Addition of new 5800 series transmitters with this control panel is prohibited, other than for repair of existing installations. Non-permitted use voids U.S. warranty.

VISTA-10
SECURITY SYSTEM

Installation Instructions

ADEMCO

CONGRATULATIONS!
On Your Purchase of the VISTA-10

The purpose of these Installation Instructions is to give you a complete overview of the system, and provide instructions for installing a basic 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.**
- 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 ADEMCO 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. You may also contact Technical Support via modem to ATLIS-BBS, Tech Support's Electronic Bulletin Board System. Replies are posted within 24 hours.

East Coast Technical Support: 1-800-645-7492 (8 a.m.-6 p.m. E.S.T.)
West Coast Technical Support: 1-800-458-9469 (8 a.m.-5 p.m. P.S.T.)
Technical Support Fax Number: 1-800-447-5086
ATLIS-BBS Electronic Bulletin Board System: 1-516-496-3980
(1200 - 9600 Baud, 8 Data Bits, 1 Start/Stop Bit, No Parity)

The VISTA-10 System
Can Support 6 EOLR Wired Zones
and
(when used with an appropriate wireless receiver)
Up to a Total of 16 RF Expansion Zones
and
(when used with a No. 4204 Output Relay Module)
Up to 4 Relay Outputs

The System Can Also Support:
Telephone Voice Module (No. 4285)
and
Long Range Radio Reporting (via No. 7720ECP)

> FOR YOUR CONVENIENCE,
> a Programming Form
> has been included at the center of this manual.

TABLE OF CONTENTS

Section 1. GENERAL INFORMATION

Introduction

System	The **VISTA-10** is a microprocessor-based state-of-the-art security control intended for wireless as well as wired zone applications.
Zones Supported	Supports up to 22 zones, in the following configuration: • 6 hard wired EOLR "basic" zones. • Up to 16 RF expansion zones by using an appropriate 5881 type RF receiver (up to 8 with 4281 type). Refer to the Zone Characteristics tabulation on the next page for detailed zone information. *Note:* The *single* 4281/5881 type RF receiver that the **VISTA-10** accommodates, features Spatial Diversity (dual antennas), which virtually eliminates the possibility of "Nulls" and "Dead Spots" within the coverage area.
Relay Outputs	4 output relays can be added, to perform programmable actions in response to zone activity or manual entries, by using a No. 4204 Relay Module.
Programming	**A No. 5137AD or 6139 Alpha Console is required for programming zones and relay operation,** but it need not remain in the system. These consoles have digital keypads and 2-line 32 character alphanumeric LCDs (Liquid Crystal Displays). Programmed options to establish specific alarm and reporting features are stored in electrically erasable, non-volatile EEROM memory. This means that the unit can be reprogrammed many times (unlike units equipped with PROMs) and that information which has been programmed will not be lost during a complete loss of power. In addition, the system can be uploaded, downloaded, or controlled via a computer and Hayes modem (see *RE-MOTE PROGRAMMING AND CONTROL* on page 32).
Remote Consoles	After programming, the system may use one or more <u>4127</u>, <u>4137AD</u>, 5137AD, <u>6127</u>, <u>6128</u>, <u>6137</u>, 6138, or 6139 Consoles. The underlined models have fixed English status LCDs. The others have alphanumeric displays. *Note:* Nos. 4137AD, 5137AD, 6128, 6137, 6138, and 6139 are Addressable Consoles and must be set to their non-addressable mode (device ID 31). When wireless is in use, the system may also be armed and disarmed with a wireless keypad (No. 5727/5827) or other 5800 RF button type transmitters (e.g., Nos. 5801, 5802, 5803, 5827BD).
Voice Module For more information, see page 14 and field *26 on page 18.	A No. 4285 Voice Module can be connected to the system. It enables Touch-tone telephones to control, and receive messages from, the system remotely. <u>Addressable type consoles must be used (not 4127 or 6127)</u>. *The Voice Module is not Listed for UL installation use.*
User Codes	Up to 6 secondary user codes can be assigned by the system's Master code.
Communication	<u>Telephone</u>: Communication capability (central station reporting, voice module accommodation, etc.) over existing phone lines is provided. <u>Radio</u>: An output for optional Long Range Radio (7720ECP) is also provided.

Alarm Output Advisory

This system includes an alarm output rated at 2 amps. **Throughout the manual, wherever reference is made to Alarm Output Ratings, they assume a fully charged battery is connected, unless the UL rating is stated.** The battery is periodically tested automatically (approximately every four hours), and if it cannot sustain a load, a low battery message is displayed and can be reported to the central station.

Multiple Consoles
(up to 4) may be used, as long as their total current drain is within the alarm and auxiliary power output limitations described in the *SPECIFICATIONS AND ACCESSORIES* section.

Zone Characteristics

Zones 1-6 For more information, see page 7.	**Wired Programmable Zones.** EOLR supervised, N.O. or N.C. sensors, 300-500 msec normal response. Optional fast (10-15msec) response programmable for zone 3.
Zones 7, 95, 96 For more information, see page 34.	**Console Panics** (Wired & Wireless). 24hr zones, programmable for silent, audible, auxiliary, or fire.
Zone 8 For more information, see page 34.	**Duress** This feature is intended for use when one is forced to disarm or arm the system under threat. When used, the system will act normally, but can silently notify the central station of the situation, if that service has been provided.
Zone 9	**Tamper.** Reports faults in the relay module and expansion units (e.g., 4204, 4281, 5881). For all report formats (except Contact ID, which provides more explicit reporting) a trouble code is reported when the system is not armed, and Zone 9 report code is sent for an alarm.
Wireless Zones For more information, see pages 8-10.	**Wireless (RF) zones can be added:** Up to 8 by using a 4281 (5700 System) or up to 16 by using a 5881 (5800 System) Type RF Receiver. Specifically: **Model** **Number of Zones** 4281L Up to 4 4281M/4281H Up to 8 5881L Up to 8 5881M/5881H Up to 16 Zone number assignments (which are also transmitter ID assignments for 5700 RF system transmitters) can be in the **10-63** range. A variety of RF system transmitters can be used to make up the wireless zones. This includes window/door units, smoke detectors, PIRs, and panic keys. *Note:For brevity, subsequent references herein to the RF Receiver will be indicated by "4281/5881" unless a specific model is named.*

HARD-WIRED ZONES

Zones 1-6
(Basic Control's Zones)

The **VISTA-10** supports 6 hard-wired zones, which are connected as zones 1-6. These zones must be EOLR supervised, and can use N.O. and/or N.C. sensors.

Zone Response Type	Any zone response can be assigned to devices on these zones except Supervised Fire (09), which can be assigned only to zone 5 (see below).
Response Time	300–500 msec. Zone 3 is optionally programmable for fast (10-15msec) response.
Max. Zone Resistance	300 ohms, excluding EOLR.
EOLR Supervised	• Supports both open circuit and closed circuit devices. • Connect open circuit devices in parallel across the loop. The 1,000 ohm EOLR must be connected across the loop wires **at the last device.** *Important:* If the EOLR is not at the end of the loop, the zone is not properly supervised. The system may not respond to an open circuit within the zone. • Connect closed circuit devices in series with the HI side of the loop.
EOLR Fire Zone 5	• Of the 6 hard-wired zones, only zone 5 can be used for fire. • Supports as many 4-wire smoke detectors as can be powered. • The zone must be configured for EOLR supervision. • The detectors must be wired in parallel, with the EOLR at the last detector for full supervision. • To supervise power, a supervisory module (e.g., System Sensor A77-716B EOL Relay Module) is required.

> **Note:** In Canada, 5800 systems must use 5882 series receivers: 5882L/5882H
> Information in this manual relative to the 5881 receivers applies as well to the 5882 receivers.
> 5881 and 5882 receivers can all use the same transmitters.

General

In addition to its basic wired zones, the control, in conjunction with an appropriate 5700 or 5800 system RF Receiver, can support up to the number of wireless zones shown below.

5700 SYSTEM	
RF Receiver	No. of Zones
4281L	up to 4
4281M	up to 8
4281H	up to 8†

5800 SYSTEM	
RF Receiver	No. of Zones
5881L	up to 8
5881M	up to 16
5881H	up to 16†

† In *this* application

A wireless keypad can also be used with the system (No. 5727 with 5700 System, No. 5827 with 5800 System, No. 5827BD with either system).

The receiver recognizes status messages and keypad control messages from Wireless Transmitters operating at 345MHz (315MHz for the 5700 system's Canadian version). These messages are processed and relayed to the control panel via a 4-wire connection to the control's remote console terminals. The receiver's RED, BLACK, YELLOW, and GREEN wires are connected in parallel with console wiring.

The receiver can be mounted within the control's cabinet (see page 13) or installed remotely, in its own housing. It can detect signals from wireless transmitters within a nominal range (installed) of 200 feet.

ON ↔ OFF
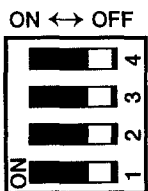
← | **The receiver's DIP switch must be set for a device address of "0",** as described in its instructions (all switches to the RIGHT..."off").

Supervision

Except for transmitters that may be carried off-premises (such as the 5700 system's 5701 and 5727, the 5800 system's 5802, 5802CP, 5803, and 5827, and either system's 5827BD), each transmitter is supervised by a check-in signal that is sent to the receiver at 70-90 minute intervals. If at least one check-in is not received from each *supervised* transmitter within a 12 hour period, the "missing" transmitter number(s) and "CHECK" will be displayed on the console.

The supervision for a particular transmitter in the 5800 system may be turned off by learning it as a "UR" (unsupervised RF) type, as described later.

Each transmitter is also supervised for low battery and will transmit a low battery signal to its receiver, with the battery having at least 30 days of life remaining. A low battery message and appropriate zone number will appear on a wired console's display.

If a 5727, 5827, or 5827BD wireless keypad transmits and has a low battery, it will be displayed as Zone 00.

> **Note:** After a low or dead battery is replaced, activate the transmitter and then enter the security code + OFF to clear the system's memory of the "Low Battery" signal.
>
> Some transmitters (e.g., 5800 system's 5802, 5802CP, and 5803) contain long-life but non-replaceable batteries. At the end of their life, the complete unit must be replaced [and new identification code(s) learned by the control...see *Transmitter Identification* below].

The receiver itself is supervised. A tamper report (zone 9) will be generated:
  a) If communication with the receiver is interrupted.
  or
  b) If valid RF signals are not received within 12 hours from at least one *supervised* wireless transmitter (if any are included in the system).

> ***WIRELESS TRANSMITTERS*** are described on page 41.
> ***TRANSMITTER & WIRELESS KEYPAD DIP SWITCH SETTING TABLES*** are shown on page 46.

House Identification

5700 SYSTEM	5800 SYSTEM
The 4281 responds only to transmitters set to the same House ID (01-31, per the DIP switch tables on page 46) as programmed in the control's field *24. This prevents interference from transmitters in other nearby systems. To make sure that a House ID is chosen that is not in use nearby, conduct the Sniffer Mode test described under *TESTING THE SYSTEM.*	If a 5827 or 5827BD Wireless Keypad is to be used with the system, a House ID Code (01-31) must be set in programming field *24 to establish proper communication, and the keypad should be set to the same ID. If no keypad is to be used, field *24 should be 00. *DIP switch setting information for a 5827 is given on page 46. The 5827BD is keypad programmable.*

Transmitter Identification

5700 SYSTEM	5800 SYSTEM
Each transmitter's assigned zone number is DIP switch programmable in the unit as its transmitter ID (except wireless keypads, which are fixed at ID 00). Whenever a transmission takes place, whether for a fault, check-in, or low battery, the ID number is sent along with the message to the 4281 which, in turn, relays this information to the control, which displays the condition and zone number on the console. *The 5827BD Wireless Keypad is keypad programmable.* Certain IDs in the assignment range of 10–63 have the following characteristics: **Transmitters set for IDs of 32-47** will have a 3 minute lock-out between fault transmissions to conserve battery life (normally PIR units, but transmitters protecting *frequently used* doors and windows should also be set for IDs in this range). **Transmitters set for IDs of 48-55 (FIRE)** will transmit once every 12 seconds while the zone is faulted. *This and the next range of zone numbers have high signal priority and their frequent transmissions while faulted insure retriggering of the alarm until the cause is removed.* **Transmitters set for IDs of 56-63** will transmit once every 3 seconds while faulted. **Transmitter IDs of 62 and 63** are unsupervised to allow removal of the 5701 off-premises. Signal priority is higher than burglary.	Each transmitter *input* has a different ID (identification) code, part of which includes a unique serial number permanently assigned to the device during manufacture. Many transmitters have more than one input, hence ID code (e.g., 5801 has 4, 5803 has 3, 5816 has 2, etc.) *and each input requires a separate programming zone.* It is not necessary to assign a transmitter's ID(s) during installation. Instead, the control must learn or be programmed for each transmitter's ID code(s) during programming, in conjunction with assigned zone number(s) and other data. Whenever a transmission takes place, whether for a fault, check-in, or low battery, the ID code is sent as part of the message to the 5881. In turn, the information is relayed to the control, which displays the condition and associated zone number on the console.

RF System Installation Advisories

1. If the Receiver is to be mounted remotely (not in the control's cabinet), place it in a high, centrally located area for best reception.
2. Do not locate receiver or transmitters on or near metal objects. This will decrease range and/or block transmissions.
3. Do not locate receiver in an area of high RF interference (revealed by frequent or prolonged lighting of the LED in the receiver...random flicker is ok).
4. Before mounting transmitters permanently, conduct Go/No Go Tests to verify adequate signal strength (see *TESTING THE SYSTEM*) and reorient or relocate transmitters if necessary.

To install the particular transmitters in a 5800 system, one of two optional methods can be used. Option 1, whose procedure is described *in general* below, and *in detail* on page 22, involves having the system learn each transmitter to be used in the system. Option 2, described below, involves downloading software, where the IDs can be entered manually at the office and then downloaded to an operating system.

OPTION 1
Learning and Assigning ID Codes at the Control

With each transmission, each transmitter sends an ID code which includes, in part, that device's unique factory assigned serial number. Some devices have more than one input (sensor point) and that input is also part of the ID code. Each ID code must be learned and assigned individually to the zone with which it will be associated.

During programming of the zone, after the device type is entered, the display "Learn S/N?" will appear. To have the control learn the ID then, pressing [1] will result in the display "TRANSMIT NOW".

The control program is now poised at a zone number to be assigned a particular transmitter input (e.g., of a multi-point contact, single-point motion detector, single-point smoke detector, multi-point emergency transmitter, etc.). A transmitter will either be *already* installed, or one of a group of transmitters *to be* installed at a given site.

The appropriate transmitter input (point) is then activated to cause a complete event transmission (e.g., by opening and closing a contact, closing and opening a contact, pressing and releasing a button, causing alarm and restore, etc.).

If the ID code of this first transmission event was previously learned, a single, long error sound is emitted.

If the ID code of this first transmission was not previously learned, the assignment of zone number and ID code (which includes device serial number and sensor point) is stored in the control memory, and the console emits a single, short sound to acknowledge this fact and to request a duplicate transmission to verify the assignment.

A second transmission should then be initiated. Upon reception of a second transmission, the control compares this second (verify) event with the first (learn) event.

    a) If the two events match, the control keeps the assignment in EEPROM memory and the console emits a double, short, acknowledge sound.

       The "learned" ID code, together with other system attributes associated with the particular zone are thus assigned to the selected zone number for that transmitter's sensor point.

    b) If the second (verify) transmission does not match the first (learn) transmission, the control awaits another transmission to match the most recently received one. If another matching transmission is not forthcoming, (within a pre-determined time limit), the assignment is discarded.

OPTION 2
Manual ID Code Assignment Method

Supplements *REMOTE PROGRAMMING AND CONTROL (DOWNLOADING)*
section on page 32.

At the downloading computer location, the downloading software for the **VISTA-10** is brought up.

The identification code numbers can be entered at the screens where the zone characteristics and communicator reporting codes are entered. If the 5800 RF system has been properly selected (RF expander type 5881) on a previous screen, the type of transmitter and identification code [which includes input (loop) data...see pages 42 and 43] can be entered on the same line as the other items for each zone. The factory pre-recorded serial number is read from the non-removable portion of the transmitter case in a 7-decimal digit (telephone number) format.

Mark the transmitters to be used in the installation (multi-point contact, single-point motion detector, single point smoke detector, multi-point emergency sensor, etc.) and enter their ID codes when programming other data for the system. When the data that defines the system is downloaded, the identification codes will be downloaded also and stored in EEPROM memory.

RELAY OUTPUTS

No. 4204
Output Relay Module

The **VISTA-10** can support 4 relay outputs via the use of a 4204 Output Relay Module. This module provides form C (normally open and normally closed) dry contacts on relays that can be programmed to activate or deactivate to perform some action in response to a predetermined event such as turning on lights and/or closing a fire door in the event of a fire alarm condition. There are many different uses for these relays, some of which are suggested in the table on page 44.

The unit can be located inside the control's cabinet or remotely (see *MOUNTING THE CONTROL, LOCK, & PC BOARD* section and the instructions that accompany the unit).

4204 Setup

The 4204 Relay Module has 4 Form C relays. Each relay can be used independently for different functions. The following steps should be taken to properly set up the 4204:

OFF ↔ ON
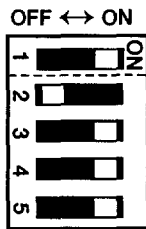
1. **Connect the 4204 to the control's remote console terminals** (4-7), using standard 4-conductor twisted cable (for long wiring runs) or the connector supplied with the 4204 (as shown in the *Summary of Connections* diagram).

←— 2. **Set the 4204's DIP switch for a device address of "1"** (switch 2 "OFF" and switches 3, 4, 5 "ON"). Switch 1 determines the unit's cover tamper response ("ON" = disabled, "OFF" = enabled).

   Note: Some "early" units have only a 4-position DIP switch. Set 1 to "OFF" and 2, 3, 4 to "ON".

3. **During programming** (summarized here, but see the detailed procedure in the *PROGRAMMING THE SECURITY CONTROL* section):

   a. Program a "3" in field *25.

   b. Program fields *80 (Output Relays) and *81 (Zone Lists) for the desired relay responses.

4. **Connect the desired field wiring** to the unit's relay contact terminals.

Output Relay Advisory

If a relay is energized before a wired smoke detector is reset, the relay will be stopped by the interruption of Aux. Power that resets the smoke detector. If this is not desired, the power to the relay module should be supplied from another 12V power source (e.g., the same source that is powering external equipment through the relay contacts).

Section 3. MOUNTING THE CONTROL, LOCK, & PC BOARD

Mounting the Cabinet

The **VISTA-10** is supplied with a 12-1/2" (318mm) wide x 14-1/2" (368mm) high x 3" (76mm) deep cabinet suitable for use in residential installations.

Mount the control cabinet to a sturdy wall using fasteners or anchors (not supplied) in a clean, dry area which is not readily accessible to the general public. 4 mounting holes are provided at the back of the cabinet.

Installing the Lock (if Used)

The cabinet can be closed and secured *without* a lock by using 2 screws in the cover's edge.

Use an Ademco No. N6277 Cam Lock and No. N6277-1 Push-On Clip (Retainer Clip).

1. Remove the cabinet cover. *It is easily removable for servicing and is easily reinstalled.*

2. Remove the lock knockout from the control cabinet cover. Insert the key into the lock. Position the lock in the hole making certain that the latch will make contact with the latch bracket when the door is closed.

3. While holding the lock steady, insert the retainer clip into the retainer slots. Position clip as illustrated to facilitate easy removal.
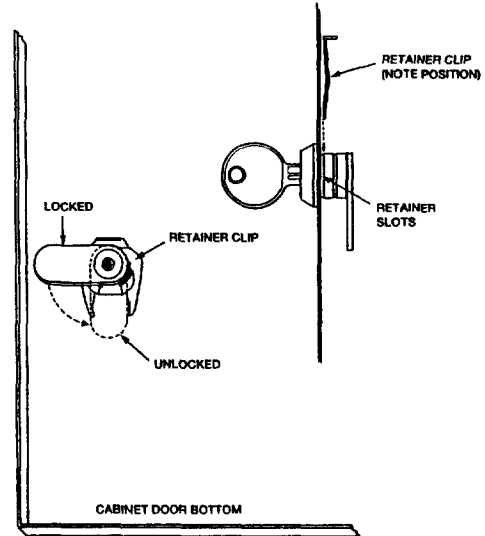
Installing the Control's Circuit Board Alone, or (if used), with a 4204

IMPORTANT!

Before installing the cabinet's contents, be sure to remove the appropriate metal cabinet knockouts.

DO NOT ATTEMPT TO REMOVE THE KNOCKOUTS AFTER THE CIRCUIT BOARD HAS BEEN INSTALLED.

Control's Circuit Board

1. Hang two *long* mounting clips (provided) on the raised cabinet tabs (see Detail B below).

2. Insert the top of the circuit board into the slots at the top of the cabinet. Make sure that the board rests on the correct row (see Detail A).

3. Swing the base of the board into the mounting clips and secure the board to the cabinet with the accompanying screws (see Detail B).

