, 1, or 2).
- May change his own code.
- Open/Close reporting is automatically the **same** as that of the Manager who is adding the new user.

### Levels 3-5: Operator Codes

- Can operate a partition, but cannot add or modify any user code (see table below).

| Level | Title | Functions Permitted |
|---|---|---|
| 3 | Operator A | Arm, Disarm, Bypass |
| 4 | Operator B | Arm, Disarm |
| 5 | Operator C | Arm, Disarm only if armed with same code |

- Operator C (sometimes known as the Babysitter Code) cannot disarm the system **unless** the system was armed with that code. This code is usually assigned to persons who may need to arm and disarm the system at specific times only (e.g., a babysitter needs to control the system only when babysitting).

**Level 6: Duress Codes**

- Sends a silent alarm to a central monitoring station if the user is being forced to disarm (or arm) the system under threat (system must be connected to a central station).
- When the system's Auxiliary Voltage Triggers are connected to another communication's media (Derived Channel/Long Range Radio), note that duress is signaled on the same trigger that signals silent panic (whereas duress has its own unique report when digitally communicated).
- Assigned on a partition-by-partition basis, and can be any code or codes desired.

### General Rules on Authority Levels and Changes

The following rules apply to users when making modifications within the system based on the user code authority levels:

- Master Codes and all lower-level codes can be used interchangeably when performing system functions within a partition (a system armed with a user's temporary code can be disarmed with the Master Code or another user's temporary code), except the Operator Level C Code described above.
- A user may not delete or change the user code of the SAME or HIGHER authority than that which he is assigned.
- A user (levels 0, 1 and 2 only) may only ADD users to a LOWER authority level.
- A user may assign other users access to only those partitions to which he himself has access.
- A user code can be DELETED or CHANGED only from within the partition it was created in.
- User numbers must be entered in 2-digits. Single-digit user numbers must, therefore, always be preceded by a "0" (e.g., 03, 04, 05, etc.). Make sure the end user understands this requirement. Temporary codes are entered as 4-digit numbers.

**Duress Reporting Note:** A non-zero report code for zone 92 (duress) must be programmed, and partition-specific field *85 duress location enabled, to enable Duress reporting.

- The Duress report-triggering logic activates on the 5th key depression (such as OFF), not the 4th key depression (last digit of code). Duress reports are not triggered if the 5th key is a [*], such as when you perform a GOTO or view the capabilities of a user.

**Open/Close Reporting Note:** When a user is added, the system prompts for Open/Close reporting capability only if the installer is adding the new user. When a Master or Manager adds a new user, the new user's Open/Close reporting is the same as that of the Master or Manager who is adding the user. If Open/Close reports are required to be selectable by the Master or Manager, the Installer should assign two Master or Manager user codes: one with Open/Close reporting enabled, and one without.

Note that Open/Close reporting of Quick Arm is enabled if User 02 is enabled for Open/Close reporting, and that Quick Arm reports as User 00. In order for Quick Arm reports to be sent for all partitions, User 02 must have authority and Open/Close must be enabled for all partitions. If a code with access to all partitions is not desired, it is suggested that user 02 be assigned authority level 5 in all partitions, and that the code be kept secret. Authority level 5 cannot disarm the system unless armed by that user.

ADEMCO Contact ID format is capable of reporting Users 01-70 uniquely. If any other report format is used, only user numbers 01 – 15 can uniquely report to the central station. Users 16 – 70 will report as User 15.

## Multiple Partition Access

Each user is programmed for a primary (home) partition. A user can also be given access to operate one or both partitions. Within each partition, each user may be programmed to have different levels of authority. For example, User 03, the VP of Engineering, could be assigned to work within the Engineering Department (Partition 1) of ABC Manufacturing. Because he needs the full capabilities in his area, he is assigned as a MASTER with Level 1 authority.

He must also be able to gain access to the manufacturing area (Partition 2) on an emergency basis. You can set this up easily by requesting that he also be assigned to Partition 2, with a level of authority set lower, such as Level 4 (OPERATOR Level B).

The control automatically assigns him the same user number within Partition 2.

**EXAMPLE OF MULTIPLE PARTITION ACCESS**

| Part 1 | Part 2 |
|--------|--------|
| User 3 | User 3 |
| Level 1 | Level 4 |
| Master | Oper B |

In the above example, User 3 has MASTER authority in Partition 1 and OPERATOR B authority in Partition 2. His user number is the same for both partitions.

## Adding a Master, Manager, or Operator Code

During user code entry, normal key depressions at other keypads in a partition are ignored. However, panic key depression causes an alarm and terminates user entry.

