First page of this international document resides under separate cover: 20SEaCOV.ps

TABLE OF CONTENTS

LIST OF FIGURES

CONVENTIONS USED IN THIS MANUAL

MAIN SECTION TITLES ARE SHOWN IN REVERSE TYPE

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

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

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

```
Enter Zn Num.
(00 = Quit)          01
```

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

✶00

When programming the system, data fields are indicated by a "star" (✶) followed by the data field number.

PRODUCT MODEL NUMBERS: Unless noted otherwise, references to specific model numbers represent ADEMCO products.

Section 1. GENERAL DESCRIPTION

The *VISTA–20SEa* is a 3-partition control that supports up to 38 zones, using basic wired, wired expansion, and/or wireless, plus 3 keypad zones.

Basic Wired Zones

Provides 8 basic wired zones having the following characteristics:

- EOLR supervision supporting N.O. or N.C. sensors
- Programmable response time (10, 350, or 700 milliseconds)
- Individually assignable to either partition
- Up to sixteen 2-wire smoke detectors on zone 1
- 4-wire smoke or heat detectors on zones 2 through 7 (as many as can be powered from the programmable trigger output on the control)

Optional Expansion Zones (up to 30 total, wired and wireless)

Wired Expansion:

Supports up to 8 additional wired zones using a 4219 expansion module or 4229 expansion/relay module. These zones have the following characteristics:

- EOLR supervision supporting N.O. or N.C. sensors
- 300–500 msec normal response with an option for fast (10–15 msec) response on loop A (first expansion zone)

Wireless Expansion:

Supports up to 30 wireless zones (less if using wired expansion zones).

- Requires the use of a 5881 type RF Receiver, as indicated below

Receiver Model	No. of Zones
5881L	Up to 8
5881M/6128RF	Up to 16
5881H	Up to 30

- Requires the use of 5800 series wireless transmitters

Three Partitions

- Provides the ability to control two separate areas independently, each area functioning as if it had its own separate control
- Zones (including wireless) assignable to either partition 1 or 2
- Relay and Powerline Carrier device outputs assignable to either partition 1 or 2, or to both partitions
- Certain programmed system options, such as Entry/Exit delay and Subscriber Account number, programmed independently for each partition
- Zones may be assigned to a 3rd common area partition that automatically arms when the second of two partitions is armed and automatically disarms when the first partition is disarmed in a completely armed system.

Remote Keypads

Up to 4 of any of the following keypads may be used in each partition:

Fixed-Word Keypads: 6137, 6128, and 6128RF.

Alpha Keypad: 6139 (2-line alphanumeric displays)

⚠️	For programming from a keypad, a 6139 2-line Alpha keypad must be connected to partition 1 (but need not necessarily stay in the system).

Security Codes

- One installer code for entire system (user 1)
- One Master code for each partition (user 2)
- 12 secondary user codes for each partition (users 3–14)
- One restricted user code for each partition (user 15)

> **Restricted User Code:** A special code that can only be used to disarm the system if that particular code was used to arm it. This code has a special option that allows it to function as a normal secondary user code AND be the only code in the system to report openings/closings.
>
> **Duress Code:** An emergency code which, when entered by *any* user to disarm or arm the system, will send a silent duress message to the central station.

Keypad Panic Keys

- Up to 3 programmable panic key functions are provided.
- Designated as Zones 95, 96, 99
- Activated by wired & wireless keypads
- Reported separately by partition, distinguished by subscriber ID number

Zone Monitor Feature

- The control will sense a high resistance in the loops on wired zones 2–8 if it is present, and will display a trouble message (rather than an alarm) for the affected zone when the system is in the disarmed mode. This feature also prevents the system from being armed while this high resistance condition exists (zone cannot be bypassed).

Optional Output Relays and Powerline Carrier Devices (X-10 type)

- Up to 4 relays using one 4204 Relay Module
- Up to 2 relays using one 4229 Zone/Relay Module
- Up to 8 Powerline Carrier devices (you must subtract the number of relay outputs actually used by the 4204 or 4229 modules, if used)
- Actions programmable to respond to zone activity or manual keypad entries

> Powerline Carrier devices require the use of an optional XF10 module .

Optional VIP Module

- Supports the ADEMCO **4285/4286 VIP Module** on Partition 1 only.
- Provides access to the system via on premises or off-premises phones for arming, disarming, etc., plus control of relay outputs and Powerline Carrier devices.

Audio Alarm Verification Option

- Provides a programmable *Audio Alarm Verification* (AAV) option which can be used in conjunction with an output relay to permit voice dialog between an operator at the central station and a person at the premises.
- Requires the use of optional AAV unit, such as Eagle model 1250.

Optional Alternative Communications Media (ACM)

- Allows all messages that have been programmed to go to the primary telephone number to be reported additionally to a serial data compatible ACM.

Built-in Telephone Line Monitoring Option

- The telephone line voltage can be monitored to supervise the phone line connection. **The panel must be connected to a good earth ground for this feature to function properly .**
- The loss of the line can optionally cause a local display, or a display and trouble sound.

Alarm Output

- Provides a 12VDC, 2 AMP output that can drive the compatible sounders listed in the EXTERNAL SOUNDERS section (assumes a fully charged battery is connected).
- Steady output for Burglary/Panic, or temporal pulsing output for Fire (3 pulses-pause-3 pulses-pause-3 pulses........)
- Uses current limiting circuitry for protection

Auxiliary Power Output

- Provides 12VDC, 600 mA maximum. Uses current limiting circuitry for protection.
- This output interrupts for smoke detector reset if 4-wire smoke detectors are used that do **NOT** use the Programmable Output as their power return.

Programming

- The system can be uploaded, downloaded, or controlled via an IBM compatible computer, V-Link software and a compatible modem specified by ADEMCO.

Keypad programming consists of:

- Data field programming
- Interactive (menu) mode programming

⚠	For programming from a keypad, a 6139 2-line Alpha keypad must be connected to partition 1 (but need not necessarily stay in the system).

Communication Formats Supported

- ADEMCO Contact ID
- ADEMCO Local Audio

Zone Descriptors

You can assign Alpha descriptors to all zones (useful only when using Alpha keypads and/or the 4285/4286 VIP Module).

Mains Power Supply

Uses 220VAC plug pack with 16.5VAC 25VA output,, unless Powerline Carrier devices (ex. X-10 type) are used, in which case an **XF10 transformer module** must be used.

Back-Up Battery

- Rechargeable Sealed Lead Acid 12VDC, 4AH minimum.

Section 2. INSTALLING THE CONTROL

Mounting the Cabinet

If an RF Receiver is being used and you intend to mount its PC board within the cabinet, note the following:

* Do not mount the cabinet on or near metal objects. This will decrease RF range and/or block RF transmissions from wireless transmitters.
* Do not locate the cabinet in an area of high RF interference (revealed by frequent or prolonged lighting of the LED in the receiver after it is operational (random flicker is OK).

Installing the Lock (if used)

Use an ADEMCO No. 8085 Cam Lock.

Note: The cabinet can be closed and secured *without* a lock by using 2 screws in the cover's edge.
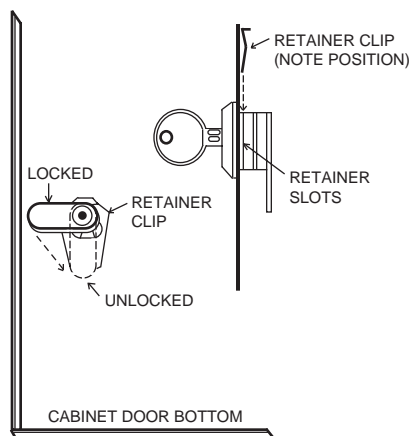
1. Remove the cabinet door. *It is easily removable for servicing and is easily re-installed.*

2. Remove the lock knockout from the control cabinet door. 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. Hold the lock steady, and insert the retainer clip into the retainer slots. Position the clip as illustrated in order to permit easy removal.

Figure 1. Installing The Cabinet Lock
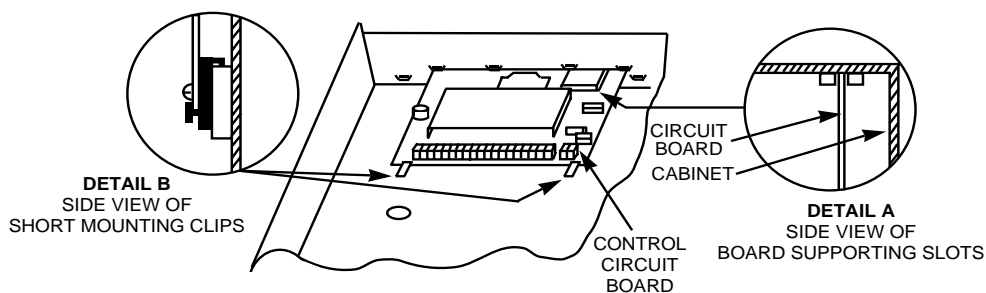
Figure 2. Mounting The PC Board (Alone)
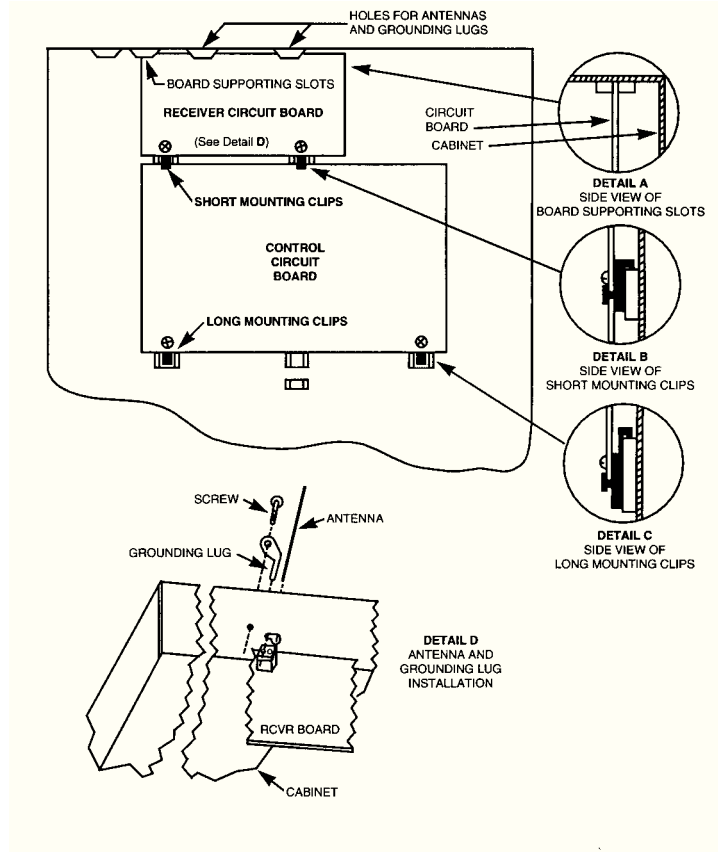
Figure 3. Mounting The PC Board And RF Receiver Together In The Cabinet

Wiring The Mains Transformer

Wire the plug pack to terminals **1** and **2** on the control board, with the earth wire connected to terminal **25**. See wiring table below for wire size to use.

WIRING TABLE	
Distance of Plug Pack From the Control Panel	**Wire Size To Use**
Up to 15m	0.8mm
15–30m	1.0mm
30–75m	1.3mm

Wiring to the mains plug pack must not exceed 75m using 1.3mm wire. The voltage reading between terminals 1 and 2 of the control must not fall below 16.5VAC or an "AC LOSS" message will be displayed.

Do not insert the plug pack into the mains outlet until you are instructed to do so later in the manual.

Connecting The Back-Up Battery

Do not attach the connector cable to the battery terminals until you are instructed to do so later in the manual.

Attach Red and Black wires on the battery connector cable as follows:

    a. Red to the positive (+) battery terminal **on the control board** (see Summary of Connections Diagram for location, if necessary)**.**

    b. Black to the negative (–) battery terminal **on the control board.**

Earth Ground Connections

The designated earth ground terminal **(25),** must be terminated in a good earth ground for the lightning transient protective devices in this product to be effective. The following are examples of good earth grounds available at most installations:

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

Mains Power Outlet Ground: Available from 3-prong, 220VAC, power outlets only. To test the integrity of the ground terminal, use a three-wire circuit tester with neon lamp indicators, available at some electrical supply stores.

Section 3. INSTALLING REMOTE KEYPADS

Keypads That May Be Used

- Fixed-Word Display: 6128, 6128RF, 6137
- Alpha Display: 6139
- Up to 4 keypads in each partition (total of 8 in the system), independent of auxiliary power considerations (you may need to use an auxiliary power supply if the 600mA aux. output is exceeded)

Wiring To The Keypads

1. Determine wire size by referring to the wiring length/size chart below. Wire lengths/size for Partition 2 keypads should be determined separately from those keypads connected to Partition 1.

   For devices (Keypads, RF Receivers, Zone Expander , etc.) connected to a single 4-wire run, determine the current drawn by all units connected to the single wire run, then refer to the Wiring Run chart to determine the maximum wire length that can be safely used for each wire size. Current draw for all devices can be found in the SPECIFICATIONS AND ACCESSORIES section.

   Note: Refer to "Auxiliary Device Current Drain Worksheet" in the *FINAL POWER UP* section for current drain for all keypads.

Maximum wire lengths for any device that is directly wired to the control can also be determined from the chart, based on the current drain of that device <u>alone</u>.

Wiring Run Chart For Devices* Drawing Aux Power From The Control (12V+ & 12V–)					
	TOTAL CURRENT DRAiN BY ALL DEVICES CONNECTED TO A SINGLE WIRE RUN				
Wire Size	**50mA or less**	**100mA**	**300mA**	**500mA**	**600mA**
7/0.2	152m	76m	24m	15m	13m
14/0.2	229m	116m	40m	24m	20m
24/0.2	396m	198m	67m	40m	35m
32/0.2	457m	305m	100m	70m	52m

* Includes Keypads, RF Receivers, Zone Expander/Relay Units, or 4285/4286 VIP Module.

The length of all wire runs for both partitions combined must not exceed 457m when unshielded quad conductor cable is used (229m if shielded cable is used). This restriction is due to the capacitive effect *on the data lines* when quad cable is used.

2. Connect remote Keypads for Partition 1 to terminals 4, 5, 6, and 7 on the control board, as shown in Figure 4.

3. Connect remote Keypads for Partition 2 to the 4-pin connector on the control board (see the Summary of Connections diagram for location of the 4-pin connector for partition 2).
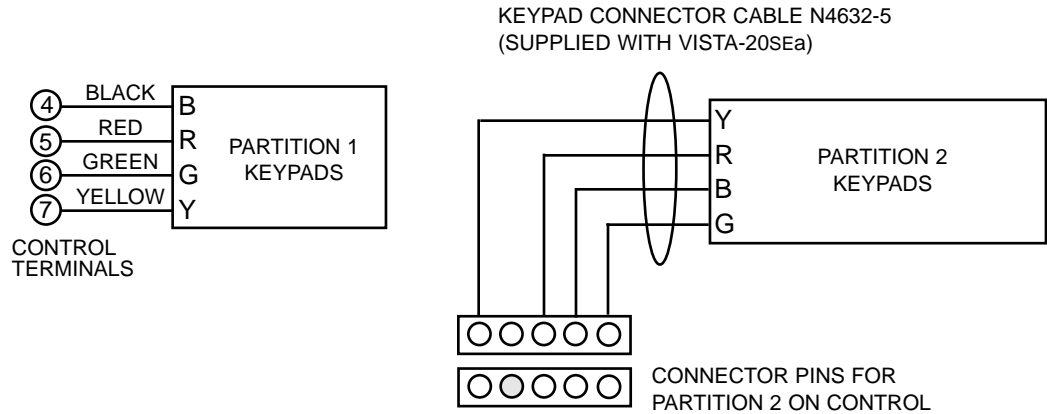
Figure 4. Keypad Connections To The Control Board

Addressable Keypad Settings

Make sure addressable type keypads (6128, 6128RF, 6137, and 6139) are set to non-addressable mode (address 31), which is the factory default setting. Refer to the instructions provided with the keypad for address setting procedure.

Using a Supplementary Power Supply to Power Additional Keypads

The control provides 600mA for powering keypads (up to a maximum of 4 per partition) and other devices from the auxiliary power output. The backup battery will supply power to these keypads in the event that mains power is lost.

When the control's auxiliary power load for all devices exceeds 600 mA, you can power additional keypads from a separate regulated, 12VDC power supply.

Keypads powered from supplies which do not have a backup battery **will not function** when mains power is lost. Therefore, be sure to power at least one keypad **in each partition** from the Control's auxiliary power output.

Make connections directly to the screw terminals as shown in Figure 5. Make no connection to the keypad blue wire (if present).

Be sure to connect the negative (–) terminal on the Power Supply unit to terminal 4 (AUX –) on the control.
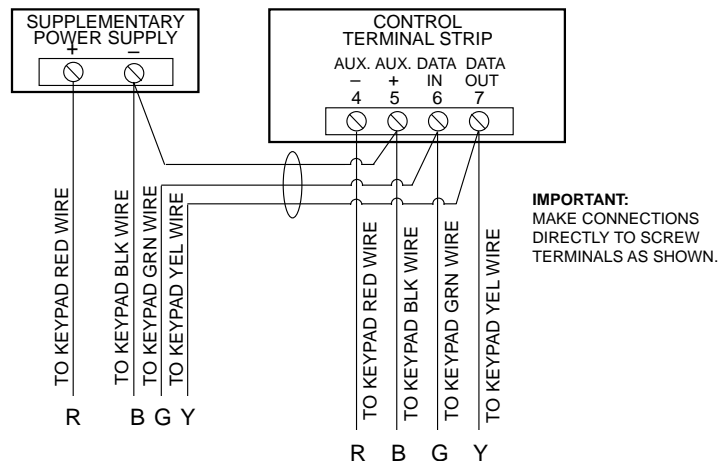
Figure 5. Using A Supplementary Power Supply For Keypads

–12–

Preliminary Check-out Procedure

If you want to check that the system is working before connecting field wiring from zones and devices, do the following:

1. Temporarily connect a 2000 ohm end-of-line resistor across each of the basic wired zones 1–8, as shown in the Summary of Connections diagram.

   Without actual zone wiring or EOL resistors connected, the keypads in each partition of the system will not display the "Ready" message.

2. Power up the system temporarily by plugging the mains plug pack (previously wired to the control) into a 220VAC mains outlet.

3. **Busy – Standby** (Alpha keypads) or **dl** (Fixed-word keypads) will be displayed.

   After approximately 1 minute*, the green "READY" LED should light, and the word READY (Fixed-word keypads), or DISARMED...READY TO ARM (Alpha keypads) should be displayed.

   * To bypass the 1-minute delay, press # plus **0**.

   If the "Ready" display does not appear on any of the keypads in the system (in either of the partitions), or a "Not Ready" message is displayed, check the keypad wiring connections, and make sure each of the 8 basic wired zones has a 2000 ohm resistor connected across its terminals.

4. When you get the proper "Ready" displays on the keypad(s), the system is functioning properly at this point.

   Do not remove the EOL resistors until you are ready to make connections to the wired zones, to allow for testing later in the manual.

	If an OC or OPEN CIRCUIT is present on the keypad, data from the control is not reaching the keypad. Please check the wiring.

Section 4. MECHANICS OF PROGRAMMING

This section provides information on how programming is performed in this system. It will enable you to understand how to enter and exit the programming mode, and how to programme the data fields and the user-friendly interactive modes (⋆56, ⋆80, ⋆81, ⋆82, ⋆83). We therefore urge you to read and understand the following before proceeding with the installation.

	The following programme fields **must be** programmed (as required) before doing any zone programming. Refer to the end of this section for instructions on programming these fields.

   ⋆22. RF SYSTEM
   ⋆25. WIRED ZONE EXPANSION

In addition, the following fields must be programmed before completing the installation. Explanations of these fields are found in *Section 19. DATA FIELD DESCRIPTIONS.*

   ⋆20. INSTALLER CODE
   ⋆21. QUICK ARM ENABLE
   ⋆23. FORCED ARM ENABLE.

General Programming Information

It is possible to programme 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 programme the unit as desired.

Important Note: **You cannot enter the programming mode unless <u>both</u> main partitions are disarmed.**

There are two programming modes: data field programming and interactive (menu) mode programming. Data field programming is used for setting various system options and interactive programming is used for programming zone information, programming relay outputs, and for enrolling transmitter serial numbers.

> ⚠ To programme the system, you must use a 6139 2-line Alpha keypad connected to the Partition 1 keypad terminals on the control (4, 5, 6, & 7). **Also, both main partitions must be disarmed.** The Alpha keypad need not necessarily remain in the system after programming.

Programming can also be performed remotely from the installer's office/home, using an IBM compatible PC, a suitable modem, and V-Link downloading software. See the *REMOTE PROGRAMMING AND CONTROL (DOWNLOADING)* section.

Entering Programme Mode

You may use one of the following methods:

a) Press both the **[∗]** and **[#]** keys at the same time **within 50 seconds after power is applied to the Control,** or

b) After power up, enter the Installer code **(4 1 1 2)** + **8 0 0.**

This method is disabled if you exit the programme mode using ∗98 instead of ∗99. See "Exiting the Programming Mode" paragraph later in this section.

If a different Installer code is subsequently programmed, use it instead of 4112 to gain access to the Programming mode.

Following entry into programme mode, data field ∗20 will be displayed (this is the first field in the system). The system will now accept entries for field ∗20.

Programming a Data Field

1. Press **[∗]** plus **Field No.** (for example, ∗21), then make the required entry.

2. When you have completely programmed a data field, the keypad will "beep" three times and then automatically display the next data field in sequence. To go to a different field, press **[∗]** plus the desired field No.

3. If the number of digits that you need to enter in a data field is less than the maximum digits available (for example, the phone number field), enter the desired data, then press [∗] and the next data field number to be programmed.

4. If you try to enter a non-existent field, the keypad will display **EE or Entry Error**. Simply re-enter [∗] plus a valid field number.

Reviewing a Data Field/Erasing an Entry in a Data Field

Press **[#]** plus **Field No.** Data will be displayed for that field number. **No changes will be accepted in this mode.**

To delete an entry in a field, press **[∗]** plus **Field No.** + **[∗]. (**Applies only to fields ∗40–∗46, and ∗94).

Interactive Mode Programming (∗56, ∗80, ∗81, ∗82 and ∗83)

Typical prompt displayed during interactive mode programming

```
Enter Zn Num.
(00 = Quit)        01
```
Zone Number ↑

Press **[∗]** plus **interactive mode No.** (for example, ∗56). The Alpha keypad will display the first of a series of prompts requesting entries.

A detailed procedure (with displays of prompts) is provided in those sections where programming in the interactive mode is to be performed.

Interactive Mode	Used To Programme
∗56 Zone Programming	Zone characteristics, report codes, alpha descriptors and serial numbers
∗80 Relay Programming	4229 or 4204 Relay modules, or Powerline Carrier devices
∗81 Zone List Programming	Zone Lists for relay/powerline carrier activation
∗82 Alpha Programming	Zone alpha descriptors
∗83 Serial No. Add/Delete	5800 series transmitter serial numbers

Loading Factory Defaults

To load the factory defaults, enter the programming mode, press ⋆97, then exit the programming mode.

⚠	Do not press ⋆97 to load defaults if any programming has been done previously—data already programmed into the system will be changed!

⋆**96** resets the Subscriber Account number and CSID in preparation for an initial download.

Programming System Setup Fields

The following programme fields **must be** programmed before doing any zone programming.

⋆**22 RF SYSTEM** ☐

Enter 1 to enable a 5881 or 6128RF receiver. Enter 4 to enable a 5881 or 6128RF receiver with the addition of RF Jam Detection. Enter 0 if no receiver is being used.   Default is **0** (none).

⋆**25 WIRED ZONE EXPANSION** ☐

Use this field to select the type of expansion unit being used, as follows: 0 = none; 1 = 4219; 2 = 4229; 3 = 4204/6128RF. Default is **0.**

Exiting the Programming Mode

⋆**99** allows re-entry into the programme mode using **Installer Code + 8 0 0.**
⋆**98** inhibits re-entry into the programming mode using the Installer code.

Section 5. BASIC WIRED ZONES 1–8

This section provides general information for the basic wired zones in the system, plus specific instructions for installing 2-wire smoke detectors, 4-wire smoke/combustion detectors, and 2-wire latching type glass break detectors. Also included is a procedure for programming and checking out the wired zones.