4204

1. Insert self-tapping screws (provided) in two adjacent raised cabinet tabs. Leave the heads projecting 1/8".

2. Hang the unit on the screw heads via two of the slotted holes at the rear of its housing, as shown.

3. The 4204's cover can be left off if the unit's DIP switch is set with its position 1 "ON" (to the right) as shown in its instructions. The tampered cover is necessary for installations outside of the control's cabinet.
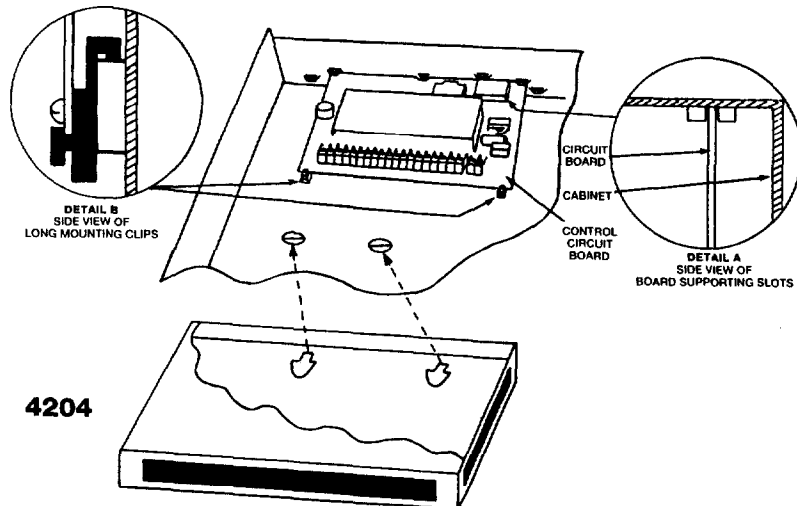
Installing Control and RF Receiver Circuit Boards Together, in the Same Cabinet

1. Hang two *short* (black) mounting clips (provided with receiver) on the raised cabinet tabs, as shown in Detail B below.
2. Insert the top of the receiver board (removed from its own case as described in *its* instructions) into the slots at the top of the cabinet (see Detail A). Make sure that the board rests on the correct row of tabs.
3. Swing the base of the board into the mounting clips and secure it to the cabinet with the accompanying screws (see Detail B).
4. Insert the top of the control's board into the slot in the clips and position two *long* (red) clips at the lower edge of the board (see Detail C).
5. Swing this board into place and secure it with two additional screws.
6. Insert grounding lugs (supplied with the receiver) through the top of the cabinet into the *left-hand* terminals of the antenna blocks (at the upper edge of the receiver board) and secure them to the cabinet top with the screws provided, as shown in Detail D.
7. Insert the receiver's antennas through the top of the cabinet, into the blocks' *right-hand* terminals, and tighten the screws.
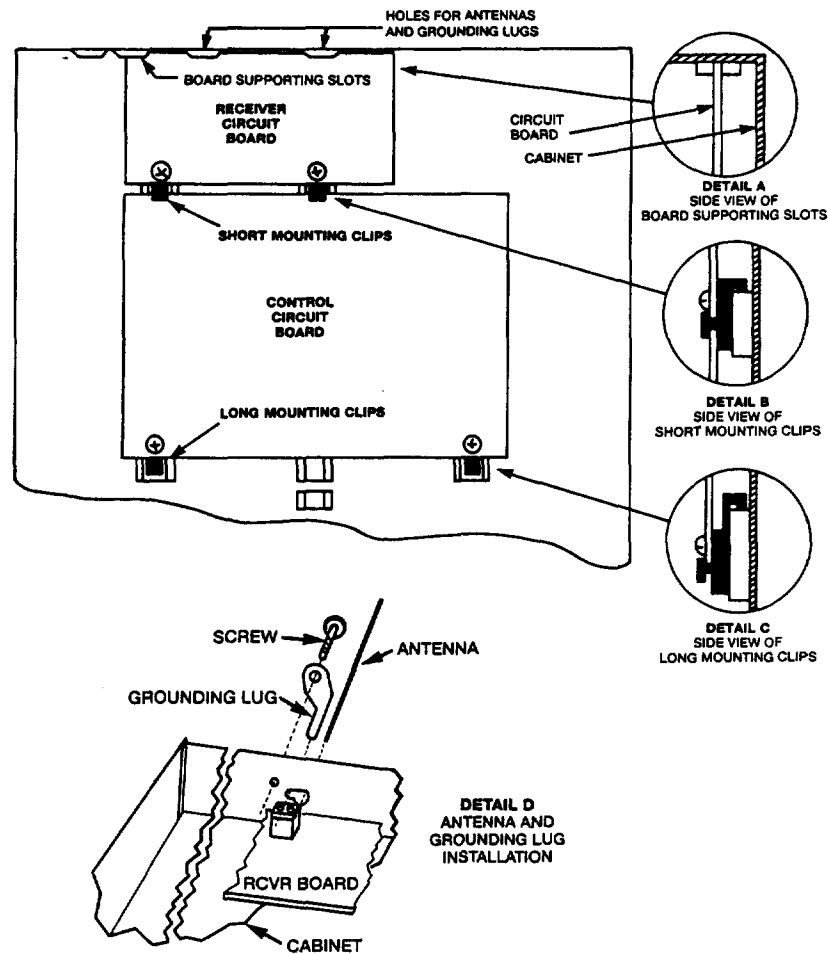
Using Optional Voice Module or Long Range Radio

If used, an optional No. 4285 Voice Module may be installed inside the control cabinet (if space permits) or externally. Complete installation and connection information (to the control's console and telephone line connection points) accompanies the voice module.

Connection of the No. 7720ECP Long Range Radio (to the control's console connection points) is described in the information that accompanies the radio.

Note: The 4285 and 7720ECP have not been UL tested and cannot, therefore, be used in a UL installation.

Section 4. WIRING & POWERING THE SYSTEM

(See Summary of Connections Diagram on Page 47)

IMPORTANT: Do not connect the battery, or plug in the AC transformer, until all other wiring connections have been completed.

Grounding the System

Terminal 21 is the earth ground connection point. In order for the protective devices in this product to be effective, the designated terminal must be terminated in a good earth ground. The following are examples of good earth grounds available at most installations:

Metal cold water pipe: Use a non-corrosive metal strap firmly secured to the pipe to which the lead is electrically connected and secured.

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

Terminals and Connections

OPTIONAL
4285 VOICE MODULE
and
7720ECP
LONG RANGE RADIO

Use of these devices in conjunction with Keypad Connection terminals 4–7 and/or phone terminals 17–20 is described in the instructions that accompany those devices.

Note: Neither the 4285 nor the 7720ECP have yet been Listed for UL installations.

---

1 & 2: AC Input (16.5VAC, 25VA) from No. 1321/TF2 plug-in transformer (in U.S.A.).
Note: In Canadian installations, a No. 1321CN transformer must be used.

3: . Alarm relay output(+), 12VDC, 2.0A maximum.
600mA max (Alarm plus Aux Power) for UL usage.

4: <u>Ground (–) Return</u> for Alarm Output, Auxiliary Power and Wired Fire.
For Console(s)† and 4281/5881, and 5800TM, and/or 4204.
<u>Via BLACK leads.</u>

5: <u>+12VDC Output (at 500mA max.)</u> for Auxiliary Power and Wired Fire.
For Console(s)† and 4281/5881, and 5800TM, and/or 4204.
<u>Via RED leads.</u>

6: <u>Data In</u> from Console(s)† and 4281/5881, and 5800TM, and/or 4204.
<u>Via GREEN leads.</u>

7: <u>Data Out</u> to Console(s)† and 4281/5881, and 5800TM, and/or 4204.
<u>Via YELLOW leads.</u>

8: Zone 1. *Note:* For each zone used, a 1,000 Ohm EOLR should be wired between the farthest sensor connected to the zone terminal and the low side of the zone.

9: Zones 1 and 2 Return.

10: Zone 2 (see Note at zone 1)

11: Zone 3 (see Note at zone 1)

12: Zones 3 and 4 Return

13: Zone 4 (see Note at zone 1)

14: Zone 5 (see Note at zone 1)

15: Zones 5 and 6 Return.

16: Zone 6

17: Handset (TIP).

18: Handset (RING).

19: Incoming Phone Line (TIP).

20: Incoming Phone Line (RING).

21: EARTH GROUND (a proper earth ground must be provided to protect the system from lightning and electrostatic discharge damage).

Warning: To prevent the risk of electrical shock, disconnect the telephone line at the Telco jack before servicing the unit.

RED LEAD: Battery (+). When AC is present, 13.8VDC is being developed to recharge a gel lead acid battery and when AC is absent, 12VDC current is drawn from the battery. Battery lead reversal will blow the battery fuse.

BLACK LEAD: Battery (-).

† Up to 4 consoles may be used (check total auxiliary current, per *SPECIFICATIONS*). Consoles need not necessarily be on individual home runs, but no more than 220' of #22 wire or 550' of #18 wire should be used for each run. Addressable consoles (e.g., 4137AD, 5137AD, 6128, 6137, 6138, and 6139) must be set to their non-addressable mode (device ID 31).

Power-up Procedure

1. Make sure that the total current to be drawn from the Alarm Output terminals (3 & 4) and Auxiliary Power Output terminals (4 & 5) does not exceed the values indicated in the *SPECIFICATIONS* section and on the *SUMMARY OF CONNECTIONS* diagram.

2. Wire the transformer to the panel (before connecting the battery) as shown on the *SUMMARY OF CONNECTIONS* diagram. **Do not plug in at this time.**

3. Connect all loops, devices, consoles, etc. to the panel.

4. Plug the transformer into a 24 hour, uninterrupted AC outlet. After some initial displays (see page 17) and approximately one minute, the green POWER or READY LED on the console(s) should be lit and the consoles should display "READY" (Fixed Word consoles) or "DISARMED READY TO ARM" (Alpha consoles).

5. Connect the battery as shown in the SUMMARY OF CONNECTIONS diagram.

General Information

Installer options are stored in non-removable, electrically erasable, non-volatile EEROM memory. These options must be programmed for the particular installation to establish its specific alarm and reporting features.

Note: It is possible to program the system at any time, even at the installer's premises prior to the actual installation. Simply apply power temporarily to the control and then program the unit as desired.

> ### THE SECURITY CONTROL IS PROGRAMMED VIA A 5137AD OR 6139 ALPHA CONSOLE (or a download)
> These consoles need not necessarily remain in the system after programming.
>
> *Note:* These addressable consoles must be set to their non-addressable mode (device ID 31).

The initial sequence of entries should follow the order on the programming sheet.

> *Certain programming fields*, such as those used to select the expansion devices (fields *22 and *25) *must be programmed before expansion zones can be programmed.* If an expansion unit type is changed, the expansion zones should be reprogrammed.

When programming, the field number will be displayed on the LCD display; also, each entry is displayed as it is keyed in. After programming, values that have been entered in each field can be reviewed and, if necessary, modified.

When programming from the console, note the following:

1. Enter the Programming mode by simultaneously depressing the [✶] and [#] keys **within 50 seconds after power is applied to the Control,** or subsequently by keying the code **4 + 1 + 1 + 1** followed by depression of **CODE + 0** keys. If a different Master code is subsequently programmed, use it instead of 4111 to gain access to the Programming mode. *If the Programming mode was exited previously using a ✶98, it will prevent entry into the Programming mode by the use of the Master Code + CODE + 0.*

2. Immediately following entry into the program mode, field *20 will be displayed. Following the above display, the system is ready to accept entries for field *20.

3. To program a data field, key [✶] plus **Field No.** (for example, ✶21), then make the required entry.

> Some entries require sequential pressings of [✶] to actually enter the data. This is true in the Zone and Relay fields *56, *80, and *81 and the prompts will indicate this. Entry of [#] will generally back up one entry position for review.

4. To simply review a data field, key [#] plus **Field No.**. Data will either be automatically sequentially displayed or can be displayed by successively pressing [#]. No changes will be accepted in this mode.

5. When a data field has been completely programmed, the console will normally "beep" three times and then automatically display the next data field number to be programmed (if not, key [✶] plus the **Field No.** of the next field to be programmed).

6. If the number of digits that you enter in the data field is less than the maximum permitted (for example, phone number), then the console will display the last data entered. To proceed, the next data field number to be programmed must then be entered (for example, ✶42).

7. If a field is improperly entered, the console will display **EE**. Simply re-enter [✶] or [#] plus the field number.

Summary of Programming Commands

FUNCTION	PROCEDURE
ENTER PROGRAMMING MODE	1. POWER UP, then depress [*] **and** [#] both at once, within 50sec of powering up. **O R** 2. Initially, key: **4 + 1 + 1 + 1** plus **CODE key + 0.** **O R** 3. If different Master Code is programmed, key : **MASTER CODE + CODE KEY + 0.** (if *98 was used to exit previously, method 1 above must be used to enter the program mode again)
INITIALIZE DOWNLOAD ID AND SUBSCRIBER ACCT NUMBER FOR DOWNLOADING	*96 No data entry required, loads defaults.
SET ALL PROGRAM FIELDS TO DEFAULT VALUES	*97 No data entry required.
EXIT PROGRAMMING MODE	*98 Inhibits re-entry to programming mode via type 2 or 3 entry method above. *99 Allows re-entry to programming mode via type 2 or 3 entry method.
ADVANCE TO FIELD	[*] + **Field No.** (e.g., 21, 38, 56, etc.)
PROGRAM FIELD	[*] + **Field No.**, followed by data entries. Some fields require sequential pressings of [*] to enter data (e.g., fields 56, 80, 81).
ERASE FIELDS	[*] + **Field No.** + [*] (only applies to fields 40 thru 43 and 94).
READ FIELD	[#] + **Field No.** Data will either be automatically sequentially displayed or can be displayed by successively pressing [#].

Special Messages

OC = OPEN CIRCUIT (no communication between Console and Control).

EE = ERROR (program entry mistake). Re-enter the field number or data).

After powering up, **AC, dl** (disabled) or **System Busy** and **NOT READY** will be displayed after approximately 4 seconds. This will revert to **READY** in appx. 1 minute, which allows PIRS, etc. to stabilize. To bypass this delay, press: [#] + [0].

If **E4** or **E8** appears, more zones than the expansion units can handle have been programmed. Correct the programming and then completely de-power and re-power the control to clear this indication and remove the disable indication.

PROGRAMMING DATA FIELDS

| THE CENTERFOLD PROGRAMMING FORM CAN BE USED TO RECORD THE DATA FOR THIS INSTALLATION |

SYSTEM SETUP
(*20-*27)

*20   MASTER CODE
Enter 4 digits, 0–9 (entry of all 4 is mandatory).
Use of a "9" in the last position inhibits the duress code feature.

*21   QUICK ARM ENABLE
If enabled, [#] key can be used instead of security code when arming .
Code is always required when disarming.
Enter 0 for disabled or 1 for enabled.

*22   RF SYSTEM TYPE
Select the RF system (receiver) type being used.
0 = none; 1 = 5700 (4281); 2 = 5800 (5881)

*23   FORCED BYPASS FUNCTION
All zones that are bypassed by this function will be displayed after the
bypass is initiated.
0 = No forced bypass.   1 = Allows quick bypass of all open zones.

*24   RF RECEIVER HOUSE ID CODE
MUST enter for 5700 system's 4281 type receiver, or 5800 system's
5827 Wireless Keypad or 5827BD Bidirectional Console.
Enter 01-31 House ID.

*25   OUTPUT RELAY MODULE
Enter 3 if relay module is being used, or 0 if not..
0 = none; 3 = 4204

*26   VOICE MODULE ACCESS CODE
Supports the 4285 Voice Module on the console lines
(the 4285 has a permanent device address of 4).
To enable, enter two digits. 1st digit: 1–9
                    2nd digit: '*' (enter #+11) or '#' (enter #+12)
To disable, enter 0 in either position.

*27   OUTPUT TO LONG RANGE RADIO (e.g., No. 7720ECP)
Enter 0 for no or 1 for yes.
If yes is selected, any dialer report programmed to report to the PRIMARY
phone number (in field *47) will be sent, as well, via long range radio. All
dialer and long range radio reports will be in Contact ID format (regardless
of the selection made in field *46).
Note: Program the radio for a device address of 3 on the keypad lines.
Full Trouble and Restore messages are sent.

ZONE SOUNDS AND
TIMING
(*28-*39)

*28   SINGLE ALARM SOUNDING PER ZONE (per armed period)
Affects external sounder only, if yes is selected.
Enter 0 for no or 1 for yes.

*29   FIRE SOUNDER TIMEOUT
0 = Fire sounder times out at end of bell timeout period (field *30).
1 = Fire sounder continues until silenced manually.

*30   ALARM BELL TIMEOUT
External sounder will shut off after time allotted. Enter 1 digit.
0 = No timeout   1 = 4 minutes   2 = 8 minutes   3 = 12 minutes

*38   ENTRY DELAY
System will wait the time allotted before sounding alarm upon entering.
(EXIT delay = Entry delay plus 15 seconds)
0 = 0 sec, 1 = 20 sec, 2 = 30 sec, 3 = 45 sec, 4 = 60 sec, 5 = 90 sec.
For UL installations, entry delay can be no greater that 45 sec.

*39   AUDIBLE EXIT WARNING
When arming AWAY or MAXIMUM, console sounds slow beeps during exit
time, turning into fast beeps during last 5 seconds.
Enter 0 for no or 1 for yes.

In Fields *40, *41, *42:
Enter up to the number of digits shown. Do not fill unused spaces. Enter 0–9, #+11 for '*', #+12 for '#', #+13 for a pause

Field *43 is also used as the Long Range Radio Subscriber Account Number

*40 PABX ACCESS CODE (See box at left)
Enter up to 4 digits if PABX code is needed to access an outside line. If fewer than 4 digits entered, exit by pressing * (and press 41 if entering next field). To clear entries from field, press *40*.

*41 PRIMARY PHONE No. (See box at left)
Enter up to 12 digits. If fewer than 12 digits entered, exit by pressing * (and press 42 if entering next field). To clear entries from field, press *41*.

Note: Back-up reporting (8 calls are made to the secondary phone number if no kiss-off is received after 8 attempts to the primary number) is automatic only if there is a secondary phone number.

*42 SECONDARY PHONE No. (See box at left)
Enter up to 12 digits. If fewer than 12 digits entered, exit by pressing * (and press 43 if entering next field). To clear entries from field, press *42*. See *Note* in field above.

*43 SUBSCRIBER ACCOUNT. No.
Enter digits 0–9, #+11=B, #+12=C, #+13=D, #+14=E, or #+15=F. Enter * as the fourth digit if a 3 digit acct no. (for 3+1 dialer reporting format) is used. Enter 0 as the first digit of a 4-digit acct no. for nos. 0000–0999. End field by pressing * (and press next field) if only 3 digits are used. To clear entries from field, press *43*.

*45 PHONE SYSTEM SELECT
Enter 1 digit to select dialing.

If Central Station Rcvr *is not* on WATS line:	0 = Pulse, 1 = Tone
If Central Station Rcvr *is* on WATS line:	2 = Pulse, 3 = Tone

*46 REPORT FORMAT
Determine format to be used to report to the central station. Enter 1 digit.

0 = 3+1; 4+1 ADEMCO Low Speed Std.	6 = 4+2 ADEMCO Express
1 = 3+1; 4+1 Radionics Standard	7 = ADEMCO Contact ID Reporting
2 = 4+2 ADEMCO Low Speed Standard	8 = 3+1; 4+1 ADEMCO Low Speed Expanded
3 = 4+2 Radionics Standard	9 = 3+1; 4+1 Radionics Expanded

(Enter * as the 4th digit of *43, if 3+1 dialer reporting is to be used.)

For explanation of these formats, see page 30.

Notes: The maximum number of alarm and alarm restore reports during one armed period is determined by field *92.
See field *27, which may override this field's selection.

*47 SPLIT/DUAL REPORTING
Enter 0 to disable (Backup report only). To enable, enter 1–5.

	TO PRIMARY PHONE No.	TO SECONDARY PHONE No.
1 =	Alarms, Restore, Cancel	Other Reports
2 =	All Reports except Open/Close, Test	Open/Close, Test
3 =	Alarms, Restore, Cancel	All Reports
4 =	All Reports except Open/Close, Test	All Reports
5 =	All Reports *(Dual Reporting)*	All Reports

*48 15 SECOND DIALER DELAY (BURGLARY)
Allows time for subscriber to avoid a false alarm transmission.
Enter 0 for no or 1 for yes.

*49 PERIODIC TEST MESSAGE
Select the desired test report interval.
0 = none; 1 = 24 hours; 2 = weekly; 3 = monthly
Test Report Code entered in field *64 is sent.
For UL installations, 24 hours (1) must be selected.

*50 SESCOA/RADIONICS SELECT
0 = Radionics (0-9, B-F reporting)   1 = SESCOA (0-9 only reporting)

*51 CONFIRMATION OF ARMING DING
Enter 0 for no or 1 for yes.
If selected, ding is external sounder only and will occur at time of kissoff of closing report. If closing report is not programmed, ding will occur at end of exit time.