Enter **Installer Code**[†] **+ [8] + new user no. (02-69) + new user's code**

[†]Or Master or Manager Code, but the code must be a higher level of authority than the code being changed (e.g., a Manager Code can add an Operator-level Code, but cannot add a Master or another Manager Code). Keypad prompts for the authority level for this user.

| PROMPT | EXPLANATION |
|---|---|
| User Number = 03<br>Enter Auth. Level | Enter the level number as follows:<br>1 = Master<br>2 = Manager<br>3 = Operator Level A<br>4 = Operator Level B<br>5 = Operator Level C<br>6 = Duress<br>Keypad then prompts for Open/Close reporting option for this user. |
| Open/Close Rep.?<br>0 = NO , 1 = YES | Press **0** (NO) or **1** (YES), depending on whether or not arming/disarming by this user will trigger Opening and Closing reports. This prompt appears only if the Installer Code is used to add a user. |
| RF Button ?<br>0=NO ,  1=YES | If a 5800 Series button transmitter has been enabled for arming/disarming functions, and is not assigned to a user, this prompt appears.  Press **0** (NO) or **1** (YES). |
| Enter Button ZN #<br>(01-63) | If you answered "yes" to the RF button question, the zone number for the button is requested.  Enter any one of the zone numbers assigned to the button transmitter as AWAY, STAY, or DISARM. The system then assigns **all** buttons of the transmitter to this user number. |
| Multi-Access ?<br>0 = NO , 1 = YES | Press **0** (NO) if the user is to have access to this partition only.  Press **1** (YES) if the user is to have access to more than one partition.  If NO, the program exits this mode.  If YES, the keypad prompts for the Global Arm option for this user. |
| Global Arm ?<br>0 = NO , 1 = YES | Press **0** (NO) or **1** (YES), depending on whether this user will be allowed to arm more than one partition via Global Arm prompts.<br>The keypad now prompts for the user's access to the next partition. |
| Part. 2 – SHOP ?<br>0 = NO , 1 = YES | Press **0** (NO) or **1** (YES), depending on whether this user will have access to the displayed partition number. If NO, the keypad displays this prompt for the next partition number in sequence.<br>If YES, the keypad prompts for the following:<br>• User's authority level in the displayed partition (see Authority Level prompt above).<br>• Open/Close option for this user in the displayed partition (see Open/Close prompt above).<br>• Global Arm option for this user in the displayed partition (see Global Arm prompt above).<br>When all partitions have been displayed, the keypad will scroll through all partitions to which access has been assigned, and will display the user number, authority level, open/close and global arm options that were programmed for each partition to which the user was granted access. See next prompt. |
| Part. 1 A0∗ WHSE<br>User 03  Auth=3G. | Note that the "G" following the authority level indicates that the global arm feature is enabled for this user in the displayed partition, and that the period at the end of the second line indicates Open/Close reporting is enabled for this user in the displayed partition. The "∗" indicates the partition from which the user may be changed or deleted. |

## Changing a Master, Manager, or Operator Code

Enter **Installer Code**\*+ **[8] + new user no. (02-69) + new user's code**

\*Or Master or Manager Code, but the code must be a higher level of authority than the code being changed (e.g. a Manager Code can add an Operator-level Code, but cannot add a Master or another Manager Code).

| PROMPT | EXPLANATION |
|---|---|
| User Number = 03<br><br>NEW USER? | The system detects that the user number is already assigned, and prompts if this is a new user.<br>Press **0** (NO).<br>The system then confirms that the change is allowed based on authorization level. |

## Adding an RF Key to an Existing User

To add an RF key to an existing user, or to change a user's global arm option, first delete that user's code, then re-add the user code as described in the "Adding a Master, Manager, or Operator Code" paragraph.

## Deleting a Master, Manager, or Operator Code

Enter **your code**\*+ **[8] + new user no. (02-69) + your code again**

\*Or Master or Manager Code, but the code must be a higher level of authority than the code being changed (e.g. a Manager Code can add an Operator-level Code, but cannot add a Master or another Manager Code).

| PROMPT | EXPLANATION |
|---|---|
| OK TO DELETE 03?<br><br>0=NO          1=YES | The system prompts to confirm that you want to delete this user.  Press **0** (NO) or **1** (YES).<br>If you answer "yes," that user's code is removed from all partitions to which it was assigned, and all authorization levels and other information about that user are deleted.  Note: A user can be deleted only by a user with a higher authority level.  A user cannot delete himself. |

A user code can be deleted only from the partition through which it was entered.  If an attempt is made to delete from another partition, the message "User [XX] Not Deleted" is displayed.

## Exiting the User Edit Mode

Press either [✱] or [#], or don't press any key for 10 seconds.

# *Testing the System*

● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●

## Battery Test

When AC power is present, the VISTA-40 runs a brief battery test every 4 hours to determine if there is a battery connected.