Installing the Basic Wired Zones

Common Characteristics for Zones 1–8

- Can be assigned to any partition
- EOLR supervised zones supporting both open circuit and closed circuit devices
- As many 4-wire smoke detectors as can be powered from Aux Power on the control (zones 2–7) or from the Programmable Output, if that is used as the means to reset the detectors
- Programmable for 10, 350, or 700 msec response
- 350 msec (default) should be used for most standard contacts. For vibration type contacts, 10 msec is more suitable

Wiring Burglary and Panic Devices To Zones 1–8

1. Connect sensors/contacts to the basic wired zone terminals (8 through 20). See the Summary of Connections diagram .
2. Connect closed circuit devices in series in the high (+) side the loop. The EOL resistor must be connected in series with the devices, following the last device. See the Summary of Connections diagram.
3. Connect open circuit devices in parallel across the loop. The 2,000 ohm EOLR must be connected across the loop wires *at the last device.*

✍	If the EOLR is not at the end of the loop, the zone will not be properly supervised, and the system may not respond to an open circuit on the zone.

High Resistance Supervision on Basic Wired Zones 2–8

- Special supervision in the control senses high resistance on wired zone loops 2–8, causing a warning "CHECK" display with the affected zone number to occur when the system is in the disarmed state. *The system cannot be armed when this display is present.* If the system is in the armed state when the high resistance condition occurs, no display will take place until the system is disarmed.

Wiring 2-Wire Smoke Detectors in Zone 1

1. Connect 2-wire smoke detectors across zone 1 terminals 8 (+) and 9 (–). Observe proper polarity when connecting the detectors.
2. If an EOL resistor is presently connected across zone 1 terminals, remove it. **The EOL resistor must be connected across the loop wires at the last detector.**
3. See "Programming Basic Wired Zones" in this section for programming procedure.
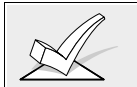
> The alarm current provided by zone 1 will support only one smoke detector in the alarmed state.

"Verify" Operation of 2-Wire Smoke Detectors in Zone 1

The control panel will "verify" any alarm by resetting the smoke detectors after the first alarm trigger, and then waiting 90 seconds for a second alarm trigger. If the smoke detector or thermostat does not trigger again, the control will disregard the first trigger, and no alarm signal will occur. This feature eliminates false alarms due to electrical or physical transients.

Turning Off Fire Alarm Sounding

You can turn off Fire alarm sounding by pressing the OFF key on any keypad or other arming/disarming device in that partition. To clear the "memory of alarm" and to reset the detector's alarm, enter the security code plus OFF again.

Compatible 2-Wire Smoke Detectors	
Detector Type	**Device Model #**
Photo-optical, direct wire	System Sensor 2100D
Photo-optical, Plug-in Head	ADEMCO 2600
Ionisation, Plug-in Head	ADEMCO 1600
Photo-optical, Plug-in Head	System Sensor 2151
Ionisation, Plug-in Head	System Sensor 1151
Thermal Detector, Plug-in Head	System Sensor 5451
Photo-optical Duct Probe	System Sensor DH400P
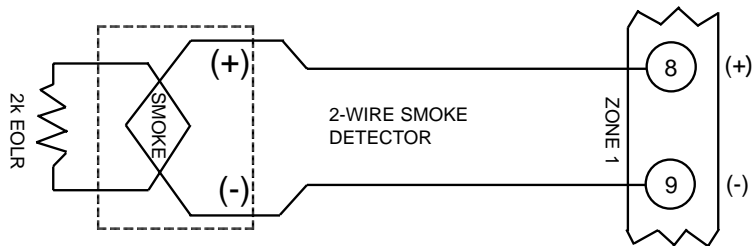
Figure 6. 2-Wire Smoke Detector Connected in Zone 1

Wiring 4-Wire Smoke/Combustion Detectors in Zones 2–7

The system will support 4-wire detectors powered from the programmable trigger output on the control on zones 2–7. Refer to the detector's instructions for complete details regarding its proper installation and operation.

1. Connect 12 volt power for the detectors from the programmable trigger output (pins **9** and **7** on the 9-pin connector**)** (which will interrupt power for fire alarm reset). Observe proper polarity when connecting detectors.

2. Connect detectors (including heat detectors, if used) across terminals of the zone selected (zones 2–7 may be used). All detectors must be wired in parallel.

> Remove 2000 ohm EOL resistor if connected across the selected zone terminals. You must connect the EOL resistor across the loop wires at the last detector.

3. To supervise power, we recommend the use of a System Sensor No. A77-716B supervisory module.
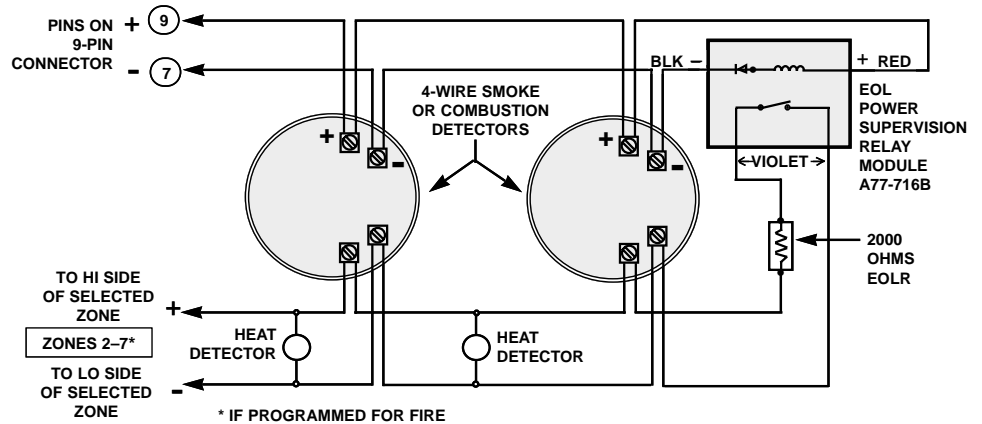
Figure 7. 4-wire Smoke Detector Connections (Zones 2–7)

Compatible 4-Wire Smoke/Combustion Detectors	
1412	*System Sensor*, 4-wire ionisation products of combustion detector
2412	*System Sensor*, 4-wire photo-optical smoke detector
2412TH	*System Sensor*, 4-wire photo-optical smoke detector w/57º C heat detector
A77–716B	*System Sensor*, EOL relay module (supervisory module for wired 4-wire fire zone).
2112/24T	*System Sensor* low-profile 4-wire photo-optical smoke detector w/57º C heat detector

Programming Basic Wired Zones

1. Enter the programming mode by keying the following on the Alpha keypad: **Installer code (4 1 1 2) + 8 + 0 + 0.**
   Note that it is not possible to enter the programming mode if Partition 2 is in an armed state.

> Data fields ✱22 RF SYSTEM, ✱25 WIRED ZONE EXPANSION and ✱30 KEYSWITCH ENABLE must be programmed as required before continuing.

2. **Press ✱56**. Note that this is an interactive programming mode. You will use it to programme zone numbers, zone types, partition numbers, alarm report codes, and to programme response times for wired zones.

```
Enter Zn Num.

(00 = Quit)        01
```
Zone Number ↑

Upon entering ✱56 mode, this prompt will be displayed. Enter the first zone number that you wish to programme (or [0][0] to exit zone programming). If you are starting with zone 2, enter "02". Press ✱ to continue.

Zn	ZT	P	RC	In	RT
02	03	1	00	HW:	1

A summary display will appear, showing the present status of that zone's programming.

Zn = zone number;
ZT = zone type;
P = partition to which zone is assigned;
RC = report code for that zone;
In = input type of zone;
RT = response time for that zone.

Values displayed are currently programmed values.

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

If you want to change a zone's programming, press [✱]. A prompt for Zone Type will appear.

↓ Zone Number

02 Zone Type	
Perimeter	03

Zone Type ↑

Each zone must be assigned a zone type, which defines the way in which the system responds to faults in that zone. A detailed explanation of each zone type is provided in "Response Type Definitions" in *the ZONE RESPONSE TYPE DEFINITIONS* section.

Enter the desired zone type code, as listed below.

00 = Zone Not Used	08 = 24 Hr Aux
01 = Entry/Exit #1	09 = Fire (w/verif.)*
02 = Entry/Exit #2	10 = Interior w/ Delay
03 = Perimeter	23 = No Alarm Response
04 = Interior Follower	
05 = Trouble Day/Alarm Night	24 = Silent Burglary
06 = 24 Hr Silent	
07 = 24 Hr Audible	

* The "verification" feature is only active when zone type 09 is assigned to basic wired zone 1.

When the display shows the zone type you want, press [✱] to continue.

> You must enter "00" as the **zone type** for any wired zones that are not used.

02 Partition	
	1

Enter the partition to which this zone is assigned, "1" or "2". The factory default is partition 1. Press [✱] to continue.

02 Report Code	
1st 03 2nd 12	00

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". Refer to the *SYSTEM COMMUNICATION* section for complete information on report codes, if necessary.

Enter the desired report code and then press [✱] to continue.

02 Response Time	
	1

Enter the desired response time for the zone. The factory default is "1".

Selections available are: "0" = 10 msec, "1" = 350 msec, or "2" = 700 msec.

Press [✱] to continue.

Typical summary display

Zn	ZT	P	RC	In	RT
02	03	1	3C	HW:	1

A summary display will appear, showing the data for the zone that was just programmed.

If it is programmed satisfactorily, press [∗] to continue.

```
Program Alpha?
0 = No   1 = Yes          0
```

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 using ∗82 interactive mode (enter 0). We recommend that the entry of Alpha descriptors be done using ∗82 mode.

See Section 15. ALPHA DESCRIPTION PROGRAMMING for specific procedure

```
Enter Zn Num.
(00 = Quit)              03
```
Enter next zone number ↑

If "0" (no) was entered above, the system will return to the Enter Zone Number prompt. Proceed with the programming for the next zone, as indicated previously.

When you have programmed all the wired zones satisfactorily, exit ∗56 interactive mode at the **Enter Zn Num**. prompt by pressing: **[0] [0]** ∗

Then exit the programming mode by keying ∗**99**.

Section 6. WIRED ZONE EXPANSION

This section provides information regarding the use of expansion modules for expanding the number of wired zones in the system, the modules that can be used and their wiring connections, plus a procedure for programming the wired expansion zones.

Installing Zone Expansion Units

You can add an additional 8 wired EOLR zones to the basic control's 8 zones, for a total of 16 wired zones, by using a **No. 4219 Wired Expansion Unit**, or **4229 Wired Expansion/Relay Unit**.

Location • You can mount an expansion unit within the control cabinet if space permits. Otherwise, mount the unit outside the cabinet.

Supervision • Units are supervised against removal. Keypads will display **CHECK** and zone **09** if a zone expander is disconnected.

• Units have tamper protection for security when mounted outside of the cabinet.

Zone Information • Assign zone numbers 10–17 for the eight wired expansion loops (designated A to H). You can programme these zones individually (in ∗56 interactive mode) for Partition 1 or 2. See "Programming Wired Expansion Zones" later in this section.

Connections and Set-Up
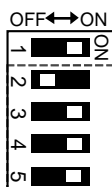
1. Connect the 4219 or 4229 module to the control's keypad terminals (see diagram that follows).

2. **Set the 4219 or 4229's DIP switch for device address "1"** (switch 2 "OFF" and switches 3, 4, 5 "ON"). Switch 1 determines expansion zone A's response time ("ON" = normal response, "OFF" = fast response). For location of the DIP switch in the unit, see the diagram below (location of DIP switch for both units is in the same location).

For additional information, see instructions supplied with the 4219 and 4229.
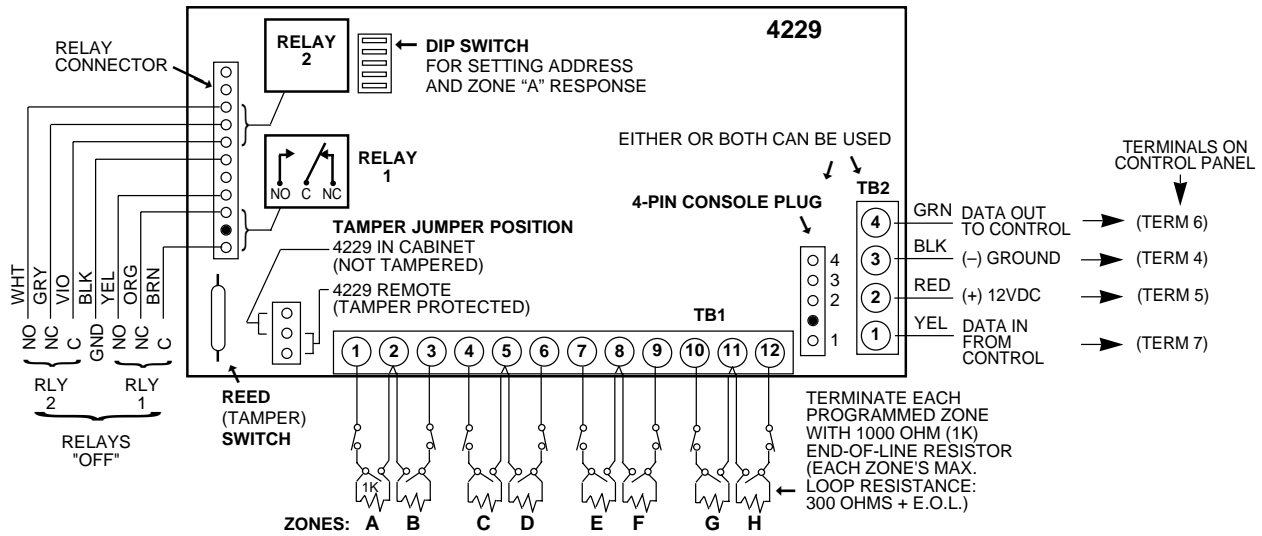
Figure 8. Wiring Connections, 4219 & 4229 (4229 shown)

Programming Wired Expansion Zones

1. Enter the programming mode by keying the following on the Alpha keypad: **Installer code (4 1 1 2) + 8 + 0 + 0.**

> Programme fields ✶22 RF SYSTEM and ✶25 WIRED ZONE EXPANSION must be programmed as required before continuing.

2. **Press ✶56.** Note that this is an interactive programming mode. It is used to programme zone numbers, zone types, partition numbers, and alarm report codes for all zones that are going to be used.

```
Enter Zn Num.
(00 = Quit)            10
```
Zone Number ↑

Enter the first zone number that you wish to programme (or [0][0] to exit zone programming). Normally, you will be starting with zone 10, so enter "10". Press [✶] to continue.

```
Zn  ZT  P  RC   In   L
10  00  1  10       RF: 1
```
↑ Entry for Zone 10 shown

A summary display will appear, showing the present status of that zone's programming.

Zn = zone number;

ZT = zone type;

P = partition to which zone is assigned;

RC = report code for that zone;

In = input type of zone (AW for Aux Wired).

L = Loop (not used for wired expansion zones)

Values in the summary display are the currently programmed values.

To start programming zone 10, press [✶]. A prompt for Zone Type will appear.

↓ Zone Number

```
10  Zone Type
Perimeter              03
```
Entry for Zone Type 03 shown ↑

Each zone must be assigned a zone type, which defines the way in which the system responds to faults in that zone. A detailed explanation of each zone type is provided in "Response Type Definitions" in the *ZONE RESPONSE TYPE DEFINITIONS* section.

Enter the desired zone type, as listed next.

00 = Zone Not Used	08 = 24 Hr Aux
01 = Entry/Exit #1	09 = Fire
02 = Entry/Exit #2	10 = Interior w/ Delay
03 = Perimeter	
04 = Interior Follower	23 = No Alarm Response
05 = Trouble Day/Alarm Night	
06 = 24 Hr Silent	24 = Silent Burglary
07 = 24 Hr Audible	

When the display shows the zone type you want, press [✶] to continue.

```
10   Partition

                    1
```

Enter the partition to which a zone is to be assigned. Enter "1" or "2". The default is partition 1.

Press [✶] to continue.

```
10  Report Code
1st  03 2nd  12      3C
```

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". Refer to the *SYSTEM COMMUNICATION* section for complete information on report codes, if necessary.

Enter the report code and then press [✶] to continue.

Typical summary display

```
Zn  ZT  P  RC  In   L
10  03  1     03 AW:  –
```

A summary display will appear, showing the data for the zone that was just programmed. Note that AW indicates an auxiliary wired (zone expansion module) zone.

If it is programmed satisfactorily, press [✶] to display the next prompt.

```
Program Alpha?
0 = No   1 = Yes        0
```

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 using ✶82 interactive mode (enter 0). We recommend that the entry of Alpha descriptors be done later using ✶82 interactive menu mode.

See the *ALPHA DESCRIPTION PROGRAMMING* section for specific procedure.

```
Enter Zn Num.
(00 = Quit)            11
```
Enter next zone number ↑

If "0" (No) was entered above, the system will display a prompt for entry of the next wired expansion zone number. Proceed with the programming for the next zone, as indicated previously.

When you have programmed all the wired expansion zones satisfactorily, exit ✶56 interactive mode at the **Enter Zn Num**. prompt by pressing [**0**] [**0**] ✶.

Then exit the programming mode by keying ✶**99**.

Check-out Procedure For Wired Expansion Zones

If a "**CHECK 09**" message appears on the display, data from the control is not reaching the zone expander module. Check your wiring and DIP switch settings on the module.

Section 7. WIRELESS EXPANSION (5800 SYSTEM)

General Information

In addition to its basic wired zones, the control supports up to 30 wireless zones using an appropriate 5881 type RF receiver. The actual number of zones supported also depends on whether you are using a wired zone expander module.

For example: If you are using only four of the wired expansion loops, a 5881H RF Receiver could add 22 RF zones to the system, using any zone numbers in the range of **18–39**, for a combined total of 30 wired and wireless expansion zones.

However, if you are *not* using wired zone expansion, the 5881H RF receiver could add 30 wireless zones to the system, using any zone numbers in the range of **10–39**.

The receiver can detect signals from wireless transmitters within a nominal range of 60m.

RF Receiver	No. of Zones
5881L	up to 8
5881M/6128RF	up to 16
5881H	up to 30

Set the receiver's DIP switch for device address "0", as described in its instructions (all switches to the right. . . "off").

Receiver Supervision

The receiver is supervised, and a trouble report will be generated. **CHECK** and zone **09** will also be displayed.
   a) If communication between the panel and the receiver is interrupted.
      or
   b) If no valid RF signals from at least one *supervised* wireless transmitter are received within 12 hours.

House Identification

If you are using a 5827 or 5827BD Wireless Keypad with the system, you must programme a House ID Code (01–31) in field ✶24 to establish proper communication, and the keypad must be set to the same ID.

DIP switch setting information for a 5827 is given later in this section. The 5827BD is keypad programmable.

5800 Series Transmitters

General

5800 series transmitters have built-in serial numbers that must be enrolled in the system using the ✶56 or ✶83 interactive mode, or input to the control via the downloader. 5800 series transmitters (except 5827 described separately) do not have DIP switches.

Each transmitter's zone number is programmed into the system in ✶56 mode. Some transmitters, such as the 5816 and 5817, can support more than one "zone" (referred to as loops or inputs). On the 5816 for example, the wire connection terminal block is loop 1, the reed contact is loop 2. Each loop must be assigned a different zone number.

For button transmitters (RF "keys"), such as the 5804 and 5801, you must assign a unique zone number to each individual button used on the transmitter. Each button on the transmitter also has a pre-designated loop or input number, which is automatically displayed.

Programming an RF House ID (01–31) in field ✶24 **is necessary only if using 5827 or 5827BD wireless keypads**. An RF House ID is not necessary for other 5800 series transmitters and the entry should be left at "00" (default) in those cases.

The 5827 reports low battery status as zone "00."

Transmitter Supervision

Except for some transmitters that may be carried off-premises (5802, 5802CP, 5804, and 5804BD), 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.

The supervision for a particular transmitter in the system that may also be carried off the premises (5801, 5802MN, 5802MN2) may be turned off by enrolling it as a "UR" (unsupervised RF) type, as described later.

5800 series transmitters have built-in tamper protection and will annunciate as a "CHECK" condition if covers are removed.

Transmitter Input Types

All of the transmitters described have one or more unique factory assigned input (loop) ID codes. *Each of the inputs requires its own programming zone* (e.g., a 5804's four inputs require four programming zones). See APPENDIX A toward the end of this manual.

Transmitters can be enrolled as one of the following types:

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

Transmitter Battery Life

	Do not install batteries in wireless transmitters until ready to enroll, as will be indicated in the procedure that follows under "Programming the Receiver and Transmitters." After enrolling, batteries need not be removed.

- Batteries in the wireless transmitters may last from 4–7 years, depending on the environment, usage, and the specific wireless device being used. Factors such as humidity, high or low temperatures, as well as large swings in temperature may all reduce the actual battery life in a given installation. The wireless system can identify a true low battery situation, thus allowing the dealer or user of the system time to arrange a change of battery and maintain protection for that given point within the system.

- Some transmitters (e.g., 5802 and 5802CP) contain long-life but non-replaceable batteries, and no battery installation is required. At the end of their life, the complete unit must be replaced (and a new serial number enrolled by the control).

- Button type transmitters, 5802, 5802CP, 5804, and 5804BD, should be periodically tested for battery life.

Programming the Receiver and Transmitters

1. Enter the programming mode by keying the following:
   Installer code (4 1 1 2) + 8 + 0 + 0.

Programme fields ✶22 RF SYSTEM and ✶25 WIRED ZONE EXPANSION must be programmed as required before continuing. It is recommended that the installer make use of the Program Tool V-LINK® Downloading Software Diskette (at revision level supporting the VISTA–20SEa) as specified in Section 20 of this manual.

---

2. ✶**24**. **RF HOUSE ID CODE**

   The House ID identifies wireless keypads.

   If a 5827 or 5827BD Wireless keypad is to be used, a House ID code MUST be entered (01–31), and the keypad should be set to the same ID. If no wireless keypad is to be used, enter "00".

   Partition 2 House ID is automatically set for one number higher than the ID number entered for Partition 1. Therefore, if a wireless keypad is also used in partition 2, the House ID for partition 1 must not be higher than 30.

3. **Press ✶56.** (Zone Programming Mode)

   Use this mode to programme zone numbers, zone types, partition numbers, alarm report codes, and to enroll RF devices for all wireless expansion zones that are going to be used in the system.

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

Enter the zone number that you wish to programme. As an example, zone 20 is shown entered.

You can assign zone *numbers* to transmitters as follows:

- Use zone numbers in the range of 10–39 if a 4219 or 4229 is NOT being used in the system.
- Use zone numbers in the range of 18–39 if a 4219 or 4229 IS ALSO being used in the system, *even if some of the expansion unit's wired loops are not being used.*
- The actual number of zones that can be assigned to wireless is 30, but will be less if a wired expansion module is being used (see "General Information" at the beginning of this section).

Note: If using a button for arming, the zone number assigned to the button is the "user number" reported to the central alarm station, i.e., arm button = zone x, disarm button = zone y.

After entry of zone number, press [✶] to continue.

IMPORTANT

If wired expansion zones are not presently being used in the system, but if there is any possibility that they may be added at some future date, you should assign zone numbers in the range of 18–39 for wireless transmitters.

The reason for this is as follows: wired expansion zone numbers are restricted to 10–17; if you assign zone numbers between 10 and 17 for wireless, and subsequently add wired expansion zones, all serial numbers for wireless transmitters in the 10–17 zone number range will be lost. and any transmitters assigned to those numbers will become inoperative in the system. These particular transmitters will then have to be assigned different zone numbers (in the range of 18–39) and their serial numbers re-enrolled.

```
Zn ZT  P  RC   In: L
20 00  1  10   RF: 1
```

A summary display will appear, showing the status of that zone's programme.

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.

```
┌──────────────────────────┐
│ 20  Zone Type            │
│                          │
│ Perimeter            03  │
└──────────────────────────┘
```

Entry for Zone Type 03 shown ↑

Each zone must be assigned a zone type, which defines the way in which the system responds to faults in that zone.

Enter the zone type (or change it, if necessary). Zone types that you can assign are listed below. A detailed explanation of each zone type is provided in Section 18. *ZONE RESPONSE TYPE DEFINITIONS.*

Enter the desired zone type code from the following list:,

00 = Zone Not Used	09 = Fire
01 = Entry/Exit #1	10 = Interior w/ Delay
02 = Entry/Exit #2	20 = Arm-Stay*
03 = Perimeter	21 = Arm-Stay*
04 = Interior Follower	22 = Disarm*
05 = Trouble Day/Alarm Night	23 = No Alarm Response
06 = 24 Hr Silent	(Example: Relay activation)
07 = 24 Hr Audible	
08 = 24 Hr Aux	24 = Silent Burglary

* These are special zone types used with 5800 series wireless pushbutton units which will result in arming the system in the STAY or AWAY mode, or disarming of the system, depending on the selection mode.
A button programmed for these functions will report zone number as the user number to the central station.