*52   ZONE 3 RESPONSE TIME TO OPEN
0 = 400ms nominal   1 = 10ms nominal

ZONE ASSIGNMENT/
ALARM REPORT
CODES, etc.
(*56)

*56   ZONE ASSIGNMENT/ALARM REPORT CODES
(and RF Input ID Learning for 5800 System)
REFER TO THE ZONE ASSIGNMENT TABLE FOR THIS FIELD
ON THE CENTERFOLD PROGRAMMING FORM

This field is used to program zone numbers, zone types, alarm and report codes, and to identify the type of loop input device. This field can also be used for "learning" 5800 series transmitter ID codes and for entering alpha descriptors for zones.

Zone Number (Zn): Upon entering field *56, enter the zone number that you wish to program (or [0][0] to leave zone programming).

```
Enter Zn Num.
(00=Quit)        20
```
Zone 20 entered ↑

```
Zn  ZT - RC  In: L
20  09 - 10  RF: -
```

Press [*]. A summary display will come up, showing the status of that zone's program.

If it is programmed satisfactorily, press [#] to back up one step and enter another zone number, if desired.

If the zone is not programmed, or you want to change it, press [*]. A prompt for Zone Type will appear.

↓ Zone Number
```
20 Zone Type
Perimeter       03
```
Zone Type ↑

Zone Type (ZT): Each zone must be assigned to a zone type, which defines the way in which the system responds to faults in that zone.

Enter the zone type code (or change it, if necessary). Zone types are defined below.

ZONE RESPONSE TYPE DEFINITIONS

Zone Type 02 is not used in this system.

Type 00
Zone Not Used

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

Type 01
Entry/ExitBurglary

This zone type provides entry delay whenever the zone is faulted if the control is armed in the Away or Stay modes. When the panel is armed in the Instant or Maximum modes, no entry delay is provided. Exit delay begins whenever the control is armed, regardless of the arming mode selected. These delays are programmable. This zone type is usually assigned to sensors or contacts on doors through which primary entry and exit will take place.

Type 03
Perimeter Burglary

This zone type gives an instant alarm if the zone is faulted when the panel is armed in the Away, Stay, Instant or Maximum modes. This zone type is usually assigned to all sensors or contacts on exterior doors and windows.

Type 04
Interior, Follower

This zone type is active when the panel is armed in the Away or Maximum modes. Entry delay (using the programmed entry time) results if the panel is armed in the Away mode and the entry/exit zone is faulted first. Otherwise this zone type gives an instant alarm. *Exit* delay is present for *any* arming mode. This zone type is usually assigned to a zone covering an area such as a foyer, lobby, or hallway through which one must pass (upon entry, after faulting the entry/exit zone) to reach the console to disarm the system. Since this zone type is designed to provide an instant alarm if the entry/exit zone is not violated first, it will protect an area in the event an intruder hides on the premises prior to the system being armed, or gains access to the premises through an unprotected area. **This zone type is bypassed automatically when the panel is armed Stay or Instant.**

Type 05
Trouble by Day/
Alarm by Night

This zone type will give an instant alarm if faulted when armed in the Away, Stay, Instant or Maximum (night) modes. During the disarmed state (day), the system will provide a latched trouble sounding from the console (and a central station report, if desired). This zone type is usually assigned to a zone which 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, drug supply room, etc. This zone type can also be used on a sensor or contact in an area where immediate notification of an entry is desired.

| Type 06 | This zone type sends a report to the Central Station but provides no console display or sounding. This zone type is usually assigned to a zone containing an Emergency button. |
| **24-hour Silent Alarm** | |

| Type 07 | This zone type sends a report to the Central Station, and provides a rapid beeping sound at the console, and an audible external alarm. This zone type is usually assigned to a zone that has an Emergency button. |
| **24-hour Audible Alarm** | |

| Type 08 | This zone type sends a report to Central Station and provides a rapid beeping sound at the console. **(No bell output is provided).** This zone type is usually assigned to a zone containing a button for use in personal emergencies, or to a zone containing monitoring devices such as water or temperature sensors, etc. |
| **24-hour Auxiliary Alarm** | |

| Type 09 | This zone type provides a fire alarm on short circuit and a trouble condition on open circuit. The bell output will pulse when this zone type is faulted. This zone type is always active and cannot be bypassed. This zone type can be assigned to control panel wired zone 5 or to certain wireless zones. |
| **Supervised Fire** | |

| Type 10 | This zone type gives *entry* delay (using the programmed entry time), if tripped when the panel is armed in the Away mode, regardless of whether or not an entry/exit delay zone was tripped first. This zone type is also active during Maximum mode, but *no* entry delay is provided (an alarm occurs immediately if the zone is tripped). *Exit* delay is present for *any* arming mode. **This zone type is bypassed automatically when the panel is armed Stay or Instant .** |
| **Interior w/Delay** | |

| Type 20 | This is a special purpose zone type used with 5800 series wireless pushbutton or contact closure or opening, and which will result in arming the system in the STAY mode when the zone is activated. |
| **Arm-Stay** | |

| Type 21 | This is a special purpose zone type used with 5800 series wireless pushbutton or contact closure or opening, and which will result in arming the system in the AWAY mode when the zone is activated. |
| **Arm-Away** | |

| Type 22 | This is a special purpose zone type used with 5800 series wireless pushbutton or contact closure or opening, and which will result in disarming the system when the zone is activated. |
| **Disarm** | |

| Type 23 | This zone type can be used on a zone when an output relay action is desired, but with no accompanying alarm (ex. lobby door access). |
| **No Alarm Response** | |

By using a 4281/5881 RF Receiver and the appropriate 5700/5800 series transmitters, all of the above zone types are available for the wireless portion of the system.

When the display shows the zone type you want, press [✳] to advance to...

```
20 Report Code
1st 00  2nd 00    00
```

Report Code (RC): The report code consists of 2 hexadecimal digits, each in turn consisting of 2 numerical digits. For example, for a report code of "3C", enter [0][3] for "3" and [1][2] for "C". Enter the numbers and press [✳] to advance to...

Input Device (In): For the hard wired zones of the **VISTA-10** (HW), and the zones for a 5700 system's transmitters (RF), the Input Device types are automatically assigned (Panic, Duress, and Tamper inputs are not applicable).

```
20 Input Device
RF Trans. RF:
```

For a 5800 system's transmitters, "RF" is initially displayed, but should be changed to "UR" (Unsupervised RF, enter 4) for units that can be carried off-premises (e.g., No. 5801), or to "BR" (Button type RF, enter 5) for small transmitters that cannot be supervised (e.g., Nos. 5802, 5802CP, 5803). Check the instructions that come with the transmitter for the proper input. When all is okay, press [✳] to advance to...

```
┌─────────────────────────┐
│ 20 Learn S/N ?          │
│ 0=No  1=Yes        0    │
└─────────────────────────┘
```

```
┌─────────────────────────┐
│ TRANSMIT NOW            │
│                         │
│                         │
└─────────────────────────┘
```

TYPICAL DISPLAY

```
┌─────────────────────────┐
│ Zn ZT – RC  In:   L     │
│ 20 03 – 3C  RF:  2      │
└─────────────────────────┘
```
Accepted Input (Loop) Number ↑

```
┌─────────────────────────┐
│ Program Alpha?          │
│ 0=No  1=Yes        0    │
└─────────────────────────┘
```

Learning RF Input (L): *Applicable to a 5800 system only.*

Note: Where a "Yes–No" is asked by the console, pressing the [✳] or [0] for No is equivalent.

This request will be to learn the transmitter input's ID code. (The ID codes can be learned here or via field *83.)

If "yes" is selected, open and close (or close and open), or press and release the particular input to the transmitter twice. After the first time, a single short beep will occur. After the second time, two short beeps will mean that the control has accepted that transmitter into the system.

Because of the characteristics of the receiver, allow about 8 seconds between transmissions from button units (e.g., 5802, 5802CP, 5803). If a long beep occurs, it means that the particular transmitter input has previously been registered in the system.

The display will revert to the summary line, with the accepted input (loop) number under the "L" in the display.

Mark the zone number on the transmitter.

If all is okay, press [✳].

Custom Alpha Editing: For all zone types, the next request is to enter alpha descriptors for the zones. The entry may be done now (enter 1) or may be done at a later time via field *82 (enter 0).

> See the *ALPHA DESCRIPTION ENTRIES* section on page 29.

```
┌─────────────────────────┐
│ Enter Zn Num.           │
│ (00=Quit)         00    │
└─────────────────────────┘
```

When all entries to be made for the zone at this time are complete, the next zone number can be entered for programming, or zone programming can be ended by entering [0][0] as the next "zone number".

Notes:
- *When using a 5801,* the Input (Loop)"4" button should always be used and learned by the system.
- *In field *56, at the summary line for each zone, the entered values can be checked.* If it is desired to change anything, press [#] to move to the previous entry. Press [#] a number of times to move to earlier entries. Press [✳] to move to later entries again.
- *Zone entries can be reviewed* by pressing [#][5][6]. Changes cannot be made here, so this is safer for review. Enter the first zone number to be viewed and press [#]. To view each zone, press [#] and the zone number will advance to the next programmed zone. When the end of the list is reached, press [0][0] to exit. This method of exiting may also be done at any time during the review.

```
┌─────────────────────────┐
│ 20 Zone Type            │
│ Not Used          00    │
└─────────────────────────┘
```

```
┌─────────────────────────┐
│ 20 Delete Zone?         │
│ 1=Yes  0=No             │
└─────────────────────────┘
```

- *To either temporarily or permanently remove a zone from the system,* go into programming mode and press [*][5][6]. Enter the zone number and press [✳]. At the Zone Type prompt, enter [0][0] and [✳]. This sets the type of the zone to Not Used. The next prompt will be "Delete Zone?". "Yes" will permanently remove the zone from the system while "No" will disable it but retain all data except the original zone type.You can then go back to this zone later and put back an active Zone Type to re-enable it.
- *An ID code that has been learned for a 5800 system will not be deleted* if the zone is disabled as described above. *If only the physical transmitter is to be removed or changed (i.e., its ID code deleted, as when replacing a unit that has a non-removable battery), it can be done in field *56 or *83.* In programming mode, press [✳][5][6], enter the zone number, and press [✳] multiple times until the cursor is under the Learned RF Input (L) position. This is the specific input (loop) or button on the transmitter that has been learned for that zone. If a [0] is entered at this point, a prompt "Delete S/N?" will appear. If "Yes" is entered, this specific ID code will be deleted from the system.

TO PROGRAM SYSTEM STATUS & RESTORE REPORT CODES (*60-*75)	With a 3+1 or 4+1 Standard Format: Enter a code in the *first digit* box: 1-9, 0, B, C, D, E, or F. Enter "#+10" for 0, "#+11" for B, "#+12" for C, "#+13" for D, "#+14" for E, "#+15" for F.
	A "0" (*not* "#+10") in the *first digit* box will disable a report.
	A "0" (*not* "#+10") in the *second digit* box (if any) will result in automatic advance to the next field when programming.
	With an Expanded or 4+2 Format: Enter codes in *both* boxes (1st and 2nd digits) for 1-9, 0, or B-F, as described above.
	A "0" (*not* "#+10") in the *second* box will eliminate the expanded message for that report.
	A "0" (*not* "#+10") in *both* boxes will disable the report.
	With Ademco Contact ID Reporting: Enter any digit (other than "0") in the *first* box, to enable zone to report This is an "enabling" code only and is disregarded in the actual reporting to the central office. Entries in the *second* boxes will be ignored.
	A "0" (*not* "#+10") in the *first* box will disable the report.

See *Examples* on programming form.

SYSTEM STATUS REPORT CODES (*60-*68)

*60   **TROUBLE REPORT CODE** (See box above.)

*61   **BYPASS REPORT CODE** (See box above.)

*62   **AC LOSS REPORT CODE** (See box above.)

*63   **LOW BAT REPORT CODE** (See box above.)

*64   **TEST REPORT CODE** (See box above.)

*65   **OPEN/EXIT ALARM REPORT CODE, 1st DIGITS**

Open Report Code : To enable, enter a code (or 0 to disable) in the left-hand box (see box above *60).

For expanded or 4+2 reporting, 2nd digit = User #.

Exit Alarm Report Code: To enable, enter a code (or 0 to disable) in the right-hand box (see box above *60). If enabled:

ANY ALARM FROM AN EXIT OR INTERIOR ZONE OCCURRING WITHIN TWO MINUTES AFTER THE END OF THE EXIT DELAY will send a special message indicating exit alarm to the central station, and a zone indication and "Exit Alarm" or "EA" is displayed on the console.

IF AN EXIT OR INTERIOR ZONE CONTAINS A FAULT AS THE EXIT DELAY ENDS, the local bell and console sound continuously.

a) *If the subscriber then disarms the system before the ensuing ENTRY delay ends,* no message is transmitted to the central station, but a zone indication and "Canceled Alarm" or "CA" is displayed on the console.

b) *If the system is not disarmed before that entry delay ends,* a special message indicating Exit Alarm is sent to the central station and a zone indication and "Exit Alarm" or "EA" is displayed on the console.

For expanded or 4+2 reporting, a 2nd digit is sent, and is the same as the 2nd digit of the zone alarm report code programmed in field *56.

For Contact ID reporting, Event code 374 and the zone number is sent.

There is no restore message for Exit Alarm report.

*66   **AWAY/STAY CLOSE RPT CODE, 1st DIGITS** (See box above.)
To enable, enter a code (or 0 to disable) in either or both boxes

For expanded or 4+2 reporting, 2nd digit for each = User # .

*67   **RF XMTR. LOW BATTERY REPORT CODE** (See box above.)

*68   **CANCEL REPORT CODE** (See box above.)

RESTORE REPORT CODES (*69-*75)

*69   **GROUP RESTORES FOR TROUBLE, RF LOW BAT, BYPASS**
Enter: 0 for no (report for each restore),
       or: 1 for yes (report after all zones restored).
Note: "1" not applicable to Contact ID reporting.

*70   **ALARM RESTORE REPORT CODE, 1ST DIGIT**
For expanded or 4+2 reporting, a 2nd digit is sent, and is the same as the 2nd digit of the zone alarm report code programmed in field *56.

*71   **TROUBLE RESTORE REPORT CODE** (See box above.)

*72   **BYPASS RESTORE REPORT CODE** (See box above.)

*73   **AC RESTORE REPORT CODE** (See box above.)

*74   **LOW BAT RESTORE REPORT CODE** (See box above.)

*75   **RF XMTR. LOW BATTERY RESTORE CODE** (See box above.)

*80   OUTPUT RELAYS
Applicable only if field *25 is programmed for a 4204...otherwise skip this field.
REFER TO THE OUTPUT RELAY TABLE FOR THIS FIELD
IN THE PROGRAMMING FORM.

Relay Basics

Relays can be used to perform many different functions and actions. In this system, each relay must be programmed as to how to act (ACTION), when to activate (START), and when to deactivate (STOP). Each of these is summarized briefly below, but described later in detail in the programming procedure for fields *80 and *81.

1. **ACTION:** The "ACTION" of the relay is how the relay will respond when it is activated by the "START" programming. There are 4 different choices of actions:

   • CLOSE for 2 SECONDS and then reset.

   • CLOSE and STAY CLOSED until deactivated by "STOP" programming.

   • PULSE ON and OFF until deactivated by "STOP" programming.

   • NO RESPONSE is chosen when the relay is not used.

2. **START:** The "START" programming instructs the relay when and under what conditions to activate. There are 3 parts to be programmed:

   • EVENT instructs the relay what condition must occur to the zone(s) programmed into the "ZONE LIST" in order to activate the relay. The "EVENT" and "ZONE LIST" work together. The 4 different choices for "EVENT" are listed in the *PROGRAMMING* section for field *80.

   • ZONE LIST is a list of zones selected by the installer in field *81.When an event occurs as assigned by "EVENT" on any zone within that list, the relay will activate as selected in "ACTION". In this way, many zones can be assigned very easily to a single event. *For example: You may wish a relay to activate (perhaps to activate a strobe for a visual indication) whenever any zone in a group of zones is faulted.*

   • ZONE TYPE/SYSTEM OPERATION. Instead of using a "ZONE LIST" and "EVENT", a specific zone (response) type or system operation action can be selected to activate the relay.

      If a specific "ZONE TYPE" is chosen, any zone of that response type going into alarm, trouble, or fault will cause the relay to activate as selected in "ACTION".

      If a "SYSTEM OPERATION" is chosen, that operation will cause the relay to activate as selected in "ACTION".

      The different choices for "ZONE TYPE" and "SYSTEM OPERATION" are listed in the PROGRAMMING section for field *80.

3. **STOP:** The "STOP" programming instructs the relay when and under what conditions to deactivate. The 2 parts to be programmed are:

   • RESTORE ZONE LIST. If a "RESTORE ZONE LIST" is used, the relay will deactivate when all the zones in that list restore from a previous fault of alarm condition. This will occur regardless of what is programmed to "START" the relay; therefore, a "RESTORE ZONE LIST" would normally only be used when a "ZONE LIST" is used to start the relay.

   • ZONE TYPE/SYSTEM OPERATION. Instead of using a "RESTORE ZONE LIST", a specific zone (response) type or system operation action can be selected to deactivate the relay.

      If a specific "ZONE TYPE" is chosen, any zone of that response type that restores from a previous alarm, trouble, or fault condition will cause the relay to deactivate.

      If a "SYSTEM OPERATION" is chosen, that operation will cause the relay to deactivate.

      The different choices for "ZONE TYPE" and "SYSTEM OPERATION" are listed in the PROGRAMMING section for field *80.

Output Relay Displays
↓

```
Enter Relay No.
(00 = Quit)      01
```

Upon entering field *80, this screen will appear. Enter the Relay Number 01, 02, 03, or 04 for a 4204 (or 00 to end these entries). Press the [✳] key to advance.

> *The data is keyed in and entered for this and the following screens by pressing [✳]. To back up to check an entry, press [#] for each position. Press [✳] to go forward again.*

Relay being programmed.
↓

```
02      A EV ZL ZT
STT  0  0  0 00
```

This screen displays a summary of the current relay START programming (for this example, relay 02 has been selected). Press the [✳] key to advance.

```
02      A EV ZL ZT
STP  –  –  0 00
```

This screen displays a summary of the current relay STOP programming. Press the [✳] key to advance.

```
02 Relay Action
No Response    0
```

Action (A): Enter the desired relay action. Press the [✳] key to advance.

    0 = Not Used   **2 = Close and Stay Closed**
    1 = Close for 2 seconds   **3 = Continual Pulses (1 sec) On and Off**

```
02 Start Event
Not Used       0
```

Event (EV): Enter the event to START the relay. Press the [✳] key to advance.

    0 = Not used   **2 = Fault**
    1 = Alarm   **3 = Trouble**

```
02 Start:   Zn List
No List        0
```

Zone List (ZL): If a zone list will be used to START the relay action, enter the zone list number (to be programmed in field *81): 1, 2, or 3. If not used, enter 0. Press the [✳] key to advance.

```
02 Start:   Zn Typ
Zone Disabled 00
```

Zone Type/System Operation (ZT): If a zone type or system operation will be used to START the relay action, enter the appropriate two digit code. If not, enter 00. Press the [✳] key to advance.

CHOICES FOR ZONE TYPES

00 = Not Used		
01 = Entry/Exit	05 = Trouble Day/Alarm Night	08 = 24 Hr Aux
03 = Perimeter	06 = 24 Hr Silent	09 = Fire
04 = Interior Follower	07 = 24 Hr Audible	10 = Interior w/Delay

CHOICES FOR SYSTEM OPERATION

20 = Arming–Stay	33 = Any Burglary Alarm	38 = Chime
21 = Arming–Away	34 = Code + # + 7 Key Entry	39 = Any Fire Alarm
22 = Disarming (Code + OFF)	35 = Code + # + 8 Key Entry	40 = Bypassing
31 = End of Exit Time	36 = At Bell Timeout**	41 = AC Power Failure
32 = Start of Entry Time	37 = 2 times Bell Timeout**	42 = System Battery Low

**Or at Disarming, whichever occurs earlier.

```
02 Stop:   Zn List
No List        0
```

"Restore of" Zone List (ZL): If a zone list will be used to STOP the relay action, enter the zone list number (to be programmed in field *81): 1, 2, or 3. If not used, enter 0. Press the [✳] key to advance.

```
02 Stop:   Zn Typ
Zone Disabled 00
```

Zone Type/System Operation (ZT): If a zone type or system operation will be used to STOP the relay action, enter the appropriate two digit code (see the "ZT" choices listed above). If not, enter 00. Press the [✳] key to advance.

```
02      A EV ZL ZT
STT  0  0  0 00
```

This screen again displays a summary of the current relay START programming . Press the [✳] key to advance.

```
02      A EV ZL ZT
STP  –  –  0 00
```

This screen again displays a summary of the current relay STOP programming. Press the [✳] key to return again to the first screen so that the next relay number to be programmed can be entered, or enter [0][0] to end relay programming.