If the VISTA-40 finds that the battery voltage is low (less than approximately 11.5V), it initiates a keypad "SYSTEM LOBAT" display and a rapid keypad beeping sound.

It also sends a Low Battery report to the central station (if programmed). The keypad is cleared by entering any security code + OFF, and a Restore report is sent to the central station if the situation has been corrected.

## Dialer Test

The VISTA-40 may be programmed to automatically transmit test reports to a central station at intervals ranging from once per hour to once per 199 hours (field ∗27).

UL requires the test report to be transmitted at least once every 24 hours. The system can be programmed to send the first report at any time of the day, or on any day of the week (field ∗83).

## Burglary Walk-Test (Code + [5] TEST)

This test causes the system to sound keypad beeps in response to faults on zones for the purpose of allowing proper zone operation to be checked without triggering alarms. This test can be activated by any-level user by entering the corresponding security code and pressing TEST while the burglary portion of the system is disarmed. UL requires that this test be conducted on a weekly basis.

When this test is first entered, the system activates the alarm output for 3 seconds. The system sends a test message to the central station. The keypad displays "Test in Progress" and sounds a single beep every 15 seconds while the test remains active.

Open and close each protected door and window in turn. Each action should produce 3 beeps from the keypad. Walk in front of any motion detectors. Listen for three beeps when the detector senses movement.

The keypad displays the zone number and alpha descriptor while a door or window remains open or while a detector remains activated. The system automatically issues a Zone 8 Glassbreak Detector Power Reset about 10 seconds after it finds a fault on this zone, to allow faulted detectors to be reset.

To end this test, enter any security code and press OFF.

## Armed Burglary System Test

✓ Alarm messages are sent to the central station during the armed system tests. Notify the central station that a test will be in progress.

✓ A display of "COMM. FAILURE" indicates a failure to communicate (no kissoff by the receiver at the central station after the maximum number of transmission attempts is tried). If this occurs, verify that the phone line is connected, the correct report format is programmed, etc.

To perform an armed burglary test, proceed as follows:

| Step | Action |
|------|--------|
| 1 | Notify the central station that a test of the system is being performed. |
| 2 | Arm the system. |
| 3 | Fault one or more zones. |
| 4 | Silence alarm sounder(s) each time by entering the code and pressing OFF. **NOTE:** The system must be rearmed after each code + off sequence. |
| 5 | Check that entry/exit delay zones provide the assigned delay times. |

| Step | Action |
|------|--------|
| 6 | Check the keypad-initiated alarms, if programmed, by pressing the panic key pairs (∗ and #, 1 and ∗, and/or 3 and #). |
|  | The word ALARM and a descriptor "99" are displayed for ∗ and #.  If [1] and [∗] are pressed, "95" is displayed; if [3] and [#] are pressed, "96" is displayed. |
| 7 | If the system has been programmed for audible emergency, the keypad emits a loud, steady alarm sound. Silence the alarm by entering the security code and pressing OFF. If the system has been programmed for silent panic, there are no audible alarms or displays. A report is sent to the central station, however. |
| 8 | Notify the central station that all tests are finished, and verify results with them. |

## Testing Wireless Transmitters

### Transmitter ID Sniffer Mode

Use the Transmitter Sniffer Mode to test that transmitters have all been properly programmed.

If a transmitter does not have its serial number "enrolled," it will not turn off its zone number.

To enter the Transmitter ID Sniffer Mode, proceed as follows:

| Step | Action |
|------|--------|
| 1 | Enter **Installer Code + [#] + [3].**  The keypad displays all zone numbers of wireless units programmed into the system. |
| 2 | Fault each wireless zone, causing each device to transmit. |
|  | As the system receives a signal from each of the transmitters, the zone number of that transmitter disappears from the display. |
| 3 | Enter **Installer Code + OFF** to exit the Sniffer Mode. |

### Go/No Go Test Mode

Checking the transmitters in this mode assists in determining good mounting locations, and verifies that the RF transmission has sufficient signal amplitude margin for the installed system.

- All partitions containing wireless transmitters must be placed in the test mode for sensitivity reduction of the RF receiver (50% sensitivity). Otherwise, the RF receiver remains at full strength.
- Make sure that all partitions are disarmed when performing this test, as the wireless receiver gain is reduced in half.