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

```
┌──────────────────────────┐
│ 20   Partition           │
│                          │
│                      1   │
└──────────────────────────┘
```

Enter the partition (1 or 2) to which this zone is assigned. Press [✳] to continue.

```
┌──────────────────────────┐
│ 20  Report Code          │
│                          │
│ 1st  03 2nd  12     3C   │
└──────────────────────────┘
```

Enter the report code. See Section 17. *SYSTEM COMMUNICATIONS* for complete information on report codes, if necessary.
Press [✳] to continue.

```
┌──────────────────────────┐
│ 10 INPUT DEV:      LP#    │
│                          │
│ RF TRANS. RF:       1    │
└──────────────────────────┘
```

Input Device (In): For the 8 built-in basic wired zones, the Input Device types are automatically displayed as HW (Panic, Duress, and Tamper inputs are not applicable). For the auxiliary wired zones or RF transmitters, enter the input device type as follows:

2 = AW (auxiliary wired zone)

3 = RF (supervised RF transmitter)

4 = UR ((unsupervised RF transmitter)

5 = BR (button type RF transmitter -
 unsupervised)

Refer to the 5800EU Series Transmitters Table in the *WIRELESS EXPANSION* section for the specific procedure required to enroll a particular transmitter.

Press [✳] to continue.

```
┌─────────────────────────────┐
│ 10  INPUT DEV:     LP#      │
│ RF TRANS. RF:      1        │
└─────────────────────────────┘
```

Loop number (LP#): Enter the loop number (1-4) for the zone of the transmitter being enrolled. The default is loop "1." To accept this, press [✶]. If a different loop number is being used on this transmitter, enter the desired loop number and press [✶] to continue (see the transmitter's Installation Instructions for specific loop designations). **The loop number must be entered here, whether using Zone Programming or Sequential Mode to "enroll" transmitters.**

```
┌─────────────────────────────┐
│ 10  LEARN S/N?             │
│ 0 = NO,  1 = YES      0     │
└─────────────────────────────┘
```

If the transmitter's serial number has not been previously "enrolled," you may enter the enroll mode now by either entering "1" (YES) or by pressing the upper left-hand button of the programme tool. **If using the programme tool, move to the physical location of the transmitter to be enrolled before pressing the button.** A single short beep will verify that the button has been pressed. The system will respond to the first serial number transmitted after the [✶] key on the keypad or the button of the programme tool is pressed. Enter "0" (NO) if you wish to enroll the transmitter later, using the "✶83 sequential" mode described in the *SEQUENTIAL MODE* section later in this manual.

If "0" is entered, skip to the summary screen prompt.

```
┌─────────────────────────────┐
│ 10 INPUT S/N         L     │
│  A XXX - XXXX              │
└─────────────────────────────┘
```

This prompt is displayed if "1" (YES) is entered in response to the "Learn S/N?" prompt. The serial number may be enrolled by one of two methods:
a) Enter the 7-digit serial number printed on the transmitter using an alpha keypad
         or
b) Activate the transmitter by faulting *or* restoring the input you wish to use for that zone (e.g., press a button, open or close a door, etc.).

```
┌─────────────────────────────┐
│ 10 INPUT S/N         L     │
│  A 002 - 4064        1     │
└─────────────────────────────┘
```

The system will enroll the serial number of the first transmitter heard, add the loop number entered to this serial number, display the serial and loop numbers, and cause the keypad to beep twice.

If the serial and loop number combination is already present in the system, a single long beep will be heard from the keypad. If this happens, the system will not display the serial number, but will wait for a transmission from another transmitter or transmitter loop input.

The system will then enter an optional confirmation mode so that the operation of the actual programmed input can be confirmed. Activate the loop input or button that corresponds to this zone. **We recommend that you confirm the programming of every transmitter before proceeding to the next zone.**

```
┌─────────────────────────────┐
│ 10  CONFIRMED              │
│  A 002 - 4064        1     │
└─────────────────────────────┘
```

When the system sees activity on the appropriate input, it will beep three times and display the confirmation message.

At any time during this step, you may press the [✱] key on the keypad or the upper left-hand button of the programme tool if you are satisfied with the serial and loop number combination that has been enrolled, regardless of whether or not the enrolled input has been "confirmed."

If the incorrect transmitter has been enrolled, press the [#] key on the keypad or the upper right-hand button of the programme tool to delete the serial number and return to the "LEARN S/N?" prompt. A single long beep will be heard from the keypad to verify pressing of the upper right-hand button. Then, press '1' (YES) or press the upper left-hand button of the programme tool (a single short beep will verify the system is ready for enrolling) and reactivate the proper transmitter or transmitter loop input.

```
Zn ZT  P  RC   In: L
10 03  1  3C   RF:1 s
```

The summary screen for the zone will appear. Note that an "s" indicates that a serial number has been enrolled. The cursor will be flashing above the loop number. Press [✱] to accept the zone information.

NOTE: If you entered "0" in the "LEARN S/N?" prompt previously, you will not get an indication that the serial number has been enrolled.

If you want to delete the serial number, enter "0" and press [✱]. The system will then prompt, "DELETE S/N?" Press the "1" (Yes) key to complete the delete sequence. This process deletes the serial number only, *not* the loop number. The assumption is that the proper loop number was programmed, but the wrong serial or loop number was enrolled. To change the loop number, you must go back through zone programming for that zone and manually enter the loop number over the existing one.

```
Program Alpha?
0 = No  1 = Yes    0
```

Alpha descriptors for the zones can be entered now (enter 1) or may be entered at a later time using ✱82 interactive mode (enter 0). We recommend that the entry of Alpha descriptors be done using ✱82 mode.

Refer to *Section 15. ALPHA DESCRIPTION PROGRAMMING* for specific procedure.

```
Enter Zn Num.
(00 = Quit)       21
```

If you entered "0" (No) in response to the Program Alpha? prompt, the system will display a prompt for entry of the number for the next wireless expansion zone to be programmed.

Proceed with the programming of the next zone, as indicated previously.
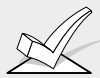
• *In ✱56 mode, at the summary line for each zone, the entered values can be checked.* Press [#] repeatedly to move to earlier entries. Press [✱] to move to later entries again.

4. Exit the programming mode by keying ✱**99**.

5. Use the transmitter Sniffer mode to test that all transmitters have all been programmed properly, as indicated next.

Using The Transmitter Sniffer Mode

1. Enter Installer **code (4112) + # + 3.** This initiates a procedure that will provide a check that all transmitters have been properly programmed.
2. The keypad will display all zone numbers of wireless units programmed into the system. Fault each transmitter in turn, causing each one to send a signal.

   As the system receives a signal from each of the transmitters, the zone number of that transmitter will **disappear** from the display. The transmitters may be checked upon installation, or in an installed system.

   Note: A transmitter not "enrolled" will **not** turn off its zone number.
3. When all transmitters have been checked, exit the sniffer mode immediately by keying **Installer code (4112) + OFF.**

To Either Temporarily Or Permanently Remove a Zone From The System.

1. Enter the programming mode and press [✳][5][6].
2. Enter the zone number and press [✳]. A summary display will appear.
3. Press [✳] again.

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

4. The "**Zone Type**" prompt will appear. Enter [0][0]. This sets the zone type to "Not Used". Press [✳] to continue.

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

5. The next prompt will ask whether you want to delete the zone.

   "Yes" will permanently remove the zone from the system, while a "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 reenable it.

   A serial number that has been enrolled for a 5800 system will not be deleted if the zone is temporarily disabled by answering "No" to the prompt above.

   If only the physical transmitter is to be removed or changed (i.e., its serial number deleted, as when replacing a unit that has a non-removable battery), it can be done in ✳56 Mode, but we recommend using the ✳**83 mode** (in a later section of this manual).

Deleting a Transmitter Serial Number From a Zone in ✳56 Mode

A more detailed procedure for adding, deleting, or changing serial numbers of wireless transmitters is provided in *Section 16. USING ✳83 MODE TO ADD, DELETE, OR CHANGE SERIAL NUMBERS.*

Abbreviated Procedure:
1. In the programming mode, press [✳][5][6] to enter Zone Programming mode.
2. Then enter the zone number, and press [✳] repeatedly until the cursor is under the "**Enrolled RF Input (L)**" position. This is the specific input (loop) or button on the transmitter that has been enrolled for that zone.
3. Enter a [0] at this point, then press [✳].
4. A prompt "**Delete S/N?**" will appear.
   Enter "Yes" to delete the existing serial number from the system.
   Note that the other programmed values for that zone will not be deleted.
   This will allow you to re-instate a new transmitter in its place.
5. A display for the next zone number will appear. To exit, enter "**00 ✳**"
6. Press ✳99 to exit the programming mode.

5800 Series Transmitters Table

Also refer to APPENDIX A toward the end of this manual
for transmitter input loops and button locations.

Model	Description	Input Type And Special Notes
5801	**Wireless Panic Transmitter**	• Unit has 4 pushbuttons, each with a unique Input (loop) code. • Each pushbutton must be assigned to a zone. • "3" for RF (supervised), or "4" for UR (unsupervised). Note: Input loop (button) No. 4 must always be used.
5802 **5802CP**	**Pendant Belt Clip (Personal Emergency) Transmitters**	"5" for BR (button type transmitter).
5802MN, 5802MN2 **5804**	**Miniature Personal Emergency Trans.** **Wireless Key Transmitter**	"3" for RF (supervised), or "4" for UR (unsupervised). • **5804** Has 4 pushbuttons, each with a unique input (loop) code. • Each pushbutton must be assigned to a zone. "5" for BR (button type transmitter). *Note: All buttons must be assigned the same Input Type.*
5806 **5807** **5808**	**Wireless Photo-optical**	"3" for RF (supervised). At the "TRANSMIT NOW" prompt, fault the detector as follows: a) On many detectors, press the special test switch (not test button) provided for faulting the detector (see detector's instructions) then release. **Note:** With some detectors, two contacts must be shorted to fault the detector. Disengage detector's cover and swing cover open – these contacts are on the PC board near a blue jumper (see detector's instructions). Momentarily short these contacts with a small screwdriver. A single keypad beep will occur when the detector is faulted the first time. b) Wait 6–8 seconds, then press and release the test switch (or momentarily short the contacts) again. 2 beeps will occur if the control has accepted the input code, and a summary display showing the enrolled input (loop) No. will appear.
5816	**Door/Window Transmitter**	• Has two input (loop) zones: one for a wired closed circuit contact loop and the other for a built-in reed switch (used in conjunction with a magnet). Either or both may be used. "3" for RF (supervised).
5816MC	**Money Clip Transmitter**	"3" for RF (supervised) if used in non-metallic cash drawer "4" for UR (unsupervised) if used in metal cash drawer.

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
		    d) 3-Minute or No Transmission Inhibit.
		DIP Switches: Set all DIP switches to the OFF position when enrolling the serial number.
		"3" for RF (supervised).
		Note: All loops must be assigned the same Input Type.

5818	**Recessed Magnetic Contact Transmitter**	"3" for RF (supervised).
5849 **5850**	**Glassbreak Detector/Transmitter**	"3" for RF (supervised).
5890	**PIR Detector/ Transmitter**	"3" for RF (supervised). **The cover must be on the unit when enrolling the serial number.**

† When "enrolling" a transmitter's ID code(s), any PIR that may be in the vicinity (and is not being enrolled) should be covered with a cloth, tissue, etc., to prevent activation of that PIR.

Installing 5800 Series Transmitters

To be sure reception of the transmitter's signal at the proposed mounting location is adequate, perform a Go/No Go test.

Go/No Go Test Mode

The Go/No Go tests will verify adequate RF signal strength from the proposed transmitter location, and allow you to reorient or relocate transmitters if necessary, before mounting the transmitters permanently.

This mode is similar to the transmitter test mode , except that the wireless receiver gain is reduced. This will enable you to make sure that the RF signal from each transmitter is received with sufficient signal amplitude when the system is in the normal operating mode.

1. Enter **installer code (4112)** + **#** + **4.** For multi-partition systems, make sure all partitions are disarmed before entering this mode.

2. Once you have placed transmitters in their desired locations and the approximate length of wire to be run to sensors is connected to the transmitter's screw terminals (if used), **fault each transmitter.** *Do not conduct this test with your hand wrapped around the transmitter as this will cause inaccurate results.*

    Note: On button type transmitters whose buttons have been set to Arm Away, Arm Stay, or Disarm, pressing a button will take the system out of the Go/No Go Test mode and cause that action.

    a. The keypad will beep three times to indicate signal reception and display the appropriate zone number.

    b. If the keypad does not beep, reorient or move the transmitter to another location. Usually a few inches in either direction is all that is required.

3. If each transmitter produces the proper keypad response when it is faulted, you can then permanently mount each of the transmitters according to the instructions provided with them.

4. Exit the Go/No Go test mode by entering: **Installer code (4112)** + **OFF.**

Setting DIP switches on the 5827 Transmitter(s)

A 5827 transmitter must be set to the selected House ID, using its DIP switches. If a 5827 is also being used in partition 2, you must set its DIP switch to an ID that is one number higher than the one in partition 1 (e.g., if House ID selected is 11, set the 5827 in partition 1 to "11", and the 5827 in partition 2 to "12".

Section 8.
RELAY OUTPUTS & POWERLINE CARRIER DEVICES

Relay/Powerline Carrier Device Basics

The control supports a total of 8 output devices in the following configurations:

*   One 4204 relay module (4 relays) and 4 Powerline Carrier devices.
*   One 4229 zone/relay module (2 relays) and 6 Powerline Carrier devices.
*   Up to 8 Powerline Carrier devices (8 minus the number of output relays used).

	A 4204 cannot be used if a 4219 or 4229 is already being used.

The 4204 and 4229 modules provide Form C (normally open and normally closed) contacts. Powerline Carrier devices are controlled by signals sent through the electrical wiring at the premises via a PLC7213 transformer. . Therefore, if using Powerline Carrier Devices, a PLC7213 transformer *must* be used in place of the regular system transformer.
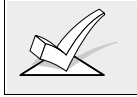
> Once a device is programmed into the system, the user sees no difference between a Powerline Carrier device or a relay output device.

In ✲80 and ✲81 interactive modes, a series of keypad prompts will request entries for programming of the Relay outputs and/or Powerline Carrier devices used in the system. Refer also to "OUTPUT RELAYS/POWERLINE CARRIER DEVICES WORKSHEET FOR ✲80 AND ✲81 INTERACTIVE MODES" in the blank programming form.

4204 and 4229 Relay Output Modules

1. **Connect the 4204/4229 to the control's Partition 1 remote keypad terminals** (4–7), using the connector supplied with the 4204 and 4229.

2. **Set the 4204/4229'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).

Supervision
- 4204 and 4229 modules are supervised against removal. **CHECK** and zone **09** will be displayed if a module is disconnected from the control.

Powerline Carrier devices

The XF10 transformer provides mains power to the control panel, and also supplies signals from the control panel through the premises mains wiring to the Powerline Carrier devices (which are plugged into mains outlets). Devices plugged into Powerline Carrier devices can then be made to perform various functions in response to commands entered at the keypads in the security system.

Wiring Connections

1. Splice one end of a 4-conductor cable to the wire ends of the 4142TR cable supplied with the XF10 transformer.

2. Connect the 4142TR cable plug to the 9-pin connector on the control (see SUMMARY OF CONNECTIONS diagram for location of the 9-pin connector).

3. Plug the other end of the 4-conductor cable into the XF10 transformer module.,

XF10 TRANSFORMER WIRE CONNECTIONS

XF10 TERMINAL	TO TERMINAL ON CONTROL
1 (AC)	1 (16.5V AC in)
2 (Ground)	25 Earth Ground terminal
3 (AC)	2 (16.5V AC in)

XF10 TERMINAL	4142TR CABLE WIRE
4 (Sync)	RED (Pin 5 of 9-pin connector)
5 (Data)	VIOLET (Pin 1 of 9-pin connector)
6 (Com)	WHITE (Pin 4 of 9-pin connector)
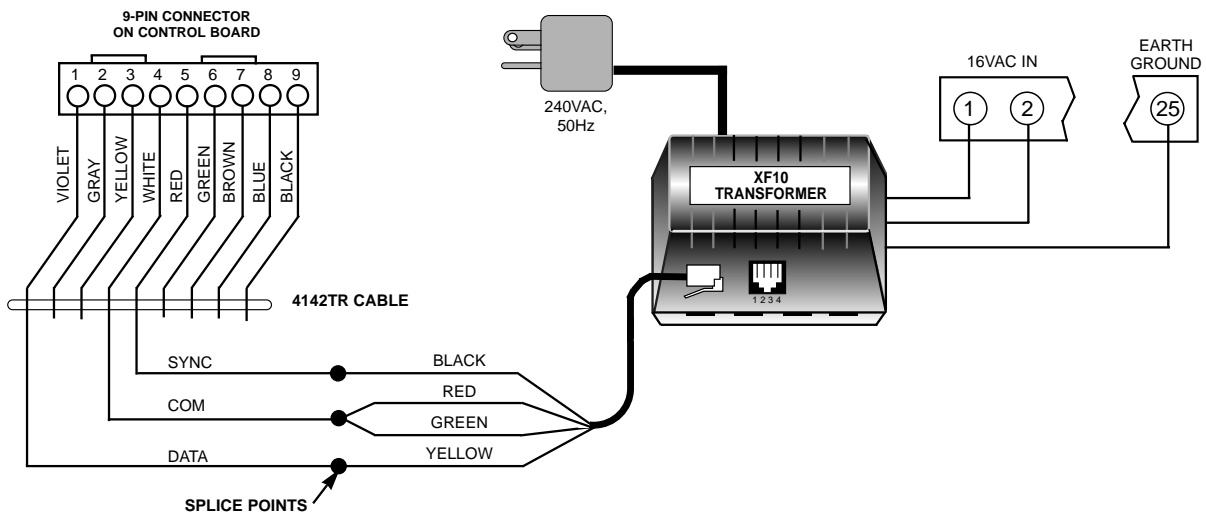
Figure 9. XF10 Transformer Wiring Connections

Programming Options Defined

The following will help you understand the programming of OUTPUT DEVICES when using ★80 and ★81 modes.

The letter(s) in parentheses after each function described below, such as (A) after ACTION, are those that appear in the various summary displays of programmed data during programming.

ACTION (A)   The "ACTION" of the device is how the device will respond when it is activated by the "START" programming. There are four different choices of actions:

- ACTIVATE for 2 SECONDS and then reset.
- ACTIVATE and REMAIN ACTIVATED until stopped by some other event.
- PULSE ON and OFF until stopped by some other event.
- NOT USED when the device is not used.

START *(STT)*   The "START" programming determines when and under what conditions the device will be activated. The following START options are available:

A)   1.   **EVENT (EV)** is the condition (Alarm, Fault, Trouble) that must occur to a zone or group of zones (zone list) in order to activate the device. These conditions apply ***only*** when a zone list is used. The different choices for "EVENT" are listed below and in the "Programming Output Relays & Powerline Carrier devices" section that follows.

- ALARM   Relay action begins upon any alarm in an assigned zone in the zone list.
- FAULT   Relay action begins upon any opening or short in an assigned zone in the zone list.
- TROUBLE   Relay action begins upon any trouble condition in an assigned zone in the zone list.
- NOT USED   Relay action is not dependent upon one of the above events.

2. **ZONE LIST (ZL)** is a group of zones to which the "EVENT" applies in order to activate a particular device. Note that there are a total of 3 zone lists that can be programmed in field ∗81 mode.

B) 1. **ZONE TYPE/SYSTEM OPERATION (ZT).** If a System Operation, such as "DISARMING" or "ANY FIRE ALARM," is to activate the device, the appropriate choice would also be entered under the "ZONE TYPE" option. "ZONE TYPE" is used independently of the "EVENT/ZONE LIST" combination.

If a specific "ZONE TYPE" is chosen, any zone of that response type going into alarm, trouble, or fault will cause the device to activate as selected in "ACTION." If the same "ZONE TYPE" is also chosen for the STOP programming, any zone of that type that *restores* will de-activate the device.

If a "SYSTEM OPERATION" is chosen (e.g., End of Exit Time), that operation will cause the device to activate as selected in "ACTION." The different choices for "ZONE TYPE" and "SYSTEM OPERATION" are listed in "Programming Output Relays & Powerline Carrier devices" later in this section, and in the Programming Form.

2. **PARTITION No. (P).** The device's "Start" ZONE TYPE/SYSTEM OPERATION may be limited to an occurrence on Partition 1, Partition 2, or any partition (A).

STOP (STP): The "STOP" programming determines when and under what conditions the device will be de-activated. The following options are available:

A) 1. **RESTORE ZONE LIST (ZL)**. If a "ZONE LIST" is used as the "Stop" event, the device will de-activate when **all** the zones in that list restore from a previous fault, trouble, or alarm condition. This will occur regardless of what is programmed to "START" the device; therefore, a "RESTORE ZONE LIST" would normally only be used when a "ZONE LIST" is used to start the device.

B). 1. **ZONE TYPE/SYSTEM OPERATION (ZT).** Instead of using a "RESTORE ZONE LIST", a specific zone (response) type or system operation action can be selected to de-activate the device.

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 device to de-activate.

If a "SYSTEM OPERATION" is chosen, that operation will cause the device to de-activate. The different choices for "ZONE TYPE" and "SYSTEM OPERATION" are listed in "Programming Relays & Powerline Carrier devices" later in this section, and in the Programming Form.

2. **PARTITION No. (P).** The device's "Stop" Zone Type/System Operation may be limited to an occurrence on Partition 1, Partition 2, or any partition.

During normal system operation, any devices may be manually *started* by keypad entry of: **Code** + # + **7** + **"n"** or manually *stopped* by keypad entry of: **Code** + # + **8** + **"n,"** where "n" = the device number to be controlled.

As a minimum, the ACTION (A) and PARTITION No. (P) fields must be programmed for this manual action to be operative.

Programming Output Relays and Powerline Carrier Devices

1. Enter the programming mode by keying the following on the Alpha keypad: **Installer code (4 1 1 2) + 8+ 0 + 0.**

> Programme fields ✻22 RF SYSTEM, ✻25 WIRED ZONE EXPANSION and ✻30 KEYSWITCH ENABLE must be programmed as required before continuing.

2. **Press ✻27. POWERLINE CARRIER DEVICE HOUSE ID.**

    Enter House ID 1–15 for Powerline Carrier devices, as follows:

    0 = A, 1 = B, 2 = C, 3 = D, 4 = E, 5 = F, 6 = G, 7 = H, 8 = I, 9 =J,# + 10 = K, # + 11 = L, # + 12 = M, # + 13 = N, # + 14 = O, # + 15 = P.

    Default is **0**.

    The House ID must match the House ID set on the powerline carrier devices. The unit ID for these devices is 1–8 depending on which device is being programmed. For example, device #1 must be set to unit ID 01, device #2 to unit ID 02, etc.

3. **Press ✻80.** Note that this is an interactive programming mode. It is used to programme all output devices used in the system (4229 or 4204 Relay modules, or Powerline Carrier devices). Refer to the Programming Form worksheet for ✻80 Interactive Mode.

Output Device Displays [

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

Upon pressing ✻80, this screen will appear. Enter the Device Number 01 or 02 for a 4229, or 01, 02, 03, or 04 for a 4204, or 01–08 for Powerline Carrier devices (or 00 to end these entries). Press the [✻] key to continue.

> The [✻] key is used to accept an entry and advance to the next prompt. The [#] key is used to revert back to the last question to check or change an entry. Press [✻] to go forward again.

```
02   A EV ZL ZT  P
STT  0  0  0  00  1
```

This screen displays a summary of the current Device START programming (for this example, device 02 has been selected).
Press the [✻] key to continue.

```
02   A EV ZL ZT  P
STP –  –  0  00  1
```

This screen displays a summary of the current Device STOP programming.
Press the [✻] key to continue.

```
02 Device Action
No Response       0
```

Enter the desired device action as listed below. Press the [✻] key to continue.
  0 = No response   2 = Close and Stay Closed
  1 = Close for 2 seconds   3 = Continuous Pulse on & off (1 sec ON, 1 sec OFF)

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

Enter the event to START the relay:
0 = Not used; 2 = Fault; 1 = Alarm; 3 = Trouble
A zone list must be used in conjunction with an event. If a zone type/system operation is to be used instead of an event, enter 0.
Press the [✻] key to continue.

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

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 continue.

```
02 Start:      Zn Typ
Not Used          00
```

If a zone type or system operation will be used to START the device action, enter the appropriate two-digit code (see table that follows). If not, enter 00. Press the [✻] key to continue.