> **Note:** *Previously entered data can be reviewed* by pressing [#] [8] [0]. After the relay number is chosen, press [#] to go to the next screens. *This is a review mode only, and data cannot be changed.*

Example of Output Relay Programming **FOR OTHER EXAMPLES SEE THE TABLE ON PAGE 44**	**Let us light an indicator when any one of 3 specific zones are faulted or when any 24 hour aux. zone is disturbed. We want to turn off the indicator manually without affecting the arming status of the system.** In field *80 we choose Output Relay 01 and program the Action (A) to be "2" (Close and stay closed). The Event we are looking for to *start* the relay action is a fault, so we will program "2" in (EV). We will use Zone List 1 for the 3 specific zones, so will program "1" in (ZL), (and will program these 3 zones in field *81's Zone List 1). The second condition for turning on the indicator is triggering a 24 hour aux. zone (Zone Type 08), so we will program (ZT) as "08". To *stop* relay action and turn off the indicator, we do not want to use a restore of any zone, so we will program a "0" for the "*Restore of*" Zone List (ZL). To choose a manual entry of User Code + [#] + [7] to turn it off, we will program (ZT) as "34". If no other relay is to be programmed we go to field *81 and program the 3 specific zones in Zone List 1.

*81   ZONE LISTS FOR OUTPUT RELAYS

*Applicable only if field *25 is programmed for a 4204...otherwise skip this field.*

Zone List Displays

↓

Zone List No.	
(00 = Quit)	01

↓ Zone List selected.

03 Enter Zn Num.	
(00 = Quit)	00

03 Del Zn List?	
0 = No 1 = Yes	0

03 Delete Zone?	
0 = No 1 = Yes	0

03 Zn to Delete?	
(00 = Quit)	00

Upon entering field *81, this screen will appear. Enter the Zone List Number 01, 02, or 03 to program (or 00 to end these entries). Press the [*] key to advance.

In the following displays, zone list 03 has been selected for programming.

Enter each zone number to add to the zone list by first entering the zone number, then the [*] key (ex., 01*, 02*, 03*). After all desired zones are entered, enter 00 to advance.

To delete the zone list, enter 1 (Yes). All zones in the zone list will be deleted automatically and programming will return to the first screen.
To save the zone list, enter 0 (No) to advance.

To save the entire zone list, enter 0 (No) and programming will return to the first screen.
To delete a zone or zones in a zone list enter 1 (Yes) to advance.

Enter each zone to be deleted from the list, followed by the [*] key. After all zones to be deleted are entered, enter 00 to return to the first screen so that another list can be programmed, if desired. .

Notes: • Any list may include any or all of the system's zone numbers.
  • A zone list can be assigned to more than one output relay.
  • *If you only want to review what has been programmed previously,* enter [#][8][1]. The review can be advanced by using the [#] key. When finished, enter [0][0] to quit. No programmed values can be disturbed in this mode.

*82   CUSTOM ALPHA EDITING (Also entered from field *56)

See ALPHA DESCRIPTION ENTRIES section on page 29.

*83   ADD/DELETE 5800 RF INPUT IDs (Serial Nos & Sensor Pts)
See procedure in last paragraph of field *56.

*92   MAXIMUM NUMBER OF REPORTS PER ARMED PERIOD
Enter: 0 for a maximum of 10 total alarm plus alarm restore reports,
     or: 1 for an unlimited number *(must be selected for UL installations)*.

DOWNLOAD INFORMATION (*94, *95)

*94   DOWNLOAD PHONE NUMBER
Enter up to 12 digits, 0–9, #+11 for '*', #+12 for '#', #+13 for a pause. Do not fill unused spaces. If fewer than 12 digits entered, end field by entering * (and press next field number). To clear field, press *94*.

*95   RING DETECTION COUNT FOR DOWNLOADING
Enter number of rings before control picks up phone line (or 0 or 15).

     0 =   disable station initiated download
     1-14 =   # of rings
     15 =   answering machine defeat

***96   INITIALIZE DOWNLOAD ID AND SUBSCRIBER ACCT. No.
FOR DOWNLOADING**
(No data entry required, loads defaults)

*97   SET ALL PROGRAM FIELDS TO DEFAULT VALUES
(No data entry required)

Press *98 or *99 if exiting programming, or next Field No. if continuing.

**TO EXIT
PROGRAMMING MODE
(*98 or *99)**

*98   EXITS PROGRAMMING MODE and *prevents* re-entry by :
    Master Code + CODE + 0

*99   EXITS PROGRAMMING MODE and *allows* re-entry by:
    Master Code + CODE + 0
    or by:
    Power-up + ✳ + #.

ALPHA DESCRIPTION ENTRIES

See the ALPHA FIXED DICTIONARY and CHARACTER CHART on page 29. If using a 4285 Voice Module, selection from the group of words in **boldface type** is suggested. *The voice module will not provide annunciation of the other words.*

**Assigning
Zone Descriptors**

The Alpha Console used with the control can have a user-friendly English language description/location of all protection zones, keypad panics, and RF receiver supervision faults programmed into the system. Each description can be composed of a combination of words (up to a maximum of 3) selected from a vocabulary of 244 words stored in memory (see page 29). In addition, up to 5 installer-defined words can be added to those already in memory. Thus, when an alarm or trouble occurs in a zone, an appropriate description for that zone's location will be displayed at the console.

Note: Alpha Descriptor entry can be done locally at the Alpha Console or remotely using V-Link Downloading Software. The Alpha Console procedure is described below.

**Entering
Zone Descriptors
(in field *56 or *82)**

1. The descriptor can be entered when the zone is being defined in field *56 or it can be entered later, in field *82.

2. Key [✳][0][1] to begin entering the description for zone 1 (key [✳][0][2] for zone 2, [✳][0][3] for zone 3, etc.). *If nothing was entered previously*, the following will be displayed: | ✳ ZN 01 A |

    Note that the first letter of the alphabet appears after the zone number, and that the zone number is automatically included with the description. *If there already is a description for the zone*, the description will appear (with no cursor, since this is a display mode). *If it is desired to enter or change a description*, key in [✳] + Zone Number again. A flashing cursor will now appear.

3. **One of two methods of entering the words can now be used** (assume, for example that the desired description for zone 1 is BACK DOOR) :

    a) **Press [#] followed by the 3 digit number of the first word from the fixed dictionary shown on page 29** (e.g., [0][1][3] for BACK). Press [6] in order to save the word and proceed, **or...**

b) **Select the first letter of the desired description** (note that "A" is already displayed). Press key [3] repeatedly to advance through the alphabet (e.g., to "B"), or key [1] to go backward. Then press [6] to display the first available word beginning with the desired letter (e.g., BABY). Next, press [3] repeatedly to move forward, or [1] to move backward, until the desired word is displayed (e.g., BACK). Then press [6] to accept the word and toggle back to the alphabet list.

4. For selection of the next word (e.g., DOOR), repeat steps 3a or 3b. For 3b, press key [3] until the first letter of the next word appears (e.g., "D"). Then press [6] to display the first available word beginning with that letter (e.g. DAUGHTERS). Press [3] repeatedly until the desired word (e.g., DOOR) appears. To accept the word, press [6], which toggles back to the alphabet list.

5. When all desired words have been entered, press [8] to store the description in memory.

6. *In field *56*, the next zone number in sequence will now be displayed for *complete* zone information entry.

   *In field *82*, enter [*][N][N], where NN is the next zone that you want to review or for which you want to program a descriptor. To modify the descriptor, enter [✳][N][N] again. To exit this mode, press [✳][0][0].

Adding Custom Words (will not be annunciated by 4285 Voice Module)

Up to five installer-defined words can be added to the built-in vocabulary. Each of the five "words" can actually consist of a "word string" of *several* words, but no more than *ten* characters can be used for each word or word string.

1. Select CUSTOM WORD mode when the question arises.

2. Key the number ([1]–[5]) of the custom word or word string to be created (for example, if you are creating the *first* custom word or word-string, enter [1], for the *second*, enter [2], etc.). A cursor will now appear at the beginning of the second line.

3. **One of two methods of entering the custom word's characters can now be used** *(refer to the CHARACTER LIST of letters, numbers, and symbols on the next page)*:

Important: Custom words must begin with an *alphabetic* character. If a number or symbol is used as the first character, the word will not be saved.

   a) **Press the [#] key, followed by the two digit entry for the first letter you would like to display** (e.g., [6][5] for "A"), **or...**

   b) **Use the [3] key to advance through the list of symbols, numbers, and letters.** Use the [1] key to move back through the list.

4. When you have reached the desired character, press [6] to select it. The cursor will then move to the right, in position for the next character.

5. Repeat steps 3 and 4 to create the desired word(s). Note that the [4] key can be used to move the cursor to the left, if necessary, and that key [7] can be used to enter a blank (or erase an existing character). Remember, no word or word-string can exceed 10 characters.

6. Press the [8] key to save the custom word(s) and return to the "CUSTOM ?" display. Repeat steps 2-5 for other custom words to be entered. To change a custom word, just overwrite it. If no more are to be entered now, press [0] to return to the Descriptor entry. The custom word(s) will be automatically added to the built-in vocabulary.

When zone descriptors are being entered as described in step 3a of the *Entering Zone Descriptors* section, the custom word numbers are 250 to 254 for words 1 to 5 respectively. When being entered as described in step 3b of that section, each word will be found at the end of the group of words that begin with the same letter as it does.

ALPHA FIXED DICTIONARY
(For Entering Zone Descriptors)

#	Word	#	Word	#	Word	#	Word	#	Word
000	(Word Space)	054	DISCRIMINATOR	• 105	KITCHEN	155	RADIO	209	VALVE
• 001	AIR	055	DISPLAY	• 106	LAUNDRY	• 156	REAR	210	VAULT
• 002	ALARM	056	DOCK	• 107	LEFT	157	RECREATION	211	VIBRATION
003	ALCOVE	• 057	DOOR	108	LEVEL	158	REFRIG	212	VOLTAGE
004	ALLEY	058	DORMER	• 109	LIBRARY	159	REFRIGERATION		
005	AMBUSH	• 059	DOWN	• 110	LIGHT	160	RF	213	WALL
• 006	AREA	• 060	DOWNSTAIRS	111	LINE	• 161	RIGHT	214	WAREHOUSE
• 007	APARTMENT	061	DRAWER	112	LIQUOR	• 162	ROOM	215	WASH
008	ART	• 062	DRIVEWAY	• 113	LIVING	163	ROOF	• 216	WEST
• 009	ATTIC	063	DRUG	• 114	LOADING			• 217	WINDOW
010	AUDIO	• 064	DUCT	115	LOCK	164	SAFE	218	WINE
011	AUXILIARY			116	LOOP	165	SCREEN	• 219	WING
		• 065	EAST	117	LOW	166	SENSOR	220	WIRELESS
• 012	BABY	066	ELECTRIC	• 118	LOWER	• 167	SERVICE	221	WORK
• 013	BACK	067	EMERGENCY			• 168	SHED		
• 014	BAR	068	ENTRY	• 119	MACHINE	169	SHOCK	222	XMITTER
015	BARN	• 069	EQUIPMENT	120	MAGNETIC	• 170	SHOP		
• 016	BASEMENT	070	EXECUTIVE	121	MAIDS	171	SHORT	223	YARD
• 017	BATHROOM	• 071	EXIT	122	MAIN	172	SHOW		
• 018	BED	072	EXTERIOR	• 123	MASTER	• 173	SIDE	224	ZONE (No.)
• 019	BEDROOM			124	MAT	174	SKYLIGHT	• 225	ZONE
020	BELL	• 073	FACTORY	• 125	MEDICAL	175	SLIDING		
• 021	BLOWER	074	FAILURE	126	MEDICINE	• 176	SMOKE	226	0
• 022	BOILER	075	FAMILY	127	MICROWAVE	177	SONIC	227	1
023	BOTTOM	• 076	FATHERS	128	MONEY	• 178	SONS	228	1ST
024	BOX	• 077	FENCE	129	MONITOR	• 179	SOUTH	229	2
025	BREAK	078	FILE	• 130	MOTHERS	180	SPRINKLER	230	2ND
• 026	BUILDING	• 079	FIRE	• 131	MOTION	181	STAMP	231	3
027	BURNER	• 080	FLOOR	132	MOTOR	• 182	STATION	232	3RD
		081	FLOW	133	MUD	183	STEREO	233	4
028	CABINET	082	FOIL			184	STORE	234	4TH
029	CALL	• 083	FOYER	• 134	NORTH	• 185	STORAGE	235	5
030	CAMERA	084	FREEZER	135	NURSERY	186	STORY	236	5TH
031	CAR	• 085	FRONT			187	STRESS	237	6
032	CASE	086	FUR	• 136	OFFICE	188	STRIKE	238	6TH
033	CASH	087	FURNACE	137	OIL	189	SUMP	239	7
034	CCTV			• 138	OPEN	190	SUPERVISED	240	7TH
035	CEILING	088	GALLERY	139	OPENING	191	SUPERVISION	241	8
036	CELLAR	• 089	GARAGE	• 140	OUTSIDE	192	SWIMMING	242	8TH
• 037	CENTRAL	• 090	GAS	141	OVERFLOW	193	SWITCH	243	9
038	CIRCUIT	091	GATE	142	OVERHEAD			244	9TH
039	CLIP	• 092	GLASS			194	TAMPER		
• 040	CLOSED	093	GUEST	143	PAINTING	195	TAPE		
041	COIN	094	GUN	• 144	PANIC	196	TELCO	250	Custom Word #1
042	COLD			145	PASSIVE	197	TELEPHONE		
043	COATROOM	• 095	HALL	• 146	PATIO	198	TELLER		
044	COLLECTION	• 096	HEAT	147	PERIMETER	• 199	TEMPERATURE	251	Custom Word #2
045	COMBUSTION	097	HIGH	• 148	PHONE	200	THERMOSTAT		
• 046	COMPUTER	098	HOLDUP	149	PHOTO	• 201	TOOL		
047	CONTACT	099	HOUSE	150	POINT	202	TRANSMITTER	252	Custom Word #3
		100	INFRARED	151	POLICE	203	TRAP		
• 048	DAUGHTERS	• 101	INSIDE	152	POOL			253	Custom Word #4
049	DELAYED	102	INTERIOR	• 153	POWER	204	ULTRA		
• 050	DEN	103	INTRUSION			• 205	UP		
051	DESK	104	JEWELRY	154	QUAD	• 206	UPPER	254	Custom Word #5
• 052	DETECTOR					• 207	UPSTAIRS		
• 053	DINING					• 208	UTILITY		

Note: Bulleted (•) words in **boldface type** are those that are also available for use by the 4285 Voice Module. If using a voice module, and words other than these are selected for alpha descriptors, the voice module will not provide annunciation of those words.

CHARACTER (ASCII) CHART
(For Adding Custom Words)

#	Char	#	Char	#	Char	#	Char	#	Char	#	Char	#	Char
32	(space)	41	)	50	2	59	;	68	D	77	M	86	V
33	!	42	*	51	3	60	<	69	E	78	N	87	W
34	"	43	+	52	4	61	=	70	F	79	O	88	X
35	#	44	,	53	5	62	>	71	G	80	P	89	Y
36	$	45	-	54	6	63	?	72	H	81	Q	90	Z
37	%	46	.	55	7	64	@	73	I	82	R		
38	&	47	/	56	8	65	A	74	J	83	S		
39	'	48	0	57	9	66	B	75	K	84	T		
40	(	49	1	58	:	67	C	76	L	85	U		

Report Code Formats

The Report Codes for Alarm, System Status, and Restore for Zones shown in program fields *56-*75 can be selected in field *46 to report to the central station in any of the following formats:

Note: If OUTPUT TO LONG RANGE RADIO (field *27) is enabled, all dialer and long range radio reports will be sent in Contact ID format (see next page), regardless of the selection made in field *46.

The 3+1 and 4+1 Standard formats comprise a 3 (or 4) digit subscriber number and a single digit report code (e.g. Alarm, Trouble, Restore, Open, Close).

The 3+1 and 4+1 Expanded formats comprise a 3 (or 4) digit subscriber number, and a single digit report code, followed by a second line where the report code is repeated 3 (or 4) times and followed by another number (normally the zone number) or user ID related to that report.

The 4+2 formats comprise either a 4 digit subscriber number and two digit report code, or a 4 digit subscriber number and single digit report code, immediately followed by the zone number (normally) or user ID.

Report	3+1, 4+1 Standard	3+1, 4+1 Expanded	4+2
Alarm	SSS(S) A	SSS(S) A AAA(A) Z	SSSS AZ
Trouble	SSS(S) T	SSS(S) T TTT(T) t	SSSS Tt
Bypass	SSS(S) B	SSS(S) B BBB(B) b	SSSS Bb
AC Loss	SSS(S) E	SSS(S) E EEE(E) A_C	SSSS EA_C
Low Batt	SSS(S) L	SSS(S) L LLL(L) L_B	SSSS LL_B
Open	SSS(S) O	SSS(S) O OOO(O) U	SSSS OU
Close	SSS(S) C	SSS(S) C CCC(C) U	SSSS CU
Test	SSS(S) G	SSS(S) G GGG(G)g	SSSS Gg
Restore Alarm	SSS(S) R	SSS(S) R RRR(R) Z	SSSS RZ
AC Restore	SSS(S) R_A	SSS(S) R_A $R_A R_A R_A (R_A) A_c$	$SSSSR_A A_c$
LoBat Res.	SSS(S) R_L	SSS(S) R_L $R_L R_L R_L (R_L) L_B$	SSSS $R_L L_B$
Trouble Res.	SSS(S) R_T	SSS(S) R_T $R_T R_T R_T (R_T)t$	SSSS $R_T t$
Bypass Res.	SSS(S) R_B	SSS(S) R_B $R_B R_B R_B (R_B)b$	SSSS $R_B b$

<u>Where:</u>

SSS or
SSSS = Subscriber ID
A = Alarm Code-1st digit
Z = Typically Zone Number*-2nd digit
Tt = Trouble Code (1st & 2nd digits)
Bb = Bypass Code (1st & 2nd digits)
EA_C = AC Loss Code (1st & 2nd digits)
LL_B = Low Battery Code(1st & 2nd digits)
O = Open Code-1st Digit

C = Close Code-1st Digit
U = User Number (1st & 2nd digits)
Gg = Test Code (1st & 2nd digits)
R = Restore Code (Alarm)1st & 2nd digits
$R_T t$ = Restore Code (Trbl)1st & 2nd digits
$R_B b$ = Restore Code (Byps)1st & 2nd digits
$R_A A_C$ = Restore Code (AC)1st & 2nd digits
$R_L L_B$ = Restore Code (Bat)1st & 2nd digits

*Zone numbers for: [*]&[#], or [B] = 7   [1] + [*] , or [A] = 95
Duress = 8   [3] + [#], or [C] = 96
Tamper = 9

The Ademco Contact ID Reporting format comprises a 4 digit subscriber number, 1 digit event qualifier ("new" or "restore"), 3 digit event code, 2 digit "00", and 3 digit zone, contact ID, user, or system status number.

Ademco Contact ID Reporting takes the following format:

CCCC Q EEE GG ZZZ

where: CCCC = Customer (subscriber) ID
Q = Event qualifier, where: E = new event , and R = restore
EEE = Event code (3 hexadecimal digits, defined in the table below)
GG = Always 00.
ZZZ = Zone/contact ID number reporting the alarm, or user number for open/close reports. System status messages (AC Loss, Walk Test, etc.) contain zeroes in the ZZZ location.

TABLE OF CONTACT ID EVENT CODES

Code	Definition	Code	Definition
110	Fire Alarm	374	Exit Alarm
121	Duress	380	Trouble (global)
122	Silent Panic	381	Loss of Supervision - RF
123	Audible Panic	383	Sensor Tamper
131	Perimeter Burglary	384	RF Transmitter Low Battery
132	Interior Burglary	401	O/C By User
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 Power	441	Armed STAY
302	Low System Battery	570	Bypass
333	Expansion Module Fail	601	Test - Manually Triggered
353	LR Radio Trouble	602	Periodic Test
373	Fire Loop Trouble		

Section 7. REMOTE PROGRAMMING AND CONTROL (DOWNLOADING)

General Information

Note: Downloading is not permissible for UL installations.

The **VISTA-10** can be remotely programmed from an IBM compatible Personal Computer (PC), a Hayes Modem, and Ademco's V-LINK® Software (see below). Programming the control from a remote location is protected against compromise by someone attempting to defeat the system, by using multi-levels of security protection:

1. **Security Code Handshake:** An 8-digit download ID code must be matched between the control and the downloading software.

2. **Site Initiated Remote Programming:** The installer or subscriber initiates the callback from the subscriber premises (by pressing MASTER CODE + # + 1) while disarmed. All parameters can then be downloaded via the phone lines using a personal computer.

3. **Station Initiated Remote Programming:** The operator calls the site from your office to initiate the download call. The control hangs up and then calls back the PC via the preprogrammed telephone number. The unit can then be uploaded, downloaded, or controlled from your office .

4. **Data Encryption:** Data passed between the PC and the control is encrypted for security so that it is very difficult for a foreign device tapped into the phone line to take over communication and substitute system compromising information.

Equipment Required

At the premises:
* **VISTA-10** and console.

At the installer's office/home:
* An IBM PC compatible computer.
* *Either:* A Hayes brand Smartmodem 1200 [Level 1.2 or higher external or Level 1.1 or higher (with 4 position DIP switch) internal style],
    * or: A Hayes brand Optima 24 Plus FAX96 Modem (set Aux Modem Command to: X&D2&C1&Q0).
* A V-Link Downloading Software Diskette (Rev. 3.0, or higher).
* Appropriate interconnecting cables.