To enter the Go/No Go Test Mode, proceed as follows:

| Step | Action |
|------|--------|
| 1 | Enter **Installer Code + [5].** |
| 2 | Fault each wireless transmitter, causing each device to transmit. |
|  | **NOTE:**  If a single receiver is used, the keypad beeps three times to indicate signal reception. If two receivers are used, the keypad beeps once if the first receiver received the signal, twice if the second receiver received the signal, and three times if both receivers heard the signal. |
| 3 | If the keypad does not beep, reorient or move the transmitter to another location.  Usually a few inches in either direction is all that is required. |
| 4 | Enter **Installer Code + OFF** to exit the Go/No Go Test Mode. |

## Trouble Conditions

### Check or Trouble Messages

| Display | Description |
|---------|-------------|
| CHECK | This indicates that a problem exists on the zone number displayed. Zone trouble may be caused by one of the following conditions:<br>• A hardwired fire zone is open (broken wire).<br>• A Day/Night zone (zone type 5) is faulted.<br>• A polling loop zone is not seen by the control panel.<br>• A polling loop zone has been tampered (cover removed on a 4190).<br>• A wireless zone has not checked in during the time programmed in field 1∗31.<br>• A 5800 Series transmitter has been tampered (cover removed).<br>• A system trouble exists (RF receiver, bell output, etc.). |

If the problem has been corrected, enter an OFF sequence (**Security Code + OFF**) twice to clear the display.

### Power Failure

| Display | Description |
|---------|-------------|
| AC LOSS POWER LED is off | This indicates that the system is operating on battery power only. Check to see that the circuit breaker for the branch circuit that your system's transformer is wired to has not been accidentally turned off. **Instruct the user to call a service representative immediately if AC power cannot be restored.** |

### Other System Messages

| Display | Description |
|---------|-------------|
| COMM FAILURE | This indicates that a failure occurred in the telephone communication portion of your system. |
| LO BAT | This indicates that a low-battery condition exists in the wireless transmitter displayed. Pressing any key silences the audible warning sound. |
| SYSTEM LO BAT | This indicates that a low-battery condition exists with the system's backup battery. |
| RCVR SETUP ERROR | This indicates that the system has more wireless zones programmed than the wireless receiver can support. If this is not corrected, none of the zones in the system will be protected. If additional wireless zones are desired, use an appropriate receiver. |
| MODEM COMM | This indicates that the control is on-line with a remote computer. |

## To the Installer

Regular maintenance and inspection (at least annually) by the installer and frequent testing by the user are vital to continuous satisfactory operation of any alarm system.

The installer should assume the responsibility of developing and offering a regular maintenance program to the user as well as acquainting the user with the proper operation and limitations of the alarm system and its component parts. Recommendations must be included for a specific program of frequent testing (at least weekly) to ensure the system's proper operation at all times.

### Turning the System over to the User

Fully explain the operation of the system to the user by going over each of its functions, as well as the User's Manual supplied.

In particular, explain the operation of each zone (entry/exit, perimeter, interior, fire, etc.). Be sure the user understands how to operate any emergency feature(s) programmed into the system.

## Contacting Technical Support

**PLEASE, before you call Technical Support, be sure you:**

- READ THE INSTRUCTIONS!

- Check all wiring connections.

- Determine that the power supply and/or backup battery are supplying proper voltages.

- Verify your programming information where applicable.

- Verify that all keypads and devices are addressed properly.

- Note the proper model number of this product, and the version level (if known) along with any documentation that came with the product.

- Note your customer number and/or company name.

Having this information handy will make it easier for us to serve you quickly and effectively.

You may contact Technical Support via Toll-Free Fax. Please include your return fax number. You will receive a reply within 24 hours.

| |
|---|
| Technical Support:................................................... 1-800-645-7492 (8 a.m.-8 p.m. EST) |
| ATLIS-FAX FAXBACK Automated Fax Retrieval System:.................... 1-800-573-0153 or |
| ............................................................................. 1-516-921-6704 / ext. 1667 |
| World Wide Web Address: ......................................... http://www.honeywell.com/security |

# *Regulatory Agency Statements*

● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●

## UL Installation Requirements

The following requirements apply to both UL Residential and UL Commercial Burglary installations:

- All partitions must be owned and managed by the same person(s).
- All partitions must be part of one building at one street address.
- The audible alarm device(s) must be placed where it/they can be heard by all partitions.
- The control cabinet must be protected from unauthorized access.  This can be done by installing a tamper switch on the cabinet door (not supplied with VISTA-40) or by installing a UL Listed passive infrared detector positioned to detect cabinet access.  Wire the selected device to any EOLR-supervised zone (Zone 1-8). Program this zone for day trouble/night alarm (type 05) or 24-hour audible alarm (type 07) response. The 24-hour alarm response must be used for multiple-partitioned systems.
- Remote downloading and auto-disarming are not UL Listed features.

**NOTE:** UL Commercial Burglary installations require the attack resistant cabinet. The cabinet is included in the VISTA-ULKT kit.