00 = Not Used	04 = Interior Follower	08 = 24 Hr Aux
01 = Entry/Exit #1	05 = Trouble Day/Alarm Night	09 = Fire
02 = Entry/Exit #2	06 = 24 Hr Silent	10 = Interior w/ Delay
03 = Perimeter	07 = 24 Hr Audible	24 = Silent Burglary

CHOICES FOR SYSTEM OPERATION

** Use 0 (Any) for Partition No. (P) entry.

*** Or at Disarming, whichever occurs earlier.

20 = Arming–Stay	36 = **At Bell Timeout***	42 = **System Battery Low
21 = Arming–Away	38 = Chime	43 = Communication Failure
22 = Disarming (Code + OFF)	39 = Any Fire Alarm	52 = Kissoff
31 = End of Exit Time	40 = Bypassing	58 = Duress
32 = Start of Entry Time	41 = **AC Power Failure	
33 = Any Burglary Alarm		

```
02 Start:        Part
Any Partition      A
```
Enter (if applicable) the partition number 1 or 2 (or 0 for any).
Press the [*] key to continue.

```
02 Stop:      Zn List
No List            0
```
If a zone list will be used to STOP, or restore, the device action, enter the zone list number 1, 2, or 3 (to be programmed in *81 mode). If not used, enter 0.
Press the [*] key to continue.

```
02 Stop:       Zn Typ
Not Used          00
```
If a zone type or system operation will be used to STOP the device action, enter the appropriate two digit code (see the "ZT" choices listed above). If not, enter 00. Press the [*] key to continue.

```
02 Stop:         Part
Any Partition      A
```
Enter (if applicable) the partition number 1 or 2 (or 0 for any). Press the [*] key to continue.

```
02    A EV ZL ZT  P
STT 0  0  0  00  1
```
This screen again displays a summary of the current device START programming . Press the [*] key to continue.

```
02    A EV ZL ZT  P
STP  – –  0  00  A
```
This screen again displays a summary of the current device STOP programming. Press the [*] key to continue.

```
02  X10 Device ?
0 = No, 1 = Yes   00
```
Enter 1 if using a Powerline Carrier Device (X-10); if not, enter 0.

The display then returns again to the first screen so that the next device number to be programmed can be entered, or enter [0][0] to end device programming.

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

Example of Output Device Programming

A lamp is to be turned on via a Powerline Carrier device (X-10) when any one of 3 specific zones are faulted, or when any 24-hour auxiliary zone is faulted. We want to be able to turn off the lamp **manually** without affecting the arming status of the system.

To programme this, we would do the following:

- In *80 interactive mode we choose Output Device 01 and programme the Action (A) to be "2" (Close and stay closed). The Event we are looking for to *start* the Device action is a fault, so we will programme "2" in (EV). We will use Zone List 1 for the 3 specific zones, so we will programme "1" in (ZL), (and we will programme these 3 zones in *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 programme (ZT) as "08".

- Next, enter the Partition number (P) in which you want the triggering of a 24-hour zone to occur; enter 1 or 2, or enter 0 for *any* partition.

- To *stop* the Device action and turn off the lamp, we do not want to use a restore of any zone, so a "0" will be programmed for the *Restore of* Zone List (ZL). We will use a **manual entry of User Code + [#] + [8] + Device #** to turn off. Therefore, we do not need to programme a STOP event.
  Press [∗] to continue.
- The system will display a summary screen for the START programming for device 01. Press [∗] to continue.
- The system will display a summary screen for the STOP programming for device 01. Press [∗] to continue.
- The system will display the "**X10?**" prompt. Enter 1 for yes.
- The **Enter Device No.** prompt for the next zone will be displayed.
- Press 00 and then [∗] to exit the ∗80 mode.

Now use ∗81 Zone List mode to programme the 3 specific zones in Zone List 1.

Press ∗81. (Zone Lists for Output Devices). This interactive mode is applicable only if you have programmed ∗80 mode.

Refer to the Programming Form worksheet for ∗81 Mode.

Zone List Displays [

Zone List No.
(00 = Quit)   01

Upon keying ∗81, this screen will appear. Enter the Zone List Number 01, 02, or 03 to programme (or 00 to end these entries). Press the [∗] key to advance. In the following displays, zone list 01 has been selected for programming.

01   Enter Zn Num.
(00 = Quit)   00

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

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

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.

01 Delete Zone?
0 = No 1 = Yes   0

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.

01 Zn to Delete?
(00 = Quit)   00

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 changed in this mode.

When programming in ∗80 and ∗81 interactive modes is completed, exit the programming mode by keying ∗99.

Section 9. 4285/4286 VIP MODULE

General Information

The 4285/4286 VIP (VIP Interactive Phone) Module is an add-on accessory for the *VISTA–20SEa* that permits access to the security system via a TouchTone phone (either on premises or by a call-in when away).

The VIP Module can announce many of the same words that would normally be displayed on an Alpha keypad under the same system conditions.

> • Only one VIP Module can be used in this security system, and only in Partition 1.
> • When using the 4285/4286 VIP Module, addressable keypads must be used in the system, but set to the non-addressable mode (address 31),

When properly connected, the 4285/4286 VIP Module will enable the user to do the following via a TouchTone telephone:

a. Receive synthesized voice messages over the phone regarding the status of the security system.

b. Arm and disarm the security system and perform most other commands using the telephone keypad, with voice annunciation being provided over the phone as confirmation after any command is entered.

The phone used for phone access must have TouchTone capability, though TouchTone service is not necessary (if premises uses PULSE dialing, switchable phones must be set for TouchTone temporarily before attempting phone access).

A **Phone Access User's Guide** for phone access to the security system is provided with the VIP Module for the user of the system.

> **A 4285/4286 VIP Module and an Audio Alarm Verification (AAV) unit cannot both be used. Only one or the other can be used.**

VIP Module Wiring

The 4285/4286* is wired between the control panel and the incoming telephone line. It listens for touch tones on the phone line and reports them to the control panel. During on-premises phone access, the 4285/4286 powers the premises phones; during off-premises phone access, it seizes the line from the premises phones and any answering machines.

* The **4285/4286 VIP** Module is supplied complete with a Line Interface Unit wired to it.

Note: The phone lines must be in service for the VIP Module to function, even when accessing the system from an on-premises phone.

1. Make 12V (+) and (–) and data in and data out connections from the 4285/4286 VIP Module to the control's keypad terminals, using the connector cable supplied with the VIP Module (see the Figure 10 that follows).

Color Lead	Terminal On Control *
GREEN	DATA IN (terminal 6)
BLACK	AUX GROUND (–) (terminal 4)
RED	AUX + (terminal 5)
YELLOW	DATA OUT (terminal 7)

* These are the same connections as those used for remote keypads connected to Partition 1.

2. Insert the keyed connector at the other end of the connector cable into the mating header on the VIP Module.

3. Use the modular phone lead supplied to connect to incoming telephone line (via 611 socket) to the 4285 Line Interface Unit (LIU) as shown in Figure 10.

4. Use the modular phone lead supplied to connect the LIU to the modular telephone connector on the control.
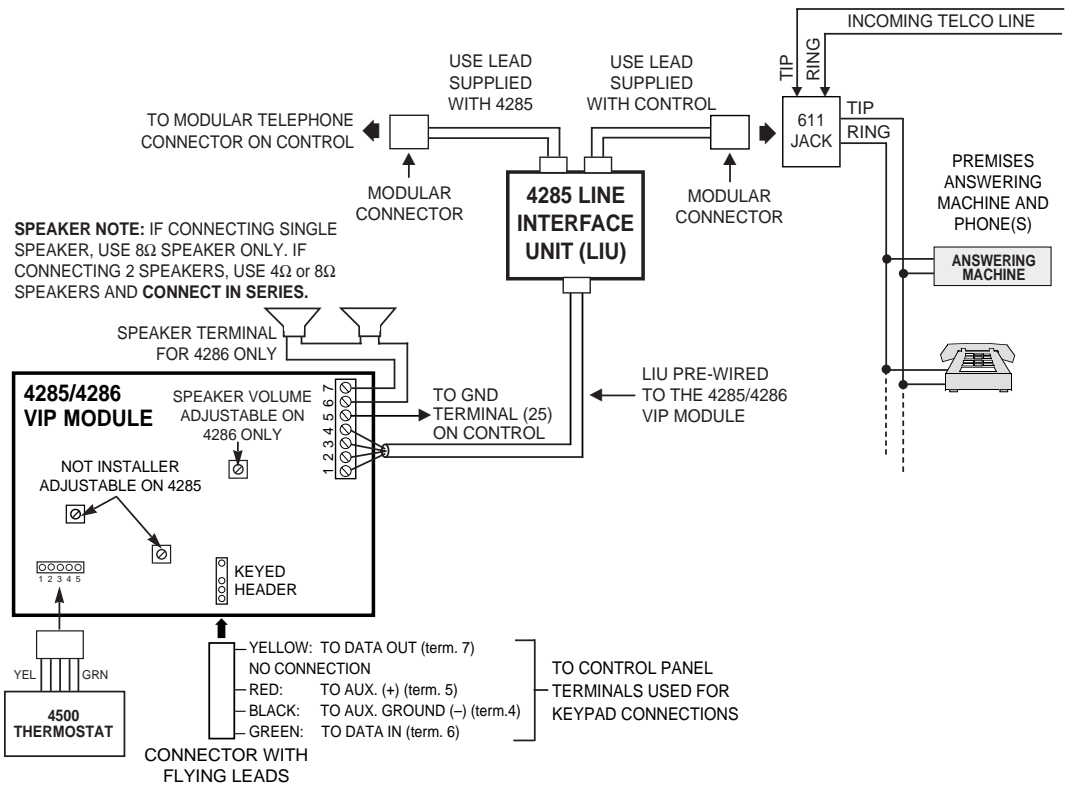
Figure 10. 4285/4286 VIP Module Wiring

Programming The Control for Phone Access

1. Enter the programming mode by keying the following on the Alpha keypad: **Installer code (4 1 1 2) + 8 + 0 + 0.**

2. **Press ✶28. VIP MODULE ACCESS CODE.**

   If using a 4285/4286 VIP Module, enter the 2-digit phone access code as follows: For first digit, enter 1–9; for second digit, enter # +11 for "✶", or # +12 for "#". Example: if desired access code is 7✶ , 7 is the first entry, and # + 11 (for ✶) is the second entry.

   Enter "00" if not using a VIP Module (this is the default).

3. **Press ✶95. RING DETECTION COUNT**.

   Refer to the chart that follows and programme this field accordingly.

VIP Module	Answering Machine	Downloading	Field ✶95 Programming
Yes	No	No	Set for value other than "0" (1–15). This will enable the control panel to answer the phone call. Otherwise, it will not be possible to access the VIP Module

–38–

VIP Module	Answering Machine	Downloading	Field *95 Programming
Yes	Yes	No	Set for a value higher than the number of rings for which the answering machine is set. Example: if machine is set for 4 rings, use a value of 5 or higher. This is recommended so that the VIP Module can still be accessed if the answering machine is turned off and does not answer the phone call.
Yes	No	Yes	Set for value other than "0" (1–15).
Yes	Yes	Yes	Enter "15" to bypass the answering machine.

4. Zone descriptors should also be programmed, regardless of the type of keypads in use. If this is not done, the VIP Module will not annunciate a description of the zone(s) in alarm, trouble, etc. (the VIP Module will annunciate zone numbers only).

   You can enter zone descriptors now using interactive mode *82, or later. See the *ALPHA DESCRIPTION PROGRAMMING* section for a detailed procedure.

5. Exit the programming mode by entering *99.

Section 10. ALTERNATIVE COMMUNICATIONS MEDIA

General Information

If output to alternative communications media is selected, all messages that are programmed to go to the primary telephone line receiver will also be sent to this media interface. These messages will always be in Contact ID format (not affected by entry in field *48).

The data line is supervised, as well as certain functions in the media interface. If communication is lost or a trouble develops, a message will be attempted to be sent via both the alternative media and the PSTN line to the central station.

For complete information, see the manual that accompanies the radio.

Connection

Connect the data in/data out terminals and voltage input terminals of the Alternative Media Interface to the control's keypad connection points, terminals 4, 5, 6, and 7 as shown below.
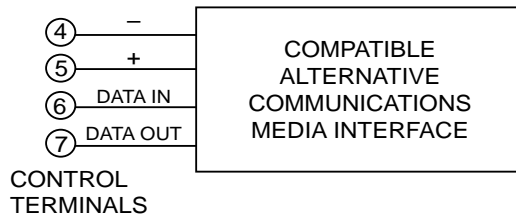
Figure 11. Alternative Media Connections

Programming

1. Enter the programming mode by keying the following on the Alpha keypad: **Installer code (4 1 1 2) + 8 + 0 + 0.**
2. **Press *29. OUTPUT TO LONG RANGE RADIO**   [   ]
3. Enter a non-zero digit to enable the dialler trouble report.
4. The alternative media interface must be set up for device address 3.
5. Exit the programming mode by keying *99.

Section 11. AUDIO ALARM VERIFICATION (AAV) UNIT

General Information

An Audio Alarm Verification (AAV) module, such as the Eagle 1250, is an add-on accessory that permits voice dialogue between an operator at a central station and a person at the alarm installation, for the purpose of alarm verification.

> Alarm reports must be programmed for the primary phone number to enable this feature.

After all messages have been sent during a reporting session to the primary phone number, the control will trigger the AAV if at least one of the messages was an alarm report. If Contact ID format is selected for the primary phone number, the control will send a "listen-in to follow" message, which signals the 685 to hold the phone connection open for 1 minute.

Once the digital message is "kissed off", the control will give up the phone line to the AAV module, without breaking connection with the central station. At this time, all sirens and all continuous keypad sounds in all partitions will be shut off.

> You must connect a 4204 or 4229 relay module when using an AAV unit. Do not use relay output number 1 for any other usage.

Wiring Connections

The method used to trigger AAV is via the use of a 4204 or 4229 relay module, as shown in the AAV connection diagram supplied separately.

Programming

1. Enter the programming mode by keying the following on the Alpha keypad: **Installer code (4 1 1 2) + 8 + 0 + 0.**

2. **Press ∗91. OPTION SELECTION**. Enter "4" for AAV monitoring. Enter "0" if not used.

3. **Relay programming in field ∗80**: Do not programme anything for Relay #1.

4. Exit the programming mode by keying ∗99.

Section 12. FINAL POWER UP

In section 2, you made temporary power connections and connected a good earth ground* for the purpose of programming and testing the installation. This section provides information about final power up procedures and battery size calculations.

* **Connecting a good earth ground is important.** The telephone line monitoring option will not function properly unless this is done (see *Section 2. INSTALLING THE CONTROL).*

AC Power-Up

1. Insert the plug pack transformer into a 24-hour, uninterrupted 220VAC outlet.

2. Following power up, **AC, dl** (disabled), or **Busy Standby** (Alpha keypads) or **NOT READY** (fixed-word keypads) will be displayed. Also the green "POWER" LED* on the keypad(s) should light.

   * Some keypads are equipped with a "READY" LED in place of a "POWER" LED.
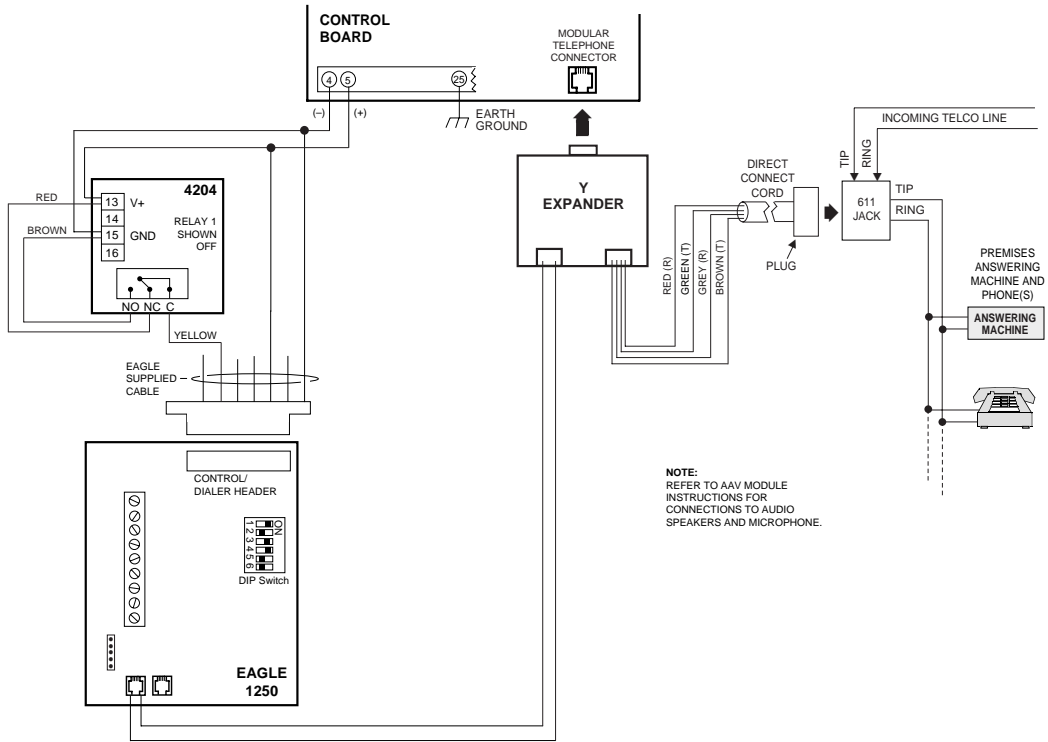
Figure 12. Connection of AAV Unit when Not using a 4285/4286 VIP Module
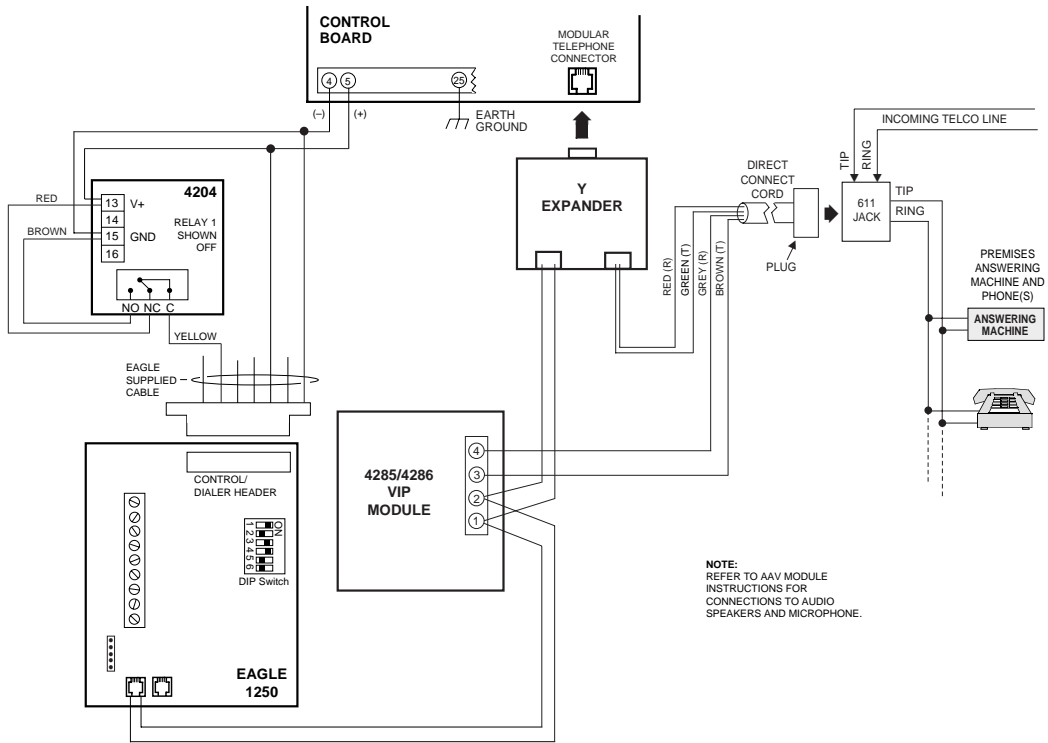
Figure 13. Connection of AAV Unit when Also Using a 4285/4286 Phone Module

After approximately 1 minute, the initial displays will revert to **DISARMED...READY TO ARM** for Alpha keypads, or **READY** for Fixed-word keypads (if there are no faulted zones). This 1-minute delay allows PIRs, etc. to stabilize.

To bypass this delay, press: [#] + [0].

Connecting The Back-Up Battery

In the event of an AC power loss, the Control panel is supported by a back-up, rechargeable sealed lead acid battery. The minimum battery size recommended is the No. PS1265 (12V, 6.5AH) battery. See "Calculating Battery Size Needed" below. The battery is installed in the control cabinet.

The standby battery is automatically tested every 4 hours, beginning 4 hours after exiting programming mode. In addition, entry into the test mode will cause a battery test to be initiated.

Calculating the Battery Size Needed

Determine the total device current drain after filling in the AUXILIARY DEVICE CURRENT DRAIN WORKSHEET on the next page. To this figure add the 100 mA that is drawn by the control panel itself. Then, to determine the battery size needed, use the following formula:

Total Current Drawn* x Number of hours standby wanted = Battery Ampere/Hours.

 * Convert mA figure to decimal Amps (see example).

Example: If total auxiliary device current drain is 450 mA, add 100 mA for the control panel, for a total of 550 mA (0.55 amps); if 24-hour standby is wanted, the calculation will be:

0.55 mA x 24 hours = 13.2 Ampere/Hour battery needed.

In this example, two 7 Amp/Hr batteries (connected in parallel) must be used.

Making the Battery Connections

1. Use the battery standby formula (above) to select the appropriate battery for the installation.

> Do not connect the battery until all devices have been wired to the control.

2. Attach the Red and Black wires on the battery connector cable as follows:
    a) Red to the positive (+) battery tab on the control board.
    b) Black to the negative (–) battery tab on the control board.

    See the SUMMARY OF CONNECTIONS diagram for location of the (+) and (–) battery tabs on the control board.

3. Attach the Red and Black wires at the other end of the battery connector cable as follows:
    a) Red to the positive (+) terminal on the battery.
    b) Black to the negative (–) terminal on the battery.

Note: The battery is periodically tested automatically (approximately every four hours), and if it cannot sustain a load, a low battery message is displayed and, if so programmed, will be reported to the central station.

AUXILIARY DEVICE CURRENT DRAIN WORKSHEET

DEVICE	CURRENT	# UNITS	TOTAL CURRENT
6128 Keypad	30 mA		
6128RF Keypad	60/120ma‡		
6137 Keypad	85 mA		
6139 Keypad	100 mA		
5881 RF Receiver	35mA		
4219 Zone Expander	35mA		
4204 Relay Unit	15/180mA‡		
4229 Zone Expander/Relay Unit	35/100mA‡		
4285/4286 VIP Module	160mA		
*			
*			
*			
TOTAL = (Current available from Aux. terminals = 600 mA max.)**			

* If using other wired devices such as PIRs, refer to the specifications for that particular unit's current drain.

‡ Figures are for relays OFF/relays ON.

Section 13.
ALPHA DESCRIPTOR PROGRAMMING

If using a 4285/4286 VIP Module, select from those words in the Alpha Vocabulary list shown in **boldface type**. *The VIP Module will not provide annunciation of the other words.*

> If a 4285/4286 VIP Module is added to an existing *VISTA–20SEa* system, the Alpha descriptors presently in the system should be re-programmed, selecting from those words shown in **boldface type** in the Alpha Vocabulary list. The VIP Module will not provide annunciation of any other words.

The ALPHA VOCABULARY LIST and CHARACTER CHART will be found on the next page.

Assigning Zone Descriptors

The Alpha Keypad used with the *VISTA–20SEa* 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 178 words stored in memory (see a following page). In addition, up to 10 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 keypad.

Note: Alpha Descriptor entry can be done locally at the Alpha Keypad or remotely using Downloading software. The Alpha keypad procedure is described next.

Entering Zone Descriptors (Programme menu mode *82)

The descriptor can be entered when the zone is being defined in field *56 but we recommend that it be done in field *82.

The method requires that you simply enter the 3-digit reference number for the desired word(s). The 3-digit number for each word is provided in the Alpha Vocabulary list (on a following page).

Programming the Descriptors

1. With the system powered up, enter the programming mode by keying:
Installer code (4 1 1 2) + 8 + 0 + 0. The following display will appear:

```
┌─────────────────────┐
│ Installer Code      │
│                 20  │
└─────────────────────┘
```

```
┌─────────────────────┐
│ Program Alpha ?     │
│ 0 = No, 1 = Yes  00 │
└─────────────────────┘
```

2. **Press *82**
   The "Program Alpha ?" prompt will appear.

```
┌─────────────────────┐
│ Custom Words ?      │
│ 0 = No, 1 = Yes  00 │
└─────────────────────┘
```

3. **Press "1" (Yes).**
   The "Custom Words" prompt will appear.