Programming

The downloading system can perform many functions when in communication with the control unit. Besides uploading and downloading, the status of the system can be observed and various commands can be initiated, as follows:

* 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 (non-payment of monitoring fees in an owned system).
* Shut Down all Security System Functions (non-payment for a leased system).
* Inhibit Local Keypad Programming (prevents account takeover).
* Command the System to Upload a Copy of its Resident Program to the office.
* Read: Arming Status, AC Power Status, Lists of Faulted Zones, Bypassed Zones, Zones Currently in Alarm, Zones Currently in Trouble, and RF Sensors with Low Battery Conditions.

Notes: After the control and the PC have established valid communication, each console on the system will become inactive and will display "CC" or "MODEM COMM.". The control, however, will still be scanning its zones and looking for alarms. If an alarm does occur, after communication is broken off, alarms are sounded and the proper dialer reports are sent to the central station. The consoles will become active after the download communication is terminated. The detailed operation of the download functions is covered in the installation instructions for the V-Link Downloading Software Diskette.

Remote Programming Advisory Notes

* Alarm and trouble reporting may be delayed during the time that the system and the Downloading Software are linked to each other following a valid exchange of codes, but the proper message will get through to the Central Station after the link is broken. *(continued)*

- Keypad entries are ignored during the time interval stated above.
- A copy of the program downloaded may be produced from the IBM PC compatible computer, using the product's internal report generator, when an optional printer is connected (consult your PC manual for proper printer and connections).
- Program Upload Time—One minute fifteen seconds for a complete program.
- Program Download Time—Depends on changes. Average time, one minute.

Section 8. SYSTEM OPERATION

SECURITY CODES

Master Code
The installer programs the 4-digit Master Code initially as part of the programming procedure (see *PROGRAMMING THE SYSTEM*). The factory default Master code is "4111".

The Master code can permit re-entry into the programming mode and also, in normal operation mode, is used to enter the user codes, which also allow access to the normal functions of the system.

See the *PROGRAMMING* section for information on exiting the programming mode via fields *98 or *99.

User Codes
In normal operation mode, the Master security code can be used to assign up to six secondary security codes. It can also be used to remove secondary codes from the system (individually).

To assign (or change) a Secondary security code, enter:

Master Code + [CODE] key+ User # (2, 3, 4, 5, 6, or 7) + desired Secondary Code

The system will emit a single beep when each secondary code has been successfully entered.

To delete a Secondary security code, enter:

Master Code + [CODE] key + User # (2, 3, 4, 5, 6, or 7)

Notes:
- All Master and Secondary security codes permit access to the system for arming, disarming, etc.
- If a secondary code is inadvertently repeated for different users, or one user's code is another's duress code (4th digit increased by 1), the lower user number will take priority.
- Opening and closing reports are sent for the Master code as No. 1. User codes are sent as Nos. 2 through 7 respectively.

KEYPAD FUNCTIONS

General Information
Note that if QUICK ARM is enabled (field *21), the [#] key can be pressed instead of entering the security code, for any of the arming procedures (Away, Stay, Instant, Maximum, etc.).The security code is *always* required, however, when disarming the system.

The keypad allows the user to arm and disarm the system, and perform other system functions, such as bypassing zones, and display zone descriptors. Zone and system conditions (alarm, trouble, bypass) are displayed in the Display Window.

When an alarm occurs, console sounding and external sounding will occur, and the zone(s) in alarm will be displayed on the console. Pressing any key will silence the console sounder for 10 seconds. Disarming the system will silence both console and external sounders. When the system is disarmed, any zones that were in an alarm condition during the armed period will be displayed (memory of alarm). To clear this display, simply repeat the disarm sequence (enter the security code and press the OFF key again).

The consoles also feature chime annunciation, and 3 panic keys, or key pairs, (for silent, audible, fire, or personal emergency alarms) which can notify the central station of an alarm condition, if that service is connected.

Arming Functions

The following is a brief list of system commands. For detailed information concerning system functions, refer to the User's Manual.

Disarmed, Not Ready   Before arming, the system must be in the READY condition (all zones must be intact). If the "NOT READY" message appears, press the READY [*] key to display faulted zones.

Arming Away   Enter code + AWAY [2].

Arming Stay   Enter code + STAY [3].

Arming Instant   Enter code + INSTANT [7].

Arming Maximum   Enter code + MAXIMUM [4].

Disarming   Enter code + OFF [1].

Bypassing Zones   Enter code + BYPASS [6] + zone number(s).

Forced (Quick) Bypass   *(If enabled)* To bypass all faulted zones at once, use "Forced Bypass" method: Enter code + BYPASS (then stop).

Chime Mode   Enter code + CHIME [9]. To turn chime mode off, enter code + CHIME again.

SUMMARY OF ARMING MODES

Mode	Features for Each Arming Mode			
	Exit Delay	Entry Delay	Perimeter Armed	Interior Armed
AWAY	Yes	Yes	Yes	Yes
STAY	Yes	Yes	Yes	No
INSTANT	Yes	No	Yes	No
MAXIMUM	Yes	No	Yes	Yes

Panic Keys

There are three panic key pairs and (on some consoles) lettered keys (shown below) that, if programmed, can be used to manually initiate alarms and send a report to the central station. Each can be individually programmed for 24 Hour Silent, Audible, Personal or Fire Emergency responses. The panic function is activated when both keys of the appropriate key pair are pressed at the same time, or the appropriate lettered key is pressed for at least 2 seconds.

The panic functions are identified by the system as follows:

KEYS	Displayed as Zone
[1] & [*], or [A]	95
[*] & [#], or [B]	07
[3] & [#], or [C]	96

IMPORTANT: For the Silent Panic function to be of practical value, the system must be connected to a central station.

Note: Keys [A], [B], [C] are not on all consoles. Key [D], if present, is not active here.

Duress Code

This feature is intended for use when one is forced to disarm or arm the system under threat. When used, the system will act normally, but can silently notify the central station of the situation, if that service has been provided. The Duress code is the same as the user code, except that the last digit is increased by one.

> *For example:* If the NORMAL security code is "1 2 3 4", the DURESS security code is "1 2 3 5".

User codes that end in "9" (e.g.,6349) cannot activate a duress alarm (i.e., 6350 is not a duress alarm code).

IMPORTANT!

Duress Code will function as described *ONLY if:*

a) The system is connected to a central station.

b) You enter a report code for Zone 8 (Duress) when you program field *56.

Relay Outputs (if used)

If relay outputs are provided (via a 4204 or 4229), two keypad entries available to the user are included among the system operation choices that may be programmed. They can manually activate or deactivate the relay(s) for starting or stopping some action, such as turning lights on or off, etc.

> These entries are: **Security Code + [#] + [7]**
> and   **Security Code + [#] + [8]**

> *Note:* Whichever entry is used to start/stop the action cannot also be used to stop/start it. The opposite action must either be performed by the other keypad entry or by some other event or operation offered in the programming section.

For some examples, see pages 26 and 45.

Exit Alarm Displays (if programmed)

- **A display of "CANCELED ALARM" or "CA" and a zone indication** will appear if an exit or interior zone contained a fault during closing at the time the exit delay ended (e.g., exit door left open), *but the system was disarmed during the immediately following entry delay time.* The alarm sounder and keypad sound continuously, but stop when the system is disarmed. No message will be transmitted to the central station.

- **A display of "EXIT ALARM" or "EA" and a zone indication** will appear if an exit or interior zone contained a fault during closing at the time the exit delay ended, *but the system was NOT disarmed during the immediately following entry delay time.* The alarm sounder and keypad sound continuously until the system is disarmed (or timeout occurs). An "exit alarm" message is sent to the central station.

- **The "EXIT ALARM" display, etc.** will also result if an alarm from an exit or interior zone occurs within two minutes after the end of an exit delay.

In any of the above cases, a second OFF sequence (code plus OFF key) will clear the display.

TROUBLE CONDITIONS

General Information

The word "CHECK" on the Keypad's display, accompanied by a rapid "beeping" at the Keypad, indicates that there is a trouble condition in the system. The audible warning sound can be silenced by pressing any key. Instruct users to call for service immediately upon seeing any of the following messages.

"Check" and "Battery" Displays

- **A display of "CHECK" and one or more zone numbers** indicates that a problem exists with the displayed zone(s) and requires attention.

  When the problem has been corrected, the display can be cleared by entering the OFF sequence (code plus OFF key) twice.

- **If there are wireless sensors in the system,** the CHECK condition may also be caused by some change in the environment that prevents the receiver from hearing a particular sensor.

- **A display of "BAT" with no zone number** indicates that the system's main standby battery is weak.

- **A display of "BAT" with a zone number and a once per minute "beeping" at the keypad** indicates that a low battery condition exists in the wireless sensor displayed (zone "00" indicates a wireless keypad). If the battery is not replaced within 30 days, a CHECK display may occur.

  Note: Some wireless sensors contain a non-replaceable long-life battery which requires replacement of the entire unit at the end of battery life (e.g., Nos. 5802, 5802CP, 5803).

Power Failure

- **If there is no keypad display at all, and the POWER indicator (if present) is not lit,** operating power for the system has stopped and the system is inoperative.

- **If the message "AC LOSS" or "NO AC" is displayed, and the POWER indicator (if present) is off,** the keypad is operating on battery power only.

- **If the battery standby capacity is used up during a prolonged AC power outage,** the control's auxiliary power will shut down to minimize deep discharge of the battery.

Other Displays

"Busy-Standby" or "dl"	If this remains displayed for more than 1 minute, the system is disabled.
"Modem Comm" or "CC"	The system is in communication with the central station for change of function or status verification.
"Comm Failure" or "FC"	A communication failure has occurred.
"Open Circuit" or "OC"	The keypad is not receiving signals from the control panel and sees an open circuit.
"Long Rng Trbl" or "bF"	7720ECP Radio backup Failure.

Section 9. TESTING THE SYSTEM

Procedure After installation is completed, the Security System should be carefully tested.

1. With the System in the disarmed state, check that all zones are intact. If **NOT READY** is displayed, press the [✳] key to display the faulted zone(s). Restore faulted zone(s) if necessary, so that **READY** is displayed. Fault and restore every sensor individually to assure that it is being monitored by the system.

2. Enter the **security code** and press the **TEST** key. The outside sounder will sound for 1 second. The console should sound 3 beeps each time a contact is faulted. A test report should be transmitted (if programmed) to the Central Station immediately. If the backup battery is discharged or missing, the sounder may not turn on and a LOW BATTERY report will be transmitted with a TEST report. The console will beep once per minute as a reminder that the system is in the Test Mode.

   To turn off the test mode enter the **security code** and press the **OFF** key.

   Note: For 5800 systems, triggering a zone set to Arm Away, Arm Stay, or Disarm will take the system out of TEST and cause that action.

Alarm messages will be sent to the central station during the following tests 3 and 4. Notify them *in advance* that tests will be in progress.

3. Arm the system and fault one or more zones. After 15 seconds (if optional dialer delay is selected), silence alarm sounder(s) by entering the **code** and pressing **OFF**. Check Entry/Exit delay zones.

4. Check the keypad-initiated alarms that are in the system by pressing the Panic key pairs. If the system has been programmed for audible emergency, the console will emit a steady alarm sound, and **ALARM and zone number** will be displayed. Silence the alarm by entering the **security code** and pressing **OFF**.

   If the system has been programmed for silent emergency, there will be no audible alarms or displays, but a report will be sent to the central station.

5. If output relays have been installed, test their programmed action.

6 Notify the central station when all tests are finished, and verify results with them.

7. To test the wireless part of the system and the RF Receiver, 3 additional test modes are available:

   a. **HOUSE ID SNIFFER MODE** (*not applicable to, or necessary with, 5800 RF system*): By pressing **Master code + # + 2**, a house code "sniffer" mode is enabled. The console will display the house code of any RF transmission it receives. In this way, you can check that you are not using the same house code as any nearby system (suggested test period: approx. 2 hrs). This mode can be exited by keying the **Master code + OFF.**

   b. **TRANSMITTER SNIFFER MODE:** Pressing **Master code + # + 3** initiates a procedure to check that all transmitters have been properly programmed. The console will display all zone numbers of wireless units programmed into the system. As the system receives a signal from each of the transmitters, the zone number of that transmitter will disappear from the display. The transmitter codes may be checked upon installation, or in an installed system. All the wireless addresses should disappear after about 1-1/2 hours. This mode can be exited by keying **Master code + OFF.** (*Note:* With a 5800 RF system, a transmitter not learned will not turn off its zone number.)

   c. **GO/NO GO TEST MODE:** By pressing **Master code + # + 4**, a mode similar to the user test mode (code + TEST) is entered, but the wireless receiver gain is reduced. Checking in this mode assists in determining good mounting locations for the transmitters when the system is being installed and verifies that the RF transmission has sufficient signal amplitude margin for the installed system. Exit the mode by entering **Master code + OFF.**

THE TEST MODE WILL BE AUTOMATICALLY TERMINATED AFTER 4 HOURS IF THE INSTALLER OR USER DOES NOT MANUALLY TERMINATE IT.

This insures that Fire and Panic zones will not remain disabled.

TROUBLESHOOTING GUIDE

	SYSTEM			
SYMPTOM	**POSSIBLE CAUSE**		**REMEDY**	
1. Transmitted signal not received at 4281/5881.	1a.	Transmitter or 4281/5881 not properly powered.	1a	Check or change transmitter's battery. Check control'sAC power.
	1b.	Transmitter and 4281 not set to same house code.	1b.	Check code switches inside transmitter. Must match with RF House Code programmed in control.
	1c.	5827 not being received by 5881.	1c.	House code for 5827 must be programmed into control.
	1d.	Strong local RF interference (frequent or prolonged lighting of indicator LED on 4281/5881 circuit board....occasional random flicker is ok).	1d.	Relocate 4281.
	1e.	Transmitter located too far from 4281/5881.	1e.	Move transmitter or 4281/5881.
	1f.	Metal shielding between transmitter and 4281/5881.	1f.	Check for large metal obstructions, then relocate transmitter if necessary.
	1g.	Transmitter malfunctioning.	1g.	Verify by activating 4281/5881 with another, similar transmitter. If O.K. now, return defective transmitter.
	1h.	4281/5881 malfunctioning.	1h.	Verify by making sure other transmitters cannot activate 4281/5881. If defective, replace and return original 4281/5881.
	1i.	Transmitter number (zone) not programmed.	1i.	Verify programming.
2. Transmitter zone number appears during Transmitter Sniffer mode, but does not clear.	2a.	Transmitter zone type (ZT) is set to 00 (Not Used).	2a.	Set ZT to a valid active zone type in field *56.
	2b.	Transmitter battery not installed.	2b.	Install proper battery.
	2c.	5700 System transmitter's DIP switch not set properly (house ID and transmitter ID).	2c.	Check and set the DIP switch.
	2d.	5800 System transmitter not "learned" in system.	2d.	"Learn" unit in field *56 or *83.
	2e.	With 5700 System, no response at all to *any* transmitter.	2e.	Check 4281 receiver. It must be Rev. D or later and have "N5334V1" marked on the large integrated circuit near the connector.
3. Low Battery message on console.	3a.	"Bat" alone.	3a.	System battery is low or missing.
	3b.	"Bat" + "00".	3b.	Remote RF keypad battery is low.
	3c.	"Bat" + "nn".	3c.	Transmitter for zone nn has a low battery.
4. Periodic beep(s) from console.	4a.	System is in TEST mode.	4a.	Enter "Code" + OFF to exit TEST mode.
	4b.	A transmitter low battery has occurred and is displayed.	4b.	Enter "Code" + OFF and replace the battery.
	4c.	A supervision CHECK has occurred.	4c.	Check the transmitter indicated. Restore communication to the receiver to cancel the condition.
5. With 5800 System, no response to a transmitter in normal operation, although zone number clears during Transmitter Sniffer mode.	Put control in TEST mode. If zone does not respond, try operating the tamper switch or another input to the transmitter.			
	5a.	If another input causes the zone to be displayed, the wrong input was "learned" when programming.	5a.	Delete input's serial number (not the zone), and learn the proper input (see field *56).
	5b.	If no response at all from this transmitter, this physical transmitter has not been learned by the system. Transmitter Sniffer display is being cleared by another unit programmed for this zone.	5b.	Determine which transmitter is programmed for this zone and reprogram as necessary.
6. Nuisance or phantom alarm.	6a.	Sensors not properly installed, wired, or monitored.	6a.	Check installation to see if in accordance with established procedure.
	6b.	Nearby neighbor has 5700 system (4281) with same house code.	6b.	Check with central monitoring station for neighbors with systems. Range can be 300 feet. Change house code if necessary.
	6c.	Universal transmitter (5715/5817) programmed wrong.	6c.	Check programming switches on transmitter.

S Y S T E M (continued)

SYMPTOM	POSSIBLE CAUSE	REMEDY
7. Intrusion alarm for no apparent reason.	7a. Protected door or window opened while system armed.	7a. Check with all occupants of protected home.
	7b. Improper user operation of exit/entry delays.	7b. Check setting of entry delay . Exit delay is 15 seconds longer than the entry delay time. Remind user of same.
	7c. Magnets located too far from switches, and/or doors and windows not properly aligned.	7c. Check all openings for proper switch and magnet orientation.
	7d. Magnetic contacts improperly connected or wire broken.	7d. Check wiring connections. Be sure wires are properly stripped and tightly fastened to screw terminals.
	7e. Entry door programmed as "instant".	7e. Check and revise program. Reprogram transmitter number.
	7f. Loose fitting door or window being rattled by wind or vibrations.	7f. Mount magnet closer to contact.
8. Repeated low battery signal.	8a. Transmitter located where temperature drops below 32° F.	8a. Change location. Use magnetic contacts to protect opening.
	8b. Poor quality or unspecified battery in transmitter.	8b. Check battery. Use only 9V Duracell MN1604 or equivalent for 5700 System. Use only 3V lithium for 5800 System.
	8c. Transmitter malfunctioning.	8c. Replace faulty transmitter.
9. Local bell and console sound continuously at arming.	9. Exit or interior zone contained a fault at end of Exit Delay (e.g., Exit door left open). *The "Exit Alarm" display, etc. will also result if an alarm from an exit or interior zone occurs within two minutes after the end of an exit delay. ──────→*	9a. If system disarmed *before* ensuing entry time runs out, "CA" or "Cancelled Alarm" will be displayed. Sounding will stop. 9b. If system *not* disarmed before entry time ends, "EA" or "Exit Alarm" will be displayed and Exit Alarm message will be sent to central station. Sounding will continue until system is disarmed or timeout occurs. Clear display by entering code + OFF a second time. Avoid fault when rearming.

C O N T R O L

SYMPTOM	POSSIBLE CAUSE	REMEDY
1. "AC POWER" light off or "NO AC" displayed.	1a. Interrupted AC power supply.	1a. Check transformer connection and power line circuit breaker.
2. Digital communicator message not being received.	2a. System in TEST mode.	2a. Remove from TEST mode.
	2b. Telephone connection not secure.	2b. Check all connections.
	2c. Telephone number in program needs prefix or access code.	2c. Program prefix or access code into control.
	2d. Telephone call to central monitoring station requires operator assistance.	2d. System cannot work in this situation.
	2e. Digital communicator malfunctioning.	2e. Check with a different **VISTA-10**.
3. Does not arm properly.	3a. Ready light not on.	3a. Try Bypass arming.
4. System doesn't respond to keystrokes on console.	4a. "CC" or "MODEM COMM" displayed.	4a. System is in communication with downloading software at central station. Wait until download session is finished.
	4b. "dl" or "System Busy" displayed.	4b. System has just been powered and is in its one minute initialization. To bypass this time, press '#' + '0'.
	4c. "E4" or "E8" displayed.	4c. More zones have been programmed than the zone expansion modules can handle. Delete some zones or use a higher capability RF receiver.

S M O K E   D E T E C T O R

SYMPTOM	POSSIBLE CAUSE	REMEDY
1. Detector alarms, no apparent reason.	1a. Dust, dirt in sensing chamber.	1a. Clean unit's sensing chamber with vacuum cleaner per unit's instructions.
	1b. Improper location.	1b. See unit's instructions for locations to avoid. Relocate as necessary.
	1c. Unit malfunctioning.	1c. Replace detector.
2. Detector's siren sounds.	2a. Unit not receiving required power.	2a. Check for proper installation of battery. Try new battery.
	2b. Unit malfunctioning.	2b. Replace detector.

SPECIFICATIONS

VISTA-10 SECURITY CONTROL

1. **Physical:** 12-1/2" W x 14-1/2" H x 3" D (318mm x 368mm x 76mm)
2. **Electrical:**

VOLTAGE INPUT: 16.5VAC from plug-in 25VA transformer, Ademco No. 1321/TF2 (in U.S.A.)

Note: For Canadian installations, a No. 1321CN transformer must be used.

RECHARGEABLE BACK-UP BATTERY: 12VDC, 4AH (Gel type), Ademco No. 467. Charging Voltage: 13.8VDC.