## UL609 Grade A Local Mercantile Premises/Local Mercantile Safe & Vault

Use the following guidelines for a Grade A Local Mercantile Premises/Local Mercantile Safe & Vault installation:

- All zones must be configured for EOLR supervision (✶41=0).  Wireless sensors may not be used.  If 4190WH RPMs are used, set field ✶24 to "0" to enable tamper detection.
- Attach a door tamper switch (supplied) to the VISTA-40 cabinet backbox. For safe and vault installations, a shock sensor (not supplied) must also be attached to the backbox. (Also see *SECTION 3: Installing the Control*)
- Wire an AB12 Grade A Bell/Box to the bell output. Bell wires must be run in conduit. Program the bell output for a timeout of 16 minutes or longer timeout and for confirmation of arming ding. (Also see *SECTION 3: Installing the Control*.)
- Wire the VISTA-40 tamper switch and AB12 Bell/Box tamper switches to any EOLR-supervised zone (zones 1-8). Program this zone for day trouble/night alarm (type 05) or 24-hour audible alarm (type 07) response. The 24-hour alarm response must be used for multiple-partitioned systems.
- Entry delays must not exceed 45 seconds, and exit delays must not exceed 60 seconds.

## UL365 Police Station Connected Burglar Alarm

Follow the instructions for UL609 local installations given above.

### For Grade A Service:

- You may use the VISTA-40 dialer alone, or the 7720 Long Range Radio alone.
- When using the dialer, program it to send Burglary Alarm, Low Battery, and Communicator Test reports.  Field ✶27 must be set to "024" (or less).
- If you are using the 7720, connect it to the VISTA-40 burglary/audible panic alarm trigger.

### For Grade AA Service:

- You must use a 7920SE Long Range Radio.
- Connect the 7920SE to the VISTA-40 burglary/audible panic alarm trigger.

## UL611/UL1610 Central Station Burglary Alarm

Follow the instructions for UL609 Local installations given above.

### For Grade A Service:

- You must use the VISTA-40 dialer with a 7720 Long Range Radio.
- Connect the control's burglary/audible panic alarm trigger (on J7 header) and the 659EN's phone line monitor output to the 7720. The 7720 will send a report to the central station when a telephone line fault condition is detected.
- Also connect the 7720's radio fault output to one of the VISTA-40 EOLR-supervised zones (i.e., 1-8). Program this zone for a trouble by day/alarm by night (type 05) or a 24-hour alarm (type 07, 08) response to radio faults.
- Program the control's dialer to send Burglary Alarm, Trouble, Opening/Closing, and Low Battery reports.

### For Grade AA Service:

Follow the instructions for Grade A service, except use the 7920SE in place of the 7720.

## California State Fire Marshal (CSFM) and UL Residential Fire Battery Backup Requirements

The California State Fire Marshal and UL have regulations that require all residential fire alarm control panels to have backup battery with sufficient capacity to operate the panel and its attached peripheral devices for 24 hours in the intended standby condition, followed by at least 4 minutes in the intended fire alarm signaling condition.

The VISTA-40 can meet this requirement without using a supplemental power supply, provided that the panel's outputs (including the current drawn from the auxiliary power output terminals) are limited as shown below:

- Output current is limited to 750mA maximum total auxiliary power, polling loop, and bell output current.
- Maximum auxiliary current is 300mA (including polling loop current).
- A 14AH battery is used. (Yuasa model NP7-12 recommended; use two connected in parallel.) A dual-battery harness is provided with the 4100EOLR Resistor Kit (kit also contains EOL resistors having spade lug/heat shrink tubing construction approved by UL and CSFM for fire zone usage). Both batteries fit inside the panel's cabinet.

## FEDERAL COMMUNICATIONS COMMISSION (FCC) PART 15 STATEMENT

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help.

## IN THE EVENT OF TELEPHONE OPERATIONAL PROBLEMS

In the event of telephone operational problems, disconnect the control panel by removing the plug from the RJ31X (CA38A in Canada) wall jack. We recommend that you demonstrate disconnecting the phones on installation of the system. Do not disconnect the phone connection inside the control panel. Doing so will result in the loss of your phone lines. If the regular phone works correctly after the control panel has been disconnected from the phone lines, the control panel has a problem and should be returned for repair. If upon disconnection of the control panel, there is still a problem on the line, notify the telephone company that it has a problem and request prompt repair service. The user may not under any circumstances (in or out of warranty) attempt any service or repairs to the system. It must be returned to the factory or an authorized service agency for all repairs.

## FCC PART 68 NOTICE

This equipment complies with Part 68 of the FCC rules. On the front cover of this equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

This equipment uses the following jacks:

An RJ31X is used to connect this equipment to the telephone network.

The REN is used to determine the quantity of devices that may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to determine the maximum REN for the calling area.

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe necessary.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

If trouble is experienced with this equipment, please contact the manufacturer for repair and warranty information. If the trouble is causing harm to the telephone network, the telephone company may request that you remove the equipment from the network until the problem is resolved.