4. **Press "0" (No).*** The system will then automatically display the descriptor for zone 1.

   * The procedure for adding custom words to the built-in vocabulary will be found later under "Adding Custom Words".

Summary Mode Display

Default Descriptor   ↓

```
┌─────────────────────┐
│ ✳ ZN 01   ZONE 01   │
│                     │
└─────────────────────┘
```

If a descriptor was not entered previously for zone 1, the default descriptor for zone 1 will be displayed.

Note that this a "summary mode", and that no entries can be made. Entries can be made only when the display contains a flashing cursor, which signifies the "entry mode".

Flashing Cursor (system is ready for entry of word).

↓

```
┌─────────────────────┐
│ ✳ ZN 01  │A│        │
│                     │
└─────────────────────┘
```

5. To delete or change the default descriptor for zone 1, **press ✳ plus the same zone number (01).** This will clear that descriptor and gain access to the entry mode with flashing cursor, allowing changes to be made.

   NOTE: If you do not wish to change the existing descriptor for zone 1, enter ✳ plus the next zone number for which you wish to enter (or check) a descriptor. A summary display for that zone will appear. You must then press ✳ plus the same zone number again to gain access to the entry mode (flashing cursor) for that zone.

Flashing Cursor ↓

```
┌─────────────────────────┐
│ ✻ ZN 01    B ACK        │
│                         │
└─────────────────────────┘
```

6. **Press # plus 3-digit number** for the first word from the "Alpha Vocabulary List". Example: The descriptor that we wish to enter for zone 1 is BACK DOOR. From the list, BACK = 013. Therefore, you would enter # **0 1 3**.

   Note: If you accidentally enter the wrong word, simply press # plus the correct 3-digit number for the word you want.

```
┌─────────────────────────┐
│ ✻ ZN 01    BACK         │
│ A                       │
└─────────────────────────┘
```
↑   Flashing Cursor if "6"
    is pressed   (system is
    ready for next word)·

7. **Press "6" to accept the selected word and continue.**
   Note: If this is the only word you are using for the descriptor, press "**8**" instead of "**6**" to save that word in memory, and then go to step 11.

```
┌─────────────────────────┐
│ ✻ ZN 01    BACK         │
│ D OOR                   │
└─────────────────────────┘
```
↑   Flashing Cursor

8. **Enter the 3-digit number for the next word.** In our example, the word is DOOR, whose number is "057".
   Enter # **0 5 7**. This display will appear:

```
┌─────────────────────────┐
│ ✻ ZN 01    BACK         │
│ DOOR     A              │
└─────────────────────────┘
```
        ↑
Flashing Cursor if "6" is pressed (system ready for next word).

9. **Press "6" to accept the selected word.**
   Note: If these are the only words you are using for the descriptor, press "**8**" instead of "**6**" to save them in memory.

10. The two words in our example have now been entered. Note, however, that up to three words may be entered (provided the number of characters will fit on the screen). **Press "8" to save all words in memory.**

Summary Display

```
┌─────────────────────────┐
│ ✻ ZN 01    BACK         │
│ DOOR                    │
└─────────────────────────┘
```

The "A" with the flashing cursor over it will disappear, indicating that the word(s) are stored in memory for that zone, as shown in the summary display at the left.

11. To enter a descriptor for the next zone, press ✶ plus the desired zone number (e.g., ✶02. The summary display following step 4 previously will appear. Now repeat steps 6 through 10 for the descriptor for the next zone.

12. To exit the Alpha descriptor mode, press "✶ + **0** + **0**" at the summary display.

This prompt will be displayed.

```
┌─────────────────────────┐
│ Program Alpha ?         │
│ 0 = No, 1 = Yes   00    │
└─────────────────────────┘
```

```
┌─────────────────────────┐
│ Alpha Pgm               │
│                    82   │
└─────────────────────────┘
```

13. Press "0." This will be displayed.

14. Press *99 to exit the programming mode.

Adding Custom Words (will NOT be annunciated by 4285/4286 VIP Module)

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

1. Perform steps 1, 2, and 3 of **Programming the Descriptors** on a previous page.

   Select CUSTOM WORD mode (enter "1") when the prompt **CUSTOM WORD ?** is displayed.

2. Enter the number ([01]–[10]) of the custom word or word string to be created (for example, if you are creating the *first* custom word or word-string, enter [01], for the *second*, enter [02], etc.). A cursor will now appear at the beginning of the second line.

3. *Refer to the CHARACTER LIST of letters, numbers, and symbols on a following page)*:

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

4. Repeat step 3 to create the desired word(s). Note that the [4] key can be used to move the cursor to the left, if necessary. Remember, no word or word-string can exceed 10 characters.

5. Press the [8] key to save the custom word(s) and return to the "**CUSTOM WORD ?**" display.

   Repeat steps 2–4 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 6 of **Programming the Descriptors**, the custom word numbers are 245 to 254 for words 1 to 10 respectively.

> **When adding Custom Words in steps 3–5, the keypad keys perform the following functions:**
> **[4]** Moves cursor one space to left.
> **[6]** Moves cursor one space to right.
> **[8]** Saves the new word in the system's memory.

ALPHA VOCABULARY LIST
(For Entering Zone Descriptors)

NOTE: The list below is a revised vocabulary list which differs from earlier versions of the VISTA-20. Use only this list when programming VISTA-20SEa zone descriptors.

000 (Word Space)	• 064 DUCT	115 LOCK	• 168 SHED	• 226 0
A	**E**	116 LOOP	169 SHOCK	• 227 1
• 001 AIR	• 065 EAST	117 LOW	• 170 SHOP	• 228 1ST
• 002 ALARM	066 ELECTRIC	• 118 LOWER	171 SHORT	• 229 2
004 ALLEY	067 EMERGENCY	**M**	• 173 SIDE	• 230 2ND
005 AMBUSH	068 ENTRY	• 119 MACHINE	174 SKYLIGHT	• 231 3
• 006 AREA	• 069 EQUIPMENT	121 MAIDS	175 SLIDING	• 232 3RD
• 007 APARTMENT	• 071 EXIT	122 MAIN	• 176 SMOKE	• 233 4
• 009 ATTIC	072 EXTERIOR	• 123 MASTER	• 178 SONS	• 234 4TH
010 AUDIO	**F**	124 MAP	• 179 SOUTH	• 235 5
B	• 073 FACTORY	• 125 MEDICAL	180 SPRINKLER	• 236 5TH
• 012 BABY	075 FAMILY	126 MEDICINE	• 182 STATION	• 237 6
• 013 BACK	• 076 FATHERS	128 MONEY	184 STORE	• 238 6TH
• 014 BAR	• 077 FENCE	129 MONITOR	• 185 STORAGE	• 239 7
016 BASEMENT	• 079 FIRE	• 130 MOTHERS	186 STORY	• 240 7TH
• 017 BATHROOM	• 080 FLOOR	• 131 MOTION	190 SUPERVISED	• 241 8
• 018 BED	081 FLOW	132 MOTOR	191 SUPERVISION	• 242 8TH
• 019 BEDROOM	082 FOIL	**N**	192 SWIMMING	• 243 9
020 BELL	• 083 FOYER	• 134 NORTH	193 SWITCH	• 244 9TH
• 021 BLOWER	084 FREEZER	135 NURSERY	**T**	
• 022 BOILER	• 085 FRONT	**O**	194 TAMPER	
023 BOTTOM	**G**	• 136 OFFICE	196 TELCO	
025 BREAK	• 089 GARAGE	• 138 OPEN	197 TELEPHONE	245 Custom Word #1
• 026 BUILDING	• 090 GAS	139 OPENING	• 199 TEMPERATURE	_____
C	091 GATE	• 140 OUTSIDE	200 THERMOSTAT	
028 CABINET	• 092 GLASS	142 OVERHEAD	• 201 TOOL	246 Custom Word #2
• 029 CALL	093 GUEST	**P**	202 TRANSMITTER	_____
030 CAMERA	094 GUN	143 PAINTING	**U**	247 Custom Word #3
031 CAR	**H**	• 144 PANIC	• 205 UP	_____
033 CASH	• 095 HALL	145 PASSIVE	• 206 UPPER	248 Custom Word #4
034 CCTV	• 096 HEAT	• 146 PATIO	• 207 UPSTAIRS	_____
035 CEILING	098 HOLDUP	147 PERIMETER	• 208 UTILITY	
036 CELLAR	099 HOUSE	• 148 PHONE	**V**	249 Custom Word #5
• 037 CENTRAL	**I**	150 POINT	209 VALVE	_____
038 CIRCUIT	100 INFRARED	151 POLICE	210 VAULT	250 Custom Word #6
• 040 CLOSED	• 101 INSIDE	152 POOL	212 VOLTAGE	_____
• 046 COMPUTER	102 INTERIOR	• 153 POWER	**W**	251 Custom Word #7
047 CONTACT	103 INTRUSION	**R**	213 WALL	_____
D	**J**	155 RADIO	214 WAREHOUSE	
• 048 DAUGHTERS	104 JEWELRY	• 156 REAR	• 216 WEST	252 Custom Word #8
049 DELAYED	**K**	157 RECREATION	• 217 WINDOW	_____
• 050 DEN	• 105 KITCHEN	159 REFRIGERATION	• 219 WING	253 Custom Word #9
051 DESK	**L**	160 RF	220 WIRELESS	_____
• 052 DETECTOR	• 106 LAUNDRY	• 161 RIGHT	**X**	254 Custom Word #10
• 053 DINING	• 107 LEFT	• 162 ROOM	222 XMITTER	_____
054 DISCRIMINATOR	108 LEVEL	163 ROOF	**Y**	
055 DISPLAY	• 109 LIBRARY	**S**	223 YARD	
• 057 DOOR	• 110 LIGHT	164 SAFE	**Z**	
• 059 DOWN	111 LINE	165 SCREEN	224 ZONE (No.)	
• 060 DOWNSTAIRS	• 113 LIVING	166 SENSOR	• 225 ZONE	
061 DRAWER	• 114 LOADING	• 167 SERVICE		
• 062 DRIVEWAY				

Note: Bulleted (•) words in **boldface type** are those that are also available for use by the 4285/4286 VIP (Vista Interactive Phone) Module. If using a phone module, and words other than these are selected for Alpha descriptors, the phone module will not provide annunciation of those words.

CHARACTER (ASCII) CHART
(For Adding Custom Words)

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

Use ✶83 Sequential mode when a wireless transmitter is to be physically added, removed, or simply changed (as when replacing a unit that has a non-removable battery).

By using this mode, you can **add**, **delete**, or **change** the serial number of a transmitter in a zone, but retain all other existing data that has been programmed for that zone.

Two transmitters have more than one button (5801, 5804). Note that each button must be assigned to a different zone. Similarly, the 5816 transmitter has contact terminals *and* a reed switch for use with a magnet. If using both, each must also be assigned to a different zone.

This means that the procedures that follow must be repeated for each button on the transmitter.

NOTE: Use this mode only after all other zone information has been programmed, including transmitter loop numbers.

To enroll transmitters **sequentially**, *after* all other zone information has been programmed, do the following:

1. Enter Programming mode [**Installer Code**] + **8** + **0** + **0** on an alpha keypad. Enter Serial Number Sequential mode by pressing ✶**83.** The following prompt will be displayed.

    NOTE: See the *ZONE PROGRAMMING* section for an explanation of the programming tool.

```
PROGRAM TOOL?
0 = NO, 1 = YES    0
```

2. If using a programme tool (5804), enter "1." If not using a tool, enter "0." If a tool has already been programmed, this prompt will not appear. If either not using a tool or one has already been programmed, skip to step 4.

```
00   INPUT S/N: L
  Axxx-xxxx
```

3. If "1" is entered, the system will prompt for the programme tool's serial number. Enter the programme tool's serial number using one of the following methods:

    a) Enter the 7-digit serial number printed on the transmitter
        or
    b) Press any button on the transmitter. The keypad should beep twice and display the serial number of the tool.

```
00   INPUT S/N: L
  A123-4567     3
```

In this example, the serial number is A123-4567. Once enrolled, you can use the programme tool to ready the system for enrolling a transmitter's serial number by first pressing the upper left-hand button of the programme tool, then activating the desired transmitter (see procedure at the "LEARN S/N?" prompt.

The serial number for the programme tool will only remain in the system until the programming mode is exited. (Entering *97 will not delete the tool.)

Press [✶] to continue.

Press the [#] key on the keypad to back up to the "PROGRAM TOOL?" prompt.

```
ENTER ZN NUM.
(00 = QUIT)    10
```
Zone Number Entered   ↑

4. Enter the first zone number to be enrolled (e.g., zone 10).

    Press [✶] to continue.

    The system will, starting with this zone number, search for the first transmitter which has **all** of the following attributes pre-programmed in Zone Programming:
    a) An input type of RF, UR, or BR programmed
    b) A loop number programmed
    c) No serial number programmed
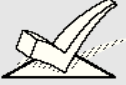
If the first zone number entered does *not* have one or more of the above attributes, the system will search its database for the first zone that does and will display it on the next screen.

```
┌─────────────────────────┐
│ 10  INPUT S/N: L        │
│    Axxx xxxx            │
└─────────────────────────┘
```

5. This prompt is displayed when the system has found the next zone which needs to be enrolled. The system will respond to the first serial number transmitted after the [✻] key on the keypad is pressed. A serial number may be enrolled by one of two methods:

    a) Enter the 7 digit serial number printed on the transmitter
          or
    b) Activate the transmitter by faulting or restoring the input you wish to use for that zone (e.g., press a button; open or close a door, open or close a window, etc.....).

If you do **not** wish to enroll the zone displayed, press the [#] key on the keypad or the upper right-hand button on the programme tool (a long beep will be heard to verify). The following prompt will appear:

```
┌─────────────────────────┐
│ 10 LEARN S/N?           │
│ 0 = NO, 1 = YES    0    │
└─────────────────────────┘
```

To enroll now, enter "1" (YES). If "0" (NO) is entered, the following prompt will appear if a programme tool has already been programmed:

```
┌─────────────────────────┐
│ ENTER ZN NUM.           │
│ (00 = QUIT)       12    │
└─────────────────────────┘
```
Zone Number Entered   ↑

Enter the next zone number to be enrolled (e.g., zone 12). The system will search for that zone and will display the prompt shown in the beginning of step 5. If you wish to exit the enroll mode completely, enter **00** and press [✻].

```
┌─────────────────────────┐
│ 10  INPUT S/N:L         │
│    A 022-4064      3    │
└─────────────────────────┘
      ↑              ↑
   Serial #       Loop #
```

The system will enroll the serial number of the first transmitter heard, add the loop number entered to this serial number, display the serial and loop numbers, and cause the keypad to beep twice.

If the serial and loop number combination is already present in the system, a single long beep will be heard from the keypad. If this happens, the system will not display the serial number, but will wait for a transmission from another transmitter or transmitter loop input.

---

6. The system will then enter an optional confirmation mode so that the operation of the actual programmed input can be confirmed. Activate the loop input or button that corresponds to this zone. **We recommend that you confirm the programming of every transmitter before proceeding to the next zone.**

```
┌─────────────────────┐
│ 10 CONFIRMED        │
│   A022-4064  3      │
└─────────────────────┘
```

When the system sees activity on the appropriate input, it will beep three times and display the confirmation message. Press [✳] or the upper left-hand button of the programme tool when you are ready to enroll the next transmitter.

At any time during this step, you may press the [✳] key on the keypad or the upper left-hand button of the programme tool if you are satisfied with the serial and loop number combination that has been enrolled, regardless of whether or not the enrolled input has been "confirmed." This will ready the system to enroll the next transmitter.

If the incorrect transmitter has been enrolled, press the [#] key on the keypad or the upper right-hand button of the programme tool to delete the serial number and return to the "LEARN S/N" prompt. A single long beep will be heard from the keypad to verify pressing of the upper right-hand button. Then, press "1" (Yes) or press the upper left-hand button of the programme tool (a single short beep will verify the system is ready for enrolling) and re-activate the proper transmitter or transmitter loop input.

7.   The system will search for the next zone that does not have a serial number associated with it. If one is found, the prompt in step 5, along with the appropriate zone number, will be displayed.   Follow steps 5 and 6 for the remaining wireless zones.

When the last zone has been enrolled, the display will remain on that zone. To exit this mode and return to data field programme mode, press [✳].

When you have finished programming all zones, test each using the system's TEST mode. Do not use the Transmitter ID Sniffer mode for this, as it will only check for transmission of one zone on a particular transmitter, and NOT the zones assigned to each additional loop.

Section 15. SYSTEM COMMUNICATION

✍	**It is mandatory that the formats selected for both the primary and secondary telephone numbers are identical.**

Report Code Formats

If the panel is not successful after its numerous attempts to communicate, the keypad will display "Comm Failure" (Alpha keypad) or "FC" (Fixed-word keypad).

The following chart defines the handshake/kissoff frequencies that the panel supports.

FORMAT	HANDSHAKE	TRANSMITS DATA	KISSOFF	TRANSMIT TIME
Contact ID	1400–2300Hz	DTMF (10 cps)	1400Hz	Under 3 secs.
Local Audio	None	DTMF (3cps)	None	

The following describes each format in greater detail.

ADEMCO Contact ID Reporting Format	Comprises a 4-digit subscriber number, 1-digit event qualifier ("new" or "restore"), 3-digit event code, 2-digit Partition No., and 3-digit zone number, user number, or system status number (see the following page).

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)
Note: For a complete list of event codes, refer to the central office receiver manual.
GG = Partition Number (system messages show "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	353	Alternative Communications Media Trouble
121	Duress	373	Fire Loop Trouble
122	Alarm, 24-hour Silent	380	Global Trouble, Trouble Day/Night
123	Alarm, 24-hour Audible	381	RF Supervision Trouble
131	Alarm, Perimeter	383	RF Sensor Tamper
132	Alarm, Interior	384	RF Sensor Low Battery
134	Alarm, Entry/Exit	401	Disarmed, Armed AWAY (MAX),
135	Alarm, Day/Night	406	Cancel by User
143	Alarm, Expansion Module	407	Remote Arm/Disarm (Downloading)
146	Silent Burglary	408	Quick Arm AWAY/MAX
150	Alarm, 24-Hour Auxiliary	441	Disarmed/Armed STAY/INSTANT, Quick Arm STAY/INSTANT
301	AC Power		
302	Low System Battery/Battery Test Fail	570	Bypass
321	Bell Supervision	602	Periodic Test
333	Trouble or Tamper Expansion Module	606	AAV to follow
		607	System Test
344	RF JAMMING (Usable when 5882 replaces current 5881)	623	Event Log 80% Full
351	Telco Line Fault	629	1 - 1/3 Day no Event

ADEMCO Local Audio Reporting

> ✍ **The type of reports programmed to be reported should be restricted to alarms for this format:**

ADEMCO Local Audio reporting calls a person to be notified when the system is in alarm. In this configuration, the system will detect if the line is busy and will abort the call and it will detect if line ringing has stopped (indicating that the call has been answered) before transmitting a repeating sequence of DTMF audio tones to indicate the alarm.

Communication Programming

Keypad Programming Procedure

Enter the programming mode by keying the following on the Alpha keypad: **Installer code (4 1 1 2) + 8 + 0 + 0.**

Press ∗40 PABX ACCESS CODE.

| | | | | | | Enter up to 6 digits if PABX is needed to access an outside line. If fewer than 6 digits are needed to be entered, exit by pressing ∗ and next field number (e.g., 41). To clear entries from field, press ∗40∗.

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
(2 secs)

Press ∗41 PRIMARY PHONE No.

| | | | | | | | | | | | | | | | |

Enter up to 16 digits. If fewer than 16 digits entered, exit by pressing ∗ and next field number (e.g., 42). To clear entries from field, press ∗41∗.

Press ∗42 SECONDARY PHONE No.

| | | | | | | | | | | | | | | | |

Enter up to 16 digits. If fewer than 16 digits entered, exit by pressing ∗ and next field number (e.g., 43). To clear entries from field, press ∗42∗

For Fields ∗ 43, ∗ 44, ∗ 45, and ∗ 46.
Entries are provided for 3 or 4 digits for the primary and secondary monitoring location.

Enter digits 0–9; #+10 = A (0 on some receivers); #+11 = B; # +12 = C; # +13 = Pause; # +14 = E; or # +15 = F.

To clear entries from field, press ∗ 43∗ , ∗ 44∗, ∗ 45∗, or ∗ 46∗ . See blank Programming Form for examples of Account No. entries.

Press ∗43 PRIMARY SUBSCRIBER ACCOUNT. No. (Partition 1)

| | | | (Primary Central Station Account Number).

Press ∗44 SECONDARY SUBSCRIBER ACCOUNT. No. (Partition 1)

| | | | (Secondary Central Station Account Number).

Press ∗45 PRIMARY SUBSCRIBER ACCOUNT. No. (Partition 2)

| | | | (Primary Central Station Account Number).

Press ∗46 SECONDARY SUBSCRIBER ACCOUNT. No. (Partition 2)

| | | | (Secondary Central Station Account Number)

Press ∗47 PHONE SYSTEM SELECT   Enter 1 digit (default = 0) | |

If Central Station Receiver *is not* on satellite linked line:
0 = Pulse Dial, 1 = Tone Dial.

If Central Station Receiver *is* on satellite linked line:
2 = Pulse Dial, 3 = Tone Dial.

Press *48   **REPORT FORMAT, PRIMARY/SECONDARY**

Primary ☐   Secondary ☐

Determines which format is to be used to report to the central station.

0 (or undefined) = ADEMCO Contact ID Reporting.
1 = Audio Tone Format

Notes: 1. The maximum number of alarm and alarm restore reports during one armed period is determined by field * 93.

2. It is mandatory that both the primary and secondary formats be identical.

Press *49   **SPLIT/DUAL REPORTING**   ☐

Enter 0 to disable (Backup report only). **This is the default.**

	TO PRIMARY	TO SECONDARY
1 =	Alarms, Restore, Cancel	Others
2 =	All except Open/Close, Test	Open/Close, Test
3 =	Alarms, Restore, Cancel	All
4 =	All except Open/Close, Test	All
5 =	All	All

Press *50   **15-SECOND DIALLER DELAY, BURGLARY**   ☐

Enter 0 for no, or 1 for yes. Default is **0** (no delay).

Press *51   **PERIODIC TEST REPORT**   ☐

Select the desired test report interval.
0 = none; 1 = 24 hours; 2 = weekly; 3 = 30 days. Default is **0** (none).   Test Report Code entered in field * 64 is sent.
Reports with Partition 1 Subscriber No.

Press *52   **TEST REPORT OFFSET**   ☐

This is the time to first report after exiting from programming or downloading.
0 = 24-hour; 1 = 6 hours; 2 = 12 hours; 3 = 18 hours. Default is **2**.

TO ENABLE SYSTEM STATUS AND RESTORE REPORT CODES
(* 60 – * 76, & * 89)

The following is a set of guidelines to be used for enabling report codes. Use these guidelines to programme this entire section.

For ADEMCO Contact ID Reporting: Enter a digit in the *first* box to enable the zone to report. Use a different digit for each zone until you have used up available digits. If the number of zones exceeds the number of available digits, begin with digit 1 again.   This is an "enabling" code only and is not the actual code sent to the central station office. Entries in the *second* boxes will be ignored. For system status (non-alarm) codes, enter a "1" in the first box for all the system conditions you want to send to the central station.

An entry of "0" in the *first* box will disable the report.

Press *60   **TROUBLE REPORT ENABLE**   1 | 0

This will be sent if a zone goes into trouble.

Press *61   **BYPASS REPORT ENABLE**   1 | 0

This will be sent when a zone is manually bypassed.

Press *62   **MAINS LOSS REPORT ENABLE**   1 | 0

Reports with Partition 1 Subscriber No. Timing of this report is random with up to a 4-hour delay. If mains restores before the report goes out, there is no mains restore report.

Press *63 LOW BATTERY REPORT ENABLE `1 | 0`

This will be sent when a low battery condition exists in the system's standby battery. Reports with Partition 1 Subscriber No.

Press *64 TEST REPORT ENABLE `1 | 0`

This is sent periodically to test that the communicator and phone lines are operational (frequency of report is selected in field *51). Reports with Partition 1 Subscriber No.

	Part. 1		Part. 2	
Press *66 ARM AWAY/STAY REPORT ENABLE	1	0	1	0
	AWAY	STAY	AWAY	STAY

This option allows for independent programming of AWAY and STAY reports for each partition. If either report is enabled, an open report is automatically enabled.