Note: For California fire alarm installations, see the CSFM battery back-up requirements on page 49.

ALARM SOUNDER: 12V, 2.0Amp output can drive 12V BELLS or can drive one or two 702 (**series** connected) self-contained 20-watt sirens. Do **not** connect two 702s in parallel.

AUXILIARY POWER OUTPUT: 12VDC, 500mA max. Interrupts for smoke detector reset.

Note: For UL installations, Alarm Sounder plus Auxiliary Power currents should not exceed 600mA total.

STANDBY TIME: 5 HRS with Auxiliary load of 500mA (using 4AH battery).To determine total standby battery load, add 100mA to total Aux. power output and remote console currents.

FUSE: Battery (3A) No. 90-12

3. **Communication:**

FORMATS SUPPORTED:

Ademco Express,
10 characters/sec, DTMF (TouchTone) Data Tones, 1400/2300Hz ACK, 1400Hz KISSOFF.

Ademco Contact ID Reporting,
10 characters/sec., DTMF (TouchTone) Data Tones, 1400/2300Hz ACK, 1400Hz KISSOFF.

Ademco Low Speed, 10 pulses/sec, 1900Hz Data Tone, 1400Hz ACK/KISSOFF.

Radionics/SESCOA, 20 pulses/sec,1800Hz Data Tone, 2300Hz ACK/KISSOFF.

Can report 0-9, B-F   Line Seize: Double Pole
FCC Registration No.: AC 398U-68192-AL-E   Ringer Equivalence: 0.7B

4127 REMOTE CONSOLE

1. **Physical:** 5-5/8" W x 4-11/16" H x 7/8" D (143mm x 119mm x 22mm)
2. **Electrical:** Voltage Input: 12VDC,   Current Drain: 20mA
3. **Interface Wiring:** To control panel's console connection points.
   RED: 12VDC input (+) aux pwr   GREEN: Data Out to Control
   YELLOW: Data In from Control   BLACK: Ground

4137AD & 5137AD REMOTE CONSOLES

1. **Physical:** 8-2/5" W x 4-3/4" H x 1-1/10" D (213mm x 121mm x 28mm)
2. **Electrical:** Voltage Input: 12VDC,   Current Drain: 60mA (4137AD)
                                                                          90mA (5137AD)

3. **Interface Wiring:**
   RED: 12VDC input (+) aux pwr
   BLUE: 18VDC input from optional No 1350 or 1360 Power Pack (not usable for UL installations)
   GREEN: Data Out to Control
   YELLOW: Data In from Control
   BLACK: Ground and (−) connection from optional No. 1350 or 1360 Power Pack

6127
REMOTE CONSOLE

1. **Physical:** 5-3/4" W x 4-3/4" H x 1" D   (146mm x 121mm x 26mm)
2. **Electrical:** Voltage Input: 12VDC,   Current Drain: 20mA
3. **Interface Wiring:** Same as 4127 above.

6128
REMOTE CONSOLE

1. **Physical:** 5-3/4" W x 4-3/4" H x 1" D   (146mm x 121mm x 26mm)
2. **Electrical:** Voltage Input: 12VDC,   Current Drain: 30mA
3. **Interface Wiring:** Same as 4127 above.

6137
REMOTE CONSOLE

1. **Physical:** 6-1/4" W x 4-3/4" H x 1" D   (159mm x 121mm x 26mm)
2. **Electrical:** Voltage Input: 12VDC,   Current Drain: 85mA
3. **Interface Wiring:** Same as 4127 above.

6138 & 6139
REMOTE CONSOLES

1. **Physical:** 6-1/4" W x 4-3/4" H x 1" D   (159mm x 121mm x 26mm)
2. **Electrical:** Voltage Input: 12VDC,   Current Drain: 100mA
3. **Interface Wiring:** Same as 4127 above.

4281L, 4281M, 4281H
RF RECEIVERS
(5700 System)
and
5881L, 5881M, 5881H
RF RECEIVERS
(5800 System)

1. **Physical:** 7-3/8" (188mm)W
   4-3/8" (112mm) H
   10-7/8" (277mm) H   ←with antenna
   1-7/16" (37mm) D
2. **Electrical:** Voltage Input: 12VDC   Current Drain: 35mA
3. **Interface Wiring:** Same as 4127 above.
4. **Range:** 200ft (60m) nominal indoors from wireless transmitters (the actual range to be determined with system in TEST mode).
5. **Zones:** With the **VISTA-10**:
   4281L: accepts up to 4 transmitters
   4281M or 4281H: accepts up to 8 transmitters
   5881L: accepts up to 8 transmitters
   5881M/5881H: accepts up to 16 transmitters

5800TM
TRANSMITTER
MODULE
used with 5827BD
Wireless
Bidirectional Keypad

1. **Physical:** 2-1/4" W x 4-1/8" H x 7/8" D   (57mm x 105mm x 22mm)
2. **Electrical:** Voltage Input: 12VDC   Current Drain: 20mA
3. **Interface Wiring:** Same as 4127 above.

4204
RELAY MODULE

1. **Physical:** 6-1/2" W x 4-1/4" H x 1-1/4" D   (169mm x 108mm x 32mm)
2. **Electrical:** Voltage Input: 12VDC   Current Drain: 15mA (Relays off)
   180mA (Relays on)
3. **Interface Wiring:** Same as 4127 above.
4. **Four Output Relays:** SPDT Contacts,
   Rating: 2A max at 28VDC/AC
   (120VAC for non-UL installations)

4285
VOICE MODULE

1. **Physical:** 6-1/2" W x 4-1/4" H x 1-1/4" D   (169mm x 108mm x 32mm)
2. **Electrical:** Voltage Input: 12VDC   Current Drain: 160mA
3. **Device Address:** Permanently set to address 4.
4. **Interface Wiring:** Same as 4127 above.
5. **Telephone Line Connections:** See information accompanying 4285.

7720ECP
LONG RANGE RADIO

1. **Physical:** 8-1/2" W x 9-1/2" H x 1-3/4" D   (216mm x 242mm x 45mm)
2. **Electrical:** Voltage Input: 12VDC   Current Drain: 150mA
3. **Device Address:** Set to address 3.
4. **Interface Wiring:** Same as 4127 above.

ACCESSORIES (COMPATIBLE DEVICES)

Accessories

No.	**1321/TF2**	16.5VAC, 25VA Plug-In Transformer (in U.S.A.)
No.	**1321CN**	16.5VAC, 25VA Plug-in Transformer (in Canada)
No.	**702**	Self-contained 20 watt Siren (indoor or outdoor).
No.	**740**	Extremely loud Piezoelectric Alarm Sounder, 122dB output (indoor or outdoor).
No.	**5716BR**	Brown Cases and Mounting Brackets (3) for 5716, 5716WM.
No.	**5799**	Pkg. of 8 Magnets for 5716

<u>System Sensor:</u>

PA400B	Piezoelectric Alarm Sounder, 90dB output (mounts in single-gang box).
1412	4-wire Ionization Products of Combustion Detector
2412	4-wire Photoelectric Smoke Detector
2412TH	4-wire Photoelectric Smoke Detector w/135°F (57°C) Heat Detector
A77-716B	EOL Relay Module (Supervisory Module for wired fire zone)

5700 RF System Wireless Transmitters for 4281

5701 Panic Transmitter

Programmable for either silent or audible 24 hour alarm (can be DIP switch programmed for zones 62 or 63.

5706 & 5707 Wireless Photoelectric Smoke Detectors

One piece smoke detectors with built-in transmitter (DIP switch programmable for zones 48-55). Built-in UL Listed 85 dB piezoelectric alarm sounder and audible low battery warning.

5711 Slimline Door/Window Transmitter

Can be used with any closed circuit sensor.

5715WH (White) Universal Transmitter

DIP switch selectable for fast response, open or closed sensor usage, and has a tamper protected cover. Use in applications where open circuit heat detectors are needed or where fast response devices are employed.

5716 Small Door/Window Transmitter
5716WM Small Door/Window Xmtr w/Magnet

Can be used with any open or closed circuit sensor (DIP switch selectable). Features a built-in reed switch.

5742 Audio Discriminator/Transmitter

For use in unoccupied areas to detect the sound of shattering glass when a window is broken. Built-in 5716 type transmitter.

5743 Dual Technology Glass Break Detector/Transmitter

Detects the sound *and* shock vibrations of breaking glass and requires the presence of *both* to initiate an alarm condition transmission. Built-in 5716 type transmitter.

5775 PIR Detector/Transmitter

Dual element passive infrared detector/transmitter with built-in selectable pulse count. DIP switch programmable for zones 32-47. *Note:* There is a 3 minute lockout between fault transmissions to conserve battery life.

Two interchangeable battery compartments are provided. One accommodates a single battery, and the other, two batteries. Use of the two-battery compartment can double the time between battery replacement.

5727 Wireless Keypad

Can be used to turn the burglary protection on and off, and features the same built-in panic functions as wired consoles for either silent or audible 24 hour alarm. An LED indication lights each time a key is pressed, to verify transmission. The keypad is identified as zone "00" (on wired consoles) when it transmits with a low battery.

5827BD Wireless Bidirectional Console
### (used with 5800TM Transmitter Module)

Can operate the system similarly to wired consoles and can indicate system status via its 3 LEDs and sounder. Includes 3 panic keys for 24 hour silent or audible alarm. Requires a 5800TM Transmitter Module, to operate in conjunction with system's 4281/5881 receiver. Key programmed, *has no DIP switch.* The console is identified as zone "00" (on wired consoles) when it transmits with a low battery.

5800 RF System Wireless Transmitters for 5881

INPUT
(LOOP)

3
2
1
4
(ALWAYS USE)

LEARN AS "UR" OR "RF"
5 8 0 1

INPUT
(LOOP)
1

LEARN AS "BR"
5 8 0 2 / 5 8 0 2 C P

INPUT
(LOOP)
3
2
1

LEARN AS "BR"
5 8 0 3

INPUT
(LOOP)
1

LEARN AS "UR" OR "RF"
5 8 0 2 M N
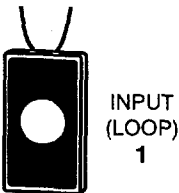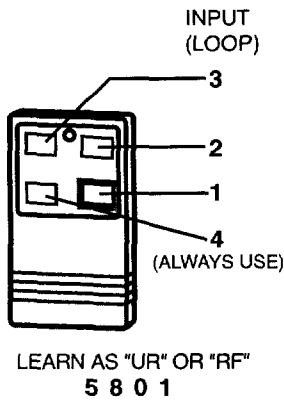
INPUT
(LOOP)
1
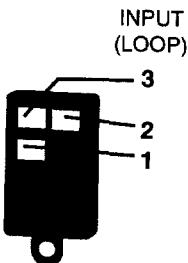
LEARN AS "RF"
5 8 0 6 / 5 8 0 7
(5806 SHOWN)

Notes:
- All of the transmitters described below have one or more unique factory assigned input (loop) ID codes. *Each of the inputs requires its own programming zone* (e.g., a 5803's three inputs require three programming zones).
- Transmitter inputs learned as:

  "RF" (Supervised RF) Type send 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) Type send 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) Type only send fault signals. They do not send low battery, restore or check-in signals. The transmitter may be carried off-premises.

5801 Wireless Panic Transmitter

Has four pushbuttons, each with a unique input (loop) code. The control unit's response to each of the buttons is programmable (e.g., Panic, Arm–Stay, Arm–Away, Disarm, etc.).

5802 Pendant & 5802CP Belt Clip (Personal Emergency) Transmitters

Their single pushbuttons should usually be programmed for control unit response of 24 Hr Audible or 24 Hr Silent. Other zone responses are possible.

Each contains a non-replaceable battery. At the end of the battery's life, the entire unit must be replaced.

5802MN Miniature (Personal Emergency) Transmitter

Its single pushbutton should usually be programmed for control unit response of 24 Hr Audible or 24 Hr Silent. Other zone responses are possible.

5803 Wireless Key Transmitter

Has three pushbuttons, each with a unique input (loop) code. The control unit's response to each of the buttons is programmable (e.g., Arm–Stay, Arm–Away, Disarm, etc.).

Contains a non-replaceable battery. At the end of the battery's life, the entire unit must be replaced.

5806 & 5807 Wireless Photoelectric Smoke Detectors

One piece smoke detectors with built-in transmitter. Built-in UL Listed 85 dB piezoelectric alarm sounder and audible low battery warning.

INPUT (LOOP) 2 (REED)

1 (TERMINALS)

LEARN AS "RF"
5 8 1 6

INPUT (LOOP)
1 (PRIMARY)
2 (AUX. CENTER)
3 (AUX. RIGHT)
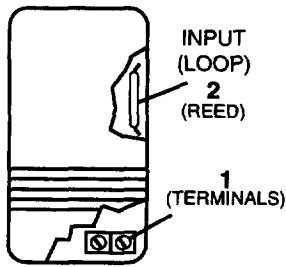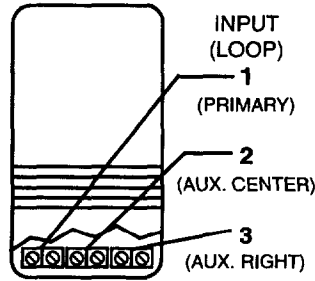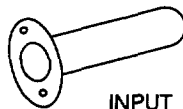
LEARN AS "RF"
5 8 1 7

INPUT (LOOP) 1

LEARN AS "RF"
5 8 1 8

SET HOUSE CODE
5 8 2 7

SET HOUSE CODE
5 8 2 7 B D

INPUT (LOOP) 1 (SOUND & SHOCK)

LEARN AS "RF"
5 8 4 9

INPUT (LOOP) 1 (MOTION)
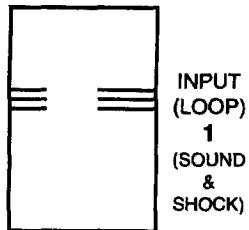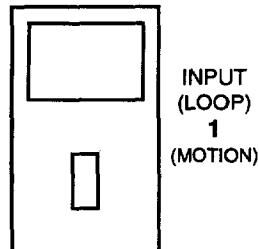
LEARN AS "RF"
5 8 9 0

5816 Door/Window Transmitter

Has two unique input (loop) codes: one for a wired closed circuit contact loop, and the other for a built-in reed switch (used in conjunction with a magnet).

5817 Multi-Point Universal Transmitter

Has three unique input (loop) codes: one for a DIP switch settable "Primary" contact loop, and the others for two "Auxiliary" closed circuit contact loops. The "Primary" loop may be set for: a) Repeating or Single Transmission, b) Normally Open or Normally Closed Circuit, c) Slow or Fast Response, and d) 3 Minute or No Transmission Inhibit.

5818 Recessed Transmitter

A reed switch magnetic contact sensor that is easily concealed in the frame and edge of a door or window. Has a single unique input (loop) code.

5827 Wireless Keypad

Can be used to turn the burglary protection on and off, and features the same built-in panic functions as wired keypads for either silent or audible 24 hour alarm. An LED indication lights each time a key is pressed, to verify transmission. The keypad is identified as zone "00" on wired keypads when it transmits with a low battery .

5827BD Wireless Bidirectional Keypad (used with 5800TM Transmitter Module)

Can operate the system similarly to wired keypads and can indicate system status via its 3. LEDs and sounder. Includes 3 panic keys for 24 hour silent or audible alarm. Requires a 5800TM Transmitter Module, to operate in conjunction with system's 4281/5881 receiver. Key programmed, *has no DIP switch*. The keypad is identified as zone "00" on wired keypads when it transmits with a low battery.

5849 Glass Break Detector/Transmitter

When sound and shock of breaking glass are detected by this unit at the same time, a wireless alarm will be transmited via the unit's unique input code. Separate alarm and cover tamper signals permit 24 hour monitoring.

5890 PIR Detector/Transmitter

Has unique input code for its dual element passive infrared detector/transmitter with built-in selectable pulse count.

Note: There is a 3 minute lock-out between fault transmissions to conserve battery life.

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 insure the system's proper operation at all times.

OUTPUT RELAY EXAMPLES TABLE

| ACTION DESIRED	RELAY ACTION	START			STOP	
	A	EV	ZL	ZT	ZL	ZT
Zones in zone list (x) close relay for 2 seconds on alarms.	1	1	x	00	0	00
Zones in zone list (x) close relay for 2 seconds on troubles.	1	3	x	00	0	00
Zones in zone list (x) close relay for 2 seconds on faults*.	1	2	x	00	0	00
*Will activate relay for any zone type plus panics on 5801 whether control is armed or disarmed. (Console panics will not activate a relay with the configurations above.)						
Zones in zone list (x) close relay on alarms and reset at bell timeout or when disarmed.	2	1	x	00	0	36
Zones in zone list (x) pulse relay on alarms and reset at bell timeout or when disarmed.	3	1	x	00	0	36
Zones in zone list (x) close relay on alarms and reset when zone is restored.*	2	1	x	00	x	00
Zones in zone list (x) pulse relay on alarms and reset when zone is restored.*	3	1	x	00	x	00
*Console panics or zone type 23 will not activate a relay with these configurations. The relay can also be activated by troubles or faults by changing the EV (event) accordingly.						
Zones in zone list (x) close relay on alarms and reset when disarmed. (Latching relay for strobes.)*	2	1	x	00	0	22
Zones in zone list (x) pulse a relay on alarms and reset when disarmed.*	3	1	x	00	0	22
*Relay will activate for burglary, fire, and panic alarms if programmed into zone list.						
Close relay after any burglary alarm and reset when disarmed.*	2	0	0	33	0	22
Close relay after any burglary alarm and reset at bell timeout or when disarmed.*	2	0	0	33	0	36
*Response types 06,08, and 09 will not activate relay. If PULSE relay is desired, enter a 3 in A (action).						
Close relay when ARMED-AWAY, reset when DISARMED.*	2	0	0	21	0	22
Close relay when ARMED-STAY, reset when DISARMED.*	2	0	0	20	0	22
*If PULSED relay is desired, enter a 3 in A (action).						
Close relay for 2 seconds at end of exit delay time after system is armed (Confirmation ding).	1	0	0	31	0	00
Pulse relay at start of entry time and reset when system is disarmed (entry warning).	3	0	0	32	0	22
Close relay for 2 seconds during chime. (Chime mode must be turned on at control.)	1	0	0	38	0	00

OUTPUT RELAY EXAMPLES TABLE

ACTION DESIRED	RELAY ACTION	START			STOP	
	A	EV	ZL	ZT	ZL	ZT
Close relay at start of entry time and reset with key entry of security code + # + 7. *	2	0	0	32	0	34
Can be used to turn on a light when entry door is opened.						
Close relay after any burglary alarm and reset with key entry of security code + # + 8.*	2	0	0	33	0	35
Can be used to turn on lights in the event of a burglary alarm...(NOTE: Response types 06, 08, and 09 will not activate relay).						
Zones in zone list (x) close relay on alarms and reset with key entry of security code + # + 7. (Possible use with strobe light)	2	1	x	00	0	34
Zones in zone list (x) pulse relay on alarms and reset with key entry of security code + # + 7.	3	1	x	00	0	34
A system low battery detection causes relay to close for 2 seconds.*	1	0	0	42	0	00
An AC loss detection causes relay to close for 2 seconds.*	1	0	0	41	0	00
The relay will not reset on restoral of low battery or AC power. For this reason, using "close for 2 seconds" in A(action) is recommended.						
Bypassing a zone will cause relay to close for 2 seconds.	1	0	0	40	0	00
Bypassing a zone causes relay to close and will reset with a disarm sequence (code + off.)	2	0	0	40	0	22
Any FIRE alarm causes relay to pulse on and off and will reset with an entry of a disarm sequence (code + off.)	3	0	0	39	0	22
An alarm or trouble condition on any FIRE zone causes relay to close and will reset when condition clears.	1	0	0	09	0	09

DIP SWITCH TABLES FOR 5700 RF SYSTEM WIRELESS DEVICES

House ID Switch Setting for All Devices Except 5716

HOUSE ID	DIP SWITCH SETTINGS				
	1	2	3	4	5
1	UP	UP	UP	UP	dn
2	UP	UP	UP	dn	UP
3	UP	UP	UP	dn	dn
4	UP	UP	dn	UP	UP
5	UP	UP	dn	UP	dn
6	UP	UP	dn	dn	UP
7	UP	UP	dn	dn	dn
8	UP	dn	UP	UP	UP
9	UP	dn	UP	UP	dn
10	UP	dn	UP	dn	UP
11	UP	dn	UP	dn	dn
12	UP	dn	dn	UP	UP
13	UP	dn	dn	UP	dn
14	UP	dn	dn	dn	UP
15	UP	dn	dn	dn	dn
16	dn	UP	UP	UP	UP
17	dn	UP	UP	UP	dn
18	dn	UP	UP	dn	UP
19	dn	UP	UP	dn	dn
20	dn	UP	dn	UP	UP
21	dn	UP	dn	UP	dn
22	dn	UP	dn	dn	UP
23	dn	UP	dn	dn	dn
24	dn	dn	UP	UP	UP
25	dn	dn	UP	UP	dn
26	dn	dn	UP	dn	UP
27	dn	dn	UP	dn	dn
28	dn	dn	dn	UP	UP
29	dn	dn	dn	UP	dn
30	dn	dn	dn	dn	UP
31	dn	dn	dn	dn	dn
BIT VALUE:	16	8	4	2	1