There are no user serviceable components in this product, and all necessary repairs must be made by the manufacturer. Other repair methods may invalidate the FCC registration on this product.

This equipment cannot be used on telephone company-provided coin service. Connection to Party Line Service is subject to state tariffs.

This equipment is hearing-aid compatible.

When programming or making test calls to an emergency number, briefly explain to the dispatcher the reason for the call. Perform such activities in the off-peak hours, such as early morning or late evening.

## CANADIAN EMISSIONS STATEMENTS

This Class B digital apparatus complies with Canadian ICES-003

### NOTICE

The Industry Canada Label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may cause the telecommunications company to request the user to disconnect the equipment.

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

**Caution:** Users should not attempt to make such connections themselves, but should contact an appropriate electric inspection authority, or electrician, as appropriate.

**NOTICE:** The **Ringer Equivalence Number** (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.

### AVIS

L'étiquette d'Industrie Canada identifie le matériel homologué. Cette étiquette certifie que le matériel est conforme aux normes de protection, d'exploitation et de sécurité des réseaux de télécommunications, comme le prescrivent les documents concernant les exigences techniques relatives au matériel terminal. Le Ministère n'assure toutefois pas que le matériel fonctionnera à la satisfaction de l'utilisateur. Avant d'installer ce matériel, l'utilisateur doit s'assurer qu'il est permis de le raccorder aux installations de l'enterprise locale de télécommunication. Le matériel doit également être installé en suivant une méthode acceptée da raccordement. L'abonné ne doit pas oublier qu'il est possible que la conformité aux conditions énoncées ci-dessus n'empêche pas la dégradation du service dans certaines situations.

Les réparations de matériel nomologué doivent être coordonnées par un représentant désigné par le fournisseur. L'entreprise de télécommunications peut demander à l'utilisateur da débrancher un appareil à la suite de réparations ou de modifications effectuées par l'utilisateur ou à cause de mauvais fonctionnement.

Pour sa propre protection, l'utilisateur doit s'assurer que tous les fils de mise à la terre de la source d'energie électrique, de lignes téléphoniques et des canalisations d'eau métalliques, s'il y en a, sont raccordés ensemble. Cette précaution est particulièrement importante dans les régions rurales.

**Avertissement :** L'utilisateur ne doit pas tenter de faire ces raccordements lui-même; il doit avoir racours à un service d'inspection des installations électriques, ou à un électricien, selon le cas.

**AVIS : L'indice d'équivalence de la sonnerie** (IES) assigné à chaque dispositif terminal indique le nombre maximal de terminaux qui peuvent être raccordés à une interface. La terminaison d'une interface téléphonique peut consister en une combinaison de quelques dispositifs, à la seule condition que la somme d'indices d'équivalence de la sonnerie de tous les dispositifs n'excède pas 5.

# *Summary of System Commands*

● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●

| | |
|---|---|
| **User Code Commands** | Add A User Code = User Code + 8 + New User Number + New User's Code |
| | Change a Code = User Code + 8 + User Number + New User's Code |
| | Delete a User's Code = Your User Code + 8 + User Number to Be Deleted + Your Code Again |
| | View User Capability = User's Code + [✳] + [✳] |
| | Set Real-Time Clock (Installer, Master Only) = Code + [#] + 63 |
| **Programming Commands** | Site Initiated Download = User Code + [#] + 1. |
| | Direct-Wire Download Enable = User Code + [#] + 5. |
| | Enter Program Mode = Installer Code + 800. |
| | Enter Interactive Program Mode = Installer Code + 800 + [#] + 93 |
| | Exit Program Mode = ✳99 or ✳98. |
| **Event Logging Commands** | Event Log Display = Code + [#] + 60 (Installer or Master Only) |
| | Event Log Print = Code + [#] + 61 (Installer or Master Only) |
| | Clear Event Log = Code + [#] + 62 (Installer or Master Only) |
| **Wireless System Commands** | House ID Sniffer Mode = Code + [#] + 2 (Installer Only) |
| | Transmitter ID Test = Code + [#] + 3 (Installer Only) |
| | Go/No Go Test = Code + 5 (Test Key) |

| | | |
|---|---|---|
| **Additional Commands** | Partition GOTO | User Code + [✳] + Partition Number 0-2. |
| | GOTO Home Partition | User Code + [✳] + 0. |
| | Panics | [✳] + 1 or A Key (Zone 95). |
| | | [✳] + [#] or B Key (Zone 99). |
| | | [#] + 3 or C Key (Zone 96). |
| | View Downloaded Messages | Press 0 for 5 Seconds. |
| | Display All Zone Descriptors | Press [✳] for 5 Seconds. |
| | Display User Self Help | Hold Any Key for 5 Seconds. |

| | |
|---|---|
| **Relay Device Control Commands** | Activate Relay Device as Programmed = User Code + [#] + 71. |
| | Activate Relay Device as Programmed = User Code + [#] + 72. |
| | Activate Relay Device Manually = User Code + [#] + 70. |
| **Access Control Commands** | Activate Access Relay for Current Partition = User Code + 0. |