Press *67 RF XMTR. LOW BATTERY REPORT ENABLE `1 | 0`

This is sent in the event that a wireless transmitter low battery condition exists.

Press *68 CANCEL REPORT ENABLE `0 | 0`

This is sent upon disarming of the system after an alarm condition was reported.

Press *70 ALARM RESTORE REPORT ENABLE `1`

This is sent when the zone that caused an alarm is restored to its non-faulted condition.

Press *71 TROUBLE RESTORE REPORT ENABLE `1 | 0`

This is sent when a trouble in a zone is restored.

Press *72 BYPASS RESTORE REPORT ENABLE `1 | 0`

This is sent when a zone that has been bypassed is unbypassed.

Press *73 MAINS RESTORE REPORT ENABLE `1 | 0`

This is sent when mains power has been restored after mains power outage. Reports with Partition 1 Subscriber No.

Press *74 LOW BAT RESTORE REPORT ENABLE `1 | 0`

This is sent when a system low battery condition is restored to normal.

Press *75 RF XMTR. LOW BATTERY RESTORE ENABLE `1 | 0`

This is sent when a transmitter that previously sent in a low battery message has sent a message indicating it no longer has a low battery condition.

Press *76 TEST RESTORE REPORT ENABLE `1 | 0`

This is sent when the test mode is exited. Reports with Partition 1 Subscriber No.

Press *88 EVENT LOGGING `☐`

0= None;   4 = Bypass/Bypass Restore;
1 = Alarm/Alarm Restore;   8 = Open/Close.
2 = Trouble/Trouble Restore;   Default is "3."

Example: To select "Alarm/Alarm Restore" and "Open/Close," enter 9 (1 + 8); to select options totaling 10 or more, press # key before the digits; example: to select all options, enter #15.

Note: System messages are logged when non-zero selections are made. See Fields *89 and *90 in Section 19. DATA FIELD DESCRIPTIONS for a more detailed description of Event Logging.

Press ✶89 EVENT LOG 80% FULL REPORT ENABLE $\boxed{1 \mid 0}$

If an Event Logging selection is made in field ✶90, a message can be sent to the central station receiver when the log is 80% full.

Note: Aside from the selection made by the installer in field ✶90, all log control and readout is accomplished via the Downloader.

Press ✶92 PHONE LINE MONITOR ENABLE. $\boxed{}$

0 = Not used (default)

1 = Local keypad display only when phone line is faulted.

2 = Local keypad display plus keypad trouble sound when line is faulted.
Each partition turns off its own trouble sound. No automatic timeout.

3 = Same as "2" above plus Device No. 2 STARTS. If either partition is armed, external sounder activates. External sounder will be turned off by normal bell timeout, or by security code plus OFF *from either partition* (it does not have to be the one that was armed).
Device number 2 must either be programmed to be STOPPED in field ✶80 or STOPPED by entry of **security code** + # + **8** + **2**. Partition in ✶80 should be set to "0" for STOP.

Note: Option 3 may be used even if a relay unit or Powerline carrier device is not connected to the control.

Press ✶93 NUMBER OF REPORTS IN ARMED PERIOD $\boxed{}$

"0" limits reports to a total of 10 per armed period; "1" allows an unlimited number of alarm plus alarm restore reports. Default is **1**.

Press ✶94 DOWNLOAD PHONE NUMBER

Enter up to 16 digits;
0–9, # +11 for "✶", # + 12 for "#", # + 13 for a pause. Do not fill unused spaces. End field by entering "✶". To clear entries, press ✶94✶.

Press ✶95 RING DETECTION COUNT FOR DOWNLOADING $\boxed{}$

Refer to the chart below and programme this field accordingly.

VIP Module	Answering Machine	Downloading	Field ✶95 Programming
Yes	No	No	Set for value other than "0" (1–15). This will enable the control panel to answer the phone call. Otherwise, it won't be possible to access the Module.
Yes	Yes	No	Set for a value higher than the number of rings for which the answering machine is set. Example: if machine is set for 4 rings, use value 5 or higher. This is recommended so that the VIP Module can still be accessed if the answering machine is turned off and does not answer the phone call.
Yes	No	Yes	Set for value other than "0" (1–15).
Yes	Yes	Yes	"15" to bypass answering machine.
No	No	No	Enter "0"
No	Yes	No	Enter "0"
No	No	Yes	Enter 1–15
No	Yes	Yes	Enter 15 to bypass fax/ans. machine

⋆**96   INITIALISE DOWNLOAD ID AND SUBSCRIBER ACCT. No. FOR DOWNLOADING**   (No data entry required)

This completes the communication programming.

Exit the programming mode by keying ⋆99.

Refer to *TESTING THE SYSTEM* section to check system operation.

Section 16.
ZONE RESPONSE TYPE DEFINITIONS

General Information

You must assign a zone type to each zone, which will then define the way in which the system will respond to faults in that zone. Zone types are defined below.

Type 00
Zone Not Used

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

Type 01
Entry/Exit Burglary #1

This zone type provides exit and entry delays 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. Entry delay #1 is programmable. Exit delay is programmable but is common to both Type 01 and 02.

Exit delay begins whenever the control is armed, regardless of the arming mode selected. This zone type is usually assigned to sensors or contacts on doors through which primary entry and exit will take place.

Type 02
Entry/Exit Burglary #2

This zone type provides a secondary entry delay whenever the zone is faulted if the panel is armed in the Away and Stay modes. When the panel is armed in the Instant or Maximum modes, no entry delay is provided. Entry delay #2 is programmable. Exit delay is the same as for Type 01 zone.

Exit delay begins whenever the control is armed, regardless of the arming mode selected.

This zone type is usually assigned to sensors or contacts on doors through which secondary entry and exit will take place, and where more time might be needed to get to and from the keypad (typically used for a garage, loading dock, or basement door).

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 gives a delayed alarm (using the programmed Entry/Exit time) if the Entry/Exit zone is faulted first. Otherwise this zone type gives an instant alarm. This zone type is active when the panel is armed in the Away and Maximum modes. **This zone type is bypassed automatically when the panel is armed in the Stay or Instant modes**. 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 keypad 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.

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 keypad (and a central station report, if desired). This zone type is usually assigned to a zone which contains tamper protection switches 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 **24-hour Silent Alarm**	This zone type sends a report to the Central Station but provides no keypad display or sounding. This zone type is usually assigned to a zone containing an Emergency button.
Type 07 **24-hour Audible Alarm**	This zone type sends a report to the Central Station, and provides an alarm sound at the keypad, and an audible external alarm. This zone type is usually assigned to a zone that has an Emergency button.
Type 08 **24-hour** **Auxiliary Alarm**	This zone type sends a report to Central Station and provides an alarm sound at the keypad. **(No siren 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.
Type 09 **Supervised Fire** **(With Verification on** **Zone 1)**	This zone type provides a fire alarm on short circuit and a trouble condition on open circuit. The siren output will pulse when this zone type is alarmed. This zone type is always active and cannot be bypassed. **This zone type can be assigned to a control panel basic wired zone, any zone in a wired zone expansion module, or wireless zones.** When used with zone 1 on the panel, 2-wire smoke detectors can be used. For an explanation of the "verification" function, refer to the "Operation" paragraph in a previous section titled **2-Wire Smoke Detector Installation.**
Type 10 **Interior w/ Delay**	This zone type gives entry delay #1 (using the programmed entry time), if tripped when the panel is armed in the AWAY mode. Entry delay begins whenever sensors in this zone are violated, regardless of whether or not an entry/exit delay zone was tripped first. *No entry delay* is provided if tripped when the panel is armed in the Maximum mode. *Exit* delay is present for *any* arming mode. This zone type is bypassed when the panel is armed in the STAY or INSTANT modes.
Type 20 **Arm–Stay**	This is a special-purpose zone type used with 5800 series wireless pushbutton units which will result in arming the system in the STAY mode when the zone is activated. Pushbutton units send zone number as a user number to central station when arming or disarming.
Type 21 **Arm–Away**	This is a special-purpose zone type used with 5800 series wireless pushbutton units which will result in arming the system in the AWAY mode when the zone is activated. Pushbutton units send zone number as a user number to central station when arming or disarming.
Type 22 **Disarm**	This is a special-purpose zone type used with 5800 series wireless pushbutton which will result in disarming the system when the zone is activated.
Type 23 **No Alarm Response**	This zone type can be used on a zone when an output relay action is desired, but with no accompanying alarm (e.g., lobby door access).
Type 24 **Silent Burglary**	This zone type provides an instant alarm, with NO audible indication at any keypad or external sounder, if the zone is faulted when the system 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 where audible notification is NOT desired. A report is sent to the Central Station.

NOTE: All of the zone types described are available for the wireless portion of the system, if used.

Section 17. DATA FIELD DESCRIPTIONS

Descriptions of All Data Fields in the System (listed numerically)

THE BLANK PROGRAMMING FORM SHOULD BE USED TO RECORD THE DATA FOR THIS INSTALLATION

The following is a listing of all data fields in this control (presented in numerical order). If you have performed the programming instructions that were included with the installation of each of the various peripheral devices covered in previous sections, this table will simply serve as a reference for all data fields in the system. If you have decided to programme all the data fields in the system at one time (and therefore did not perform the programming indicated previously in each section), you can use this listing to programme all the data fields now.

Defaults (where applicable) are indicated in the text

∗20 INSTALLER CODE | | | |

The Installer code is used to enter the 4-digit Master security code for each partition **in the normal operation mode**, via the keypad connected to Partition 1. See "Master Code" in the *SYSTEM OPERATION* section for procedure.

Enter 4 digits, 0–9. Default is **4-1-1-2**.

∗21 QUICK ARM ENABLE   Partition 1 [ ]   Partition 2 [ ]

If enabled, the [#] key can be used instead of the security code when **arming** the system.

Enter 0 for disabled or 1 for enabled for each partition. Default is **0**.

∗22 RF SYSTEM   [ ]

This option is enabled (1) if a wireless receiver is used.

Enter 1 if 5881/6128RF RF receiver is being used; 4=same as "1" but with RF jam detection; enter 0 if no receiver is being used.
Default is **0** .

∗23 FORCED ARM ENABLE   Partition 1 [ ]   Partition 2 [ ]

This feature allows all faulted Exit type zones to be bypassed automatically.
All zones that are bypassed by this function will be displayed after the bypass is initiated. Enter, for each partition:

0 = No forced arm.
1 = Allows automatic bypass of all open exit zones, and automatic bypass of zones remaining faulted at the end of the exit delay. **This is the default.**

∗24 RF HOUSE ID CODE | |

The House ID identifies receivers and wireless keypads.

If a 5827 or 5827BD Wireless keypad is to be used, a House ID code MUST be entered (01–31), and the keypad should be set to the same ID. If no wireless keypad is to be used, enter 00 (Default value).

Partition 2 House ID = entered Partition 1 ID + 1 (use 01–30 for partition 1 if wireless keypads are used in both partitions).

∗25 WIRED ZONE EXPANSION   [ ]

Use this field to select the type of expansion unit being used, as follows:
0 = none; 1 = 4219; 2 = 4229; 3 = 4204. Default is **0**.

∗26 CHIME BY ZONE   [ ]

Use this field to select chime by zone (where the specific zones that will annunciate faults when the system is disarmed will be entered in Zone List 3),
0 = no; 1 = yes; Default is **0**.

*27 **POWERLINE CARRIER DEVICE (X-10) HOUSE ID** ☐

Powerline Carrier devices require a House ID. This field identifies this house ID to the control.

If Powerline Carrier devices are used, they are selected in field *80.

House ID is entered in following manner:

0 = A, 1 = B, 2 =C, 3 = D, 4 = E, 5 = F, 6 = G, 7 = H, 8 = I, 9 = J, # + 10 = K, # + 11 = L, # + 12 = M, # + 13 = N, # + 14 = O, # + 15 = P.

Default is **0**.

*28 **VIP MODULE PHONE CODE** ☐

The use of a 4285/4286 VIP Module (can be used in Partition 1 only) requires a 2-digit code.

Enter a 2-digit phone access code as follows: For first digit, enter any digit from 1 to 9; for second digit, enter # +11 for "*", or # +12 for "#".

Example: If desired access code is 7* , **7** is the first entry, and **# + 11** (for *) is the second entry.

Default = 00 (No Voice Module).

*29 **OUTPUT TO ALTERNATIVE COMMUNICATIONS MEDIA (ACM)** ☐

If output to ACM is selected here, all messages that are programmed to go to the primary telephone line receiver will also be sent to the compatible ACM. These messages will always be in Contact ID format (not affected by entry in field *48). The data line is supervised as well as certain functions in the ACM. If communication is lost or a trouble develops, a message will be attempted to be sent via both the ACM and PSTN line to the central station.

Note: Normal trouble restore report (*71) is sent on restore of the condition.

Entry is a non-zero digit to enable a Dialler Trouble Report.

Note: The ACM should be set up for device address 3 on the keypad lines; default is 0 (no).

ZONE SOUNDS AND TIMING (*31–*39)

*31 **SINGLE ALARM SOUNDING PER ZONE** (per armed period) ☐

This field limits alarm sounding to once per arming period for a given zone. Enter 1 for yes; default is **0** (no).

*32 **FIRE SOUNDER TIMEOUT** ☐

This field determines whether the external sounder will shut off after time allotted, or continue until manually turned off. Enter 0 for sounder timeout, or 1 for no timeout. Default is **0**.

This control panel produces temporal pulsed sounding for Fire notification as follows: 3-pulses, pause, 3-pulses, pause, 3-pulses.....

*33 **ALARM SIREN TIMEOUT** ☐

This field determines whether the external sounder will shut off after time allotted, or continue until manually turned off. Enter as follows:

0 = No timeout;
1 = 4 min;
2 = 8 min (default);
3 = 12 min;
4 = 16 min.

*34 **EXIT DELAY**   Partition 1 ☐ ☐   Partition 2 ☐ ☐

System will wait the time allotted before arming the entry/exit zones (Types 01 and 02), the interior follower and delay zones (Types 4 and 10).

Exit delay time of 00 - 99 seconds may be selected individually for each Partition.

Default is 70 seconds.

∗35 **ZONE TYPE 01 ENTRY DELAY**   Part. 1 ☐ ☐   Part. 2 ☐ ☐

System will wait the time allotted before sounding alarm upon entering. Entry delay time of 00 - 99 seconds may be selected individually for each Partition.
Default is 30 seconds.

∗36 **ZONE TYPE 02 ENTRY DELAY**   Part. 1 ☐ ☐   Part. 2 ☐ ☐

System will wait the time allotted before sounding alarm upon entering. Entry delay time of 00 - 99 seconds may be selected individually for each Partition.
Default is 60 seconds.

∗37 **AUDIBLE EXIT WARNING**   Part. 1 ☐   Part. 2 ☐

If enabled, this field provides exit warning sound when armed AWAY; it can be selected for either or both Partitions.
Warning sound consists of slow continuous beeps until last 5 seconds, when it changes to fast beeps. The warning sound will end at the termination of Exit time.
0 = no; 1 = yes. Default is **0**.

∗38 **CONFIRMATION OF ARMING DING**   Part. 1 ☐   Part. 2 ☐

Enter 1 (in either or both Partitions) to enable 1/2 second external alarm sounding "ding" when closing report goes in, or at the end of exit delay. **0** disables the "ding" (default). Enter 2 = Yes, RF only.

∗39 **POWER UP IN PREVIOUS STATE**   ☐

Enter **1** for Yes (default) if, upon power up, you want the system to assume the system status prior to power down. Enter **0** if you want the system to always power up in a disarmed state.

When the system powers up armed, an alarm will occur 1 minute after arming if a zone is faulted.

Note that if the previous state was armed AWAY or STAY, the system will not respond to sensor changes for 1 minute, which allows time for sensors such as PIRs to stabilise.

DIALLER PROGRAMMING (∗40 – ∗50)

∗40 **PABX ACCESS CODE** (See Box at Left) | | | | | | |

Enter up to 6 digits if PABX is needed to access an outside line. If fewer than 6 digits are needed to be entered, exit by pressing ∗ and next field number (e.g., 41). To clear entries from field, press ∗40∗.

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 (2 secs)

∗41 **PRIMARY PHONE No.** (See Box at Left)

| | | | | | | | | | | | | | | | | |

Enter up to 16 digits. If fewer than 16 digits entered, exit by pressing ∗ and next field number (e.g., 42). To clear entries from field, press ∗41∗.

Note: Back-up reporting (3 calls are made to the secondary phone number if no kiss-off is received after 3 attempts to the primary number) is automatic only if there is a secondary phone number (field ∗42).

∗42 **SECONDARY PHONE No.** (See Box at Left)

| | | | | | | | | | | | | | | | | |

Enter up to 16 digits. If fewer than 16 digits entered, exit by pressing ∗ and next field number (e.g., 43). To clear entries from field, press ∗42∗. See the Note in the previous field also.

For Fields ∗43, ∗44, ∗45, and ∗46.

Entries provided for up to 4 digits for primary office and 4 digits for secondary.

Enter digits 0–9; # +11=B; # +12=C; # +13=D; # +14=E; or # +15=F.

Enter 0 as the first digit of a 4-digit account number for Nos. 0000–0999.

To clear entries from field, press ∗43∗, ∗44∗, ∗45∗ or ∗46∗.

See blank Programming Form for examples of Account No. entries.

∗43 PRIMARY SUBSCRIBER ACCOUNT. No. (partition 1)

| | | | | Primary Receiver   See notes above.

∗44 SECONDARY SUBS ACCOUNT. No. (partition 1)

| | | | | Secondary Receiver   See notes above.

∗45 PRIMARY SUBSCRIBER ACCOUNT. No. (partition 2)

| | | | | Primary Receiver   See notes above.

∗46 SECONDARY SUBS ACCOUNT. No. (part. 2)

| | | | | Secondary Receiver   See notes above.

∗47 PHONE SYSTEM SELECT   ☐

Enter 1 digit. Default is **0**.

If Central Station Receiver *is not* on satellite linked line:
0 = Pulse Dial 1 = Tone Dial

If Central Station Receiver *is* on satellite linked line:
2 = Pulse Dial 3 = Tone Dial

∗48 REPORT FORMAT   Primary ☐   Secondary ☐

Determine which format is to be used to report to the central station. Enter 1 digit (0 or 1).

0 (or undefined) = ADEMCO Contact ID Format; this is the default.
1 = Local Audio

> For an explanation of the above formats, see *SYSTEM COMMUNICATION* section .

Note: The maximum number of alarm and alarm restore reports during one armed period is determined by field ∗93.

∗49 SPLIT/DUAL REPORTING   ☐

Enter 0 to disable (Backup report only). **This is the default.**

	TO PRIMARY	TO SECONDARY
1 =	Alarms, Restore, Cancel	Others
2 =	All except Open/Close, Test	Open/Close, Test
3 =	Alarms, Restore, Cancel	All
4 =	All except Open/Close, Test	All
5 =	All	All

∗50 15-SECOND DIALLER DELAY (BURGLARY)   ☐

If selected, will provide 15-second delay of burglary alarm report to the central station. Allows time for subscriber to avoid a false alarm transmission.

Enter 0 for no or 1 for yes. Default is **0** (no delay).

∗51 **PERIODIC TEST REPORT** ☐

Select the desired test report interval.

0 = none; 1 = 24 hours; 2 = weekly; 3 = 30 days. Default is **0** (none).

Test Report Code entered in field ∗64 is sent.

Reports with Partition 1 Subscriber No.

∗52 **TEST REPORT OFFSET** ☐

This is the time to first report from programming or downloading.

0 = 24 hours; 1 = 6 hours; 2 = 12 hours; 3 = 18 hours. Default is **2**.

∗56 **ZONE ASSIGNMENT/ALARM REPORT ENABLES**
(and RF Input ID Enrolling for 5800 System)

REFER TO THE ZONE ASSIGNMENT TABLE FOR ∗56 IN THE CENTERFOLD PROGRAMMING FORM .

This is an interactive menu mode that is used to programme zone numbers, zone types, partition numbers, alarm and report codes, and to identify the type of loop input device. This mode can also be used for "enrolling" 5800 series transmitter ID codes and for entering Alpha descriptors for zones (we recommend entering descriptors in menu mode ∗82.

Upon entry menu mode ∗56, the following is displayed:

Zone Number (Zn): Enter the zone number that you wish to programme (or [0][0] to leave zone programming).

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

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

```
Zn ZT P RC  In: L
20 09 1 10  RF: -
```

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 listed below.

00 = Not Used	06 = 24 Hr Silent	20 = Arm–Stay
01 = Entry/Exit #1	07 = 24 Hr Audible	21 = Arm–Away
02 = Entry/Exit #2	08 = 24 Hr Aux	22 = Disarm
03 = Perimeter	09 = Fire W/verif.	23 = No alarm
04 = Interior Follower	10 = Interior w/Delay	response
05 = Trouble Day/Alarm Night		24 = Silent Burglary

Default values for zones 01 to 08 are:

Zone No.(Zn):	01	02	03	04	05	06	07	08
Zone Type Default:	01	04	03	03	03	03	03	03
Partition Default	1	1	1	1	1	1	1	1
Response Time Default *	1	1	1	1	1	1	1	1

* "1" for response time = 350 msec.

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

Partition No. (P) (Default = [1].

Enter "1" or "2".

Press [∗] to advance to...

```
20 Partition
                 1
```

```
┌─────────────────────┐
│ 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...

```
┌─────────────────────┐
│ 10 INPUT DEV:  LP#  │
│ RF TRANS.  RF: 1    │
└─────────────────────┘
```

Input Device (In): For the 8 built-in basic wired zones the Input Device types are automatically displayed as HW (Panic, Duress, and Tamper inputs are not applicable). For the auxiliary wired zones or RF transmitters, enter the input device type as follows:

2 = AW (auxiliary wired zone)

3 = RF (supervised RF transmitter)

4 = UR (unsupervised RF transmitter)

5 = BR (button type RF transmitter - unsupervised)

Refer to the "5800 Series Transmitters Table" in the *WIRELESS EXPANSION* section for the specific procedure required to "enroll" a particular transmitter.

Press [∗] to continue.

```
┌─────────────────────┐
│ 10 INPUT DEV:  LP#  │
│ RF TRANS.  RF: 1    │
└─────────────────────┘
```

Loop number (LP#): Enter the loop number (1-4) for the zone of the transmitter being enrolled. The default is loop "1." To accept this, press [∗]. If a different loop number is being used on this transmitter, enter the desired loop number and press [∗] to continue (see the transmitter's Installation Instructions for specific loop designations).

The loop number must be entered here, whether using Zone Programming or Sequential Mode to "enroll" transmitters.

```
┌─────────────────────┐
│ 10 LEARN S/N ?      │
│ 0 = NO  1 = YES   0 │
└─────────────────────┘
```

If the transmitter's serial number has not been previously "enrolled," you may enter the enroll mode now by either entering "1" (YES) or by pressing the upper left-hand button of the programme tool. **If using the programme tool, move to the physical location of the transmitter to be enrolled before pressing the button.** A single short beep will verify that the button has been pressed. The system will respond to the first serial number transmitted after the [∗] key on the keypad or the button of the programme tool is pressed. Enter "0" (NO) if you wish to enroll the transmitter later, using the "∗83 sequential" mode described in the SEQUENTIAL MODE section later in this manual. If "0" is entered, skip to the summary screen prompt.

```
┌─────────────────────┐
│ 10  INPUT S/N:    L │
│ A X X X–X X X X     │
└─────────────────────┘
```

This prompt is displayed if "1" (YES) is entered in response to the "Learn S/N?" prompt. The serial number may be enrolled by one of two methods:

a) Enter the 7-digit serial number printed on the transmitter using an alpha keypad

or

b) Activate the transmitter by faulting *or* restoring the input you wish to use for that zone (e.g., press a button).

```
┌─────────────────────┐
│ 10  INPUT S/N:    L │
│ A 002-4064        1 │
└─────────────────────┘
```

The system will enroll the serial number of the first transmitter heard, add the loop number entered to this serial number, display the serial and loop numbers, and cause the keypad to beep twice.

┌──────────┬──┐
│ ✓   │ If the serial and loop number combination is already present in the │
│   │ system, a single long beep will be heard from the keypad. If this │
│   │ happens, the system will not display the serial number, but will wait for │
│   │ a transmission from another transmitter or transmitter loop input. │
└──────────┴──┘

The system will then enter an optional confirmation mode so that the operation of the actual programmed input can be confirmed. Activate the loop input or button that corresponds to this zone. **We recommend that you confirm the programming of every transmitter before proceeding to the next zone.**

```
10  CONFIRMED
A 002-4064        1
```

When the system sees activity on the appropriate input, it will beep three times and display the confirmation message.

At any time during this step, you may press the [✳] key on the keypad or the upper left-hand button of the programme tool if you are satisfied with the serial and loop number combination that has been enrolled, regardless of whether or not the enrolled input has been "confirmed."

If the incorrect transmitter has been enrolled, press the [#] key on the keypad or the upper right-hand button of the programme tool to delete the serial number and return to the "LEARN S/N" prompt. A single long beep will be heard from the keypad to verify pressing of the upper right-hand button. Then, press "1" (YES) or press the upper left-hand button of the programme tool (a single short beep will verify the system is ready for enrolling) and re-activate the proper transmitter or transmitter loop input.