5701 Panic Xmtr.

HOUSE ID (1 SHOWN)
1 2 3 4 5 6

SIDE VIEW (UP)

POS. 6: UP = XMTR ID 62
dn = XMTR ID 63

5727 Keypad

HOUSE ID (1 SHOWN)
1 2 3 4 5 UP dn

XMTR ID fixed at "00"

SIDE VIEW (dn)
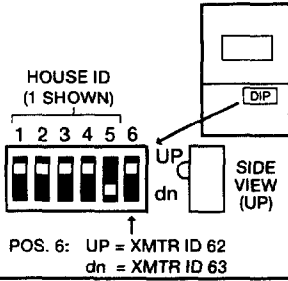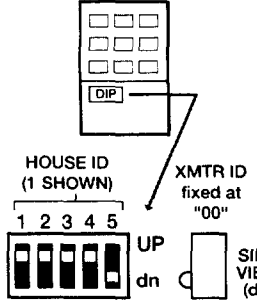
5706/5707 Smoke Detector Transmitter

HOUSE ID (1 SHOWN)
1 2 3 4 5 6 7 8 UP dn

SIDE VIEW (UP)

XMTR ID (48 SHOWN)
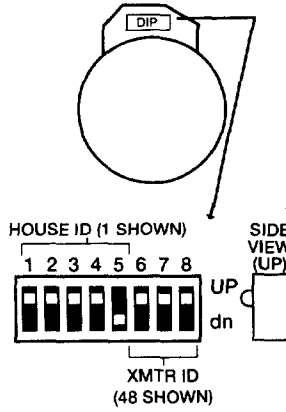
XMTR ID	DIP SWITCH SETTINGS		
	6	7	8
48	UP	UP	UP
49	UP	UP	dn
50	UP	dn	UP
51	UP	dn	dn
52	dn	UP	UP
53	dn	UP	dn
54	dn	dn	UP
55	dn	dn	dn

5775 PIR Detector/Transmitter

MIRROR

HOUSE ID (1 SHOWN)
1 2 3 4 5 6 7 8 9 10 UP dn

SIDE VIEW (UP)

XMTR ID (32 SHOWN)   UP = PULSE COUNT
dn = INST. MODE
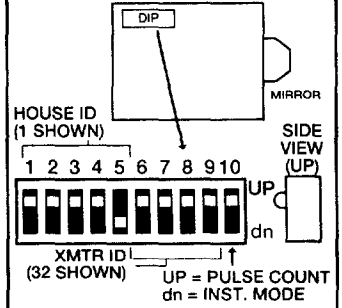
XMTR ID	DIP SWITCH SETTINGS			
	6	7	8	9
32	UP	UP	UP	UP
33	UP	UP	UP	dn
34	UP	UP	dn	UP
35	UP	UP	dn	dn
36	UP	dn	UP	UP
37	UP	dn	UP	dn
38	UP	dn	dn	UP
39	UP	dn	dn	dn
40	dn	UP	UP	UP
41	dn	UP	UP	dn
42	dn	UP	dn	UP
43	dn	UP	dn	dn
44	dn	dn	UP	UP
45	dn	dn	UP	dn
46	dn	dn	dn	UP
47	dn	dn	dn	dn

5715 Universal Xmtr.

1 2
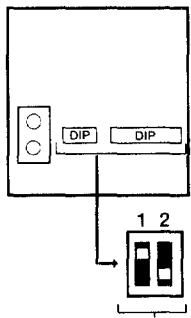
POS. 1: UP = NORMAL RESPONSE
dn = FAST RESPONSE
POS. 2: UP = NO COVER TAMPER
dn = COVER TAMPER (use N.C. setting)

XMTR ID	DIP SWITCH SETTINGS					
	6	7	8	9	10	11
1	UP	UP	UP	UP	UP	dn
2	UP	UP	UP	UP	dn	UP
3	UP	UP	UP	UP	dn	dn
4	UP	UP	UP	dn	UP	UP
5	UP	UP	UP	dn	UP	dn
6	UP	UP	UP	dn	dn	UP
7	UP	UP	UP	dn	dn	dn
8	UP	UP	dn	UP	UP	UP
9	UP	UP	dn	UP	UP	dn
10	UP	UP	dn	UP	dn	UP
11	UP	UP	dn	UP	dn	dn
12	UP	UP	dn	dn	UP	UP
13	UP	UP	dn	dn	UP	dn
14	UP	UP	dn	dn	dn	UP
15	UP	UP	dn	dn	dn	dn
16	UP	dn	UP	UP	UP	UP
17	UP	dn	UP	UP	UP	dn
18	UP	dn	UP	UP	dn	UP
19	UP	dn	UP	UP	dn	dn
20	UP	dn	UP	dn	UP	UP
21	UP	dn	UP	dn	UP	dn
22	UP	dn	UP	dn	dn	UP
23	UP	dn	UP	dn	dn	dn
24	UP	dn	dn	UP	UP	UP
25	UP	dn	dn	UP	UP	dn
26	UP	dn	dn	UP	dn	UP
27	UP	dn	dn	UP	dn	dn
28	UP	dn	dn	dn	UP	UP
29	UP	dn	dn	dn	UP	dn
30	UP	dn	dn	dn	dn	UP
31	UP	dn	dn	dn	dn	dn
32	dn	UP	UP	UP	UP	UP
BIT VALUE:	32	16	8	4	2	1

5711/5711WM Door/Window Transmitter

TERMINAL BLOCK

HOUSE ID (1 SHOWN)
1 2 3 4 5 6 7 8 9 10 11 12 UP dn

SIDE VIEW (dn)

XMTR ID (33 SHOWN)   POS. 12: UP = N.O.
dn = N.C.
(Avoid ID 32-37 with N.O.)

XMTR ID	DIP SWITCH SETTINGS					
	6	7	8	9	10	11
33	dn	UP	UP	UP	UP	dn
34	dn	UP	UP	UP	dn	UP
35	dn	UP	UP	UP	dn	dn
36	dn	UP	UP	dn	UP	UP
37	dn	UP	UP	dn	UP	dn
38	dn	UP	UP	dn	dn	UP
39	dn	UP	UP	dn	dn	dn
40	dn	UP	dn	UP	UP	UP
41	dn	UP	dn	UP	UP	dn
42	dn	UP	dn	UP	dn	UP
43	dn	UP	dn	UP	dn	dn
44	dn	UP	dn	dn	UP	UP
45	dn	UP	dn	dn	UP	dn
46	dn	UP	dn	dn	dn	UP
47	dn	UP	dn	dn	dn	dn
48	dn	dn	UP	UP	UP	UP
49	dn	dn	UP	UP	UP	dn
50	dn	dn	UP	UP	dn	UP
51	dn	dn	UP	UP	dn	dn
52	dn	dn	UP	dn	UP	UP
53	dn	dn	UP	dn	UP	dn
54	dn	dn	UP	dn	dn	UP
55	dn	dn	UP	dn	dn	dn
56	dn	dn	dn	UP	UP	UP
57	dn	dn	dn	UP	UP	dn
58	dn	dn	dn	UP	dn	UP
59	dn	dn	dn	UP	dn	dn
60	dn	dn	dn	dn	UP	UP
61	dn	dn	dn	dn	UP	dn
62	dn	dn	dn	dn	dn	UP
63	dn	dn	dn	dn	dn	dn
BIT VALUE:	32	16	8	4	2	1

5716 Door/Window Transmitter

IMPORTANT SET SWITCHES WITH BATTERY REMOVED

TERMINALS

SW4
SW3

6 5 4 3 2 1

UP SW4

XMTR ID (33 SHOWN)
HOUSE ID (1 SHOWN)

6 5 4 3 2 1

UP SW3   UP dn

SIDE VIEW (UP)

POS. 6: UP = N.O.
dn = N.C.
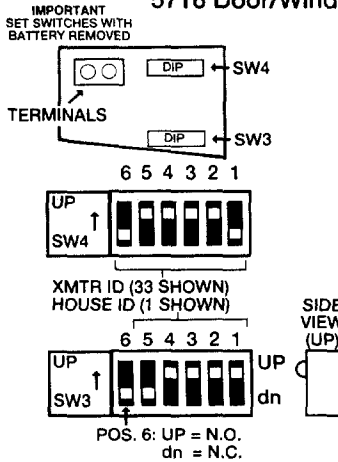
HOUSE ID	DIP SWITCH SETTINGS				
	5	4	3	2	1
1	dn	UP	UP	UP	UP
2	UP	dn	UP	UP	UP
3	dn	dn	UP	UP	UP
4	UP	UP	dn	UP	UP
5	dn	UP	dn	UP	UP
6	UP	dn	dn	UP	UP
7	dn	dn	dn	UP	UP
8	UP	UP	UP	dn	UP
9	dn	UP	UP	dn	UP
10	UP	dn	UP	dn	UP
11	dn	dn	UP	dn	UP
12	UP	UP	dn	dn	UP
13	dn	UP	dn	dn	UP
14	UP	dn	dn	dn	UP
15	dn	dn	dn	dn	UP
16	UP	UP	UP	UP	dn
17	dn	UP	UP	UP	dn
18	UP	dn	UP	UP	dn
19	dn	dn	UP	UP	dn
20	UP	UP	dn	UP	dn
21	dn	UP	dn	UP	dn
22	UP	dn	dn	UP	dn
23	dn	dn	dn	UP	dn
24	UP	UP	UP	dn	dn
25	dn	UP	UP	dn	dn
26	UP	dn	UP	dn	dn
27	dn	dn	UP	dn	dn
28	UP	UP	dn	dn	dn
29	dn	UP	dn	dn	dn
30	UP	dn	dn	dn	dn
31	dn	dn	dn	dn	dn
BIT VALUE:	1	2	4	8	16

TRANSMITTER ID	DIP SWITCH SETTINGS					
	6	5	4	3	2	1
1	dn	UP	UP	UP	UP	UP
2	UP	dn	UP	UP	UP	UP
3	dn	dn	UP	UP	UP	UP
4	UP	UP	dn	UP	UP	UP
5	dn	UP	dn	UP	UP	UP
6	UP	dn	dn	UP	UP	UP
7	dn	dn	dn	UP	UP	UP
8	UP	UP	UP	dn	UP	UP
9	dn	UP	UP	dn	UP	UP
10	UP	dn	UP	dn	UP	UP
11	dn	dn	UP	dn	UP	UP
12	UP	UP	dn	dn	UP	UP
13	dn	UP	dn	dn	UP	UP
14	UP	dn	dn	dn	UP	UP
15	dn	dn	dn	dn	UP	UP
16	UP	UP	UP	UP	dn	UP
17	dn	UP	UP	UP	dn	UP
18	UP	dn	UP	UP	dn	UP
19	dn	dn	UP	UP	dn	UP
20	UP	UP	dn	UP	dn	UP
21	dn	UP	dn	UP	dn	UP
22	UP	dn	dn	UP	dn	UP
23	dn	dn	dn	UP	dn	UP
24	UP	UP	UP	dn	dn	UP
25	dn	UP	UP	dn	dn	UP
26	UP	dn	UP	dn	dn	UP
27	dn	dn	UP	dn	dn	UP
28	UP	UP	dn	dn	dn	UP
29	dn	UP	dn	dn	dn	UP
30	UP	dn	dn	dn	dn	UP
31	dn	dn	dn	dn	dn	UP
32	UP	UP	UP	UP	UP	dn
33	dn	UP	UP	UP	UP	dn
34	UP	dn	UP	UP	UP	dn
35	dn	dn	UP	UP	UP	dn
36	UP	UP	dn	UP	UP	dn
37	dn	UP	dn	UP	UP	dn
38	UP	dn	dn	UP	UP	dn
39	dn	dn	dn	UP	UP	dn
40	UP	UP	UP	dn	UP	dn
41	dn	UP	UP	dn	UP	dn
42	UP	dn	UP	dn	UP	dn
43	dn	dn	UP	dn	UP	dn
44	UP	UP	dn	dn	UP	dn
45	dn	UP	dn	dn	UP	dn
46	UP	dn	dn	dn	UP	dn
47	dn	dn	dn	dn	UP	dn
48	UP	UP	UP	UP	dn	dn
49	dn	UP	UP	UP	dn	dn
50	UP	dn	UP	UP	dn	dn
51	dn	dn	UP	UP	dn	dn
52	UP	UP	dn	UP	dn	dn
53	dn	UP	dn	UP	dn	dn
54	UP	dn	dn	UP	dn	dn
55	dn	dn	dn	UP	dn	dn
56	UP	UP	UP	dn	dn	dn
57	dn	UP	UP	dn	dn	dn
58	UP	dn	UP	dn	dn	dn
59	dn	dn	UP	dn	dn	dn
60	UP	UP	dn	dn	dn	dn
61	dn	UP	dn	dn	dn	dn
62	UP	dn	dn	dn	dn	dn
63	dn	dn	dn	dn	dn	dn
BIT VALUE:	1	2	4	8	16	32

Note: For a 5827 (5800 System) Wireless Keypad, House ID settings are *opposite* to those for a 5727 (i.e., "UP" is "dn" and "dn" is "UP").

VISTA-10
SUMMARY OF CONNECTIONS

SUPERVISORY MODULE (e.g. SYSTEM SENSOR A77-716B)

SMOKE OR COMBUSTION DETECTOR SEE ITS INSTRUCTIONS FOR ITS PROPER INSTALLATION

HEAT DETECTOR

ZONE 5 IF PROGRAMMED FOR FIRE

1000 OHMS EOLR

AUX. POWER OUTPUT TERM.

LOCATED AT LOWER RIGHT CORNER OF CIRCUIT BOARD

EARTH GROUND SEE INSTRUCTIONS FOR PROPER GROUNDING

RING (RED) / TIP (GREEN) — INCOMING PHONE LINE

RING (GRAY) / TIP (BROWN) — HANDSET

TELEPHONE WIRING (MA RJ31X* JACK DIRECT CONNECT CORD) *IN CANADA, CA38A JACK DOC LOAD NO.: 3

WARNING:
TO PREVENT RISK OF SHOCK, DISCONNECT TELEPHONE LINE AT TELCO JACK BEFORE SERVICING THIS UNIT.

THIS EQUIPMENT SHOULD BE INSTALLED IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION'S STANDARD 74 (NATIONAL FIRE PROTECTION ASSOC., BATTERYMARCH PARK, QUINCY, MA 02269), PRINTED INFORMATION DESCRIBING PROPER INSTALLATION, OPERATION, TESTING, MAINTENANCE, EVACUATION PLANNING AND REPAIR SERVICE IS TO BE PROVIDED WITH THIS EQUIPMENT.

ZONE 6 — 1000 OHMS EOLR
ZONE 5 — 1000 OHMS EOLR
ZONE 4 — 1000 OHMS EOLR
ZONE 3 — 1000 OHMS EOLR
ZONE 2 — 1000 OHMS EOLR
ZONE 1 — 1000 OHMS EOLR

OPTIONAL
FOR UP TO 16 RF EXPANSION ZONES
ADEMCO 4281 or 5881 Type RF RECEIVER (35mA) WIRELESS ZONES
4281L: UP TO 4
4281M/4281H: UP TO 8
5881L: UP TO 8
5881M/5881H: UP TO 16
SET UNIT'S DIP SWITCH FOR DEVICE ADDRESS OF "0" (See receiver's instructions)

OPTIONAL
ADEMCO No. 4204 RELAY MODULE (180mA MAX) (4 OUTPUT RELAYS)
SET UNIT'S DIP SWITCH FOR DEVICE ADDRESS OF "1" (See unit's instructions)

THESE OPTIONAL ITEMS MAY ALSO BE USED SEE THEIR INSTRUCTIONS
ADEMCO No. 5800TM TRANSMITTER MODULE (20mA) (for No. 5827BD Wireless Bidirectional Console)
AND/OR ADEMCO No. 4285 VOICE MODULE (160mA)
AND/OR ADEMCO No. 7720EGP LONG RANGE RADIO (150mA)

BLK / RED / GRN / YEL

• MAXIMUM LOOP RESISTANCE (EACH ZONE) 300 OHMS (PLUS EOLR)
• RESPONSE, ZONES 1-6: 300-500MSEC
• ZONE 3 CAN BE PROGRAMMED FOR N.C. SENSOR FAST RESPONSE TO AN OPEN: 10MSEC MAX
• ZONE 5 CAN BE PROGRAMMED FOR USE AS A FIRE ZONE. SEE DIAGRAM.

THIS DEVICE COMPLIES WITH PART 15 OF FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) IT MAY NOT CAUSE HARMFUL INTERFERENCE, (2) IT MUST ACCEPT ANY INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

COMPLIES WITH FCC RULES, PART 68 FCC REGISTRATION NO. AC398U-68192-AL-E RINGER EQUIVALENCE: 0.7B.

BATTERY FUSE (e.g. ADEMCO No. 90-12) FOR REPLACEMENT USE SAME VALUE — 3A

GEL LEAD ACID TYPE. DO NOT USE GATES BATTERY. BATTERY NORMALLY NEED NOT BE REPLACED FOR AT LEAST 3 YRS. BATTERY CAPACITY FOR EMERGENCY STANDBY USE AT LEAST 4 HOURS.

CHARGING VOLTAGE 13.8VDC

BATTERY 12V, 4AH (e.g. ADEMCO No. 467) OR 12V, 1.2AH

BLACK / RED

CONNECTOR TABS

TO DETERMINE TOTAL STANDBY LOAD ON BATTERY, ADD 100mA TO TOTAL OF AUX. POWER OUTPUT AND REMOTE CONSOLE CURRENTS.

USE UL LISTED LIMITED ENERGY CABLE FOR ALL CONNECTIONS

FOR COMPLETE INFORMATION, SEE INSTRUCTIONS N7227

YELLOW: DATA OUT TO CONSOLE
GREEN: DATA IN FROM CONSOLE
RED: CONSOLE PWR (+)
BLACK: CONSOLE GROUND (-) RETURN

REMOTE CONSOLE

REMOTE CONSOLES: SYSTEM MUST BE PROGRAMMED WITH A No. 5137AD OR 6139. IT NEED NOT REMAIN IN SYSTEM.
AFTER PROGRAMMING, THE SYSTEM CAN USE: No. 4127(20mA), 4137AD (60mA), 5137AD (90mA), 6127 (22mA), 6128 (30mA), 6137 (85mA), 6138 (100mA), OR 6139 (100mA).
MULTIPLE CONSOLES MAY BE USED, BUT USE MAX. OF 220 FT. OF #22 WIRE OR 550 FT. OF #18.

AUX. POWER OUTPUT 10.5-13.8VDC 500mA MAX. INTERRUPTS FOR FIRE ALARM RESET
NOTE: CONSOLE CURRENT MUST BE INCLUDED IN AUX. CURRENT DRAIN CALCULATIONS

ALARM OUTPUT 10.5-13.8VDC, 2A MAX. (600mA MAX FOR UL USAGE, INCLUDING AUX. POWER) STEADY FOR BURGLARY/PANIC, PULSING FOR FIRE (e.g. USE ADEMCO No. 740 SOUNDER, No.702 OR 719 SIREN, OR 12V BELL)

PLUG-IN TRANSFORMER 16.5VAC, 25VA (e.g. ADEMCO No.1321/TF2. USE No. 1321CN IN CANADA)

TO 110VAC UNSWITCHED OUTLET (24HR)

CONNECTION OF THE FIRE ALARM SIGNAL TO A FIRE ALARM HEADQUARTERS OR A CENTRAL STATION SHALL BE PERMITTED ONLY WITH THE PERMISSION OF THE LOCAL AUTHORITY HAVING JURISDICTION. THE BURGLAR ALARM SIGNAL SHALL NOT BE CONNECTED TO A POLICE EMERGENCY NUMBER.

FEDERAL COMMUNICATIONS COMMISSION (FCC) Part 15 STATEMENT

This equipment has been tested to FCC requirements and has been found acceptable for use. The FCC requires the following statement for your information:

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause 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:

• If using an indoor antenna, have a quality outdoor antenna installed.
• Reorient the receiving antenna until interference is reduced or eliminated.
• Move the radio or television receiver away from the receiver/control.
• Move the antenna leads away from any wire runs to the receiver/control.
• Plug the receiver/control into a different outlet so that it and the radio or television receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user or installer may find the following booklet prepared by the Federal Communications Commission helpful:

"Interference Handbook"

This booklet is available from the U.S. Government Printing Office, Washington, DC 20402.

The user shall not make any changes or modifications to the equipment unless authorized by the Installation Instructions or User's Manual. Unauthorized changes or modifications could void the user's authority to operate the equipment.

FEDERAL COMMUNICATIONS COMMISSION (FCC) Part 68 STATEMENT

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 which 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 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.

UL NOTICES

1. This is a "Grade A" residential system.
2. The 4285 Voice Module and 7720ECP Long Range Radio have not been UL tested and cannot, therefore, be used in a UL installation.
3. The Entry Delay (field *38) cannot be greater than 45 seconds for UL installations.
4. The maximum number of reports per armed period (field *92) must be unlimited (set to 1) for UL installations.
5. Periodic testing (field *49) must be at least every 24 hours (set to 1) for UL installations.
6. Alarm Sounder plus Auxiliary Power currents must not exceed 600mA total for UL installations.
7. Downloading is not permissible for UL installations.