# *Specifications*

● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●

**VISTA-40 CONTROL**

**Physical:**

| | |
|---|---|
| Standard Cabinet (included) | 12 1/2" W x 14 1/2" H x 3" D |
| UL Cabinet (optional) | 14 1/2" W x 18" H x 4.3" D (Included in the VISTA-ULKT kit) |

**Electrical:**

| | |
|---|---|
| Voltage Input: | From the 1361 Plug-In Transformer (use 1361CN in Canada) or 1361X10 transformer (for X-10 installations) rated 16.5VAC, 40 VA. |
| Alarm Sounder Output: | 10VDC-13.8VDC, 1.7 amps max. (UL1023, UL609 installations); 750mA less aux. current draw (UL985 installations). |
| Auxiliary Power Output: | 9.6VDC-13.8VDC, 750mA max.  For UL installations, the accessories connected to the output must be UL Listed, and rated to operate in the above voltage range. |
| Backup Battery: | 12VDC, 4AH or 7AH gel cell.  YUASA NP4-12 (12V, 4AH) or NP7-12 (12V, 7AH) recommended. |
| Standby Time: | 4 hours min. with 750mA aux. load using 7 AH battery. |
| Circuit Protectors: | PTC circuit breakers are used on battery input to protect against reverse battery connections and on alarm sounder output to protect against wiring faults (shorts). |
| | A solid-state circuit breaker is used on auxiliary power output to protect against wiring faults (shorts). |

**Digital Communicator**

| | |
|---|---|
| Formats Supported: | ADEMCO High Speed, ADEMCO 4 + 2 Express, ADEMCO Low Speed, ADEMCO Contact ID, Sescoa and Radionics Low Speed |
| Line Seize: | Double Pole |
| Ringer Equivalence: | 0.7B |
| FCC Registration No.: | AC398U-68192-AL-E |

**Remote Keypads**

| **6139** | | **6160** | |
|---|---|---|---|
| **Physical:** | | **Physical:** | |
| Width: | 6.25 inches | Width: | 7.437 inches |
| Height: | 4.75 inches | Height: | 5.25 inches |
| Depth: | 1.25 inches | Depth: | 1.312 inches |
| **Electrical:** | | **Electrical:** | |
| Voltage Input: | 12VDC | Voltage Input: | 12VDC |
| Current Drain: | 100mA | Current Drain: | 150mA |
| **Interface Wiring:** | | **Interface Wiring:** | |
| RED: | 12VDC input (+) auxiliary power | RED: | 12VDC input (+) auxiliary power |
| BLUE: | Not Used | BLUE: | Not Used |
| GREEN: | Data to control panel | GREEN: | Data to control panel |
| YELLOW: | Data from control panel | YELLOW: | Data from control panel |
| BLACK: | Ground and (-) connection from supplemental power supply | BLACK: | Ground and (-) connection from supplemental power supply |

# Contact ID Event Codes

• • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • •

## TABLE OF CONTACT ID EVENT CODES

| Code | Definition | Code | Definition |
|------|------------|------|------------|
| 110 | Fire Alarm | 381 | Loss of Supervision (RF) |
| 121 | Duress | 382 | Loss of RPM Supervision |
| 122 | Silent Panic | 383 | RPM Sensor Tamper |
| 123 | Audible Panic | 384 | RF Transmitter Low Battery |
| 131 | Perimeter Burglary | 401 | O/C by User |
| 132 | Interior Burglary | 403 | Power-Up Armed/Auto-Arm |
| 134 | Entry/Exit Burglary | 406 | Cancel by User |
| 135 | Day/Night Burglary | 407 | Remote Arm/Disarm (Download) |
| 150 | 24-Hour Auxiliary | 408 | Quick Arm |
| 301 | AC Loss | 409 | Keyswitch O/C |
| 302 | Low System Battery | 411 | Callback Requested |
| 305 | System Reset | 441 | Armed STAY |
| 306 | Program Tamper | 570 | Bypass |
| 309 | Battery Test Fail | 602 | Communicator Test |
| 321 | Bell 1 Trouble | 606 | Listen-In to Follow |
| 332 | Poll Loop Short-Trouble | 607 | Burglary Walk-Test |
| 333 | Expansion Module Failure | 621 | Event Log Reset |
| 344 | RF Jam | 625 | Time/Date Reset |
| 373 | Fire Loop Trouble | 626 | Time/Date Inaccurate |
| 380 | Trouble (global) | | |

# *Index*

# WARNING!
## THE LIMITATIONS OF THIS ALARM SYSTEM

While this System is an advanced wireless security system, it does not offer guaranteed protection against burglary, fire or other emergency. Any alarm system, whether commercial or residential, is subject to compromise or failure to warn for a variety of reasons. For example:

- Intruders may gain access through unprotected openings or have the technical sophistication to bypass an alarm sensor or disconnect an alarm warning device.