```
Program Alpha?
0 = No  1 = Yes   0
```

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 ✳82 mode (enter 0).
See *Section 15. ALPHA DESCRIPTION PROGRAMMING* for procedure.

```
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:

1. *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.

2. *Zone entries can be reviewed* by pressing #56. 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 00 to exit. This method of exiting may also be done at any time during the review.

3. *To either temporarily or permanently remove a zone from the system,* go into programming mode and press ✳56. Enter the zone number and press ✳. At the "Zone Type" prompt, enter 00 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.

4. *An ID code that has been enrolled 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 the programming mode, press ✳56, 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 enrolled 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.

The following is a set of guidelines to be used for programming report code enables. Use these guidelines to programme this entire section.

For ADEMCO Contact ID Reporting: Enter a digit in the *first* box to enable the zone to report. Use a different digit for each zone until you have used up available digits. If the number of zones exceeds the number of available digits, begin with digit 1 again. This is an "enabling" code only and is not the actual code sent to the central station office. Entries in the *second* boxes will be ignored. For system status (non-alarm) codes, enter a "1" in the first box for all the system conditions you want to send to the central station. An entry of "0" in the *first* box will disable the report.

**SYSTEM STATUS
REPORT ENABLES
(∗60 – ∗68)**

∗60   **TROUBLE REPORT ENABLE**   (See box above) | 1 | 0 |

∗61   **BYPASS REPORT ENABLE**   (See box above) | 1 | 0 |

∗62   **MAINS LOSS REPORT ENABLE** | 1 | 0 |

See box above. Reports with Partition 1 Subscriber No. Timing of this report is random with up to a 4-hour delay. If mains restores before the report goes out, there is no mains restore report.

∗63   **LOW BATTERY REPORT ENABLE** | 1 | 0 |

See box above. Reports with Partition 1 Subscriber No.

∗64   **TEST REPORT ENABLE** | 1 | 0 |

See box above. Periodic Reports with Partition 1 Subscriber No.

		Part. 1		Part. 2	
∗66	**ARM AWAY/STAY REPORT ENABLE**	1	0	1	0

This option allows for independent programming of AWAY and STAY reports for each partition.

∗67   **RF XMTR. LOW BATTERY REPORT ENABLE** | 1 | 0 |

(See box on previous page)

∗68   **CANCEL REPORT ENABLE**   (See box on previous page) | 0 | 0 |

∗69   **RESTORE REPORT TIMING** | |

Select the desired occurrence of restore reports.
0 = Dynamic, as zones restore, 1= At the same time the system is disarmed. 0= Default.

**RESTORE
REPORT ENABLES
(∗70 – ∗76)**

∗70   **ALARM RESTORE REPORT ENABLE** | 1 |

∗71   **TROUBLE RESTORE REPORT ENABLE** | 1 | 0 |

See box on previous page. This is sent when a trouble in a zone is restored.

∗72   **BYPASS RESTORE REPORT ENABLE** | 1 | 0 |

See box on previous page. This is sent when a zone that has been bypassed is unbypassed.

∗73   **MAINS RESTORE REPORT ENABLE** | 1 | 0 |

See box on previous page. Reports with Partition 1 Subscriber No.

∗74   **LOW BATTERY RESTORE REPORT ENABLE** | 1 | 0 |

See box on previous page. Reports with Partition 1 Subscriber No.

∗75   **RF XMTR. LOW BATTERY RESTORE ENABLE** | 1 | 0 |

See box. This is sent when a transmitter that previously sent in a low battery message has sent a message indicating it no longer has a low battery condition.

✶76   TEST RESTORE REPORT ENABLE   `1 | 0`

See box on previous page. Reports with Partition 1 Subscriber No. A restore code entered here will cause a restore message to be sent when Test mode is exited.

✶80   OUTPUT DEVICES

This is an interactive menu mode that is applicable only if field ✶25 is programmed for a 4229 or 4204, or if Powerline Carrier devices are to be used. See *RELAY OUTPUTS & POWERLINE CARRIER DEVICES* section for a detailed programming procedure. Also refer to the OUTPUT DEVICE table for ✶80 in the Programming Form.

✶81   ZONE LISTS FOR OUTPUT DEVICES

This is an interactive menu mode that is applicable only if field ✶25 is programmed for a 4229, 4204, or if Powerline Carrier devices are used.

Refer to *RELAY OUTPUTS & POWERLINE CARRIER DEVICES* section for a detailed programming procedure. Also refer to the ZONE LISTS FOR OUTPUT DEVICES table for ✶81 in the Programming Form.

✶82   CUSTOM ALPHA EDITING

See *ALPHA DESCRIPTION PROGRAMMING* section for procedure.

✶83   ADD/DELETE 5800 RF INPUT IDs

See Notes 4 and 5 in field ✶56. Also see *USING ✶83 MODE TO DELETE, ADD, OR CHANGE SERIAL NUMBERS* section for procedure.

✶88   EVENT LOGGING   `☐`

The VISTA-20SEa system has the ability to record various events in a history log (48-event capacity). The types of events to be logged can be selected as indicated below. At any time, the downloader operator can then upload the log and view or print out all or selected categories of the log. The log can also be cleared by the downloader operator.

The display/printout at the central station will show the date, time, event, and description of the occurrences. The time is calculated by an internal clock at the central station computer. Note that the time for any events that occur prior to a system power-down or an entry into the programming mode cannot be calculated by the central station computer. The time will then appear on the log as "unknown>"

0 = None; 1 = Alarm/Alarm Restore; 2 = Trouble/Trouble Restore; 4 = Bypass/Bypass Restore; 8 = Open/Close. The default is "3."

Example: To select "Alarm/Alarm Restore," and "Open/Close," enter 9 (1+8); to select all, enter #15.

Note: System messages are logged when any non-zero selection is made.

✶89   EVENT LOG 80% FULL REPORT ENABLE   `   |   `

(Also see "TO PROGRAMME SYSTEM STATUS & RESTORE REPORT ENABLES" box on a previous page)

If an event log selection is made in field ✶90, a message can be sent to the central station receiver when the event log is 80% full. If the log becomes full, a new message will overwrite the oldest message in the log.

NOTE: Aside from the selection made by the installer in field ✶90, all control and readout from the log is accomplished via the downloader (see field ✶90).

★90   PROGRAMMABLE TRIGGER OUTPUT ☐

One of the voltage outputs on the 9-pin connector is programmable (pin 9).

0 = Keypad sounder mimic (normally open, connect other side of sounder to +12VDC). This is the default.

1 = Satellite self-actuating sounder hold-off (0VDC normal, open to sound siren; will require an interface relay).

2 = Resettable 4-wire smoke detector power (0VDC, connect + side of detectors to 12VDC). Disconnects the detectors from power for 6 seconds after second OFF after a fire alarm.

> **For "0" above, the partition is selected by the setting of zone 7's partition.**

★91   OPTION SELECTION ☐

0 = None

1 = Restricted User Code #15 option for Open/Close Reporting (applies to both partitions.

4 = AAV

8 = Enable Exit Delay Restart (default)

Example: For Restricted User #15 Open/Close Reporting and Enable Exit Delay Restart, press 9 (1+8).

★92   PHONE LINE MONITOR ENABLE ☐

0 = Not used (default)

1 = Local keypad display only when phone line is faulted.

2 = Local keypad display plus keypad trouble sound when line is faulted.
Each partition turns off its own trouble sound. No automatic timeout.

3 = Same as "2" above plus Device No. 2 STARTS. If either partition is armed, external sounder activates. External sounder will be turned off by normal bell timeout, or by security code plus OFF *from either partition* (it does not have to be the one that was armed).

Device number 2 must either be programmed to be STOPPED in field ★80 or STOPPED by entry of **security code + # + 8 + 2**. Partition in ★80 should be set to "0 "for STOP.

★93   NUMBER OF REPORTS IN ARMED PERIOD ☐

This option can be used to limit the number of messages (alarm & alarm restore reports) sent to the central station in an armed period. "0" limits reports to a total of 10; "1" allows an unlimited number of reports. Default is **1**.

DOWNLOAD
INFORMATION
(★94, ★95)

★94   DOWNLOAD PHONE NUMBER

Enter up to 16 digits;

| | | | | | | | | | | | | | | | |

0–9, # +11 for "★", # + 12 for "#", # + 13 for a pause. Do not fill unused spaces. End field by entering ★. To clear entries from field, press ★94★.

★95   RING DETECTION COUNT FOR DOWNLOADING ☐

Enter number of rings before control picks up phone line (or 0 to 15).

Refer to the chart that follows and programme this field accordingly. Default is 0.

VIP Module	Answering Machine	Downloading	Field ∗95
Yes	No	No	Set for value other than "0" (1–15). This will enable the control panel to answer the phone call. Otherwise, it will not be possible to access the VIP Module
Yes	Yes	No	Set for a value higher than the number of rings for which the answering machine is set. Example: if machine is set for 4 rings, use a value of 5 or higher. This is recommended so that the VIP Module can still be accessed if the answering machine is turned off and does not answer the phone call.
Yes	No	Yes	Set for value other than "0" (1–15).
Yes	Yes	Yes	Enter "15" to bypass answering machine.
No	No	No	Enter "0".
No	Yes	No	Enter "0".
No	No	Yes	Enter 1–15.
No	Yes	Yes	Enter 15.

∗96   **INITIALISE DOWNLOAD ID AND SUBSCRIBER ACCT. No. FOR DOWNLOADING**
(No data entry required, press ∗96)

∗97   **SET ALL PROGRAMME FIELDS TO DEFAULT VALUES**
(No data entry required, pressing ∗97 automatically loads all defaults).

TO EXIT PROGRAMMING MODE (∗98 or ∗99)

∗98   **EXITS PROGRAMMING MODE** and *prevents* re-entry by :
   Installer Code + 8 + 0 + 0

∗99   **EXITS PROGRAMMING MODE** and *allows* re-entry by:
   Installer Code + 8 + 0 + 0 or by: **Power-up** then "∗" and "#".

While in programme mode, press ∗56 to enter Zone Programming Menu Mode.

Refer to the zone assignment table for ∗56 on the separate programming form .

This is an interactive menu mode that is used to programme zone numbers, zone types, partition numbers, alarm and report codes, and to identify the type of loop input device. This mode can also be used for "enrolling" 5800 series transmitter ID codes and for entering Alpha descriptors for zones (we recommend entering descriptors in menu mode ∗82).

NOTE: If using wireless transmitters, there are two methods for enrolling the transmitter serial numbers. The first method is by using ∗56 Zone Programming mode (described below). The second method is by using ∗83 Sequential mode. Note that the ∗83 Sequential mode requires that all zone information first be entered using ∗56 Zone Programming mode.

Programme Tool: The Zone Programming and Sequential Modes allow you to use a 5804 button-type transmitter as a "programme tool." The upper left-hand and right-hand buttons of the tool duplicate the [∗] and [#] keypad programming functions. The advantage of using a programme tool is that it enables remote enrollment. You can move to the physical location of the transmitter to be enrolled, press the upper left-hand button of the programme tool, and then activate the intended transmitter. The transmitter that you use as the programme tool can also be used as a transmitter in the system. If you plan to use an existing transmitter, it must first be enrolled into the system as its associated zones. You may then programme it as the tool.

After entering ∗56, the following prompts are displayed:

If the system has been set up to use wireless transmitters, and a programme tool has been entered, skip to the zone number prompt. If no programme tool has been entered, the following prompt will appear:

```
PROGRAM TOOL?
0 = NO, 1 = YES       0
```

If a programme tool (5804) is being used, enter "1." If not using a tool, enter "0" and skip to the zone number prompt.

```
00  INPUT S/N:        L
   A X X X–X X X X
```

If "1" is entered, the system will prompt for the serial number of the transmitter being used as the programme tool. You can enter the serial number using one of the following methods:
a) Enter the 7-digit serial number for the transmitter
      or
b) Press any button on the transmitter. The keypad should beep twice and display the serial number of the tool.

```
00  INPUT S/N:        L
   A123-4567          3
```

In this example, the serial number is A123-4567. Once entered, you can use the 5804 programme tool to ready the system for enrolling a transmitter's serial number by first pressing the upper left-hand button of the programme tool, then activating the desired transmitter (see procedure at the "LEARN S/N?" prompt).

To back up to the "PROGRAM TOOL ?" prompt, press the [#] key on the keypad.

The serial number for the programme tool will only remain in the system until the programming mode is exited. (Entering ∗97 will not delete the tool.)
Press [∗] to continue.

```
┌─────────────────────────┐
│ Enter Zn Num.           │
│ (00 = Quit)          10 │
└─────────────────────────┘
```
Zone 10 entered ↑

Zone Number (Zn): Enter the zone number that you wish to programme (or 00 to exit zone programming). Press [✶] to continue.

```
┌─────────────────────────┐
│ Zn  ZT P RC  In: L      │
│ 10  03 1 10  RF: 1      │
└─────────────────────────┘
```

A summary display appears, showing the status of that zone's programming.

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 make changes, press [✶] to continue.

↓ Zone Number
```
┌─────────────────────────┐
│ 10 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 listed below.

00 = Not Used	06 = 24 Hr Silent	20 = Arm–Stay
01 = Entry/Exit #1	07 = 24 Hr Audible	21 = Arm–Away
02 = Entry/Exit #2	08 = 24 Hr Aux	22 = Disarm
03 = Perimeter	09 = Fire w/Verif.	23 = No Alarm Response
04 = Interior Follower	10 = Interior w/ Delay	
05 = Trouble Day/Alarm Night		24 = Silent Burglary

Default values for zones 01 to 08 are:

Zone No.(Zn):	01	02	03	04	05	06	07	08
Zone Type Default:	01	04	03	03	03	03	03	03
Partition Default	1	1	1	1	1	1	1	1
Response Time Default *	1	1	1	1	1	1	1	1

* "1" for response time = 350 msec.

Press [✶] to continue.

```
┌─────────────────────────┐
│ 10 Partition            │
│                      1  │
└─────────────────────────┘
```

Partition No. (P) (Default = [1].
Enter "1" or "2".
Press [✶] to continue.

```
┌─────────────────────────┐
│ 10 Report Code          │
│ 1st 01  2nd 00      10  │
└─────────────────────────┘
```

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 continue.

```
┌─────────────────────────┐
│ 10 INPUT DEV: LP#       │
│ RF TRANS. RF :  1       │
└─────────────────────────┘
```

Input Device (In): For the 8 built-in wired zones, the Input Device types are automatically displayed as HW (Panic, Duress, and Tamper inputs are not applicable). For the auxiliary wired zones or RF transmitters, enter the input device type as follows:

2 = AW (auxiliary wired zone)
3 = RF (supervised RF transmitter)
4 = UR (unsupervised RF transmitter)
5 = BR (button type RF transmitter - unsupervised)

Refer to the "5800 Series Transmitters Table" in the *WIRELESS EXPANSION* section for the specific procedure required to "enroll a particular transmitter.

Press [✶] to continue.

```
┌─────────────────────┐
│ 10 INPUT DEV:  LP#  │
│ RF TRANS. RF:   1   │
└─────────────────────┘
```

Loop number (LP#): Enter the loop number (1-4) for the zone of the transmitter being enrolled. The default is loop "1." To accept this, press [✱]. If a different loop number is being used on this transmitter, enter the desired loop number and press [✱] to continue (see the transmitter's Installation Instructions for specific loop designations). **The loop number must be entered here, whether using Zone Programming or Sequential Mode to "enroll" transmitters.**

```
┌─────────────────────┐
│ 10  LEARN S/N?      │
│ 0 = NO,  1 = YES   0 │
└─────────────────────┘
```

If the transmitter's serial number has not been previously "enrolled," you may enter the enroll mode now by either entering "1" (YES) **or** by pressing the upper left-hand button of the programme tool. **If using the programme tool, move to the physical location of the transmitter to be enrolled before pressing the button.** A single short beep will verify that the button has been pressed. The system will respond to the first serial number transmitted after the [✱] key on the keypad or the button of the programme tool is pressed. Enter "0" (NO) if you wish to enroll the transmitter later, using the "∗83 sequential" mode described in the *SEQUENTIAL MODE* section later in this manual.
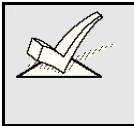
If "0" is entered, skip to the summary screen prompt.

```
┌─────────────────────┐
│ 10  INPUT S/N:    L │
│  A X X X–X X X X    │
└─────────────────────┘
```

This prompt is displayed if "1" (YES) is entered in response to the "Learn S/N?" prompt. The serial number may be enrolled by one of two methods:

a) Enter the 7-digit serial number printed on the transmitter using an alpha keypad

      or

b) Activate the transmitter by faulting **or** restoring the input you wish to use for that zone (e.g., press a button, open or close a door, etc.).

```
┌─────────────────────┐
│ 10  INPUT S/N:    L │
│  A002-4064      1   │
└─────────────────────┘
```

The system will enroll the serial number of the first transmitter heard, add the loop number entered to this serial number, display the serial and loop numbers, and cause the keypad to beep twice.
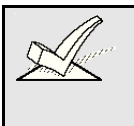
 If the serial and loop number combination is already present in the system, a single long beep will be heard from the keypad. If this happens, the system will not display the serial number, but will wait for a transmission from another transmitter or transmitter loop input.

The system will then enter an optional confirmation mode so that the operation of the actual programmed input can be confirmed. Activate the loop input or button that corresponds to this zone. **We recommend that you confirm the programming of every transmitter before proceeding to the next zone.**

```
┌─────────────────────┐
│ 10  CONFIRMED       │
│  A022-4064      1   │
└─────────────────────┘
```

When the system sees activity on the appropriate input, it will beep three times and display the confirmation message.

 At any time during this step, you may press the [✱] key on the keypad or the upper left-hand button of the programme tool if you are satisfied with the serial and loop number combination that has been enrolled, regardless of whether or not the enrolled input has been "confirmed."

If the incorrect transmitter has been enrolled, press the [#] key on the keypad or the upper right-hand button of the programme tool to delete the serial number and return to the "LEARN S/N" prompt. A single long beep will be heard from the keypad to verify pressing of the upper right-hand button. Then, press "1" (YES) or press the upper left-hand button of the programme tool (a single short beep will verify the system is ready for enrolling) and re-activate the proper transmitter or transmitter loop input.

```
ZN ZT P RC IN: L
10  03 1 00  RF: 1 s
```

The summary screen for the zone will appear. Note that an "s" indicates that a serial number has, in fact, been enrolled. The cursor will be flashing above the loop number. Press [✶] to accept the zone information.

NOTE: If you entered "0" in the "LEARN S/N?" prompt previously, you will not get an indication that the serial number has been enrolled.

If you want to delete the serial number, enter "0" and press [✶]. The system will then prompt, "DELETE S/N?" Press the "1" (YES) key to complete the delete sequence. This process deletes the serial number only, *not* the loop number. The assumption is that the proper loop number was programmed, but the wrong serial or loop number was enrolled. To change the loop number, you must go back through zone programming for that zone and manually enter the loop number over the existing one.

```
PROGRAM ALPHA?
0 = NO    1 = YES    0
```

If you want to programme alpha descriptors now, enter "1" (YES). See the *ALPHA DESCRIPTOR PROGRAMMING* section for more information.
If not, enter "0" (NO).