CANADIAN DEPARTMENT OF COMMUNICATIONS (DOC) STATEMENT

NOTICE

The Canadian Department of Communications label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements. 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. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of certified connector assembly (telephone extension cord). 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 made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

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

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

The Load Number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a telephone loop which is used by the device, to prevent overloading. The termination on a loop may consist of any combination of devices subject only to the requirement that the total of the Load Numbers of all the devices does not exceed 100.

AVIS

L'étiquette du ministère des Communications du Canada identifie le matériel homologué. Cette étiquette certifie que le matériel est conforme à certaines normes de protection, d'exploitation et de sécurité des réseaux de télécommunications. 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'entreprise locale de télécommunications. Le matériel doit également être installé en suivant une méthode acceptée de raccordement. Dans certains cas, les fils intérieurs de l'entreprise utilisés pour un service individuel à la ligne unique peuvent être prolongés au moyen d'un dispositif homologué de raccordement (cordon prolongateur téléphonique interne). 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. Actuellement, les entreprises de télécommunications ne permettent pas que l'on raccorde leur matériel aux prises d'abonnés, sauf dans les cas precis prévus par les tarifs particuliers de ces entreprises.

Les réparations du matériel homologué doivent être effectuées pas un centre d'entretien canadien autorisé désigné par le fournisseur. La compagnie de télécommunications peut demander à l'utilisateur de 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 en terre de la source d'énergie électrique, des lignes téléphoniques de réseau de conduites d'eau, s'il y en a, soient 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 recours à un service d'inspection des installations électriques, ou à un électricien, selon le cas.

L'indice de charge (IC) assigné à chaque dispositif terminal pour éviter toute surcharge indique le pourcentage de la charge totale qui peut être raccordé à un circuit téléphonique bouclé utilisé par ce dispositif. La terminaison du circuit bouclé peut être constituée de n'importe quelle combinaison de dispositifs, pourvu que la somme des indices de charge de l'ensemble des dispositifs ne dépasse pas 100.

CALIFORNIA STATE FIRE MARSHAL (CSFM) 24 HOUR BATTERY BACK-UP REQUIREMENTS

The California State Fire Marshal has published new regulations which require that all residential fire alarm control panels installed after June 30, 1993 must be provided with a back-up battery which has 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.

This control panel can meet these requirements without using a supplementary power supply, provided that the panel's auxiliary power and bell output currents are limited as indicated below.

OUTPUT LIMITATIONS TO MEET CSFM 24 HOUR BATTERY BACK-UP REQUIREMENTS FOR UL LISTED RESIDENTIAL FIRE INSTALLATIONS			
OUTPUT CURRENT LIMITATIONS		BATTERY INFORMATION	
OUTPUT CURRENT TOTAL	MAXIMUM AUXILIARY CURRENT	BATTERY CAPACITY TO USE	RECOMMENDED BATTERY (Yuasa Model No.)
600mA maximum total of auxiliary power plus bell output currents.	45mA	4Ah	NP4-12
	160mA	7Ah	NP7-12
	200mA	8Ah	NP4-12 (two)‡
	425mA	14Ah	NP7-12 (two)‡

‡**Note:** Use two batteries, connected in parallel. Obtain an Ademco No. 4100EOLR Resistor Kit. A dual battery harness is provided with the kit. The kit also contains EOL resistors with spade lug/heat shrink tubing construction which has been approved by UL and CSFM for fire zone usage. Both batteries will fit inside the panel's cabinet.

WARNING
THE LIMITATIONS OF THIS ALARM SYSTEM

While this System is an advanced design 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:

- 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 console (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.

INDEX

ⓇADEMCO

ALARM DEVICE MANUFACTURING COMPANY
A DIVISION OF PITTWAY CORPORATION
165 Eileen Way, Syosset, NY 11791

N7227V2 9/94

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VISTA-10 PROGRAMMING FORM

FIELD FUNCTION	PROGRAMMED VALUES	[ ] = Default Value

SYSTEM SETUP (*20-*27)

*20 MASTER CODE — ☐☐☐☐ Enter 4 digits, 0-9...[4] [1] [1] [1]

*21 QUICK ARM ENABLE † ☐ [0 = no]; 1 = yes

*22 RF SYSTEM TYPE ☐ [0 = none]; 1 = 5700 (4281); 2 = 5800 (5881)

*23 FORCED BYPASS FUNCTION † ☐ [0 = none]; 1 = bypass open zones

*24 RF HOUSE ID CODE [0][0] ☐☐ MUST enter (01-31) for 5700 System. Enter also for 5827 Keypad or 5827BD Console.

*25 OUTPUT RELAY MODULE † ☐ [0 = none]; 3 = 4204

26 VOICE MODULE ACCESS CODE ☐☐ 1st digit: Enter 1–9; 2nd digit: Enter only #+11 for '', #+12 for '#'. [0] in either position = disabled.

*27 OUTPUT TO LONG RANGE RADIO † ☐ [0 = no]; 1 = yes If yes selected, dialer reports to PRIMARY No. (field *47) will also be sent via LRR. All dialer and LRR reports will be in Contact ID format (overriding field *46 selection).

ZONE SOUNDS AND TIMING (*28-*39)

*28 SINGLE ALARM SOUNDING/ZONE † ☐ [0 = no]; 1 = yes

*29 FIRE SOUNDER TIMEOUT † ☐ [0 = fire sounder timeout]; 1 = no fire sounder timeout

*30 ALARM BELL TIMEOUT † ☐ 0 = none; [1= 4 min]; 2 = 8 min; 3 = 12 min

*38 ENTRY DELAY † ☐ 0 = 0 sec ; 1= 20 sec; [2 = 30 sec]; 3 = 45 sec; 4 = 60 sec; 5 = 90 sec EXIT Delay = ENTRY Delay + 15 sec

*39 AUDIBLE EXIT WARNING † ☐ 0 = no; [1 = yes]

DIALER PROGRAMMING (*40-*50)
In fields *40, *41, *42, enter up to the number of digits shown. Do not fill unused spaces. Enter 0-9; #+11 for '*'; #+12 for '#'; #+13 for a pause.

*40 PABX ACCESS CODE — ☐☐☐☐ Enter up to 4 digits.
If fewer than 4 digits entered, exit by pressing * (and press 41, if entering next field). To clear entries from field, press *40*.

*41 PRIMARY PHONE No. — ☐☐☐☐☐☐☐☐☐☐☐☐ Enter up to 12 digits.
If fewer than 12 digits entered, exit by pressing * (and press 42, if entering next field). To clear entries from field, press *41*.

*42 SECONDARY PHONE No. — ☐☐☐☐☐☐☐☐☐☐☐☐ Enter up to 12 digits.
If fewer than 12 digits entered, exit by pressing * (and press 43, if entering next field). To clear entries from field, press *42*.

*43 SUBSCRIBER ACCT No. — ☐☐☐☐ Enter 0-9; #+11 for B; #+12 for C; #+13 for D;
#+14 for E; [#+15 for F]. Enter * as 4th digit, if 3+1 dialer reporting is to be used.
If only 3 digits used, exit by pressing *(and press next field). To clear entries from field, press *43*.

Examples: For Acct No. 1234, enter: | 1 | 2 | 3 | 4 |

For Acct No. B234, enter: | #+11 | 2 | 3 | 4 |

For Acct No. 123, enter: | 1 | 2 | 3 | * |

*45 PHONE SYSTEM SELECT † ☐ If Cent. Sta. *IS NOT* on a WATS line: [0 = Pulse Dial]; 1 = Tone Dial
If Cent. Sta. *IS* on a WATS line: 2 = Pulse Dial ; 3 = Tone Dial

*46 REPORT FORMAT ☐ Also see field *27.

[0 = 3+1, 4+1 ADEMCO L/S STANDARD]	6 or undefined = 4+2 ADEMCO EXPRESS
1 = 3+1, 4+1 RADIONICS STANDARD	7 = ADEMCO CONTACT ID REPORTING
2 = 4+2 ADEMCO L/S STANDARD	8 = 3+1, 4+1 ADEMCO L/S EXPANDED
3 = 4+2 RADIONICS STANDARD	9 = 3+1, 4+1 RADIONICS EXPANDED

*47 SPLIT/DUAL REPORTING ☐ [0 = Disable (Backup report only)]

	TO PRIMARY PHONE No.	TO SECONDARY PHONE No.
1=	Alarms, Restore, Cancel	Other Reports
2=	All Reports except Open/Close, Test	Open/Close, Test
3=	Alarms, Restore, Cancel	All Reports
4=	All Reports except Open/Close, Test	All Reports
5=	All Reports (*Dual Reporting*)	All Reports

*48 15 SEC DIALER DELAY (BURG) † ☐ [0 = no]; 1 = yes

*49 PERIODIC TEST MESSAGE † ☐ [0 = none]; 1 = 24 hrs; 2 = wkly; 3 = mnthly. Enter Test Code in field *64.

*50 SESCOA/RADIONICS SELECT † ☐ [0 = Radionics (0-9, B-F reporting)]; 1 = SESCOA (0-9 only reporting) Select 0 for all other formats.

*51 CONFIRMATION OF ARMING DING † ☐ [0 = no]; 1 = yes

† Entry of a number other than one specified will give unpredictable results.

*52 ZONE 3 RESPONSE TO OPEN † ☐ [0 = 400 ms nominal]; 1 = 10 ms nominal († see previous page)

*56 ZONE ASSIGNMENT/ALARM REPORT CODES (See explanation on next page) ──────────→

ZONE DESCRIPTION	ZONE No. (Zn)	ZONE TYPE (ZT)	ALARM RPT CODE (Hex) (RC)	INPUT DEVICE (In)	LEARNED RF INPUT (L)
ZONES ON CONTROL:					
Wired Zone 1	0 1	☐☐	☐☐☐☐	HW	—
Wired Zone 2	0 2	☐☐	☐☐☐☐	HW	—
Wired Zone 3	0 3	☐☐	☐☐☐☐	HW	—
Wired Zone 4	0 4	☐☐	☐☐☐☐	HW	—
Wired Zone 5	0 5	☐☐	☐☐☐☐	HW	—
Wired Zone 6	0 6	☐☐	☐☐☐☐	HW	—
Console Panic (∗&#, or B)	0 7	☐☐	☐☐☐☐	—	—
Duress	0 8	— —	☐☐☐☐	—	—
Tamper	0 9	0 5	☐☐☐☐	—	—
Console Panic (1&∗, or A)	9 5	☐☐	☐☐☐☐	—	—
Console Panic (3&#, or C)	9 6	☐☐	☐☐☐☐	—	—

RF EXPANSION ZONES: With 4281L, up to 4 RF expansion zones available; 4281M or 4281H, up to 8; 5881L, up to 8; 5881M or 5881H, up to 16. ENTER FOR ↓5800 ONLY↓

1st RF Expansion Zone	☐☐	☐☐	☐☐☐☐	☐	☐
2nd	☐☐	☐☐	☐☐☐☐	☐	☐
3rd	☐☐	☐☐	☐☐☐☐	☐	☐
4th	☐☐	☐☐	☐☐☐☐	☐	☐
5th	☐☐	☐☐	☐☐☐☐	☐	☐
6th	☐☐	☐☐	☐☐☐☐	☐	☐
7th	☐☐	☐☐	☐☐☐☐	☐	☐
8th	☐☐	☐☐	☐☐☐☐	☐	☐
9th	☐☐	☐☐	☐☐☐☐	☐	☐
10th	☐☐	☐☐	☐☐☐☐	☐	☐
11th	☐☐	☐☐	☐☐☐☐	☐	☐
12th	☐☐	☐☐	☐☐☐☐	☐	☐
13th	☐☐	☐☐	☐☐☐☐	☐	☐
14th	☐☐	☐☐	☐☐☐☐	☐	☐
15th	☐☐	☐☐	☐☐☐☐	☐	☐
16th	☐☐	☐☐	☐☐☐☐	☐	☐

Zn = ZONE NUMBER Zone Nos. are from 01 to 63, 95, 96. Some are pre-assigned.
With Field *22 set for RF (5700 or 5800), use Zone Nos. 10-63 .

ZT = ZONE TYPE

00 = Zone Not Used	05 = Trouble Day/Alarm Night	10 = Interior w/Delay
01 = Entry/Exit	06 = 24 Hr Silent	20 = Arm–Stay
02 = Do not use	07 = 24 Hr Audible	21 = Arm–Away
03 = Perimeter	08 = 24 Hr Aux	22 = Disarm
04 = Interior Follower	09 = Fire	23 = No Alarm Response

DEFAULT VALUES

Zn:	01	02	03	04	05
ZT:	[01]	[04]	[03]	[03]	[09]
Zn:	06	07	95	96	
ZT:	[07]	[06]	[00]	[00]	

RC = ALARM REPORT CODE Two Hex Digits. For each Hex Digit, enter: 00–09 for 0–9,
10 for A, 11 for B, 12 for C, 13 for D, 14 for E, 15 for F.

If "00" is entered in the first pair of boxes, there will be no report for that zone.

For contact ID reporting, this is an enabling code only. Make any hex digit entry (other than "00") in the first pair of boxes. The second pair of boxes will be ignored.

In = LOOP INPUT DEVICE   HW: Hard Wire

Enter 3 for RF: Supervised RF
Enter 4 for UR: Unsupervised RF
Enter 5 for BR: Button Type RF

These are automatically assigned, except "UR" and "BR" for 5800 RF.

L = LEARNED RF INPUT Used with self-learning (5800) RF Loop Input Devices. Record transmitter input number.

TO PROGRAM SYSTEM STATUS, & RESTORE REPORT CODES (*60-*75):

With a 3+1 or 4+1 Standard Format: Enter a code in the *first* box: 1-9, 0, B, C, D, E, or F. Enter "#+10" for 0, "#+11" for B, "#+12" for C, "#+13" for D, "#+14" for E, "#+15" for F.

A "0" (*not* "#+10") in the *first* box will disable a report.

A "0" (*not* "#+10") in the *second* box will result in automatic advance to the next field when programming.

With an Expanded or 4+2 Format: Enter codes in *both* boxes (1st and 2nd digits) for 1-9, 0, or B-F, as described above.

A "0" (*not* "#+10") in the *second* box will eliminate the expanded message for that report.

A "0" (*not* "#+10") in *both* boxes will disable the report.

With Ademco Contact ID Reporting: Enter any digit (other than "0") in the *first* box, to enable zone to report (entries in the *second* boxes will be ignored).

A "0" (*not* "#+10") in the *first* box will disable the report.

Examples: For Code 3 (Single Digit), enter: [3] [0]

For Code 32 (Two Digits), enter: [3] [2]

For Code B2 (Hexadecimal) enter: [#+11] [2]

SYSTEM STATUS REPORT CODES (*60-*68)

*60   TROUBLE REPORT CODE

*61   BYPASS REPORT CODE

*62   AC LOSS REPORT CODE

*63   LOW BATTERY REPORT CODE

*64   TEST REPORT CODE

*65   OPEN/EXIT ALARM REPORT CODE
2nd digit of OPEN REPORT is automatically sent as the user number if expanded or 4+2 reporting is selected.
2nd digit of EXIT ALARM REPORT is automatically sent as the 2nd digit of the zone alarm report code programmed in *56, if expanded or 4+2 reporting is selected.

*66   AWAY/STAY CLOSE REPORT CODE
2nd digit of any CLOSE REPORT is automatically sent as the user number, if expanded or 4+2 reporting is selected.

*67   RF XMTR LOW BAT REPORT CODE

*68   CANCEL REPORT CODE

RESTORE REPORT CODES (*69-*75)

*69   GROUP RESTORES for TROUBLE,
RF LOW BAT, BYPASS: [0 = no (report for each restore)],
1 = yes (report after all zones restored)
Note: "1" not applicable to Contact ID reporting.

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*70   ALARM RESTORE REPORT CODE
2nd digit is automatically sent as the 2nd digit of the zone alarm report code programmed in *56, if expanded or 4+2 reporting is selected.

*71   TROUBLE RESTORE REPORT CODE

*72   BYPASS RESTORE REPORT CODE

*73   AC RESTORE REPORT CODE

*74   LOW BAT RESTORE REPORT CODE

*75   RF XMTR LO BAT RST REPORT CODE

OUTPUT AND SYSTEM SETUP (*80-*92)

*80   OUTPUT RELAYS

*81   ZONE LISTS FOR OUTPUT RELAYS

Program only if Relays are to be used. See next page.

*82   CUSTOM ALPHA EDITING: (Also entered from field *56): *See procedure in instructions.*

*83   ADD/DELETE 5800 RF INPUT IDs: (Also can be accomplished from field *56): *See procedure in instructions, under field *56.*

*92   REPORTS PER ARMED PERIOD
[0 = 10 max total alarm + alarm restore], 1 = unlimited

DOWNLOAD INFO (*94, *95)

*94   DOWNLOAD PHONE No.

Enter up to 12 digits: 0-9; #+11 for '*'; #+12 for '#'; #+13 for a pause. Do not fill unused spaces. If fewer than 12 digits entered, exit field by pressing * (and press 95, if entering next field).
To clear entries from field, press *94*.

*95   RING DET COUNT FOR DOWNLOADING
[0=Disable Station Initiated Download]; 1-14=number of rings (1-9, #+10=10, #+11=11, #+12=12, #+13=13, #+14=14); 15=answering machine defeat (#+15=15)

*96   INITIALIZES DOWNLOAD ID , SUBSCRIBER ACCOUNT No. FOR INITIAL DOWNLOAD: No entry required.

*97   SETS ALL PROGRAM FIELDS TO DEFAULT VALUES: No entry required.

TO EXIT PROGRAM MODE (*98 or *99)

Press *98 or *99 if exiting programming, or next field number if continuing.

*98   EXITS PROGRAMMING MODE and *prevents* re-entry by: Master Code + Code + 0.

*99   EXITS PROGRAMMING MODE and *allows* re-entry by: Master Code + Code + 0 or by: Power-up + * + #.

OUTPUT RELAYS WORKSHEET FOR FIELDS *80, and *81.

Applicable only if relays are to be used.

**Fill in required data and follow detailed programming procedure
described in *PROGRAMMING DATA FIELDS* section of Installation Instructions**

*80 OUTPUT RELAYS

Notes: 1. Field *25 must be programmed for a 4204 (Relays 01 to 04).
2. Tampers of contacts or expansion unit cannot be used to operate relays.

OUTPUT RELAY	RELAY ACTION (A)	START ← either or both →			STOP ← either or both →	
		EVENT (EV)	ZONE LIST (ZL)	ZONE TYPE /SYST OP'N (ZT)	"*RESTORE of*" ZONE LIST (ZL)	ZONE TYPE /SYST OP'N (ZT)
01	☐	☐	☐	☐☐	☐	☐☐
02	☐	☐	☐	☐☐	☐	☐☐
03	☐	☐	☐	☐☐	☐	☐☐
04	☐	☐	☐	☐☐	☐	☐☐

Where:
A = RELAY ACTION 0 = No Response; 1 = Close for 2 sec; 2 = Close and stay closed; 3 = Pulse on and off
EV = EVENT 0 = Not used; 1 = Alarm; 2 = Fault; 3 = Trouble
ZL = ZONE LIST 1,2, or 3 (from Field *81) or 0 = Not Used.
START ZONE LIST: Upon alarm, fault, or trouble of ANY zone on this list, relay action will START.
STOP "*RESTORE of*" ZONE LIST: Upon restore of ALL zones on this list, relay action will STOP.
It need not be same list as used for START.

ZT = ZONE TYPE/SYSTEM OPERATION

Choices for Zone Types are:

00 = Not Used	06 = 24 Hr Silent
01 = Entry/Exit	07 = 24 Hr Audible
03 = Perimeter	08 = 24 Hr Aux
04 = Interior Follower	09 = Fire
05 = Trouble Day/Alarm Night	10 = Interior w/Delay

Note: *Any* zone in "ZT" going into alarm, fault, or trouble will actuate relay. *Any* zone of that type that restores will stop relay action.

Choices for System Operation are:

20 = Arming–Stay	33 = Any Burglary Alarm	38 = Chime
21 = Arming–Away	34 = Code + # + 7 Key Entry	39 = Any Fire Alarm
22 = Disarming (Code + OFF)	35 = Code + # + 8 Key Entry	40 = Bypassing
31 = End of Exit Time	36 = At Bell Timeout**	41 = AC Power Failure
32 = Start of Entry Time	37 = 2 times Bell Timeout**	42 = System Battery Low

**Or at Disarming, whichever occurs earlier.

*81 ZONE LISTS FOR OUTPUT RELAYS Record desired zone numbers. More or fewer boxes than shown may be needed, since any list may include *any* or *all* of system's zone numbers.

Zone List 1: Started or stopped by zone numbers (enter 00 to end entries).

☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐ ...etc.

Zone List 2: Started or stopped by zone numbers (enter 00 to end entries).

☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐ ...etc.

Zone List 3: Started or stopped by zone numbers (enter 00 to end entries).

☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐ ...etc.