- Intrusion detectors (e.g., passive infrared detectors), smoke detectors, and many other sensing devices will not work without power. Battery-operated devices will not work without batteries, with dead batteries, or if the batteries are not put in properly. Devices powered solely by AC will not work if their AC power supply is cut off for any reason, however briefly.

- Signals sent by wireless transmitters may be blocked or reflected by metal before they reach the alarm receiver. Even if the signal path has been recently checked during a weekly test, blockage can occur if a metal object is moved into the path.

- A user may not be able to reach a panic or emergency button quickly enough.

- While smoke detectors have played a key role in reducing residential fire deaths in the United States, they may not activate or provide early warning for a variety of reasons in as many as 35% of all fires, according to data published by the Federal Emergency Management Agency. Some of the reasons smoke detectors used in conjunction with this System may not work are as follows. Smoke detectors may have been improperly installed and positioned. Smoke detectors may not sense fires that start where smoke cannot reach the detectors, such as in chimneys, in walls, or roofs, or on the other side of closed doors. Smoke detectors also may not sense a fire on another level of a residence or building. A second floor detector, for example, may not sense a first floor or basement fire. Finally, smoke detectors have sensing limitations. No smoke detector can sense every kind of fire every time. In general, detectors may not always warn about fires caused by carelessness and safety hazards like smoking in bed, violent explosions, escaping gas, improper storage of flammable materials, overloaded electrical circuits, children playing with matches, or arson. Depending on the nature of the fire and/or location of the smoke detectors, the detector, even if it operates as anticipated, may not provide sufficient warning to allow all occupants to escape in time to prevent injury or death.

- Passive Infrared Motion Detectors can only detect intrusion within the designed ranges as diagrammed in their installation manual. Passive Infrared Detectors do not provide volumetric area protection. They do create multiple beams of protection, and intrusion can only be detected in unobstructed areas covered by those beams. They cannot detect motion or intrusion that takes place behind walls, ceilings, floors, closed doors, glass partitions, glass doors, or windows. Mechanical tampering, masking, painting or spraying of any material on the mirrors, windows or any part of the optical system can reduce their detection ability. Passive Infrared Detectors sense changes in temperature; however, as the ambient temperature of the protected area approaches the temperature range of 90° to 105°F (32° to 40°C), the detection performance can decrease.

- Alarm warning devices such as sirens, bells or horns may not alert people or wake up sleepers if they are located on the other side of closed or partly open doors. If warning devices are located on a different level of the residence from the bedrooms, then they are less likely to waken or alert people inside the bedrooms. Even persons who are awake may not hear the warning if the alarm is muffled by noise from a stereo, radio, air conditioner or other appliance, or by passing traffic. Finally, alarm warning devices, however loud, may not warn hearing-impaired people.

- Telephone lines needed to transmit alarm signals from a premises to a central monitoring station may be out of service or temporarily out of service. Telephone lines are also subject to compromise by sophisticated intruders.

- Even if the system responds to the emergency as intended, however, occupants may have insufficient time to protect themselves from the emergency situation. In the case of a monitored alarm system, authorities may not respond appropriately.

- This equipment, like other electrical devices, is subject to component failure. Even though this equipment is designed to last as long as 20 years, the electronic components could fail at any time.

The most common cause of an alarm system not functioning when an intrusion or fire occurs is inadequate maintenance. This alarm system should be tested weekly to make sure all sensors and transmitters are working properly. The security keypad (and remote keypad) should be tested as well.

Wireless transmitters (used in some systems) are designed to provide long battery life under normal operating conditions. Longevity of batteries may be as much as 4 to 7 years, depending on the environment, usage, and the specific wireless device being used. External factors such as humidity, high or low temperatures, as well as large swings in temperature, may all reduce the actual battery life in a given installation. This wireless system, however, can identify a true low battery situation, thus allowing time to arrange a change of battery to maintain protection for that given point within the system.

Installing an alarm system may make the owner eligible for a lower insurance rate, but an alarm system is not a substitute for insurance. Homeowners, property owners and renters should continue to act prudently in protecting themselves and continue to insure their lives and property. We continue to develop new and improved protection devices. Users of alarm systems owe it to themselves and their loved ones to learn about these developments.

# NOTES

# NOTES

# NOTES

# NOTES

# NOTES

# NOTES

# NOTES