```
ENTER ZN NUM.
(00 = QUIT)     11
```

This will return you to the ENTER ZN NUM. prompt for the next zone. When all zones have been programmed, enter "00" to quit.

If you plan to enroll serial numbers in the sequential mode, enter "00" to quit, then go to the *SEQUENTIAL MODE* section later in this manual to enroll the serial numbers.
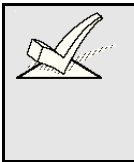
> When you have finished programming all zones (including all serial numbers), test each zone using the system's TEST mode. Do not use the Transmitter ID Sniffer mode for this, as it will only check for transmission of one zone on a particular transmitter, and NOT the zones assigned to each additional loop.

Section 19. ZONE LISTS (*81 Menu Mode)

While in programme mode, press ✶81 to enter Zone List Menu Mode.
This mode is used to programme zone lists for output devices (programmed in ✶80 menu mode) and/or for defining a common area zone. Refer to the Programming Form worksheet for ✶81 Mode.

Defining A Common Area zone:
A common area zone allows either partition to arm the system, while leaving the designated common area zone disarmed. This allows access to a disarmed partition without compromising the security of the armed partition.

To define a zone as a common area zone, simply enter the zone number in zone list 04 using *81 menu mode as described below.

Common Area Zone Notes:
- When using common area zones, we suggest the use of the same primary subscriber account number for both partitions 1 and 2. This will help monitoring stations to better track events involving common area zones.

- The common area zone will sound and report alarms only if **both** partitions are armed (i.e., if one of the partitions is disarmed and the other partition is armed, a fault on this zone will not cause an alarm). When only one partition is armed, the common area zone is automatically treated as if it were a zone type 23 (no alarm response) zone.

- If either partition is armed and the other is in chime mode, the common area zone keypad **will not** chime upon faults. The common area zone **will** chime if both partitions are disarmed and either partition is in chime mode.

- A fault on the common area zone is displayed in both partitions.

- Either partition may arm its system if the common area zone is faulted, but once armed, the other partition cannot arm. That partition must first bypass the common area zone or correct the fault before arming.

- Either partition can clear and restore the common area zone after an alarm.

After entering *81, the following prompts are displayed.

Zone List Displays ↓

| Zone List No. |
| (00 = Quit) 01 |

Enter the Zone List Number 01, 02, 03, or 04 to programme (or 00 to end these entries). Press the [✶] key to advance.

In the following displays, zone list 01 has been selected for programming.

| 01   Enter Zn Num. |
| (00 = Quit) 00 |

Enter each zone number to add to the zone list by first entering the zone number, then the [✶] key (example, 01✶, 02✶, 03✶). After all zones desired are entered, press 00 to advance.
IMPORTANT: Do not include fire zones in zone lists that are used to STOP relay actions.

| 01 Del Zn List? |
| 0 = No 1 = Yes   0 |

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.

| 01 Delete Zone? |
| 0 = No 1 = Yes   0 |

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.

| 01 Zn to Delete? |
| (00 = Quit) 00 |

Enter 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.

– 73–

Section 20. REMOTE PROGRAMMING AND CONTROL (DOWNLOADING)

General Information

The *VISTA–20SEa* can be remotely programmed from an IBM compatible Personal Computer (PC), a suitable compatible modem, and ADEMCO's V-LINK® Software (as specified below).

Programming the control from a remote location is protected against compromise by someone attempting to defeat the system, using multi-levels of security protection:

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

2. Site Initiated Remote Programming: The installer or subscriber initiates the callback from the subscriber premises (by entering Installer 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. Telecom Handoff: Allows the installer to perform a download session on the call initiated from the protected alarm site.

5. 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–20SEa* and keypad.

At the installer's office/home:

- An IBM compatible PC.
- A suitable modem.
- V-LINK® Downloading Software Diskette (at revision level supporting the VISTA–20SEa).
- Appropriate interconnecting cables.

Initial Download

Enter Installer code + # + 5. This sets field *95 to 4 rings, and system to "no call-back" option. The download computer can then call the subscriber, make connection, and download all programming items.

Remote Programming Information

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 Programme Download.
- Shut Down Communication (dialler) Functions (non-payment of monitoring fees in an owned system).
- Shut Down all Security System Functions (non-payment for a leased system).

Remote Programming Information (cont)

- Inhibit Local Keypad Programming (prevents account takeover).
- Command the System to Upload a Copy of its Resident Programme to the office.
- Read: Arming Status, Mains 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 keypad on the system will become inactive and will display "**C C**" 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 dialler reports are sent to the central station. The keypads 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.

Programme Upload or Download Time: approximately 1 minute, 15 seconds for a complete programme.

Section 21. TESTING THE SYSTEM

Test Procedure

1. Enter the **security code** and press the **TEST** key. The outside sounder will sound for 1 second. The keypad 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 keypad will beep once per minute as a reminder that the system is in the Test Mode. To turn off the test mode enter **security code** and press the **OFF** key.

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

2. To test the wireless part of the system and the RF Receiver, perform the two additional tests that follow:

   a. **TRANSMITTER SNIFFER MODE**
   Make sure both partitions are disarmed before trying to enter this mode.

   Press **Installer code** + # + **3.** This initiates a procedure that will check that all transmitters have been properly programmed.

   Note: If the communicator is in the process of sending a report to the central station, the system will not go into the Sniffer mode. If so, wait a few minutes, and try again.

   The keypads in both partitions will display all zone numbers of wireless units (in both partitions) 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 zone numbers should disappear after about 1-1/2 hours.

   Notes:
   - All BR type units must be physically activated to clear the display.
   - When **one** button of a transmitter (RF, UR, or BR) is activated, all zones assigned to other buttons on that transmitter are cleared. This also applies to 5816 and 5817 transmitters which have multiple loops (zones).
   - Any transmitter that is not "enrolled" will not turn off its zone number.

<table>
<tr><td>

NOTE:

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.

</td><td>

Exit this mode by keying **Installer code** + **OFF.**

b. **GO/NO GO TEST MODE:** By pressing **Installer 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 **Installer code** + **OFF.**

</td></tr>
</table>

Section 22. SYSTEM OPERATION

Security Codes

Installer Code

The installer programmes the 4-digit Installer Code initially as part of the programming procedure. The factory default Installer code is "**4-1-1-2**", but may be changed in field ✶20.

The Installer code is the only code that can enter programming mode and also, in normal operation mode, is used to enter the Master code for each partition, which allows access to the normal functions of the system.

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

Master Codes

In normal operation mode, the Installer code is used to enter the 4-digit Master security code for each partition, using *the keypad connected to Partition 1*:

To enter the Master Code for Partition 1, enter:

> Installer Code + [8] + [01] + desired 4-digit Master code for Partition 1

To enter the Master Code for Partition 2, enter:

> Installer Code + [8] + [02] + desired 4-digit Master code for Partition 2

To change the Master Code for either Partition, enter:

> Existing Master Code (for that partition) + [8] + [02] + new Master Code (for that partition) + new Master Code again (for that partition)

Secondary User Codes

In normal operation mode, each partition's Master security code can be used to assign up to 14 secondary 4-digit security codes for that partition. It can also be used to remove secondary codes from the system (individually).

To assign (or change) a Secondary security code, enter *(via partition's keypad)*:

> Partition's Master Code + [CODE key] + User # (03–16)
> + 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 *(via partition's keypad)*:

> Partition's Master Code + [CODE key] + User # (03–16)

Notes: • All Master and Secondary security codes permit access to the system for arming, disarming, etc.

• The installer code can disarm the system only if it was used to arm it.

- User code No. 15 is a "babysitter" code, i.e., it can disarm the system only if it was used to arm it.
- If a secondary code is inadvertently repeated for different users, the lower user number will take priority.
- Opening and closing reports are sent for the Installer code as No. 01, with the appropriate subscriber number. Each Master code and set of secondary user codes are sent as Nos. 02, and 03–16 respectively in Contact ID format (with the appropriate subscriber number); in 4+2, it is 1–F, "F" for anything greater than 14.

Keypad Functions

General Information

Note that if you enabled QUICK ARM for the partition (field ✶21), the [#] key can be pressed instead of entering the partition's 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, keypad sounding and external sounding will occur, and the zone(s) in alarm will be displayed on the keypad. Pressing any key will silence the keypad sounder for 10 seconds. Disarming the system will silence both keypad 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 keypads also feature chime annunciation, and 3 panic key pairs, or individual panic keys (depending on keypad type – see *Panic Keys* below), for silent, audible, fire or personal emergency alarms. These keys 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 not in the exit route 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).

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

Arming Mode	Features for Each Arming Mode				
	Exit Delay	Entry Delay	Perimeter Armed	Interior Armed	Perimeter with Pre-Alarm, Armed
AWAY	Yes	Yes	Yes	Yes	Yes
STAY	Yes	Yes	Yes	No	Yes
INSTANT	Yes	No	Yes	No	Yes
MAXIMUM	Yes	No	Yes	No	Yes

Panic Keys There are three panic key pairs or (on some keypads) lettered keys 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]	99
[3] & [#], or [C]	96

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

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

Relay/Powerline Carrier Devices (if used) If relay outputs (via a 4204, or 4229), or Powerline Carrier devices are used, two keypad entries available to the user are included. They can manually activate or deactivate the device(s) for starting or stopping some action, such as turning lights on or off, etc.

These keypad entries are:

Security Code + [#] + [7] + Device # activates (starts) that device.

Security Code + [#] + [8] + Device # deactivates (stops) that device.

4285/4286 VIP Module (if used)

Note: The VIP Module **cannot** be used to add user codes in this system. User codes must be added by using a wired keypad.

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.

  Note: The control will sense a high resistance in the loops on wired zones 2–8 and display "CHECK" and the affected zone number when the system is in the disarmed mode. It will not be possible to arm the system as long as this condition exists (unless this zone is bypassed). If the system is in the armed mode when the high resistance condition occurs, this display will not appear, but will do so as soon as the system is disarmed. Check the sensor or the loop wiring for the displayed zone.

<table>
<tr><td>"Check" and "Battery" Displays (cont)</td><td>When the problem has been corrected, the display can be cleared by entering the OFF sequence (code plus OFF key) twice.</td></tr>
</table>

"Check" and "Battery" Displays (cont)

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

- A display of "**CHECK**" and **09** indicates that communication between control and a zone expander or wireless receiver is interrupted or that a cover removal tamper switch is activated in a zone expander. Check the wiring and DIP switch settings on the units.

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

- **A display of "BAT"** (Fixed-word keypads) **or "SYSTEM LO BAT"** (Alpha keypads) **with no zone number** indicates that the system's main standby battery is weak.

- **A display of "BAT"** (Fixed-word keypads) **or LO BAT** (Alpha keypads) **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).

Telephone Line Failure

A display of "**94**" (Fixed-word keypads), or "**Telco Fault**" (Alpha keypads), indicates that a monitored telephone line (if programmed in field ∗92) has been cut (or disconnected). Depending on how the system was programmed, the keypad may also produce a trouble sound, and the external sounder may be activated (silence by entering installer code plus OFF).

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"** (Alpha keypads) **or "NO AC"** (Fixed-word keypads) **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 mains power outage,** the control's auxiliary power will shut down to minimise deep discharge of the battery.

Other Displays (Fixed Word displays are in parentheses)

Busy-Standby (**dI**). If this remains displayed for more than 1 minute, the system is disabled.

Modem Comm (**CC**) The system is in communication with the central station for change of function or status verification.

Comm. Failure (**FC**) A communication failure has occurred.

Open Circuit (**OC**) The keypad is not receiving signals from the control and sees an open circuit.

Long Rng Trbl (**bF**) Back-up ACM communication failure.

Section 23. SPECIFICATIONS & ACCESSORIES

Specifications

VISTA–20SEa SECURITY CONTROL

1. Physical: 318mm W x 368 mm H x 76mm D

2. Electrical:

VOLTAGE INPUT: 16.5VAC from plug-in 25VA transformer

RECHARGEABLE BACK-UP BATTERY: 12VDC, 6.5AH Sealed Lead Acid.
Charging Voltage: 13.8VDC

ALARM SOUNDER: 12V, 2.0 Amp output can drive 1009 self-contained sounders

AUXILIARY POWER OUTPUT: 12VDC, 600mA max.

STANDBY TIME: (see Table in POWERING THE SYSTEM section)

FUSE: Battery (3A) No. 90–12

3. Communication:

FORMATS SUPPORTED:

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

Local Audio
3 characters/sec, DTMF (TouchTone), no ACK, no KISSOFF

Line Seize: Double Pole

4. Maximum Zone Resistance: Zones 1–8 = 300 ohms excluding EOLR

6128 REMOTE KEYPAD

1. Physical: 146mm W x 121mm H x 26mm D

2. Electrical: Voltage Input: 12VDC; Current Drain: 30mA

3. Interface Wiring: RED (R):   12VDC input (+) Aux Power
                          GREEN (G):   Data Out to Control
                          YELLOW (Y):   Data In from Control
                          BLACK (B):   Ground (–)

6137 REMOTE KEYPAD

1. Physical: 159mm W x 121mm H x 26mm D

2. Electrical: Voltage Input: 12VDC; Current Drain: 85mA

3. Interface Wiring: Same as 6128

6139 REMOTE KEYPAD

1. Physical: 159mm W x 121mm H x 26mm D

2. Electrical: Voltage Input: 12VDC; Current Drain: 100mA

3. Interface Wiring: Same as 6128

5881 SERIES RF RECEIVERS (5800 System)

1. Physical: 188mm W x 112mm H x 37mm D
                   Note: 277mm H with antenna

2. Electrical: Voltage Input: 12VDC; Current Drain: 35mA

3. Interface Wiring: Same as 6128

4. Range: 60m nominal indoors from wireless transmitters (the actual range to be determined with system in TEST mode)

5. Zones: (With the *ADEMCO VISTA–20SEa*)

5881L   accepts up to 8 transmitters
5881M: accepts up to 16 transmitters
5881H: accepts up to 30 transmitters

5800TM TRANSMITTER MODULE used with 5804BD/5827BD Wireless 2-Way Keypad	**1. Physical:** 57mm W x 105mm H x 22mm D **2. Electrical:** Voltage Input: 12VDC Current Drain: 20mA **3. Interface Wiring:** Same as 6128
4219 WIRED EXPANSION MODULE	**1. Physical:** 169mm W x 108mm H x 32mm D **2. Electrical:** Voltage Input: 12VDC; Current Drain: 35mA **3. Interface Wiring:** Same as 6128 **4. 8 EOLR Loops (A–H):** Loop A can be set for fast (10–15msec) response to an open

4204 RELAY MODULE	**1. Physical:** 169mm W x 108mm H x 32mm D
	2. Electrical: Voltage Input: 12VDC; Current Drain: 15mA(Relays off)
	                                                  180mA (Relays on)
	3. Interface Wiring: Same as 6128
	4. Four Output Relays: SPDT Contacts,
	                 Rating: 2A max at 28VDC/AC

4229 WIRED EXPANSION/ RELAY MODULE	**1. Physical:** 169mm W x 108mm H x 32mm D **2. Electrical:** Voltage Input: 12VDC; Current Drain: 35mA (Relays off) 100mA (Relays on) **3. Interface Wiring:** Same as 6128 **4. 8 EOLR Loops (A–H):** Loop A can be set for fast (10–15msec) response to an open **5. Two Output Relays:** SPDT Contacts, Rating: 2A max at 28VDC/AC
4285/4286 VIP MODULE	**1. Physical:** 169mm W x 108mm H x 32mm D **2. Electrical:** Voltage Input: 12VDC Current Drain:160mA **3. Device Address:** Permanently set to address 4 **4. Interface Wiring:** See 4285/4286 VIP MODULE manual **5. Telephone Line Connections:** See 4285/4286 VIP MODULE manual

Accessories (Compatible Devices)

4285/4286 Line Interface Unit (LIU)

Sounders	**ADEMCO 1009 Siren**	Self-contained 12 volt siren (driver built-in) and weatherproof for outdoor use. Can be wired for either a steady or warble sound.
	ADEMCO 747 Indoor Siren	Self-contained 12 volt siren (driver built-in) for indoor wall mount. 747F available for flush mounting.
	ADEMCO 744 Siren Driver	6 jumper-selected sound outputs. Rated at 119dB with use of an 8-ohm 30 watt speaker.
	ADEMCO 745X3 Voice Siren Driver	Voice siren driver with English, Spanish and French voice messages. Separate messages for Fire and Burglary. Use with 8-ohm speaker.
	ADEMCO 705–820, 5-inch Round Speaker	15-watt, 8-ohm speaker.
	ADEMCO 713 Speaker	40-watt, 8-ohm, indoor/outdoor speaker.
	System Sensor PA400B (beige)/PA400R (red) Indoor Piezo Sounder	Indoor piezo sounder (red or beige), rated at 90 dB @ 10 feet.

Compatible 2-Wire
Smoke Detectors

System Sensor 2100D	Photo-optical, direct wire
ADEMCO 2600	Photo-optical, Plug-in Head
ADEMCO 1600	Ionisation, Plug-in Head
System Sensor 2151	Photo-optical, Plug-in Head
System Sensor 1151	Ionisation, Plug-in Head
System Sensor 5451	Thermal Detector, Plug-in Head
System Sensor DH400P	Photo-optical Duct Probe

Compatible 4-Wire
Smoke/Combustion
Detectors

System Sensor

1412 B	4-wire ionisation products of combustion detector
A77–716B	EOL relay module (supervisory module for wired 4-wire fire zone).
2112/24R	Low profile 4-wire photo-optical smoke detector
2112/24TR	Low-profile 4-wire photo-optical smoke detector w/57º C heat detector

APPENDIX A.
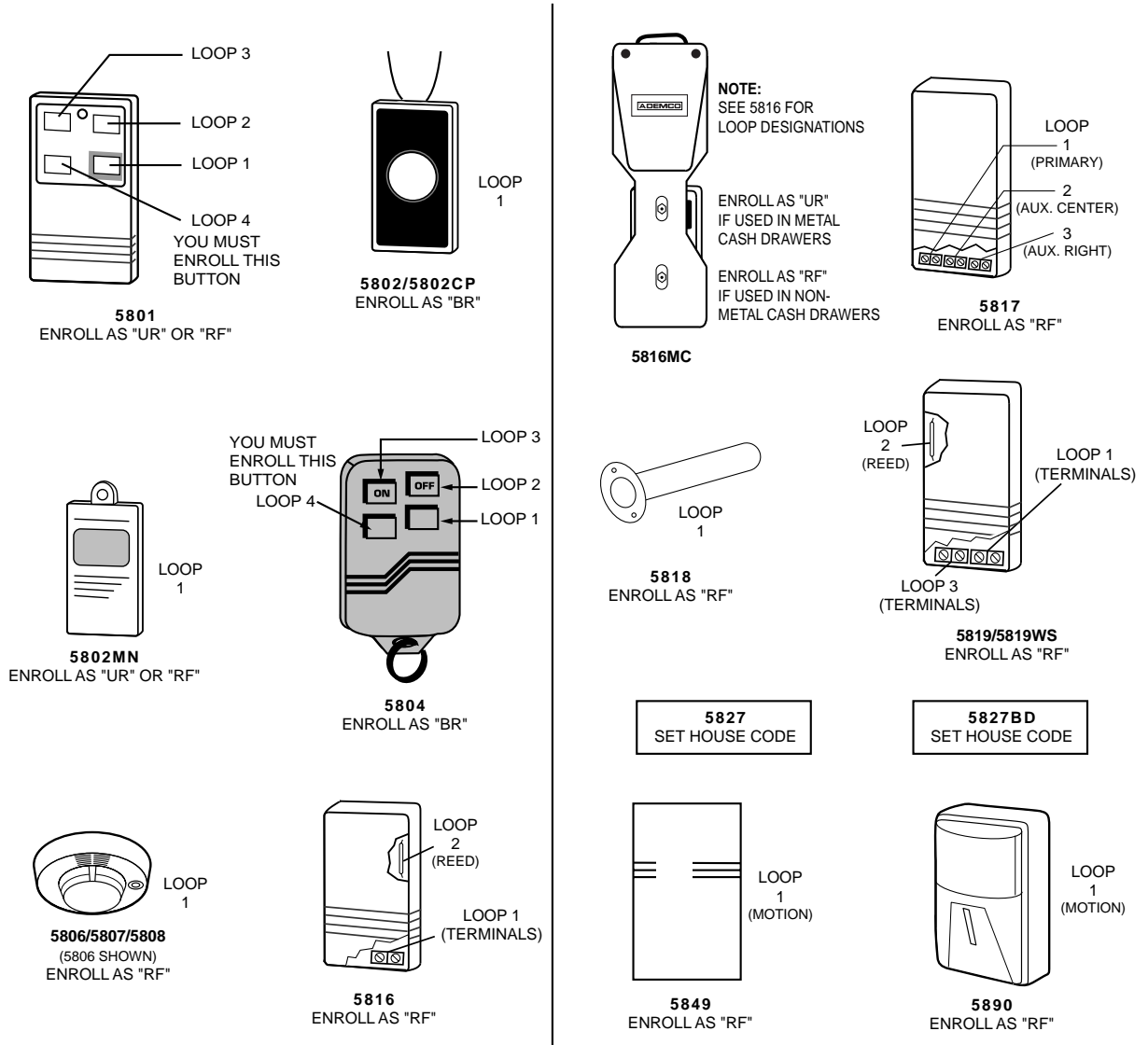## 5800 RF System Wireless Transmitters

Transmitter Input Loop Identification

- All of the transmitters illustrated 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 enrolled 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.

LOOP 3
LOOP 2
LOOP 1
LOOP 4
YOU MUST ENROLL THIS BUTTON

5801
ENROLL AS "UR" OR "RF"

LOOP 1

5802/5802CP
ENROLL AS "BR"

NOTE:
SEE 5816 FOR LOOP DESIGNATIONS

ENROLL AS "UR" IF USED IN METAL CASH DRAWERS

ENROLL AS "RF" IF USED IN NON-METAL CASH DRAWERS

5816MC

LOOP 1 (PRIMARY)
2 (AUX. CENTER)
3 (AUX. RIGHT)

5817
ENROLL AS "RF"

LOOP 1

5802MN
ENROLL AS "UR" OR "RF"

YOU MUST ENROLL THIS BUTTON
LOOP 4
LOOP 3
LOOP 2
LOOP 1

5804
ENROLL AS "BR"

LOOP 1

5818
ENROLL AS "RF"

LOOP 2 (REED)
LOOP 1 (TERMINALS)
LOOP 3 (TERMINALS)

5819/5819WS
ENROLL AS "RF"

5827
SET HOUSE CODE

5827BD
SET HOUSE CODE

LOOP 1

5806/5807/5808
(5806 SHOWN)
ENROLL AS "RF"

LOOP 2 (REED)
LOOP 1 (TERMINALS)

5816
ENROLL AS "RF"

LOOP 1 (MOTION)

5849
ENROLL AS "RF"

LOOP 1 (MOTION)

5890
ENROLL AS "RF"

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 mains will not work if their mains 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, they may not activate or provide early warning for a variety of reasons in as many as 35% of all fires. 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 32° to 40°C, the detection performance can decrease.

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

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

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

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

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

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

Installing an alarm system may make the owner eligible for a lower insurance rate, but an alarm system is not a substitute for insurance. Homeowners, property owners and renters should continue to act prudently in protecting themselves and continue to insure their lives and property.

We continue to develop new and improved protection devices. Users of alarm systems owe it to themselves and their loved ones to enroll about these developments.
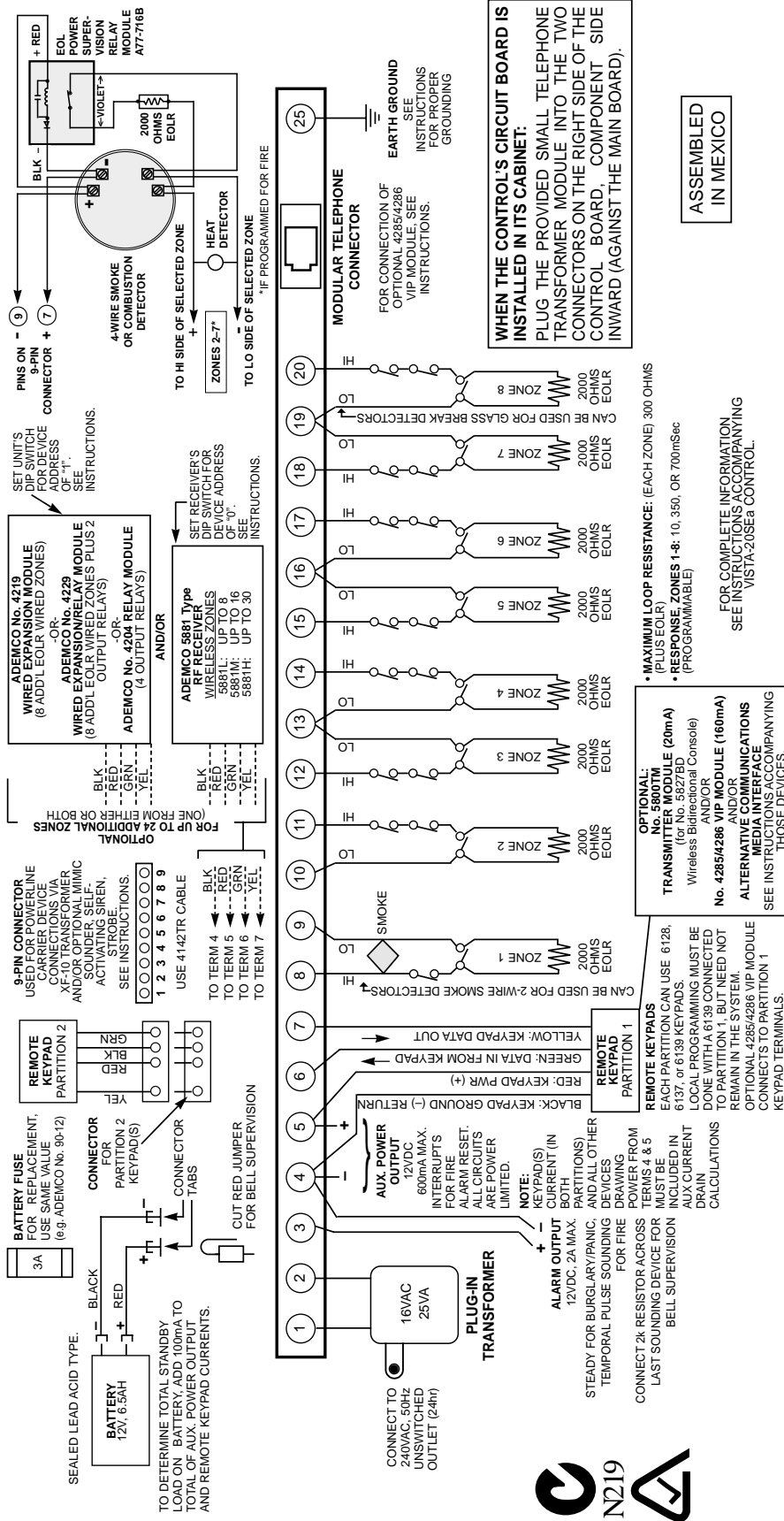
Figure 14. VISTA-20SEa SUMMARY OF CONNECTIONS

LIMITED WARRANTY

Alarm Device Manufacturing Company, a Division of Pittway Corporation, and its divisions, subsidiaries and affiliates ("Seller"), 165 Eileen Way, Syosset, New York 11791, warrants its products to be in conformance with its own plans and specifications and to be free from defects in materials and workmanship under normal use and service for 18 months from the date stamp control on the product or, for products not having an ADEMCO date stamp, for 12 months from date of original purchase unless the installation instructions or catalog sets forth a shorter period, in which case the shorter period shall apply. Seller's obligation shall be limited to repairing or replacing, at its option, free of charge for materials or labor, any part which is proved not in compliance with Seller's specifications or proves defective in materials or workmanship under normal use and service. Seller shall have no obligation under this Limited Warranty or otherwise if the product is altered or improperly repaired or serviced by anyone other than ADEMCO factory service. For warranty service, return product transportation prepaid, to your ADEMCO distributor.

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. IN NO CASE SHALL SELLER BE LIABLE TO ANYONE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, OR UPON ANY OTHER BASIS OF LIABILITY WHATSOEVER, EVEN IF THE LOSS OR DAMAGE IS CAUSED BY THE SELLER'S OWN NEGLIGENCE OR FAULT.

Seller does not represent that its product may not be compromised or circumvented; that the product will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; or that the product will in all cases provide adequate warning or protection. Buyer understands that a properly installed and maintained alarm may only reduce the risk of a burglary, robbery or fire without warning, but it is not insurance or a guarantee that such will not occur or that there will be no personal injury or property loss as a result. CONSEQUENTLY, SELLER SHALL HAVE NO LIABILITY FOR ANY PERSONAL INJURY, PROPERTY DAMAGE OR OTHER LOSS BASED ON A CLAIM THE PRODUCT FAILED TO GIVE WARNING. However, if Seller is held liable, whether directly or indirectly, for any loss or damage arising under this Limited Warranty or otherwise, regardless of cause or origin, Seller's maximum liability shall not in any case exceed the purchase price of the product, which shall be the complete and exclusive remedy against Seller. This warranty replaces any previous warranties and is the only warranty made by Seller on this product. No increase or alteration, written or verbal, of this Limited Warranty is authorized.